

# REVISED PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

# ARMED FORCES RETIREMENT HOME-MAIN CAMPUS 3700 N. CAPITAL STEET WASHINGTON, DC 20011

**Presented to:** 

GENERAL SERVICES ADMINISTRATION (GSA) PUBLIC BUILDINGS SERVICE PROPERTY DISPOSAL DIVISION (WPR) 301 7<sup>th</sup> Street, SW, Room 7709 WASHINGTON, DC 20407 ATTN: MR. TIM SHECKLER

**Prepared by:** 

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**MACTEC PROJECT 3552-06-0897** 

**APRIL 10, 2006** 

April 10, 2007

Mr. Tim Sheckler GSA, Public Buildings Service Property Disposal Division (WPR) 301 7<sup>th</sup> Street, SW Room 7709 Washington, DC 20407

#### Subject: Revised Phase II Environmental Site Assessment Report Armed Forces Retirement Home – Main Campus Washington, DC MACTEC Project 3552-06-0897

Dear Mr. Sheckler:

MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to submit this Revised Phase II Environmental Site Assessment Report for the Armed Forces Retirement Home (AFRH) Main Campus located in Washington, DC. The Phase II ESA was performed for the General Services Administration (GSA) to evaluate the presence or absence of contaminants of concern and related recognized environmental conditions (RECs) identified at the AFRH site in a January 2005 *Phase I ESA Report* prepared by Greenhorne & O'Mara. This project was completed in general accordance with MACTEC's Technical Proposal Prop06wash.0098 dated June 8, 2006 and authorized by GSA Work Order GS-P-11-06-YA-0087 dated June 28, 2006. Additional services were performed at Buildings 75/76 in accordance with our Proposal for Suspected Underground Storage Tank (UST) Evaluations dated November 30, 2006.

We appreciate the opportunity to provide our continuing environmental services to both GSA and AFRH and are committed to providing the expertise you require for successful completion of this project. If you have any questions, please do not hesitate to contact Mr. Brent Chapman at 571-252-2522.

Sincerely,

## MACTEC ENGINEERING AND CONSULTING, INC.

Brent R. Chapman, P.G. Principal

Ben Grosser Staff Geologist

# **TABLE OF CONTENTS**

	Page
EXECUTIVE SUMMARY	iii
LIST OF ACRONYMS, ABBREVIATIONS, AND UNITS	viii
1.0 INTRODUCTION	1
1.1 OBJECTIVE	1
1.2 LIMITATIONS	2
2.0 SITE DESCRIPTION AND BACKGROUND	3
2.1 SITE DESCRIPTION	3
2.2 BACKGROUND	3
3.0 PHASE II INVESTIGATION METHODOLOGY	5
3.1 UNDERGROUND STORAGE TANK (UST) PHASE II ASSESSMENT ACTIVITIES	5
3.2 FLOOR DRAIN DYE TESTING AND BUILDING 46 (DRYCLEANING SOLVENT)	1
SAMPLING	6
3.3 BUILDINGS 48, 77, AND 78 PESTICIDES SAMPLING	7
3.4 BUILDING 69 ASH WASTE CHARACTERIZATION	8
3.5 BUILDING 76 (HYDRAULIC LIFT) SAMPLING	8
3.6 INVESTIGATION DERIVED WASTE (IDW)	8
3.7 BUILDING 75 SUSPECTED UST EVALUATIONS	8
4.0 RESULTS AND FINDINGS	10
4.1 GENERAL GEOLOGY AND STRATIGRAPHY	10
4.2 GROUND-WATER CONDITIONS	11
4.3 UNDERGROUND STORAGE TANK (UST) ASSESSMENT RESULTS	12
4.3.1 Regulatory File Review Results	12
4.3.2 Building 46 and 75/76 Geophysical Surveys	13
4.4 FLOOR DRAIN DYE TESTING RESULTS	15
4.5 BUILDING 46 DRYCLEANING SOLVENT SAMPLING RESULTS	16
4.6 BUILDINGS 48, 77, AND 78 PESTICIDES SAMPLING RESULTS	17
4.6.1 Building 48 Pesticides Sampling Results	17
4.6.2 Building 77 Pesticides Sampling Results	18
4.6.3 Building /8 Pesticides Sampling Results	18
4.7 BUILDING 69 ASH WASTE SAMPLING RESULTS	19
4.0 BUILDING /0 (HYDKAULIC LIFT) SAMPLING KESULIS	19
T.7 BOILDING 75 SUSTECTED UST EVALUATIONS	21

# 

#### LIST OF TABLES

Table 1 – Summary of Phase II Environmental Sampling Parameters

Table 2 – Soil Analytical Results

Table 3 – Ground-Water Analytical Results

Table 4 – Monitoring Well Gauging Data

Table 5 – Monitoring Well Construction Data

Table 6 - Building 69 TCLP and Waste Characterization Analytical Results

Table 7 – File Review and Underground Storage Tank Summary

## LIST OF FIGURES

Figure 1.0 – Site Topographic Map

Figure 2.0 – Site Vicinity Map

Figure 3.0 – AFRH Site Layout Map

Figure 4.0 – AFRH Site Development Zones

Figure 5.0 – Boring and Monitoring Well Locations (Buildings 46, 72, 75, 76, 77 and 78)

Figure 6.0 – Boring and Monitoring Well Location Map (Building 48)

Figure 7.0 – Estimated Ground-Water Flow Direction Map

Figure 8.0 - Building 75 Suspected UST Soil Knifing Boring Locations

## LIST OF APPENDICES

APPENDIX A - FIELD PROCEDURES APPENDIX B - BORING LOGS AND WELL COMPLETION DETAILS APPENDIX C - LABORATORY ANALYTICAL RESULTS APPENDIX D - PHOTOGRAPHS APPENDIX E - ERT GEOPHYSICAL REPORT

# **EXECUTIVE SUMMARY**

MACTEC Engineering and Consulting, Inc. (MACTEC) has completed a Phase II Environmental Site Assessment (ESA) at the Armed Forces Retirement Home (AFRH) located at 3700 N. Capitol Street, NW in Washington, DC. The Phase II ESA was performed for the General Services Administration (GSA) to evaluate the presence or absence of contaminants of concern and related recognized environmental conditions (RECs) identified at the AFRH Site in a January 2005 *Phase I ESA Report* prepared by Greenhorne & O'Mara.

Phase II sampling activities included underground storage tank (UST), drycleaning solvent, pesticide, hydraulic lift, and incineration ash assessments, as well as performing dye tracer studies, geophysical surveys, and regulatory file reviews. In general, invasive Phase II sampling activities included advancing a total 28 shallow hand auger or Geoprobe® soil borings and installing 6 deep ground-water monitoring wells to collect subsurface data. The Phase II ESA did not include UST removals, UST tightness testing, asbestos or lead-based paint sampling, remediation or the characterization/removal of drums or containerized waste materials. Borings advanced at the Site typically encountered man-made fill at or near the surface, underlain by unconsolidated Coastal Plain soils described as silty clay to clayey silt, with alternating strata of silty sand to sandy silt, including some silty gravel lenses. The following summary and conclusions were developed based on the results of the Phase II sampling and laboratory analyses.

- Static ground-water levels at the site ranged from approximately 13.8 to 44.7 feet (in the shallow or perched ground water in monitoring wells W46-1 and W48-1) to 79.8 to 95.4 feet below the top of PVC casing in the seven remaining wells. No light non-aqueous phase liquid (LNAPL) was detected in any of the monitoring wells. The static ground-water elevations generally indicated a ground-water flow direction to the south, likely with both southeast and southwest components. Ground water is not reportedly used on site as a drinking water source.
- Regulatory file reviews were completed at the DC Department of the Environment (DDOE) UST Division for each of the three petroleum USTs removed at Buildings 26/27, 43 and 74. Table 7 summarizes registration and closure information for these and other petroleum USTs at the site. In general, active USTs are present at Buildings 56, 64 and 52, inactive USTs are present at Buildings 46 and 75, and closed USTs with undocumented closure reports were formerly located at Buildings 26/27 and 74A.
- A file review of regulatory documents from the USEPA Region III related to a "No Further Remedial Action Planned" (NFRAP) listing for the AFRH Site was also completed. Based on the documents reviewed, AFRH procured several thousand war surplus cans of paint in 1947 to be used in maintenance activities at the facility. When the paint was determined not to be suitable for use, the paint cans were buried in a storage cell several feet deep in the area northwest of Building 72, where a current paved road exists. During 1990 hot water/steam system installation activities, these paint cans and approximately 1,000 tons of xylenes contaminated soil, were removed down to a depth of approximately 30 feet and the excavation backfilled. Five ground-water monitoring wells (designated by ABB Environmental Services, Inc. as MW-1, 2, 3, 4 and 5) were also installed in this area. Laboratory analysis of soil and ground-water samples collected from these wells did not have detectible xylenes concentrations, and the case was subsequently closed by the USEPA. Although MACTEC did not have this information for the preparation of our Sampling and Analysis Plan (SAP) and associated Phase II ESA field work, we did find and sample three of these five wells. The three wells sampled by MACTEC were designated as W72-1 (ABB well MW-4), W72-2 (ABB well MW-1) and W72-3 (ABB well MW-5).

- A geophysical survey was completed in the areas west and southeast of Building 75 and between Building 75 and Building 76, to evaluate the potential presence of former or existing USTs that may not have been removed from the ground. As indicated in the ERT Geophysical Survey Report (Appendix E, Figure 12), subsurface anomalies representing six suspected buried USTs were noted along the west and southwest sides of Building 75. Vacuum assisted "soil knifing" borings were subsequently completed at each of these six locations, to evaluate the presence or absence of suspected USTs, and to collect soil samples for TPH-DRO and TPH-GRO analysis. No indications of existing USTs were identified and soil TPH-DRO/GRO concentrations were ND, aside from a trace TPH-DRO of 5.6 mg/kg.
- Based on the results of floor drain dye tracer testing performed at Buildings 46, 72, 76 and 77, these floor drains discharge directly into either the sanitary sewer or an oil-water separator, and not into the storm-water system, or into a related illicit discharge location.
- Building 46: Drycleaning and laundry operations activities have reportedly been performed in the past at Building 46 (i.e., Building 46A). Potential hazardous wastes generated by drycleaning operations are primarily solvents, and historically have included petroleum solvents such as Stoddard (naphtha), and other solvents such as tetrachloroethene (also known as perchloroethylene; PCE) and valclene (fluorocarbon 113 or trichlorotrifluoroethane). Naphthalene was detected in soil at Building 46 at a concentration of 1,820 ug/kg, and a distinct "moth ball" odor (commonly associated with naphthalene) was noted in soil samples collected from boring G46-1. In addition, various other VOCs (acetone, carbon disulfide, tetrachloroethene, trichloroethene, and 1,2,4-trimethylbenzene) were detected in soil at levels below their respective USEPA Risk-Based Concentrations (RBCs) and DC Risk-Based Screening Levels (RBSLs). Based on this data, the elevated naphthalene concentrations detected in soil at G46-1 are apparently associated with a release or spill from historical drycleaning activities at Building 46. In addition, the presence of PCE and it's daughter product TCE, suggest that PCE was also utilized at Building 46 for drycleaning activities. The W46-1 ground-water sample had concentrations of 1,2-dichloroethane (1.49 ug/L) and 1,2,3-trichloropropane (32.5 ug/L), which exceeded their respective tap water RBCs, although bromomethane (1.76 ug/L) was less than its RBC. 1,2-dichloroethane is a daughter or breakdown product for the dehalogenation of PCE, while 1,2,3-trichloropropane is a solvent, paint, and varnish remover and a cleaning and degreasing agent. In addition, the ground-water sample collected in W72-1 (located approximately 200 feet downgradient of Building 46) had detectible concentrations of PCE, TCE and cis-1,2-dichloroethene which exceeded their respective tap water RBCs, while PCE and TCE also exceeded their respective Maximum Contaminant Levels (MCLs). Although it can be inferred that the chlorinated solvents detected in W72-1 were from a drycleaning solvent spill or release in the area of Building 46, no actual "source area" was identified, and historic paint can disposal activities northwest of Building 72 could also be contributing to their presence.
- <u>Building 48 (Golf Course Maintenance Shed/Bathrooms)</u>: Two pesticides, beta-BHC (0.0276 mg/kg) and methoxychlor (0.052 mg/kg), were detected in soil at Building 48, while the remaining pesticides and herbicides analyzed were Not Detected (ND). The methoxychlor concentration was less than its RBC, while no RBC exists for beta-BHC. Various metals detected in soil included arsenic, barium, cadmium, chromium, lead, and mercury. Arsenic concentrations detected exceeded RBC and RBSL levels, while cadmium and chromium exceeded their respective RBSLs only. Although no RBC or RBSL exists for mercury, mercury was detected in soil at concentrations ranging from 0.137 to 0.46 mg/kg. Arsenic, mercury, and lead are potential by-products associated with pesticides, although these metals can be found naturally occurring.

The W48-1 ground-water sample was ND for pesticides and herbicides, although relatively low concentrations of the metals barium, cadmium, chromium, and lead were detected (at concentrations less than their respective RBCs, MCLs and DC Ground-Water Quality Standards). Based on this data, shallow soil in the area of HA48-3 has been impacted by pesticides, although detected concentrations were less than available RBCs. The metals detected in soil and ground water are likely from naturally occurring metals.

- <u>Building 77</u>: A distinct "pesticide" odor and apparent pesticide/herbicide residue was observed coating the concrete floor inside of the Building 77 Pesticide Storage Room. However, soil samples collected beneath the concrete slab-on-grade and from beneath the adjacent asphalt parking surface were ND for pesticides and herbicides (although the metals barium, chromium, and lead were detected). Chromium in soil exceeded its RBSL, but did not exceed its RBC. The W77-1 ground-water sample was ND for pesticides and herbicides, aside from the herbicide MCPP (detected at 132 ug/L). The MCPP concentration detected exceeded the 37 ug/L tap water RBC. Relatively low concentrations of the metals barium, cadmium, and mercury were detected in ground water below their respective RBCs, MCLs and DC Ground-Water Quality Standards (except for cadmium which exceeded its DC Water Quality Standard). The metals detected in soil and ground water are likely from naturally occurring metals.
- Building 78: Soil samples collected at Building 78 were ND for pesticides and herbicides, aside from the pesticides 4,4'-DDE (detected at 0.0023 mg/kg) and methoxychlor (detected at 0.00329 mg/kg). However, the 4,4'-DDE and methoxychlor concentrations were less than their respective RBCs. An unknown "chemical" odor was also noted in several of the soil samples collected near the surface in borings H78-2, 3, 5 and W78-1; however, organic vapor concentrations for these soil samples measured on site using a photoionization detector (PID) were generally less than 2 parts per million. Various metals including arsenic, barium, chromium, and lead were detected in soil. Aside from chromium which exceeded its RBSL, the other metals did not exceed their respective RBSLs or RBCs. The W78-1 ground-water sample was ND for pesticides and herbicides. Relatively low concentrations of the metals barium, cadmium, chromium, and lead were also detected in ground water. Cadmium was greater than its DC Water Ouality Standard while lead exceeded its MCL and DC Water Quality Standard. Based on this data, limited pesticide impact to shallow soils has occurred in the various greenhouses at Building 78, although no pesticide/herbicide impact to ground water was detected. The metals detected in soil and ground water are likely from naturally occurring metals.
- <u>Building 69</u>: The composite sample of the ash waste material inside of the incinerator ash cleanout chute at Building 69 was ND for Toxicity Characteristics Leaching Procedure (TCLP) VOCs, SVOCs, pesticides and herbicides; and ignitability, corrosivity, and reactivity did not indicate hazardous waste characteristics. However, the TCLP lead concentration of 13.3 mg/L, was greater than the 5.0 mg/L regulatory standard (other metals did not exceed their associated regulatory standards). Based on this data, ash waste material located inside of the incinerator is a lead characteristic hazardous waste.
- <u>Building 76:</u> Total petroleum hydrocarbons-diesel range organics (TPH-DRO) concentrations up to 1,420 mg/kg were detected in soil at Building 76, which is greater than the DC release reporting level of 100 mg/kg and is also greater than DC Tier 1 RBSL (aka the Soil Quality Standard; typically used as a cleanup standard on leaking UST sites) of 960 mg/kg. PCBs were ND in each soil sample, while butyl benzyl phthalate was the only SVOC detected (at 0.643 ug/kg) which was less than its RBC and RBSL. These borings were located adjacent to hydraulic lifts, and apparently represent hydraulic oil releases from hydraulic lifts or hydraulic lines. The

W76-1 ground-water sample had a relatively low TPH-DRO concentration of 415 ug/L, which was less than the DC Risk-Based Ground-Water Standard at the Point of Exposure concentration of 3,570 ug/L. Bis(2-ethylhexyl)phthalate was the only SVOC detected in ground water, although no RBC or RBSL exists for this constituent. Based on this data, no significant petroleum impact has occurred to ground water in the area of Building 76, although a significant impact to soil in the area of the hydraulic lifts has occurred, above DC reporting and soil cleanup guidelines.

• Although the District of Columbia does not have guidelines regarding typical background levels for metals in soil, the adjacent State of Maryland does have published Anticipated Typical Concentrations (ATCs) for various metals, according to the various Geologic Provinces in the State. The ATCs for Eastern Maryland (generally the same as the Coastal Plain soils at the AFRH site) are 3.6 mg/kg for arsenic, 28 mg/kg for chromium, and 0.51 mg/kg for mercury. These ATCs are generally in line with metals concentrations detected at the AFRH site Buildings 48, 77, and 78, suggesting the metals are naturally occurring background levels. In addition, where pesticides were detected in soil at H48-3, H78-1 and H78-6, corresponding metals at those locations were not significantly higher than other locations where no pesticides were detected.

The following recommendations were developed based on the conclusions stated above. Recommendations and opinions of cost for potential soil and ground-water remediation will be provided in a separate report.

- No further assessment of floor drains is recommended, because the floor drains dye tested discharge into the sanitary sewer system or into an oil-water separator. However, the oil-water separator at Building 76 should be removed if it is no longer needed.
- Based on information included in Table 7, existing UST systems at Buildings 56, 64 and 52, should be tightness tested to confirm that there are no current leaks. In addition, inactive UST systems at Buildings 46 and 75 should be removed and properly closed. Additional subsurface sampling should be completed at Buildings 26/27 and 74A, to evaluate the presence/absence of petroleum hydrocarbons in soil, where no closure data exists.
- Additional assessment at Building 46 is recommended to delineate the lateral and vertical extent of naphthalene, PCE, TCE and related drycleaning solvents and to establish the actual source area. An active or passive soil-gas survey should be performed as the initial investigative task for this assessment, prior to additional soil and ground-water sampling.
- Wipe samples should be collected on the concrete floor in the Building 77 Pesticides Storage Room to confirm the presence/absence of pesticides and herbicides, if future occupancy or demolition is proposed.
- The ash waste material located inside of the incinerator at Building 69 should be removed by a qualified contractor, and transported and disposed of off-site as a lead characteristic hazardous waste.
- Additional subsurface soil sampling is recommended in the area of the hydraulic lifts at Building 76, to delineate the lateral and vertical extent of petroleum impact. No additional ground-water sampling is recommended, although the DC UST Division may require additional ground-water data. Remediation of soils with TPH-DRO greater than 960 mg/kg, will likely be required by the DC UST Division. In addition, petroleum contaminated soils that are removed from the ground

at Building 76 or at other buildings at the AFRH that cannot be used on site as approved fill (typically with a TPH less than 100 mg/kg), must be remediated or transported off site for treatment/disposal at a properly permitted facility.

- Although no further assessment is recommended at Buildings 48 and Building 78 (since the levels of detected pesticides were less than RBCs), future landholders should be advised that if greenhouses/structures at these sites are demolished, the interior soil will need to be characterized prior to disposal.
- The TPH-DRO concentrations detected at Building 76 (greater than the 100 mg/kg) should be reported to the DDOE UST Division as a release. The DDOE UST Division is typically the regulatory agency responsible for managing non-UST petroleum release cases, and will likely require a Comprehensive Site Assessment. This report should be provided to the DDOE Water Quality Division, to document reporting of the contaminants of concern detected in ground water at concentrations greater than either RBCs, MCLs or RBSLs.

Investigation derived waste

light non-aqueous phase liquid

leaking underground storage

Maximum Contaminant Level

milligrams per kilogram

methyl tert-Butyl ether

tank

IDW

LNAPL

LUST

**MCLs** 

mg/kg

MTBE

AFRH	Armed Forces Retirement Home	ne ND Not Detected		
ASTM	America Society of Testing	NFRAP	No Further Remedial Action	
	Materials		Planned	
ATC	Anticipated Typical	PCBs	Polychlorinated biphenols	
	Concentration	PCE	perchloroethylene	
bgs	below ground surface	PID photoionization detector		
DC	District of Columbia	PVC	polyvinyl chloride	
DOH-EHA	Department of Health –	RBC	<b>Risk-Based</b> Concentration	
	Environmental Health	RBSL	Risk-Based Screening Level	
	Administration	REC	recognized environmental	
DDOE	DC Department of Environment		conditions	
ERT	Earth Resources Technology,	SAP	Sampling and Analysis Plan	
	Inc.	SVOC	semi-volatile organic compound	
ESA	Environmental Site Assessment	TCE	trichloroethene	
G&O	Greenhorne & O'Mara TCLP Toxicity Characteristi		Toxicity Characteristics	
GPR	ground penetrating radar		Leaching Procedure	
GRO	gasoline range organics	TPH-DRO	Total petroleum hydrocarbons-	
GSA	General Services		diesel range organics	
	Administration	ug/kg	micrograms per kilogram	
HSA	hollow-stem auger	ug/L	micrograms per Liter	

USEPA

UST

VOC

United States Environmental

Underground storage tank

volatile organic compound

Protection Agency

# LIST OF ACRONYMS, ABBREVIATIONS, AND UNITS

#### **1.0 INTRODUCTION**

MACTEC Engineering and Consulting, Inc. (MACTEC) has completed a Phase II Environmental Site Assessment (ESA) at the Armed Forces Retirement Home (AFRH) located at 3700 N. Capitol Street, NW in Washington, DC. The AFRH Main Campus is a 276-acre parcel, bordered on the south by Irving Street, and on the west by Park Place and Rock Creek Church Road. The eastern border is formed by North Capitol Street and the northeastern border follows Harewood Road (Figure 1). The AFRH property includes a hospital, retirement home, nursing home, cemetery, golf course, and various other administrative and support facilities including a central heating plant and incinerator. A total of 93 buildings are listed on the AFRH's building inventory (Figures 2 and 3). The majority of the campus has been disturbed by grading, filling, and construction activities.

The General Services Administration (GSA) requested a Phase II ESA of the AFRH site, which was described in a May 2006 Scope of Work – Phase II Environmental Site Assessment for the Armed Forces Retirement Home – Main Campus. Based on the GSA Scope of Work, MACTEC prepared a proposal and subsequent Sampling and Analysis Plan (SAP) dated July 25, 2006, which described procedures to be utilized in evaluating recognized environmental conditions (RECs) identified in a *Phase I ESA Report* for the AFRH prepared by Greenhorne & O'Mara, Inc. (G&O), dated January 2005.

This Phase II ESA Report has been prepared in general accordance with MACTEC's Technical Proposal PROP06WASH.0098 dated June 8, 2006. Additional services were performed at Buildings 75/76 in accordance with our Proposal for Suspected Underground Storage Tank (UST) Evaluations dated November 30, 2006. Phase II sampling and reporting activities were completed based on procedures outlined in American Society for Testing Materials (ASTM), Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E1903-97).

#### **1.1 OBJECTIVE**

The objective of this Phase II ESA is to describe sampling activities completed by MACTEC to evaluate the presence or absence of contaminants of concern and related RECs (previously identified by G&O), as well as to recommend remedial alternatives, where applicable. The Phase II ESA did not include underground storage tank (UST) removals, UST tightness testing, asbestos or lead-based paint sampling, remediation or the characterization/removal of drums or containerized waste materials. The scope of work generally included the completing environmental sampling activities described below: <u>Buildings 75, 75/76, and 46</u> – Document Reviews and Geophysical Surveys <u>Buildings 26/27, 43, and 74</u> – Regulatory File Reviews <u>Buildings 46, 72, 76, and 77</u> – Floor Drain Dye Tracer Testing <u>Building 75</u> – Petroleum UST Phase II Sampling and Analysis <u>Building 46</u> – Drycleaning Solvent Phase II Sampling and Analysis <u>Buildings 77, 78, and 48</u> - Pesticides Phase II Sampling and Analysis

# **1.2 LIMITATIONS**

This report was prepared for the sole use of GSA. No other party should rely on the information contained herein without prior written consent of MACTEC. The scope of work specified is reasonably supported by the results of the previous work described herein and the application of professional standards of care that are generally accepted for completion of environmental investigations. If additional information becomes available which might impact our scope of work, we will review the information, reassess the potential concerns, and modify our approach, if warranted.

#### 2.0 SITE DESCRIPTION AND BACKGROUND

#### 2.1 SITE DESCRIPTION

A total of 93 buildings are listed on the AFRH's building inventory. The main campus also has two fishing ponds and two other ponds within or near the golf course. In addition, a 15 million-gallon underground reservoir, leased to the District public water system, is located in the golf course area. In general, most of the RECs identified by G&O were located along the southeastern portion of the AFRH Site, in a location designated as Development Zone 3 (see Figure 4). This area of the Site primarily includes paved and grassy landscaped areas, with many of the buildings unoccupied, and utilized for storage, or as greenhouses. A listing of the buildings identified as either RECs or environmental concerns by G&O is as follows:

- Building 46 Heating Plant
- Building 69 Incinerator and Storage Building
- Building 72 Shop Building #2
- Building 75 Flammable Gas and Storage Building
- Building 76 Garage
- Building 77 Grounds Maintenance Building
- Building 78 Greenhouse Buildings
- Building 48 Golf Course Maintenance/Storage and Bathrooms

In addition, regulatory file reviews for previously removed petroleum USTs were recommended by G&O for Building 26/27 (Tunnel Exhaust Fan/Manhole C Converter), Building 43 (Auto Craft Shop), and Building 74 (Warehouse).

## 2.2 BACKGROUND

MACTEC reviewed the following documents for the Site, to obtain background information, establish a site chronology and to assist in the placement of sampling points to assess the presence or absence of contaminants of concern:

- *GENERAL SITE MAP Master Plan Update, Existing Conditions, U.S. Soldiers' and Airman's Home,* Rhodeside and Harwell Incorporated, January 1994.
- Draft Report of Phase I Environmental Site Assessment and Other Environmental Assessment (EA) Components, U.S. Soldiers and Airmens Home, Law Engineering and Environmental Services, Inc., October 25, 1998.

- Final Phase I Environmental Site Assessment, Armed Forces Retirement Home-Main Campus, Greenhorne & O'Mara, Inc., January 2005.
- Scope of Work Phase II Environmental Site Assessment, Armed Forces Retirement Home Main Campus, General Services Administration, May 2006.
- Final Sampling and Analysis Plan (SAP) for Phase II Environmental Site Assessment Activities, Armed Forces Retirement Home –Main Campus, MACTEC Engineering and Consulting, Inc., July 25, 2006.

# 3.0 PHASE II INVESTIGATION METHODOLOGY

Phase II sampling activities were performed in general accordance with the Standard Operating Procedures included in MACTEC's Sampling and Analysis Plan (SAP). **The AFRH building number, number of borings/ground-water monitoring wells, sample type, number of samples, final boring/well depths, and analytical parameters completed at each site are summarized in Table 1.** Field sampling procedures are included in Appendix A. The locations of each sample location, soil boring and monitoring well are shown on Figures 5 and 6.

In general, Phase II sampling activities included UST, dry cleaning solvent, pesticide, hydraulic lift and incineration ash assessments, as well as performing dye tracer studies, geophysical surveys and regulatory file reviews described below in Sections 3.1 through 3.6. Field investigation work was performed with the on-site technical oversight of a MACTEC environmental geologist. The environmental geologist directed the sampling efforts, field classified recovered samples, noted ground-water conditions, and recorded other appropriate information. Although detailed sampling procedures are included in the SAP and in Appendix A, invasive soil and ground-water sampling generally utilized the following procedures:

- Invasive soil and ground-water sampling was performed using direct push (Geoprobe®) drilling and hand augers for shallow borings, while deep ground-water monitoring wells were completed using hollow-stem auger (HSA) drilling and sampling techniques.
- A photo-ionization detector (PID) was utilized to screen the soil samples collected from each boring for organic vapors. For petroleum and volatile organic constituents of concern, soil samples from each boring that exhibited the most obvious evidence of suspected contamination (based on visual observation, staining, or PID readings) were typically selected for laboratory analysis.
- After well development, ground-water samples were collected using a disposable high density polyethylene bailer. Each monitoring well was gauged using an oil-water interface probe, to measure the depth to ground water and potential light non-aqueous-phase liquid (LNAPL).
- No detailed elevation surveying was performed, and each sampling point location was nominally established using a scaled drawing and measuring tape. However, elevations for the monitoring wells were established based on existing survey points using a level and rod to estimate the localized ground-water flow direction.

#### 3.1 UNDERGROUND STORAGE TANK (UST) PHASE II ASSESSMENT ACTIVITIES

Regulatory file reviews were completed at the DC Department of the Environment (DDOE) UST Division to obtain closure documentation and related correspondence for each of the three USTs removed at Buildings 26/27, 43 and 74. In addition, all other available AFRH UST file documents were copied and reviewed, to gain a more accurate inventory of registered USTs, closed USTs, and USTs where no information or conflicting information exists.

- Although no recent UST records were provided by the AFRH, DC Fire Department records were also reviewed to evaluate the presence/absence of suspected USTs at Buildings 76, 75/76 and 46.
- Earth Resources Technology, Inc. subsequently performed geophysical surveys at Buildings 76, 75/76 and 46 using a magnetometer/ground penetrating radar (GPR), to further evaluate or confirm the presence of suspected USTs.
- A pre-closure Phase II assessment at each of the 3 existing USTs at Building 75 was performed to evaluate the presence/absence of petroleum hydrocarbons prior to anticipated future tank removals. The Pre-closure assessment included 4 direct-push (Geoprobe®) borings adjacent to the sides of each UST (G75-1, 2, 3 and 4) to approximately 15 feet bgs. In addition, 1 deep ground-water monitoring well (W75-1) was installed to a depth of approximately 98 feet bgs.

# 3.2 FLOOR DRAIN DYE TESTING AND BUILDING 46 (DRYCLEANING SOLVENT) SAMPLING

Prior to performing Phase II sampling activities, drawing reviews and dye tracer testing were performed at Building 46 to establish the discharge locations of eight representative floor drains. Drawing reviews and subsequent dye tracer testing were also performed to establish the discharge locations of representative floor drains in Buildings 72, 76 and 77. Dye tracer testing was performed by injecting a fluorometric or colored dye into representative floor drains and washing the dye into the piping system using a garden hose with a constant flow of water. Representative sewer and storm-water manholes were opened and visually monitored around the building perimeter to document when the dye was detected discharging into the main piping.

After the dye testing was completed, Phase II soil and ground-water sampling was performed at the northwest portion of Building 46 to evaluate the presence/absence of drycleaning solvents in the area of former laundry and drycleaning operations. The area of Building 46 (i.e., 46A) where dry cleaning and laundry operations were reported, is located on a second floor, and is underlain by the first floor boiler room. Therefore, potential leaks from drycleaning equipment would not have been released directly onto

the concrete slab-on-grade. However, the west wall of Building 46 is almost at grade with the adjacent sidewalk and paved parking/access road.

- Three direct-push Geoprobe® borings were advanced adjacent to Building 46 (G46-1, 2 and 3) to approximately 25 feet bgs and one down gradient exterior deep ground-water monitoring well (W46-1) was completed to a depth of 45 feet bgs.
- In addition, ground-water samples were collected from the three existing wells at Building 72, located down gradient of Building 46 (designated by MACTEC as W72-1, 2 and 3).

# 3.3 BUILDINGS 48, 77, AND 78 PESTICIDES SAMPLING

Phase II soil and ground-water sampling was performed at Building 48 (Golf Course Maintenance/Storage and Bathrooms), Building 77 (Pesticides Storage Room) and at representative greenhouses managed by the Smithsonian Institution at Building 78 to evaluate the presence/absence of pesticides/herbicides and related metals (primarily arsenic, lead and mercury) by-products.

- Building 77 assessment activities included completing 6 hand auger/Geoprobe® borings (G77-1 through 6) to a depth of approximately 5 feet each near the building's southeast corner, inside and adjacent to the Pesticide Storage Room. In addition, 1 exterior deep ground-water monitoring well (W77-1) was completed in the down gradient direction adjacent to the southeast building corner of Building 77 to a depth of 90 feet bgs.
- Building 78 (Greenhouse) assessment activities included completing 6 shallow hand-auger borings (H78-1 through H78-6) to approximately 5 feet bgs adjacent and within the oldest representative Building 78 greenhouses. One of the 6 hand augers (H78-1) was completed in the Pesticide Storage Room by coring through the concrete floor. In addition, 1 exterior deep ground-water monitoring well (W78-1) was completed to a depth of 90 feet bgs.
- Building 48 assessment activities included completing 5 shallow hand-auger/Geoprobe® borings (H48-1 through G48-5) to approximately 5 feet bgs adjacent to golf course maintenance sheds/chemical storage areas and at representative proximal locations. In addition, 1 ground-water monitoring well (W48-1) was completed to a depth of 29.5 feet bgs.

# 3.4 BUILDING 69 ASH WASTE CHARACTERIZATION

One composite sample of ash waste material was collected inside of the incinerator ash clean-out chute at Building 69 (designated as H69-1) using a stainless steel trowel to evaluate if the ash material remaining in the incinerator is a characteristic hazardous waste.

# 3.5 BUILDING 76 (HYDRAULIC LIFT) SAMPLING

Three hydraulic lifts are present inside Building 76, and no hydraulic lifts were observed at Building 77 (although, G&O reported the potential for their presence). Three borings were completed inside of Building 76 (one adjacent to each lift) and one exterior boring was completed along the southern wall of Building 76, in the area of significant staining on the asphalt from apparent waste oil spillage. These 4 direct-push Geoprobe® borings (G76-1, 2, 3 and 4) were completed to a depth of approximately 15 feet bgs. One deep ground-water monitoring well (W76-1) was installed along the southern exterior wall of Building 76 to a depth of 85 feet bgs.

# **3.6 INVESTIGATION DERIVED WASTE (IDW)**

Investigation derived waste (IDW), consisting of soil cuttings, decontamination materials, purge water and decontamination water generated during the Phase II sampling activities were placed into 55-gallon steel drums, labeled and staged on-site. In general, IDW associated with the Phase II sampling activities was managed using procedures specified in the SAP and as generally described below:

- IDW (primarily soil samples and drill cuttings) was assumed to be non-hazardous, and was placed in steel 55-gallon drums, labeled, and staged adjacent to the boring/monitoring well location or at an approved central location. Our scope of work did not include collecting composite samples from the drums for waste characterization testing or disposal. However, we can assist GSA with future characterization and IDW disposal activities.
- Well development water, purge water and decontamination water was also containerized in 55gallon drums, labeled and staged on site.
- General debris (i.e., wood, paper, plastic, personnel protective equipment) was collected in plastic garbage bags or drums and disposed of as non-hazardous municipal waste.

# 3.7 BUILDING 75 SUSTPECTED UST EVALUATIONS

As described in Task 3.1, a geophysical survey was completed in the area between Building 75 and Building 76, to evaluate the potential presence of suspected USTs that may not have been removed from the ground. Subsurface anomalies representing six suspected buried USTs were noted along the west and southwest sides of Building 75. MACTEC subsequently completed six vacuum assisted "soil knifing" borings at each of these six locations, to physically evaluate the presence or absence of suspected USTs. Backhoe excavated test pits could not be performed based on the presence of numerous proximal underground utility lines.

In general, the exploratory borings were completed using high pressure air knifing to initially break up the soil, and the soil was subsequently removed from the borehole using a vacuum truck. The borings were extended to a depth of approximately three to six feet below the ground surface (bgs), where the geophysical anomalies were previously detected. One soil sample collected from the bottom of each boring was screened on site for organic vapors using a PID. The three soil samples with the highest PID readings or suspected petroleum contamination were transferred to appropriate sample containers, and laboratory analyzed for TPH-DRO and TPH-GRO. After completion, each boring was backfilled with soil and the surface capped with an asphalt cold-patch.

#### 4.0 **RESULTS AND FINDINGS**

The results and findings of MACTEC's Phase II ESA are discussed in the following sections. Soil and ground-water analytical results are summarized in Tables 2 and 3, respectively. Monitoring well gauging and construction data are summarized in Tables 4 and 5, respectively. Table 6 includes TCLP and hazardous waste characterization parameter results for the Building 69 ash sample, while UST and related regulatory file review data is summarized in Table 7. Boring logs with well completion details are provided in Appendix B. Laboratory Test Data reports are included in Appendix C, while selected site photographs are included in Appendix D.

#### 4.1 GENERAL GEOLOGY AND STRATIGRAPHY

The subject site is located within the uplands of the Coastal Plain physiographic province. The Coastal Plain consists mainly of marine sediments that were deposited during successive periods of fluctuating sea level and moving shorelines. The unconsolidated formations dip slightly seaward and several are exposed at the surface in bands paralleling the coastline. Many beds exist only as fragmental erosional remnants sandwiched between more continuous strata above and below. Coastal Plain sediments are typical of those deposited in shallow sloping sea bottom, near-shore and riverene environments: gravels, sands, silts and clays, with irregular deposits of shells.

The Site is underlain by the basal formation of the Potomac Group, known as the Patuxent Formation. This Formation is generally described as fine-to medium-grained, tan, white, yellow, or pink sands commonly mixed with clays, kaolin, gravels and lenses of varicolored massive clay. The natural surficial material belongs to the Wicomico formation which is characterized as gravel, sand, and silt with local basal deposits of carbonaceous clay often containing tree stumps and other woody debris. Udorthents (fill soils) are also common at or near the surface of the site. Although isolated seasonal or perched ground water can often be encountered, the depth to the water table is generally on the order of 80 to 90 feet below the ground surface (bgs). Topographically, the Site slopes to the south with both southeast and southwest components.

Detailed descriptions of the soil strata encountered are presented on the Soil Boring and Hand Auger Logs and Soil Test Boring Records contained in Appendix B. The contacts between strata indicated on the Soil Test Boring Records represent approximate boundaries, which may be gradational or transitional. In general, borings advanced at the Site encountered varying thicknesses of man-made fill at or near the surface, grading to a silty clay to clayey silt, with alternating strata of silty sand to sandy silt, including some silty gravel lenses.

#### 4.2 GROUND-WATER CONDITIONS

In the geologic setting of the subject site, shallow ground water typically occurs as an unconfined (water table) aquifer, and the water table is usually a subdued reflection of the surface topography. Locally, confined aquifers or perched water tables also may occur. Perched or shallow ground water was encountered above apparently discontinuous clay strata at Buildings 46 and 48, but was not encountered in the four other monitoring wells installed. Ground water typically flows towards the nearest stream or other surface water body; these topographically low areas commonly consist of local drainage features that have eroded deeply enough to intersect the water table or to act as ground-water discharge zones.

Construction data, screen intervals and well depths for ground-water monitoring wells installed at the Site are summarized in Table 5. Static ground-water levels in the monitoring wells were gauged on September 8, 2006. Static ground-water levels ranged from approximately 13.8 to 44.7 feet below the top of PVC casing (perched at wells W46-1 and W48-1) to 79.8 to 95.4 feet in the seven remaining wells. No light non-aqueous phase liquid (LNAPL) were detected in any of the monitoring wells. A summary of monitoring well gauging data is presented in Table 4. The static ground-water elevations generally indicated a ground-water flow direction to the south, likely with both southeast and southwest components (see Figure 7).

No hydraulic conductivity testing was performed to estimate the ground-water flow velocity and related hydrogeologic characteristics. However, solutes (i.e. contaminants of concern) are subject to a number of different processes through which they can be removed from ground water. They can be sorbed onto the surfaces of mineral grains in the aquifer, sorbed by organic carbon that might be present in the aquifer, undergo chemical precipitation, be subjected to abiotic degradation or biodegradation, and participate in oxidation-reduction reactions. As a result of these sorption processes, some solutes will move substantially slower through the aquifer than the ground water that is transporting them; this effect is called "retardation". Dissolved oxygen in ground-water samples collected during monitoring well sampling activities ranged from 3.01 to 7.10 mg/L (with an average of 5.2 mg/L), indicating aerobic conditions are present at many locations to support natural biodegradation. However, chlorinated solvents typically biodegrade (dehalogenate) more rapidly under anaerobic conditions.

# 4.3 UNDERGROUND STORAGE TANK (UST) ASSESSMENT RESULTS

## 4.3.1 Regulatory File Review Results

Regulatory file reviews were completed at the DDOE UST Division for each of the three USTs removed at Buildings 26/27, 43 and 74, including all other UST/LUST files for the AFRH site which were provided by the DDOE UST Division. The Fire Department only had records for 300-gallon gasoline UST removed in December 1998, but did not indicate the building location. Table 7 is a summary of the information obtained from these file reviews. The closure status and recommendations for each active, closed or suspected UST are summarized below:

Location	Size (gallons)	Contents	Closure Status	Recommendations
17	400	Diesel	Removed	Closure Assessment completed with no release detected. No Further Assessment recommended.
26/27	500	Diesel	Unknown	No documentation of closure produced or obtained. Complete soil borings in area of reported UST (Former UST is possibly designated as a FST 55 feet NE of Building 26 on the General Site Map dated January 1994 by Rhodeside and Harwell, Inc.).
43	500	Used Oil	Removed	Closure assessment completed with no TPH >100 mg/kg. No Further assessment recommended
46A/46	Unknown	Unknown	Inactive	Fill ports and vent pipes present for 2 suspected heating oil USTs at SE Corner of Building. Perform tank removals or in-place closures if utility conflicts exist.
52	500	Diesel	Unknown	Existing UST at Building SE corner. Tightness test existing UST system.
56	1,500	Diesel	Active	In use. Perform tightness test of existing UST system.
64	1,000	Diesel	Active	Previous 1,200 gallon UST removed and soil remediation in 1994 by bioventing. Perform tightness test of existing UST system.
74A	500	Diesel	Unknown	No location or closure information provided or available. Complete soil borings at SE corner of Building 74 where a former UST is located (at existing AST).
75	8,000	Gasoline	Inactive	Three previous USTs removed in 1990/1991, and soil remediation performed. Records indicate one compartmentalized 8,000-gallon no longer in use. Remove and properly close existing UST system.

As indicated above, active USTs are present at Buildings 56, 64 and Building 52, inactive USTs are present at Buildings 46 and 75, and closed USTs with undocumented closure reports were formerly located at Buildings 26/27 and 74A.

MACTEC was also provided a CD by the USEPA Region III on September 22, 2005, which contained regulatory files related to a "No Further Remedial Action Planned" (NFRAP) listing for the AFRH

described in LAW's previous Phase I ESA report. Based on our review of the *Soil and Groundwater Investigation Report, Waste Paint Disposal Site* prepared by ABB Environmental Services, Inc. dated August 14, 1991, AFRH procured several thousand war surplus cans of paint in 1947 to be used in maintenance activities at the facility. When the paint was determined not to be suitable for use, the paint cans were buried in a storage cell several feet deep in the area northwest of Building 72, where a current paved road exists. In the spring of 1990, during installation of piping for a hot water/steam system, the contractor encountered the buried paint cans. The paint cans and approximately 1,000 tons of xylenes contaminated soil, were removed down to a depth of approximately 30 feet and the excavation backfilled. Five ground-water monitoring wells (designated by ABB as MW-1, 2, 3, 4 and 5) were also installed in this area. Laboratory analysis of soil and ground-water samples collected from these wells did not have detectible xylenes concentrations, and the case was subsequently closed by the USEPA. Although MACTEC did not have this information for the preparation of our SAP and associated Phase II ESA field work, we did find and sample three of these five wells. The three wells sampled by MACTEC were designated as W72-1 (ABB well MW-4), W72-2 (ABB well MW-1) and W72-3 (ABB well MW-5).

#### 4.3.2 Building 46 and 75/76 Geophysical Surveys

#### Building 46 Suspected UST(s)

MACTEC observed two vent pipes, a 3-inch steel fill port and two bolted-down steel manway covers along the southwestern exterior wall of Building 46 underneath the steps (Photograph 1). MACTEC removed the two bolted-down manway covers which each extended down approximately 3.0 feet to the top of what appeared to be two separate tanks (or compartments for a single tank). The depth to the bottom of the tanks was approximately 8.5 feet bgs, suggesting the tanks have a diameter of approximately 5.5 feet. Both tanks were filled with water, which had a distinct petroleum or fuel oil odor and sheen. In addition, ERT completed a geophysical survey in this area which indicated the presence of one or several suspected USTs (see Figure 13 in Appendix E). Based on this information, several USTs are apparently located at the southwest exterior corner of Building 46, which are no longer in use. Since no drawings for the USTs were found, the length, capacity and orientation of the tanks is unknown, but could extend beneath the building foundation or proximal underground utility lines. The asphalt, concrete, grass and concrete retaining wall located above the tanks will need to be removed to confirm their size and orientation, prior to closure.

#### Building 75/76 Suspected USTs

A geophysical survey was completed in the areas west and southeast of Building 75, and in the area between Building 75 and Building 76, to evaluate the potential presence of former or existing USTs that may not have been removed from the ground. As indicated in the ERT Geophysical Survey Report (Appendix E, Figure 12), subsurface anomalies representing six suspected buried USTs were noted along the west and southwest sides of Building 75. In addition, indications of a pit or excavation were noted in this area, which could represent a UST that was previously removed. Vacuum assisted "soil knifing" borings were subsequently completed at each of the six suspected UST locations, as described in Section 4.9.

Along the northeast side of Building 75, MACTEC observed three vent pipes, and a rectangular-shaped concrete pad with three manway covers and three fill covers for three suspected USTs (Photograph 3). A fuel pump island with three fuel pumps was observed along the southeastern corner of Building 75 (see Figure 5). MACTEC removed the three manway covers for each tank; however, they were locked and inaccessible. No data was available beyond the installation documentation in 1991. Based on records reviewed and described in Table 7, AFRH indicated one manifolded 8,000-gallon UST is present at this location. In addition, ERT completed a geophysical survey in this area which indicated the presence of a UST (see Figure 12 in Appendix E).

Based on this information, one manifolded, three-compartment UST is located along the northeast exterior wall of Building 75. Although conflicting records exist regarding the size, orientation and contents of the UST, this UST system and the fuel pump dispensers are no longer in use and will need to be closed in accordance with DDOE-UST Division requirements.

Four Geoprobe® borings (G75-1, 2, 3 and 4) and one deep ground-water monitoring well (W75-1) were completed adjacent to the USTs and the fuel pump island at Building 75. Five soil samples (one per boring/well) and a ground-water sample collected from monitoring well W75-1 were laboratory analyzed for TPH-DRO/GRO, and VOCs. Soil and ground-water results are discussed below and are summarized in Tables 2 and 3.

Soil:

A TPH-GRO concentration of 10.9 mg/kg was detected in boring G75-3, which was less than the DC release reporting concentration of 100 mg/kg. Acetone was detected in soil at three locations at concentrations ranging from 90 to 95 ug/kg, which was less than the acetone USEPA Region III risk-

based concentration (RBC) and the DC Risk-Based Screening Level (RBSL) for both residential and industrial use. Acetone is strong solvent for most plastics and synthetic fibres, can be used as a fuel additive, is commonly found in nail polish removers, and is used for thinning and cleaning fiberglass resins and epoxies. However, acetone is also a common laboratory contaminant. Carbon disulfide (often used as a solvent in metal industries) was also detected at two locations (at 10 and 16 ug/kg), which was less than its RBC and RBSL. Benzene (detected at 2 ug/kg) was also less than its RBC and RBSL. The low concentrations of TPH, acetone and benzene may be associated with minor leaks, overfill or fuel/chemical spillage around the Building 75 UST system. It should be emphasized that no borings were completed directly beneath or directly adjacent to the USTs or piping, and higher contaminant concentrations may be discovered, when the USTs and piping are removed from the ground.

#### Ground Water:

TPH-DRO/GRO were not detected (ND) above the laboratory detection limits in the W75-1 ground-water sample, although a relatively low methyl tert-Butyl ether (MTBE; a gasoline additive) concentration of 1.4 ug/L and a relatively low chloroform (once a general anesthetic and also used as a solvent for fats, alkaloids, iodine, and other substances) concentration of 1.44 ug/L were detected. The chloroform concentration exceeded the tap water RBC. Based on this data, a slight impact to soil and ground water has occurred in the area of Building 75, likely from current/historic fuel leaks or chemical spills.

#### 4.4 FLOOR DRAIN DYE TESTING RESULTS

Floor drain dye tracer testing was performed on representative floor drains at Buildings 46, 72, 76 and 77 to evaluate if floor drains may be discharging into the storm-water system, or into a related illicit discharge location. A total of eight floor drains were dye tested at Building 46. Two of these floor drains discharged into an internal dry trench, which subsequently flows into the boiler room pit, and then discharges into the sanitary sewer system. Four other floor drains (primarily along the northeast side of Building 46) were confirmed to discharge into the sanitary sewer, while two of the drains along the building's southeast side, were clogged and the final discharge point could not be confirmed. However, based on information provided by the Heating Plant Manager, these floor drains also discharge into the sanitary sewer system.

Two floor drains were dye tested at Building 72. The floor drain at the building's southeast corner beneath a sink was confirmed to discharge into the sanitary sewer, while the second floor drain in the Cement Storage Room, was clogged (although this drain also likely discharges into the sanitary sewer). The four floor drains along the northeastern portion of Building 76 (garage area), were confirmed to discharge into an oil-water separator located at the northeast exterior corner of the building, which subsequently discharges into the sanitary sewer system. Building 77 had three floor drains, each located inside of the two bathrooms. Although there were no proximal sanitary sewer manholes to visually

monitor the dye injected into these floor drains, down gradient storm-water inlets were visually monitored. The floor drains were flushed for approximately 30 minutes with multiple dye injections, and no indications of discharge were observed in the storm-water system. Given that these floor drains are located within bathrooms, it is likely they are connected to the sanitary sewer system, and no illicit discharges are anticipated.

Based on the dye testing performed at Buildings 46, 72, 76 and 77, the floor drains at these buildings appear to discharge into the sanitary sewer system, and do not discharge into the storm-water system.

#### 4.5 BUILDING 46 DRYCLEANING SOLVENT SAMPLING RESULTS

Three Geoprobe® borings (G46-1, 2 and 3) and one ground-water monitoring well (W46-1) were completed near the southwest corner of Building 46, where former dry cleaning activities were suspected. In addition, ground-water samples were collected from the three existing wells at Building 72, located approximately 200 to 350 feet down gradient of Building 46 (designated as W72-1, 2 and 3). A total of five soil samples (with a minimum of one sample from each boring/well) and a ground-water sample collected from monitoring well W46-1 were laboratory analyzed for volatile organic compounds (VOCs). The three ground-water samples collected from existing wells W72-1, 2 and 3 were laboratory analyzed for VOCs and for TPH-DRO and TPH-GRO.

#### Soil:

A distinct "moth ball" odor commonly associated with naphthalene was noted in soil samples collected from boring G46-1. In addition, a 1,820 ug/kg naphthalene concentration in soil was detected in boring G46-1 from 10.5 to 12.0 feet bgs, but was ND at 24 to 25 feet. The 1,820 ug/kg naphthalene concentration was less than the USEPA Region III risk-based concentration of 1,600,000 ug/kg (residential use), and naphthalene was ND in the other soil samples analyzed at Building 46. In addition, various other VOCs (acetone, carbon disulfide, tetrachloroethene, trichloroethene, and 1,2,4-trimethylbenzene) were detected in soil at Building 46. However, each of these VOCs were less than their respective RBCs and RBSLs.

Potential hazardous wastes generated by drycleaning and laundry operations are primarily solvents, and historically have included petroleum solvents such as Stoddard (naphtha), and other solvents such as tetrachloroethene (also known as perchloroethylene; PCE) and valclene (fluorocarbon 113 or trichlorotrifluoroethane). Stoddard solvent is a mixture of petroleum distillate fractions (petroleum naphtha), which is composed of over 200 different compounds primarily a mixture of C5 to C12 petroleum hydrocarbons, including naphthalene. Drycleaners began using Stoddard solvent in 1928 and it was the predominant drycleaning solvent in the United States from the late 1920s until the late 1950s. Based on this data, it is likely that the elevated naphthalene concentrations detected in soil at G46-1 are associated with a release or spillage from historical drycleaning activities at Building 46. In addition, the

presence of PCE and it's daughter product trichloroethene (TCE), suggest that PCE was also utilized at Building 46 for dry cleaning activities.

<u>Ground Water:</u> The W46-1 ground-water sample had concentrations of 1,2-dichloroethane (1.49 ug/L) and 1,2,3-trichloropropane (32.5 ug/L), which exceeded their respective tap water RBCs, although bromomethane (1.76 ug/L) was less than its RBC. 1,2-dichloroethane is a daughter or breakdown product for the dehalogenation of PCE, while 1,2,3-trichloropropane is a solvent, paint, and varnish remover and a cleaning and degreasing agent. The ground-water sample collected from down gradient well W72-1 had a trace TPH-DRO concentration of 331 ug/L, a PCE concentration of 44.5 ug/L, including trichloroethene (TCE) at 4.47 ug/L and 1 cis-1, 2-dichloroethene (at 3.84 ug/L). The ground-water samples collected from wells W72-2 and W72-3 were ND for TPH and VOCs. The PCE, TCE and cis-1,2-DCE concentrations detected in W72-1 exceeded their respective tap water RBCs, while PCE and TCE also exceeded their respective MCLs. Although it can be inferred that the chlorinated solvents detected in W72-1 were from a drycleaning solvent spill or release in the area of Building 46, no actual "source area" was identified, and historic paint can disposal activities at Building 72 could also be contributing to their presence.

# 4.6 BUILDINGS 48, 77, AND 78 PESTICIDES SAMPLING RESULTS

# 4.6.1 Building 48 Pesticides Sampling Results

Five shallow hand-auger/Geoprobe® borings (H48-1 through G48-5) and one ground-water monitoring well (W48-1) were completed in the area of the Golf Course Building 48. A total of six soil samples (one from each shallow boring/monitoring well) and a ground-water sample collected from monitoring well W48-1 were laboratory analyzed for pesticides and herbicides, and for the RCRA metals.

## Soil:

The two pesticides beta-BHC (0.0276 mg/kg) and methoxychlor (0.052 mg/kg) were detected in the soil sample collected from H48-3. The remaining pesticides and herbicides analyzed were ND in this and the five other samples collected at Building 48. The methoxychlor concentration was less than its RBC, while no RBC exists for beta-BHC. Various metals detected in soil at Building 48 included arsenic, barium, cadmium, chromium, lead, and mercury. Arsenic concentrations detected exceeded its RBC and RBSL, while cadmium and chromium exceeded their respective RBSLs only. Although no RBC or RBSL exists for mercury, mercury was also detected in soil at concentrations ranging from 0.137 to 0.46 mg/kg. Arsenic, mercury, and lead are potential by-products associated with pesticides, although these metals can be found naturally occurring.

Based on information provided to MACTEC by Mr. Mark Hughes, Inspector for the Washington D.C. Environmental Health Administration Hazardous Waste Division (DC EHA) on a previous project, the District of Columbia generally adheres to the USEPA Region III RBC regulatory criteria for arsenic, and acceptable background levels in Washington D.C. for arsenic are 5.5 mg/kg in urban areas and 1 to 3 mg/kg in natural areas. The AFRH campus lies within the urban area of Washington D.C., and therefore, the relatively low concentrations of arsenic detected in soil (ranging from 2.3 to 6.7 mg/kg) are generally in line with acceptable background level for arsenic in urban areas.

#### Ground Water:

The W48-1 ground-water sample was ND for pesticides and herbicides, although relatively low concentrations of the metals barium, cadmium, chromium, and lead were detected. However, the detected metals concentrations were below their respective RBCs, MCLs and DC Ground-Water Quality Standards. Based on this data, some pesticides impact to shallow soils has occurred in the area of Building 48, although detected concentrations are less than available regulatory standards. The low levels of metals detected in ground water are likely from naturally occurring metals.

## 4.6.2 Building 77 Pesticides Sampling Results

Six shallow Geoprobe® borings (G77-1 through G77-6) and one ground-water monitoring well (W77-1) were completed near the southeast building corner of Building 77, within and adjacent to the pesticides storage room. A total of eight soil samples (one from each shallow boring and two from the deep monitoring well) and a ground-water sample collected from monitoring well W77-1 were laboratory analyzed for pesticides and herbicides, and for the RCRA metals.

# Soil:

The seven soil samples collected at Building 77 were ND for pesticides and herbicides, although the metals barium, chromium, and lead were detected. Chromium in soil exceeded its RBSL, but did not exceed its RBC. As previously stated, these metals are naturally occurring and may not be associated with pesticide/herbicide impact. However, a distinct "pesticide odor" and apparent pesticide/herbicide residue was observed coating the concrete slab-on-grade floor inside of the Building 77 Pesticide Storage Room. Additional wipe samples would be required to confirm the presence/absence of pesticides and herbicides inside of this room, if future occupancy or demolition is performed.

## Ground Water:

The W77-1 ground-water sample was ND for pesticides and herbicides, aside from the herbicide MCPP (detected at 132 ug/L). The MCPP concentration detected exceeded the 37 ug/L tap water RBC. Relatively low concentrations of the metals barium, cadmium, and mercury were detected. However, the detected metals concentrations were below their respective RBCs, MCLs and DC Ground-Water Quality Standards, except for cadmium (which exceeded the DC Water Quality Standard).

## 4.6.3 Building 78 Pesticides Sampling Results

Six shallow hand-auger borings (designated H78-1 through H78-6) and one ground-water monitoring well (W78-1) were completed within and adjacent to representative greenhouses in the Building 78 area. A total of nine soil samples (one from each shallow boring and three from the deep monitoring well) and a ground-water sample collected from monitoring well W78-1 were laboratory analyzed for pesticides and herbicides, and for the 8 RCRA metals.

#### Soil:

The nine soil samples collected at Building 78 were ND for pesticides and herbicides, aside from the pesticides 4,4'-DDE (detected at 0.0023 mg/kg) and methoxychlor (detected at 0.00329 mg/kg). However, the 4,4'-DDE and methoxychlor concentrations were less than their respective RBCs. An unknown "chemical" odor was also noted in several of the soil samples collected near the surface in borings H78-2, 3, 5 and W78-1; however, organic vapor concentrations for these soil samples measured on site using a photoionization detector (PID) were generally less than 2 parts per million. Various metals including arsenic, barium, chromium, and lead were detected in soil. Aside from chromium which exceeded its RBSL, the other metals did not exceed their respective RBSLs or RBCs. As previously stated, these metals are naturally occurring and may not be associated with pesticide/herbicide impact.

#### Ground Water:

The W78-1 ground-water sample was ND for pesticides and herbicides. Relatively low concentrations of the metals barium, cadmium, chromium, and lead were detected. Cadmium was greater than its DC Water Quality Standard while lead exceeded its MCL and DC Water Quality Standard. Based on this data, limited pesticide impact to shallow soils has occurred at the random locations sampled, although no pesticide/herbicide impact to ground water was detected. The metals detected in both soil and ground water could potentially be by-products of pesticide/herbicide use, or are naturally occurring.

# 4.7 BUILDING 69 ASH WASTE SAMPLING RESULTS

One composite sample of the ash waste material inside of the incinerator ash clean-out chute at Building 69 (designated as H69-1) was collected to evaluate if the ash is a characteristic hazardous waste. This soil sample was analyzed for Toxicity Characteristics Leaching Procedure (TCLP) VOCs, semi-volatile organic compounds (SVOCs), metals, and pesticides/herbicides, as well as for the hazardous waste parameters ignitability, corrosivity and reactivity. The ash material analytical results are summarized in Table 6.

No TCLP VOCs, SVOCs, pesticides or herbicides were detected above the laboratory detection limits. In addition, ignitability, corrosivity, and reactivity did not indicate hazardous waste characteristics. However, the TCLP lead concentration of 13.3 mg/L, was greater than the 5.0 mg/L regulatory standard. The remaining TCLP metals detected did not exceed their associated regulatory standards. Based on this data, ash waste material located inside of the incinerator is a lead characteristic hazardous waste.

## 4.8 BUILDING 76 (HYDRAULIC LIFT) SAMPLING RESULTS

Four Geoprobe® borings (G76-1, 2, 3 and 4) and one ground-water monitoring well (W76-1) were completed at Building 76. A total of five soil samples (one from each shallow boring/monitoring well)

were laboratory analyzed for TPH-DRO, SVOCs and polychlorinated biphenyls (PCBs). The groundwater sample collected from monitoring well W76-1 was analyzed for TPH-DRO, SVOCs and PCBs.

# Soil:

TPH-DRO concentrations detected in soil ranged from 5.73 mg/kg (G76-4) to 1,420 mg/kg (G76-3). Two of the soil samples had TPH concentrations greater than the DC release reporting concentration of 100 mg/kg and was also greater than the DC Tier 1 RBSL (aka the Soil Quality standard; typically used as a cleanup standard on leaking UST sites) of 960 mg/kg. PCBs were ND in each soil sample, while butyl benzyl phthalate was the only SVOC detected (at 0.643 ug/kg) which was less than its RBC and RBSL. These borings were located adjacent to hydraulic lifts, and apparently represent hydraulic oil leaks from hydraulic lift or hydraulic lines. Additional assessment will be required to delineate the lateral and vertical extent of petroleum impact in this area.

## Ground Water:

The W76-1 ground-water sample had a relatively low TPH-DRO concentration of 415 ug/L, which was less than the DC Risk-Based Ground-Water Standard at the Point of Exposure concentration of 3,570 ug/L. Bis(2-ethylhexyl)phthalate was the only SVOC detected, although no RBC or RBSL exists for this constituent. Based on this data, only limited petroleum impact has occurred to ground water in the area of Building 76, although a significant impact to soil in the area of the hydraulic lifts has occurred, above DC reporting and soil cleanup guidelines.

# 4.9 BUILDING 75 SUSPECTED UST EVALUATIONS

Six vacuum-assisted "soil knifing" borings were completed near the centers of each of the six suspected UST anomalies identified at Building 75 during the previous geophysical survey. The locations of the six borings designated as SB-01 through SB-06 are shown on Figure 8. Boring logs with a description of subsurface materials encountered and PID organic vapor screening results are included in Appendix B. TPH-DRO and TPH-GRO analytical results for the three soil samples selected for laboratory analysis are summarized in Table 2, while the lab data reports are included in Appendix C.

The six soil knifing borings did not encounter either steel or fiberglass-reinforced plastic materials considered to be a petroleum UST. Boring SB-01 encountered a 6 to 8-inch diameter steel utility pipe at approximately 3 feet bgs, while the other borings generally encountered fill material. The anomalies detected during the geophysical investigation likely represent buried metal debris or utility lines, and do not appear to represent unknown petroleum USTs. Soil TPH-DRO/GRO concentrations were ND, aside from a trace TPH-DRO of 5.6 mg/kg. Therefore, no significant petroleum impact to soil was present at the locations tested.

# 5.0 SUMMARY AND CONCLUSIONS

- This Phase II ESA was completed by MACTEC to evaluate the presence or absence of contaminants of concern and related RECs (previously identified by G&O), as well as to recommend remedial alternatives, where applicable.
- Phase II sampling activities included UST, dry cleaning solvent, pesticide, hydraulic lift and incineration ash assessments, as well as performing dye tracer studies, geophysical surveys and regulatory file reviews. In general, invasive Phase II sampling activities included advancing a total 28 shallow hand auger or Geoprobe® soil borings and installing six deep ground-water monitoring wells to collect subsurface data. The Phase II ESA did not include UST removals, UST tightness testing, asbestos or lead-based paint sampling, remediation or the characterization/removal of drums or containerized waste materials.
- Borings advanced at the Site generally encountered man-made fill at or near the surface, grading to unconsolidated Coastal Plain soils described as silty clay to clayey silt, with alternating strata of silty sand to sandy silt, including some silty gravel lenses.
- Static ground-water levels at the site ranged from approximately 13.8 to 44.7 feet (in the shallow or perched ground water in monitoring wells W46-1 and W48-1) to 79.8 to 95.4 feet below the top of PVC casing in the seven remaining wells. No light non-aqueous phase liquid (LNAPL) was detected in any of the monitoring wells. The static ground-water elevations generally indicated a ground-water flow direction to the south, likely with both southeast and southwest components. Ground water is not reportedly used on site as a drinking water source.
- Regulatory file reviews were completed at the DDOE UST Division for each of the three petroleum USTs removed at Buildings 26/27, 43 and 74. Table 7 summarizes registration and closure information for these and other petroleum USTs at the site. In general, active USTs are present at Buildings 56, 64 and 52, inactive USTs are present at Buildings 46 and 75, and closed USTs with undocumented closure reports were formerly located at Buildings 26/27 and 74A.
- A file review of regulatory documents from the USEPA Region III related to a "No Further • Remedial Action Planned" (NFRAP) listing for the AFRH was also completed. Based on the documents reviewed, AFRH procured several thousand war surplus cans of paint in 1947 to be used in maintenance activities at the facility. When the paint was determined not to be suitable for use, the paint cans were buried in a storage cell several feet deep in the area northwest of Building 72, where a current paved road exists. During 1990 hot water/steam system installation activities, these paint cans and approximately 1,000 tons of xylenes contaminated soil, were removed down to a depth of approximately 30 feet and the excavation backfilled. Five ground-water monitoring wells (designated by ABB Environmental Services, Inc. as MW-1, 2, 3, 4 and 5) were also installed in this area. Laboratory analysis of soil and ground-water samples collected from these wells did not have detectible xylenes concentrations, and the case was subsequently closed by the USEPA. Although MACTEC did not have this information for the preparation of our Sampling and Analysis Plan (SAP) and associated Phase II ESA field work, we did find and sample three of these five wells. The three wells sampled by MACTEC were designated as W72-1 (ABB well MW-4), W72-2 (ABB well MW-1) and W72-3 (ABB well MW-5).

- A geophysical survey was completed in the areas west and southeast of Building 75 and between Building 75 and Building 76, to evaluate the potential presence of former or existing USTs that may not have been removed from the ground. As indicated in the ERT Geophysical Survey Report (Appendix E, Figure 12), subsurface anomalies representing six suspected buried USTs were noted along the west and southwest sides of Building 75. Vacuum assisted "soil knifing" borings were subsequently completed at each of these six locations, to evaluate the presence or absence of suspected USTs, and to collect soil samples for TPH-DRO and TPH-GRO analysis. No indications of existing USTs were identified and soil TPH-DRO/GRO concentrations were ND, aside from a trace TPH-DRO of 5.6 mg/kg.
- Based on the results of floor drain dye tracer testing performed at Buildings 46, 72, 76 and 77, these floor drains discharge directly into either the sanitary sewer or an oil-water separator, and not into the storm-water system, or into a related illicit discharge location.
- Building 46: Drycleaning and laundry operations activities have reportedly been performed in the past at Building 46 (i.e., Building 46A). Potential hazardous wastes generated by drycleaning operations are primarily solvents, and historically have included petroleum solvents such as Stoddard (naphtha), and other solvents such as tetrachloroethene (also known as perchloroethylene; PCE) and valclene (fluorocarbon 113 or trichlorotrifluoroethane). Naphthalene was detected in soil at Building 46 at a concentration of 1,820 ug/kg, and a distinct "moth ball" odor (commonly associated with naphthalene) was noted in soil samples collected from boring G46-1. In addition, various other VOCs (acetone, carbon disulfide, tetrachloroethene, trichloroethene, and 1,2,4-trimethylbenzene) were detected in soil at levels below their respective USEPA Risk-Based Concentrations (RBCs) and DC Risk-Based Screening Levels (RBSLs). Based on this data, the elevated naphthalene concentrations detected in soil at G46-1 are apparently associated with a release or spill from historical drycleaning activities at Building 46. In addition, the presence of PCE and it's daughter product TCE, suggest that PCE was also utilized at Building 46 for drycleaning activities. The W46-1 ground-water sample had concentrations of 1,2-dichloroethane (1.49 ug/L) and 1,2,3-trichloropropane (32.5 ug/L), which exceeded their respective tap water RBCs, although bromomethane (1.76 ug/L) was less than its RBC. 1,2-dichloroethane is a daughter or breakdown product for the dehalogenation of PCE, while 1,2,3-trichloropropane is a solvent, paint, and varnish remover and a cleaning and degreasing agent. In addition, the ground-water sample collected in W72-1 (located approximately 200 feet downgradient of Building 46) had detectible concentrations of PCE, TCE and cis-1,2-dichloroethene which exceeded their respective tap water RBCs, while PCE and TCE also exceeded their respective Maximum Contaminant Levels (MCLs). Although it can be inferred that the chlorinated solvents detected in W72-1 were from a drycleaning solvent spill or release in the area of Building 46, no actual "source area" was identified, and historic paint can disposal activities northwest of Building 72 could also be contributing to their presence.
- <u>Building 48 (Golf Course Maintenance Shed/Bathrooms)</u>: Two pesticides, beta-BHC (0.0276 mg/kg) and methoxychlor (0.052 mg/kg), were detected in soil at Building 48, while the remaining pesticides and herbicides analyzed were Not Detected (ND). The methoxychlor concentration was less than its RBC, while no RBC exists for beta-BHC. Various metals detected in soil included arsenic, barium, cadmium, chromium, lead, and mercury. Arsenic concentrations detected exceeded its RBC and RBSL, while cadmium and chromium exceeded their respective RBSLs only. Although no RBC or RBSL exists for mercury, mercury was detected in soil at concentrations ranging from 0.137 to 0.46 mg/kg. Arsenic, mercury, and lead are potential by-products associated with pesticides, although these metals can be found naturally occurring. The

W48-1 ground-water sample was ND for pesticides and herbicides, although relatively low concentrations of the metals barium, cadmium, chromium, and lead were detected (at concentrations less than their respective RBCs, MCLs and DC Ground-Water Quality Standards). Based on this data, shallow soil in the area of HA48-3 has been impacted by pesticides, although detected concentrations were less than available RBCs. The metals detected in soil and ground water are likely from naturally occurring metals.

- <u>Building 77</u>: A distinct "pesticide" odor and apparent pesticide/herbicide residue was observed coating the concrete floor inside of the Building 77 Pesticide Storage Room. However, soil samples collected beneath the concrete slab-on-grade and from beneath the adjacent asphalt parking surface were ND for pesticides and herbicides (although the metals barium, chromium, and lead were detected). Chromium in soil exceeded its RBSL, but did not exceed its RBC. The W77-1 ground-water sample was ND for pesticides and herbicides, aside from the herbicide MCPP (detected at 132 ug/L). The MCPP concentration detected exceeded the 37 ug/L tap water RBC. Relatively low concentrations of the metals barium, cadmium, and mercury were detected in ground water below their respective RBCs, MCLs and DC Ground-Water Quality Standards (except for cadmium which exceeded its DC Water Quality Standard). The metals detected in soil and ground water are likely from naturally occurring metals.
- Building 78: Soil samples collected at Building 78 were ND for pesticides and herbicides, aside from the pesticides 4,4'-DDE (detected at 0.0023 mg/kg) and methoxychlor (detected at 0.00329 mg/kg). However, the 4,4'-DDE and methoxychlor concentrations were less than their respective RBCs. An unknown "chemical" odor was also noted in several of the soil samples collected near the surface in borings H78-2, 3, 5 and W78-1; however, organic vapor concentrations for these soil samples measured on site using a photoionization detector (PID) were generally less than 2 parts per million. Various metals including arsenic, barium, chromium, and lead were detected in soil. Aside from chromium which exceeded its RBSL, the other metals did not exceed their respective RBSLs or RBCs. The W78-1 ground-water sample was ND for pesticides and herbicides. Relatively low concentrations of the metals barium, cadmium, chromium, and lead were also detected in ground water. Cadmium was greater than its DC Water Ouality Standard while lead exceeded its MCL and DC Water Quality Standard. Based on this data, limited pesticide impact to shallow soils has occurred in the various greenhouses at Building 78, although no pesticide/herbicide impact to ground water was detected. The metals detected in soil and ground water are likely from naturally occurring metals.
- <u>Building 69</u>: The composite sample of the ash waste material inside of the incinerator ash cleanout chute at Building 69 was ND for Toxicity Characteristics Leaching Procedure (TCLP) VOCs, SVOCs, pesticides and herbicides; and ignitability, corrosivity, and reactivity did not indicate hazardous waste characteristics. However, the TCLP lead concentration of 13.3 mg/L, was greater than the 5.0 mg/L regulatory standard (other metals did not exceed their associated regulatory standards). Based on this data, ash waste material located inside of the incinerator is a lead characteristic hazardous waste.
- <u>Building 76:</u> Total petroleum hydrocarbons-diesel range organics (TPH-DRO) concentrations up to 1,420 mg/kg were detected in soil at Building 76, which is greater than the DC release reporting level of 100 mg/kg and is also greater than DC Tier 1 RBSL (aka the Soil Quality Standard; typically used as a cleanup standard on leaking UST sites) of 960 mg/kg. PCBs were ND in each soil sample, while butyl benzyl phthalate was the only SVOC detected (at 0.643 ug/kg) which was less than its RBC and RBSL. These borings were located adjacent to hydraulic lifts, and apparently represent hydraulic oil releases from hydraulic lifts or hydraulic lines. The

W76-1 ground-water sample had a relatively low TPH-DRO concentration of 415 ug/L, which was less than the DC Risk-Based Ground-Water Standard at the Point of Exposure concentration of 3,570 ug/L. Bis(2-ethylhexyl)phthalate was the only SVOC detected in ground water, although no RBC or RBSL exists for this constituent. Based on this data, no significant petroleum impact has occurred to ground water in the area of Building 76, although a significant impact to soil in the area of the hydraulic lifts has occurred, above DC reporting and soil cleanup guidelines.

• Although the District of Columbia does not have guidelines regarding typical background levels for metals in soil, the adjacent State of Maryland does have published Anticipated Typical Concentrations (ATCs) for various metals, according to the various Geologic Provinces in the State. The ATCs for Eastern Maryland (generally the same as the Coastal Plain soils at the AFRH site) are 3.6 mg/kg for arsenic, 28 mg/kg for chromium, and 0.51 mg/kg for mercury. These ATCs are generally in line with metals concentrations detected at the AFRH site Buildings 48, 77, and 78, suggesting the metals are naturally occurring background levels. In addition, where pesticides were detected in soil at H48-3, H78-1 and H78-6, corresponding metals at those locations were not significantly higher than other locations where no pesticides were detected.

The following recommendations were developed based on the conclusions stated above. Recommendations and opinions of cost for potential soil and ground-water remediation will be provided in a separate report.

- No further assessment of floor drains is recommended, because the floor drains dye tested discharge into the sanitary sewer system or into an oil-water separator. However, the oil-water separator at Building 76 should be removed if it is no longer needed.
- Based on information included in Table 7, existing UST systems at Buildings 56, 64 and 52 should be tightness tested to confirm that there are no current leaks. In addition, inactive UST systems at Buildings 46 and 75 should be removed and properly closed. Additional subsurface sampling should be completed at Buildings 26/27 and 74A, to evaluate the presence/absence of petroleum hydrocarbons in soil, where no closure data exists.
- Additional assessment at Building 46 is recommended to delineate the lateral and vertical extent of naphthalene, PCE, TCE and related drycleaning solvents and to establish the actual source area. An active or passive soil-gas survey should be performed as the initial investigative task for this assessment, prior to additional soil and ground-water sampling.
- Wipe samples should be collected on the concrete floor in the Building 77 Pesticides Storage Room to confirm the presence/absence of pesticides and herbicides, if future occupancy or demolition is proposed.
- The ash waste material located inside of the incinerator at Building 69 should be removed by a qualified contractor, and transported and disposed of off-site as a lead characteristic hazardous waste.
- Additional subsurface soil sampling is recommended in the area of the hydraulic lifts at Building 76, to delineate the lateral and vertical extent of petroleum impact. No additional ground-water sampling is recommended, although the DDOE UST Division may require additional ground-water data. Remediation of soils with TPH-DRO greater than 960 mg/kg, will likely be required by the DC UST Division. In addition, petroleum contaminated soils that are removed from the

ground at Building 76 or at other buildings at the AFRH that cannot be used on site as approved fill (typically with a TPH less than 100 mg/kg), must be remediated or transported off site for treatment/disposal at a properly permitted facility.

- Although no further assessment is recommended at Buildings 48 and 78 (since the levels of detected pesticides were less than RBCs), future landholders should be advised that if greenhouses/structures at these sites are demolished, the interior soil will need to be characterized prior to disposal.
- The TPH-DRO concentrations detected at Building 76 (greater than the 100 mg/kg) should be reported to the DDOE UST Division as a release. The DDOE UST Division is typically the regulatory agency responsible for managing non-UST petroleum release cases, and will likely require a Comprehensive Site Assessment. This report should be provided to the DDOE Water Quality Division, to document reporting of the contaminants of concern detected in ground water at concentrations greater than either RBCs, MCLs or RBSLs.
TABLES

### Table 1: Summary of Phase II Environmental Sampling Paremeters

Sub-Task Description	AFRH Building Number	Number of Geoprobe/ Hand Auger Borings	Number of GW Monitoring Wells	Sample Type	Number of Samples	Final Boring/Well Depths(ft)	Analytical Parameters	Rationale/Scope of Work
TASK 2.0 - CONDUCT PHASE II INVES	STIGATIV	E ACTIVITI	ES (See Sam	ling and	Anaysis Pla	n text for deta	iled description of Phase II activities)	
TASK 2.1 - UNDERGROUND STORAG	E TANK P	'HASE II ASS	SESSMENT A	CTIVITI	ES		<u>.</u>	
Task 2.1.1 - Geophysical Surveys for Suspe	ected USTs	at Buildings 4	6, 75/76 and 7	6 (no sam	ıpling).			Perform additional records and drawings reviews including file review of DC Fire Department records and interviews to establish the presence/absence of suspected USTs at all 3 building locations. Perform a geophysical survey at each site using a magnetometer/ground penetrating radar (GPR).
Task 2.1.2 - Phase II Sampling at 3 Known USTs	75	4	1	Soil	5	15	TPH-DRO/GRO by EPA method 8015M and VOCs by EPA Method 8260.	Perform a pre-closure Phase II assessment at each of the 3 USTs to evaluate the presence/absence of petroleum hydrocarbons prior to future tank removals. Preclosure assessment to include 4 direct-push (Geoprobe) borings adjacent to the sides of each UST to
				GW	1	98	TPH-DRO/GRO by EPA method 8015M and VOCs by EPA Method 8260.	15 feet bgs. Complete 1 deep ground-water monitoring well downgradient of the UST to a depth of 98 feet bgs.
Task 2.1.3 - Regulatory File Reviews for Fo	ormer USTs	s at Buildings :	26/27, 43 and '	74 (no san	npling)			Perform regulatory file reviews at the DC EHA UST Division to obtain closure documentation and related correspondence for each UST removed.
TASK 2.2 - FORMER DRY CLEANING	PHASE II	ASSESSME	NT					
Task 2.2.1 - Drawing/Document Review and	l Tracer Te	sting of Floor	Drains at Build	ling 46				Perform drawing reviews and subsequent dye tracer testing to establish the discharge locations of floor drains.
Task 2.2.2 - Phase II Soil and Ground- Water Sampling								
				Soil	5	25	VOCs by EPA method 8260	Perform a Phase II assessment to evaluate the presence/absence of chlorinated solvents in the
				GW	1	45	VOCs by EPA method 8260 (New well)	arrea of suspected dry cleanring at the northwest portion of Building 46. Phase II assessment to include 3 direct-push (Geoprobe) borings adjacent inside of the building to 25 feet bgs, with
	46	3	1	GW	3	106 to 119	(3 Existing wells at Building /2) TPH- DRO/GRO by EPA method 8015M and VOCs by EPA method 8260	I exterior boring completed to a depth of 45 feet bgs as a deep ground-water monitoring well. In addition, three existing monitoring wells at Building 72 (downgradient of Building 46) will be sampled and analyzed for TPH-DRO and for VOCs.
Task 2.2.3 - Drawing/Document Review and	l Tracer Te	sting of Buildi	ng 72, 76 and	77 Floor I	Drains ( <b>no s</b>	ampling).		Perform drawing reviews and subsequent dye tracer testing to establish the discharge locations of floor drains.

### Table 1: Summary of Phase II Environmental Sampling Paremeters

Sub-Task Description	AFRH Building Number	Number of Geoprobe/ Hand Auger Borings	Number of GW Monitoring Wells	Sample Type	Number of Samples	Final Boring/Well Depths(ft)	Analytical Parameters	Rationale/Scope of Work
TASK 2.3 - PHASE II SAMPLING FOR	PESTICI	DES AT BUII	LDING 77, GI	REEN HO	USE AND	GOLF COUR	SE	
Task 2.3.1 - Phase II Soil and Ground- Water Sampling for Pesticides at Building 77	77	6	1	Soil	8	15	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	Perform a Phase II assessment to evaluate the presence/absence of pesticides/herbicides and related metals (primarily arsenic and mercury) degradation products. Assessment to include 6 hand auger/or Geoprobe borngs to a depth of 5 feet each (3 interior and 3 exterior borings)
				GW	1	90	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	near the pesticides storage room . Complete 1 exterior deep ground-water monitoring well to a depth of 90 feet bgs.
Task 2.3.2 - Phase II Soil and Ground- Water Sampling for Pesticides at the Greenhouses	78 (Greenho uses)	6	1	Soil	9	5	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	Perform a Phase II assessment to evaluate the presence/absence of pesticides/herbicides and related metals (primarily arsenic and mercury) degradation products. Assessment to include 6 shallow hand-auger borings to 5 feet bgs adjacent to the greenhouses and in suspected areas of
				GW	1	90	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	concern. Complete 1 deep ground-water monitoring well to a depth of 90 feet bgs.
Task 2.3.3 - Phase II Soil and Ground- Water Sampling for Pesticides at the Golf Course	48 (Golf Course)	5	1	Soil	6	5	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	Perform a Phase II assessment to evaluate the presence/absence of pesticides/herbicides and related metals (primarily arsenic and mercury) degradation products. Assessment to include 5 shallow hand-auger borings to 5 feet bgs adjacent to golf course maintenance sheds/chemical
				GW	1	30	Pesticides by EPA method 8081, herbicides by EPA method 8151, and 8 RCRA metals by 6020/7471	storage areas and at representative locations throughout the golf course and 1 deep ground- water monitoring well to a depth of 30 feet bgs, adjacent to Golf Course chemical storage area.
TASK 2.4 - Ash Waste Sampling and Characterization at Building 69	69	1	0	Soil	1	0 to 5	Full TCLP Analysis (VOCs, SVOCs, metals, pesticides/herbicides) and hazardous waste parameters ignitability, corrosivity, and reactivity.	Collect one composite sample of the ash waste material using a stainless steel trowel to evaluate if the ash is a charcteristic hazardous waste.
TASK 2.5 – Hydraulic Lift Phase II Sampling at Buildings 76	76	4	1	Soil	5	15	Six samples analyzed for TPH-DRO by EPA method 8015M; with four samples analyzed for SVOCs by EPA method 8270 and PCBs by EPA method 8082.	Three hydraulic lifts are present inside of the building and a waste oil drum is located along the buildings southern border. Assessment to include 4 direct-push (Geoprobe) borings to 15 feet bgs, with one deep ground-water monitoring well installed at the Building 76 site to a depth of 90 feet bgs.
				GW	1	90	TPH-DRO by EPA method 8015M, SVOCs by EPA method 8270 and PCBs by EPA method 8082.	

### Table 2: Soil Analytical Results

Site			Building 46					Buildi	a 48					U.S. EPA Region III	U.S. EPA Region III
Field Sample ID:	G46-1(10 5-12)	G46-1(24-25)	G46-2(0-1.5)	G46-3(16 5-18)	W46-1 (28 5-30)	H48-1(0 25-1)	G48-2(1-2)	H48-3(2-2 75)	G48-4(1-2)	G48-5(1-2)	W48-1(28 5-30)			Risk-Based	Risk-Based
Sample Location:	G46-1	G46-1	G46-2	G46-3	W46-1	H48-1	G48-2	H48-3	G48-4	G48-5	W48-1	DC Tier 1 RBSL <sup>3</sup>	DC Tier 1 RBSL <sup>3</sup>	Concentrations Apri	Concentrations Apri
Sample Date:	8/17/2006	8/17/2006	8/17/2006	8/17/2006	8/25/2006	8/2/2006	8/16/2006	8/3/2006	8/16/2006	8/16/2006	8/27/2006			2006 (RBCs)	2006 (RBCs)
Sample Depth (feet bgs):	10.5-12	24-25	0-1.5	16.5-18	28.5-30	0.25-1	1-2	2-2.75	1-2	1-2	28.5-30	Residential	industirai	Residentia	Industrial
TPH (mg/kg)													(m	g/kg)	
DRO												960		-	
GRO												1,490			
VOCs (ug/kg)													(u	g/kg)	
Acetone	<50	69	<50	<50	<50							6,590,000	48,200,000	70,000,000	920,000,000
Benzene	<2	<2	<2	<2	<2							157	429	12,000	52,000
Carbon disulfide	5	<5	<5	<5	<5							18,800	151,000	780,000	100,000,000
Naphthalene	1820	<5	<5	<5	<5							47,700,000	47,700,000	1,600,000	20,000,000
Tetrachloroethene	<2	<2	<2	3	<2							1,070	3,360	1,200	5,300
Trichloroethene	<2	<2	<2	3	<2							656	2,060	1,600	7,200
1,2,4- Trimethylbenzene	2	<2	<2	<2	<2							15,200	123,000		-
Remaining VOC Constituents	ND	ND	ND	ND	ND										
SVOCs (ug/kg)													(u	g/kg)	
Butyl benzyl phthalate												370,000	370,000	340,000	1,500,000
Remaining SVOC Constituents															-
PCBs (ug/kg)													(u	g/kg)	
All PCB constituents were ND												-		-	
RCRA Metals (mg/kg)													(m	g/kg)	
Arsenic						2.3	2.4	<3	6.7	<2	2.52	0.101	0.403	0.43	1.9
Barium						55.0	73.2	50	44.6	33.3	5.62			16,000	250,000
Cadmium						<0.98	1.73	< 0.95	1.1	< 0.98	< 0.98	0.3	1.31	39	510
Chromium						16.8	7.3	12.1	8.6	8.8	5.26	0.0461	0.201	230	3,100
Lead						51.9	158	182	127	68.7	3.32			400*	400*
Mercury						0.46	< 0.0976	0.432	0.137	< 0.0984	< 0.0968				
Selenium						< 0.98	<2	< 0.95	<3	< 0.98	< 0.98	329	2,410	390	5,100
Silver						< 0.5	<0.5	<0.5	<0.5	< 0.5	< 0.49	329	2,410	390	5,100
Pesticides (mg/kg)							-		-				(m	g/kg)	
4,4' DDE						< 0.00825	< 0.00167	<0.00828	< 0.00837	< 0.00166	< 0.00168			1.9	8.4
beta-BHC						< 0.016	< 0.00325	0.0276	< 0.162	< 0.00323	< 0.00327				
Methoxychlor						< 0.016	< 0.00325	0.052	< 0.162	< 0.00323	< 0.00327	-		390	5,100
Remaining pesticides constituents						ND	ND	ND	ND	ND	ND	-			
Herbicides (mg/kg)		•	•	•							•		(m	g/kg)	•
All Herbicides were ND						ND	ND	ND	ND	ND	ND				
														Brong	rod/Dato-BDC 9/7/200

Checked/Date: BRC 9/18/06

 Notes:

 1. Table includes detected constituents only and not all analyzed parameters. See lab data reports for a summary of all parameters analyzed which were not detected.

 2. Analytical results that exceed one of the following regulatory criteria are highlighted with the corresponding color.

 3. DC Ter 1 Risk Based Screening Levels (RBSLs) in Soli for Residential Adult (Table 5-9), and for an Extended List of Chemicals (Table F-2, Residential Solis), dated 2002.

 \* 400 mg/kg is the HDD lead in soli guideline and not a USEPA RBC.

 For the case where both the DC RBSL and the USEPA RBC are exceeded, the most conservative exceedence was highlighted.

D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for residential standards D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for industrial standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for residential standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial standards

U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial t-dbtreviations: mglkg milligrams per killer mgl-milligrams per Liter SVOCs: Semi-Volatile Organic Compounds. Analyzed using EPA Method 8270C. Only detected analytes are listed. VOCs: Volatile Organic Compounds. Analyzed using EPA Method 8260B. Only detected analytes are listed. ug/liter\_micrograms.per kilogram – Not analyzed for this garameter/ not applicable ND. Not detected

### Table 2: Soil Analytical Results

									1					1		U.C. EDA Degion III	ILC EDA Desien III
Site:				Build	ling 75			1			Building 76					U.S. EFA Region III	0.3. EFA Region III
Field Sample ID:	G75-1(4.5-6)	G75-2(3-4.5)	G75-3(1.5-3)	G75-4(10.5-12	) W75-1(93-95)	SB02	SB04	SB06	G76-1(10.5-12)	G76-2(12-13.5)	G76-3(9-10.5)	G76-4(7.5-9)	W76-1(83.5-85)	DC Tier 1 RBSL <sup>3</sup>	DC Tier 1 RBSL <sup>3</sup>	RISK-Daseu	RISK-Daseu
Sample Location:	G/5-1	G75-2	G75-3	G75-4	W75-1	0/40/0007	Soil Knifing Borin	igs	G76-1	G76-2	G76-3	G76-4	W76-1			Concentrations April	Concentrations April
Sample Date:	8/17/2006	8/17/2006	8/17/2006	8/17/2006	8/29/2006	3/12/2007	3/12/2007	3/12/2007	8/16/2006	8/16/2006	8/16/2006	8/16/2006	8/28/2006		00005050	2006 (RBCS)	2006 (RBCS)
Sample Depth (leet bgs).	4.3-0	3-4.5	1.5-5	10.5-12	93-93	3-6	5-6	3-0	10.5-12	12-13.5	9-10.3	7.3-9	63.3-65	Reducinital	moduliar	Residential	Industrial
TPH (mg/kg)	4.00	4.00	4.70	40.0	4.0	5.00	4.00	1.00	0.75		4400	5 70	140	000	(m	д/кд)	
DRU	<4.86	<4.98	<4.79	<49.8	<4.9	5.60	<4.90	<4.88	9.75	449	1420	5.73	<4.10	960			
GRO	<5.01	<4.96	10.9	<5	<5.03	<4.72	<4.87	<4.98		-				1,490	(		-
VOCs (ug/kg)							1	1			1	T	1		(U	ј/кд)	
Acetone	95	90	93	<50	<50									6,590,000	48,200,000	70,000,000	920,000,000
Benzene	2	<2	<2	<2	<2									157	429	12,000	52,000
Carbon disulfide	10	<5	16	<5	<5									18,800	151,000	780,000	100,000,000
Naphthalene	<5	<5	<5	<5	<5									47,700,000	47,700,000	1,600,000	20,000,000
Tetrachloroethene	<2	<2	<2	<2	<2									1,070	3,360	1,200	5,300
Trichloroethene	<2	<2	<2	<2	<2	-								656	2,060	1,600	7,200
1,2,4- Trimethylbenzene	<2	<2	<2	<2	<2					-				15,200	123,000		
Remaining VOC Constituents	ND	ND	ND	ND	ND												
SVOCs (ug/kg)															(u	j/kg)	
Butyl benzyl phthalate									<332	<322	0.643	<325	<330	370,000	370,000	340,000	1,500,000
Remaining SVOC Constituents									ND	ND	ND	ND	ND				
PCBs (ug/kg)															(u	g/kg)	
All PCB constituents were ND					-				ND	ND	ND	ND	ND			-	-
RCRA Metals (mg/kg)															(m	g/kg)	
Arsenic					-									0.101	0.403	0.43	1.9
Barium										-						16,000	250,000
Cadmium					-									0.3	1.31	39	510
Chromium					-									0.0461	0.201	230	3,100
Lead					-					-						400*	400*
Mercury					-					-							
Selenium					-					-				329	2,410	390	5,100
Silver					-					-				329	2,410	390	5,100
Pesticides (mg/kg)															(m	g/kg)	
4,4' DDE																1.9	8.4
beta-BHC																	
Methoxychlor										-						390	5,100
Remaining pesticides constituents					-					-						-	
Herbicides (ma/ka)															(m	a/ka)	
All Herbicides were ND					-										-		
									•								

Prepared/Date:BDG 9/7/2006 Checked/Date: BRC 9/18/06

 Notes:

 1. Table includes detected constituents only and not all analyzed parameters. See lab data reports for a summary of all parameters analyzed which were not detected.

 2. Analytical results that exceed one of the following regulatory criteria are highlighted with the corresponding color.

 3. DC Ter 1 Risk Based Screening Levels (RBSLs) in Soil for Residential Adult (Table 5-9), and for an Extended List of Chemicals (Table F-2, Residential Soils), dated 2002.

 \* 400 mg/kg is the HDD lead in on SUSPEA RBC.

 For the case where both the DC RBSL and the USEPA RBC are exceeded, the most conservative exceedence was highlighted.

D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for residential standards D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for industrial standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for residential standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial standards

U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial t-dbtreviations: mglkg milligrams per killer mgl-milligrams per Liter SVOCs: Semi-Volatile Organic Compounds. Analyzed using EPA Method 8270C. Only detected analytes are listed. VOCs: Volatile Organic Compounds. Analyzed using EPA Method 8260B. Only detected analytes are listed. ug/liter\_micrograms.per kilogram – Not analyzed for this garameter/ not applicable ND. Not detected

4-10-2007

#### Table 2: Soil Analytical Results

Field Sample ID: G77-1(		Building 77							Building 78											ILS FPA Region III	ILS FPA Region III
Field Sample Loostien: C77	4/4 0) 07	77 0/4 0)	077.2(0.4)	C77 4(0.4)	Q 77 E(1 2)	077.8(0.1)	M77 4/00 5 05W	177 4/02 5 05	H70 4(4 2)	H70 3(3 3)	LI70 2(2.4)	H70 4(4 0)	Building 78	H70 6(2.2.5)	14/70 4/4 2)	M(70 1/2 E)	14/70 1/00 00)			Risk-Based	Risk-Based
	7.1 07	677.2	677-3	G77-4(0-1)	677-5	G77-6	W77-1	W77-1	LI79_1	H/0-2(2-3)	H/0-3(3-4)	LT2-4	U79.5	H70-0(3-3.5)	W/0-1(1-3)	W79-1	W70-1(00-90)	DC Tier 1 RBSL <sup>3</sup>	DC Tier 1 RBSL <sup>3</sup>	Concentrations April	Concentrations April
Sample Date: 8/16/2	/2006 8/1	16/2006	8/16/2006	8/16/2006	8/16/2006	8/16/2006	8/26/2006	8/26/2006	8/7/2006	8/7/2006	8/7/2006	8/3/2006	8/7/2006	8/3/2006	8/30/2006	8/30/2006	9/6/2006			2006 (RBCs)	2006 (RBCs)
Sample Depth (feet bgs): 1-2	-2	1-2	0-1	0-1	1-2	0-1	23.5-25	83.5-85	1-2	2-3	3-4	1-2	1-2	3-3.5	1-3	3-5	88-90	Residential	industiral	Residential	Industrial
TPH (mg/kg)																			(mi	1/ka)	
DRO																		960			
GRO																		1.490			
VOCs (ug/kg)															р				(uc	/kg)	
Acetone																		6.590.000	48.200.000	70.000.000	920.000.000
Benzene																		157	429	12,000	52,000
Carbon disulfide						-												18,800	151,000	780,000	100,000,000
Naphthalene						-												47,700,000	47,700,000	1,600,000	20,000,000
Tetrachloroethene						-												1,070	3,360	1,200	5,300
Trichloroethene						-												656	2,060	1,600	7,200
1,2,4- Trimethylbenzene						-												15,200	123,000		
Remaining VOC Constituents																			-		
SVOCs (ug/kg)							· · · · ·												(ug	/kg)	
Butyl benzyl phthalate						-												370,000	370,000	340,000	1,500,000
Remaining SVOC Constituents																-					
PCBs (ug/kg)																			(uç	/kg)	
All PCB constituents were ND																		-	-	-	
RCRA Metals (mg/kg)																			(m	j/kg)	
Arsenic <1.9	1.9 ·	<1.9	<1.9	<2	<1.9	<2	<1.85	<1.94	<2.0	<2.0	<1.9	<2	<1.9	2.3	<1.90	<1.92	<1.9	0.101	0.403	0.43	1.9
Barium 16.3	6.3	14	17.2	18.6	15.8	22.6	11.4	3.05	21.4	14.1	34.9	42.8	11.8	33.1	28.5	49.4	9.07	-	-	16,000	250,000
Cadmium <0.9	.96 <	< 0.96	<0.96	<0.98	< 0.93	<1	< 0.926	<0.971	<1.0	<1.0	< 0.94	< 0.96	< 0.97	< 0.93	< 0.952	< 0.962	< 0.952	0.3	1.31	39	510
Chromium 22.8	2.8	11.9	14	17.6	14.6	15	5.16	<1.94	5.2	14.3	8.4	11.8	10.0	20.6	16.6	12.3	6.41	0.0461	0.201	230	3,100
Lead 10.2	0.2	5.59	8.54	8.13	8.04	8.9	4.31	1.12	7.3	6.6	11.1	4.56	2.66	7.84	9.07	10.9	5.96	-	-	400*	400*
Mercury <0.09	0987 <0	0.0984	< 0.0969	< 0.0969	< 0.0993	< 0.099	< 0.0997	< 0.0979	< 0.0976	<0.101	< 0.0984	<0.1	< 0.0984	<0.101	< 0.0963	<0.0987	< 0.0971			-	
Selenium <0.9	.96 <	< 0.96	<0.96	<0.98	< 0.93	<1	< 0.926	< 0.971	<1.0	<2.0	< 0.94	<0.98	< 0.97	<0.93	< 0.952	< 0.962	< 0.952	329	2,410	390	5,100
Silver <0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.463	<0.485	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.476	<0.481	< 0.476	329	2,410	390	5,100
Pesticides (mg/kg)																			(mj	3/kg)	
4,4' DDE <0.00'	0167 <0	0.00165	< 0.00169	< 0.00169	< 0.00169	< 0.00168	< 0.00166	< 0.00168	<0.00168	<0.00167	< 0.00163	< 0.00168	<0.00168	0.0023	<0.00168	<0.0017	< 0.00165		-	1.9	8.4
beta-BHC <0.003	0324 <0	0.00321	<0.00327	< 0.00327	< 0.00327	<0.00325	<0.00321	< 0.00327	<0.00326	<0.00324	<0.00316	<0.00326	<0.00327	< 0.00326	<0.00327	<0.0033	<0.0032	-	-	-	
Methoxychlor <0.003	0324 <0	0.00321	<0.00327	< 0.00327	< 0.00327	< 0.00325	< 0.00321	< 0.00327	0.00329	< 0.00324	< 0.00316	< 0.00326	< 0.00327	< 0.00326	< 0.00327	< 0.0033	< 0.0032	-		390	5,100
Remaining pesticides constituents ND	ID	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	
Herbicides (mg/kg)					· ··• ·														(m)	j/kg)	
All Herbicides were ND ND	1D	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-			

Checked/Date: BRC 9/25/06

 Notes:

 1. Table includes detected constituents only and not all analyzed parameters. See lab data reports for a summary of all parameters analyzed which were not detected.

 2. Analytical results that exceed one of the following regulatory criteria are highlighted with the corresponding color.

 3. DC Ter 1 Risk Based Screening Levels (RBSLs) in Soil for Residential Adult (Table 5-9), and for an Extended List of Chemicals (Table F-2, Residential Soils), dated 2002.

 \* 400 mg/kg is the HDD lead in on SUSPEA RBC.

 For the case where both the DC RBSL and the USEPA RBC are exceeded, the most conservative exceedence was highlighted.

D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for residential standards D.C. Tier 1 Risk Based Screening Level (RBSL) exceeded for industrial standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for residential standards U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial standards

U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for industrial t-dbtreviations: mglkg milligrams per killer mgl-milligrams per Liter SVOCs: Semi-Volatile Organic Compounds. Analyzed using EPA Method 8270C. Only detected analytes are listed. VOCs: Volatile Organic Compounds. Analyzed using EPA Method 8260B. Only detected analytes are listed. ug/liter\_micrograms.per kilogram – Not analyzed for this garameter/ not applicable ND. Not detected

4-10-2007

### TABLE 3: Ground-Water Analytical Results

Field Sample ID:	W72-1	W72-2	W72-3	W46-1	W48-1	W75-1	W76-1	W77-1	W78-1	DC Ground-	DC Tier 1 RBSL	DC Tier 1 RBSL	U.S. EPA Region III	
										Water Quality	for Ground water	for Ground water	Risk-Based	U.S. EPA Maximum
Sample Date:	8/2/2006	8/2/2006	8/2/2006							Standard (*) 3	(residential)	(industrial)	Concentrations	Contaminant Levels (MCLs)
TPH (ug/L)			-			-	-	-				(ug/l	_)	
DRO	331	<94.3	<94.3			<96.2	415			3,570*				
GRO	<100	<100	<100			<100				7,300*				
VOCs (ug/L)			-			-	-	-				(ug/l	L)	
Bromomethane	<1	<1	<1	1.76		<1					726	5,850	8.5	
Chloroform	<1	<1	<1	<1		1.44					11,900	38,600	0.15	
1,2 - Dichloroethane	<1	<1	<1	1.49		<1				5.0	385	1,210	0.12	5
cis-1, 2-Dichloroethene	3.84	<1	<1	<1		<1							0.12	70
Methyl tert-Butyl Ether	<1	<1	<1	<1		1.40					6,800,000	48,000,000	2.6	
Trichloroethene	4.47	<1	<1	<1		<1					799	2,510	0.026	5
Tetrachloroethene	44.5	<1	<1	<1		<1					1,500	4,700	0.1	5
1,2,3 - Trichloropropane	<2	<2	<2	32.5		<2					23,800	192,000	0.0053	
Remaining VOC Constituents	ND	ND	ND	ND		ND								
SVOCs (ug/L)												(ug/l	L)	
Bis(2-ethylhexyl)phthalate							10.9							
Remaining SVOC Constituents							ND							
PCBs (ug/L)												(ug/l	L)	
All PCBs were ND							ND							
RCRA Metals (mg/L)												(mg/	Ĺ)	
Arsenic					< 0.005			< 0.005	< 0.02	0.05			0.000045	0.010
Barium					0.0981			0.174	0.306	1.0			7.3	2.0
Cadmium					0.000526			0.0031	0.00323	0.0005			0.018	0.005
Chromium					0.0029			< 0.002	0.0552	0.10			0.110	0.10
Lead					0.00222			<0.001	0.0734	0.05				0.015
Mercury					< 0.0002			0.00042	< 0.002	0.0002				0.002
Selenium					< 0.005			< 0.005	<0.01	0.05			0.18	0.05
Silver					< 0.0005			< 0.0005	<0.001	0.05			0.18	
Pesticides (ug/L)												(ug/l	_)	
All Pesticide constituents were ND					ND		-	ND	ND					
Herbicides (ug/L)												(ug/l	L)	
MCPP					<9.71			132	<22.2				37	
Remaining herbicide constituents					ND			ND	ND					

### Notes:

1. Table includes detected constituents only and not all analyzed parameters. See lab data reports for a summary of all parameters analyzed which were not detected.

2. Analytical results that exceed one of the following regulatory criteria are highlighted with the corresponding color.

3. District of Columbia Ground Water Quality Standards, Amended January 2000.

4. District of Columbia Tier 1 Risk Based Screening Levels (RBSLs) for Ground Water (Table 5-2) and for an Extended List of Chemicals (Table F-2, Residential), dated 2002.

For the case where the DC RBSL, the USEPA RBC and/or the USEPA MCL are exceeded, the most conservative exceedence was highlighted.

DC Ground-Water Quality Standard exceeded for ground water at the point of exposure
DC Tier 1 RBSL exceeded for ground water (residential)
DC Tier 1 RBSL exceeded for ground water (industrial)
U.S. EPA Region III Risk-Based Concentrations (RBCs) exceeded for tap water.
U.S. EPA Maximum Contaminant Levels (MCLs) for drinking water.

Abbreviations:

ND: Not detected above the laboratory reporting limit.

SVOCs: Semi-Volatile Organic Compounds. Analyzed using EPA Method 8270C. Only detected analytes are listed.

TPH: Total petroleum hydrocarbons by EPA Method 8015M.

VOCs: Volatile Organic Compounds. Analyzed using EPA Method 8260B. Only detected analytes are listed.

ug/L: micrograms per Litre

---: Not available / not applicable

Prepared/Date: BDG 9/7/2006 Checked/Date: BRC 9/25/06

### Table 4: Monitoring Well Gauging Data

	<b>T</b> 1	Darth		<u>8/</u>	/2/2006			<u>9/8</u>	3/2006	
Location	efTOC	to TOS	Depth	Depth	Thickness of	GW	Depth	Depth	Thickness of	GW
	01100	10 105	to LPH	to GW	LPH	Elevation	to LPH	to GW	LPH	Elevation
W72-1	240.31	Unknown	ND	87.37	ND	152.94	ND	87.05	ND	153.26
W72-2	248.17	Unknown	ND	95.3	ND	152.87	ND	95.36	ND	152.81
W72-3	239.57	Unknown	ND	87.17	ND	152.40	ND	87.21	ND	152.36
W46-1	251.04	24.5	ND		ND		ND	44.67	ND	206.37
W48-1	215.18	13.5	ND		ND		ND	13.81	ND	201.37
W75-1	233.39	73.5	ND		ND		ND	81.33	ND	152.06
W76-1	231.29	69.5	ND		ND		ND	79.88	ND	151.41
W77-1	231.53	69.5	ND		ND		ND	79.8	ND	151.73
W78-1	229.87	74.5	ND		ND		ND	79.7	ND	150.17
								Prep	ared/Date: BI	DG 9/19/2006

Checked/Date: BRC 9/25/2006

### Notes:

ND Not Detected

TOS Top of Screen

TOC Top of Casing

LPH Liquid Phase Hydrocarbons

GW Ground Water

-- No Data Collected (or well not yet constructed)

<sup>1</sup> Depths and thicknesses measured in feet.

<sup>2</sup> Relative Elevations were established using a level and rod relative to survey elevations adjacent to each building

### Table 5: Monitoring Well Construction Data

Well Number	Date Const.	El. <sup>1</sup> of TOC (feet)	Ground Surface El. <sup>1</sup> (feet)	Depth of Boring <sup>2</sup> (feet)	Depth of Well <sup>2</sup> (feet)	Well Casing Inside Diameter (inches)	PVC Screen Interval <sup>2</sup> (ft- ft)	Depth to Ground Water (ft. BTOC) 9/8/2006	Formation Screened
W46-1	8/25/06	251.04	251.74	45	44.5	2	24.5-44.5	44.67	Silty clay to clay fill to 15 ft with interbedded clay, silt, silty sand, and sand
W48-1	8/27/06	215.18	215.59	29.5	28.5	2	13.5-28.5	13.81	Silty clay fill to 6 ft with interbedded clayey sand, clay, and sand
W75-1	8/29/06	233.39	233.66	98.5	98.5	2	73.5-98.5	81.33	Clay fill to 14 ft with interbedded clay, silty clay, silty sand, and sand
W76-1	8/28/06	231.29	231.61	85	85	2	69.5-85	79.88	Silty clay fill to 9 ft with interbedded clay, silty sand, clayey sand, sand, and sandy clay
W77-1	8/26/06	231.53	231.94	90	90	2	69.5-89.5	79.8	Clay fill to 20 ft with interbedded sandy clay, sand, silty sand, silty clay, sandy silt, and gravel
W78-1	9/6/06	229.87	230.51	90	90	2	74.5-89.5	79.7	Sand and silty clay fill to 5 ft with interbedded clay, clayey sand, sand, and silty sand
W72-1		240.31	240.62		106	2		87.05	No boring Logs available.
W72-2		248.17	248.52		119	2		95.36	No boring Logs available.
W72-3		239.57	239.76		114	2		87.21	No boring Logs available.

Prepared/Date: BDG 9/19/06 Checked/Date: BRC 9/25/2006

Notes:			
TOC	Top of PVC casing	PVC	Polyvinyl Chloride
(ft)	Feet	BTOC	Below top of casing
GW	Ground water	NA	Not available
	Unknown		

<sup>1</sup> Relative Elevations were established using a level and rod relative to survey elevations adjacent to each building

<sup>2</sup> Depths were estimated from the ground surface. All wells are machine-threaded 2-inch I.D. PVC.

	Building 69₁	
Field Sample ID:	H69-1	
Sample Location:	H69-1	TCLP Regulatory Limits (mg/L) and
Sample Date:	8/3/2006	Hazard Classification <sub>2</sub>
Sample Depth (feet):	0-0.5	
Waste Characterization		
Ignitability	>200	Flashpoint <140 <sup>0</sup> F
Corrosivity (solid waste pH)	6.3	(aqueous pH <2 or > 12.5)
Reactive Cyanide (mg/kg)	<20	Not Reactive
Reactive Sulfide (mg/kg)	<100	Not Reactive
TCLP VOCs (mg/L)		
10 constituents	ND	
TCLP SVOCs (mg/L)		
11 constituents	ND	
TCLP Metals (mg/L)		
Arsenic	<0.1	5
Barium	0.25	100
Cadmium	0.382	1
Chromium	<0.05	5
Lead	13.3	5
Mercury	<0.01	
Selenium	<0.1	1
Silver	<0.05	5
TCLP Pesticides (mg/L)		
7 constituents	ND	
TCLP Herbicides (mg/L)		
2 constituents	ND	

### Table 6: Building 69 TCLP and Waste Characterization Parameters Analytical Results

Prepared/Date: BDG 8/23/06 Checked/Date: BRC 9/25/2006

Notes:

1. Table includes detected constituents only and not all analyzed parameters. See lab data reports for a summary of all parameters analyzed which were not detected.

2. EPA Toxicity Characteristic Leachate Procedure (TCLP) regulatory limits, and EPA hazardous waste classification.

Abbreviations:

mg/L: milligrams per Litre

mg/kg: milligrams per kilogram

SVOCs: Semi-Volatile Organic Compounds. Analyzed using EPA Method 8270C. Only detected analytes are listed.

VOCs: Volatile Organic Compounds. Analyzed using EPA Method 8260B. Only detected analytes are listed.

-- Not analyzed for this parameter/ not applicable

Building	Case ID	Building #	# of tanks	Date Installed	Size	Tank Contents	Tank Status	Date Removed	Assessments	Leaks	Additional information
Sheridan Building	400696	17	1	1986	400	diesel	Removed	Dec-98	Yes	No	No leaks detected. 2 soil samples from 1999; TPH-DRO < 10mg/kg.
Lagarde Bldg	400699	56	1	1992	1500	diesel	Active	NA	NA	NA	Tank in use based on information provided by AFRH in 2006.
Barnes Bldg of the King Center	400700	52	1	1993	550	diesel	Active	NA	NA	NA	Tank in use based on information provided by AFRH in 2006.
USSAH Auto Craft Shop	400697	43	1	1986	1000	used oil	Removed	Nov-98	Yes	No	Properly closed. No leaks detected. Assessment data: Benzene, Ethlybenze, Toluene < 5ug/kg, Xylene =7.0 ug/kg, TPH- DRO=24.3 mg/kg
Pipes Bldg- King Health Center	400694, 400695	64	1	1986	1200	diesel	Removed	Oct-90	Yes	Yes-1990	Leak detected 1990. TPH=61.5ppm, insitu remediation study,more borings TPH up to 6,300ppm; System ran from 1993 to 1994; Case closed in 1994; Post closure TPH-DRO = 13 mg/kg
			1	1992	1000	diesel	Active	NA	NA	NA	Tank in use based on information provided by AFRH in 2006.
Cold Storage Warehouse	4000696	74a	1	Unknown	1000	Unknown	Removed	Nov-98	NA	NA	No location of UST provided. No closure documentation. Tank was removed based on
					2500	gasoline	Removed	1990	Yes	Yes	Approximately 83 tons of soil excavated; Soil samples: TPH=43.9ppm composite bottom; TPH 59.8ppm wall composite
Supply Management	400698,	74/75	3	1986	3000	gasoline	Removed	Jan-91	Yes	No	The 3000 gal tank was removed in 1991contamination detected of 70-80 ppm HNU. Removed at least another 1 to 2 ft of soil; 0 ppm HNU. Sampled for TPH-GRO= 3mg/kg, TPH-DRO= 18mg/kg.
Services/Service Station	4000694	14/10			1000	diesel	Removed	1990	Yes	No	50yd3 soil removed; TPH 617ppm at bottom; excavated until clean; TPH-DRO 32 mg/kg
			1	1991	8000	gasoline/diesel	Out of Use	NA	NA	NA	Based on information provided by AFRH in 2006, the 3-compartment UST was installed in 1991. The UST includes two 3,000-gallon gasoline compartments and one 2,000-gallon diesel fuel compartment.
Laundry Building/Heating Plant Building	NA	46A/46	1 or 2	Unknown	UNK	Unknown	Out of Use - contains water.	NA	NA	UNK	MACTEC observed 2 vent pipes and opened 2 manway covers at the southwest corner of Building 46A . Either two 5.5 ft diameter tanks or one 5.5 ft diameter manifolded tank exist. Tanks are filled with water and oily sheen. Apparently inactive USTs.
Tunnel Exhaust Fan/Manhole "C" (Converter)	NA	26/27	1	1986	500	Diesel	unknown	NA	NA	UNK	Tank was removed based on information provided by AFRH in 2006. No closure data available.

Table 7: File Review and Underground Storage Tank Summary

Notes:

NA

Not available/not applicable TPH-DRO Total Petroleum Hydrocarbons Diesel Range Organics

TPH-GRO Total Petroleum Hydrocarbons Gasoline Range Organics

UNK Unknown

# FIGURES



















# APPENDIX A FIELD PROCEDURES

# **APPENDIX A - FIELD PROCEDURES**

A field notebook was maintained and a Soil Test Boring Log for visual classification was completed for soil samples collected from each soil boring advanced at the site. The boring log will provide documentation of procedures used, observations made, results obtained, and pertinent logistical information.

- A geologist or engineer field classified soils collected during sampling activities in accordance with the Unified Soil Classification System (USCS) and will report this data using a Soil Test Boring Log.
- The physical appearance of the soil observed during sampling was recorded along with any discolorations or chemical staining indicative of potential light non-aqueous phase liquid (LNAPL).
- Field instruments were calibrated according to manufacturers' specifications.
- A drill rig or hand auger were used as the primary means for collecting soil samples. Sampling equipment, including the drill rig, was observed for cleanliness and obvious potential cross contamination hazards prior to mobilization to the sampling area.
- Borings were advanced using Direct-Push Geoprobe® rigs, 4.25-inch inside-diameter (I.D.) or 3.25-inch I.D. hollow stem auger (HSA) rigs or using hand augers.
- Soil samples from the direct-push Geoprobe® borings were collected continuously using a 1 3/8 inch outside diameter (O.D.) steel sampling tube (MacroCore® sampler) with an interior disposable acetate liner.
- Soil samples from the HSA borings were collected using a split-barrel (split-spoon) sampling device, in general accordance with ASTM Method D 1586-84. At regular intervals, drilling tools were removed and soil samples obtained with a standard 1.4 inch I.D., 2-inch O.D., split-barrel sampler. The sampler was first seated 6 inches to penetrate any loose cuttings and then driven an additional 18 inches with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler 12 inches after if it is seated 6 inches was recorded and designated the "standard penetration resistance". Penetration resistance, when properly evaluated, is an index to engineering properties of the soil.
- Shallow hand auger soil samples were collected continuously using a stainless steel hand auger, manually advanced to the target depth.

- Soil samples were transferred directly to the appropriate container(s). Sample containers were provided by the laboratory contracted to perform the analyses. Sample containers were filled as completely as possible so as to minimize headspace or void space.
- Each sampling and measurement location was marked in the field logbook and on a map, sequentially, according to type. Each sample container was marked with the type, number, a unique project number (used for all samples), project name and date.
- Downhole drilling equipment was steam cleaned prior to drilling each soil boring to reduce the potential for cross contamination, or decontaminated using an Alconox and water rinse, followed by a distilled water rinse.

# FIELD VAPOR HEADSPACE SCREENING

A photoionization detector (PID) was used to field screen the head space of each collected soil sample for organic vapors. Soil vapor headspace screening procedures are designed to promote volatilization of organic vapors into the headspace of the sampling container. The degree of volatilization is dependent on temperature, exposed surface area, and other factors in addition to organic concentrations. Ionization detectors were calibrated to read in meter deflection units relative to a gas standard and a zero-air standard; however, a variety of organic compounds will produce a response if volatile constituents are present. Readings obtained with the ionization detector therefore should not be confused with concentrations of any specific compound.

Steps followed for headspace screening include the following:

- For non-cohesive soils, an 8 ounce soil sample jar or Ziploc style plastic baggie will filled approximately half full with loose, crumbled soil. For cohesive soils, the sample was broken into several pieces to increase surface area.
- The mouth of the jar was covered with aluminum foil and secured with a screw-on-lid or the baggie zipped close.
- The jar/baggie was placed in a relatively warm location (at least 20°F above the average annual temperature in the area) for approximately 10 minutes.
- The PID probe was inserted through the foil or into the partially opened baggie into the vapor headspace.
- The maximum identified reading over a 15 second period was recorded

This procedure encourages volatile organics to enter the vapor phase thus allowing for measurement by the headspace technique. Only a portion of the soil sample is required for the headspace analysis. The portion of the sample that was sent to the laboratory will be excluded from the headspace analysis.

# MONITORING WELL INSTALLING, DEVELOPING, GAUGING, PURGING AND SAMPLING PROCEDURES

The following procedures were utilized during monitoring well installation, development, gauging, purging, and sampling activities.

# TYPE II (SINGLE CASED) MONITORING WELL INSTALLATION PROCEDURES

Ground-water monitoring well installation and development were based on the ASTM Test Method D5092. The Type II (single-cased) ground-water monitoring wells were constructed with 2-inch I.D., machine threaded, schedule 40 PVC casing installed approximately 10 feet above the saturated zone. The bottom section of the Type II monitoring well will be completed with 2-inch I.D. 0.010-inch machine slotted well screen. The well screen was set to intercept the top of the saturated zone encountered at the time of drilling. Silica sand backfill was placed around the outside of the PVC pipe at least one foot above the top of the well screen to stabilize the formation and help yield a less turbid ground-water sample.

A minimum 2-foot thick zone of bentonite was installed on top of the sand backfill to hydraulically separate the grouted section of the well from the screened interval. The borehole was grouted with a cement/bentonite grout to the ground surface. A steel protective flush-mounted cover and lockable interior cap were placed over each well.

The elevation of the top of the PVC casing, top of the exterior steel casing, and the ground surface elevation adjacent to the well were established using a level and rod. A known elevation such as a benchmark or a similar fixed object assigned a reference point elevation were used as a reference datum.

### MONITORING WELL DEVELOPING PROCEDURES

Monitoring wells were developed to create an effective filter pack around the well screen, to remove fine particles near the borehole, and to assist in restoring the natural water quality of the aquifer in the vicinity of the well. Bailing or over pumping procedures were used to develop each well. A bailer, bladder pump or peristaltic pump were used to evacuate water in the well. The evacuated water was visually monitored for turbidity and field measured for pH, temperature and conductivity. Well development continued until the development/purge water is generally clear of suspended materials or sediments or the well purged dry. Well development equipment were decontaminated between wells using an Alconox and water solution, and a distilled water rinse as appropriate.

# GROUND-WATER LEVEL MEASURING, WELL PURGING, AND GROUND-WATER SAMPLING PROCEDURES

Ground-water level measuring, well purging and ground-water sampling procedures used during the Phase II ESA are described in the following sections.

### **Ground-Water Level Measuring Procedures**

The following procedures were performed to measure ground-water levels in monitoring wells at the site.

- Each well was marked with an easily identified permanent reference point surveyed to an accuracy of 0.01 feet. This reference point was used in obtaining ground-water level measurements. Surface elevations werecorrelated with existing wells on-site.
- The flush-mounted well covers were not fitted with vented well caps; therefore, the well caps for flush-mounted monitoring wells were removed and allowed to vent until static conditions are reached prior to water level gauging.
- Depth to ground water from the measuring point were measured using an electronic tape and recorded on a Monitoring Well Purging and Sampling Form. The measuring tape was cleaned using an Alconox and water solution, and a distilled water rinse.
- After determining the ground-water elevation, the total well depth was measured. The volume of water within the well and depth of the sediment within the well was calculated.

- The amount of sediment is determined from the difference between the constructed well depth and the depth at the time of measurement.
- Prior to subsequent use, parts of the measuring tape which were placed within the well was cleaned.

# Well Evacuation/Purging Procedures for Ground Water

All wells were allowed to stabilize for at least 72 hours after development, prior to purging and sampling. Personnel will follow the procedures below as a prelude to collecting ground-water samples for field or laboratory analyses.

- Purging of wells and evacuation were performed at a rate that minimized excessive agitation of formation fluids.
- Purge water disposal alternatives were evaluated prior to performing developing and purging activities. Purged water was containerized in 55-gallon steel drums, which was staged on site in an area approved by AFRH
- Purging efficiency was demonstrated through temperature, pH, and specific conductance measurements. These measurements were obtained as soon as fluid recovery permits in low-yield wells and at a frequency of one per well volume in high-yield wells. A low-yield well is a well that purges to dryness before three well volumes of standing water is removed from it. Sample collection from low-yield wells will commence immediately following subject measurements provided that a second set of measurements is acquired following sample collection.
- Measurements of pH, temperature, specific conductance, dissolved oxygen (D.O.), redox potential (EH), time, well purging/evacuation procedures, and all other field measurements, parameters and conditions were recorded on the Monitoring Well Purging and Sampling Form.
- For wells which do not purge to dryness, between three and five well volumes of standing water were removed from the well prior to sampling. The actual volume needed to be purged was based on the stabilization of the indicator parameters pH, specific conductance and temperature. This volume was calculated by using the following formula:

$$V = X 7.48 \text{ gal/ft}^3 [(r_c^2 h_c) + n_e [(r_a^2 h_s) - (r_c^2 h_c)]]$$

where: V = volume of water standing in annulus (gallons)

 $r_c = radius of well casing (feet)$ 

 $h_c$  = vertical length of standing water in the well casing (feet)

 $n_e$  = effective porosity of sandpack material (dimensionless)

 $r_a = radius$  of annulus in which well is installed (feet)

 $h_s$  = vertical length of sandpack material (feet)

- If a well is purged to dryness, but recharged rapidly, evacuation rates were reduced to maintain a relatively constant water level in the well (i.e., match the purging rate to recharge rate of the well).
- Sampling and purging devices were thoroughly cleaned prior to each sampling event.
- Well purging will progress from areas least impacted by contaminants of concern to those areas most impacted; if known, in any case, background wells were purged first.

### Field Analyses

The sampling team will record relevant information regarding well purging procedures on the Monitoring Well Purging and Sampling Form during and after well development and sampling. Physically and/or chemically unstable ground-water parameters such as temperature, pH, and specific conductance were evaluated in the field during and after well purging/evacuation activities and also recorded on the Monitoring Well Purging and Sampling Forms. In addition, redox potential (EH) and dissolved oxygen (DO) readings were measured in each well and recorded. Instrument calibration and cleaning were performed prior to taking measurements, according to manufacturers' specifications

### **Ground-Water Sampling**

- Ground-water sampling was performed with manual bailing techniques or using a peristaltic pump immediately following well purging. Sample collection was performed in such a way as to minimize unnecessary agitation of the sample.
- Samples were of the grab type and were obtained with a bottom valve teflon bailer equipped with a bottom drainage device for decanting the sample.
- The bailer was lowered on a nylon line. Neither the bailer nor attendant line were allowed to contact the ground prior to sampling.
- Ground-water samples were collected and placed into separate laboratory-prepared containers. Sample containers were filled as completely as possible so as to minimize headspace or void space.
- Ground-water samples requiring dissolved metals analysis were field filtered using a 0.45 micron filter.
- Each ground-water sampling and measurement location was marked in the field logbook and on a map, sequentially according to type. Each sample container was marked with the type, number, a unique project number (used for all samples), project name and date. A chain-of-custody reflected these identifiers and the number of sample containers from each location. These same identifiers were shown on laboratory data reports. These identifiers are traceable from time of sampling to final data summary reports.
- The physical appearance of ground water observed during sampling was recorded.
- Ground-water sample containers were placed on ice, packaged, and delivered to the laboratory under chain-of-custody procedures and QA/QC procedures.

## QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

### Introduction

The following Quality Assurance and Quality Control (QA/QC) procedures are provided for proposed sample collection activities at the site. Standard practices and procedures were utilized by all personnel

during field operations to ensure the collection of representative samples. Collection of representative samples depends upon the following:

- Ensuring that the sample collected is truly representative of the material or medium being sampled;
- Using proper sampling, sample handling, preservation, and quality control techniques;
- Properly identifying collected samples and documenting their collection in permanent field records;
- Maintaining sample chain-of-custody records; and,
- Protecting collected samples by properly packing and transporting (shipping) them to a laboratory for analysis.

### **Procedures for Maintaining Sample Control**

- To provide for proper identification in the field and proper tracking in the laboratory, all samples must be labeled in a clear and consistent fashion.
- Sample containers were labeled in a legible fashion that should remain clear even when wet. Labels will, at minimum, exhibit the following information:

Sample identification number Date and time of collection Analyses required Collector's name(s) Preservative used Project number

- A field notebook was maintained throughout the sampling and analysis period. The field notebook will provide documentation of procedures used, observations made, results obtained, and pertinent logistical information. Also to be documented are any deviations from procedures specified within this Work Plan. The field notebook, Monitoring Well Purging and Sampling Form, along with the chain-of-custody record must contain sufficient information to allow reconstruction of sample collection and handling procedures at a later time.
- Samples were shipped to the approved laboratory certified under chain-of-custody procedures described below

### **Chain-of-Custody Program**

The chain-of-custody program will facilitate the tracking of sample possession and handling from field collection through laboratory analyses. The chain-of-custody program consists of the field notebook, sampling forms, field logs, sample labels, custody seals, and sample analysis request forms as well as a chain-of-custody record.

- Each sample must have a corresponding entry on a chain-of-custody record. The chain-of-custody record must contain sufficient information to allow reconstruction of sample collection and handling procedures at a later time. The Record will include:
  - Site name
    Sample number
    Sample type
    Date and time of collection
    Number of containers
    Parameters (for which analyses are requested)
    Signature of sampler(s)
    Signature of persons involved in the chain of custody
    Condition of samples (upon arrival at laboratory)
    Dates of possession
    Well identification
- The chain-of-custody record entry for sampling at any sampling point is to be completed before sampling is initiated by the same sampling team at any other sampling point.
- In cases where samples leave the immediate control of the sampling team (i.e. shipment via a common carrier) the shipping container must be sealed.
- Samples anticipated to have high contaminant concentrations should be stored and shipped in a separate container. Laboratory personnel should reconcile information from various components of the chain-of-custody program. Any discrepancies among these records were resolved before analyses commence.
- Chain-of-custody was written in waterproof, non-erasable pen.

- Before shipment to laboratory sampler (who makes original entry) will correct errors on chain-ofcustody by drawing a single line through the error and entering the correct information. Sampler will initial and date correction.
- After shipment, sampler will correct errors or discrepancies on chain of custody by sending a "Memo to File" as soon as error is discovered.

## Sample Preservation and Sample Containers

General requirements state that all samples be cooled to 4° C and protected from light. Other specific requirements are:

- Samples collected for organic analyses are not to be filtered and no headspace is allowed in sample containers. Volatile organics have a maximum holding time of 14 days. Samples collected for volatile organic analysis shall be preserved with 4 drops of concentrated hydrochloric acid (HCL) per 40 ml vial and analysis shall be performed within 7 days after collection.
- Sample containers were provided by the laboratory. In general, sample containers were PTFE (teflon)-lined caps for organics analyses.

## Sample Analysis Request Forms

A sample analysis request form will accompany samples to the laboratory and will contain a clear record of the following:

- Name of person receiving the samplesLaboratory sample number (if different from field number)
- Date of sample receipt
- Requested analyses
- Internal temperature of shipping vessel upon opening in the laboratory

## Shipping

Samples that were shipped to the laboratory by independent means (e.g., air freight, UPS, etc.) were transported in shipping containers that are properly refrigerated and sealed to ensure sample integrity. Sample containers themselves will not have custody seals or any other tape on the lids. Two custody seals overlapping the lid and body of the cooler (on opposite sides of the cooler) were used. Custody seals will

be dated and signed by the sampler. Tight packaging material is to be provided around each sample container and any void around the "freezer pacs." The container is to be securely sealed, clearly labeled, and accompanied by a chain-of-custody record.

# Field and Laboratory QA/QC

Volatile organic compounds can be detected in the parts per billion range; therefore, precautions must be exercised to prevent sample contamination by the sampling process itself. The following field and laboratory QA/QC procedures will contribute to the preservation of sample integrity:

- Sample collection will progress from areas least impacted by constituents of concern to those areas most impacted; if known; in any case, background samples were secured first.
- Each sample was collected using appropriately cleaned equipment.
- Trip blanks were prepared by the laboratory charged with providing sample containers. Trip blanks were prepared with deionized or Type II reagent grade water, transported to the site, handled like other samples collected in the field, and returned to the laboratory for analysis. One trip blank per sampling event was prepared.
- Information about these samples was included in field notebooks.
- Decontamination procedures were employed.

A summary of the soil and ground water QA/QC parameters are included in Tables 1 and 2.

### **Post-Sampling Procedures**

- The sampling area is to be left as close as possible to how it was found.
- All clean-up and security procedures shall be documented in the field notebook.
- Each ground water well is to be capped, locked, and secured before proceeding to the next well.
- Information in data files is to be updated at the termination of each sampling event.

# APPENDIX B BORING LOGS AND WELL COMPLETION DETAILS

			ГЕ	С			BORING NO.W46-1SHEET1 of 2PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897
	SAMPI		ORMA.		UM	1	LOGGED BY BDG
DEPTH FEET	LAB B SAMPLE CC		USCS	Recovery (inches)	PID	STRATA	DESCRIPTION CONSTRUCTION DETAIL
- - - 5 - -		3-3 2	CH	E 12	0		6in of Asphalt 6in of Concrete Probable FILL orange brown CLAY (CH) dry, no odor Probable FILL orange brown CLAY (CH) dry, no odor
- 10- - - -		3-7 10	СН	8	0		Probable FILL orange-brown with gray mottled areas, CLAY (CH), dry, faint organic odor
15- - - - 20-	- 7	7-11 13 7-15 17	CL	18	0		Hard brittle orange and gray mottled silty CLAY (CL), dry, faint chemical odor
25-		4-7 12	CL	18	0.5		Stiff gray silty SAND (SM), moist, no odor
30-	4	-10 10	SM	12	1		Firm red-gray sandy CLAY (CL) dry, no
- 35- - - -	13	-17	SM	8	0.5		Very hard orange-gray layered sandy SILT (ML) grading into a silty SAND (SM) at 40ft, faint odor, wet
DRILLING C DRILLING N DRILLING E DRILLING S	CONTRACTO METHOD EQUIPMENT	DR M H Cl 8/25/	actec ollow ste ME55 06 El	m auger	0.5 <u>8/25/06</u>	F S	REMARKS

ENV2A AFRH GINT LOGS.GPJ LAEWNN03.GDT 9/7/06

COORDINATES SURFACE ELEVATION DATUM							BORING NO. PROJECT LOCATION PROJECT NO. LOGGED BY	W46-1 AFRH Washington, DC 3552-06-0897 BDG		SHEET 2 OF 2
DEPTH FEET	LAB SAMPLE	BLOW	USCS	TION Recovery (inches)	PID	STRATA	DES	CRIPTION	cc	WELL DNSTRUCTION DETAIL
45-		15-39 50/6 8-10 17-17	SP	18 18	0		Very dense gray- medium-grained Very dense gray- medium-grained Boring Terminate ground surfance	white fine to SAND (SP), wet, no odor white fine to SAND (SP), wet, no odor d at 45 feet below (bgs) on 8/25/06.		Length of End Cap: 0.5' Total Well Depth: 45' bgs

ENV2A AFRH GINT LOGS.GPJ LAEWNN03.GDT 9/7/06

MACTEC							BORING NO. W48-1 PROJECT AFRH LOCATION Washingto	on, DC		SHEET 1 OF 1	
COORDINATES SURFACE ELEVATION DATUM							PROJECT NO. 3552-06-08 LOGGED BY BDG	3552-06-0897 BDG			
	SAM	IPLE INF	ORMA	TION		A			W/ELL		
DEPTH FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recovery (inches)	PID	STRAT	DESCRIPTION				
5		2-4 8 2-4	GW CL CL SC	12	0.5		0-6in - Surficial gravel Probable FILL, orange brown sil (CL) with trace gravel, dry, no oc silty CLAY (CL) with trace gravel odor Bottom 4in Loose white clayey S (SC), dry, no odor	e brown I, dry, no		Cement Grout: From 0.0 to 9.5' bgs 2.0" ID Sch 40 PVC casing: From 0.0 to 13.5' bgs	
10 - - 15 -		6 3-5 6	сн sc	14	0.5		Stiff, tan-brown CLAY (CH), sand areas, moist, no odor Top 15in - Firm orange clayey SA (SC), moist, no odor	dy in		Bentonite Chips: 1/4" From 9.5' to 11.5' bgs	
20-	-	4-5 7	CL CL	18	0.5		Basal 3in - Stiff gray and purple ( (CL) damp, no odor Top 8in - Stiff gray and purple CL damp, no odor	ĒLĀΥ — — _AY (CL)		No. 2 Clean Silica Sand Filte Pack: From 11.5' to 29' bgs Slotted Screen: 2" ID Sch 40	
	-	4-6 10 3-10	CL	18	0.5		Bottom 10in - Very stiff orange sa CLAY (CL) and clayey SAND (SC moist, no odor Very stiff orange sandy CLAY (CL clayey SAND (SC) mix moist, no o wet, no odor. Basal 3in - Firm, wh SAND (SP)	andy — — 2) mix L) and odor - hite		PVC 0.010" From 13.5' to 28.5' bgs	
		13		18	0.5	-929-94 -929-94	Boring terminated at 29.5 feet belo ground surface (bgs) on 8/27/06 Bentonite seal added to the base boring from 29' to 29.5' bgs	of the		Length of End Cap: 0.5' Total Well Depth: 29.5' bgs	
RILLING	CONTRA METHOD	CTOR M	lactec ollow st	em auger	2		REMARKS				
RILLING	STARTED	b 8/27/	WIE55 06 Е		B/27/06		See key sheet for symbols and abt	broviationa us	od obe		
	COORE		AC	ΓΕ	С			BORING NO.W75-1PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897	SHEET 1 OF 3		
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	SURFA	CE ELEV	ATION		DAT	UM		LOGGED BY BDG			
		SAM		FORMA			ATA		WELL		
	DEPTH FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recovery (inches)	PID	STR/	DESCRIPTION	CONSTRUCTION DETAIL		
			3-1 1 1-3 4	CL	6 12	0		Firm red CLAY (CL), damp, no odor	Locking Cap with flush-mount manhole cover		
	- - - - - - - - - - - - - - - - - - -		4-4 7 4-7 8	SM CL	6 18	0.5		Stiff red-brown CLAY (CL), dry, no odor, 6in fine-grained SAND (SP) interlayer - dry, faint hydrocarbon odor			
	25-		6-4 6	CL	3	0.5		Stiff red-brown CLAY (CL) with trace gravel, moist, no odor Stiff red-brown CLAY (CH), gray mottled with iron staining, damp, no odor			
WNN03.GDT 9/18/06	- 30- - - - 35- - -		3-6 8 2-7 11-16	CL	18 20	0.5		Very stiff red-brown sandy CLAY (CL) grading into a silty CLAY (CL) with trace gravel grading into a basal tan to gray silty SAND (SM) dry, no odor	Cement Grout: From 0.0 to 69.0' bgs 2.0" ID Sch 40 PVC casing:		
INT LOGS.GPJ LAE	DRILLING		2-11 15-12 CTOR <b>M</b>	SM actec	18	0		REMARKS	From 0.0 to 73.0' bgs		
AFRH G			H	ollow ste	em auger			and a second			
ENV2A			<u>8/29/</u>	ме55 0 <u>6</u> е	NDED 8	/29/06		ee key sheet for symbols and obbraviation			

COORE			TE	C	UM		BORING NO. PROJECT LOCATION PROJECT NO. LOGGED BY	W75-1 AFRH Washington, DC 3552-06-0897 BDG	SHEET 2 OF 3
DEPTH		BLOW	FORMA	TION		RATA	DES	CRIPTION	WELL
FEET	SAMPLE	COUNTS	USCS	(inches)	PID	ST			DETAIL
- - 45 -		2-9 17-18	SP	20	0		Dense beige to w (SP), dry, no odo	hite fine-grained SAND r hite fine-grained SAND	
- - 50 —	-	15-18 17-18	SP	24	0		Dense beige to wi	hite fine-grained SAND	
- - 55	_	10-15 17-14	SP	24	0		Dense beige to wh (SP), no odor, dan	nite fine-grained SAND	
- - 60- -		6-13 19-17	SP	24	0.5		Dense beige to wh (SP), no odor, dan	nite fine-grained SAND	
65 — -	-	6-12 14-14	SP	20	0.5		Firm beige to white (SP), moist, no odd (CL) with trace grav	e coarse-grained SAND or, basal silty CLAY vel	
70_		11-14 17-18		24	0.5				
70 - - - 75 -		8-9 10-12	сн	24	0		Very stiff red-brown CLAY (CH) with a b medium-grained SA odor	and gray mottled basal fine-to AND (SP), damp, no	Bentonite Chips: 1/4" From 69.0' to 71.0' bgs
	_	6-7 16-30	CH	24	0.5		SAND (SP)	r, basal 8 inches-tan to SAND (SP)	
RILLING	CONTRAC METHOD EQUIPME STARTED	CTOR N H NT C 8/29/	lactec ollow ste ME55 06 E	em auger	8/29/06		REMARKS See key sheet for sy	mbols and abbreviations	s used above.

COORI	DINATES ACE ELEVA		ΓE	C	ŪM		BORING NO.W75-1SHEEPROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897LOGGED BYBDG	ET <b>3</b> OF <b>3</b>
	SAM	PLE IN	FORMA			ATA	WELL	
FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recovery (inches)	PID	STR	DESCRIPTION CONSTRUCT DETAIL	FION
- - - 85- -		3-11 13-17	СН	24	0.5		Top 6 inches - Firm white SAND (SP)         Bottom: Very stiff white CLAY (CH) dry, no odor         No. 2 Clean         Very hard white SILT (MH) moist, no odor	Silica Sand Filter 71.0' to 98.5' bgs een: 2" ID Sch 40 From 73.0' to
- 90 - -		11-21 50/5	мн	14	0.5		Very hard white SILT (MH) wet, no odor	
- 95 - - - -		10-8 14-17		24	0.5		Sample refusal at 98 feet below ground	
		50/0					Sample refusal at 98 feet below ground surface (bgs) on 8/29/2006. Surface (bgs) on 8/29/2006. Total Well De	d Cap: 0.5' pth: 98.5' bgs

$\mathcal{J}N$	<b>1</b> A		ΓΕ	С			BORING NO. PROJECT LOCATION	W76-1 AFRH Washington, DC	SHEET 1 OF 3
COORDINAT	ES _EVATI	ON		DAT	JM		PROJECT NO.	3552-06-0897 BDG	
S	SAMPI	LE INF	ORMA	TION		-			
DEPTH LA FEET SAM	B B PLE CC	BLOW DUNTS	USCS	Recovery (inches)	PID	STRAT	DES	CRIPTION	CONSTRUCTION DETAIL
-			ASPHAL				4 inches of Aspha	lt	- Cocking Cap with flush-moun
- - 5-	_	4-14 15	CL	4	0.5		Probable fill brown trace gravel, dry, r	silty CLAY (CL) with	
	_	5-6 5	CL	16	0.5		trace gravel, dry, n	o dor	
		3-3	СН				Firm light brown Cl silt, dry, no odor	AY (CH) with some	
15		4	СН	14	0.5		Firm light brown CL silt, dry, no odor	AY (CH) with some	
20		2-4 5	£	18	1		Firm brown silty SA clay, moist, no odor	ND (SM) with trace	
25-		4-13 9	SM	18	0		Very stiff brown CL/	AY (CL) dry, no odor	-
- - 30- -		6-8 9	CL	18	0		Very stiff brown CLA	VY (CL) dry, no odor	
35-		3-6 9	CL	18	0		Top 10" - Very stiff b	rown CLAY (CL) dry,	Cement Grout: From 0.0 to 65.5' bgs 2.0" ID Sch 40 PVC casing: From 0.0 to 69.5' bgs
-	3	3-3 12	SC	16	0		Bottom 6" - Firm whi dry, no odor	te clayey SAND (SC),	
RILLING CONT	FRACT	OR M	lactec				REMARKS		
RILLING METH	HOD	Н	ollow st	em auger					2
		C ו פרוא	ME55		120/00		- 		

COORDINATE SURFACE EL		ΓEO	DATI	JM		BORING NO.W76-1SHEET2 OF 3PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897LOGGED BYBDG
S	AMPLE IN	FORMAT	TION		1	
DEPTH LAE FEET SAMP	BLOW	USCS	Recovery (inches)	PID	STRATA	DESCRIPTION CONSTRUCTION DETAIL
45-	2-8 8	CH	18	0		Mix of a very stiff white sandy CLAY (CH) and firm white clayey SAND (SC), dry, no odor Dense white medium-grained SAND (SP) damp, no odor
50	4-17 18	SP	18	0		Dense white medium-grained SAND (SP) damp, no odor
- - 55— - -	12-14 15	SP	18	0		Dense white medium-grained SAND (SP) damp, no odor
- 60 — - -	13-14 14	SP	18	0.5		Dense white medium-grained SAND (SP) damp, no odor
65 -	3-13 16	SP	18	0		Dense red, orange, and white medium-grained SAND (SP) damp, no odor Bentonite Chips: 1/4" From 65.5' to 67.5' bgs
70-	14-15 15	SP	18	۵		Dense red, orange, and white medium-grained SAND (SP) damp, no odor
- 75— -	13-50/5	SP SW	11	0		Top 6" - Dense red, orange, and white medium-grained SAND (SP) damp, no odor Middle 8" - gravelly SAND (SW)
	3-16 11	CH	18	0		Bottom 4" - sandy CLAY (CH) moist, no odor
RILLING METH	OD H MENT C	lollow ste ME55	em auger			REMARKS

COORI	DINATES ACE ELEVA		ΓE	DAT	UM		BORING NO.W76-1PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897LOGGED BYBDG	SHEET 3 OF 3
DEPTH FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recovery (inches)	PID	STRATA	DESCRIPTION	WELL CONSTRUCTION DETAIL
		2-5 5	GP CH	14	0.5		Top 10" - Loose fine-grained GRAVEL (GP) with some sand, wet, no odor Bottom 4" - CLAY (CH) with trace sand, moist	
		-					Boring terminated at 85 feet below ground surface (bgs) on 8/28/06.	Length of End Cap: 0.5' Total Well Depth: 85.0' bgs
	e) I							
							45 -	

COOR		AC'	ΤE	С	T1 15 4		BORING NO.W77-1SHEET1 OF3PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897
	SAN	IPLE IN	FORMA		IOM		LOGGED BY BDG
DEPTH FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recover (inches)	y PID	STRATA	DESCRIPTION VELL DESCRIPTION DETAIL
		2-4 8	ASPHAL GW CL	6	0.5	X	4in of Asphalt 4in of gravel Stiff orange-red CLAY (CL), dry, no odor, possible fill
- - - 10-	-	2-10 14	CL	10	0.5		
		2-7 11	CL	12	1		Stiff orange-red CLAY (CL), dry, no odor, possible fill with 3 inches of red and black
- 20- - -	-	7-15 50/5	CL	16	0.5		Stiff light brown fine sandy CLAY (CH)
- 25-		3-5 8	СН	18	0		Stiff light brown fine sandy CLAY (CH), moist, no odor
-	_	10-12 5-15	SP	18	0		medium-grained SAND (SP), damp, no odor
30-	-	21	SM	12	0.5		Firm brown silty SAND (SM) damp, no
- 35- -	_	2-3 18	SM	8	0.5		Firm brown silty SAND (SM) damp, no odor becomes dark brown to black
]		23-50/5	SM	10	0		Bottom 5in - Dark brown to black silty SAND (SM), damp, no odor
DRILLING DRILLING DRILLING DRILLING	CONTRAC METHOD EQUIPME STARTED	NT CI 8/26/	actec ollow ste ME55 06 E	em auger	8/26/06		REMARKS

2	/M	AC	ΓE	С			BORING NO.W77-1SHEET2 OF3PROJECTAFRHLOCATIONWashington, DC
COOR SURFA	DINATES	ATION		DAT	ШM		PROJECT NO. <b>3552-06-0897</b> LOGGED BY <b>BDG</b>
	SAN	IPLE IN	FORMA	TION		A	
DEPTH FEET	LAB SAMPLE		USCS	Recovery (inches)	PID	STRAT	DESCRIPTION CONSTRUCTION DETAIL
- 45- -		4-6 12	СН	- 18	0		Very stiff gray silty CLAY (CH) with trace sand, moist, no odor Very stiff orange-gray layered sandy SILT (MH), damp, no odor
50-		4-8 16		18	0.5		Dense white medium grained SAND (SP) dry, no odor
- 55 - -		9-21 21	SP	18	1		
- - 60- - -	-	33-50/5	SP	11	0		Dense white medium grained SAND (SP) dry, no odor with trace clay
65 - -	-	12-41 50/3	SP	15	0		Dense white medium grained SAND (SP) dry, no odor Bentonite Chips: 1/4" From
- - 70- -		39-50/5	SP	11	0		65.5 to 67.5 bgs
75-		6-50/5	SP	11	0		Same as above with bottom 10 inches red-brown colored coarse-grained SAND (SP), moist, no odor
-		5-12 46	U.	16	0.5		No. 2 Clean Silica Sand Filter Pack: From 67.5' to 90.0' bgs
RILLING		CTOR M	actec ollow ste	em auger		ŀ	REMARKS
RILLING	STARTER	) 8/26/	06 ⊏		126/06		

COORDINATE SURFACE ELI	ES EVATION	ΓΕ	C	UM		BORING NO.W77-1PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897LOGGED BYBDG	SHEET 3 OF 3
S	AMPLE INF	ORMA	TION				
DEPTH LAE FEET SAMP	B BLOW PLE COUNTS	USCS	Recovery (inches)	PID	STRATA	DESCRIPTION	WELL CONSTRUCTION DETAIL
- - - 85- - - - - -	9-10 18	GP GP CH	18	0		Dense tan GRAVEL (GP) with trace coarse sand, wet, no odor Dense tan GRAVEL (GP) with trace coarse sand, wet, no odor with basal white silty CLAY (CH) at bottom of sample	Slotted Screen: 2" ID Sch 40 PVC 0.010" From 69.5' to 89.5' bgs
90						Boring terminated at 90 feet below ground surface (bgs) on 8/26/06	Length of End Cap: 0.5' Total Well Depth: 90.0' bgs

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	M.	AC	TE	С			BORING NO.     W78-1     SHEET 1 OF 3       PROJECT     AFRH       LOCATION     Washington, DC
SURFA	CE ELEV	ATION		DAT	им		LOGGED BY BDG
	SAN	IPLE IN	FORMA	TION		4	
DEPTH FEET	LAB SAMPLE	BLOW COUNTS	USCS	Recovery (inches)	PID	STRAT	DESCRIPTION CONSTRUCTION DETAIL
		11-4 5-4 14-7 7-8	ASPHALT GC SP CH CH	8 8	0.5 0.5	5×1×	0-6 inches - Asphalt 6-8 inches - Gravel 8-10 inches - possible fill orange brown SAND (SP) with trace gravel Stiff red brown silty CLAY (CH) moist, moderate unknown odor
5		 5-6 6-5	CL	3	0		Same CLAY as above, moderate to strong unknown odor Stiff red and gray mottled CLAY (CL) dry, faint unknown odor
10		7-9 21-24	CL	20	1		Hard orange brown CLAY (CL) with trace silty gravel, dry, no odor
		7-9 10-12	СН	3	1		Very stiff red brown CLAY (CH) with trace gravel, dry, no odor
	-	2		0			Drill rig broke, no sample recovery, augering to 25 feet. Work stopped to fix rig. Restarted drilling on 9/6/06.
20	-	7-7 10-12	сн	20	0		Very stiff red CLAY (CH) with trace sand, no odor, moist
30-	_	3-10 11-11	СН	16	0.5		Very stuff red CLAY (CH), no odor, moist
35		3-8 12-13	СН	18	0.5		Hard brown to orange brown CLAY (CH) moist, no odor 2.0" ID Sch 40 PVC casing: From 0.0 to 74.5' bgs
DRILLING DRILLING DRILLING		CTOR M	Mactec Hollow ste CME55	em auger			REMARKS At 25ft bgs, drilling resumed on 9/6/2006
DRILLING	STARTE	D 8/30	/ <b>06</b> E	NDED	9/6/06		See key sheet for symbols and abbreviations used above.

COOR	DINATES	AC	ΓE	С	-		BORING NO.W78-1SHEET2 OF 3PROJECTAFRHLOCATIONWashington, DCPROJECT NO.3552-06-0897
SURFA	ACE ELEV			DAT	rum -	1	LOGGED BY BDG
DEPTH FEET	LAB SAMPLE	BLOW	USCS	Recoven (inches)	PID	STRATA	DESCRIPTION WELL DESCRIPTION DETAIL
- - 45- -		2-7 10-14	СН	20	1		Hard gray CLAY (CH) with some black needle shaped sand sized fragments of possible organic material. Grades to-orange-brown-tan fine-grained SAND (SP) Very dense gray and white to orange and white mottled clavey SAND (SC) moist
- - 50—		4-17 25-33	SC	24	0		no odor
- - - 55 - -		11-23 25-30	SP	10	0		Very dense white, medium-to coarse-grained SAND (SP) with trace gravel, dry, no odor
- - 60 - -	-	19-19 21-23	SP	22	o		Very dense white, red, and orange medium-to coarse-grained SAND (SP)
- - 65-	-	WOH-3 20-28	SP	8	0.5		
70-	-	4-15 16-18	SP	.24	0.5		Very dense red and orange medium-to coarse-grained SAND (SP), moist, no
75-		7-11 10-11	SP	12	0.5		Some gravel, damp to moist
-		20-50/5	SP	10	0.5		
RILLING RILLING RILLING	CONTRAC METHOD EQUIPME	CTOR M Ho INT CI	actec ollow ste ME55	em auger		F	REMARKS At 25ft bgs, drilling resumed on 9/6/2006
RILLING	STARTED	8/30/0	06 E	NDED S	9/6/06		ee key sheet for symbols and abbreviations used above

COORE		AC	ΓE	С			BORING NO. PROJECT LOCATION PROJECT NO.	W78-1 AFRH Washington, DC 3552-06-0897		SHEET 3 OF 3
SURFA	CE ELEVA				UM		LOGGED BY	BDG	-	
DEPTH FEET	LAB	BLOW COUNTS	USCS	Recovery (inches)	PID	STRATA	DES	SCRIPTION	co	WELL DNSTRUCTION DETAIL
- - - - - - - - - - - - - - - - - - -		7-11 15-18 4-9 9-10	CH SM CH	24 18	0.5		Hard gray-brown odor Silty SAND (SM) Very stiff dary gra with some sand a	CLAY (CH), moist, no , wet, no odor ay to brown CLAY (CH) and silt, wet, no odor		No. 2 Clean Silica Sand Filter Pack: From 72.5' to 90.0' bgs Slotted Screen: 2" ID Sch 40 PVC 0.010" From 74.5' to 89.5' bgs
							Boring terminated surface (bgs) on s	d at 90 feet below ground 9/6/2006.		Length of End Cap: 0.5' Total Well Depth: 90.0' bgs

			Building 46		
	-		Geoprobe Soil Boring Logs		-
Date	Soil Boring	Depth (feet bgs)	Sail Description Stratigraphy	Screened Samples (feet bgs)	PID Results
8/17/2006	G46-1	0-0.3	Son Description-strangraphy	0-1.5	0.5
		0.3-0.8	Red sand and gravel fill with brick pieces, dry, no odor	3-4.5	1.5
		1-5	Orange-brown silty CLAY (CL) with trace gravel, fill material, dry, faint "moth ball" odor	4.5-6	14
		5-6	Orange-brown CLAY (CL) with red and black coarse sand and gravel, fill material, dry,	6-7.5	4
		6 10	strong naphthalene odor	7.5-9	5
		10-11.5	Orange gravelly, alluvial SAND (SW), dry, moderate to strong naphthalene odor	10.5-12	19
		11.5-15	Orange and gray alluvial CLAY (CL) with trace gravel, moist, no odor	12-13.5	4
		15-16	Orange and gray alluvial CLAY (CL) with trace gravel, moist, faint naphthalene odor Coarse gravelly, alluvial SAND (SW), dry, no odor	13.5-15	4
		17.5-20	Orange alluvial CLAY (CL) with trace gravel, dry, no odor	16.5-18	2
		20-25	Orange alluvial CLAY (CL) with trace gravel, dry, faint naphthalene odor odor	18-19.5	1
			Boring terminated at 25 feet bgs	19.5-21	1.5
				22.5-24	2.5
				24-25	2
8/17/2006	G46-2	0-0.25	Asphalt	0-1.5	3
		0.23-0.3	Orange brown silty CLAY (CL) fill with trace gravel, moist, no odor	3-4.5	2.5
		4-4.5	Sand, gravel, and brick fill, dry, no odor	4.5-6	2
		4.5-7.5	Tan-brown, silty, alluvial CLAY (CL), moist, no odor	6-7.5	1.5
		8-10	Tan-orange alluvial CLAY (CL), moist, no odor	9-10.5	0.5
		10-13	Tan-orange alluvial CLAY (CL) grading into a gray alluvial CLAY (CL), moist, no odor	10.5-12	0.5
		13-23	Orange-brown, sandy, alluvial CLAY (CL) with trace gravel, dry, no odor	12-13.5	1.5
			Boring terminated at 23 feet bgs	15-16.5	1
				16.5-18	1.5
				18-19.5	0.5
				19.5-21 21-22.5	1
				22.5-23	2
8/17/2006	G46-3	0-0.5	Vegetation and loose topsoil	0-1.5	4
		0.5-2	Loose, tan, SILT (ML) fill, dry, no odor Eriable, red. clavey SILT (ML) fill, dry, no odor	1.5-3	2
		4-15	Sand, gravel, and brick fill, dry, no odor	4.5-6	3
		15-16	Gray, hard, alluvial CLAY (CL), moist, no odor	6-7.5	2.5
		16-18 18-23	Red-gray alluvial CLAY (CL), dry, strong organic odor Red-gray alluvial CLAY (CL), dry, no odor	7.5-9	1.5
		10-25	Boring terminated at 23 feet bgs	10.5-12	2
				12-13.5	1.5
				13.5-15	1.5
				16.5-18	4
				18-19.5	2
				19.5-21	2
			Building 48	21-23	1.5
		n	Geoprobe Soil Boring Logs	1 6 1	
	Soil Boring	Depth		Samples	PID Results
Date	No.	(feet bgs)	Soil Description-Stratigraphy	(feet bgs)	(ppm)
8/16/2006	G48-2	0-0.5	Asphalt	0-1	2
		1-2	Brown, gravel, sand and clay fill, dry, no odor Brown, gravel, sand and clay fill, dry, faint chemical odor	1-2 2-3	1.5
		2-3.5	Brown, gravel, sand and clay fill, dry, no odor	3-4	1.5
		3.5-4.5	Brown alluvial CLAY (CL), moist, no odor	4-5	1.5
8/16/2006	G48-4	0-0.5	Asphalt	0-1	1.5
		0.5-1	Brown, gravel and sand fill, dry, no odor	1-2	1.5
		1-2	Brown, gravel, sand and clay fill, moist, no odor		
		2	Boring terminated at 2 feet bgs on refusal material		
8/16/2006	G48-5	0-0.5	Asphalt	0-1	1.5
		0.5-0.8	Gravel Brown gravel and clay fill dry, organic odor	1-2	3.5
		1-3	Brown, graver and cray fill, dry, organic odor Brown alluvial CLAY (CL) with trace gravel, moist, faint organic odor	3-3.5	1.5
1		3-3.5	Brown alluvial CLAY (CL) with trace gravel, moist, no odor		
			Boring terminated at 3.5 feet bgs on refusal material Hand Auger Logs		
8/2/2006	H48-1	0-0.25	Topsoil and organic debris	0-1	3
		0.25-1.1	Brown, hard, mixture of sand, silt, and coarse gravel fill, very compact, dry, no odor		
8/16/2007	1110 2	0.0.2	Refusal at 1.1 feet bgs, boring terminated on refusal material	0.1	0.5
0/10/2000	1148-3	0.2-2.75	Brown SILT (ML) with trace clay, sand, and coarse gravel fill, dry, no odor	1-2	1
			Refusal at 2.75 feet bgs, boring terminated on refusal material	2-2.75	3
			Building 69 Hand Auger Log		
			nanu Auger Log	Screened	
1	Soil Boring	Thickness		Samples	PID Results
Date 8/3/2006	No.	(feet)	Soil Description-Stratigraphy	(feet bgs)	(ppm)
0/0/2000	1107-1	· · · · · · · · · · · · · · · · · · ·	DARAMA CHAY SHINI MINI MUAALAMI WHILI HAVA, STAVEL NIZER HASHIETIN, ULV	11/14	

#### Soil Boring and Hand Auger Logs

_			Cooperate Soil Daving Loss		
			Geoprode Soil Boring Logs	Screened	
Dete	Soil Boring	Depth (feet hgs)	Call Decembring Standarda	Samples (fact bgs)	PID Results
/17/2006	G75-1	(leet bgs)	Asphalt	(leet bgs) 0-1.5	(ppm) 10
1//2000	0/51	0.3-0.8	Concrete	1.5-3	9
		0.8-1	Black, sandy, gravelly, alluvial CLAY (CL), dry, moderate to hydrocarbon odor	3-4.5	32
		1-5	Brown-red alluvial CLAY (CL) with trace sand and gravel, dry, moderate to very strong	4.5-6	35
		5-6	Green-gray alluvial CLAY (CL), dry, hydrocarbon odor	7.5-9	2
		6-8	Brown-tan alluvial CLAY (CL)with trace sand and gravel, dry, faint to no odor	9-10.5	1.5
		8-10	Red, hard, alluvial CLAY (CL) with trace gravel, dry, no odor	10.5-12	2
		10-14	Red-brown to orange-brown alluvial CLAY (CL) with some sand and gravel, dry, no odor Boring terminated at 14 feet bas	12-13.5	0.5
/17/2006	G75-2	0-0.3	Asphalt	0-1.5	10
.17.2000	0/5 2	0.3-0.6	Gravel and sand fill, dry, no odor	1.5-3	14
		0.6-4	Brown, black, and red alluvial CLAY (CL) with some gravel, dry, moderate hydrocarbon odo	3-4.5	36
		4-4.5	Green-gray alluvial CLAY (CL), dry, hydrocarbon odor	4.5-6	20
		4.5-5	Orange-red alluvial CLAY (CL), dry, faint to moderate hydrocarbon odor	6-7.5	4
		5-0	strong hydrocarbon odor. dry	9-10.5	8
		6-10	Orange-red alluvial CLAY (CL) with some gravel, dry, no odor	10.5-12	1
		10-10.5	Orange-red alluvial CLAY (CL) with trace gravel and a green-gray staining, dry, faint to	12-13.5	1.5
		10 5 12	moderate hydrocarbon odor	13.5-14	1
		10.5-15	Tan-orange sandy gravelly alluvial CLAY (CL) dry faint to no odor		
		15 11	Boring terminated at 14 feet bgs		
/17/2006	G75-3	0-0.25	Asphalt	0-1.5	1.5
		0.25-0.5	Gravel	1.5-3	14
		0.5-0.8	Ked, brown, and black gravelly alluvial CLAY (CL), dry, moderate hydrocarbon odor Grav-green alluvial CLAY (CL) with trace travel, dry, moderate hydrocarbon odor	5-4.5 4 5 6	10
		4-4.6	Orange alluvial CLAY (CL) with trace gravel. drv. no odor		1.5
		4.6-5	Green-gray alluvial CLAY (CL), dry, moderate to strong hydrocarbon odor	7.5-9	2
		5-10	Red-orange, hard, alluvial CLAY (CL), dry, no odor	9-10.5	3
		10-14	Orange alluvial CLAY (CL) with trace gravel, dry, moderate hydrocarbon odor from 10 to	10.5-12	6
			12.5 ft. Boring terminated at 14 feet bos	12-13.5	2
/17/2006	G75-4	0-0.25	Asphalt	0-1.5	1.5
		0.25-0.6	Gravel	1.5-3	10
		0.6-1	Red-brown, sandy, silty, alluvial CLAY (CL), dry, no odor	3-4.5	4
		1-2	Gray-green sandy, alluvial CLAY (CL), dry, faint hydrocarbon odor	4.5-6	8
		2-5	CLAY (CL) at the base, dry, no odor	6-7.5 7.5-9	5
		5-10	Orange alluvial CLAY (CL) with trace gravel, faint hydrocarbon odor at the top, no odor at	9-10.5	2
			the base, moist at 9ft.	10.5-12	12
		10-12	Orange alluvial CLAY (CL) with trace gravel, moist, moderate hydrocarbon odor	12-13.5	4
		12-15	Orange alluvial CLAY (CL) with trace gravel, moist, no odor	13.5-15	2
			Soil Knifing Boring Logs		
			Light brown fine silty CLAY (CL), dry, no odor. Apparent 6-8 inch diameter steel pipe at 3		
/12/2007	SB01	2-3	feet.	2-3	0.5
/12/2007	SB02		Light brown silty CLAY (CL) dry no odor		
/12/2007	5002	5-6		5-6	0.5
	SB02 SB03	5-6 5-5.3	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete	5-6 5-5.3	0.5
/12/2007	SB02 SB03 SB04	5-6 5-5.3 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL) dry moderate (old weathered) hydrocarbon odor	5-6 5-5.3	0.5
/12/2007	SB02 SB03 SB04 SB05	5-6 5-5.3 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor	5-6 5-5.3 5-6 5-6	0.5 0 4 1
/12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06	5-6 5-5.3 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sitly CLAY (CL) with trace gravel, moist, faint hydrocarbon	5-6 5-5.3 5-6 5-6	0.5 0 4 1 2.5
/12/2007 /12/2007 /12/2007	SB02           SB03           SB04           SB05           SB06	5-6 5-5.3 5-6 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL) with trace gravel, moist, faint hydrocarbon odor	5-6 5-5.3 5-6 5-6 5-6	0.5 0 4 1 2.5
/12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06	5-6 5-5.3 5-6 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), with trace gravel, moist, faint hydrocarbon odor Building 76 Geographe Soil Borine Loss	5-6 5-5.3 5-6 5-6 5-6	0.5 0 4 1 2.5
/12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06	5-6 5-5.3 5-6 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs	5-6 5-5.3 5-6 5-6 5-6 Screened	0.5 0 4 1 2.5
/12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06 Soil Boring	5-6 5-5.3 5-6 5-6 5-6	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs	5-6 5-5.3 5-6 5-6 5-6 Screened Samples	0.5 0 4 1 2.5 PID Results
/12/2007 /12/2007 /12/2007 Date	SB02 SB03 SB04 SB05 SB06 Soil Boring No.	5-6 5-5.3 5-6 5-6 5-6 Depth (feet bgs)	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), damp, no odor Dark red brown to gray black sity CLAY (CL), with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0.15	0.5 0 4 1 2.5 PID Results (ppm)
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 Depth (feet bgs) 0-0.5 0,5-0.8	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL), damp, no odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1 5-3	0.5 0 4 1 2.5 PID Results (ppm) 2 1 5
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	SB02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 Depth (feet bgs) 0-0.5 0.5-0.8 0.8-1.5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sitly CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), dry, no odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	Sb02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 0-0.5 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), dy, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 15
/12/2007 /12/2007 /12/2007 /12/2007 Date /16/2006	SB02           SB03           SB04           SB05           SB06           Soil Boring No.           G76-1	5-6 5-5.3 5-6 5-6 5-6 0-0.5 0-0.5 0-0.5 0-0.5 0.5-0.5 0-0-0.5 00-0.5 00-0.5 0-0.5 0-0.5 0-0.5 0-0.5 0-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 00-0.5 0000000000	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sitly CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 6-7.5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 3
/12/2007 /12/2007 /12/2007 /12/2007 Date /16/2006	SB02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-0.5 0.5-0.8 0.8-1.5 1.5-4.5 6-10.5 10.5 10.5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CL), dry, moderate (old weathered) hydrocarbon odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9,105	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2
/12/2007 /12/2007 /12/2007 /12/2007 Date /16/2006	SB02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 0-0-5 0-5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), dry, moderate (old weathered) hydrocarbon odor Dark red brown to gray black silty CLAY (CL), damp, no odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20
/12/2007 /12/2007 /12/2007 /12/2007 Date /16/2006	SB02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 0-0-5 0-5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 1.3-14	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL), damp, no odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace silt, dry, faint to no odor 3 -inch gravel layer above a tan-red alluvial CLAY (CL) with trace silt, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-13.5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20 12
/12/2007 /12/2007 /12/2007 /12/2007 Date /16/2006	Sb02 SB03 SB04 SB05 SB06 Soil Boring No. G76-1	5-6 5-5.3 5-6 5-6 5-6 0-0-5 0-0-5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 13.5-14	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sitly CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, diseel fuel odor 3 - inch gravel layer above a tan-red alluvial CLAY (CL) with some silt, dry, faint to no odor Bed to orange alluvial CLAY (CL) (LAY (CL) with trace silt, dry, no odor Boring terminated at 14 feet bgs	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-13.5 13.5-14	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20 12 2
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	SB03           SB04           SB05           SB06             Soil Boring           No.           G76-1   G76-2	5-6 5-5.3 5-6 5-6 5-6 0-0-5 0-0-5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 13.5-14 0-0.3 0-2.5 c	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, faisel fuel odor 3 -inch gravel layer above a tan-red alluvial CLAY (CL) with some silt, dry, faint to no odor Red to orange alluvial CLAY (CL) with trace silt, dry, no odor Boring terminated at 14 feet bgs	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3.4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-13.5 13.5-14 0-1.5 0.5-2	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2.5 2 20 12 2 0 0 0
/12/2007 /12/2007 /12/2007 Date /16/2006	SB03 SB04 SB05 SB06 SB06 Soil Boring No. G76-1 G76-2	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0-0.5 0-0.5 0.8-1.5 1.5-4.5 0.8-1.5 1.5-4.5 10.5-12 12-13.5 13.5-14 0-0.3 0.3-0.6 0.5-4.5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor         Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor         Reddish orange gravelly CLAY (CL), damp, no odor         Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor         Building 76         Geoprobe Soil Boring Logs         Soil Description-Stratigraphy         Asphalt         Gravel and sand fill, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace silt, dry, no odor	5-6 5-5.3 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-13.5 13.5-14 0-1.5 1.5-3 3-4.5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0 5 5
/12/2007 /12/2007 /12/2007 Date /16/2006	SB03 SB04 SB05 SB06 SB06 Soil Boring No. G76-1 G76-2	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-0.5 0.5-0.8 0.8-1.5 1.5-4.5 1.5-4.5 1.5-1.5 1.3-5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor         Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor         Reddish orange gravelly CLAY (CL), damp, no odor         Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor         Building 76         Geoprobe Soil Boring Logs         Soil Description-Stratigraphy         Asphalt         Gravel and sand fill, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-orange alluvial CLAY (CL) with trace silt, dry, no odor         Red-orange alluvial CLAY (CL) with trace silt, dry, no odor         Red orange alluvial CLAY (CL) with trace silt, dry, no odor         Red-orange-brown mottled	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0.5 0.5
/12/2007 /12/2007 /12/2007 Date /16/2006	SB03 SB04 SB05 SB06 SB06 Soil Boring No. G76-1 G76-2	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 1.5-4.5 1.5-4.5 1.3-1.2 12-13.5 13.5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Soing terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0.5 1 1
//12/2007 //12/2007 //12/2007 //12/2007 Date //16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1           G76-2	5-6 5-5.3 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 1.3-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CL), dry, moderate (old weathered) hydrocarbon odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red to orange alluvial CLAY (CL) with trace silt, dry, no odor Red to orange alluvial CLAY (CL) with trace silt, dry, no odor Red to orange alluvial CLAY (CL) with trace silt, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), greasy-oily feel, moderate metallic odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2 20 12 2 0 0 0.5 1 1.5 1.5 1.5 1.5 1.5 1.5 1.5
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	SB03           SB04           SB05           SB06             Soil Boring           No.           G76-1   G76-2	5-6 5-5.3 5-6 5-6 5-6 Depth (feet bgs) 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 1.3.5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10 10-13 12-14 12-	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete     fragments, dry, no odor     Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor     Reddish orange gravelly CLAY (CL), damp, no odor     Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon     odor     Building 76     Geoprobe Soil Boring Logs     Soil Description-Stratigraphy     Asphalt     Gravel and sand fill, dry, no odor     Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor     Red-orange laluvial CLAY (CL) with trace silt, dry, no odor     Boring terminated at 14 feet bgs     Concrete     Gravel     Red-orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic     odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor     Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 13.5-14 0-1.5 13.5-13 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 13.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-5 1.5-3 1.5-5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 2.5 2 20 12 2 0 0 0.5 0.5 1.5 1.5 4 4
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007	SB03           SB04           SB05           SB06             Soil Boring           No.           G76-1   G76-2	5-6 5-5.3 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 13.5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10 10-13 13.14	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-torown alluvial CLAY (CL) with trace silt, dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 13.5-14 0-1.5 13.5-13 3-4.5 4.5-6 6-7.5 1.5-3 3-4.5 4.5-6 6-7.5 1.5-3 3-4.5 4.5-6 6-7.5 1.5-3 3-4.5 4.5-6 6-7.5 1.5-3 3-4.5 1.5-3 1.5-3 1.5-3 1.5-3 1.5-5 1.5-12	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2.5 2 20 12 2 0 0 0.5 0.5 1.5 4 6 6
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007 /16/2006 /16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1           G76-2           G76-3	5-6 5-5.3 5-6 5-6 5-6 0-0.5 0.5-0.8 0.0.5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 12-13.5 13.5-14 0-0.3 0.3-0.4.5 4.5-9 9-10 10-13 13-14 0-0.3	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red to orange alluvial CLAY (CL) with trace gravel, dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), greasy-oily feel, moderate metallic odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Boring terminated at 14 feet bgs Concrete	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-13.5 13.5-14 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 10.5-13 10.5-12	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0 0.5 1.5 1.5 4 6 0 0
/12/2007 /12/2007 /12/2007 Date /16/2006 /16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1           G76-2           G76-3	5-6           5-5.3           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-7           5-6           5-7           0-0.5           0.5-0.8           0.8-1.5           1.5-4.5           6-10.5-12           12-13.5           13.5-14           0-0.3           0.3-0.6           0.6-4.5           4.5-9           9-10           10-13           13-14           0-0.3           0.3-1	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-to range alluvial CLAY (CL) with trace silt, dry, no odor Red to range alluvial CLAY (CL) with trace silt, dry, no odor Red to range alluvial CLAY (CL) with trace silt, dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), greasy-oily feel, moderate metallic odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, har	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 2 20 12 2 0 0 0 0.5 1.5 1.5 4 6 0 0.5 0.5
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007 /16/2006 /16/2006	SB03 SB04 SB05 SB06 SB06 Soil Boring No. G76-1 G76-2 G76-2	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 0.5-0.8 0.8-1.5 1.5-4.5 1.5-4.5 1.5-1.2 13.5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10 10-13 13.14 0-0.3 0.3-1 1-4.5 0-0.3 0.3-1 1-4.5 0-0.3 0.3-1 1-4.5 0-0.3 0.3-1 1-4.5 0-0.3 0.3-1 1-4.5 0-0.5 0.5-1 0-1.5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black sitly CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-orange alluvial CLAY (CL) with trace gravel, dry, no odor Red orange alluvial CLAY (CL) with trace silt, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), with some silt, dry, faint to no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-brown alluvial CLAY (CL) with some gravel and trace black veins, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0.5 1.5 1.5 4 6 6 0 0.5 1 1 2
/12/2007 /12/2007 /12/2007 Date /16/2006 /16/2006	Silo2 SB03 SB04 SB05 SB06 Soil Boring No. G76-1 G76-2 G76-2	5-6 5-5.3 5-6 5-6 5-6 5-6 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 0.5-0.8 0.8-1.5 1.5-4.5 1.5-1.2 12-13.5 1.3-14 0-0.3 0.3-0.6 0.6-4.5 4.5-6 0.6-4.5 4.5-9 9-10 10-13 13-14 0-0.3 0.3-1 1-4.5 4.5-5 6-7 5-7 5-7 5-7 5-7 5-7 5-7 5-7 5	Light brown sity CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray sity CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red to orange alluvial CLAY (CL) with trace gravel, dry, no odor Red to orange alluvial CLAY (CL) with trace silt, dry, no odor Red to arange alluvial CLAY (CL) with trace silt, dry, no odor Red orange-brown mottled, hard, alluvial CLAY (CL), with trace gravel, dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-brown alluvial CLAY (CL) with some gravel and trace black veins, dry, no odor Red, hard, alluvial CLAY (CL) with some gravel and trace black veins, dry, no odor Red, hard, alluvial CLAY (CL) with some gravel and trace black veins, dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
/12/2007 /12/2007 /12/2007 /12/2007 /12/2007 /16/2006 /16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1	5-6           5-5.3           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           0.0.5           0.5-0.8           0.8-1.5           1.5-1.5           1.5-1.2           12-13.5           1.5-14           0-0.3           0.3-0.6           0.6-4.5           4.5-9           9-10           10-13           13-14           0-0.3           0.3-1           1-4.5           4.5-6           6-7.5           9.5-0	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-orange alluvial CLAY (CL) with trace gravel, dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-hard, alluvial CLAY (CL), with some gravel and trace black veins, dry, no odor Red, hard, alluvial CLAY (CL)	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2.5 2 20 12 2 0 0 0.5 1 1.5 4 6 6 0 0.5 1 2 3 5 5 1 5 5 5 1 5 5 5 1 5 5 5 1 5 5 5 1 5 5 5 1 5 5 5 1 5 5 5 5 1 5 5 5 5 1 5 5 5 1 5 5 5 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5
V12/2007 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006 V12/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1   G76-2 G76-3	5-6 5-5.3 5-6 5-6 5-6 Depth (feet bgs) 0-0.5 0.5-0.8 0.8-1.5 1.5-4.5 4.5-6 6-10.5 10.5-12 12-13.5 1.3.5-14 0-0.3 0.3-0.6 0.6-4.5 4.5-9 9-10 10-13 13-14 0-0.3 0.3-1 1-4.5 6-7.5 7.5-9 9-10.5 0-5-10 0-10.5 0-5-10 0-10.5 0-10.5 0-5-10 0-10.5 0-5-10 0-10.5 0-1	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete fragments, dry, no odor Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor Reddish orange gravelly CLAY (CL), damp, no odor Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor Building 76 Geoprobe Soil Boring Logs Soil Description-Stratigraphy Asphalt Gravel and sand fill, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor Red-tor ange alluvial CLAY (CL) with trace gravel, dry, no odor Red-to crange alluvial CLAY (CL) with trace silt, dry, no odor Boring terminated at 14 feet bgs Concrete Gravel Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor Red-brown alluvial CLAY (CL), greasy-oily feel, faint to moderate metallic/burnt odor Red, hard, alluvial CLAY (CL), greasy-oily feel, faint to moderate metallic od	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 1.5-3 3-4.5 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-5 1.5-3 1.5-5 1.5-3 1.5-5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2.5 2 20 12 2 0 0 0.5 0.5 1 1.5 4 6 6 0 0.5 1 2 3 5 6 6
3/12/2007 3/12/2007 3/12/2007 Date 3/16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1           G76-2           G76-3	5-6           5-5.3           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-7           0-0.5           0.5-0.8           0.8-1.5           1.5-4.5           4.5-6           0.6-0.3           0.3-0.4           0-0.3           0.3-14           0-0.3           0.3-1           14-5-6           6-7.5           7.5-9           9-10.5-11	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete         fragments, dry, no odor         Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor         Reddish orange gravelly CLAY (CL), damp, no odor         Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor         Building 76         Geoprobe Soil Boring Logs         Red-brown alluvial CLAY (CL), dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL) with some silt, dry, faint to no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, moderate metallic/burnt odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor         Boring terminated at 14 feet b	5-6 5-5.3 5-6 5-6 5-6 Screened Samples (feet bgs) 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 1.5-3 13.5-14 0-1.5 13.5-14 0-1.5 13.5-14 0-1.5 13.5-14 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-14 0-1.5 1.5-3 3-4.5 4.5-6 6-7.5 7.5-9 9-10.5 10.5-12 12-14 0-1.5 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-3 1.5-5	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 3 2.5 2 20 12 2 0 0 0 0.5 1.5 1 5 5 6 6 6 6 6 1 2 3 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6
3/12/2007 3/12/2007 3/12/2007 Date 3/16/2006 3/16/2006	SB03           SB04           SB05           SB06           Soil Boring No.           G76-1           G76-2           G76-3	5-6           5-5.3           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-6           5-7           0.5-0.8           0.8-1.5           1.5-4.5           6-10.5           12-13.5           13.5-14           0-0.3           0.3-0.6           0.6-4.5           4.5-9           9-10           10-13           13-14           0-0.3           0.3-1           1-4.5           4.5-6           6-7.5           7.5-9           9.10.5-11           11-14	Light brown silty CLAY (CL) with trace gravel, and some rock, asphalt, and concrete         fragments, dry, no odor         Gray silty CLAY (CH), dry, moderate (old weathered) hydrocarbon odor         Reddish orange gravelly CLAY (CL), damp, no odor         Dark red brown to gray black silty CLAY (CL) with trace gravel, moist, faint hydrocarbon odor         Building 76         Geoprobe Soil Boring Logs         Geoprobe Soil Boring Logs         Soil Description-Stratigraphy         Asphalt       Gravel and sand fill, dry, no odor         Red-brown alluvial CLAY (CL), with trace gravel, dry, no odor       Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor       Red-brown alluvial CLAY (CL) with trace gravel, dry, hydrocarbon odor         Red-brown alluvial CLAY (CL) with trace gravel, dry, no odor       Red-orange alluvial CLAY (CL) with trace gravel, dry, no odor         Red-orange alluvial CLAY (CL) with trace silt, dry, no odor       Red-orange alluvial CLAY (CL) with trace silt, dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), grasy-oily feel, moderate metallic odor       Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor       Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor         Red-orange-brown mottled, hard, alluvial CLAY (CL), dry, no odor	5-6 5-5.3 5-6 5-6 5-6 5-6 5-6 5-6 5-6 5-6	0.5 0 4 1 2.5 PID Results (ppm) 2 1.5 1.5 1.5 1.5 1.5 2 2 0 0 0 0.5 1 1.5 4 6 6 0 2 2 2 2 0 0 0 0 0.5 1 2 2 0 0 0 0 0 5 1 2 2 2 0 0 5 1 5 1 2 2 2 2 1 5 5 5 6 2 2 2 2 2 5 5 5 1 2 2 2 2 5 5 5 6 2 2 2 2 5 5 6 6 2 2 2 2 2 5 5 5 6 2 2 2 2 5 5 5 6 2 2 2 2 5 5 5 5 5 5 5 5 5 5 5 5 5

0/16/0006	0764	0.0.2		0.1.5	0
8/16/2006	G/6-4	0-0.5	Concrete	0-1.5	0
		0.3-0.6	Gravel	1.5-3	1
		0.6-4.5	Brown alluvial CLAY (CL) with trace sand and gravel, dry, no odor	3-4.5	1
		4.5-7	Light brown alluvial CLAY (CL), moist, no odor	4.5-6	1
		7-8	Orange-brown alluvial CLAY (CL) with trace gravel, moist, faint diesel odor at base	6-7.5	1.5
		8-10	Red-brown, hard, alluvial CLAY (CL), dry, no odor	7.5-9	2
		10-14	Red-brown, hard, alluvial CLAY (CL) with some sand and silt, moist, no odor	9-10.5	1
			Boring terminated at 14 feet bgs	10.5-12	1
				12-14	0.5

			Building 77		
	1		Geoprobe Soil Boring Logs	G 1	
	Soil Poring	Donth		Screened	DID Bogulta
Data	No	(feet bgs)	Soil Description Stratigraphy	(feet bgs)	(ppm)
8/16/2006	G77-1	0-0.3	Asphalt	0-1	0
0,10,2000	0// 1	0.3-0.8	Orange mix of loose sand and gravel fill, dry, no odor	1-2	0.5
		0.8-5	Orange-red, hard, alluvial CLAY (CL), dry, no odor	2-3	0.5
			Boring terminated at 5 feet bgs	3-4	0.5
				4-5	0.5
8/16/2006	G77-2	0-0.4	Concrete	0-1	0.5
		0.4-0.6	Gravel	1-2	1.5
		0.6-1	Sand, gravel, and clay fill, dry, no odor	2-3	1.5
		1-3	Orange-red, mottled, alluvial CLAY (CL), dry, faint chemical odor	3-4	1
		5-5	Orange-red, motiled, anuviar CLAT (CL), dry, no odor Boring terminated at 5 feet bas	4-3	0
8/16/2006	G77-3	0-0.4	Concrete	0-1	15
0/10/2000	0// 5	0.4-0.5	Gravel	1-2	1.5
		0.5-5	Red, hard, alluvial CLAY (CL), dry, no odor	2-3	1
			Boring terminated at 5 feet bgs	3-4	1.5
				4-5	1.5
8/16/2006	G77-4	0-0.4	Concrete	0-1	2
		0.4-0.6	Gravel	1-2	1.5
		0.6-2	Red-orange alluvial CLAY (CL), dry, faint chemical odor	2-3	1
		2-5	Red-orange alluvial CLAY (CL), dry, no odor	3-4	1
0/16/2006	077.5	0.0.2	Boring terminated at 5 feet bgs	4-5	1
8/16/2006	G/7-5	0-0.5	Aspnait	0-1	0
		0.5-1	Orange nit of foose said and graver fill, dry, no odor	1-2	2
		1-5	Boring terminated at 5 feet bas	3.4	1
			bornig terminated at 5 reet bgs	4-5	0.5
8/16/2006	G77-6	0-0.3	Asphalt	0-1	4
		0.3-0.6	Orange mix of loose sand and gravel fill, dry, no odor	1-2	2.5
		0.6-1	Orange-red, hard, alluvial CLAY (CL), dry, moderate chemical odor	2-3	1
		1-2	Orange-red, hard, alluvial CLAY (CL), dry, faint chemical odor	3-4	1
		2-5	Orange-red, hard, alluvial CLAY (CL), dry, no odor	4-5	1
			Boring terminated at 5 feet bas		
			bornig terminated at 5 feet bgs		
			Building 78		
			Building 78 Hand Auger Logs	Screened	
	Soil Boring	Depth	Building 78 Building 78 Hand Auger Logs	Screened Samples	PID Results
Date	Soil Boring No.	Depth (feet bgs)	Building 78 Hand Auger Logs Soil Description-Stratigraphy	Screened Samples (feet bgs)	PID Results (ppm)
Date 8/7/2006	Soil Boring No. H78-1	Depth (feet bgs) 0-0.4	Boiling etiminated at 5 feet bgs Building 78 Hand Auger Logs Soil Description-Stratigraphy Concrete	Screened Samples (feet bgs) 0-1	PID Results (ppm) 0
Date 8/7/2006	Soil Boring No. H78-1	Depth (feet bgs) 0-0.4 0.4-0.75	Building 78 Building 78 Hand Auger Logs Concrete Gravel, wet at 1ft, no odor	Screened Samples (feet bgs) 0-1 1-2	PID Results (ppm) 0 0.5
Date 8/7/2006	Soil Boring No. H78-1	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3	PID Results (ppm) 0 0.5 1.5
Date 8/7/2006	Soil Boring No. H78-1	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5	Building 78           Building 78           Hand Auger Logs           Concrete           Gravel, wet at 1ft, no odor           Red allwid CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4	PID Results (ppm) 0 0.5 1.5 1.5 1.5
Date 8/7/2006	Soil Boring No. H78-1	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5	Boining erininated at 5 feet bgs Building 78 Hand Auger Logs Concrete Gravel, wet at 1ft, no odor Red alluvial CLAY (CL) with trace silt, moist, no odor Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 1.5 2
Date 8/7/2006	Soil Boring No. H78-1 H78-2	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5	Building 78           Building 78           Hand Auger Logs           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Gravel, wet at 1.5ft, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 0-1	PID Results (ppm) 0 0.5 1.5 1.5 2
Date 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Description terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 3-4	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1.5 1 1
Date 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-2	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2	Boing erminated at 5 feet bgs Building 78 Hand Auger Logs Concrete Gravel, wet at 1ft, no odor Red alluvial CLAY (CL) with trace silt, moist, no odor Boring terminated at 5 feet bgs Gravel, wet at 1.5ft, no odor Red alluvial CLAY (CH) wet, faint chemical odor Boring terminated at 5 feet bgs Gravel, wet at 1ft, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1 1 1 1
Date 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2	PID Results (ppm) 0 0.5 1.5 2   1.5 1 1 1 
Date 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gravel, moder alluvial CLAY (CH) with trace gravel, wet, moderate chemical odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 1 1 1 1 .5
Date 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 1 1   1.5 2
Date 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-0.25	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH), with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1 1 1  2 2 2 1.5
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-0.25 0.25-0.8	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CH) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2 3-3 3-4 1-2 2-2 3-2 2-2 2-2 3-2 2-2 2-2 2-2 2-2 2	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-5 0-2 2-5 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 2 1 1   1.5 2 2 2 1.5 3 2
Date 8/7/2006 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-25 0.25-0.25 0.25-0.25 0.8-2 2-3	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1 1   1.5 2 2 2 1.5 3 2 3 2 3
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 2.4 5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH), with trace gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY           Varient fraint chemical odor           Varient of dor corange alluvial CLAY (CL) overlying red alluvial CLAY	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1 1 1  1.5 2 2 2 1.5 3 2 2 3 2 3 2
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL), overlying red alluvial CLAY           CL), wet, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3-3-9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.03	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY           (CL), wet, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 2  1.5 2 2 2 1.5 3 2 3 2 1 1
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3-3-3 3-3-9 3-9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.31-25	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY (CL), wet, faint chemical odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial CLAY (CL) with trace gravel, moist, faint chemical odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 5 0-1 1-2 2-3 3-4 4-5 5 0-1 1-2 2-2 3-4 1-2 2-2 3-4 1-2 2-2 3-4 2-2 2-2 3-4 2-2 2-2 3-4 2-2 2-2 3-2 2-2 2-2 2-2 2-2 2-2 2-2 2-2	PID Results (ppm) 0 0.5 1.5 1.5 2  1.5 1 1   1.5 2 2 2 1.5 3 2 3 2 3 2 1 5 3 2 2 3 2 3 2
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-2 H78-3 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25-1.8	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Varigated red, gray, and orange, alluvial CLAY (CL) overlying red alluvial CLAY           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 1-2 2-3 3-4 4-5 2-2 2-3 3-4 4-5 2-2 2-3 3-4 4-5 2-2 2-3 2-4 2-2 2-2 2-3 2-2 2-2 2-2 2-2 2-2 2-2 2-2	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 1 1 1  1.5 2 2 2 1.5 3 2 2 1.5 3 2 2 1.5 3 2 2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
Date 8/7/2006 8/7/2006 8/7/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25 1.25-1.8	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY (CL), wet, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt           Gravel and sand fill, dry, no odor	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 2-2 3-4 4-5 2-2 3-4 4-5 2-2 3-4 2-2 3-4 3-4 2-2 3-4 3-4 2-2 3-4 3-4 2-2 3-4 3-4 2-2 3-4 3-4 2-2 3-4 3-4 2-2 3-4 2-2 3-4 3-4 3-4 3-4 3-4 2-2 3-4 3-4 3-4 3-4 2-2 3-4 3-4 3-4 3-4 2-2 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006 8/7/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25 1.25-1.8	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.6ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CL), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Borown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, alluvial SAND (SM) overlying gray alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt           Gravel and sand fill, dry, no odor           Ref alluvial CLAY (CL), dry, faint chemical odor           Refavel and sand fill, dry, no o	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 3-4 1-2 2-2 3-1 2-2 3-4 3-4 3-4 3-4 3-4 2-2 3-4 3-4 3-4 3-4 2-2 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 2 1 1 1 1  1.5 2 2 2 1.5 3 2 3 2 1 2.5
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4 H78-4 H78-5	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25 1.25-1.8 0-3	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Borown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt           Gravel and sand fill, dry, no odor           Ref alluvial CLAY (CL), dry, faint chemical odor           Ref alluvial CLAY (CL), dry, fa	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2 3-4 4-5 0-1 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 4-5 1-2 2-2 3-4 1-2 2-2 3-4 1-2 2-2 3-4 1-2 2-2 3-4 3-4 2-2 2-2 3-4 2-2 3-4 3-4 2-2 3-2 3-4 2-2 3-2 3-4 2-2 3-2 3-4 3-4 2-2 3-2 3-4 2-2 3-2 3-4 3-4 2-2 3-2 3-4 3-4 2-2 3-2 3-4 3-4 3-4 3-4 2-2 3-2 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4 3-4	PID Results (ppm) 0 0.5 1.5 1.5 2   1.5 2 1  1.5 2 2 3 2 3 2 3 2 1 2.5
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-2 H78-3 H78-3 H78-5 H78-5	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-5 0-2 2-3.3 3.3-3.9 3.9-5 0-25-08 0.8-2 2-3 3.3-4.5 0-0.3 0.3-1.25 1.25-1.8 0-3 3-3.5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1ft, no odor           Orange alluvial CLAY (CH), with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange, and y, alluvial CLAY (CL) with trace gravel, moist, no odor           Varigated red, gray, and orange, alluvial CLAY (CL), overlying red alluvial CLAY           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 1-2 2-2 3-3 3-4 1-2 2-2 3-3 2-4 1-2 2-2 3-2 3-4 1-2 2-2 3-2 2-2 3-4 1-2 2-2 3-2 3-4 1-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 1-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 2-2 2-2 3-2 3-4 3-4 2-2 3-2 3-4 2-2 3-2 3-4 2-2 3-2 3-4 3-4 2-2 3-2 3-4 2-2 3-2 3-4 2-2 3-2 3-4 2-2 3-2 3-4 3-2 3-2 3-2 3-2 3-2 3-2 3-2 3-2 3-2 3-2	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/7/2006 8/7/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4 H78-4	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25 1.25-1.8 0-3 3-3.5	Building 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CH), with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Boring terminated at 5 feet bgs           Gravel           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL), moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL), moist, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Asphalt           Gravel and sand fill, dry, no odor           Red alluvial SAND (SC) with some clay, wet, no odor           Orange alluvial SAND (SC) with some clay, wet, no odor <t< td=""><td>Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2 3-4 2-2 3-4 2-2 2-3 3-4 2-2 2-2 3-4 2-2 2-2 3-2 2-2 3-2 2-2 3-2 2-2 3-2 2-2 2</td><td>PID Results (ppm) 0 0.5 1.5 1.5 2 </td></t<>	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2 3-4 2-2 3-4 2-2 2-3 3-4 2-2 2-2 3-4 2-2 2-2 3-2 2-2 3-2 2-2 3-2 2-2 3-2 2-2 2	PID Results (ppm) 0 0.5 1.5 1.5 2 
Date 8/7/2006 8/7/2006 8/7/2006 8/3/2006 8/3/2006	Soil Boring No. H78-1 H78-2 H78-3 H78-3 H78-4 H78-5 H78-5	Depth (feet bgs) 0-0.4 0.4-0.75 0.75-5 0-2 2-5 0-2 2-3 3.3-3.9 3.9-5 0-0.25 0.25-0.8 0.8-2 2-3 3-4.5 0-0.3 0.3-1.25 1.25-1.8 0-3 3-3.5	Bilding 78           Building 78           Hand Auger Logs           Soil Description-Stratigraphy           Concrete           Gravel, wet at 1ft, no odor           Red alluvial CLAY (CL) with trace silt, moist, no odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.5ft, no odor           Red alluvial CLAY (CH) wet, faint chemical odor           Boring terminated at 5 feet bgs           Gravel, wet at 1.ft, no odor           Orange alluvial CLAY (CH) with some gravel and silt, wet, moderate chemical odor           Gray-green alluvial CLAY (CL) with trace gravel, wet, moderate chemical odor           Orange alluvial CLAY (CL) with trace gravel and silt, wet, moderate chemical odor           Brown, sandy, alluvial CLAY (CL) with trace gravel, moist, no odor           Orange alluvial SAND (SM) overlying gray alluvial CLAY (CL) overlying red alluvial CLAY           CL), wet, faint chemical odor           Varigated red, gray, and orange, alluvial CLAY (CL), moist, faint chemical odor           Boring terminated at 5 feet bgs           Gravel and sand fill, dry, no odor           Refusal at 1.8 feet bgs, boring terminated           Gravel and sand fill, dry, no odor           Refusal at 1.8 feet bgs, boring terminated           Gravel, wet at 1.5ft           Orange alluvial SAND (SC) wit	Screened Samples (feet bgs) 0-1 1-2 2-3 3-4 4-5 0-1 1-2 2-2 3-5 5 2-2 2-2 2-2 2-2 3-4 2-2 2-2 2-2 2-2 2-2 2-2 2-2 2-2 2-2 2	PID Results (ppm) 0 0.5 1.5 1.5 2 

Notes: See Figures 5 and 6 for sample locations Borings advanced using a direct-push geoprobe rig or stainless steel hand auger PID - Photo ionization detector field headspace organic vapor reading bgs - Below the ground surface ppm - Parts per million -- Sample interval not analyzed by PID NA- Not applicable

#### APPENDIX C LABORATORY ANALYTICAL REPORTS



March 22, 2007 10:17:12AM

SAMPLE IDENTIFICATION LAB NUMBER COLLECTION	
	DATE AND TIME
SB02 NQC1739-01 03/12	2/07 11:00
SB04 NQC1739-02 03/12	2/07 13:00
SB06 NQC1739-03 03/12	2/07 14:00
Trip (2)         NQC1739-04         03/12	2/07 00:01

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

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

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

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

Estimated uncertainity is available upon request.

This report has been electronically signed.

Report Approved By:

Fin M. Headley

Lisa Headley Senior Project Manager

### Test America

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

ANALYTICAL REPORT											
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch			
Sample ID: NQC1739-01 (SB02 - S	Soil) Sampled:	03/12/07	11:00								
Extractable Petroleum Hydrocarbons											
Diesel	5.60		mg/kg	4.92	1	03/16/07 02:29	SW846 8015B	7032390			
Surr: o-Terphenyl (32-132%)	96 %					03/16/07 02:29	SW846 8015B	7032390			
Purgeable Petroleum Hydrocarbons											
GRO as Gasoline	ND		mg/kg	4.72	50	03/15/07 14:51	SW846 8015B	7032463			
Surr: a,a,a-Trifluorotoluene (66-146%)	104 %					03/15/07 14:51	SW846 8015B	7032463			
Sample ID: NOC1739-02RE1 (SR)	)4 - Soil) Samn	led• 03/12	2/07 13.00								
Extractable Petroleum Hydrocarbons	sen, sump	1041 00/12									
Diesel	ND		mg/kg	4.90	1	03/16/07 09:09	SW846 8015B	7032390			
Surr: o-Terphenyl (32-132%)	49 %		00			03/16/07 09:09	SW846 8015B	7032390			
Purgeable Petroleum Hydrocarbons											
GRO as Gasoline	ND		mg/kg	4.87	50	03/15/07 15:24	SW846 8015B	7032463			
Surr: a,a,a-Trifluorotoluene (66-146%)	102 %					03/15/07 15:24	SW846 8015B	7032463			
Sample ID: NOC1739-03 (SB06 - 5	Soil) Sampled:	03/12/07	14:00								
Extractable Petroleum Hydrocarbons	··, ··										
Diesel	ND		mg/kg	4.88	1	03/16/07 02:46	SW846 8015B	7032390			
Surr: o-Terphenyl (32-132%)	90 %					03/16/07 02:46	SW846 8015B	7032390			
Purgeable Petroleum Hydrocarbons											
GRO as Gasoline	ND		mg/kg	4.98	50	03/15/07 15:56	SW846 8015B	7032463			
Surr: a,a,a-Trifluorotoluene (66-146%)	103 %					03/15/07 15:56	SW846 8015B	7032463			
Sample ID: NQC1739-04 (Trip (2)	- Water) Samı	oled: 03/1	2/07 00:01								
Purgeable Petroleum Hydrocarbons	,										
GRO as Gasoline	ND		ug/L	100	1	03/18/07 21:45	SW846 8015B	7033211			
Surr: a,a,a-Trifluorotoluene (44-152%)	105 %		-			03/18/07 21:45	SW846 8015B	7033211			

# Test/America

ANALYTICAL TESTING CORPORATION

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Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons							
SW846 8015B	7032390	NQC1739-01	25.39	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-02	25.53	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-02RE1	25.53	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-03	25.60	1.00	03/14/07 09:00	BJM	EPA 3550B
Purgeable Petroleum Hydrocarbons							
SW846 8015B	7032463	NQC1739-01	5.30	5.00	03/14/07 09:15	NKN	EPA 5035A (GC)
SW846 8015B	7032463	NQC1739-02	5.13	5.00	03/14/07 09:16	NKN	EPA 5035A (GC)
SW846 8015B	7032463	NQC1739-03	5.02	5.00	03/14/07 09:17	NKN	EPA 5035A (GC)

## Test/America

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time	
Extractable Petroleum Hydrocar	rbons						
7032390-BLK1							
Diesel	<2.00		mg/kg	7032390	7032390-BLK1	03/15/07 21:26	
Surrogate: o-Terphenyl	101%			7032390	7032390-BLK1	03/15/07 21:26	
Purgeable Petroleum Hydrocarb	oons						
7032463-BLK1							
GRO as Gasoline	2.00		mg/kg	7032463	7032463-BLK1	03/15/07 03:20	
Surrogate: a,a,a-Trifluorotoluene	104%			7032463	7032463-BLK1	03/15/07 03:20	
7033211-BLK1							
GRO as Gasoline	<43.0		ug/L	7033211	7033211-BLK1	03/18/07 21:20	
Surrogate: a,a,a-Trifluorotoluene	102%			7033211	7033211-BLK1	03/18/07 21:20	

## Test America

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA

#### LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Extractable Petroleum Hydrocarbons								
7032390-BS1								
Diesel	40.0	34.9		mg/kg	87%	41 - 141	7032390	03/15/07 21:43
Surrogate: o-Terphenyl	0.800	0.847			106%	32 - 132	7032390	03/15/07 21:43
Purgeable Petroleum Hydrocarbons								
7032463-BS1								
GRO as Gasoline	10.0	9.72		mg/kg	97%	76 - 117	7032463	03/15/07 18:40
Surrogate: a,a,a-Trifluorotoluene	30.0	44.2	Z2		147%	66 - 146	7032463	03/15/07 18:40
7033211-BS1								
GRO as Gasoline	1000	934		ug/L	93%	58 - 138	7033211	03/19/07 06:59
Surrogate: a,a,a-Trifluorotoluene	30.0	24.8			83%	44 - 152	7033211	03/19/07 06:59

## Test/America

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Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA

#### LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons 7032463-BSD1												
GRO as Gasoline		9.90		mg/kg	10.0	99%	76 - 117	2	22	7032463		03/15/07 19:15
Surrogate: a,a,a-Trifluorotoluene		45.3	Z2	ug/L	30.0	151%	66 - 146			7032463		03/15/07 19:15

### Test America

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA Matrix Spike

Analyte	Orig. Val.	MS Val	Q	Units	Spike Conc	% Rec.	Target Range	Batch	Sample Spiked	Analyzed Date/Time
Extractable Petroleum Hydrocart	ons									
7032390-MS1										
Diesel	16.1	46.7		mg/kg	38.8	79%	24 - 133	7032390	NQC1596-02	03/15/07 22:00
Surrogate: o-Terphenyl		0.926		mg/kg	0.776	119%	32 - 132	7032390	NQC1596-02	03/15/07 22:00
Purgeable Petroleum Hydrocarbo	ons									
7032463-MS1										
GRO as Gasoline	1.94	489		mg/kg	500	97%	64 - 130	7032463	NQC1759-01	03/15/07 17:34
Surrogate: a,a,a-Trifluorotoluene		44.3	Z2	ug/L	30.0	148%	66 - 146	7032463	NQC1759-01	03/15/07 17:34
7033211-MS1										
GRO as Gasoline	3580	4180		ug/L	1000	60%	34 - 201	7033211	NQC1558-01	03/19/07 06:09
Surrogate: a,a,a-Trifluorotoluene		25.7		ug/L	30.0	86%	44 - 152	7033211	NQC1558-01	03/19/07 06:09

### Test/America

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

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

Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA Matrix Spike Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Extractable Petroleum Hydrocart	ons											
7032390-MSD1												
Diesel	16.1	55.3		mg/kg	38.9	101%	24 - 133	17	50	7032390	NQC1596-02	03/15/07 22:17
Surrogate: o-Terphenyl		0.933		mg/kg	0.779	120%	32 - 132			7032390	NQC1596-02	03/15/07 22:17
Purgeable Petroleum Hydrocarbo	ns											
7032463-MSD1												
GRO as Gasoline	1.94	514		mg/kg	500	102%	64 - 130	5	22	7032463	NQC1759-01	03/15/07 18:07
Surrogate: a,a,a-Trifluorotoluene		44.8	Z2	ug/L	30.0	149%	66 - 146			7032463	NQC1759-01	03/15/07 18:07
7033211-MSD1												
GRO as Gasoline	3580	4190		ug/L	1000	61%	34 - 201	0.2	28	7033211	NQC1558-01	03/19/07 06:34
Surrogate: a,a,a-Trifluorotoluene		25.6		ug/L	30.0	85%	44 - 152			7033211	NQC1558-01	03/19/07 06:34

### Test Analytical Testing Corporation

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

Client	MACTEC Engineering & Consulting, Inc. (3740)
	21740 Beaumeade Circle, Suite 150
	Ashburn, VA 20147
Attn	Brent Chapman

Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### DATA QUALIFIERS AND DEFINITIONS

Z2 Surrogate recovery was above the acceptance limits. Data not impacted.

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

#### METHOD MODIFICATION NOTES





BC#

NQC1739

Cooler Received/Opened On03/13/2007 @ 0810 1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:
Fed-Ex
2. Temperature of representative sample or temperature blank when opened: Degrees Celsius (indicate IR Gun ID#)
Raynger ST
3. Were custody seals on outside of cooler?
a. If yes, how many and where: 2 Won 1 Wick
4. Were the seals intact, signed, and dated correctly?NA
5. Were custody papers inside cooler?NA
I certify that I opened the cooler and answered questions 1-5 (initial)
6. Were custody seals on containers: YES NO and Intact YES NO NA
were these signed, and dated correctly?
7. What kind of packing material used? Bubblewrap Peanuts Vermiculite Foam Insert
Plastic bag Paper Other None
8. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None
9. Did all containers arrive in good condition (unbroken)?NA
10. Were all container labels complete (#, date, signed, pres., etc)?
11. Did all container labels and tags agree with custody papers?
12 a. Were VOA vials received?NA
b. Was there any observable head space present in any VOA vial?
L certify that I unloaded the cooler and answered <u>questions 6-12 (intial)</u>
13 a On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YESNO
b. Did the bottle labels indicate that the correct preservatives were used
If preservation in-house was needed, record standard ID of preservative used here
14 Was residual chlorine present?
Leartify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)
15 Were custody papers properly filled out (ink, signed, etc)?
16. Did you sign the custody papers in the appropriate place?
10. Due you sign the customy pupped in the analysis requested?
17. Were confident amount of sample sent in each container?
Leartify that Lentered this project into LIMS and answered questions 15-18 (intial)
Leastify that I attached a label with the unique LIMS number to each container (intial)
19 Were there Non-Conformance issues at login YES NO Was a PIPE generated YES NO #

Chain of Custody Record

.....



Severn Trent Laboratories, Inc.

STL-4124 (0901)						I
Client M	Project	Manager	and in	Date 112/197	Chain of Custody Number	
MACK	R	· (MUF	press .	10/100		ł
Altress Address And And And	- 10 4 KM Zeleph	one Number (Area Co	de)/Fax Number	C- BSS Lab Number	Page / of /	ł
City City State Zip C	ode A	intact DVDX (0)	Lab Contact	Analysis (Attach list if more space is needed)		1
Project Name and Location (State)	Carrier	Maybill Number		TOR C	Special Instructions/	
ContractPurchase Order/Quote No.		Matrix	Containers & Preservatives		Conditions of Receipt	
Sample 1.D. No. and Description (Containers for each sample may be combined on one line)	Date Time	ViA suosupA inoS	NaOH NaOH HOEN HOC3 H2OA H2O24 H2O24	Met and a second		I
5802	3/12/07/11/00	X	X X		1	<u> </u>
SB04	2/201/300	×	2		•	ام
SRO6	3/210- 140	X	2 X			<i>w</i> 1
70.20[2]	3 42197				1	5
						!
				NQC1739		1
				03/22/07 23:59		I
						ļ
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						I
						1
						1 1
Possible Hazard Identification		Sample Disposal		(A fee may be a (A fee may be a (A fee may be a	ssessed if samples are retained	
U Non-Hazard U Flammable U Skin Irritant L Turn Around Time Required	Poison B		or L Disposal by Lao L Arc		(1910)	1
24 Hours 24 Hours 7 Days 14 Day	ys 🗌 21 Days 🗍 Of	her				I
1. Relinquished By	Date	12197 LLC	1. Received By		Date	I
2 Reinquished By	Date	Time	2. Received By		Date	
3. Relinquished By	Date	Time	3. Received By G. 14	when	Date Time 3-/3 207 0810	ι I
Comments						

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy



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

September 13, 2006

W48-1

W78-1 (1-3')

W78-1 (3-5')

Client: MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn: Brent Chapman

Work Order:NPH4237Project Name:AFRHProject Nbr:3552-06-0897P/O Nbr:APO# 65378Date Received:08/31/06

#### SAMPLE IDENTIFICATION

#### LAB NUMBER

NPH4237-01 NPH4237-02 NPH4237-03 **COLLECTION DATE AND TIME** 

08/30/06 11:45 08/30/06 15:30 08/30/06 15:35

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

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

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

Koxanne L. Connor

Roxanne Connor Senior Project Manager

### **Test**America

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

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

Work Order: NPH4237 Project Name: AFRH Project Number: 3552-06-0897 Received: 08/31/06 08:00

		AN	ALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH4237-01 (W48-1	1 - Ground	Water) S	ampled: 08/3	80/06 11:45	· -	Unionfilis and an Alexandra unioneer kademini		
Mercury by EPA Methods 7470A/74	71A		- 					
Mercury	ND		mg/L	0.000200	1	09/01/06 12:09	SW846 7470A	6090045
Organochlorine Pesticides by FPA M	lethod 8081	4	C					0070012
Aldrin		1		0.0500	1	00/04/06 00 00	CINCLE DODA 1	
delta-BHC	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
alpha-BHC	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
heta-BHC	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
yamma-BHC (Lindane)	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
alpha-Chlordane	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
eamma-Chlordane	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Chlordane	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
	ND		ug/L	3.00	1	09/04/06 00:22	SW846 8081A	6090291
4,4 -DDE	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
4,4'-DDT	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Dieldrin	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Endosulfan I	ND		ug/L	0.0500	1.	09/04/06 00:22	SW846 8081A	6090291
Endosulfan II			ug/L	0.0500	. 1	09/04/06 00:22	SW846 8081A	6090291
Endosultan II Endosultan gulfata	ND		ug/L	0.0500	I	09/04/06 00:22	SW846 8081A	6090291
Endrin	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Endrin aldabyda	ND		ug/L	0.0500	1 .	09/04/06 00:22	SW846 8081A	6090291
Endrin ketono	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Hantachlar	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Heptachlor enovide	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Methowychlor	ND		ug/L	0.0500	1	09/04/06 00:22	SW846 8081A	6090291
Towashone	ND		ug/L	0.0500	- 1	09/04/06 00:22	SW846 8081A	6090291
Toxaphene Summ Transition (50, 11704)	ND		ug/L	5.00	1	09/04/06 00:22	SW846 8081A	6090291
Surr: Tetrachloro-meta-xylene (58-11/%)	92%					09/04/06 00:22	SW846 8081A	6090291
surr. Decachiorobiphenyi (22-115%)	54 %					09/04/06 00:22	SW846 8081A	6090291
Chlorinated Herbicides by EPA Meth	od 8151A							
2,4 <b>-</b> D	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Dalapon	ND		ug/L	0.971	1	09/07/06 03:36	SW846 8151A	6090016
2,4-DB	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Dicamba	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Dichloroprop	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Dinoseb	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
MCPA	ND		ug/L	9.71	1	09/07/06 03:36	SW846 8151A	6090016
MCPP	ND		ug/L	9.71	1	09/07/06 03:36	SW846 8151A	6090016
4-Nitrophenol	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Pentachlorophenol	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Picloram	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
2,4,5-T	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
2,4,5-TP (Silvex)	ND		ug/L	0.0971	1	09/07/06 03:36	SW846 8151A	6090016
Surr: Dichloroacetic Acid (51-136%)	69 %					09/07/06 03:36	SW846 8151A	6090016

**Total Metals** 



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

ANALYTICAL II	Consulting, Inc. (3740)	Work Ord Project Na	er: NPH4 ime: AFRE	-237 I		1 1 1	
ent MACTEC Engineering & C	mite 150	Project N	umber: 3552-	06-0897			
21740 Beaumeade Chere, E		Received:	08/31	/06 08:00			
Ashburn, VA 20147		Record					
n Brent Chapman			- <b>70</b>				
	AN	VALYTICAL REPO	<u>KT</u>	Dilution	Analysis	Method	Batch
	Flag	Units	MRL	Factor	Date/Time		
alvte	Resun		8/30/06 11:	45			
	V48-1 - Ground Water)	- cont. Samplea.			00/06/00:53	SW 6020	6090084
mple ID: Nr 114257 01 (		- Л	0.00500	1	09/09/06 00:53	SW 6020	6090084
otal Metals - cont.	ND	mg/L	0.00100	1	09/09/06 00:53	SW 6020	6090084
senic	0.0981	mg/L	0.000200	1	09/09/06 00:53	SW 6020	6090084
rium	0.000526	mg/L	0.00200	1	09/09/06 00:53	SW 6020	6090084
admium	0.00290	mg/L	0.00100	1	09/09/06 00:53	SW 6020	6090084
hromium	0.00222	mg/L	0.00500	1	09/09/06 00:53	SW 6020	6090084
ead	ND	mg/L	0 000500	1	09/09/06 00:53	D11 0020	
elenium	ND	mg/L	0.0000				
ilver	ND	1 09/30/06 15	:30				
	(W78-1 (1-3') - Soil) San	npled: 08/30/00 13				CW1846 747	1A 6090043
Sample ID: NPH4237-02	70 4 /7 / 71 A		0.0963	1	09/01/06 15:16	5W040 / 11	
Mercury by EPA Methods 74	ND	mg/kg wet	0.000				
Mercury				1	09/12/06 04:5	7 SW846 808	31A 6091011
Desticides by	v EPA Method 8081A	malkawet	0.00168	1	09/12/06 04:5	7 SW846 808	31A 6091011
Organochlorine Pesticides .	ND	mg/kg wet	0.00168	1	09/12/06 04:5	7 SW846 808	81A 6091011
Aldrin	ND	mg/kg wet	0.00168	3	09/12/06 04:5	7 SW846 80	81A 6091011
delta-BHC	ND	mg/kg wet	0.00327	7	1 09/12/00 04:5	7 SW846 80	81A 6091011
alpha-BHC	ND	mg/kg wet	0.00168	8	1 09/12/00 04:	57 SW846 80	81A 6091011
beta-BHC	ND	mg/kg wet	0.0016	8	1 09/12/06 04	57 SW846 80	81A 6091011
gamma-BHC (Lindane)	ND	mg/kg wet	0.0016	8	1 09/12/06 04:	57 SW846 80	)81A 6091011
alnha-Chlordane	ND	mg/kg wet	0.0660	0	1 09/12/06 04:	57 SW8468	081A 6091011
gamma-Chlordane	ND	mg/kg wet	0.0016	58	1 09/12/06 04:	57 SW040 8	081A 6091011
Chlordane	ND	mg/kg wet	0.0016	58	1 09/12/06 04	57 SW8408	0814 6091011
	ND	mg/kg wet	0.0010	68	1 09/12/06 04	:57 SW840 0	081A 6091011
4,4-DDE	ND	mg/kg wet	0.001	60 69	1 09/12/06 04	:57 SW846 8	001A 6001011
4,4-DDE	ND	mg/kg wet	0.001	00 70	1 09/12/06 04	:57 SW846 8	SUSIA 6091011
4,4-001	ND	mg/kg wet	0.001	68	1 09/12/06 04	1:57 SW846	8081A 6091011
Dieldrin	ND	mg/kg wet	0.001	.68	1 09/12/06 04	4:57 SW846	8081A 6091011
Endosultan I	ND	mg/kg wet	0.001	68	1 09/12/06 0	4:57 SW846	8081A 6091011
Endosultan II	ND	mg/kg wet	0.00	168	1 09/12/06 0	4:57 SW846	8081A 6091011
Endosulfan sulfale	ND	mg/kg wet	0.00	168	1 09/12/06 0	4:57 SW846	8081A 6091011
Endrin	ND	mg/kg wet	0.00	168	1 09/12/06 (	4:57 SW846	8081A 6091011
Endrin aldehyde	ND	mg/kg wet	0.00	168	1 09/12/06 0	4:57 SW846	8081A 6091011
Endrin ketone	ND	mg/kg wet	0.00	168	1 09/12/00	04:57 SW846	58081A 6091011
Heptachlor	ND	mg/kg wet	0.00	)327	1 09/12/06	04.57 SW840	5 8081A 6091011
Heptachlor epoxide	ND	mg/kg wet	0.0	660	1 09/12/06	04.57 SW84	6 8081A 6091011
Methoxychlor	ND	mg/kg wet			09/12/06	04:57 SW84	6 8081A 6091011
Toxaphene	((2 122%) 106%				09/12/00	04.57 2.11	
Surr: Tetrachloro-meta-xyl	(20, 108%) 72%						LC 0151 A 6000018
Surr: Decachlorobiphenyl	(39-10070)			0/51	1 09/06/06	00:56 SW84	6 8151A 0090010
Chlaringted Herbicides	by EPA Method 8151A	mg/kg wet	0.	0651	1 09/06/06	00:56 SW84	46 8151A 6090016
Chiorinaled Hereter	ND	mg/kg wet	0	.163	1 09/06/06	5 00:56 SW84	46 8151A 6090018
2,4-D	ND	mg/kg wet	0.	.0651	1 09/06/0	6 00:56 SW8	46 8151A 609001
Dalapon	ND	mg/kg wet	0	.0322	1 00/06/0	6 00:56 SW8	46 8151A 609001
2,4-DB	ND	mg/kg wet	0	.0651	1 00/06/0	6.00:56 SW8	346 8151A 609001
Dicamba	ND	mg/kg wet	C	0.0651	1 09/00/0	0.00.00	
Dichloroprop	ND	mg/kg wet					
Dinoseb							c . c . c . c . c . c . c . c . c . c .

### Test Analytical testing corporation

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150

Ashburn, VA 20147

Attn Brent Chapman

 Work Order:
 NPH4237

 Project Name:
 AFRH

 Project Number:
 3552-06-0897

 Received:
 08/31/06 08:00

		Α	NALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH4237-02 (W78	-1 (1-3') - So	il) - cont	. Sampled: 08	/30/06 15:30	n Million annan annan			-
Chlorinated Herbicides by EPA Me	thod 8151A -	cont	oumpieur oo	00/00 15:50				
MCPA	ND	cont.	ma/ka wet	2.25	1	00/06/06 00.56	CIN04C 01514	(000010
MCPP	ND		mg/kg wet	3.25	1	09/06/06 00:56	SW846 8151A	6090018
4-Nitrophenol	ND		mg/kg wet	0.0322	1	09/06/06 00:56	SW840 8151A	6090018
Pentachlorophenol	ND		mg/kg wet	0.0322	1	09/06/06 00:36	SW 840 8151A	6090018
Picloram	ND		mg/kg wet	0.0322	-1	09/06/06 00:56	SW 840 8151A	6000018
2,4,5-T	ND		mg/kg wet	0.0322	1	09/06/06 00:56	SW846 8151A	6000018
2,4,5-TP (Silvex)	ND		mg/kg wet	0.0166	1	09/06/06 00:56	SW846 8151A	6000018
Surr: Dichloroacetic Acid (55-132%)	150 %	Z2	mente not	0.0100		09/06/06 00:50	SW8468151A	6000018
Total Metals						09/00/00 00.90	5W0400151A	0090016
Arsenic	ND		malkawat	1.00	20	00/12/06 01.46	001 (000	<
Barium	28.5		mg/kg wet	0.052	20	09/13/06 01:46	SW 6020	6090085
Cadmium	ND		mg/kg wet	0.932	20	09/13/06 01:46	SW 6020	6090085
Chromium	16.6		mg/kg wet	1.00	- 20	09/13/06 01:46	SW 6020	6090085
Lead	9.07		mg/kg wet	0.052	20	09/13/06 01:46	SW 6020	6090085
Selenium	ND		mg/kg wet	0.932	20	09/13/06 01:46	SW 6020	6090085
Silver	ND		mg/kg wet	0.932	20	09/13/06 01:46	SW 6020	6090085
				0.170	200	07/15/00 01.40	5 14 0020	0090085
Sample ID: NPH4237-03 (W78	8-1 (3-5') - So	oil) Samp	oled: 08/30/06	15:35				
Mercury by EPA Methods 7470A/7	7471A							
Mercury	ND		mg/kg wet	0.0987	1	09/01/06 15:18	SW846 7471A	6090043
Organochlorine Pesticides by EPA	Method 8081/	4						
Aldrin	ND	1	ma/lea mat	0.00170	1	00/10/06 05 06	GIUDAC 0001 I	
delta-BHC	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW846 8081A	6091011
alpha-BHC	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW846 8081A	6091011
beta-BHC	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW846 8081A	6091011
gamma-BHC (Lindane)	ND		mg/kg wet	0.00330	1	09/12/06 05:26	SW846 8081A	6091011
alpha-Chlordane	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW846 8081A	6091011
gamma-Chlordane	ND		mg/kg wet	0.00170	• • 1	09/12/06 03:26	SW846 8081A	. 6091011
Chlordane	ND		mg/kg wet	0.0667	1	09/12/06 05:26	SW 840 8081A	. 6091011
4.4'-DDD	ND		mg/kg wet	0.0007	. 1	09/12/06 05:26	SW040 8081A	. 6091011
4.4'-DDE	ND		mg/kg wet	0.00170	1	09/12/06 03:26	SW840 8081A	. 6091011
4.4'-DDT	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW040 8081A	. 6091011
Dieldrin	ND		mg/kg wet	0.00170	1	09/12/06 03:26	5 W 840 8081A	. 6091011
Endosulfan I	ND		mg/kg wet	0.00170	· 1	09/12/06 03.26	SW040 8081A	. 6091011
Endosulfan II	ND		mg/kg wet	0.00170	. 1	09/12/06 05:26	SW 840 8081A	. 6091011
Endosulfan sulfate	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW040 0001A	. 6091011
Endrin	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW840 8081A	. 6091011
Endrin aldehyde	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW840 8081A	. 6091011
Endrin ketone	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW040 8081A	. 0091011
Heptachlor	ND		mg/kg wet	0.00170	1	09/12/00 03:20	SW040 8081A	. 0091011
Heptachlor epoxide	ND		mg/kg wet	0.00170	1	09/12/06 05:26	SW040 8081A	. 0091011
Methoxychlor	ND		mg/kg wet	0.00170	1	09/12/00 03:20	SW840 8081A	. 0091011
			mg/ng wet	0.00330	I	09/12/00 05:26	5 W 840 8081A	. 0091011

+ A me	rica			Road Nashville,	TN 37204 *	800-765-0	980 * Fax 615	-726-3404		
MACTEC Engineering & Consultin 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147	corporatio g, Inc. (3740)	N	2960 Foster Creightor Work C Project Project Receiv	order: NPH Name: AFR Number: 3552 ed: 08/3	4237 H 2-06-0897 31/06 08:0	0				
Brent Chapman		AN	ALYTICAL REP	ORT	Dilutio	n An	alysis	Metho	d Ba	tch
			Units	MRL	Facto	r Dat	e/Time	1110011-		
nyte nple ID: NPH4237-03RE1 (W ranochlorine Pesticides by EPA M	<b>Result</b> 78-1 (3-5') - ethod 8081A - ND	Flag Soil) - cont.	cont. Sampled: mg/kg wet	<b>08/30/06 15</b> 0.0667	<b>:35</b>	09/1 09/ 09/	2/06 05:26 12/06 05:26 12/06 05:26	SW846 8 SW846 8 SW846 8	3081A 609 3081A 60 8081A 60	1011 91011 91011
aphene r: Tetrachloro-meta-xylene (63-132%) r: Decachlorobiphenyl (39-108%)	70 % 76 % hod 8151A		mg/kg wet	0.0656		1 09/ 1 09	06/06 01:28 /06/06 01:28	SW846 SW846 SW846	8151A 60 8151A 60 8151A 60	90018 990018 990018
hlorinated Herbicides of 2	ND ND		mg/kg wet	0.065	6	1 09   1 09	/06/06 01:20	8 SW840	6 8151A 6 6 8151A 6	090018 090018
	ND		mg/kg wet	0.032	4	1 09	9/06/06 01:2	8 SW04	6 8151A (	6090018
A DB	ND		mg/kg wet	0.065	10	1 0	9/06/06 01:2	28 SW04	6 8151A	5090018
4-DD	ND		mg/kg wet	0.065	56	1 0	9/06/06 01:2	28 SW84	4/ 0151A	6090018
icamba	ND		mg/kg wet	3.2	7	1 (	9/06/06 01:	28 SW84	40 0151 1	6090018
ichloroprop	ND		mg/kg wet	3.2	7	1	09/06/06 01:	28 SW8	46 81517	6090018
Dinoseb	ND		mg/kg wet	0.03	24	1	00/06/06 01	:28 SW8	46 8151A	6000018
MCPA	ND		mg/kg wet	0.03	324	1	09/06/06 01	:28 SW8	346 8151A	(000018
MCPP	ND		mg/kg wet	0.0	324	1	09/06/06 01	:28 SW	846 8151A	6090018
4-Nitrophenol	ND		mg/kg wet	0.0	324	1	09/00/06 07	1:28 SW	846 8151A	6090010
Pentachlorophenoi	ND		mg/kg wet	0.0	167	1	09/00/00 0	1.28 SW	846 8151 A	6090010
Picloram	ND		mg/kg wet	0.0			<i>09/00/00</i> t			
2.4.5-T	ND	1		• *					GW 6020	609008:
2,4,5-TP (Silvex) Surr: Dichloroacetic Acid (55-132%	) 100 %	0			1.92	20	09/13/06	)1:51 01:51	SW 6020 SW 6020	609008
- I Matals			mg/kg wet		).962	20	09/13/06	01:51	SW 6020	609008
Total Metals	ND		mg/kg wet		0.962	20	09/13/06	01:51	SW 6020	60000
Arsenic	49.4		mg/kg wet	· · · ·	1.92	20	00/13/06	01:51	SW 6020	C0000
Barium	ND	•	mg/kg wet		0.962	20	09/13/00	01:51	SW 6020	60900
Cadmium	12.3		mg/kg wet	t.	0.962	20	09/15/00	5 01.51	SW 6020	) 60900
Chromium	10.9		mg/kg we	t .	0.481	- 20	09/13/00	) U1.21		
Lead	ND		mg/kg we	et	0.401					
Selenium	ND		1118-0		*					
Cilver					*					
211/01										

ŋ	Test America	
	Nashville Division       COOLER RECEIPT FORM       BC#	NPH4237
	Cooler Received/Opened On:8/31/20068:001. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:	7208
	FED-EX Temperature of representative sample or temperature blank when opened: De (indicate IR Gun ID#)	egrees Celsius
	<u>101507</u>	
	3. Were custody seals on outside of cooler?	(YES)NONA
	a. If yes, how many and where:	
	4. Were the seals intact, signed, and dated correctly?	(YESNONA
	5. Were custody papers inside cooler?	YESNONA
	I certify that I opened the cooler and answered questions 1-5 (initial)	655
	6. Were custody seals on containers: YES 🔊 and Intact	YES NO NA
	were these signed, and dated correctly?	YESNO
	7. What kind of packing material used? Rubblewrap Peanuts Vermice	ulite Foam Insert
	Plastic bag Paper Other	None
	8. Cooling process: Ice-pack Ice (direct contact) Dry ice	e Other None
	<ol> <li>Did all containers arrive in good condition ( unbroken)?</li> </ol>	
	10. Were all container labels complete (#, date, signed, pres., etc)?	<b>Æ</b> ES2NONA
	11. Did all container labels and tags agree with custody papers?	<b>FES</b> )NONA
	12. a. Were VOA vials received?	YES
	b. Was there any observable head space present in any VOA vial?	YESNO
	<u>I certify that I unloaded the cooler and answered questions 6-12 (intial)</u>	
	13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct p	H level? YESNO.
	b. Did the bottle labels indicate that the correct preservatives were used	YESNO.
	If preservation in-house was needed, record standard ID of preservative used here	
	14. Was residual chlorine present?	YESNO
	I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)	@
	15. Were custody papers properly filled out (ink, signed, etc)?	ESNONA
	16. Did you sign the custody papers in the appropriate place?	ES. NONA
	17. Were correct containers used for the analysis requested?	ESNONA
	18. Was sufficient amount of sample sent in each container?	TESNONA
	I certify that I entered this project into LIMS and answered questions 15-18 (intial)	
	<u>I certify that I attached a label with the unique LIMS number to each container (intial)</u>	
	19. Were there Non-Conformance issues at login YES 👩 Was a PIPE generated YI	es <u>NO</u> #

Relinguished By: AIMAC Relinguished By: Relinguished By:	Special Instructions:	TAT Standard         Rush (surcharges may apply)         Date Needed:       97-06         Fax Results:       Y         N         SAMPLE ID         W 48-1         W 78-1         W 78-1         W 78-1	Testing corpor ANALYTICAL TESTING CORPOR Client Name Address: 2 City/State/Zip Code: Project Manager: Telephone Number: Sampler Name: (Print Name) Sampler Signature:
CXV     B/30/06     1 8 00       Date:     Time:       Date:     Time:       Date:     Time:		Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the system       Image: Construction of the system         Image: Construction of the	A nashville Division Nashville Division Nachter Creighton MACTEC MACTEC MACTEC Honburn, VA 2 Honburn, VA 2 Honburn
Received By: FEDEX Received By: Received By: AAAAAA		$\begin{array}{c c c c c c c c c c c c c c c c c c c $	NPH423         ane: 615-726-0177       09/07/06         client #:       09/07/06         client #:       100         cli
Date: Time: Custo Date: Time: Bottle Date: Time: Methy		XX ECEA Metals 6020 /7471 BERNERADES	To assist us in using the prop is this work being conducted Project Name: AFEH Project #: 3052-06 Site/Location ID: Report To: Brent C Invoice To: Quote #:
ody Seals: Y N N/A es Supplied by Test America: Y N od of Shipment:	RATORY COMMENTS: hit Lab Temp: lec Lab Temp: 6.2	Level 3 Level 3 NPH 4337-01 02 03	regulatory purposes? ng NDONDO State: DC None Level 2

TestAmerica ANALYTICAL TESTING CORPORATION		
Nashville Division	BC#	NPH4081
COOLER RECEILT 1 012		
a (200	8:00	7764
Cooler Received/Opened On: 8/30/200 1. Indicate the Airbill Tracking Number (last 4 digits for F	edex only) and Name of Courier	below:
FED-EX	nk when opened: <u>3.4</u>	Degrees Celsius
Temperature of representative sample of temperature and (indicate IR Gun ID#)		
101507		YES NO NA
3. Were custody seals on outside of cooler?	FOF	
a. If yes, how many and where:		YES NONA
4. Were the seals intact, signed, and dated correctly?		YES NO NA
5. Were custody papers inside cooler?		-W2
I certify that I opened the cooler and answered questions	and	Intact YES NO NA
6. Were custody seals on containers: YE	s Mo	YESNONA
were these signed, and dated correctly?	Bognuts	Vermiculite Foam Insert
7. What kind of packing material used? Bub	blewrap Featurs	None
Plastic bag Paper	Other	During Other None
8 Cooling process: Ice-pack	Ice (direct contact)	VESINONA
9. Did all containers arrive in good condition (unbrok	ten)?	VES. NONA
10 Were all container labels complete (#, date, signed	, pres., etc)?	VES. JO NA
11. Did all container labels and tags agree with custo	ly papers?	VES. NO. NA
12 a. Were VOA vials received?		VES NOANA
b. Was there any observable head space present	in any VOA vial?	
I certify that I unloaded the cooler and answered que	<u>stions 6-12 (intial)</u>	Hievel? YES. NOCNA
13. a. On preserved bottles did the pH test strips su	ggest that preservation reached t	YESNONA
b. Did the bottle labels indicate that the correct	preservatives were used	
If preservation in-house was needed, recor	d standard ID of preservative us	VES NA
14. Was residual chlorine present?		
I certify that I checked for chlorine and pH as per Se	<u>OP and answered guestions 13-14</u>	VES.NONA
15. Were custody papers properly filled out (ink, s	igned, etc)?	MESNONA
16. Did you sign the custody papers in the appropriate	iate place?	TES. NONA
17. Were correct containers used for the analysis r	equested?	ESK NOL.NA
18. Was sufficient amount of sample sent in each c	ontainer?	TRO
I certify that I entered this project into LIMS and a	nswered questions 15-18 (intial).	Hall
I certify that I attached a label with the unique LIN	1S number to each container (int	tod YES NO #
19. Were there Non-Conformance issues at login	YES NO Was a PIPE generat	

r


### Test∆merica ANALYTICAL TESTING CORPORATION

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

MACTEC Engineering & Consulting, Inc. (3740) Client 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

NPH4081 Work Order: AFRH Project Name: Project Number: Received:

3552060897 08/30/06 08:00

### CERTIFICATION SUMMARY

### Subcontracted Laboratories

TestAmerica - Dayton 3601 South Dixie Drive - Dayton, OH 45439 Subcontract - Outside1 Analysis Performed: Samples: NPH4081-01

ANALYTICAL TESTING CORPORATION

MACTEC Engineering & Consulting, Inc. (3740) Client 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

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

Work Order: Project Name: Project Number: Received:

NPH4081 AFRH 3552060897 08/30/06 08:00

#### CERTIFICATION SUMMARY

#### **Subcontracted Laboratories**

TestAmerica - Dayton

3601 South Dixie Drive - Dayton, OH 45439

Analysis Performed: Subcontract - Outside1 Samples: NPH4081-01





ANALYTICAL TESTING CORPORATION

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

#### September 19, 2006

Client:	MACTEC Engineering & Consulting, Inc. (3740)
	21740 Beaumeade Circle, Suite 150
	Ashburn, VA 20147
Attn:	Brent Chapman

Work Order: AFRH Project Name: Project Nbr: P/O Nbr: Date Received: 09/09/06

NP10939 3552-06-0897 APO# 65378

#### SAMPLE IDENTIFICATION

### LAB NUMBER

### COLLECTION DATE AND TIME

MW78-1

NPI0939-01

#### 09/08/06 10:00

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

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

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

Koxanne L. Connor

Roxanne Connor Senior Project Manager

## Test∕\merica

ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150	Work Order: Project Name:	NPI0939 AFRH
	Ashburn, VA 20147	Project Number:	3552-06-0897
Attn	Brent Chapman	Received	09/09/06 08:20

ANALYTICAL REPORT											
Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch				
1 - Water) - co	nt. Sampled	I: 09/08/06 10:00	2 - 1 2								
ND	M13	mg/L	0.0200	10	09/15/06 07:41	SW 6020	6090506				
0.306	- M13	mg/L	0.0100	10	09/15/06 07:41	SW 6020	6090506				
0.00323	M13	mg/L	0.00200	10	09/15/06 07:41	SW 6020	6090506				
0.0552	M13	mg/L	0.0100	10	09/15/06 07:41	SW 6020	6090506				
0.0734	M13	mg/L	0.00200	10	09/15/06 07:41	SW 6020	6090506				
ND	M13	mg/L	0.0100	10	09/15/06 07:41	SW 6020	6090506				
ND	M13	mg/L	0.00100	10	09/15/06 07:41	SW 6020	6090506				
	Result 1 - Water) - co ND 0.306 0.00323 0.0552 0.0734 ND ND	Result         Flag           1 - Water) - cont. Sampled           ND         M13           0.306         M13           0.00323         M13           0.0552         M13           0.0734         M13           ND         M13           ND         M13           ND         M13           ND         M13	Result         Flag         Units           1 - Water) - cont. Sampled:         09/08/06 10:00           ND         M13         mg/L           0.306         M13         mg/L           0.00323         M13         mg/L           0.0552         M13         mg/L           0.0734         M13         mg/L           ND         M13         mg/L           ND         M13         mg/L           ND         M13         mg/L           ND         M13         mg/L	Result         Flag         Units         MRL           1 - Water) - cont. Sampled:         09/08/06 10:00         0.0200           ND         M13         mg/L         0.0200           0.306         M13         mg/L         0.0100           0.00323         M13         mg/L         0.00200           0.0552         M13         mg/L         0.0100           0.0734         M13         mg/L         0.00200           ND         M13         mg/L         0.0100           ND         M13         mg/L         0.0100           ND         M13         mg/L         0.0100	NALYTICAL REPORT           Result         Flag         Units         MRL         Dilution           1 - Water) - cont. Sampled:         09/08/06 10:00         Factor         10           ND         M13         mg/L         0.0200         10           0.00323         M13         mg/L         0.0100         10           0.0552         M13         mg/L         0.0100         10           0.0734         M13         mg/L         0.00200         10           ND         M13         mg/L         0.0100         10           ND         M13         mg/L         0.0100         10           ND         M13         mg/L         0.0100         10	NALYTICAL REPORT           Result         Flag         Units         MRL         Dilution Factor         Analysis Date/Time           1 - Water) - cont. Sampled:         09/08/06 10:00         000000         10         09/15/06 07:41           ND         M13         mg/L         0.0200         10         09/15/06 07:41           0.00323         M13         mg/L         0.0100         10         09/15/06 07:41           0.0552         M13         mg/L         0.0100         10         09/15/06 07:41           0.0734         M13         mg/L         0.00200         10         09/15/06 07:41           ND         M13         mg/L         0.0100         10         09/15/06 07:41           ND         M13         mg/L         0.00200         10         09/15/06 07:41           ND         M13         mg/L         0.0100         10         09/15/06 07:41	NALYTICAL REPORT         Dilution         Analysis           Result         Flag         Units         MRL         Factor         Date/Time         Method           1 - Water) - cont. Sampled:         09/08/06 10:00         000000         10         09/15/06 07:41         SW 6020           ND         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           0.00323         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           0.0552         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           0.0734         M13         mg/L         0.00200         10         09/15/06 07:41         SW 6020           ND         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           ND         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           ND         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           ND         M13         mg/L         0.0100         10         09/15/06 07:41         SW 6020           ND         M13         mg/L				

ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740)	Work Order:	NP10939	
	21740 Beaumeade Circle, Suite 150	Project Name:	AFRH	
	Ashburn, VA 20147	Project Number:	3552-06-0897	
Attn	Brent Chapman	Received	09/09/06 08:20	

#### SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
DRAFT: Chlorinated Herbicides	by EPA Method 8151	4		4			
SW846 8151A	6091644	NPI0939-01	1060.00	10.00	09/12/06 09:45	KLG	EPA 8151A
SW846 8151A	6092298	NPI0939-01RE1	450.00	10.00	09/14/06 14:30	DRH	EPA 8151A
DRAFT: Mercury by EPA Metho	ds 7470A/7471A						
SW846 7470A	6092092	NPI0939-01	30.00	30.00	09/13/06 09:42	LTB	EPA 7470
DRAFT: Organochlorine Pesticid	es by EPA Method 80	81A					
SW846 8081A	6091641	NPI0939-01	500.00	5.00	09/11/06 16:15	KLG	EPA 3510C

ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740)	Work Order:	NPI0939
	21740 Beaumeade Circle, Suite 150	Project Name:	AFRH
	Ashburn, VA 20147	Project Number:	3552-06-0897
Attn	Brent Chapman	Received	09/09/06 08:20

#### ANALYTICAL REPORT

	-	AT 1999 THE REAL POINT OF THE			Dilution	Analysis	and you want the and th	
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NPI0939-01 (MW78-1	- Water) Sam	nled: 09/08	/06 10:00					
Mercury by EPA Methods 7470A/7471	A	pretar 05700	,00 10100					
Mercury	ND		mg/L	0.000200	1	09/13/06 17:50	SW846 7470A	6092092
Organochlorine Pesticides by EPA Met	hod 8081A							
Aldrin	ND		110/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
delta-BHC	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
alpha-BHC	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
beta-BHC	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
gamma-BHC (Lindane)	ND		ug/L	0.0500	. 1	09/14/06 02:42	SW846 8081A	6091641
alpha-Chlordane	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
gamma-Chlordane	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Chlordane	ND		ug/L	3.00	1	09/14/06 02:42	SW846 8081A	6091641
4.4'-DDD	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
4.4'-DDE	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
4,4'-DDT	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Dieldrin	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endosulfan I	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endosulfan II	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endosulfan sulfate	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endrin	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endrin aldehvde	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Endrin ketone	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Heptachlor	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Heptachlor epoxide	ND		ug/L	0.0500	1 -	09/14/06 02:42	SW846 8081A	6091641
Methoxychlor	ND		ug/L	0.0500	1	09/14/06 02:42	SW846 8081A	6091641
Toxaphene	ND		ug/L	5.00	1	09/14/06 02:42	SW846 8081A	6091641
Surr Tetrachloro-meta-xylene (58-117%)	104 %		ug/L	5,00	. 1	09/14/06 02:42	SW846 80814	6001641
Surr: Decachlorobiphenyl (22-115%)	58 %					09/14/06 02:42	SW846 8081A SW846 8081A	6091641
Chlorinated Herbicides by EPA Method	18151A							
2,4-D	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Dalapon	ND		ug/L	2.22	1	09/15/06 21:44	SW846 8151A	6092298
2,4-DB	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Dicamba	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Dichloroprop	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Dinoseb	ND .		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
МСРА	ND		ug/L	22.2	1	09/15/06 21:44	SW846 8151A	6092298
МСРР	ND		ug/L	22.2	1	09/15/06 21:44	SW846 8151A	6092298
4-Nitrophenol	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Pentachlorophenol	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
Picloram	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
2.4.5-T	ND		ug/L	0.222	1	09/15/06 21:44	SW846 8151A	6092298
2.4.5-TP (Silvex)	ND		ug/L	0 222	1	09/15/06 21:44	SW846 8151A	6092298
Surr: Dichloroacetic Acid (51-136%)	73 %		-6-			09/15/06 21:44	SW846 8151A	6092298

Total Metals

### Test Analytical testing corporation

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

tiv V

August 18, 2006

Client: MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn: Brent Chapman

#### SAMPLE IDENTIFICATION

W72-1 W72-2 W72-3 H48-1 (0.25-1) Trip Blank

### LAB NUMBER

NPH0652-01 NPH0652-02 NPH0652-03 NPH0652-04 NPH0652-05

Work Order:NPH0652Project Name:AFRHProject Nbr:3552060897P/O Nbr:62671Date Received:08/03/06

COLLECTION DATE AND TIME .

AUG 2 4 2008

08/02/06 08:00 08/02/06 09:15 08/02/06 10:30 08/02/06 12:00 08/02/06

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

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The Chain(s) of Custody, 8 pages, are included and are an integral part of this report.

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

call. Juckes

Jessica Vickers Senior Project Manager

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

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

Work Order: NPH0652 Project Name: AFRH Project Number: 3552060897 Received: 08/03/06 08:00

	ANALYTICAL REPORT									
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch		
Sample ID: NPH0652-01 (W	72-1 - Ground	Water) S	ampled: 08/0	2/06 08:00						
Volatile Organic Compounds by	EPA Method 82	60B								
Acetone	ND		uo/L	50.0	1	08/12/06 04:08	SW846 8260B	6082044		
Benzene	ND		ug/L	1.00	. 1	08/12/06 04:08	SW846 8260B	6082044		
Bromobenzene	ND		ug/L	1.00	· · 1	08/12/06 04:08	SW846 8260B	6082044		
Bromochloromethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Bromodichloromethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Bromoform	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Bromomethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
2-Butanone	ND		ug/L	50.0	1	08/12/06 04:08	SW846 8260B	6082044		
sec-Butvlbenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
n-Butylbenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
tert-Butylbenzene	ND		ug/L	1.00	- 1	08/12/06 04:08	SW846 8260B	6082044		
Carbon disulfide	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Carbon Tetrachloride	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Chlorobenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Chlorodibromomethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Chloroethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Chloroform	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Chloromethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
2-Chlorotoluene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
4-Chlorotoluene	ND		ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1 2-Dibromo-3-chloropropane	ND		ug/L	5.00	1	08/12/06 04:08	SW846 8260B	6082044		
1.2-Dibromoethane (EDB)	ND		ug/L 11g/l	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
Dibromomethane	ND		ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1 4-Dichlorobenzene	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1.3-Dichlorobenzene	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1.2-Dichlorobenzene	ND		ug/L ug/I	1.00	. 1	08/12/06 04:08	SW846 8260B	6082044		
Dichlorodifluoromethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1 1-Dichloroethane	ND		ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1.2-Dichloroethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
cis-1 2-Dichloroethene	3.84		ug/L ug/I	1.00	. 1	08/12/06 04:08	SW846 8260B	6082044		
1 1-Dichloroethene	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
trans-1 2-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
1 3-Dichloropropage	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260D	6082044		
1.2-Dichloropropane	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260D	6082044		
2 2-Dichloropropane	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260D	6082044		
cis-1 3-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260D	6082044		
trans-1.3-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260D	6002044		
1 1-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260D	6082044		
Ethylbenzene	ND		ug/L 110/I	1.00	1	08/12/06 04:08	SW846 8760D	6082044		
Hexachlorobutadiene	ND		ug/L	1.00	1 1	08/12/06 04.08	SW846 9260D	6082044		
2-Hexanone	ND		ug/L ug/I	50.0	1	08/12/06 04:08	SW846 9260B	6082044		
Isonronylbenzene	ND		ug/L ug/I	1.00	1	08/12/06 04:08	SW846 8260B	6082044		
n-Isopropyltoluene	ND		цель цо/Г.	1.00	1	08/12/06 04:08	SW846 8760D	6082044		
P isopropjitoriuono			ugin	1.00	1	00/12/00 04.00	5 W 070 0200D	0002044		

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 
 Work Order:
 NPH0652

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/03/06 08:00

		Aľ	NALYTICAL I	REPORT				
Analyte	Result	_ Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0652-01 (W72-1	- Ground	Water) -	cont. Sample	ed: 08/02/06 08	:00			
Volatile Organic Compounds by EPA	Method 82	60B - cont.				•	,	
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Methylene Chloride	ND		ug/L	5.00	1	08/12/06 04:08	SW846 8260B	6082044
4-Methyl-2-pentanone	ND		ug/L	50.0	1	08/12/06 04:08	SW846 8260B	6082044
Naphthalene	ND		ug/L	5.00	1	08/12/06 04:08	SW846 8260B	6082044
n-Propylbenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Styrene	ND		ug/L	1.00	. 1	08/12/06 04:08	SW846 8260B	6082044
1.1.1.2-Tetrachloroethane	ND		ug/L	1.00	. 1	08/12/06 04:08	SW846 8260B	6082044
1.1.2.2-Tetrachloroethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Tetrachloroethene	44.5		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Toluene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1	08/12/06 04:08	SW846 8260B	6082044
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1	08/12/06 04:08	SW846 8260B	6082044
1,1,2-Trichloroethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
1,1,1-Trichloroethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Trichloroethene	4.47		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Trichlorofluoromethane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
1,2,3-Trichloropropane	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Vinyl chloride	ND		ug/L	1.00	1	08/12/06 04:08	SW846 8260B	6082044
Xylenes, total	ND		ug/L	3.00	1	08/12/06 04:08	SW846 8260B	6082044
Surr: 1,2-Dichloroethane-d4 (70-130%)	106 %		U I			08/12/06 04:08	SW846 8260B	6082044
Surr: Dibromofluoromethane (79-122%)	102 %					08/12/06 04:08	SW846 8260B	6082044
Surr: Toluene-d8 (78-121%)	101 %					08/12/06 04:08	SW846 8260B	6082044
Surr: 4-Bromofluorobenzene (78-126%)	103 %					08/12/06 04:08	SW846 8260B	6082044
Extractable Petroleum Hydrocarbons								
Diesel	331	CE6	uo/I	94.3	1	08/09/06 21:41	SW846 8015B	6080981
Surr: o-Terphenvl (55-150%)	48 %	Z6	ug/D	71.5	• ,	08/09/06 21:41	SW846 8015B	6080981
Purgeable Petroleum Hydrocarbons								000000
GPO as Casolina	ND		ug/I	100	1	08/06/06 17:06	SW846 8015D	6081017
Group as a Twifty protolyging $(62, 1240/)$	ND 02.0/		ug/L	100	1	00/00/00 1/:00	SW040 0013B	200101/
surr: a,a,a-1rijiuoroioiuene (05-154%)	03 70					06/06/06 17:06	SW 840 8013B	0081017

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

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C 2

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

Work Order: NPH0652 Project Name: AFRH Project Number: 3552060897 Received: 08/03/06 08:00

	ANALYTICAL REPORT											
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch				
Sample ID: NPH0652-02 (W	72-2 - Ground	Water) S	ampled: 08/0	2/06 09:15								
Volatile Organic Compounds by	EPA Method 82	60B	•									
Acetone	ND		ng/L	50.0	1	08/12/06 04:33	SW846 8260B	6082044				
Benzene	ND		ng/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Bromobenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Bromochloromethane	ND		ng/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Bromodichloromethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Bromoform	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Bromomethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
2-Butanone	ND		ug/L ug/I	50.0	1	08/12/06 04:33	SW846 8260B	608204/				
sec-Butylbenzene	ND		ug/I	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
n-Butylbenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
tert-Butylbenzene	ND		ug/L ug/I	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Carbon digulfide	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	608204				
Carbon Tetrachloride	ND		ug/L ug/I	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Chlorobenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	608204				
Chlorodibromomethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	608204				
Chloroethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	608204				
Chloroform	ND		ug/L ug/I	1.00	1	08/12/06 04:33	SW846 8260B	608204				
Chloromethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260D	6082044				
2 Chlorotoluene	ND		ug/L ug/I	1.00	1	08/12/06 04:33	SW846 8260D	608204				
4 Chlorotoluono	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260D	608204				
1.2 Dibromo 2 chloropropono	ND	· · · · ·	ug/L	5.00	1	08/12/06 04:33	SW846 8260D	6082044				
1.2 Dibromosthana (EDD)	ND		ug/L	5.00	1	08/12/06 04:33	SW040 0200D	6082044				
Dibromomothono	ND		ug/L	1.00	1	08/12/06 04.33	SW846 8260D	6082044				
1 4 Dishlarahan zana	ND		ug/L	1.00	1	08/12/06 04:33	SW840 8200B	0082044				
1.2 Dichlarghengens	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	0082044				
1,3-Dichlorobenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW840 8200B	6082044				
1,2-Dichlorodenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,1-Dichlemethene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,2-Dichloroethane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
L Di la settere	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,1-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
trans-1,2-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,3-Dichloropropane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,2-Dichloropropane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
2,2-Dichloropropane	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
cis-1,3-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
trans-1,3-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
1,1-Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Ethylbenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
Hexachlorobutadiene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
2-Hexanone	ND		ug/L	50.0	1	08/12/06 04:33	SW846 8260B	6082044				
Isopropylbenzene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				
p-Isopropyltoluene	ND		ug/L	1.00	1	08/12/06 04:33	SW846 8260B	6082044				

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

Work Order: NPH0652 Project Name: AFRH Project Number: 3552060897 Received: 08/03/06 08:00

ANALYTICAL REPORT										
Analyte	Result	Flag	Unit	S	MRL	Dilution Factor	Analysis Date/Time	Method	Batch	
Sample ID: NPH0652-02 (W72-2	2 - Ground	Water	) - cont. Sa	mpled:	08/02/06 09	:15				
Volatile Organic Compounds by EPA	Method 82	60B - co	nt.							
Methyl tert-Butyl Ether	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Methylene Chloride	ND .		ug/L		5.00	1	08/12/06 04:33	SW846 8260B	6082044	
4-Methyl-2-pentanone	ND		ug/L		50.0	1	08/12/06 04:33	SW846 8260B	6082044	
Naphthalene	ND		ug/L		5.00	1	08/12/06 04:33	SW846 8260B	6082044	
n-Propylbenzene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Styrene	ND		· ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,1,1,2-Tetrachloroethane	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,1,2,2-Tetrachloroethane	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Tetrachloroethene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Toluene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,2,3-Trichlorobenzene	ND		ug/L		2.00	1 -	08/12/06 04:33	SW846 8260B	6082044	
1,2,4-Trichlorobenzene	ND		ug/L		2.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,1,2-Trichloroethane	ND	-	ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,1,1-Trichloroethane	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Trichloroethene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Trichlorofluoromethane	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,2,3-Trichloropropane	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,3,5-Trimethylbenzene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
1,2,4-Trimethylbenzene	ND		ug/L		1.00	1	08/12/06 04:33	SW846 8260B	6082044	
Vinyl chloride	ND		ug/L		1.00	. 1	08/12/06 04:33	SW846 8260B	6082044	
Xylenes, total	ND		ug/L		3.00	1	08/12/06 04:33	SW846 8260B	6082044	
Surr: 1,2-Dichloroethane-d4 (70-130%)	105 %						08/12/06 04:33	SW846 8260B	6082044	
Surr: Dibromofluoromethane (79-122%)	101 %						08/12/06 04:33	SW846 8260B	6082044	
Surr: Toluene-d8 (78-121%)	100~%						08/12/06 04:33	SW846 8260B	6082044	
Surr: 4-Bromofluorobenzene (78-126%)	102 %						08/12/06 04:33	SW846 8260B	6082044	
Extractable Petroleum Hydrocarbons										
Diesel	ND	CF6	ug/L		94.3	1	08/09/06 21:59	SW846 8015B	6080981	
Surr: o-Terphenyl (55-150%)	10 %	Z6	0				08/09/06 21:59	SW846 8015B	608098	
Purgeable Petroleum Hydrocarbons										
GRO as Gasoline	ND		ug/L		100	. 1	08/06/06 17:32	SW846 8015B	6081017	
Surr: a,a,a-Trifluorotoluene (63-134%)	81 %						08/06/06 17:32	SW846 8015B	6081017	

## Test/Merica

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Work Order:NPH0652Project Name:AFRHProject Number:3552060897Received:08/03/06 08:00

	ANALYTICAL REPORT										
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch			
Sample ID: NPH0652-03 (W	'72-3 - Ground	Water) S	ampled: 08/0	2/06 10:30							
Volatile Organic Compounds by	EPA Method 82	60B	-								
A cetone	ND		ng/I	50.0	1	08/12/06 04:58	SW846 8260B	6082044			
Renzene :	ND		ug/L	1.00	. 1	08/12/06 04:58	SW846 8260B	6082044			
Bromobenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Bromochloromethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Promodichloromethane	ND		ug/L ug/I	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Promoform	ND		ug/L ug/I	1.00	. 1	08/12/06 04:58	SW846 8260B	6082044			
Gromomathana	ND		ug/L ug/L	1.00	1	08/12/06 04:58	SW846 8260D	6082044			
	ND	4	ug/L	50.0	1	08/12/06 04:58	SW040 0200D	6082044			
2-Butanone	ND		ug/L	30.0	1	08/12/00 04.58	SW040 0200D	6082044			
sec-Butylbenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW840 8200D	0082044			
n-Butylbenzene	ND		ug/L	1.00	. I 1	08/12/06 04:58	SW846 8260B	6082044			
ert-Butylbenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Carbon disulfide	ND		ug/L	1.00	l	08/12/06 04:58	SW846 8260B	6082044			
Carbon Tetrachloride	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Chlorobenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Chlorodibromomethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Chloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Chloroform	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Chloromethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
2-Chlorotoluene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
4-Chlorotoluene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1,2-Dibromo-3-chloropropane	ND		ug/L	5.00	1	08/12/06 04:58	SW846 8260B	6082044			
1,2-Dibromoethane (EDB)	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Dibromomethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1,4-Dichlorobenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1,3-Dichlorobenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1,2-Dichlorobenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
Dichlorodifluoromethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1.1-Dichloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1.2-Dichloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
cis-1.2-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1 1-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
trans-1 2-Dichloroethene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1 3-Dichloropropane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
1.2-Dichloropropane	ND		ng/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
2 2-Dichloropropane	ND -		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044			
ais 1.2 Dichloropropene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	608204/			
trang 1.2 Dichloropropene	ND		ug/L ug/l	1.00	1	08/12/06 04:58	SW846 8260B	608204-			
1.1 Dichloronronono	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	608204-			
Ethylhongono	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260D	6082044			
Euryroenizene Ugwaghlanghutadigna			ug/L	1.00	1	08/12/00 04.30	SW040 0200B	6082044			
			ug/L	50.0	1	08/12/00 04.38	SW040 0200B	6082044			
Z-mexanone			ug/L	JU.U 1.00	1	08/12/00 04:38	5 W 640 6200B	6082044			
Isopropyibenzene			ug/L	1.00	1	08/12/06 04:58	5 W 840 8200B	6082044			
p-isopropyltoluene	ND		ug/L	1.00	1	08/12/06 04:58	- S W 840 8260B	0082044			

# Test/Merica

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NPH0652Project Name:AFRHProject Number:3552060897Received:08/03/06 08:00

		A	NALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0652-03 (W72-3	- Ground	I Water)	- cont. Sampled	I: 08/02/06 10	:30			
Volatile Organic Compounds by EPA	Method 82	260B - cont	-					
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Methylene Chloride	ND		ug/L	5.00	1	08/12/06 04:58	SW846 8260B	6082044
4-Methyl-2-pentanone	ND		ug/L	50.0	1	08/12/06 04:58	SW846 8260B	6082044
Naphthalene	ND		ug/L	5.00	1	08/12/06 04:58	SW846 8260B	6082044
n-Propylbenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Styrene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,1,1,2-Tetrachloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,1,2,2-Tetrachloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Tetrachloroethene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Toluene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,2,3-Trichlorobenzene	ND		ug/L	2.00	1	08/12/06 04:58	SW846 8260B	6082044
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1	08/12/06 04:58	SW846 8260B	6082044
1,1,2-Trichloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,1,1-Trichloroethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Trichloroethene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Trichlorofluoromethane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,2,3-Trichloropropane	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Vinyl chloride	ND		ug/L	1.00	1	08/12/06 04:58	SW846 8260B	6082044
Xylenes, total	ND	1 11 11 11 11 11 11 11 11 11 11 11 11 1	ug/L	3.00	1	08/12/06 04:58	SW846 8260B	6082044
Surr: 1,2-Dichloroethane-d4 (70-130%)	107 %					08/12/06 04:58	SW846 8260B	6082044
Surr: Dibromofluoromethane (79-122%)	104 %					08/12/06 04:58	SW846 8260B	6082044
Surr: Toluene-d8 (78-121%)	100 %					08/12/06 04:58	SW846 8260B	6082044
Surr: 4-Bromofluorobenzene (78-126%)	105 %					08/12/06 04:58	SW846 8260B	6082044
Extractable Petroleum Hydrocarbons							•	
Diesel	ND	CF6	ug/L	.94.3	1	08/09/06 22:17	SW846 8015B	6080981
Surr: o-Terphenyl (55-150%)	49 %	Z6				08/09/06 22:17	SW846 8015B	608098.
Purgeable Petroleum Hydrocarbons								
GRO as Gasoline	ND		ug/L	100	1	08/06/06 17:59	SW846 8015B	6081017
Surr: a,a,a-Trifluorotoluene (63-134%)	83 %		~			08/06/06 17:59	SW846 8015B	608101

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Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

Work Order: NPH0652 Project Name: AFRH Project Number: 3552060897 Received: 08/03/06 08:00

		AN	ALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0652-04 (H48-	1 (0.25-1) -	- Soil) Sam	pled: 08/02/0	6 12:00				
Mercury by EPA Methods 7470A/74	471A		-					
Mercury	0.460		mg/kg	0.0990	1	08/11/06 14:57	SW846 7471A	6082192
Organachlarina Pastisidas by EDA N	Acthod 2021	٨						
Aldrin		A DI I	m ~ /1 ~	0.00825	5	.09/07/06 17:06	CITIO 4 C 0001 A	6000000
Aldrin dalta DUC	ND	KLI DI 1	mg/kg	0.00825	5 5	08/07/06 17:06	SW840 8081A	6080989
oleho DHC	ND	RL1 DL1	mg/kg	0.00823	5	08/07/06 17:06	5 W 840 8081A	6080989
alpha-BHC	ND	RLI DL1	mg/kg	0.00825	2 5	08/07/06 17:06	SW840 8081A	6080989
Deta-BHC	ND	RL1	mg/kg	0.0160		08/07/06 17:06	SW846 8081A	6080989
gamma-BHC (Lindane)	ND	RL1	mg/kg	0.00825	, ) , ,	08/07/06 17:06	SW846 8081A	6080989
alpha-Chlordane	ND ,	RL1	mg/kg	0.00825	2	08/07/06 17:06	SW846 8081A	6080989
gamma-Chlordane	ND	RL1	mg/kg	0.00825	2	08/07/06 17:06	SW846 8081A	6080989
Chlordane	ND	RL1	mg/kg	0.324	2	08/07/06 17:06	SW846 8081A	6080989
4,4'-DDD	ND	RLI	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
4.4-DDE	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
4,4-DD1	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Dieldrin	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endosultan I	ND	RLI	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endosultan II	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endosulfan sulfate	ND	RLI	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endrin	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endrin aldehyde	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Endrin ketone	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Heptachlor	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Heptachlor epoxide	ND	RL1	mg/kg	0.00825	5	08/07/06 17:06	SW846 8081A	6080989
Methoxychlor	ND	RL1	mg/kg	0.0160	5	08/07/06 17:06	SW846 8081A	6080989
Toxaphene	ND	RL1	mg/kg	0.324	5	08/07/06 17:06	SW846 8081A	6080989
Surr: Tetrachloro-meta-xylene (63-132%	5)					08/07/06 17:06	SW846 8081A	6080989
Surr: Decachlorobiphenyl (39-108%)	120 %	Z5				08/07/06 17:06	SW846 8081A	6080989
Chlorinated Herbicides by EPA Met	hod 8151A							
2,4-D	ND		mg/kg	0.0666	1	08/15/06 21:02	SW846 8151A	6082467
Dalapon	ND		mg/kg	0.167	1	08/15/06 21:02	SW846 8151A	6082467
2,4-DB	ND		mg/kg	0.0666	1	08/15/06 21:02	SW846 8151A	6082467
Dicamba	ND		mg/kg	0.0330	1	08/15/06 21:02	SW846 8151A	6082467
Dichloroprop	ND		mg/kg	0.0666	1	08/15/06 21:02	SW846 8151A	6082467
Dinoseb	ND		mg/kg	0.0666	1	08/15/06 21:02	SW846 8151A	6082467
MCPA	ND		mg/kg	3.33	1	08/15/06 21:02	SW846 8151A	6082467
MCPP	ND		mg/kg	3.33	1	08/15/06 21:02	SW846 8151A	6082467
4-Nitrophenol	ND		mg/kg	0.0330	1	08/15/06 21:02	SW846 8151A	6082467
Pentachlorophenol	ND		mg/kg	0.0330	1	08/15/06 21:02	SW846 8151A	6082467
Picloram	ND		mg/kg	0.0330	1	08/15/06 21:02	SW846 8151A	6082467
2,4,5-T	ND		mg/kg	0.0330	1	08/15/06 21:02	SW846 8151A	6082467
2,4,5-TP (Silvex)	ND		mg/kg	0.0170	1	08/15/06 21:02	SW846 8151A	6082467
Surr: Dichloroacetic Acid (55-132%)	77 %		~ ~			08/15/06 21:02	SW846 8151A	6082467

Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.

# Test/Merica

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Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NPH0652Project Name:AFRHProject Number:3552060897Received:08/03/06 08:00

		AN	ALYTICAL R					
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0652-0	4 (H48-1 (0.25-1) - S	Soil) - con	t. Sampled: 0	8/02/06 12:00				
Arsenic, Barium, Cadmium	n, Chromium, Lead, Sil <sup>,</sup>	ver, Seleniu	ım by 6020 co	nt.				
See Attached Report								

#### Sample ID: NPH0652-05 (Trip Blank - Water) Sampled: 08/02/06

Volatile Organic Compounds by EPA Method 8260B

Acetone	ND	ug/L	50.0	1	08/11/06 23:56 SW846 8260B 6082044
Benzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Bromobenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Bromochloromethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Bromodichloromethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Bromoform	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Bromomethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
2-Butanone	ND	ug/L	50.0	1	08/11/06 23:56 SW846 8260B 6082044
sec-Butylbenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
n-Butylbenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
tert-Butylbenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Carbon disulfide	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Carbon Tetrachloride	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Chlorobenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Chlorodibromomethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Chloroethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Chloroform	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Chloromethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
2-Chlorotoluene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
4-Chlorotoluene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,2-Dibromo-3-chloropropane	ND	ug/L	5.00	1	08/11/06 23:56 SW846 8260B 6082044
1,2-Dibromoethane (EDB)	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Dibromomethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,4-Dichlorobenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,3-Dichlorobenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1.2-Dichlorobenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
Dichlorodifluoromethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,1-Dichloroethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,2-Dichloroethane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
cis-1,2-Dichloroethene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,1-Dichloroethene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
trans-1,2-Dichloroethene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,3-Dichloropropane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,2-Dichloropropane	ND	ug/L	1.00	<u> </u>	08/11/06 23:56 SW846 8260B 6082044
2,2-Dichloropropane	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
cis-1,3-Dichloropropene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
trans-1,3-Dichloropropene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044
1,1-Dichloropropene	ND	ug/L	1.00	. 1	08/11/06 23:56 SW846 8260B 6082044
Ethylbenzene	ND	ug/L	1.00	1	08/11/06 23:56 SW846 8260B 6082044

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Work Order: NPH0652 Project Name: AFRH Project Number: 3552060897 Received: 08/03/06 08:00

		AN	ALYTICAL R					
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0652-05 (Trip I	Blank - Wa	ter) - cont	t. Sampled: 0	8/02/06				
Volatile Organic Compounds by EPA	Method 82	60B - cont.						
Hexachlorobutadiene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
2-Hexanone	ND		ug/L	50.0	· 1	08/11/06 23:56	SW846 8260B	6082044
Isopropylbenzene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
p-Isopropyltoluene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Methyl tert-Butyl Ether	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Methylene Chloride	ND		ug/L	5.00	1	08/11/06 23:56	SW846 8260B	6082044
4-Methyl-2-pentanone	ND		ug/L	50.0	1	08/11/06 23:56	SW846 8260B	6082044
Naphthalene	ND		ug/L	5.00	1	08/11/06 23:56	SW846 8260B	6082044
n-Propylbenzene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Styrene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1,1,1,2-Tetrachloroethane	ND		ug/L	1.00	. 1	08/11/06 23:56	SW846 8260B	6082044
1.1,2,2-Tetrachloroethane	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Tetrachloroethene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Toluene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1.2,3-Trichlorobenzene	ND		ug/L	2.00	1	08/11/06 23:56	SW846 8260B	6082044
1,2,4-Trichlorobenzene	ND		ug/L	2.00	1	08/11/06 23:56	SW846 8260B	6082044
1,1,2-Trichloroethane	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1,1,1-Trichloroethane	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Trichloroethene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Trichlorofluoromethane	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1,2,3-Trichloropropane	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
1,2,4-Trimethylbenzene	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Vinyl chloride	ND		ug/L	1.00	1	08/11/06 23:56	SW846 8260B	6082044
Xylenes, total	ND		ug/L	3.00	1	08/11/06 23:56	SW846 8260B	6082044
Surr: 1,2-Dichloroethane-d4 (70-130%)	105 %					08/11/06 23:56	SW846 8260B	608204-
Surr: Dibromofluoromethane (79-122%)	102 %					08/11/06 23:56	SW846 8260B	6082044
Surr: Toluene-d8 (78-121%)	102 %					08/11/06 23:56	SW846 8260B	6082044
Surr: 4-Bromofluorobenzene (78-126%)	105 %					08/11/06 23:56	SW846 8260B	6082044

Test/America ANALYTICAL TESTING CORPORATION

3601 South Dixie Drive • Dayton, OH 45439 • 937-294-6856 • Fax: 937-294-7816 • 800-572-9839

TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14672 Report Date: 08/16/2006 Page: 1 of 5

Enclosed are the Analytical and Quality Control Reports for the following samples submitted to TestAmerica for analysis:

Project: NPH0652

Sample <u>Number</u>	Sample Description	Date <u>Taken</u>	Date <u>Received</u>
216094	NPH0652-02	08/02/2006	08/11/2006

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica certifies that the analytical results contained herein apply only to the specific samples analyzed. Reproduction of this report is permitted only in its entirety.

Enclosure

Project Management Approval

Dayton - 3601 South Dixie Drive, Dayton, OH 45439 937-294-6856/FAX:937-294-7816 Dundee (Chicago) - 1090 Rock Road Lane, Unit 11, Dundee, IL 60118 847-783-4960/FAX:847-783-4969 Indianapolis - 6964 Hillsdale Court, Indianapolis, IN 46250 317-842-4261/FAX:317-842-4286 Pontiac - 341 W. Walton Blvd, Pontiac, MI 48340 248-332-1940/FAX:248-332-5450



3601 South Dixic Drive . Dayton, OH 45439 . 937-294-6856 . Fax: 937-294-7816 . 800-572-9839

### **Analytical Report**

TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14672 Report Date: 08/16/2006 Page: 2 of 5

#### SAMPLE NO. SAMPLE DESCRIPTION 216094 NPH0652-02

#### DATE/TIME TAKEN 08/02/2006 12:00

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete		Complete		08/15/2006	08:47		696	ekh	DT	SW 6020
Arsenic, ICPMS	2.3	mg/Kg	<2.0		08/15/2006	08:47	510	8303	ekh	DT	SW 6020
Barium, ICPMS	55.0	mg/Kg	<0.98		08/15/2006	08:47	510	8288	ekh	DT	SW 6020
Cadmium, ICPMS	<0.98	mg/Kg	<0.98		08/15/2006	08:47	510	8357	ekh	DT	SW 6020
Chromium, ICPMS	16.8	mg/Kg	<2.0		08/15/2006	08:47	510	8206	ekh	DT	SW 6020
Lead, ICPMS	51.9	mg/Kg	<0.98	h	08/15/2006	08:56	510	8376	ekh	DT	SW 6020
Selenium, ICPMS	<0.98	mg/Kg	<0.98		08/15/2006	08:47	510	1923	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/15/2006	08:47	510	8095	ekh	DTr	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/14/2006	13:00	510		jml	DT	ŚW 3050B

h - MSD recovery and RPD outside of control limits.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

www.testamericainc.com

Relinquished By:	Relinquished By:	Relinquished By			Special instructions:		Sin man one statutes and a company and common the same statutes and an <b>Up monotory in subject</b> to a view same have wanted and an a property of the same statutes and a same statute of the same statutes and a same statute of the same statutes and a same stat			H48-1(0.25-1) 8-20	111-72-3	1172-2 87.	M72-1 820	SAMPLE ID	Fax Results:	Date Needed:	Rush (surcharges may apply)	Standard	and a constant of the second and a second second second second second second and a second second second second	Sampler Signature:	Sampler Name: (Print Name)	Telephone Number:	Project Manager:	City/State/Zip Code:	Address:	Client Name	Test Analytical testing corporatio
Date:	Date:	Date:							annormality of the second s	Q081 2	a ico	202	<u>az z</u>	Tim	e Sample	ed					S GA	73-2225	PHIX C	beller	1240 6	late.	Nashville 2960 Fost Nashville
Time:	Time:	5 Time:								5	616	NCV	64	G - Field SL - GW	d Filtered Słudge [ - Groundw	i DW - Dr vater s	inking ' S - Soil	Water /Solid	Matri			14116	22000	PSU -	Balland		Division er Creighton TN 37204
Received By:	Received By:	Received By	and the second se							Stale	20	3	8	HNO HCI NaOI H <sub>2</sub> SC	H D <sub>4</sub>				X Preservation & # of (		da na zakratela in moneto francisca za zakratela da da na	Fax: 7		20147	106 6:14	Clie	Phone: 615-726- Fax: 615-726-
		-9.3-00 B	na a managana ang kanana ng kanana ng kanang kang k							3	X		X	None Othe	e r ( Specify	n) 100-			Containers		strategy of decision-on-the case of the scattering and the work to get the special case of the scattering of the	3-858-125	adan daga bancanke ekeci ortensoonedet konsortenen of daga eige na - minorea teken and	an a	B IN	ant #:	0177 3404
Date:	Date:	Date: 4.90	na na anala na ang ang ang ang ang ang ang ang ang						SOURCE NO.		X		X		Not Contraction		A NO NGC	Real States			In/	X R	Site/Loc		2 Projec		
Time:	Time:	Jime:							and a second sec	XX						AS E	81		Analyze For	Quote #:	voice To:	aport To:	ation ID:	roject #: SS	t Name:		To assist us i is this work b Comp
Method of Shipment:	Bottles Supplied by Test Am	- Custody Seals: Y N	_ Rec Lab Temp:	Init Lab Temp:	LABORATORY COMMENTS:				A-		2	2	WH 06527	K		100 U8/14/06 23:59	NPH0652	Ville		PO#:	NAME OF A DESCRIPTION OF A	ward chapman	ERH S	52060897	AFCH.		in using the proper analytical meth xeing conducted for regulatory pu vilance Monitoring
nden ministra yang mengen kanan dan kanan kanan kanan yang bertara kanan kanan kanan kanan kanan kanan kanan k	ierica: Y N	NA					na non na la facto de la fa	n en anten en composition en					A CONTRACTOR OF A CONT	REMARKS	Other	Level 3 Level 4	(Batch QC)	QC Deliverables		Unlleman 4	novannin en de la service de la segura de la s	Non a constant and a constant and a constant of the second se	state:	NAME AND A DESCRIPTION OF	NAME AND A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTION OF		וסds, גווףסses ?

Image: Test America Analytical testing corporation         Nashville Division         COOLER RECEIPT FORM	
NE	PH0652
Cooler Received/Opened On08/03/068:00 1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:	9510
Fed-Ex UPS Velocity DHL Route Off-street	t Misc.
2. Temperature of representative sample or temperature blank when opened: $\frac{2}{2}$ Deg (indicate IR Gun ID#)	grees Celsius
NA A00466 A00750 A01124 100190 101282	Raynger ST
3. Were custody seals on outside of cooler?	YES NO NA
a. If yes, how many and where: 18 ont 118 ack	
4. Were the seals intact, signed, and dated correctly?	YESNONA
5. Were custody papers inside cooler?	VESNONA
6. Were custody seals on containers: VES NO	VES NO NT
were these signed and dated correctly?	VES NO NA
7 What hind of modeling material word? Dark him - Discrete - Marine -	I ESNONA
7. what kind of packing material used Bubblewrap Peanuts Vermiculite	Foam Insert
Plastic bag Paper Other N	one
8. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice	Other None
9. Did all containers arrive in good condition ( unbroken)?	YES. NONA
10. Were all container labels complete (#, date, signed, pres., etc)?	YESNONA
11. Did all container labels and tags agree with custody papers?	YESNONA
12. a. Were VOA vials received?	YESNONA
b. Was there any observable head space present in any VOA vial?	YES NO NA
I certify that I unloaded the cooler and answered questions 6-12 (intial)	
13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH lev	el? YESNONo
b. Did the bottle labels indicate that the correct preservatives were used	YESNONA
If preservation in-house was needed, record standard ID of preservative used here	
14. Was residual chlorine present?	YESNO.
I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)	312
15. Were custody papers properly filled out (ink, signed, etc)?	YESNONA
16. Did you sign the custody papers in the appropriate place?	ESNONA
17. Were correct containers used for the analysis requested?	YESNONA
18. Was sufficient amount of sample sent in each container?	YESNONA
I certify that I entered this project into LIMS and answered questions 15-18 (intial)	- 3R
I certify that I attached a label with the unique LIMS number to each container (intial)	-M-
19. Were there Non-Conformance issues at login YES $(NO)$ Was a PIPE generated $(YES)$	NO # 38729

### Test Analytical testing corporation

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

August 21, 2006

Client: MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn: Brent Chapman

#### SAMPLE IDENTIFICATION

H78-4 (1-2) H78-6 (3-3.5) H48-3 (2-2.75) H69-1 LAB NUMBER

NPH0573-01 NPH0573-02 NPH0573-03 NPH0573-04

Work Order:NPH0573Project Nation:AFRHProject Nbr:3552060897P/O Nbr:62671Date Received:08/04/06

#### **COLLECTION DATE AND TIME**

08/03/06 08:00 08/03/06 09:50 08/03/06 11:00 08/03/06 13:00

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

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

The Chain(s) of Custody, 9 pages, are included and are an integral part of this report.

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

Jica ( Uuchers

Jessica Vickers Senior Project Manager

## Test/Merica

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

 Work Order:
 NPH0573

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/04/06 08:00

	- -	A	NALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
ample ID: NPH0573-01 (H78-	-4 (1-2) - Soil	) Sampl	ed: 08/03/06 0	8:00				
Mercury by EPA Methods 7470A/7	471A	,						
Aercury	ND		ma/ka	0 100	1	08/16/06 14:44	SW846 7471 A	6082795
			mg/ Kg	0.100	1	00/10/00 14.44	511040747111	0002795
Organochlorine Pesticides by EPA	Method 8081A			1				
ldrin	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
elta-BHC	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
lpha-BHC	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
eta-BHC	ND		mg/kg	0.00326	1	08/07/06 15:10	SW846 8081A	6080989
amma-BHC (Lindane)	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
lpha-Chlordane	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
amma-Chlordane	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Chlordane	ND		mg/kg	0.0659	1	08/07/06 15:10	SW846 8081A	6080989
-,4'-DDD	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
.4'-DDE	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
-,4' <b>-</b> DDT	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Dieldrin	ND		mg/kg	0.00168	. 1	08/07/06 15:10	SW846 8081A	6080989
Endosulfan I	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Endosulfan II	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Endosulfan sulfate	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Indrin	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
ndrin aldehvde	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Endrin ketone	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
dentachlor	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Jeptachlor epoxide	ND		mg/kg	0.00168	1	08/07/06 15:10	SW846 8081A	6080989
Aethoxychlor	ND		mg/kg	0.00100	1	08/07/06 15:10	SW846 8081A	6080080
Covanhana	ND		mg/kg	0.00520	1	08/07/06 15:10	SW846 2021A	6080080
loxaphene Loxaphene mata milana (62,122)	$\frac{1}{6}$		mg/kg	0.0059	1	08/07/06 15.10	SW 640 6061A	0000909
urr: Decachlorobiphenyl (39-108%)	120 %	Z5				08/07/06 15:10	SW846 8081A SW846 8081A	6080989 6080989
Chlorinated Herbicides by EPA Me	thod 8151A							
2.4 <b>-</b> D	ND		mg/kg	0.0654	1	08/07/06 18:29	SW846 8151A	6080810
Dalapon	ND		mg/kg	0.164	. 1	08/07/06 18:29	SW846 8151A	6080810
2.4-DB	ND		mg/kg	0.0654	1	08/07/06 18:29	SW846 8151A	6080810
Dicamba	ND		mg/kg	0.0324	1.	08/07/06 18:29	SW846 8151A	6080810
lichloroprop	ND		mg/kg	0.0654	1	08/07/06 18:29	SW846 8151A	6080810
Jinoseh	ND		mg/kg	0.0654	. 1	08/07/06 18:29	SW846 8151A	6080810
	ND		mg/kg	3 26	1	08/07/06 18:29	SW846 8151A	6080810
	ND		mg/kg	3.26	1	08/07/06 18:29	SW846 8151A	60000010
Nitronhonol	ND		mg/kg	0.0224	. 1	08/07/06 18:29	CW046 0151A	6000010
Pentachlorophenol	ND		mg/kg mg/kg	0.0324	1	08/07/06 18:29	SW040 0151A	6080810
Dialaram			mg/kg	0.0324	1	00/07/06 10:29	SW040 0151A	20000010
			mg/kg	0.0324	1	08/07/06 18:29	SW040 0151A	6080810
2,4, <b>3-1</b>			mg/kg	0.0324	1	08/07/06 18:29	SW840 8151A	0080810
2,4,3-1P (BIIVEX)	ND 70.4/		mg/kg	0.0167	1	00/07/06 18:29	SW8408151A	0180810
urr: Dichloroacetic Acid (55-132%)	/0 %					-08/07/06 18:29	' SW846 8151A	-6080810

Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 
 Work Order:
 NPH0573

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/04/06 08:00

		A	NALYTICAL	REPORT	na sense da la construcción de la c			
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0573-01 (H78-4	l (1-2) - Soi	l) - cont.	Sampled: 08	/03/06 08:00				
Arsenic Barium Cadmium Chromiu	ım Lead Sil	ver Selen	$i_{1}$ ium by 6020 - 6	cont				
See Attached Report	, Doud, Sh		iuni og 0020. k					
Sample ID: NPH0573-02 (H78-6	5 (3-3.5) - S	oil) Sam	pled: 08/03/0	6 09:50				
Mercury by EPA Methods 7470A/74	71A							
Mercury	ND		mø/kø	0.101	1	08/16/06 14.51	SW846 7471 A	6082795
Organachlarine Pesticides by EPA M	lethod 8081	۸	mg/ng	0.101		00/10/00 14.01	5 11 070 777 111	0002775
Aldrin		1	ma/lea	0.00168	1	08/07/06 15:20	CW/046 0001 A	(000000
dalta DUC	ND		mg/kg	0.00168	. 1	08/07/06 15:39	SW846 8081A	6080989
alpha DHC	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	6080989
hota PHC	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	6080989
amma PUC (Lindana)	ND		mg/kg	0.00326	1	08/07/06 15:39	SW846 8081A	0080989
gamma-BHC (Lindane)	ND		mg/kg	0.00168	1	08/07/06 15:39	SW840 8081A	0080989
appia-Chlordane	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	0080989
Chlordone	ND		mg/kg	0.00108	1	08/07/06 15:39	SW840 8081A	0080989
	ND		mg/kg	0.0039	1	08/07/06 15:39	SW040 0001A	6080989
4,4-DDE	0.00230		mg/kg	0.00168	1	08/07/06 15:39	SW040 0001A	6080989
	ND		mg/kg	0.00108	1	08/07/06 15:39	SW040 0001A	0000909
Dieldrin	ND		mg/kg	0.00168	1	08/07/06 15:39	SW840 8081A	0080989
Endogulfan I	ND		mg/kg	0.00108	1	08/07/06 15:39	SW840 8081A	0080989
Endosulfan I	ND		mg/kg	0.00168	1	08/07/06 15:39	SW040 0001A	6000909
Endosulfan sulfate	ND		mg/kg	0.00168	1	08/07/06 15:39	SW 840 8081A	6000909
Endrin	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	60000909
Endrin aldehyde	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	60000909
Endrin ketone	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	6080080
Hentachlor	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	6080080
Heptachlor epoxide	ND		mg/kg	0.00168	1	08/07/06 15:39	SW846 8081A	6080989
Methoxychlor	ND		mg/kg	0.00100	• 1	08/07/06 15:39	SW846 8081A	6080080
Toxanhene	ND		mg/kg	0.0659	1	08/07/06 15:39	SW846 8081A	6080989
Surr: Tetrachloro-meta-xylene (63-132%)	70%			0.0005	1	08/07/06 15:30	SW846 80814	6080080
Surr: Decachlorobiphenyl (39-108%)	98 %					08/07/06 15:39	SW846 8081A	6080989
Chlorinated Herbicides by EPA Meth	nod 8151A							
2,4 <b>-</b> D	ND		mg/kg	0.0657	1	08/07/06 19:01	SW846 8151A	6080810
Dalapon	ND		mg/kg	0.164	1	08/07/06 19:01	SW846 8151A	6080810
2,4-DB	ND		mg/kg	0.0657	1	08/07/06 19:01	SW846 8151A	6080810
Dicamba	ND		mg/kg	0.0325	1	08/07/06 19:01	SW846 8151A	6080810
Dichloroprop	ND		mg/kg	0.0657	1	08/07/06 19:01	SW846 8151A	6080810
Dinoseb	ND		mg/kg	0.0657	1	08/07/06 19:01	SW846 8151A	6080810
MCPA	ND		mg/kg	3.28	1	08/07/06 19:01	SW846 8151A	6080810
MCPP	ND		mg/kg	3.28	1	08/07/06 19:01	SW846 8151A	6080810
4-Nitrophenol	ND		mg/kg	0.0325	1	08/07/06 19:01	SW846 8151Å	6080810
Pentachlorophenol	ND		mg/kg	0.0325	1	08/07/06 19:01	SW846 8151A	6080810
Picloram	ND		mg/kg	0.0325	1	08/07/06 19:01	SW846 8151A	6080810
2,4,5-T	ND		mg/kg	0.0325	1	08/07/06 19:01	SW846 8151A	6080810

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

Work Order: NPH0573 AFRH Project Name: Project Number: 3552060897 Received: 08/04/06 08:00

ANALYTICAL REPORT												
Analyte	Result Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch					
Sample ID: NPH0573-02 (H78-	6 (3-3.5) - Soil) - co	ont. Sampled: 08	/03/06 09:50									
Chlorinated Herbicides by EPA Met	hod 8151A - cont.											
2.4,5-TP (Silvex) Surr: Dichloroacetic Acid (55-132%)	ND 62 %	mg/kg	0.0167	1	08/07/06 19:01 <i>08/07/06 19:01</i>	SW846 8151A SW846 8151A	6080810 <i>6080810</i>					
Arsenic, Barium, Cadmium, Chromi	um, Lead, Silver, Sele	enium by 6020.										

Mercury by Er A Meulous 7470A/74	I IA							
Mercury	0.432		mg/kg	0.100	1	08/16/06 14:53	SW846 7471A	6082795
Organochlorine Pesticides by EPA M	1ethod 8081A			a de la constante de la consta				
Aldrin	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
delta-BHC	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
alpha-BHC	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
beta-BHC	0.0276		mg/kg	0.0161	5	08/07/06 16:36	SW846 8081A	6080989
gamma-BHC (Lindane)	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
alpha-Chlordane	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
gamma-Chlordane	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Chlordane	ND		mg/kg	0.325	5	08/07/06 16:36	SW846 8081A	6080989
4,4'-DDD	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
4,4'-DDE	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
4,4 <b>'-DDT</b>	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Dieldrin	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endosulfan I	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endosulfan II	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endosulfan sulfate	ND .		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endrin	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endrin aldehyde	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Endrin ketone	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Heptachlor	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Heptachlor epoxide	ND		mg/kg	0.00828	5	08/07/06 16:36	SW846 8081A	6080989
Methoxychlor	0.0520	R1	mg/kg	0.0161	5	08/07/06 16:36	SW846 8081A	6080989
Toxaphene	ND		mg/kg	0.325	5	08/07/06 16:36	SW846 8081A	6080989
Surr: Tetrachloro-meta-xylene (63-132%)	) 80 %		8			08/07/06 16:36	SW846 8081A	6080989
Surr: Decachlorobiphenyl (39-108%)	381 %	Z5				08/07/06 16:36	SW846 8081A	6080989
Chlorinated Herbicides by EPA Met	hod 8151A							
2,4-D	ND		mg/kg	0.0651	1	08/07/06 19:32	SW846 8151A	6080810
Dalapon	ND		mg/kg	0.163	1	08/07/06 19:32	SW846 8151A	6080810
2,4-DB	ND		mg/kg	0.0651	1	08/07/06 19:32	SW846 8151A	6080810
Dicamba	ND		mg/kg	0.0322	1	08/07/06 19:32	SW846 8151A	6080810
Dichloroprop	ND		mg/kg	0.0651	1	08/07/06 19:32	SW846 8151A	6080810
Dinoseb	ND		mg/kg	0.0651	1	08/07/06 19:32	SW846 8151A	6080810
MCPA	ND		mg/kg	3.25	1	08/07/06 19:32	SW846 8151A	6080810
MCPP	ND		mg/kg	3.25	1	08/07/06 19:32	SW846 8151A	6080810

## Test/Merica

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NPH0573Project Name:AFRHProject Number:3552060897Received:08/04/06 08:00

		A	NALYTICAL	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH0573-03 (H48-	3 (2-2.75) -	Soil) - co	nt. Sampled:	08/03/06 11:00				
Chlorinated Herbicides by EPA Met	hod 8151A -	cont.	-					
l-Nitrophenol	ND		mo/ko	0.0322	1	08/07/06 19:32	SW846 8151A	6080810
Pentachlorophenol	ND		mg/kg	0.0322	1	08/07/06 19:32	SW846 8151A	6080810
Picloram	ND		mg/kg	0.0322	1	08/07/06 19:32	SW846 8151A	6080810
2.4.5-T	ND		mg/kg	0.0322	1	08/07/06 19:32	SW846 8151A	6080810
2.4.5-TP (Silvex)	ND		mg/kg	0.0166	1	08/07/06 19:32	SW846 8151A	6080810
Surr: Dichloroacetic Acid (55-132%)	66 %			0.0100		08/07/06 19:32	SW846 8151A	6080810
Arsenic, Barium, Cadmium, Chromi	um, Lead, Si	lver, Seleni	ium by 6020.					
See Attached Report								
Sample ID: NPH0573-04 (H69-	1 - Soil) Sa	mpled: 0	8/03/06 13:00	)				
General Chemistry Parameters	,,							
onitability	>200		٥F	80.0	1	08/09/06 14.16	4 STM D4982B	6081376
h	6 30	HTI	nH Units	NA	. 1	08/09/06 14:18	SW846 9045C	6080840
Reactive Cvanide as Total	ND	1111 .	mg/kg	20.00	1	08/08/06 16:19	SW846 90124	6081162
Reactive Sulfide as Total	ND		mg/kg	100	1	08/07/06 17:20	SW846 9030B	6081163
TCL D Motols by 6000/7000 Spring N	Acthoda		66					
TCLP Metals by 600077000 Series F	ND		/1	0.100	1	0010710710 00	1046 1011 (601)	(001000
Arsenic	ND		mg/L	0.100	1	08/07/06 13:20	V846 1311/6010	6081080
Sarium	0.250		mg/L	0.100	1	08/07/06 13:20	V846 1311/6010	6081080
_admium	0.382		mg/L	0.0100	ľ	08/07/06 13:20	V846 1311/6010	6081080
nromium	ND 12.2		mg/L	0.0500	1	08/07/06 13:20	V846 1311/6010	6081080
	13.3	÷ .	mg/L	0.0500	1	08/07/06 13:20	V846 1311/6010	6081080
selenium	ND		mg/L	0.100	1	08/07/06 13:20	V846 1311/6010	6081080
silver	ND		mg/L	0.0500	1	08/07/06 13:20	V846 1311/6010	6081080
Mercury	ND		mg/L	0.0100	1	08/07/06 14:32	V846 1311/7470	6081139
TCLP Chlorinated Herbicides by EF	A Method 8	151						
2,4-D	ND		mg/L	0.100	1	08/07/06 17:07	V846 1311/815	6081000
2,4,5-TP (Silvex)	ND		mg/L	0.0100	1	08/07/06 17:07	V846 1311/815	6081000
Surr: Dichloroacetic Acid (17-136%)	47 %					08/07/06 17:07	V846 1311/815.	6081000
TCLP Volatile Organic Compounds	by EPA Met	hod 1311/8	3260B					
Vinyl chloride	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
,1-Dichloroethene	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
,2-Dichloroethane	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
2-Butanone	ND		mg/L	0.250	10	08/09/06 07:42	V846 1311/8260	6081325
Chloroform	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Carbon Tetrachloride	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Benzene	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Frichloroethene	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Fetrachloroethene	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Chlorobenzene	ND		mg/L	0.0100	10	08/09/06 07:42	V846 1311/8260	6081325
Surr: 1,2-Dichloroethane-d4 (70-130%)	104 %		-			08/09/06 07:42	V846 1311/826	6081325
Surr: Dibromofluoromethane (79-122%)	106 %					08/09/06 07:42	V846 1311/826	6081325
Surr: Toluene-d8 (78-121%)	104 %					08/09/06 07:42	1846 1311/826	6081325

### Test America ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740)
	21740 Beaumeade Circle, Suite 150
	Ashburn, VA 20147
Attn	Brent Chapman

Work Order: NPH0573 Project Name: AFRH Project Number: 3552060897 Received: 08/04/06 08:00

ANALYTICAL REPORT									
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch	
Sample ID: NPH0573-04 (H69-1	- Soil) - co	nt. Sampl	ed: 08/03/00	5 13:00					
TCLP Volatile Organic Compounds b	y EPA Meth	od 1311/82	260B - cont.						
Surr: 4-Bromofluorobenzene (78-126%)	115 %					08/09/06 07:42	V846 1311/826	6081325	
TCLP Semivolatile Organic Compour	nds by EPA I	Method 131	1/8270C						
Cresol(s)	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/827(	6080987	
1,4-Dichlorobenzene	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
2.4-Dinitrotoluene	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Hexachlorobenzene	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Hexachlorobutadiene	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Hexachloroethane	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Nitrobenzene	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Pentachlorophenol	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Pyridine	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
2,4,6-Trichlorophenol	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
2,4,5-Trichlorophenol	ND		mg/L	0.0200	2	08/08/06 11:30	V846 1311/8270	6080987	
Surr: Terphenyl-d14 (31-111%)	77 %					08/08/06 11:30	7846 1311/827	6080987	
Surr: 2,4,6-Tribromophenol (32-118%)	83 %					08/08/06 11:30	7846 1311/827	6080987	
Surr: Phenol-d5 (10-48%)	53 %	Z2				08/08/06 11:30	7846 1311/827	6080987	
Surr: 2-Fluorobiphenyl (33-101%)	69 %					08/08/06 11:30	7846 1311/827	6080987	
Surr: 2-Fluorophenol (10-64%)	53 %					08/08/06 11:30	7846 1311/827	6080987	
Surr: Nitrobenzene-d5 (31-112%)	72 %					08/08/06 11:30	7846 1311/827	6080987	
TCLP Pesticides by EPA Method 131	1/8081A								
gamma-BHC (Lindane)	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808	6081330	
Chlordane	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808:	6081330	
Endrin	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808	6081330	
Heptachlor	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808	6081330	
Heptachlor epoxide	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808:	6081330	
Methoxychlor	ND		mg/L	0.000500	1	08/09/06 18:39	V846 1311/808:	6081330	
Toxaphene	ND		mg/L	0.0100	1	08/09/06 18:39	V846 1311/8083	6081330	
Surr: Tetrachloro-meta-xvlene (58-117%)	87 %		<i>U</i> .	-		08/09/06 18:39	V846 1311/808	6081330	
Surr: Decachlorobiphenyl (22-115%)	112 %					08/09/06 18:39	<i>V846 1311/808</i>	6081330	



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TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14754 Report Date: 08/21/2006 Page: 1 of 6

Enclosed are the Analytical and Quality Control Reports for the following samples submitted to TestAmerica for analysis:

Project: NPH0573

Sample <u>Number</u>	Sample Description	Date <u>Taken</u>	Date <u>Received</u>
216361	NPH0573-01	08/03/2006	08/15/2006
216362	NPH0573-02	08/03/2006	08/15/2006
216363	NPH0573-03	08/03/2006	08/15/2006

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica certifies that the analytical results contained herein apply only to the specific samples analyzed. Reproduction of this report is permitted only in its entirety.

Enclosure

Project Management Approval

Dayton - 3601 South Dixie Drive, Dayton, OH 45439 937-294-6856/FAX:937-294-7816 Dundee (Chicago) - 1090 Rock Road Lane, Unit 11, Dundee, IL 60118 847-783-4960/FAX:847-783-4969 Indianapolis - 6964 Hillsdale Court, Indianapolis, IN 46250 317-842-4261/FAX:317-842-4286 Pontiac - 341 W. Walton Blvd, Fontiac, MI 48340 248-332-1940/FAX:248-332-5450

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### **Analytical Report**

TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14754 Report Date: 08/21/2006 Page: 2 of 6

SAMPLE	NO.	SAMPLE	DESCRIPTION

NPH0573-01

**DATE/TIME TAKEN** 08/03/2006 08:00

			Reporting	3	Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Inít.	ID	Reference
ICPMS NONAQUEOUS	Complete		Complete		08/18/2006	11:19		697	ekh	DT	SW 6020
Arsenic, ICPMS	<2.0	mg/Kg	<2.0	I	08/18/2006	11:29	511	8312	ekh	DT	SW 6020
Barium, ICPMS	42.8	mg/Kg	<0.98	h	08/18/2006	11:29	511	8297	ekh	DT	SW 6020
Cadmium, ICPMS	<0.96	mg/Kg	<0.96		08/18/2006	11:19	511	8366	ekh	DT	SW 6020
Chromium, ICPMS	11.8	mg/Kg	<2.0	h	08/18/2006	11:29	511	8217	ekh	DT	SW 6020
Lead, ICPMS	4.56	mg/Kg	<0.96		08/18/2006	11:19	511	8384	ekh	DT	SW 6020
Selenium, ICPMS	<0.98	mg/Kg	<0.98	I	08/18/2006	11:29	511	1932	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/18/2006	11:19	511	8103	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/17/2006	09:00	511		jml	DT	SW 3050B

**SAMPLE NO.** 216362

216361

**SAMPLE DESCRIPTION** NPH0573-02

**DATE/TIME TAKEN** 08/03/2006 09:50

				Reporting		Run Run		Prep	Run	Anal.	Lab	Method	
		Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference	
ICPMS NONAQUEOUS		Complete		Complete		08/18/2006	12:00		697	ekh	DT	SW 6020	
Arsenic, ICPMS		2.3	mg/Kg	<1.9		08/18/2006	12:00	511	8312	ekh	DT	SW 6020	
Barium, ICPMS		33.1	mg/Kg	<0.93		08/18/2006	12:00	511	8297	ekh	DT	SW 6020	
Cadmium, ICPMS		<0.93	mg/Kg	<0.93		08/18/2006	12:00	511	8366	ekh	DT	SW 6020	
Chromium, ICPMS		20.6	mg/Kg	<1.9		08/18/2006	12:00	511	8217	ekh	DT	SW 6020	
Lead, ICPMS		7.84	mg/Kg	<0.93		08/18/2006	12:00	511	8384	ekh	DT	SW 6020	
Selenium, ICPMS		<0.93	mg/Kg	<0.93		08/18/2006	12:00	511	1932	ekh	DT	SW 6020 Mod	
Silver, ICPMS		<0.5	mg/Kg	<0.5		08/18/2006	12:00	511	8103	ekh	DT	SW 6020	
ICPMS Digestion,	Nonaqueous	Complete		Complete		08/17/2006	09:00	511		jml	DT	SW 3050B	

I - RPD, MS and MSD recovery outside of control limits. h - MSD recovery and RPD outside of control limits.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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### **Analytical Report**

TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204

Job Number: 06.14754 Report Date: 08/21/2006 Page: 3 of 6

		• • • • • • • • • • • • • • • • • • •
SAMPLE	NO.	SAMPLE DESCRIPTION
216363		NPH0573-03

DATE/TIME TAKEN 08/03/2006 11:00

	Result	Units	Reporting Limit	Flag	Run Date	Run Time	Prep Batch	Run Batch	Anal. Init.	Lab ID	Method Reference
ICPMS NONAQUEOUS	Complete		Complete		08/18/2006	12:04		697	ekh	DT	SW 6020
Arsenic, ICPMS	<3.0	mg/Kg	<3.0	0	08/18/2006	1.2:04	511	8312	ekh	DT	SW 6020
Barium, ICPMS	50.0	mg/Kg	<0.95		08/18/2006	12:04	511	8297	ekh	DT	SW 6020
Cadmium, ICPMS	<0.95	mg/Kg	<0.95		08/18/2006	12:04	511	8366	ekh	DT	SW 6020
Chromium, ICPMS	12.1	mg/Kg	<1.9		08/18/2006	12:04	511	8217	ekh	DT	SW 6020
Lead, ICPMS	182	mg/Kg	<0.95		08/18/2006	12:04	511	8384	ekh	DT	SW 6020
Selenium, ICPMS	<0.95	mg/Kg	<0.95		08/18/2006	12:04	511	1932	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/18/2006	12:04	511	8103	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueo	us Complete		Complete		08/17/2006	09:00	511		jml.	DT	SW 3050B

O - Elevated value due to sample matrix.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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### SUBCONTRACT ORDER

TestAmerica - Nashville, TN

### NPH0573

SENDING LABORATORY:			RECEIVING LABORA	TORY:
TestAmerica - Nashville, T 2960 Foster Creighton Roa Nashville, TN 37204 Phone: 800-765-0980 Fax: 615-726-3404 Project Manager: Jennifer	N d Gambill		TestAmerica - Daytor 3601 South Dixie Dri Dayton, OH 45439 Phone :(800) 572-983 Fax: (937) 294-7816 Project Location: Viry	n, OH (8733) ve 9 ginia
nin falsen sin sen sen sen sen sen sen sen sen sen se				
Analysis	Due	Expires	and all south many statements and an and a statement of the statement of the statement of the statement of the	Comments
Sample ID: NPH0573-01	Soil	San	npled: 08/03/06 08:00	
Subcontract - Outside1	08/18/06 15:00	04/28/09 08:00		Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.
Containers Supplied:				
2 oz. Glass Jar (A)				
Sample ID: NPH0573-02	Soil	San	npled: 08/03/06 09:50	
Subcontract - Outside1	08/18/06 15:00	04/28/09 09:50		Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.
Containers Supplied:				
2 oz. Glass Jar (B)			alaansaa ta'aatii ka bahayaa ka ahaa ahaa ahaa ahaa ahaa ahaa	
Sample ID: NPH0573-03	Soil	Sar	npled: 08/03/06 [1:00	
Subcontract - Outside1	08/18/06 15:00	04/28/09 11:00		Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.
Containers Supplied:				
2 oz. Glass Jar (B)				

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) (.	Zambill 14Augold	N N N N N N N N N N N N N N N N N N N
Released-By	Date Received By	B-15060855
Released By	Date Received By Tene	P22. JIC Page 1 of 1

Relinguished By:	Relinquished By:	Relinquished by Sector		Special Instructions:					MOTION DE	1770 J ( 2-26 12) (2-26 12)	1/1/2-2/2 22/1/	178-512-31 0	-8 (2-1) A-824	Fax Results:	Date Needed:	Rush (surcharges may apply)		Sampler Signature:	Sampler Name: (Print Name)	Telephone Number: $Z$	Project Manager	City/State/Zip Code:	Address:	Client Name	Test/mpene
						10000000000000000000000000000000000000			5	28	2 B	25	Ř	Date Sampled			Internet Antipercenter	M	R	2	NR N	K	Na Na	n and a start	
Date:	Date:	Date							122	100	100	2%	308	Time Sampled		n yn mae ddol y dyf yn ar y yn fan ei ddol yn fan yn ar yn yn fan yn	yes in the first state of the second s	K	24	-72	TT.	K)	Ø,	1 de	Nashv 2960 f Nashv
2124610000000000000000000000000000000000	-	Ø							F	10		20	96	G = Gr <b>a</b> b, C =	Comp	osite	and share a state of the state		R'	.2	24	Ň,	R	h	
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e.	e.	S.				Í				, k	∧ (	7	S	SL-Sludge DW GW-Groundwat	-Drini er S-	king Water -Soil/Solid	Ma	-	N.	6	ma	A			on Nghto 7204
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<b>Test</b> America
ANALYTICAL TESTING CORPORATION
Nashville Division

**COOLER RECEIPT FORM** 

BC#



NPH0573

1	Coole . Indic	r Received ate the Airbi	l/Opene II Tracki	d On8/4/ ng Number (last 4	068:00 digits for Fedex only	y) and Name of Cou	rier below:	9520	
	(	Fed-Ex	UPS	Velocity	DHL	Route	Off-street	Mis	с.
2	. Tem indic:	perature of r ate IR Gur	epresent: 1 ID#)	ative sample or ten	perature blank wh	en opened: <u>3</u> -	<u>2</u> Deg	grees Cels	ius
N	ĨA	A00466		A00750	A01124	100190	101282	1025	94
3	. Wer	e custody sea	ls on out	side of cooler?			****	SNO	NA
		a. If yes	s, how ma	any and where:		1 Front			
4	Wer	e the seals in	tact, sign	ed, and dated corro	ectly?	*****		ES.NO.	NA
5	Wer	e custody pap	pers insid	e cooler?		•••••••••••••••••••••••••••••••••••••••	•••••	<b>Æ</b> §NO.	NA
<u>1</u>	certify	that I opene	d the cool	er and answered q	uestions 1-5 (intial)			- Br	<u> </u>
6.	Wer	e custody sea	ls on con	tainers:	YES NO	an	d Intact	YES NO	(NA)
		were these	signed, a	nd dated correctly	?		••••	YESNO.	.NA
7.	Wh	at kind of p	acking r	naterial used?	Bubblewrap	Peanuts	Vermiculite	Foam 1	Insert
			Plastic	bag Paper	Other		No	ne	
8.	Co	oling proces	s:	Ice Ice-	pack Ice (d	irect contact)	Dry ice	Other	None
9.	Did a	all containers	arrive in	good condition ( u	nbroken)?			(YES)NO	NA
10	. Wei	re all contain	er labels	complete (#, date, s	igned, pres., etc)?			YESNO	.NA
.11	. Did	all container	labels an	d tags agree with o	custody papers?			YESNO	.NA
12	. a. '	Were VOA vi	ials receiv	/ed?	••••			YESNO	.NA
	b. `	Was there an	y observa	ble head space pre	esent in any VOA vi	al?		YES. NO.	.NA
<u>I c</u>	ertify	that I unload	ed the co	oler and answered	questions 6-12 (inti:	al)			
13	. a. C	)n preserved	bottles di	d the pH test strip	s suggest that prese	rvation reached the	correct pH level	? YESNO.	
	b. D	oid the bottle	labels inc	licate that the corr	ect preservatives we	ere used	•••••	NESNO	.NA
		If preserva	tion in-ho	use was needed, re	cord standard ID o	f preservative used	here	9	
14	Was	residual chlo	orine pres	sent?	••••••••••••••••••••••••	••••••	• • • • • • • • • • • • • • • • • • • •	YESNO.4	NA
<u>I c</u>	ertify (	that I checked	l for chlo	rine and pH as per	SOP and answered	questions 13-14 (ir	itial)	_~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
15.	Wei	re custody pa	pers prop	perly filled out (ink	, signed, etc)?		•••••	YESNO	.NA
16.	Did	you sign the	custody p	papers in the appro	priate place?	*********		YES NO	.NA
17.	Wer	e correct con	tainers us	sed for the analysis	requested?	•••••••		YESNO	NA
18.	Was	sufficient am	ount of s	ample sent in each	container?	••••••	••••••	ESNO	NA
<u>I c</u>	ertify t	hat I entered	this proj	ect into LIMS and	answered questions	15-18 (intial)	<u></u>	N	
<u>I co</u>	ertify t	hat I attache	d a label	with the unique LI	MS number to each	container (intial)			•
19.	Were	there Non-Co	onformar	ice issues at login	YES NO Was a	PIPE generated	YES	NO	
BIS Coe	s = Bro oler Re	ken in shipme ceipt Form	ent		LF-1			Revise	:d 3/9/06

LF-1 End of Form

Revised 3/9/06



ANALYTICAL TESTING CORPORATION

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

September 12, 2006

Client: MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn: Brent Chapman

#### SAMPLE IDENTIFICATION

H78-3 (3-4) H78-1 (1-2) H78-5 (1-2) H78-2 (2-3)

#### LAB NUMBER

P/O Nbr:

NPH1108-01 NPH1108-02 NPH1108-03 NPH1108-04

NPH1108 Work Order: AFRH Project Name: 3552060897 Project Nbr: 65378 Date Received: 08/08/06

#### **COLLECTION DATE AND TIME**

08/07/06 09:30 08/07/06 11:00 08/07/06 13:20 08/07/06 14:00

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

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The Chain(s) of Custody, 9 pages, are included and are an integral part of this report.

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

Roxanne L. Connor

Roxanne Connor Senior Project Manager

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

Work Order:	NPH1108
Project Name:	AFRH
Project Number:	3552060897
Received:	08/08/06 07:50

		A	ANALYTICAL RI	EPORT				κ.
Analyte	Result	Flag	Ünits	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1108-01 (H78-3 (.	3-4) - Soil) San	pled: 08/	07/06 09:30					
Mercury by EPA Methods 7470A/747	1A							
Mercury	ND		mg/kg	0.0984	1	08/11/06 14:59	SW846 7471A	6082192
Organochlorine Pesticides by EPA Me	thod 8081A							
Aldrin	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
delta-BHC	ND		mg/kg	0.00163	- 1	08/15/06 04:56	SW846 8081A	6082146
alpha-BHC	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
beta-BHC	ND		mg/kg	0.00316	1	08/15/06 04:56	SW846 8081A	6082146
gamma-BHC (Lindane)	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
alpha-Chlordane	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
gamma-Chlordane	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Chlordane	ND		mg/kg	0.0640	1	08/15/06 04:56	SW846 8081A	6082146
4,4'-DDD	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
4,4'-DDE	ND		mg/kg	0.00163	1 .	08/15/06 04:56	SW846 8081A	6082146
4,4'-DDT	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Dieldrin	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endosulfan I	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endosulfan II	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endosulfan sulfate	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endrin	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endrin aldehyde	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Endrin ketone	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Heptachlor	ND		mg/kg	0.00163	1 .	08/15/06 04:56	SW846 8081A	6082146
Heptachlor epoxide	ND		mg/kg	0.00163	1	08/15/06 04:56	SW846 8081A	6082146
Methoxychlor	ND		mg/kg	0.00316	1	08/15/06 04:56	SW846 8081A	6082146
Toxaphene	ND		mg/kg	0.0640	1	08/15/06 04:56	SW846 8081A	6082146
Surr: Tetrachloro-meta-xylene (63-132%)	68 %					08/15/06 04:56	SW846 8081A	6082146
Surr: Decachlorobiphenyl (39-108%)	96 %					08/15/06 04:56	SW846 8081A	6082146
Chlorinated Herbicides by EPA Method	18151A							
2,4-D	ND		mg/kg	0.0649	1	08/15/06 21:33	SW846 8151A	6082467
Dalapon	ND		mg/kg	0.162	1	08/15/06 21:33	SW846 8151A	6082467
2,4-DB	ND		mg/kg	0.0649	1	08/15/06 21:33	SW846 8151A	6082467
Dicamba	ND		mg/kg	0.0321	1	08/15/06 21:33	SW846 8151A	6082467
Dichloroprop	ND		mg/kg	0.0649	1	08/15/06 21:33	SW846 8151A	6082467
Dinoseb	ND		mg/kg	0.0649	1	08/15/06 21:33	SW846 8151A	6082467
MCPA	ND		mg/kg	3.24	1	08/15/06 21:33	SW846 8151A	6082467
MCPP	ND		mg/kg	3.24	1	08/15/06 21:33	SW846 8151A	6082467
4-Nitrophenol	ND		mg/kg	0.0321	1	08/15/06 21:33	SW846 8151A	6082467
Pentachlorophenol	ND		mg/kg	0.0321	1	08/15/06 21:33	SW846 8151A	6082467
Picloram	ND		mg/kg	0.0321	1	08/15/06 21:33	SW846 8151A	6082467
2,4,5-T	ND		mg/kg	0.0321	1	08/15/06 21:33	SW846 8151A	6082467
2,4,5-TP (Silvex)	ND		mg/kg	0.0165	1	08/15/06 21:33	SW846 8151A	6082467
Surr: Dichloroacetic Acid (55-132%)	77 %					08/15/06 21:33	SW846 8151A	6082467

Surr: Dichloroacetic Acid (55-132%)

Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020.
ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147

Brent Chapman Attn

Aldrin

Endrin

2.4-D

MCPA

MCPP

Picloram

2,4,5-T

4-Nitrophenol

Pentachlorophenol

Work Order NPH1108 AFRH Project Name: 3552060897 Project Number: 08/08/06 07:50 Received

ANALYTICAL REPORT Dilution Analysis Analyte MRL Factor Date/Time Method Result Flag Units Batch Sample ID: NPH1108-01 (H78-3 (3-4) - Soil) - cont. Sampled: 08/07/06 09:30 Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020. - cont. See Attached Report Sample ID: NPH1108-02 (H78-1 (1-2) - Soil) Sampled: 08/07/06 11:00 Mercury by EPA Methods 7470A/7471A Mercury ND mg/kg 0.0976 1 08/11/06 15:01 SW846 7471A 6082192 Organochlorine Pesticides by EPA Method 8081A ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 delta-BHC ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 alpha-BHC ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 beta-BHC ND 0.00326 08/15/06 05:25 mg/kg 1 SW846 8081A 6082146 gamma-BHC (Lindane) ND 0.00168 08/15/06 05:25 mg/kg 1 SW846 8081A 6082146 alpha-Chlordane ND 0.00168 1 08/15/06 05:25 SW846 8081A mg/kg 6082146 gamma-Chlordane ND mg/kg 0.00168 08/15/06 05:25 SW846 8081A 6082146 1 Chlordane ND mg/kg 0.0658 1 08/15/06 05:25 SW846 8081A 6082146 4,4'-DDD ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 4,4'-DDE ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 4,4'-DDT ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Dieldrin ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Endosulfan I ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Endosulfan II ND mg/kg 0.00168 08/15/06 05:25 1 SW846 8081A 6082146 Endosulfan sulfate ND 0.00168 08/15/06 05:25 mg/kg 1 SW846 8081A 6082146 ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Endrin aldehyde ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Endrin ketone ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Heptachlor ND 0.00168 mg/kg 1 08/15/06 05:25 SW846 8081A 6082146 Heptachlor epoxide ND mg/kg 0.00168 1 08/15/06 05:25 SW846 8081A 6082146 Methoxychlor 0.00329 R10 mg/kg 0.00326 1 08/15/06 05:25 SW846 8081A 6082146 Toxaphene ND mg/kg 0.0658 1 08/15/06 05:25 SW846 8081A 6082146 Surr: Tetrachloro-meta-xylene (63-132%) 70 % 08/15/06 05:25 SW846 8081A 6082146 Surr: Decachlorobiphenyl (39-108%) 123 % Z508/15/06 05:25 SW846 8081A 6082146 Chlorinated Herbicides by EPA Method 8151A ND 0.0656 08/15/06 22:04 mg/kg 1 SW846 8151A 6082467 Dalapon ND mg/kg 0.164 08/15/06 22:04 1 SW846 8151A 6082467 2,4-DB ND 0.0656 mg/kg 1 08/15/06 22:04 SW846 8151A 6082467 Dicamba ND SW846 8151A mg/kg 0.0325 1 08/15/06 22:04 6082467 Dichloroprop ND mg/kg 0.0656 1 08/15/06 22:04 SW846 8151A 6082467 Dinoseb ND mg/kg 0.0656 1 08/15/06 22:04 SW846 8151A 6082467 ND

mg/kg

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mg/kg

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08/15/06 22:04

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ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

Work Order: NPH1108 AFRH Project Name: Project Number: 3552060897 Received:

08/08/06 07:50

ANALTHUAL REFORT													
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch					
Sample ID: NPH1108-02 (H78-1 (1-	-2) - Soil) - con	t. Sample	d: 08/07/06 11:00				`						
Chlorinated Herbicides by EPA Method	8151A - cont.												
2,4,5-TP (Silvex)	ND		mg/kg	0.0167	1	08/15/06 22:04	SW846 8151A	6082467					
Surr: Dichloroacetic Acid (55-132%)	73 %					08/15/06 22:04	SW846 8151A	6082467					
Arsenic, Barium, Cadmium, Chromium	. Lead. Silver, Se	elenium by	6020										
See Attached Report	,,, ,, , , ,												
Sample ID: NPH1108-03 (H78-5 (1-	-2) - Soil) Sam	pled: 08/0	7/06 13:20										
Mercury by EPA Methods 7470A/7471	Α												
Mercury	ND		mg/kg	0.0984	1	08/11/06 15:03	SW846 7471A	6082192					
Organochlorine Pesticides by EPA Meth	nod 8081A												
Aldrin	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
delta-BHC	ND		mg/kg	0.00168	1 .	08/15/06 05:54	SW846 8081A	6082146					
alpha-BHC	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
beta-BHC	ND		mg/kg	0.00327	1	08/15/06 05:54	SW846 8081A	6082146					
gamma-BHC (Lindane)	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
alpha-Chlordane	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082140					
gamma-Chlordane	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082140					
Chlordane	ND		mg/kg	0.0661	1	08/15/06 05:54	SW046 0001A	6002140					
4,4'-DDD	ND		mg/kg	0.00168	1	08/15/06 05:54	SW046 0001A	6002140					
4,4'-DDE	ND		mg/kg	0.00168	1	08/15/06 05:54	SW046 0001A	6082140					
4,4'-DDT	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082140					
Dieldrin	ND		mg/kg	0.00168	1	08/15/06 05:54	SW040 0001A	6082140					
Endosulfan I	ND		mg/kg	0.00168	. 1	08/15/06 05:54	SW040 0001A	0082140					
Endosulfan II	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Endosulfan sulfate	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Endrin	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Endrin aldehyde	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Endrin ketone	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Hentachlor	ND		mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Hentachlor enovide			mg/kg	0.00168	l	08/15/06 05:54	SW846 8081A	6082146					
Methomichlor			mg/kg	0.00168	1	08/15/06 05:54	SW846 8081A	6082146					
Fovorbana	ND		mg/kg	0.00327	1	08/15/06 05:54	SW846 8081A	6082146					
i uxapitette	ND		mg/kg	0.0661	1	08/15/06 05:54	SW846 8081A	6082146					
Surr: Decachlorobiphenyl (39-108%)	54 % 80 %	. 25				08/15/06 05:54 08/15/06 05:54	SW846 8081A SW846 8081A	6082146 6082146					
Chlorinated Herbicides by EPA Method	8151A												
2,4-D	ND		mg/kg	0.0651	1	08/15/06 22:35	SW846 8151 A	6082467					
Dalapon	ND		mg/kg	0.163	1	08/15/06 22:35	SW846 81514	6082467					
2,4-DB	ND		mg/kg	0.0651	1	08/15/06 22:35	SW/8/6 0151 A	6002407					

_,. ~	ПD	mg/kg	0.0031	I	08/15/06 22:35	SW846 8151A	6082467
Dalapon	ND	mg/kg	0.163	1	08/15/06 22:35	SW846 8151A	6082467
2,4-DB	ND	mg/kg	0.0651	1	08/15/06 22:35	SW846 8151A	6082467
Dicamba	ND	mg/kg	0.0322	1	08/15/06 22:35	SW846 8151A	6082467
Dichloroprop	ND	mg/kg	0.0651	1	08/15/06 22:35	SW846 8151A	6082467
Dinoseb	ND	mg/kg	0.0651	1	08/15/06 22:35	SW846 8151A	6082467
MCPA	ND	mg/kg	3.25	1	08/15/06 22:35	SW846 8151A	6082467
MCPP	ND	mg/kg	3.25	1	08/15/06 22:35	SW846 8151A	6082467
5							

ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740)
	21740 Beaumeade Circle, Suite 150
	Ashburn, VA 20147
Attn	Brent Chapman

NPH1108 Work Order: AFRH Project Name: 3552060897 Project Number: 08/08/06 07:50 Received:

				Dilution	Analysis		
Analyte	Result Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NPH1108-03 (H78-5 (	1-2) - Soil) - cont. Sampl	ed: 08/07/06 13:2	0				
Chlorinated Herbicides by EPA Metho	od 8151A - cont.		1				
4-Nitrophenol	ND	mg/kg	0.0322	. 1	08/15/06 22:35	SW846 8151A	608246
Pentachlorophenol	ND	mg/kg	0.0322	1	08/15/06 22:35	SW846 8151A	608240
Picloram	ND	mg/kg	0.0322	. 1	08/15/06 22:35	SW846 8151A	608240
2.4.5-T	ND	mg/kg	0.0322	1	08/15/06 22:35	SW846 8151A	608240
2.4.5-TP (Silvex)	ND	mg/kg	0.0166	1	08/15/06 22:35	SW846 8151A	608240
Surr: Dichloroacetic Acid (55-132%)	79 %	111 <u>9</u> /11 <u>9</u>	0.0100		08/15/06 22:35	SW846 8151A SW846 8151A	608246
Arsenic, Barium, Cadmium, Chromiun	n, Lead, Silver, Selenium by	7 6020.					
See Attached Report							
Samule ID: NPH1108-04 (H78-7 (	7-3) Soil) Somplade A8	107106 14.00					
Mercury by EPA Methods 7470A/747	1A	07/00 14:00					
Mercury	ND	mg/kg	0.101	1	08/11/06 15:06	SW846 7471A	6082192
Organochlorine Pesticides by EPA Me	thod 8081A						
Aldrin	ND	mg/kg	0.00167	1	08/14/06 00:14	SW/846 8081 A	6082146
delta-BHC	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 9091A	6000140
alpha-BHC	ND	mg/kg	0.00167	1	08/14/06 00:14	SW040 0001A	6082140
beta-BHC	ND	mg/kg	0.00324	1	08/14/06 00:14	SW040 0001A	6002140
gamma-BHC (Lindane)	ND	mg/kg	0.00324	. 1	08/14/06 00:14	SW040 0001A	6082140
alpha-Chlordane	ND	mg/kg	0.00167	1	08/14/06 00:14	SW040 8081A	0082140
gamma-Chlordane	ND	mg/kg	0.00167	1	08/14/06 00:14	SW840 8081A	6082146
Chlordane	ND	mg/kg	0.0654	1	08/14/06 00:14	SW040 0001A	0082140
4 4'-DDD	ND	mg/kg	0.0034	1	08/14/06 00:14	SW846 8081A	6082146
4.4'-DDE	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	. 6082146
4.4'-DDT	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Dieldrin	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Endosulfan I	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Endosulfan II	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Endosulfan sulfate	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Endrin	ND	mg/kg	0.00167	· I	08/14/06 00:14	SW846 8081A	6082146
Endrin aldehyde	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Endrin ketone	ND	mg/kg	0.00167	i .	08/14/06 00:14	SW846 8081A	6082146
Hentachlor	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Hentschlor enovide	ND ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Methowyshler	ND	mg/kg	0.00167	1	08/14/06 00:14	SW846 8081A	6082146
Tovonhono	ND	mg/kg	0.00324	1	08/14/06 00:14	SW846 8081A	6082146
Toxaphene	ND	mg/kg	0.0654	. 1	08/14/06 00:14	SW846 8081A	6082146
Surr: Tetrachtoro-meta-xytene (63-132%) Surr: Decachlorobiphenyl (39-108%)	52 % Z5 88 %				08/14/06 00:14 08/14/06 00:14	SW846 8081A SW846 8081A	6082146
Chlorinated Herbicides by EPA Metho	d 8151A				55/14/00 00,14	57 070 0001A	0002140
2,4-D	ND	mg/kg	0.0665	1 -	08/15/06 23:36	SW846 8151 A	6082467
Dalapon	ND	mg/kg	0 166	1	08/15/06 23:36	SW846 8151A	6082407
2,4-DB	ND	mg/kg	0.0665	1	08/15/06 23:30	SW846 8151A	6082407
			0.0005	1	00/10/00 20.00	5 W 040 0131A	000240/

ANALYTICAL TESTING CORPORATION

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

NPH1108

3552060897

08/08/06 07:50

AFRH

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

Work Order:

Project Name:

Received:

Project Number:

		Aľ	NALYTICAL REPO	RT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH1108-04 (H78- Chlorinated Herbicides by EPA M	-2 (2-3) - Soil) - con ethod 8151A - cont.	ıt. Sampled	: 08/07/06 14:00					
Dichloroprop	ND		, mg/kg	0.0665	1	08/15/06 23:36	SW846 8151A	6082467
Dinoseb	ND		mg/kg	0.0665	- 1	08/15/06 23:36	SW846 8151A	6082467
MCPA	ND .	÷	mg/kg	3.32	1	08/15/06 23:36	SW846 8151A	6082467
MCPP	ND		mg/kg	3.32	1	08/15/06 23:36	SW846 8151A	6082467
4-Nitrophenol	ND		mg/kg	0.0329	1	08/15/06 23:36	SW846 8151A	6082467
Pentachlorophenol	ND		mg/kg	0.0329	1	08/15/06 23:36	SW846 8151A	6082467
Picloram	ND		mg/kg	0.0329	1	08/15/06 23:36	SW846 8151A	6082467
2,4,5-T	ND		mg/kg	0.0329	1	08/15/06 23:36	SW846 8151A	6082467
2,4,5-TP (Silvex)	ND	· · · ·	mg/kg	0.0169	1	08/15/06 23:36	SW846 8151A	6082467
Surr: Dichloroacetic Acid (55-132%)	67 %					08/15/06 23:36	SW846 8151A	6082467

Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium by 6020. See Attached Report



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TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14670 Report Date: 09/11/2006 Page: 1 of 6

Enclosed are the Analytical and Quality Control Reports for the following samples submitted to TestAmerica for analysis:

Project: NPH1108

Sample <u>Number</u>	Sample Description	Date <u>Taken</u>	Date <u>Received</u>
216089	NPH1108-01	08/07/2006	08/11/2006
216090	NPH1108-02	08/07/2006	08/11/2006
216091	NPH1108-03	08/07/2006	08/11/2006
216092	NPH1108-04	08/07/2006	08/11/2006

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica certifies that the analytical results contained herein apply only to the specific samples analyzed. Reproduction of this report is permitted only in its entirety.

Enclosure

Project Management Approval

Dayton - 3601 South Dixie Drive, Dayton, OH 45439 937-294-6856/FAX:937-294-7816 Dundee (Chicago) - 1090 Rock Road Lane, Unit 11, Dundee, IL 60118 847-783-4960/FAX:847-783-4969 Indianapolis - 6964 Hillsdale Court, Indianapolis, IN 46250 317-842-4261/FAX:317-842-4286 Pontiac - 341 W. Walton Blvd, Pontiac, MI 48340 248-332-1940/FAX:248-332-5450

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### **Analytical Report**

TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.14670 Report Date: 09/11/2006 Page: 2 of 6

#### SAMPLE NO. SAMPLE DESCRIPTION

216089

### NPH1108-01

DATE/TIME TAKEN 08/07/2006 09:30

			Reporting	1	Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete		Complete		08/15/2006	09:01		696	ekh	DT	SW 6020
Arsenic, ICPMS	<1.9	mg/Kg	<1.9		08/15/2006	09:01	510	8303	ekh	DT	SW 6020
Barium, ICPMS	34.9	mg/Kg	<0.94		08/15/2006	09:01	510	8288	ekh	DT	SW 6020
Cadmium, ICPMS	<0.94	mg/Kg	<0.94		08/15/2006	09:01	510	8357	ekh	DT	SW 6020
Chromium, ICPMS	8.4	mg/Kg	<1.9		08/15/2006	09:01	510	8208	ekh	DT	SW 6020
Lead, ICPMS	11.1	mg/Kg	<0.94		08/15/2006	09:01	510	8376	ekh	DT	SW 6020
Selenium, ICPMS	<0.94	mg/Kg	<0.94		08/15/2006	09:01	510	1923	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0,5		08/15/2006	09:01	510	8095	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/14/2006	13:00	510		jml	DT	SW 3050B

#### SAMPLE NO. 216090

SAMPLE DESCRIPTION

NPH1108-02

DATE/TIME TAKEN 08/07/2006 11:00

			Reporting	3	Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete	e	Complete		08/15/2006	09:06		696	ekh	DT	SW 6020
Arsenic, ICPMS	<2.0	mg/Kg	<2.0		08/15/2006	09:06	510	8303	ekh	DT	SW 6020
Barium, ICPMS	21.4	mg/Kg	<1.0		08/15/2006	09:06	510	8288	ekh	DT	SW 6020
Cadmium, ICPMS	<1.0	mg/Kg	<1.0		08/15/2006	09:06	510	8357	ekh	DT	SW 6020
Chromium, ICPMS	5.2	mg/Kg	<2.0		08/15/2006	09:06	510	8208	ekh	$\mathbf{DT}$	SW 6020
Lead, ICPMS	7.3	mg/Kg	<1.0		08/15/2006	09:06	510	8376	ekh	DT	SW 6020
Selenium, ICPMS	<1.0	mg/Kg	<1.0		08/15/2006	09:06	510	1923	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/15/2006	09:06	510	8095	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete	2	Complete		08/14/2006	13:00	510		jml	DT	SW 3050B

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data



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### **Analytical Report**

#### TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204

Job Number: 06.14670 Report Date: 09/11/2006 Page: 3 of 6

### SAMPLE NO. 216091

### SAMPLE DESCRIPTION NPH1108-03

DATE/TIME TAKEN 08/07/2006 13:20

				Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
		Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS		Complete		Complete		08/15/2006	09:13		696	ekh	DT	SW 6020
Arsenic, ICPMS		<1.9	mg/Kg	<1.9		08/15/2006	09:13	510	8303	ekh	DT	SW 6020
Barium, ICPMS		11.8	mg/Kg	<0.97		08/15/2006	09:13	510	8288	ekh	DT	SW 6020
Cadmium, ICPMS		<0.97	mg/Kg	<0.97		08/15/2006	09:13	510	8357	ekh	DT	SW 6020
Chromium, ICPMS	•	10.0	mg/Kg	<1.9		08/15/2006	09:13	510	8208	ekh	DT	SW 6020
Lead, ICPMS		2.66	mg/Kg	<0.97		08/15/2006	09:13	510	8376	ekh	DT	SW 6020
Selenium, ICPMS		<0.97	mg/Kg	<0.97		08/15/2006	09:13	510	1923	ekh	DT	SW 6020 Mod
Silver, ICPMS	,	<0.5	mg/Kg	<0.5		08/15/2006	09:13	510	8095	ekh	DT	SW 6020
ICPMS Digestion,	Nonaqueous	Complete		Complete		08/14/2006	13:00	510		jml	DT	SW 3050B

**SAMPLE NO.** 216092

#### SAMPLE DESCRIPTION NPH1108-04

**DATE/TIME TAKEN** 08/07/2006 13:20

				Reporting	1	Run	Run	Prep	Run	Anal.	Lab	Method
		Result	Units	Limít	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS		Complete	3	Complete		09/07/2006	18:32		706	ekh	DT	SW 6020
Arsenic, ICPMS		<2.0	mg/Kg	<2.0	I	09/07/2006	18:32	517	8354	ekh	DT	SW 6020
Barium, ICPMS		14.1	mg/Kg	<1.0		09/07/2006	18:32	517	8339	ekh	DT	SW 6020
Cadmium, ICPMS		<1.0	mg/Kg	<1.0		09/07/2006	18:32	517	8407	ekh	DT	SW 6020
Chromium, ICPMS		14.3	mg/Kg	<2.0		09/07/2006	18:32	517	8259	ekh	DT	SW 6020
Lead, ICPMS		6.6	mg/Kg	<1.0		09/07/2006	18:32	517	8424	ekh	DT	SW 6020
Selenium, ICPMS		<2.0	mg/Kg	<2.0	0	09/07/2006	18:32	517	1973	ekh	DT	SW 6020 Mod
Silver, ICPMS		<0.5	mg/Kg	<0.5		09/07/2006	18:32	517	8145	ekh	DT	SW 6020
ICPMS Digestion,	Nonaqueous	Complete	<b>e</b> .	Complete		09/06/2006		517		mja	DT	SW 3050B

I - RPD, MS and MSD recovery outside of control limits.

O - Elevated value due to sample matrix.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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Relinquished By: Date	Relinquished By: Date	Relinquished Br. Zate	× ×		Special instructions:						H 2-2/2-3) 870 H	478-571-2 8-78 B	H.2. (1-2) 22 /1	H78-3 (3-4) 8-74 /3	SAMPLE ID Z	Date Needed:	Ruch (surchamage may apply)		Sampler Signature:	Sampler Name: (Print Name)	Telephone Number: 783-72	Project Manager: SPPM:	City/State/Zip Code; Kohler	Address: 2/1/01	Testing corporation 1996	
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Cooler Received/Opened On: August 8, 2006 @ 07:50         1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:       State 1         Fed-Ex       UPS       Velocity       DHI       Route       Off-street       Misc.         2. Temperature of representative sumple or temperature blank when opened:       Image: Colsius       Degrees Colsius         (indicate IR Gun ID#)       NA       A00466       A00750       A1124       100190       IO1282       Raynger ST         3. Were castody scale on outside of cooler?       Image: Colsius       Image: Colsius       Fraction NonNA         a. If yes, how many and where:       Image: Colsius       Fraction NonNA       Image: Colsius       Fraction NonNA         4. Were the scale intact, signed, and dated correctly?       VES       and Intact       VES NO CO         Ver castody seals on containers:       VES       Image: Colsius       Vermiculite       Foam Insert         VESNO6X       Vermiculite       Foam Insert       VESNONA       Image: None         8. Cooling process:       Ice Deack       Ice direct contact)       Dry ice       Other       None         9. Did all containers arrive in good condition (unbroken)?       Image: NonNA       Image: NonNA       Image: NonNA       Image: NonNA       Im	<b>Mashville Division</b> COOLER RECEIPT FORM	NPH1108
<ol> <li>Indicate the Airbill Tracking Number (last 4 digits for Feder only) and Name of Courier below:</li> <li>Fed-Ex UPS Velocity DHL Route Off-street Misc.</li> <li>Temperature of representative sample or temperature blank when opened:</li> <li>Degreess Celsius (indicate IR Gun 10#)</li> <li>NA A00466 A00750 A01124 100190 101282 Raynger ST</li> <li>Were custody scals on outside of cooler?</li> <li>THOMT I BACK</li> <li>Were custody scals on outside of cooler?</li> <li>Were custody scals on outside of cooler?</li> <li>THOMT I BACK</li> <li>Were custody papers inside cooler?</li> <li>THOMT I BACK</li> <li>Were custody papers inside cooler?</li> <li>WES 00 and Intact</li> <li>WES NO.</li> <li>Were custody papers inside cooler?</li> <li>Were the seasing and dated correctly?</li> <li>WES 00 and Intact</li> <li>WES NO.</li> <li>What kind of packing material used?</li> <li>Where all containers arrive in good condition (unbroken)?</li> <li>Were all container labels complete (#, dats, signed, pres., etc)?</li> <li>Bal all containers arrive in good condition (unbroken)?</li> <li>Were all container labels and tags agree with custody papers?</li> <li>B. NONA</li> <li>Was there any observable head space present in any VOA vial?</li> <li>Were set contained by the cooler and answered questions 5-12 (inflah).</li> <li>A on preserved bottles did the pl Hest strips sugget that preservation reached the correct pt Heve?? YESNO.</li> <li>Did all container labels and tags agree with custody papers?</li> <li>Did the bottle habels indicate that the correct preservatives were used.</li> <li>YESNO.</li> <li>Did the bottle habels indicate that the correct preservative seed here</li> <li>YESNO.</li></ol>	Cooler Received/Opened On: August 8, 2006 @ 07:50	arrow
Ped-Ex       UPS       Velocity       DHL       Route       Off-street       Misc.         2. Temperature of representative sample or temperature blank when opened:	1. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier b	elow: <u>()                                   </u>
2. Temperature of representative sample or temperature blank when opened: Degrees Celsius (indicate IR Gun D)#) NA A00466 A00750 A01124 100190 101252 Raynger ST 3. Were custody seals on outside of cooler?	Fed-Ex UPS Velocity DHL Route	Off-street Misc.
NA       A00466       A00750       A01124       100190       101282       Raynger ST         3.       Were custody seals on outside of cooler?	2. Temperature of representative sample or temperature blank when opened:(indicate IR Gun ID#)	Degrees Celsius
	NA A00466 A00750 A01124 100190	101282 Raynger ST
<ol> <li>If yes, how many and where:</li> <li>FROMTIBACE</li> <li>Were the seals intact, signed, and dated correctly?</li> <li>Were custody papers inside cooler?</li> <li>Were custody papers inside cooler?</li> <li>Were custody seals on containers:</li> <li>YES</li> <li>and Intact</li> <li>YES NO</li> <li>Were custody seals on containers:</li> <li>YES</li> <li>and Intact</li> <li>YES</li> <li>And Intact</li> <li>YES</li> <li>YES</li> <li>YES</li> <li>And Intact</li> <li>YES</li> <li>YES</li> <li>YES</li> <li>And Intact</li> <li>YES</li> <li>YES</li></ol>	3. Were custody seals on outside of cooler?	NONA
<ol> <li>Were the seals intact, signed, and dated correctly?</li> <li>Were custody papers inside cooler?</li> <li>Were custody papers inside cooler?</li> <li>Were custody seals on containers:</li> <li>VES</li> <li>Were custody seals on containers:</li> <li>VES</li> <li>Mere these signed, and dated correctly?</li> <li>YES</li> <li>What kind of packing material used?</li> <li>Webblewrap</li> <li>Peanuts</li> <li>Vermiculite</li> <li>Foam Insert</li> <li>Plastic bag</li> <li>Paper</li> <li>Other</li> <li>None</li> <li>Cooling process:</li> <li>Ice- pack</li> <li>Ice (direct contact)</li> <li>Dry ice</li> <li>Other</li> <li>None</li> <li>Cooling process:</li> <li>Ice- pack</li> <li>Ice (direct contact)</li> <li>Dry ice</li> <li>Other</li> <li>None</li> <li>Cooling process:</li> <li>Ice- pack</li> <li>Ice (direct contact)</li> <li>Dry ice</li> <li>Other</li> <li>None</li> <li>Cooling process:</li> <li>Ice- pack</li> <li>Ice (direct contact)</li> <li>Dry ice</li> <li>Other</li> <li>NonNA</li> <li>Were any observable head space present in any VOA vial?</li> <li>YESNONA</li> <li>Icertify that I unloaded the cooler and answered questions 6-12 (Initia)</li> <li>Icertify that I unloaded the pH test strips suggest that preservation reached the correct pH level? YESNONA</li> <li>If preservation in-house was needed, record standard ID of preservative used here</li> <li>Icertify that I checked for chlorine and pH as per SOP and answered questions 13-14 (Initia)</li> <li>Icertify that I entered this projec</li></ol>	a. If yes, how many and where:	É
<ol> <li>Were custody papers inside cooler?</li></ol>	4. Were the seals intact, signed, and dated correctly?	
Icertify that I opened the cooler and answered questions 1-5 (initial)	5. Were custody papers inside cooler?	
6. Were custody seals on containers:       YES       and Intact       YES       NO         were these signed, and dated correctly?       YES       YES       YES       YES       YES       YES       NO       NO         7. What kind of packing material used?       YEB       YEB       YES       YES       NO       NO         8. Cooling process:       Tee       Ice-pack       Ice (direct contact)       Dry ice       Other       None         9. Did all containers arrive in good condition (unbroken)?       Were all container labels complete (#, date, signed, pres., etc)?       WES       NO       NA         10. Were all container labels and tags agree with custody papers?       WES       YES       NO       NA         12. a. Were VOA vials received?       YES       YES       NO       YES       NO       NA         b. Was there any observable head space present in any VOA vial?       YES       YES       NO       YES       NO       NA         b. Was there any observable head space present in any VOA vial?       YES       YES       NO       NA         b. Did the bottle labels indicate that the correct preservatives were used       YES       YES       NO       NA         b. Did the bottle labels indicate that the correct preservative used here       YES       YES<	I certify that I opened the cooler and answered questions 1-5 (intial)	THE
were these signed, and dated correctly?       YESNO. (A)         7. What kind of packing material used?       weblewrap       Peanuts       Vermiculite       Foam Insert         Plastic bag       Paper       Other       None         8. Cooling process:       Ice       Ice-pack       Ice (direct contact)       Dry ice       Other       None         9. Did all containers arrive in good condition (unbroken)?       Ice. NoNA       Ice. NoNA       Ice. NoNA         10. Were all container labels complete (#, date, signed, pres., etc)?       Ice. NoNA       Ice. NoNA         11. Did all container labels and tags agree with custody papers?       Ice. NoNA       Ice. NoNA         12. a. Were VOA vials received?       YESNO. (M)       NoNA         13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YESNO. (M)       If preservation in-house was needed, record standard ID of preservative used here       YESNO. (M)         14. Was residual chlorine present?       YESNO. (M)       Icertify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)	6. Were custody seals on containers: YES NO and Intac	et YES NO NA
7. What kind of packing material used?       Rubblewrap       Peanuts       Vermiculite       Foam Insert         Plastic bag       Paper       Other       None         8. Cooling process:       Ice       Ice-pack       Ice (direct contact)       Dry ice       Other       None         9. Did all containers arrive in good condition (unbroken)?       Ice.NoNA       Ice.NoNA       Ice.NoNA         10. Were all container labels complete (#, date, signed, pres., etc)?       Ice.NoNA       Ice.NoNA         11. Did all container labels and tags agree with custody papers?       Ice.NoNA       Ice.NoNA         12. a. Were VOA vials received?       YESNONA       YESNONA         b. Was there any observable head space present in any VOA vial?       YESNONA         13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YESNONA         b. Did the bottle labels indicate that the correct preservatives were used       YESNONA         If preservation in-house was needed, record standard ID of preservative used here       YESNONA         14. Was residual chlorine present?       YESNONA         15. Were custody papers properly filled out (ink, signed, etc)?       YESNONA         16. Did you sign the custody papers in the appropriate place?       YESNONA         17. Were c	were these signed, and dated correctly?	YESNONA
Plastic bag       Paper       Other	7. What kind of packing material used? Kubblewrap Peanuts Ver	miculite Foam Insert
8. Cooling process:       Ice       Ice-pack       Ice (direct contact)       Dry ice       Other       None         9. Did all containers arrive in good condition (unbroken)?       Ice (direct contact)       Dry ice       Other       None         10. Were all containers arrive in good condition (unbroken)?       Ice (direct contact)       Ice (Dry ice       Other       None         10. Were all container labels complete (#, date, signed, pres., etc)?       Ice None       Ice None       Ice None         11. Did all container labels and tags agree with custody papers?       Ice None       Ice None       Ice None         12. a. Were VOA vials received?       YESNONA       YESNONA       Ice	Plastic bag Paper Other	None
<ul> <li>9. Did all containers arrive in good condition (unbroken)?</li> <li>9. Did all container labels complete (#, date, signed, pres., etc)?</li> <li>10. Were all container labels complete (#, date, signed, pres., etc)?</li> <li>11. Did all container labels and tags agree with custody papers?</li> <li>12. a. Were VOA vials received?</li> <li>12. a. Were VOA vials received?</li> <li>12. a. Were VOA vials received?</li> <li>13. a. On preserved bettles did the pH test strips suggest that preservation reached the correct pH level? YESNONA</li> <li>14. Did the bottle labels indicate that the correct preservatives were used.</li> <li>15. Were custody papers properly filled out (ink, signed, etc)?</li> <li>15. Were custody papers properly filled out (ink, signed, etc)?</li> <li>16. Did you sign the custody papers in the appropriate place?</li> <li>17. NONA</li> <li>18. Was sufficient amount of sample sent in each container?</li> <li>19. Were there Non-Conformance issues at login YES NO. Was a PIPE generated</li> <li>YESNO. #</li> </ul>	8. Cooling process: Ice-pack Ice (direct contact) Dr	y ice Other None
<ol> <li>Were all container labels complete (#, date, signed, pres., etc)?</li></ol>	9. Did all containers arrive in good condition ( unbroken)?	ES.NO.NA
11. Did all container labels and tags agree with custody papers?       (ES).NONA         12. a. Were VOA vials received?       YESNONA         12. a. Were VOA vials received?       YESNONA         b. Was there any observable head space present in any VOA vial?       YESNONA         13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YESNONA       Image: NoNA         b. Did the bottle labels indicate that the correct preservatives were used.       YESNONA         If preservation in-house was needed, record standard ID of preservative used here       YESNONA         14. Was residual chlorine present?       YESNONA         15. Were custody papers properly filled out (ink, signed, etc)?       Image: NoNA         16. Did you sign the custody papers in the appropriate place?       Image: NoNA         17. Were correct containers used for the analysis requested?       Image: NoNA         18. Was sufficient amount of sample sent in each container?       Image: NoNA         19. Were there Non-Conformance issues at login YES (NO) Was a PIPE generated       YES (NO) #	10. Were all container labels complete (#, date, signed, pres., etc)?	RES.NO.NA
<ul> <li>12. a. Were VOA vials received?</li></ul>	11. Did all container labels and tags agree with custody papers?	VESD.NONA
<ul> <li>b. Was there any observable head space present in any VOA vial?</li></ul>	12. a. Were VOA vials received?	VES. NO.) NA
I certify that I unloaded the cooler and answered questions 6-12 (intial)	b. Was there any observable head space present in any VOA vial?	YES. NO
<ul> <li>13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct pH level? YESNONA</li> <li>b. Did the bottle labels indicate that the correct preservatives were used</li></ul>	I certify that I unloaded the cooler and answered questions 6-12 (initial)	
<ul> <li>b. Did the bottle labels indicate that the correct preservatives were used</li></ul>	13. a. On preserved bottles did the pH test strips suggest that preservation reached the correct	t pH level? VES NO NA
If preservation in-house was needed, record standard ID of preservative used here	b. Did the bottle labels indicate that the correct preservatives were used	VES NO NA
14. Was residual chlorine present?       YESNONA <u>I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)</u> Image: Certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)         15. Were custody papers properly filled out (ink, signed, etc)?       Image: Certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)         16. Did you sign the custody papers in the appropriate place?       Image: CertifyNONA         17. Were correct containers used for the analysis requested?       Image: CertifyNONA         18. Was sufficient amount of sample sent in each container?       Image: Certify that I entered this project into LIMS and answered questions 15-18 (intial)         19. Were there Non-Conformance issues at login YES NO       Was a PIPE generated       YES NO #	If preservation in-house was needed, record standard ID of preservative used here	
I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (initial).       Image: Constraint of the constraint of the custody papers in the appropriate place?         16. Did you sign the custody papers in the appropriate place?       Image: Constraint of the custody papers in the appropriate place?         17. Were correct containers used for the analysis requested?       Image: Constraint of the custody papers in the appropriate place?         18. Was sufficient amount of sample sent in each container?       Image: Constraint of the custody papers in the analysis requestions 15-18 (initial).         19. Were there Non-Conformance issues at login YES (NO)       Was a PIPE generated       YES (NO) #	14. Was residual chlorine present?	YES. NO.
15. Were custody papers properly filled out (ink, signed, etc)?	I certify that I checked for chlorine and pH as per SOP and answered questions 13-14 (intial)	
16. Did you sign the custody papers in the appropriate place?       Image: Container in the appropriate place?         17. Were correct containers used for the analysis requested?       Image: Container in the appropriate place?         18. Was sufficient amount of sample sent in each container?       Image: Container in the appropriate place?         18. Was sufficient amount of sample sent in each container?       Image: Container in the appropriate place?         19. Were there Non-Conformance issues at login YES (NO)       Was a PIPE generated YES (NO) #	15. Were custody papers properly filled out (ink, signed, etc)?	
17. Were correct containers used for the analysis requested?       (ES).NONA         18. Was sufficient amount of sample sent in each container?       (ES).NONA <u>I certify that I entered this project into LIMS and answered questions 15-18 (intial)</u> (Intial) <u>I certify that I attached a label with the unique LIMS number to each container (intial)</u> (Intial)         19. Were there Non-Conformance issues at login YES NO       Was a PIPE generated YES NO #	16. Did you sign the custody papers in the appropriate place?	KES NO NA
18. Was sufficient amount of sample sent in each container?       YES.NONA <u>I certify that I entered this project into LIMS and answered questions 15-18 (intial)</u> YES.NONA <u>I certify that I attached a label with the unique LIMS number to each container (intial)</u> YES         19. Were there Non-Conformance issues at login YES NO       Was a PIPE generated YES NO #	17. Were correct containers used for the analysis requested?	ESLNONA
I certify that I entered this project into LIMS and answered questions 15-18 (intial)         I certify that I attached a label with the unique LIMS number to each container (intial)         19. Were there Non-Conformance issues at login YES NO    Was a PIPE generated YES NO #	18. Was sufficient amount of sample sent in each container?	WESLNONA
I certify that I attached a label with the unique LIMS number to each container (intial)	I certify that I entered this project into LIMS and answered questions 15-18 (intial)	
19. Were there Non-Conformance issues at login YES NO Was a PIPE generated YES NO #	I certify that I attached a label with the unique LIMS number to each container (intial)	and the second s
	19. Were there Non-Conformance issues at login YES NO Was a PIPE generated	VES NO #

BIS = Broken in shipment Cooler Receipt Form

LF-1 End of Form

Revised 3/9/06

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

		AN	ALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-01 (G76-4	(7.5-9) - So	il) Samp	led: 08/16/06	11:30				
Polychlorinated Biphenyls by EPA M	ethod 8082							
PCB-1016	ND		ma/ka	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1221	ND		mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1232	ND		mg/kg mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1242	ND		mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1248	ND		mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1254	ND		mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
PCB-1260	ND		mg/kg	0.0331	1	08/26/06 21:01	SW846 8082	6084003
Surr: Tetrachloro-meta-xylene (63-132%) Surr: Decachlorobiphenyl (39-108%)	51 % 74 %	<i>Z6</i>				08/26/06 21:01 08/26/06 21:01	SW846 8082 SW846 8082	6084003 6084003
Semivolatile Organic Compounds by	EPA Method	8270C						
Acenaphthene	ND	02100	mø/kø	0 325	1	08/19/06 22:48	SW846 8270C	6083593
Acenaphthylene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Anthracene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Benzo (a) anthracene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Benzo (a) pyrene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Benzo (b) fluoranthene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Benzo (g.h.i) pervlene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Benzo (k) fluoranthene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
4-Bromophenyl phenyl ether	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Butyl benzyl phthalate	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Carbazole	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
4-Chloro-3-methylphenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
4-Chloroaniline	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Bis(2-chloroethoxy)methane	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Bis(2-chloroethyl)ether	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Bis(2-chloroisopropyl)ether	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2-Chloronaphthalene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2-Chlorophenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
4-Chlorophenyl phenyl ether	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Chrysene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Dibenz (a,h) anthracene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Dibenzofuran	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Di-n-butyl phthalate	ND		mg/kg	0.325	- 1	08/19/06 22:48	SW846 8270C	6083593
1,4-Dichlorobenzene	ND		mg/kg	0.325	. 1	08/19/06 22:48	SW846 8270C	6083593
1,2-Dichlorobenzene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
1,3-Dichlorobenzene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
3.3'-Dichlorobenzidine	ND		mg/kg	0.651	1	08/19/06 22:48	SW846 8270C	6083593
2.4-Dichlorophenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Diethyl phthalate	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2,4-Dimethylphenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Dimethyl phthalate	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
4,6-Dinitro-2-methylphenol	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
2,4-Dinitrophenol	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

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

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

		AN	ALYTICAL	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-01 (G76-4	(7.5-9) - S	oil) - cont	. Sampled: (	08/16/06 11:30				
Semivolatile Organic Compounds by	EPA Metho	d 8270C - o	cont.					
2 6-Dinitrotoluene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2.4-Dinitrotoluene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
)i-n-octyl phthalate	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Bis(2-ethylhexyl)nhthalate	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Huoranthene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Tuorene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
lexachlorobenzene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
lexachlorobutadiene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
fexachlorocyclopentadiene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
lexachloroethane	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
ndeno (1.2.3-cd) pyrene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
sophorone	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
P-Methylnaphthalene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
P-Methylphenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
3/4-Methylphenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Nanhthalene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
-Nitroaniline	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
-Nitroaniline	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
4-Nitroaniline	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
Nitrobenzene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
L-Nitrophenol	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
Nitrophenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
N-Nitrosodinhenvlamine	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
N-Nitrosodi-n-propylamine	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Pentachloronhenol	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
henanthrene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Phenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
Ovrene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2 4-Trichlorobenzene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
-Methylnanhthalene	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2 4 6-Trichlorophenol	ND		mg/kg	0.325	1	08/19/06 22:48	SW846 8270C	6083593
2, 4, 5-Trichlorophenol	ND		mg/kg	0.813	1	08/19/06 22:48	SW846 8270C	6083593
Surr: Ternhenvl-d14 (41-117%)	77 %		mg ng	0.015	•	08/19/06 22:48	SW846 8270C	6083593
Surr: 2.4.6-Tribromophenol (21-125%)	74 %					08/19/06 22:48	SW846 8270C	6083593
Surr: Phenol-d5 (33-109%)	61 %					08/19/06 22:48	SW846 8270C	6083593
Surr: 2-Fluorobiphenyl (35-106%)	59 %					08/19/06 22:48	SW846 8270C	6083593
Surr: 2-Fluorophenol (26-105%)	57 %					08/19/06 22:48	SW846 8270C	6083593
Surr: Nitrobenzene-d5 (10-153%)	61 %					08/19/06 22:48	SW846 8270C	6083593
Extractable Petroleum Hydrocarbons								
Diesel	5.73		mg/kg	4.91	1	08/21/06 21:08	SW846 8015B	6083590
Surr: o-Terphenyl (56-143%)	74 %					08/21/06 21:08	SW846 8015B	6083590

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

		ANA	LYTICAL REPOI	RT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-02 (G48-2	(1-2) - Soil	) Sampled:	08/16/06 09:15					
Mercury by EPA Methods 7470A/74	71A							
Aercury	ND		mg/kg	0.0976	1	08/23/06 14:25	SW846 7471A	6084215
Organachlaring Dastisidas by EDA M	lathad 2021 A		0.0					
Organochionne Pesticides by EPA M			Л	0.001/7	1	00/00/07 00.00	CUM046 0001 4	(00 1000
	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
leha DHC	ND		mg/kg	0.00167	1	08/29/06 20:09	SW840 8081A	6084002
IIPNA-BHC	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
DUC (Lindene)	ND		mg/kg	0.00325	1.	08/29/06 20:09	SW846 8081A	6084002
amma-BHC (Lindane)	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
lipna-Chlordane	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
amma-Chlordane	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
chlordane	ND		mg/kg	0.0657	1	08/29/06 20:09	SW846 8081A	6084002
I,4'-DDD	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
I,4'-DDE	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
4,4' <b>-</b> DDT	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Dieldrin	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endosulfan I	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endosulfan II	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endosulfan sulfate	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endrin	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endrin aldehyde	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Endrin ketone	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
leptachlor	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
leptachlor epoxide	ND		mg/kg	0.00167	1	08/29/06 20:09	SW846 8081A	6084002
Methoxychlor	ND		mg/kg	0.00325	1	08/29/06 20:09	SW846 8081A	6084002
Toxaphene	ND		mg/kg	0.0657	1	08/29/06 20:09	SW846 8081A	6084002
Surr: Tetrachloro-meta-xylene (63-132%)	94 %					08/29/06 20:09	SW846 8081A	6084002
Surr: Decachlorobiphenyl (39-108%)	92 %					08/29/06 20:09	SW846 8081A	6084002
Chlorinated Herbicides by EPA Meth	nod 8151A		ана стала се					
2,4-D	ND		mg/kg	0.0667	1	08/30/06 22:00	SW846 8151A	6085510
Dalapon	ND		mg/kg	0.167	1	08/30/06 22:00	SW846 8151A	6085510
2,4-DB	ND		mg/kg	0.0667	1	08/30/06 22:00	SW846 8151A	6085510
Dicamba	ND		mg/kg	0.0330	1	08/30/06 22:00	SW846 8151A	6085510
Dichloroprop	ND		mg/kg	0.0667	1	08/30/06 22:00	SW846 8151A	6085510
Dinoseb	ND		mg/kg	0.0667	1	08/30/06 22:00	SW846 8151A	6085510
ИСРА	ND		mg/kg	3.33	1	08/30/06 22:00	SW846 8151A	6085510
ИСРР	ND		mg/kg	3.33	1	08/30/06 22:00	SW846 8151A	6085510
l-Nitrophenol	ND		mg/kg	0.0330	1	08/30/06 22:00	SW846 8151A	6085510
Pentachlorophenol	ND		mg/kg	0.0330	1	08/30/06 22:00	SW846 8151A	6085510
Picloram	ND		mg/kg	0.0330	1	08/30/06 22:00	SW846 8151A	6085510
2.4.5 <b>-</b> T	ND		mg/kg	0.0330	1	08/30/06 22:00	SW846 8151A	6085510
2.4.5-TP (Silvex)	ND		mg/kg	0.0170	1	08/30/06 22:00	SW846 8151A	6085510
Surr: Dichloroacetic Acid (55-132%)	*	CF6. ZX			•	08/30/06 22:00	SW846 81514	6085510
		ve v, each				55,50,00 22.00	2001001010171	00000010

As, Ba, Cd, Cr, Pb, Se, Ag by 6020

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Work Order:NPH2446Project Name:AFRHProject Number:3552060897Received:08/17/06 08:00

#### **ANALYTICAL REPORT** Dilution Analysis Method MRL **Date/Time** Analyte Factor Result Flag Units Batch Sample ID: NPH2446-02 (G48-2 (1-2) - Soil) - cont. Sampled: 08/16/06 09:15 As, Ba, Cd, Cr, Pb, Se, Ag by 6020 - cont. See Attached Report Sample ID: NPH2446-03 (G48-4 (1-2) - Soil) Sampled: 08/16/06 09:30 Mercury by EPA Methods 7470A/7471A 0.137 mg/kg 0.0971 1 08/23/06 14:27 SW846 7471A 6084215 Mercury Organochlorine Pesticides by EPA Method 8081A 08/29/06 20:38 SW846 8081A 6084002 ND 0.00837 5 Aldrin mg/kg delta-BHC ND mg/kg 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 ND 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 alpha-BHC mg/kg 5 ND 0.0162 08/29/06 20:38 SW846 8081A 6084002 beta-BHC mg/kg 5 08/29/06 20:38 SW846 8081A 6084002 ND 0.00837 gamma-BHC (Lindane) mg/kg 5 08/29/06 20:38 SW846 8081A 6084002 alpha-Chlordane ND mg/kg 0.00837 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 gamma-Chlordane ND mg/kg 5 08/29/06 20:38 SW846 8081A 6084002 Chlordane ND mg/kg 0.328 ND 5 08/29/06 20:38 SW846 8081A 6084002 4.4'-DDD mg/kg 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 4,4'-DDE ND mg/kg 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 4,4'-DDT ND mg/kg 0.00837 Dieldrin ND mg/kg 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 5 ND 0.00837 08/29/06 20:38 SW846 8081A 6084002 Endosulfan I mg/kg 5 08/29/06 20:38 SW846 8081A 6084002 ND mg/kg 0.00837 Endosulfan II 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 Endosulfan sulfate ND mg/kg 08/29/06 20:38 SW846 8081A 6084002 5 Endrin ND mg/kg 0.00837 ND mg/kg 0.00837 5 08/29/06 20:38 SW846 8081A 6084002 Endrin aldehyde 5 08/29/06 20:38 SW846 8081A 6084002 0.00837 Endrin ketone ND mg/kg 08/29/06 20:38 SW846 8081A 6084002 Heptachlor ND 0.00837 5 mg/kg 5 08/29/06 20:38 SW846 8081A 6084002 Heptachlor epoxide ND mg/kg 0.00837 ND 0.0162 5 08/29/06 20:38 SW846 8081A 6084002 Methoxychlor mg/kg ND 0.328 5 08/29/06 20:38 SW846 8081A 6084002 Toxaphene mg/kg 130 % 08/29/06 20:38 SW846 8081A 6084002 Surr: Tetrachloro-meta-xylene (63-132%) 110 % Z308/29/06 20:38 SW846 8081A 6084002 Surr: Decachlorobiphenyl (39-108%) Chlorinated Herbicides by EPA Method 8151A 2,4**-**D ND mg/kg 0.0665 1 08/28/06 12:15 SW846 8151A 6084743 ND 0.167 1 08/28/06 12:15 SW846 8151A 6084743 Dalapon mg/kg 08/28/06 12:15 SW846 8151A 6084743 2,4-DB ND mg/kg 0.0665 1 ND 0.0329 1 08/28/06 12:15 SW846 8151A 6084743 mg/kg Dicamba 08/28/06 12:15 SW846 8151A 6084743 Dichloroprop ND mg/kg 0.0665 1 Dinoseb ND mg/kg 0.0665 1 08/28/06 12:15 SW846 8151A 6084743 ND 3.32 1 08/28/06 12:15 SW846 8151A 6084743 MCPA mg/kg 1 08/28/06 12:15 SW846 8151A 6084743 ND 3.32 MCPP mg/kg ND 0.0329 1 08/28/06 12:15 SW846 8151A 6084743 4-Nitrophenol mg/kg ND 0.0329 1 08/28/06 12:15 SW846 8151A 6084743 Pentachlorophenol mg/kg Picloram ND mg/kg 0.0329 1 08/28/06 12:15 SW846 8151A 6084743 2,4,5-T ND 0.0329 1 08/28/06 12:15 SW846 8151A 6084743 mg/kg

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
ample ID: NPH2446-03RE1 (G	48-4 (1-2)	- Soil) - co	nt. Sampled:	08/16/06 09:30				Mit gladidh hitaday yaxay
Chlorinated Herbicides by EPA Meth	od 8151A -	cont						
4 5-TP (Silvey)	ND	cont.	malka	0.0170	1	08/28/06 12:15	SW016 0151 A	6091712
Furr: Dichlorogentic Acid (55-132%)	44 %	CE6 7Y	mg/kg	0.0170	1	08/28/00 12.15	SW 840 8151A	6091712
	77 70	CP0, ZA	•			00/20/00 12.15	5W 840 8151A	0004743
As, Ba, Cd, Cr, Pb, Se, Ag by 6020 See Attached Report								
ample ID: NPH2446-04 (G48-5	(1-2) - So	il) Samnled	• 08/16/06 0	0.45				
Maroum by EDA Mathada 7470 A /747	(1- <i>22)</i> - 130	ii) Sampicu	. 00/10/00 0	2.40				
Mercury by EFA Methods 7470A/747	ND :		(1	0.0004	1	00/00/06 14 00	CHIOLC FLEL	(00.101.5
viercury	ND		mg/kg	0.0984	1	08/23/06 14:29	SW846 7471A	6084215
Organochlorine Pesticides by EPA Me	ethod 8081	Α.						
Aldrin	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
lelta-BHC	ND		mg/kg	0.00166	. 1	08/29/06 21:07	SW846 8081A	6084002
lpha-BHC	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
octa-BHC	ND		mg/kg	0.00323	1	08/29/06 21:07	SW846 8081A	6084002
amma-BHC (Lindane)	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
lpha-Chlordane	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
amma-Chlordane	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Chlordane	ND		mg/kg	0.0653	1	08/29/06 21:07	SW846 8081A	6084002
,4'-DDD	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
,4'-DDE	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
-,4' <b>-</b> DDT	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Dieldrin	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
endosulfan I	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Endosulfan II	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Endosulfan sulfate	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Endrin	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Endrin aldehyde	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Endrin ketone	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Ieptachlor	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
leptachlor epoxide	ND		mg/kg	0.00166	1	08/29/06 21:07	SW846 8081A	6084002
Aethoxychlor	ND		mg/kg	0.00323	1	08/29/06 21:07	SW846 8081A	6084002
oxaphene	ND		mg/kg	0.0653	1	08/29/06 21:07	SW846 8081A	6084002
urr: Tetrachloro-meta-xylene (63-132%) urr: Decachlorobiphenyl (39-108%)	126 % 98 %					<i>08/29/06 21:07</i> <i>08/29/06 21:07</i>	SW846 8081A SW846 8081A	6084002 6084002
Chlorinated Herbicides by EPA Metho	od 8151A							
4-D	ND		mo/ko	0.0667	1	08/28/06 12:46	SW846 8151A	6084743
Palapon	ND		mg/kg	0.167	1	08/28/06 12:46	SW846 8151A	6084743
4-DB	ND		mg/kg mg/kg	0.0667	1	08/28/06 12:46	SW846 8151A	6084743
Dicamba	ND		mg/kg	0.0330	1	08/28/06 12:46	SW846 8151A	6084743
Dichloroprop	ND		mg/kg	0.0667	1	08/28/06 12:46	SW846 8151A	6084743
Dinoseb	ND		mø/kø	0.0667	1	08/28/06 12:46	SW846 81514	6084743
ЛСРА	ND		mg/kg	3 3 3	1	08/28/06 12:46	SW846 81514	6084743
ЛСРР	ND		mø/kø	3 33	1	08/28/06 12:46	SW846 8151A	6084743
			IIIE/ KE	5.55	1	00/20/00 12.40	5 W 040 0131A	000474

# Test/Merica

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

		AN	ALYTICAL	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-04RE1 (G	48-5 (1-2)	- Soil) - co	nt. Sampled	l: 08/16/06 09:45				
Chlorinated Herbicides by EPA Meth	nod 8151A -	cont.						
4-Nitrophenol	ND		mg/kg	0.0330	1	08/28/06 12:46	SW846 8151A	6084743
Pentachlorophenol	ND		mg/kg	0.0330	1	08/28/06 12:46	SW846 8151A	6084743
Picloram	ND		mg/kg	0.0330	1	08/28/06 12:46	SW846 8151A	6084743
2.4.5-T	ND		mg/kg	0.0330	1	08/28/06 12:46	SW846 8151A	6084743
2.4.5-TP (Silvex)	ND		mg/kg	0.0170	1	08/28/06 12:46	SW846 8151A	6084743
Surr: Dichloroacetic Acid (55-132%)	10 %	CF6, ZX	88		_	08/28/06 12:46	SW846 8151A	6084743
As. Ba. Cd. Cr. Pb. Se. Ag by 6020								
See Attached Report			,					
Sample ID: NPH2446-05 (G76-1	(10.5-12)	- Soil) San	nled: 08/16	5/06 10:30				
Polychlorinated Biphenyls by EPA M	1ethod 8082							
PCB-1016	ND		malka	0.0328	. 1	08/26/06 21:23	SW846 8082	6084003
PCB-1221	ND		mg/kg	0.0328	1	08/26/06 21:23	SW846 8082	6084003
PCB 1232	ND		mg/kg	0.0328	1	08/26/06 21:23	SW846 8082	6084003
PCP 1242	ND		mg/kg	0.0328	1	08/26/06 21:23	SW846 8082	6084003
DCD 1242	ND		mg/kg	0.0328	1	08/26/06 21:23	SW040 8082	6004003
DCD 1254	ND		mg/kg	0.0328	1	08/26/06 21:23	SW840 8082	6004003
PCD 1260	ND		mg/kg	0.0328	1	08/20/00 21:23	SW040 8082	6094003
FCB-1200 Sumu Tetrachlono mota milano (62, 1220/)	ND 65.0/		mg/kg	0.0328	1	08/20/00 21.23	SW040 0002	0004003
Surr: Decachlorobiphenyl (39-108%)	86 %					08/26/06 21:23	SW846 8082 SW846 8082	6084003
Semivolatile Organic Compounds by	EPA Metho	d 8270C						
Acenaphthene	ND		ma/ka	0 332	1	08/19/06 23:51	SW846 8270C	6083593
Acenaphthylene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Anthracene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Benzo (a) anthracene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Benzo (a) pyrene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Benzo (b) fluoranthene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Benzo (g h i) pervlene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Benzo (k) fluoranthene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
4-Bromonhenvl nhenvl ether	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Butyl benzyl phthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Carbazole	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
4-Chloro-3-methylphenol	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
4-Chloroaniline	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Ris(2-chloroethovy)methane	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083595
Bis(2-chloroethul)ether	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083503
Dis(2-chloroisonronyl)ether	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083503
2 Chloronanhthalene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083503
2-Chlorophenol			mg/kg mg/kg	0.332	1	08/10/06 22.51	SW846 9270C	6083203
4 Chloronhenvil nhenvil ather	ND		mg/kg	0.332	۶ ۱	08/10/06 22:51	SW846 92700	6083293
Chrussen			mg/kg	0.332	1	08/10/06 22:51	SW846 9270C	6002593
Dibang (a h) anthrocens	ND		mg/kg	0.332	1	08/10/06 22:51	SW040 02/UC	6002573
Dibonzofuran	ND		mg/kg	0.332	1	08/10/06 22:51	SW040 82/00	6082502
Dibenzoluran	IND		mg/kg	0.332	1	06/19/00 23:31	5 W 840 8270C	0083393

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman Attn

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

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

		AN	IALYTICAL R	REPORT				
					Dilution	Analysis		
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NPH2446-05 (G7	76-1 (10.5-12) -	Soil) - co	nt. Sampled:	08/16/06 10:30				
Semivolatile Organic Compound	s by EPA Method	18270C - 0	cont.					
Di-n-butyl phthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
4-Dichlorobenzene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2-Dichlorobenzene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
3'-Dichlorobenzidine	ND		mg/kg	0.665	1	08/19/06 23:51	SW846 8270C	6083593
2 4-Dichlorophenol	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Diethyl nhthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2 4-Dimethylphenol	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Dimethyl phthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
4 6-Dinitro-2-methylphenol	ND		mg/kg	0.830	1	08/19/06 23:51	SW846 8270C	6083593
2 4-Dinitrophenol	ND		mg/kg	0.830	1	08/19/06 23:51	SW846 8270C	6083593
2.6-Dinitrotoluene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2 4-Dinitrotoluene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Di-n-octyl phthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Bis(2-ethylbexyl)nhthalate	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Fluoranthene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Fluorene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Hevachlorobenzene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Hexachlorobutadiene	ND ,		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Hexachlorocyclopentadiene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Hexachloroethane	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
ndeno (1.2.3-cd) pyrene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
sophorope	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2-Methylpanhthalene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2-Methylinaphulaiene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083595
3/4 Mathylphenol	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083333
Nanhthalana	ND		mg/kg	0.332	1	08/19/00 23:51	SW846 8270C	6003393
	ND		mg/kg	0.332	1	08/19/00 23:51	SW040 0270C	6003595
	ND		mg/Kg	0.830	1	08/19/00 23:51	SW040 0270C	0003393
	ND		mg/kg	0.830	1	08/19/06 23:31	SW846 8270C	0083393
	ND		mg/kg	0.830	1	08/19/00 23:31	SW846 8270C	0083393
1 Nitrophonal	ND		mg/kg	0.332	1	08/19/00 23:51	SW 840 8270C	0083393
-INITOPRENOI	ND		mg/kg	0.830	1	08/19/06 23:51	SW846 8270C	0083593
2-Nitrophenoi	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
N-INitrosodiphenylamine	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
N-INitrosodi-n-propylamine	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
	ND		mg/kg	0.830	1	08/19/06 23:51	SW846 8270C	6083593
nenanthrene	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
Fyrene	ND		mg/kg	0.332	1	08/19/06 23:51	5W846 8270C	6083593
1,2,4-1 richlorobenzene	ND		mg/kg	0.332	1	08/19/06 23:51	5 W 846 8270C	6083593
	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2,4,6-1 richlorophenol	ND		mg/kg	0.332	1	08/19/06 23:51	SW846 8270C	6083593
2,4,5-1 richlorophenol	ND		mg/kg	0.830	1	08/19/06 23:51	SW846 8270C	6083593
surr: Terphenyl-d14 (41-117%)	81 %					08/19/06 23:51	SW846 8270C	6083593

# Test/Merica

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147

Attn Brent Chapman

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

		ANA	LYTICAL F	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
ample ID: NPH2446-05 (G76-1	(10.5-12) -	Soil) - con	t. Sampled:	08/16/06 10:30				
Semivolatile Organic Compounds by	EPA Method	1 8270C - co	nt.					
urr: 2 4 6-Tribromophenol (21-125%)	72 %	. 02/00 00				08/19/06 23.51	SW846 8270C	6083503
urr: Phenol-d5 (33-109%)	65 %					08/19/06 23:51	SW846 8270C	6083593
urr: 2-Fluorobiphenyl (35-106%)	66 %					08/19/06 23:51	SW846 8270C	6083593
urr: 2-Fluorophenol (26-105%)	53 %					08/19/06 23:51	SW846 8270C	6083593
urr: Nitrobenzene-d5 (10-153%)	65 %					08/19/06 23:51	SW846 8270C	6083593
Extractable Petroleum Hydrocarbons								
Diesel	9.75		mg/kg	4.97	1	08/22/06 09:08	SW846 8015B	6083590
urr: o-Terphenyl (56-143%)	65 %					08/22/06 09:08	SW846 8015B	6083590
Sample ID: NPH2446-06 (G77-3	(0-1) - Soil	) Sampled	: 08/16/06 0	8:00				
Mercury by EPA Methods 7470A/74	71A							
Aercury	ND		mg/kg	0.0969	1	08/23/06 14:31	SW846 7471A	6084215
Organochlorine Pesticides by EPA M	lethod 8081A	L .						
Aldrin	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
lelta-BHC	ND		mg/kg	0.00169	• 1	08/29/06 21:36	SW846 8081A	6084002
lpha-BHC	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
peta-BHC	ND		mg/kg	0.00327	1	08/29/06 21:36	SW846 8081A	6084002
amma-BHC (Lindane)	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
lpha-Chlordane	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
amma-Chlordane	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Chlordane	ND		mg/kg	0.0662	1	08/29/06 21:36	SW846 8081A	6084002
.4'-DDD	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
,4' <b>-</b> DDE	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
,4'-DDT	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Dieldrin	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Endosulfan I	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Endosulfan II	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Endosulfan sulfate	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Indrin	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Indrin aldehyde	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Endrin ketone	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
leptachlor	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
leptachlor epoxide	ND		mg/kg	0.00169	1	08/29/06 21:36	SW846 8081A	6084002
Aethoxychlor	ND		mg/kg	0.00327	1	08/29/06 21:36	SW846 8081A	6084002
Toxaphene	ND		mg/kg	0.0662	1	08/29/06 21:36	SW846 8081A	6084002
urr: Tetrachloro-meta-xylene (63-132%) Surr: Decachlorobiphenyl (39-108%)	90 % 96 %					08/29/06 21:36 08/29/06 21:36	SW846 8081A SW846 8081A	6084002 6084002
Chlorinated Herbicides by EPA Meth	od 8151A							
2,4-D	ND		mg/kg	0.0651	1	08/30/06 22:30	SW846 8151A	6085510
Dalapon	ND		mg/kg	0.163	1	08/30/06 22:30	SW846 8151A	6085510
2,4 <b>-</b> DB	ND		mg/kg	0.0651	1	08/30/06 22:30	SW846 8151A	6085510
Dicamba	ND		mg/kg	0.0322	1	08/30/06 22:30	SW846 8151A	6085510
Dichloroprop	ND		mg/kg	0.0651	1	08/30/06 22:30	SW846 8151A	6085510

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

4.4'-DDE

4.4'-DDT

Dieldrin

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

0.00165

0.00165

0.00165

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		AN	ALYTICAL I	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-06RE2 (	G77-3 (0-1)	- Soil) - coi	nt. Sampled	: 08/16/06 08:00				
Chlorinated Herbicides by EPA Met	thod 8151A -	· cont.						
Dinoseb	ND		mg/kg	0.0651	1	08/30/06 22:30	SW846 8151A	6085510
мсра	ND		mg/kg	3.25	1	08/30/06 22:30	SW846 8151A	6085510
ИСРР	ND		mg/kg	3.25	1	08/30/06 22:30	SW846 8151A	6085510
l-Nitrophenol	ND		mg/kg	0.0322	1	08/30/06 22:30	SW846 8151A	6085510
entachlorophenol	ND		mg/kg	0.0322	1	08/30/06 22:30	SW846 8151A	6085510
Picloram	ND		mg/kg	0.0322	1	08/30/06 22:30	SW846 8151A	6085510
2.4,5-T	ND		mg/kg	0.0322	1	08/30/06 22:30	SW846 8151A	6085510
2.4,5-TP (Silvex)	ND		mg/kg	0.0166	1	08/30/06 22:30	SW846 8151A	6085510
Surr: Dichloroacetic Acid (55-132%)	*	CF6, ZX				08/30/06 22:30	SW846.8151A	6085510
As, Ba, Cd, Cr, Pb, Se, Ag by 6020 See Attached Report								
Sample ID: NPH2446-07 (G77-2	2 (1-2) - So	il) Sampled	: 08/16/06 (	)8:15				
Mercury by EPA Methods 7470A/74	471A							
Aercury	ND		mg/kg	0.0984	1	08/23/06 14:33	SW846 7471A	6084215
Organochlorine Pesticides by EPA N	Method 8081	А						
Aldrin	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
lelta-BHC	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
lipha-BHC	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
oeta-BHC	ND		mg/kg	0.00321	1	08/29/06 22:05	SW846 8081A	6084002
amma-BHC (Lindane)	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
llpha-Chlordane	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
amma-Chlordane	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Chlordane	ND		mg/kg	0.0649	1	08/29/06 22:05	SW846 8081A	6084002
,4'-DDD	ND		mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002

Endosulfan I	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Endosulfan II	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Endosulfan sulfate	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Endrin	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Endrin aldehyde	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Endrin ketone	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Heptachlor	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Heptachlor epoxide	ND	mg/kg	0.00165	1	08/29/06 22:05	SW846 8081A	6084002
Methoxychlor	ND	mg/kg	0.00321	1	08/29/06 22:05	SW846 8081A	6084002
Toxaphene	ND	mg/kg	0.0649	1	08/29/06 22:05	SW846 8081A	6084002
Surr: Tetrachloro-meta-xylene (63-132%)	122 %				08/29/06 22:05	SW846 8081A	6084002
Surr: Decachlorobiphenyl (39-108%)	98 %				08/29/06 22:05	SW846 8081A	6084002
Chlorinated Herbicides by EPA Metho	od 8151A						
2,4 <b>-</b> D	ND	mg/kg	0.0663	1	08/28/06 13:48	SW846 8151A	6084743

mg/kg

mg/kg

mg/kg

ND

ND

ND

08/29/06 22:05 SW846 8081A 6084002

08/29/06 22:05 SW846 8081A 6084002

08/29/06 22:05 SW846 8081A 6084002

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Work Order:NPH2446Project Name:AFRHProject Number:3552060897Received:08/17/06 08:00

		AN	ALYTICAL F	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
ample ID: NPH2446-07RE1 (C	77-2 (1-2)	- Soil) - co	nt. Sampled	: 08/16/06 08:15				
Therinated Herbicides by FPA Met	hod $8151A$ -	cont	and Stampion	00,20,000000				
alapan	ND	cont.	malka	0.166	1	08/28/06 13:48	SW046 0151 A	6081712
A-DB	ND		mg/kg	0.100	1	08/28/06 13:48	SW040 0151A	6084743
)icamba	ND		mg/kg mg/kg	0.0003	. 1	08/28/06 13:48	SW846 8151A	6084743
Dichloroprop	ND		mg/kg	0.0528	1	08/28/06 13:48	SW846 8151A	6084743
Dinoseh	ND		mg/kg	0.0663	1	08/28/06 13:48	SW846 8151A	6084743
ACPA	ND		mg/kg	3 3 1	1	08/28/06 13:48	SW846 8151A	6084743
АСРР	ND		mg/kg	3 31	1	08/28/06 13:48	SW846 8151A	6084743
-Nitrophenol	ND		mg/kg	0.0328	1	08/28/06 13:48	SW846 8151A	6084743
entechlorophenol	ND		mg/kg	0.0328	1	08/28/06 13:48	SW040 8151A	6084743
fictoram	ND		mg/kg	0.0328	1	08/28/06 13:48	SW846 8151A	6084743
A 5-T	ND		mg/kg	0.0328	. 1	08/28/06 13:48	SW846 8151A	6084743
4.5-TP (Silvey)	ND		mg/kg	0.0169	1	08/28/06 13:48	SW846 8151A	6084743
urr: Dichloroacetic Acid (55-132%)	32 %	CE6 7Y	iiig/ kg	0.0109	1	08/28/06 13:48	SW8468151A	6084743
	52 70	CI 0, ZA				08/28/00 15.48	5W0400151A	0004743
As, Ba, Cd, Cr, Pb, Se, Ag by 6020 dee Attached Report								
Mercury by EPA Methods 7470A/74 Aercury	471A ND		mg/kg	0.0969	1	08/21/06 16:10	SW846 7471A	6083616
Dragnachlarine Pesticides by FPA N	lethod 8081	۸						
Idrin	ND	7 K	malka	0.00160	. 1	08/20/06 22.24	SW046 0001 A	6084002
elta-BHC	ND		mg/kg mg/kg	0.00169	1	08/29/00 22.34	SW040 0001A	6084002
Inha-BHC	ND		mg/kg	0.00109	1	08/29/06 22:34	SW846 8081A	6084002
eta-BHC	ND		mg/kg	0.00102	1	08/29/06 22:34	SW846 8081A	6084002
amma-BHC (Lindane)	ND		mg/kg mg/kg	0.00327	1	08/29/06 22:34	SW846 8081A	6084002
Inha-Chlordane	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
amma-Chlordane	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
'hlordane	ND		mg/kg	0.0661	1	08/29/06 22:34	SW846 8081A	6084002
4'-DDD	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
4'-DDE	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
.4'-DDT	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
Dieldrin	ND		mg/kg	0.00169	1 -	08/29/06 22:34	SW846 8081A	6084002
ndosulfan I	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
ndosulfan II	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
ndosulfan sulfate	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
ndrin	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
Indrin aldehyde	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
Endrin ketone	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
leptachlor	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
leptachlor epoxide	ND		mg/kg	0.00169	1	08/29/06 22:34	SW846 8081A	6084002
Aethoxychlor	ND		mg/kg	0.00327	1	08/29/06 22:34	SW846 8081A	6084002
òxaphene	ND		mg/kg	0.0661	1	08/29/06 22:34	SW846 8081A	6084002
urr: Tetrachloro-meta-xylene (63-132%	) 92 %		-			08/29/06 22:34	SW846 8081A	6084002

Test/Merica

ANALYTICAL TESTING CORPORATION

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

Client	MACTEC Engineering & Consulting, Inc. (3740)
	21740 Beaumeade Circle, Suite 150
	Ashburn, VA 20147
Attn	Brent Chapman

		AN	ALYTICAL R	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-08 (C	G77-4 (0-1) - Soi	l) - cont. §	Sampled: 08/1	6/06 08:30				
Organochlorine Pesticides by E	EPA Method 8081A	A - cont.	-					
urr: Decachlorobinhenvl (39-108	%) 96%					08/20/06 22.34	SW846 80814	6084002
	M-d-101514					00/27/00 22.54	5#040 0001M	0004002
Informated Herbicides by EPA	Method 8151A			0.0447		00/00/07 11 10	011101 C 01 01 01	
,,4-D	ND		mg/kg	0.0667	1	08/28/06 14:19	SW846 8151A	6084743
Jalapon	ND		mg/kg	0.167	1	08/28/06 14:19	SW846 8151A	6084743
,4-DB	ND		mg/kg	0.0667	1	08/28/06 14:19	SW846 8151A	6084743
Jicamba	ND		mg/kg	0.0330	1	08/28/06 14:19	SW846 8151A	6084743
Jichloroprop	ND		mg/kg	0.0667	1	08/28/06 14:19	SW846 8151A	6084743
Jinoseb	ND		mg/kg	0.0667	1	08/28/06 14:19	SW846 8151A	6084743
ACPA	ND		mg/kg	3.33	1	08/28/06 14:19	SW846 8151A	6084743
АСРР	ND		mg/kg	3.33	1	08/28/06 14:19	SW846 8151A	6084743
-Nitrophenol	ND		mg/kg	0.0330	1	08/28/06 14:19	SW846 8151A	6084743
entachlorophenol	ND		mg/kg	0.0330	1	08/28/06 14:19	SW846 8151A	6084743
hicloram	ND		mg/kg	0.0330	1	08/28/06 14:19	SW846 8151A	6084743
4 5-1	ND		mg/kg	0.0330	1	08/28/06 14:19	SW846 8151A	6084743
					4	08/28/06 11.10	SW/8/16 8151 A	6084743
.4,5-TP (Silvex)	ND		mg/kg	0.0170	. 1	00/20/00 14.19	5 W 040 0151A	
4,5-TP (Silvex) <i>furr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report	ND %) 49 % 5020	CF6, ZX	mg/kg	0.0170	. 1	08/28/06 14:19	SW846 8151A SW846 8151A	6084743
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747(	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A	CF6, ZX	mg/kg <b>d: 08/16/06 0</b> 7	0.0170 7:15	. 1	08/28/06 14:19	SW846 8151A SW846 8151A	6084743
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Aercury	ND 5020 577-5 (1-2) - Soi 0A/7471A ND	CF6, ZX	mg/kg <b>d: 08/16/06 0'</b> mg/kg	0.0170 7:15 0.0993	. 1	08/28/06 14:19 08/28/06 14:19 08/21/06 16:16	SW846 8151A SW846 8151A SW846 7471A	6084743 6083616
A,5-TP (Silvex) <i>(urr: Dichloroacetic Acid (55-1329</i> ) As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Aercury Organochlorine Pesticides by E	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A	CF6, ZX I) Sample	mg/kg <b>d: 08/16/06 07</b> mg/kg	0.0170 7:15 0.0993	. 1	08/28/06 14:19 08/28/06 14:19 08/21/06 16:16	SW846 8151A SW846 7471A	6084743 6083616
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> ) As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> l 0A/7471A ND EPA Method 8081A ND	<i>CF6, ZX</i> <b>I) Sample</b> A	mg/kg <b>d: 08/16/06 0'</b> mg/kg mg/kg	0.0170 7:15 0.0993	1	08/28/06 14:19 08/28/06 14:19 08/21/06 16:16 08/29/06 23:03	SW846 8151A SW846 7471A SW846 8081A	6084743 6083616 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> ) As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin Metha-BHC	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 0' mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169	1	08/28/06 14:19 08/28/06 14:19 08/21/06 16:16 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 7471A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 Gee Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169	1	08/28/06 14:19 08/28/06 14:19 08/21/06 16:16 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 7471A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Aercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC peta-BHC	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00327	1	08/29/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 7471A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Aercury Organochlorine Pesticides by E Aldrin lelta-BHC lpha-BHC beta-BHC camma-BHC (Lindane)	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00327 0.00169	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	08/29/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> ) As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC beta-BHC samma-BHC (Lindane) loha-Chlordane	ND %) 49 % 5020 G77-5 (1-2) - Soil 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169	1 1 1 1 1 1 1 1 1	08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> ) As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC seta-BHC samma-BHC (Lindane) lpha-Chlordane samma-Chlordane	ND %) 49 % 5020 5077-5 (1-2) - Soil 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND ND	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>(urr: Dichloroacetic Acid (55-1329)</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin Melta-BHC Ipha-BHC Ipha-BHC Seta-BHC (Lindane) Ipha-Chlordane Samma-Chlordane Chlordane	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC harma-BHC (Lindane) lpha-Chlordane amma-Chlordane chlordane A'-DDD	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( <i>Aercury</i> Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC teta-BHC teta-BHC (Lindane) lpha-Chlordane amma-Chlordane <i>A</i> '-DDD <i>A</i> '-DDE	ND %) 49 % 5020 <b>G77-5 (1-2) - Soi</b> 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND ND ND ND	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC teta-BHC mma-BHC (Lindane) lpha-Chlordane mma-Chlordane Ad-DDD A'-DDD A'-DDE .4'-DDT	ND %) 49 % 5020 G77-5 (1-2) - Soil 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND ND ND ND ND ND ND	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Aercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC beta-BHC samma-BHC (Lindane) lpha-Chlordane chlordane A'-DDD A'-DDE A'-DDT Dieldrin	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC lpha-BHC seta-BHC amma-BHC (Lindane) lpha-Chlordane amma-Chlordane A'-DDD A'-DDE A'-DDT Dieldrin Endosulfan I	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 16:16 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC lpha-BHC ceta-BHC tamma-BHC (Lindane) lpha-Chlordane tamma-Chlordane A'-DDD A'-DDE A'-DDT Dieldrin Endosulfan I Endosulfan II	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
4,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Aercury Organochlorine Pesticides by E Adrin lelta-BHC lpha-BHC lpha-BHC samma-BHC (Lindane) lpha-Chlordane chlordane chlordane 4'-DDD .4'-DDE .4'-DDT Dieldrin Endosulfan II Endosulfan Sulfate	ND %) 49 % 5020 5020 577-5 (1-2) - Soil 0A/7471A ND EPA Method 8081A ND ND ND ND ND ND ND ND ND ND ND ND ND	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC lpha-BHC seta-BHC samma-BHC (Lindane) lpha-Chlordane samma-Chlordane Chlordane A'-DDD A'-DDE A'-DDT Dieldrin Endosulfan II Endosulfan sulfate Endrin	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 747( Aercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC beta-BHC samma-BHC (Lindane) lpha-Chlordane chlordane A'-DDD A'-DDE A'-DDT Dieldrin Endosulfan II Endosulfan Sulfate Endrin Endrin aldehyde	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002
A,5-TP (Silvex) <i>urr: Dichloroacetic Acid (55-1329</i> As, Ba, Cd, Cr, Pb, Se, Ag by 6 See Attached Report <b>Sample ID: NPH2446-09 (C</b> Mercury by EPA Methods 7470 Mercury Organochlorine Pesticides by E Mdrin lelta-BHC lpha-BHC beta-BHC tamma-BHC (Lindane) lpha-Chlordane tamma-Chlordane Chlordane A'-DDD A'-DDE A'-DDT Dieldrin Endosulfan II Endosulfan sulfate Endrin aldehyde Endrin ketone	ND %) 49 % 5020 5020 5020 5020 5020 5020 5020 502	CF6, ZX I) Sample	mg/kg d: 08/16/06 07 mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0170 7:15 0.0993 0.00169		08/29/06 14:19 08/28/06 14:19 08/28/06 14:19 08/29/06 23:03 08/29/06 23:03	SW846 8151A SW846 8151A SW846 8081A SW846 8081A	6084743 6083616 6083616 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002 6084002

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ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

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

08/28/06 14:50 SW846 8151A 6084743

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

0.0329

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		AN	ALYTICA	L REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-09 (G77-5	(1-2) - Soil	) - cont. S	Sampled: (	08/16/06 07:15				
Organochlorine Pesticides by EPA M	ethod 8081A	- cont.						
Heptachlor epoxide	ND		mg/kg	0.00169	1	08/29/06 23:03	SW846 8081Á	6084002
Methoxychlor	ND		mg/kg	0.00327	1	08/29/06 23:03	SW846 8081A	6084002
Foxaphene	ND		mg/kg	0.0661	1	08/29/06 23:03	SW846 8081A	6084002
Surr: Tetrachloro-meta-xylene (63-132%) Surr: Decachlorobiphenvl (39-108%)	92 % 86 %	a.				08/29/06 23:03 08/29/06 23:03	SW846 8081A SW846 8081A	6084002 6084002
Chlorinated Herbicides by EPA Meth	od 8151A							000,000
2,4 <b>-</b> D	ND		mg/kg	0.0664	1	08/28/06 14:50	SW846 8151A	6084743
Dalapon	ND		mg/kg	0.166	1	08/28/06 14:50	SW846 8151A	6084743
2,4-DB	ND		mg/kg	0.0664	1	08/28/06 14:50	SW846 8151A	6084743
Dicamba	ND		mg/kg	0.0329	1	08/28/06 14:50	SW846 8151A	6084743
Dichloroprop	ND		mg/kg	0.0664	1	08/28/06 14:50	SW846 8151A	6084743
Dinoseb	ND		mg/kg	0.0664	1	08/28/06 14:50	SW846 8151A	6084743
MCPA	ND		mg/kg	3.32	1	08/28/06 14:50	SW846 8151A	6084743
MCPP	ND		mg/kg	3.32	1	08/28/06 14:50	SW846 8151A	6084743
4-Nitrophenol	ND		mg/kg	0.0329	1	08/28/06 14:50	SW846 8151A	6084743
Pentachlorophenol	ND		mg/kg	0.0329	1	08/28/06 14:50	SW846 8151A	6084743

2,4,5 <b>-</b> T	ND		mg/kg	0.0329	1	08/28/06 14:50 S	W846 8151A	6084743
2,4,5-TP (Silvex)	ND		mg/kg	0.0169	1	08/28/06 14:50 S	W846 8151A	6084743
Surr: Dichloroacetic Acid (55-132%)	53 %	CF6, ZX				08/28/06 14:50 S	SW846 8151A	60847.43

mg/kg

As, Ba, Cd, Cr, Pb, Se, Ag by 6020 See Attached Report

Picloram

### Sample ID: NPH2446-10 (G77-6 (0-1) - Soil) Sampled: 08/16/06 07:30

ND

Mercury by EPA Methods 74	70A/7471A					
Mercury	ND	mg/kg	0.0990	1	08/21/06 16:18 5	SW846 7471A 6083616
Organochlorine Pesticides by	EPA Method 8081A					
Aldrin	ND	mg/kg	0.00168	1	08/29/06 23:32 8	SW846 8081A 6084002
delta-BHC	ND	mg/kg	0.00168	1	08/29/06 23:32 8	SW846 8081A 6084002
lpha-BHC	ND	mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A 6084002
beta-BHC	ND	mg/kg	0.00325	1	08/29/06 23:32	SW846 8081A 6084002
gamma-BHC (Lindane)	ND	mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A 6084002
lpha-Chlordane	ND	mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A 6084002
gamma-Chlordane	ND	mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A 6084002
Chlordane	ND	mg/kg	0.0657	1	08/29/06 23:32 \$	SW846 8081A 6084002
4,4'-DDD	ND	mg/kg	0.00168	1	08/29/06 23:32 S	SW846 8081Å 6084002
4.4'-DDE	ND	mg/kg	0.00168	1	08/29/06 23:32 \$	SW846 8081A 6084002
4,4'-DDT	ND	mg/kg	0.00168	1	08/29/06 23:32 \$	SW846 8081A 6084002
Dieldrin	ND	mg/kg	0.00168	1	08/29/06 23:32 5	SW846 8081A 6084002
Endosulfan I	ND	mg/kg	0.00168	1	08/29/06 23:32 \$	SW846 8081A 6084002
Endosulfan II	ND	mg/kg	0.00168	1	08/29/06 23:32 \$	5W846 8081A 6084002
Endosulfan sulfate	ND	mg/kg	0.00168	1	08/29/06 23:32 5	SW846 8081A 6084002
		00				

ANALYTICAL TESTING CORPORATION

ND

ND

ND

ND

ND

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman

gamma-Chlordane

Chlordane

1,4'-DDD

4,4'-DDE

4,4'**-**DDT

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

 Work Order:
 NPH2446

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/17/06 08:00

#### ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID; NPH2446-10 (G77-6	(0-1) - Soi	l) - cont. S	Sampled:	08/16/06 07:30				
Organochlorine Pesticides by EPA Me	ethod 8081A	A - cont.				· ·	1	
Endrin	ND		mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A	6084002
Endrin aldehyde	ND		mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A	6084002
Endrin ketone	ND		mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A	6084002
leptachlor	ND		mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A	6084002
leptachlor epoxide	ND		mg/kg	0.00168	1	08/29/06 23:32	SW846 8081A	6084002
Methoxychlor	ND		mg/kg	0.00325	1	08/29/06 23:32	SW846 8081A	6084002
Toxaphene	ND		mg/kg	0.0657	1	08/29/06 23:32	SW846 8081A	6084002
Surr: Tetrachloro-meta-xylene (63-132%) Surr: Decachlorobiphenyl (39-108%)	126 % 102 %					08/29/06 23:32 08/29/06 23:32	SW846 8081A SW846 8081A	6084002 6084002
Chlorinated Herbicides by EPA Metho	od 8151A							
2 4-D	ND		mø/kø	0.0645	1	08/30/06 23:01	SW846 8151A	6085510
Dalapon	ND		mg/kg	0.162	1	08/30/06 23:01	SW846 8151A	6085510
2.4-DB	ND		mg/kg	0.0645	1	08/30/06 23:01	SW846 8151A	6085510
Dicamba	ND		mg/kg	0.0319	1	08/30/06 23:01	SW846 8151A	6085510
Dichloroprop	ND		mg/kg	0.0645	1	08/30/06 23:01	SW846 8151A	6085510
Dinoseb	ND		mg/kg	0.0645	1	08/30/06 23:01	SW846 8151A	6085510
МСРА	ND		mg/kg	3.22	1	08/30/06 23:01	SW846 8151A	6085510
MCPP	ND		mg/kg	3.22	1	08/30/06 23:01	SW846 8151A	6085510
I-Nitrophenol	ND		mg/kg	0.0319	1	08/30/06 23:01	SW846 8151A	6085510
Pentachlorophenol	ND		mg/kg	0.0319	1	08/30/06 23:01	SW846 8151A	6085510
Picloram	ND		mg/kg	0.0319	1	08/30/06 23:01	SW846 8151A	6085510
2,4,5 <b>-</b> T	ND		mg/kg	0.0319	1	08/30/06 23:01	SW846 8151A	6085510
2,4,5-TP (Silvex)	ND		mg/kg	0.0165	1	08/30/06 23:01	SW846 8151A	6085510
Surr: Dichloroacetic Acid (55-132%)	17 %	CF6, ZX				08/30/06 23:01	SW846 8151A	6085510
As, Ba, Cd, Cr, Pb, Se, Ag by 6020 See Attached Report								
Sample ID: NPH2446-11 (G77-1 Mercury by EPA Methods 7470A/747	<b>(1-2) - Soi</b> 1A	I) Sample	d: 08/16/0	06 07:45				
Mercury	ND		mg/kg	0.0987	1	08/21/06 16:21	SW846 7471A	6083616
Organochlorine Pesticides by EPA Me	ethod 8081A	ł						
Aldrin	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597
lelta-BHC	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597
llpha-BHC	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597
peta-BHC	ND	2	mg/kg	0.00324	1	08/23/06 14:22	SW846 8081A	6083597
gamma-BHC (Lindane)	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597
alpha-Chlordane	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081Å	6083597

mg/kg

mg/kg

mg/kg

mg/kg

mg/kg

0.00167

0.0655

0.00167

0.00167

0.00167

1

1

1

1

1

08/23/06 14:22 SW846 8081A 6083597

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Brent Chapman  $\Delta ttn$ 

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

Work Order: NPH2446 Project Name: AFRH Project Number: 3552060897 Received: 08/17/06 08:00

ANALYTICAL REPORT										
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch		
Sample ID: NPH2446-11 (G77-	1 (1-2) - Soi	l) - cont. §	Sampled: 08/1	6/06 07:45						
Organochlorine Pesticides by EPA M	Aethod 8081A	A - cont.								
Dieldrin	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endosulfan I	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endosulfan II	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endosulfan sulfate	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endrin	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endrin aldehyde	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Endrin ketone	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
leptachlor	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Heptachlor epoxide	ND		mg/kg	0.00167	1	08/23/06 14:22	SW846 8081A	6083597		
Methoxychlor	ND		mg/kg	0.00324	1	08/23/06 14:22	SW846 8081A	6083597		
Toxaphene	ND		mg/kg	0.0655	1	08/23/06 14:22	SW846 8081A	6083597		
Surr: Tetrachloro-meta-xylene (63-132% Surr: Decachlorobiphenyl (39-108%)	5) 66 % 74 %					08/23/06 14:22 08/23/06 14:22	SW846 8081A SW846 8081A	6083597 6083597		
Chlorinated Herbicides by EPA Met	hod 8151A			¥						
2.4 <b>-</b> D	ND		mg/kg	0.0661	1	08/27/06 13:55	SW846 8151A	6084743		
Dalapon	ND		mg/kg	0.166	1	08/27/06 13:55	SW846 8151A	6084743		
2.4-DB	ND		mg/kg	0.0661	1	08/27/06 13:55	SW846 8151A	6084743		
Dicamba	ND		mg/kg	0.0327	1	08/27/06 13:55	SW846 8151A	6084743		
Dichloroprop	ND		mg/kg	0.0661	1	08/27/06 13:55	SW846 8151A	6084743		
Dinoseb	ND		mg/kg	0.0661	1	08/27/06 13:55	SW846 8151A	6084743		
МСРА	ND		mg/kg	3.30	1	08/27/06 13:55	SW846 8151A	6084743		
МСРР	ND		mg/kg	3.30	1	08/27/06 13:55	SW846 8151A	6084743		
4-Nitrophenol	ND		mg/kg	0.0327	1	08/27/06 13:55	SW846 8151A	6084743		
Pentachlorophenol	ND		mg/kg	0.0327	1	08/27/06 13:55	SW846 8151A	6084743		
Picloram	ND		mg/kg	0.0327	1	08/27/06 13:55	SW846 8151A	6084743		
2,4,5 <b>-</b> T	ND		mg/kg	0.0327	1	08/27/06 13:55	SW846 8151A	6084743		
2,4,5-TP (Silvex)	ND		mg/kg	0.0168	1	08/27/06 13:55	SW846 8151A	6084743		
Surr: Dichloroacetic Acid (55-132%)	89 %					08/27/06 13:55	SW846 8151A	6084743		
As, Ba, Cd, Cr, Pb, Se, Ag by 6020		•		1. 16						

See Attached Report

### Sample ID: NPH2446-12 (G76-3 (9-10.5) - Soil) Sampled: 08/16/06 13:00

Polychlorinated Biphenyls by EPA Me	ethod 8082							
PCB-1016	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
PCB-1221	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
PCB-1232	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
PCB-1242	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
PCB-1248	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
PCB-1254	ND		mg/kg	0.0331	- 1	08/26/06 22:32	SW846 8082	6084003
PCB-1260	ND		mg/kg	0.0331	1	08/26/06 22:32	SW846 8082	6084003
Surr: Tetrachloro-meta-xylene (63-132%) Surr: Decachlorobiphenyl (39-108%)	53 % 53 %	Z6				08/26/06 22:32 08/26/06 22:32	SW846 8082 SW846 8082	6084003 6084003

1 0 C 10

### Test/Merica

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

		AN	NALYTICAL	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-12 (G	G76-3 (9-10.5) - 1	Soil) - con	it. Sampled:	08/16/06 13:00				
Semivolatile Organic Compoun	ds by EPA Metho	d 8270C						
Acenaphthene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Acenaphthylene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Anthracene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Benzo (a) anthracene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Benzo (a) pyrene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Benzo (b) fluoranthene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Benzo (g,h,i) perylene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Benzo (k) fluoranthene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
4-Bromophenyl phenyl ether	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Butvl benzvl phthalate	0.643		mg/kg	0.322	1	08/19/06 23:09	SW846 8270Ċ	6083593
Carbazole	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
4-Chloro-3-methylphenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
4-Chloroaniline	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Bis(2-chloroethoxy)methane	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Bis(2-chloroethyl)ether	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Bis(2-chloroisopropyl)ether	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
2-Chloronaphthalene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
2-Chlorophenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
4-Chlorophenyl phenyl ether	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Chrysene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Dibenz (a,h) anthracene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Dibenzofuran	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Di-n-butyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
1.4-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
1.2-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
1.3-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
3,3'-Dichlorobenzidine	ND		mg/kg	0.645	1	08/19/06 23:09	SW846 8270C	6083593
2,4-Dichlorophenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Diethyl phthalate	ND		mg/kg	0.322	1 -	08/19/06 23:09	SW846 8270C	6083593
2.4-Dimethylphenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Dimethyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
4.6-Dinitro-2-methylphenol	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083593
2,4-Dinitrophenol	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083593
2.6-Dinitrotoluene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
2.4-Dinitrotoluene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Di-n-octyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Bis(2-ethylhexyl)phthalate	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Fluoranthene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Fluorene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Hexachlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Hexachlorobutadiene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Hexachlorocyclopentadiene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593
Hexachloroethane	ND		mg/kg	0.322	- 1	08/19/06 23:09	SW846 8270C	6083593
			-					

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

ANALYTICAL REPORT												
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch				
ample ID: NPH2446-12 (G76-3	(9-10.5) - 8	Soil) - con	it. Sampled:	08/16/06 13:00								
Semivolatile Organic Compounds by I	EPA Method	1 8270C - o	cont.									
ndeno (1 2 3-cd) pyrene	ND		mg/kg	0 322	1	08/19/06 23:09	SW846 8270C	6083593				
sonhorone	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
-Methylnaphthalene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
-Methylphenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
/4-Methylphenol	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
Janhthalene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083593				
-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083593				
-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083503				
litrobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
-Nitrophenol	ND		mg/kg	0.322	1	08/19/06 23:00	SW846 8270C	6082502				
-Nitrophenol	ND		mg/kg	0.300	1	08/10/06 23:09	SW846 8270C	6083595				
[ Nitrosodinhenvlamine	ND		mg/kg	0.322	1	08/19/06 23:09	SW040 0270C	6003595				
Nitrosodi n propylamine	ND		mg/kg mg/kg	0.322	1	08/19/00 23:09	SW040 0270C	0083393				
tentechlerenhenel	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
Phananthrana	ND		mg/kg	0.800	1	08/19/06 23:09	SW846 8270C	0083393				
Phanal	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	0083393				
henor	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	0083393				
2.4 Trichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	0083393				
Mothulnonhtholono	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	0083393				
4.6. Trichlorenhenel	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
4.6 Trichlerenhanel	ND		mg/kg	0.322	1	08/19/06 23:09	SW846 8270C	6083593				
,4,5-1 richlorophenol	ND		mg/kg	0.806	1	08/19/06 23:09	SW846 8270C	6083593				
urr: 1erphenyl-a14 (41-11/%)	08 % 75 %					08/19/06 23:09	SW846 8270C	6083593				
$urr: Phenol_{d5} (33-100\%)$	64 %					08/19/00 23:09	SW840 8270C	6083393				
urr: 2-Fluorohiphenyl (35-106%)	61 %					08/19/00 23:09	SW846 8270C	6083595				
urr: 2-Fluorophenol (26-105%)	57 %					08/19/06 23:09	SW846 8270C	6083593				
urr: Nitrobenzene-d5 (10-153%)	60 %					08/19/06 23:09	SW846 8270C	6083593				
Extractable Petroleum Hydrocarbons												
Ningel	1400			246	50	00/00/06 00:04	GW04C 001 CD	(000 500				
nesei	1420	72	mg/kg	246	50	08/22/06 09:24	SW846 8015B	6083590				
urr: 0-1erpnenyi (30-143%)		23				08/22/06 09:24	SW840 8015B	6083590				
Sample ID: NPH2446-13 (G76-2	(12-13.5) -	Soil) San	npled: 08/10	5/06 13:40								
Polychlorinated Biphenyls by EPA M	ethod 8082											
CB-1016	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
CB-1221	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
CB-1232	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
CB-1242	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
PCB-1248	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
PCB-1254	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
PCB-1260	ND		mg/kg	0.0328	1	08/26/06 22:55	SW846 8082	6084003				
urr: Tetrachloro-meta-xylene (63-132%)	45 %	Z6				08/26/06 22:55	SW846 8082	6084003				
urr: Decachlorobiphenyl (39-108%)	47 %					08/26/06 22:55	SW846 8082	6084003				

# Test/Merica

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

		AN	VALYTICAL	REPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2446-13 (G76-	2 (12-13.5) -	- Soil) - ca	ont. Sampled	: 08/16/06 13:40			4	
Semivolatile Organic Compounds by	v EPA Metho	d 8270C						
Acenaphthene	ND		mø/kø	0 322	1	08/19/06 23:30	SW846 8270C	6083593
Acenaphthylene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Anthracene	ND		mg/kg	0.322	. 1	08/19/06 23:30	SW846 8270C	6083593
Benzo (a) anthracene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Benzo (a) pyrene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Benzo (b) fluoranthene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Benzo (g.h.i) pervlene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Benzo (k) fluoranthene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
I-Bromophenyl phenyl ether	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Butyl benzyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Carbazole	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
-Chloro-3-methylphenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
-Chloroaniline	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Ris(2-chloroethoxy)methane	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083575
3is(2-chloroethyl)ether	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6082502
Bis(2-chloroisopropyl)ether	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
P-Chloronaphthalene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
2-Chlorophenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
-Chlorophenyl phenyl ether	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Thrysene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
)ibenz (a h) anthracene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Dibenzofuran	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Di-n-butyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
4-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
2-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
3-Dichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
3'-Dichlorobenzidine	ND		mg/kg mg/kg	0.645	1	08/19/06 23:30	SW846 8270C	6083593
4-Dichlorophenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Diethyl phthalate	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
4-Dimethylphenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Dimethyl nhthalate	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
6-Dinitro-2-methylphenol	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083503
2 4-Dinitrophenol	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
6-Dipitrotoluene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
2 4-Dinitrotoluene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083575
)i-n-octyl phthalate	ND		mg/kg	0.322	1	08/10/06 23:30	SW846 8270C	6083555
Bis(2-ethylbeyyl)nhthalate	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6082502
Eluoranthene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
luorene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
lexachlorobenzene	ND		merke	0.322	1	08/19/06 23:30	SW846 8270C	6083503
Hexachlorobutadiene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6082502
Hexachlorocyclonentadiene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6082502
Hexachloroethane	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083503
ionaomoi oonano			mg/ng	0.322	1	00/17/00 25.30	5 11 040 02 / 00	0003373

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 
 Work Order:
 NPH2446

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/17/06 08:00

### ANALYTICAL REPORT

		alter for the second spectrum and the second se			Dilution	Analysis	1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Sample ID: NPH2446-13 (G76-2	(12-13.5).	Soil) - co	nt Samnled	• 08/16/06 13.40				
Semivolatile Organic Compounds by	EPA Metho	d 8270C - 0	cont.					
ndeno (1 2 3-cd) pyrene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
sophorone	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
-Methylnaphthalene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
P-Methylphenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
3/4-Methylphenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Ňaphthalene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
3-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
2-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
I-Nitroaniline	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
Vitrobenzene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
1-Nitrophenol	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
2-Nitrophenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
N-Nitrosodiphenylamine	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
N-Nitrosodi-n-propylamine	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Pentachlorophenol	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
Phenanthrene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
Phenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
yrene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
1.2,4-Trichlorobenzene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
I-Methylnaphthalene	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
2,4,6-Trichlorophenol	ND		mg/kg	0.322	1	08/19/06 23:30	SW846 8270C	6083593
2,4,5-Trichlorophenol	ND		mg/kg	0.806	1	08/19/06 23:30	SW846 8270C	6083593
Surr: Terphenyl-d14 (41-117%)	60 %					08/19/06 23:30	SW846 8270C	6083593
Surr: 2,4,6-Tribromophenol (21-125%)	78 %					08/19/06 23:30	SW846 8270C	6083593
Surr: Phenol-d5 (33-109%)	61 %					08/19/06 23:30	SW846 8270C	6083593
Surr: 2-Fluorobiphenyl (35-106%)	65 %					08/19/06 23:30	SW846 8270C	6083593
Surr: 2-Fluorophenol (26-105%)	53 %					08/19/06 23:30	SW846 8270C	6083593
Surr: Nitrobenzene-d5 (10-153%)	58 %					08/19/06 23:30	SW846 8270C	6083593
Extractable Petroleum Hydrocarbons								
Diesel	449		mg/kg	247	50	08/22/06 09:40	SW846 8015B	6083590
Surr: o-Terphenyl (56-143%)	*	Z3	2 2			08/22/06 09:40	SW846 8015B	6083590

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Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.15015 Report Date: 08/29/2006 Page: 1 of 9

Enclosed are the Analytical and Quality Control Reports for the following samples submitted to TestAmerica for analysis:

Project: NPH2446

ANALYTICAL TESTING CORPORATION

lest/

Sample	Sample Description	Date	Date
<u>Number</u>		<u>Taken</u>	<u>Received</u>
217064 217065 217066 217067 217068 217069 217070 217071 217071	NPH2446-02 NPH2446-03 NPH2446-04 NPH2446-06 NPH2446-07 NPH2446-08 NPH2446-09 NPH2446-09 NPH2446-10 NPH2446-11	08/16/2006 08/16/2006 08/16/2006 08/16/2006 08/16/2006 08/16/2006 08/16/2006 08/16/2006 08/16/2006	08/19/2006 08/19/2006 08/19/2006 08/19/2006 08/19/2006 08/19/2006 08/19/2006 08/19/2006 08/19/2006

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica certifies that the analytical results contained herein apply only to the specific samples analyzed. Reproduction of this report is permitted only in its entirety.

Enclosure

Project Management Approval

-

Dayton - 3601 South Dixie Drive, Dayton, OH 45439 937-294-6856/FAX:937-294-7816 Dundee (Chicago) - 1090 Rock Road Lane, Unit 11, Dundee, IL 60118 847-783-4960/FAX:847-783-4969 Indianapolis - 6964 Hillsdale Court, Indianapolis, IN 46250 317-842-4261/FAX:317-842-4286 Pontiac - 341 W. Walton Blvd, Pontiac, MI 48340 248-332-1940/FAX:248-332-5450



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### **Analytical Report**

Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.15015 Report Date: 08/29/2006 Page: 2 of 9

#### SAMPLE NO. SAMPLE DESCRIPTION 217064 NPH2446-02

**DATE/TIME TAKEN** 08/16/2006 09:15

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete	5	Complete		08/25/2006	22:09		702	ekh	DT	SW 6020
Arsenic, ICPMS	2.4	mg/Kg	<2.0		08/25/2006	22:09	514	8331	ekh	DT	SW 6020
Barium, ICPMS	73.2	mg/Kg	<0.99		08/25/2006	22:09	514	8316	ekh	DT	SW 6020
Cadmium, ICPMS	1.73	mg/Kg	<0.99		08/25/2006	22:09	514	8385	ekh	$\mathbf{DT}$	SW 6020
Chromium, ICPMS	7.3	mg/Kg	<2.0		08/25/2006	22:09	514	8236	ekh	DT	SW 6020
Lead, ICPMS	1.58	mg/Kg	<0.99	h .	08/25/2006	22:09	514	8402	ekh	DT	SW 6020
Selenium, ICPMS	<2.0	mg/Kg	<2.0		08/25/2006	22:09	514	1951	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/25/2006	22:09	514	8122	ekh	$\mathbf{DT}$	SW 6020
ICPMS Digestion, Nonaqueo	us Complete	3	Complete		08/22/2006		514		mja	DT	SW 3050B

**SAMPLE NO.** 217065

SAMPLE DESCRIPTION NPH2446-03

### **DATE/TIME TAKEN** 08/16/2006 09:30

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAOUEOUS	Complete		Complete		08/25/2006	23:18		702	ekh	DT	SW 6020
Arsenic, ICPMS	6.7	mg/Kg	<2.0		08/25/2006	23:18	514	8331	ekh	DT	SW 6020
Barium, ICPMS	44.6	mg/Kg	<1.0		08/25/2006	23:18	514	8316	ekh	DT	SW 6020
Cadmium, ICPMS	1.1	mg/Kg	<1.0		08/25/2006	23:18	514	8385	ekh	DT	SW 6020
Chromium, ICPMS	8.6	mg/Kg	<2.0		08/25/2006	23:18	514	8236	ekh	DT	SW 6020
Lead, ICPMS	127	mg/Kg	<1.0		08/25/2006	23:18	514	8402	ekh	DT	SW 6020
Selenium, ICPMS	<3.0	mg/Kg	<3.0		08/25/2006	23:18	514	1951	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/25/2006	23:18	514	8122	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

h - MSD recovery and RPD outside of control limits.

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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### **Analytical Report**

Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.15015 Report Date: 08/29/2006 Page: 3 of 9

#### SAMPLE NO. 217066

### SAMPLE DESCRIPTION NPH2446-04

**DATE/TIME TAKEN** 08/16/2006 09:45

	Result	Units	Reporting Limit	Flag	Run Date	Run Time	Prep Batch	Run Batch	Anal. Init.	Lab ID	Method Reference
				5							
ICPMS NONAQUEOUS	Complete		Complete		08/25/2006	23:23		702	ekh	DT	SW 6020
Arsenic, ICPMS	<2.0	mg/Kg	<2.0		08/25/2006	23:23	514	8331	ekh	DT	SW 6020
Barium, ICPMS	33.3	mg/Kg	<0.98		08/25/2006	23:23	514	8316	ekh	DT	SW 6020
Cadmium, ICPMS	<0.98	mg/Kg	<0.98		08/25/2006	23:23	514	8385	ekh	DT	SW 6020
Chromium, ICPMS	8.8	mg/Kg	<2.0		08/25/2006	23:23	514	8236	ekh	DT	SW 6020
Lead, ICPMS	68.7	mg/Kg	<0.98		08/25/2006	23:23	514	8402	ekh	DT	SW 6020
Selenium, ICPMS	<0.98	mg/Kg	<0.98		08/25/2006	23:23	514	1951	ekh	DT	SW 6020 Moá
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/25/2006	23:23	514	8122	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

#### SAMPLE NO.

217067

SAMPLE DESCRIPTION NPH2446-06

#### DATE/TIME TAKEN 08/16/2006 08:00

				Reporting	3	Run	Run	Prep	Run	Anal.	Lab	Method
		Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	ж. 1	Complete		Complete		08/28/2006	18:13		703	ekh	DT	SW 6020
Arsenic, ICPMS		<1.9	mg/Kg	<1.9		08/28/2006	18:13	514	8335	ekh	DT	SW 6020
Barium, ICPMS		17.2	mg/Kg	<0.96		08/28/2006	18:13	514	8320	ekh	DT	SW 6020
Cadmium, ICPMS		<0.96	mg/Kg	<0.96		08/28/2006	18:13	514	8389	ekh	DT	SW 6020
Chromium, ICPMS		14.0	mg/Kg	<1.9		08/28/2006	18:13	514	8240	ekh	DT	SW 6020
Lead, ICPMS		8.54	mg/Kg	<0.96		08/28/2006	18:13	514	8406	ekh	DT	SW 6020
Selenium, ICPMS		<0.96	mg/Kg	<0.96		08/28/2006	18:13	514	1955	ekh	DT	SW 6020 Mod
Silver, ICPMS		<0.5	mg/Kg	<0.5		08/28/2006	18:13	514	8126	ekh	DT	SW 6020
ICPMS Digestion,	Nonaqueous	Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data



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### **Analytical Report**

Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.15015 Report Date: 08/29/2006 Page: 4 of 9

#### SAMPLE NO. SAMPLE DESCRIPTION 217068 NPH2446-07

DATE/TIME TAKEN 08/16/2006 08:15

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
I CPMS NONAQUEOUS	Complete		Complete		08/28/2006	18:18		703	ekh	DT	SW 6020
Arsenic, ICPMS	<1.9	mg/Kg	<1.9		08/28/2006	18:18	514	8335	ekh	DT	SW 6020
Barium, ICPMS	14.0	mg/Kg	<0.96		08/28/2006	18:18	514	8320	ekh	DT	SW 6020
Cadmium, ICPMS	<0.96	mg/Kg	<0.96		08/28/2006	18:18	514	8389	ekh	DT	SW 6020
Chromium, ICPMS	11.9	mg/Kg	<1.9		08/28/2006	18:18	514	8240	ekh	DT	SW 6020
Lead, ICPMS	5.59	mg/Kg	<0.96		08/28/2006	18:18	514	8406	ekh	DT	SW 6020
Selenium, ICPMS	<0.96	mg/Kg	<0.96		08/28/2006	18:18	514	1955	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/28/2006	18:18	514	8126	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/22/2006		514	,	mja	DT	SW 3050B

**SAMPLE NO.** 217069

SAMPLE DESCRIPTION NPH2446-08

#### DATE/TIME TAKEN 08/16/2006 08:30

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete		Complete		08/28/2006	18:23		703	ekh	DT	SW 6020
Arsenic, ICPMS	<2.0	mg/Kg	<2.0		08/28/2006	18:23	514	8335	ekh	DT	SW 6020
Barium, ICPMS	18.6	mg/Kg	<0.98		08/28/2006	18:23	514	8320	ekh	DT	SW 6020
Cadmium, ICPMS	<0.98	mg/Kg	<0.98		08/28/2006	18:23	514	8389	ek'n	DT	SW 6020
Chromium, ICPMS	17.6	mg/Kg	<2.0		08/28/2006	18:23	514	8240	ekh	DT	SW 6020
Lead, ICPMS	8.13	mg/Kg	<0.98		08/28/2006	18:23	514	8406	ekh	DT	SW 6020
Selenium, ICPMS	<0.98	mg/Kg	<0.98		08/28/2006	18:23	514	1955	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/28/2006	18:23	514	8126	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueous	Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data



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### **Analytical Report**

Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204

Job Number: 06.15015 Report Date: 08/29/2006 Page: 5 of 9

#### SAMPLE NO. 217070

### SAMPLE DESCRIPTION

NPH2446-09

#### DATE/TIME TAKEN 08/16/2006 07:15

Reporting Run Run Prep Run Anal. Lab Method Result Units Limit Flag Date Time Batch Batch Init. ID Reference TCPMS NONAQUEOUS Complete 08/28/2006 18:27 SW 6020 Complete 703 ekh DT Arsenic, ICPMS <1.9 mg/Kg 08/28/2006 18:27 8335 ekh DT SW 6020 <1.9 514 08/28/2006 18:27 Barium, ICPMS 15.8 mg/Kg <0.93 514 8320 ekh DT SW 6020 Cadmium, ICPMS <0.93 mg/Kg <0.93 08/28/2006 18:27 514 8389 ekh DT SW 6020 Chromium, ICPMS 14.6 mg/Kg <1.9 08/28/2006 18:27 514 8240 ekh  $\mathbf{DT}$ SW 6020 Lead, ICPMS 08/28/2006 18:27 8.04 mg/Kg <0.93 514 8406 ekh  $\mathbf{DT}$ SW 6020 Selenium, ICPMS <0.93 08/28/2006 18:27 mg/Kg <0.93 514 1955 ekh DT SW 6020 Mod Silver, ICPMS <0.5 mg/Kg <0.5 08/28/2006 18:27 514 8126 ekh DT SW 6020 ICPMS Digestion, Nonaqueous Complete Complete 08/22/2006 514 mja  $\mathbf{DT}$ SW 3050B

SAMPLE NO. 217071

SAMPLE DESCRIPTION NPH2446-10

#### DATE/TIME TAKEN 08/16/2006 07:30

			Reporting		Run	Run	Prep	Run	Anal.	Lab	Method
	Result	Units	Limit	Flag	Date	Time	Batch	Batch	Init.	ID	Reference
ICPMS NONAQUEOUS	Complete		Complete		08/28/2006	18:32		703	ekh	DT	SW 6020
Arsenic, ICPMS	<2.0	mg/Kg	<2.0		08/28/2006	18:32	514	8335	ekh	DT	SW 6020
Barium, ICPMS	22.6	mg/Kg	<1.0		08/28/2006	18:32	514	8320	ekh	DT	SW 6020
Cadmium, ICPMS	<1.0	mg/Kg	<1.0		08/28/2006	18:32	514	8389	ekh	DT	SW 6020
Chromium, ICPMS	15.0	mg/Kg	<2.0		08/28/2006	18:32	514	8240	ekh	DT	SW 6020
Lead, ICPMS	8.9	mg/Kg	<1.0		08/28/2006	18:32	514	8406	ekh	DT	SW 6020
Selenium, ICPMS	<1.0	mg/Kg	<1.0		08/28/2006	18:32	514	1955	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/28/2006	18:32	514	8126	ekh	DT	SW 6020
ICPMS Digestion, Nonaqueon	us Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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### **Analytical Report**

Jennifer Gambill TESTAMERICA ANALYTICAL/ TESTING CORPORATION 2960 Foster Creighton Dr. Nashville, TN 37204 Job Number: 06.15015 Report Date: 08/29/2006 Page: 6 of 9

#### SAMPLE NO. SAMPLE DESCRIPTION 217072 NPH2446-11

#### **DATE/TIME TAKEN** 08/16/2006 07:45

	Result	Units	Reporting Limit	Flag	Run Date	Run Time	Prep Batch	Run Batch	Anal. Init.	Lab ID	Method Reference
ICPMS NONAQUEOUS	Complete		Complete		08/28/2006	18:40	7	703	ekh	DT	SW 6020
Arsenic, ICPMS	<1.9	mg/Kg	<1.9		08/28/2006	18:40	514	8335	ekh	DT	SW 6020
Barium, ICPMS	16.3	mg/Kg	<0.96		08/28/2006	18:40	514	8320	ekh	DT	SW 6020
Cadmium, ICPMS	<0.96	mg/Kg	<0.96		08/28/2006	18:40	514	8389	ekh	DT	SW 6020
Chromium, ICPMS	22.8	mg/Kg	<1.9		08/28/2006	18:40	514	8240	ekh	DT	SW 6020
Lead, ICPMS	10.2	mg/Kg	<0.96		08/28/2006	18:40	514	8406	ekh	DT	SW 6020
Selenium, ICPMS	<0.96	mg/Kg	<0.96		08/28/2006	18:40	514	1955	ekh	DT	SW 6020 Mod
Silver, ICPMS	<0.5	mg/Kg	<0.5		08/28/2006	18:40	514	8126	ekh	DT	SW 6020
ICPMS Digestion, Nonaqu	eous Complete		Complete		08/22/2006		514		mja	DT	SW 3050B

Lab ID: CH = Chicago (Dundee), DT = Dayton, IN = Indianapolis, PT = Pontiac, SUB = Subcontracted, CLT = Client Data

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Test Analytical LESTING CORPORATION
Nashville Division
<b>COOLER RECEIPT FORM</b>



BC#

NPH2446

Cooler Received/Opened On 1. Indicate the Airbill Tracking Nu	Mugust 17, 2006 Moder (last 4 digits for	<u>5 @ 0800</u> Fedex only) and Na	ame of Courier bel	ow: 2	296
Fedex UPS Velocit	ty DHL	Route	Off-street	Misc.	
2. Temperature of representative s (indicate IR Gun ID#)	ample or temperature	blank when opene	d: <u>2,6</u>	_ Degree	s Celsius
NA A00466 A00	A011	24 10	0190	101282	Raynger ST
3. Were custody seals on outside of	f cooler?	********			S)NONA
a. If yes, how many an	ið where:	Front) 1	(back)		21
4. Were the seals intact, signed, an	d dated correctly?	***************************************	• • • • • • • • • • • • • • • • • • • •		SNONA
5. Were custody papers inside cool	er?				SNONA
I certify that I opened the cooler and	d answered questions	l-5 (intial)			J-
6. Were custody seals on container	s: YES	<b>NO</b>	and Intact	YE	ls no 😡
were these signed, and da	ted correctly?		******************	YE	SNO. NA
7. What kind of packing mater	ial used? Bubbl	ewrap) Pea	nuts Verm	iculite	Foam Insert
Plastic bag	Paper O	ther	en die Seferite de Caracter d'Arman and and and and and and and and and a	None	
8. Cooling process:	J Ice-pack	Ice (direct co	ntact) Dry	ice Ot	her None
9. Did all containers arrive in good	condition ( unbroken)	?		<b>V</b> e	S.NONA
10. Were all container labels comp	lete (#, date, signed, pr	es., etc)?	• • • • • • • • • • • • • • • • • • • •		\$).NONA
11. Did all container labels and tag	s agree with custody p	apers?		Œ	SNONA
12. a. Were VOA vials received?	•••••		*****	УЕ	s
b. Was there any observable h	ead space present in a	ny VOA vial?	**********	YE	SNO. (NA)
I certify that I unloaded the cooler a	nd answered questions	6-12 (intial)	<u></u>	<u></u>	æ
13. a. On preserved bottles did the	pH test strips suggest	that preservation r	eached the correct	pH level? Y	ESNO
b. Did the bottle labels indicate	that the correct prese	rvatives were used.		Æ	S.nona
If preservation in-house w	as needed, record star	dard ID of preserv	ative used here		
14. Was residual chlorine present?.	• • • • • • • • • • • • • • • • • • • •			YE	SNO
I certify that I checked for chlorine a	and pH as per SOP and	l answered questio	<u>ns 13-14 (intial)</u>		$\square$
15. Were custody papers properly	filled out (ink, signed,	etc)?		E	SNONA
16. Did you sign the custody papers	s in the appropriate pl	ace?		Æ	🤉NONA
17. Were correct containers used fo	r the analysis requeste	d?			3NONA
18. Was sufficient amount of sample	e sent in each containe	r?	*****	Es	DNONA
I certify that I entered this project in	to LIMS and answered	l questions 15-18 (i	ntial)	•••••	$\overline{Q}$
I certify that I attached a label with t	he unique LIMS num	er to each contain	er (intial)		W
19. Were there Non-Conformance iss	ues at login YES	Was a PIPE ge	enerated Y	res (No	) #


ANALYTICAL TESTING CORPORATION

#### September 05, 2006

Client: MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn: Brent Chapman

#### SAMPLE IDENTIFICATION

G75-4(10.5-12) G75-3(1.5-3) G75-2(3-4.5) G75-1(4.5-6) G46-1(10.5-12) G46-1(24-25) G46-2(0-1.5) G46-3(16.5-18)

### LAB NUMBER

Work Order:

Project Name:

Project Nbr:

Date Received:

P/O Nbr:

NPH2665-01 NPH2665-02 NPH2665-03 NPH2665-04 NPH2665-05 NPH2665-06 NPH2665-07 NPH2665-08 NPH2665 AFRH 3552060897 65378 08/18/06

### COLLECTION DATE AND TIME

08/17/06 07:30 08/17/06 08:15 08/17/06 08:45 08/17/06 09:05 08/17/06 10:00 08/17/06 10:30 08/17/06 12:00 08/17/06 13:00

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

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

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

Roxanne L. Connor

Roxanne Connor Senior Project Manager

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting. Inc. (3740)	Work Order:	NPH2665	
	21740 Beaumeade Circle, Suite 150	Project Name:	AFRH	
	Ashburn, VA 20147	Project Number:	3552060897	
Attn	Brent Chapman	Received	08/18/06 08:00	

Dilutico         Parton         Dilutico         Analysis           Analyte         Result         Filag         Wind         MR1         Factor         Dilutico         Mattol           Sample ID: NPH2665-01 (C75-4(10.5-12)         Soil) Sampled:         08/17/06 07:30         SW346 82:08         605566           Volanie Organic Compounds by EPA Method 82500B         ND         mgkg         0.002         1         08/2566 1:21         SW346 82:08         665566           Bronnecharementane         ND         mgkg         0.002         1         08/2566 1:21         SW346 82:08         665596           Bronnecharementane         ND         mgkg         0.002         1         08/2566 1:21         SW446 22:08         665596           Bronnecharementane         ND         mgkg         0.002         1         08/2566 1:21         SW446 22:08         665596           Bronnecharementane         ND         mgkg         0.002         1         08/2566 1:31         SW446 12:06         68/2596           Bronnechare         ND         mgkg         0.002         1         08/2566 1:31         SW446 12:06         68/3596           Bronnechare         ND         mgkg         0.002         1         08/2566 1:31         SW446			А	NALYTICAL RE	PORT				
Sample ID: NPH2665-01 (G75-4(10.5-12) - S0il) Sample:: 08/17/06 07:30           Volaiti Organic Compounds by EPA Method 82608           Acchine         ND         mg/sq         0.002         I         08/25/06 15.21         SW46 2508         665306           Benzers         ND         mg/sq         0.002         I         08/25/06 15.21         SW46 2508         665306           Bromachioencrein         ND         mg/sq         0.002         I         08/25/06 15.21         SW44 2508         665306           Bromachioencrein         ND         mg/sq         0.002         I         08/25/06 15.21         SW44 2506         665306           Bromachioencrein         ND         mg/sq         0.002         I         08/25/06 15.21         SW44 2506         665306           Bromachione         ND         mg/sq         0.002         I         08/26/06 15.21         SW44 2506         665306           Bromachione         ND         mg/sq         0.002         I         08/26/06 15.21         SW44 2506         665306           Carbon retractioned         ND         mg/sq         0.002         I         08/26/06 15.21         SW44 2508         665306           Carbon retractioned         ND         mg/sq	Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Volatile Organic Compounds by EPA Method 8260B           Aceene         ND         mg/kg         0.05         I         082/2006         15:23         SW484 5200B         6881966           Bronnehumen         ND         mg/kg         0.062         1         082/2006         15:23         SW484 5200B         6881966           Bronnehumenehane         ND         mg/kg         0.002         1         082/2006         15:23         SW484 5200B         6881966           Bronnehumenehane         ND         mg/kg         0.002         1         082/2006         15:23         SW484 5200B         6881966           Bronnehumenehane         ND         mg/kg         0.002         1         082/2006         15:23         SW484 5200B         6881966           Cateronehane         ND         mg/kg         0.002         1         082/2006         15:23         SW484 5200B         6881966           Cateronehane         ND         mg/kg         0.002         1         082/2006         15:23         SW484 5200B         6881966           Cateronehane         ND         mg/kg         0.002         1         082/2006         6581966           Cateronehane         ND         mg/kg         0.002	Sample ID: NPH2665-01 (G75-4(1	0.5-12) - Soil)	Sampled:	08/17/06 07:30					
Acteorie         ND         mg/kg         0.050         I         68/26/06.15.21         SW846 52/06         66/85/06           Brauncene         ND         mg/kg         0.002         I         68/26/06.15.21         SW846 52/06         66/85/06           Bronnochizoronefhane         ND         mg/kg         0.002         I         68/26/06.15.21         SW846 52/06         66/85/06           Bronnochizoronefhane         ND         mg/kg         0.002         I         68/26/06.15.21         SW846 52/06         66/85/06           Bronnochizoronefhane         ND         mg/kg         0.002         I         68/26/06.15.21         SW846 52/06         66/85/06           Bronnochizoronefhane         ND         mg/kg         0.002         I         68/26/06.15.21         SW846 52/06         66/85/06           Sw846 52/06         MS10         mg/kg         0.002         I         88/26/06         66/85/06           Carbon disclifde         ND         mg/kg         0.002         I         88/26/06         66/85/06           Carbon disclifde         ND         mg/kg         0.002         I         88/26/06         66/85/06           Carbon disclifde         ND         mg/kg         0.002         I <td>Volatile Organic Compounds by EPA 1</td> <td>Method 8260B</td> <td>Sumprour</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Volatile Organic Compounds by EPA 1	Method 8260B	Sumprour						
Nume         mg/kg         0.402         1         0.825/06.15.21         SW486 S29301         6685/96           Bromochloromethane         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2068         6685096           Bromochloromethane         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2068         6685096           Bromochloromethane         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2068         6685096           Bromochloromethane         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2088         6685096           Samanae         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2088         6685096           samanae         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2088         6685096           carlon frashbioride         ND         mg/kg         0.002         1         0.82206.15.21         SW486 S2088         6685096           Chiorochromethane         ND         mg/kg         0.002         1         0.82206.15.21         SW446 S2088         6685096           Chiorochromethane         ND         <	Acetone	ND		mø/ko	0.050	1	08/26/06 15:21	SW846 8260B	6085096
International and the second	Benzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Bromschlaren         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           Bromschlaren         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           Bromschlaren         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           Bromschlaren         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           2-Baaranne         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           n-Bauylbenzene         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         6685996           Carbon disutidie         ND         mg/kg         0.005         1         0.826/06 1521         SW46 82008         685996           Carbon disutidie         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         685996           Chiorochname         ND         mg/kg         0.002         1         0.826/06 1521         SW46 82008         685996           Chiorochname         ND         mg/kg<	Bromobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Bromodichloremettanne         ND         mg/kg         0.002         1         08/26/06 15.21         SW4/6 82/08         68/59/6           Bromodirhane         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           2-Jauanons         ND         mg/kg         0.021         0.8/26/06 15.21         SW4/6 82/08         68/59/6           2-Jauanons         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           See-Bdy/henzene         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           Carbon dixilidie         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           Carbon dixilidie         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           Chiorodirnomettane         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           Chiorodirnomettane         ND         mg/kg         0.002         1         0.8/26/06 15.21         SW4/6 82/08         68/59/6           Chiorodirnomettane	Bromochloromethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Bromonfame         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           Bromonfame         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           2-Butanone         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           n=Butylbenzene         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           Carbon tisalfide         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           Carbon tisalfide         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 82006         6085096           Chiorotheme         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 8206         6885096           Chiorotheme         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 8206         6885096           Chiorotheme         ND         mg/kg         0.002         1         0.8226/06 15.21         SW486 8206         6885096           Chiorothenc         ND	Bromodichloromethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Bromomethane         ND         mg/kg         0.02         1         0.82.606         15.21         SW846         82.606         608.5096           2-Buatonic         ND         mg/kg         0.050         1         0.82.506         15.21         SW846         608.5096           n-Buylbenzene         ND         mg/kg         0.062         1         0.82.506         15.21         SW846         608.5096           carbon disulfide         ND         mg/kg         0.062         1         0.82.606         15.21         SW846         608.5096           Carbon disulfide         ND         mg/kg         0.062         1         0.82.606         15.21         SW846         608.5096           Chiorobrence         ND         mg/kg         0.062         1         0.82.606         15.21         SW846         608.5096           Chiorobrence         ND         mg/kg         0.062         1         0.82.606         15.21         SW846         608.5096           Chiorobrence         ND         mg/kg         0.002         1         0.82.606         15.21         SW846         808.506           Chiorobrence         ND         mg/kg         0.002         1         0.82.606         <	Bromoform	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
2-Butanone         ND         mg/kg         0.050         1         08/26/06.15.21         SW46 5260B         6685/96           scs-Butylbenzene         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           helnylbenzene         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           Carbon disuliide         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           Carbon tachabioride         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           Chiorotherzene         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           Chiorothare         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           Chiorothare         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           2.Chiorothare         ND         mg/kg         0.002         1         08/26/06.15.21         SW46 5260B         6685/96           1.2-Dithronetrac         ND<	Bromomethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
sec-Barythenzene         ND         mg/kg         0.002         1         088/26/06 15.21         SW446 8260B         698/596           n-Burythenzene         ND         mg/kg         0.002         1         088/26/06 15.21         SW446 8260B         688/596           Carbon disulfide         ND         mg/kg         0.002         1         088/26/06 15.21         SW446 8260B         668/596           Carbon Tetrachloride         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           Chioroberzene         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           Chioroberne         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           Chioroberne         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           Chioroberne         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           Chioroberne         ND         mg/kg         0.002         1         08/26/06 15.21         SW446 8260B         668/596           L2-Dibrono-S-chioropropan	2-Butanone	ND		mg/kg	0.050	1	08/26/06 15:21	SW846 8260B	6085096
n-Butylbenzene         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Carban disultylbenzene         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Carban disultylbenzene         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Chierobenzene         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Chierobenzene         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Chierochtame         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           Chierochtame         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/85096           2-Chierochame         ND         mg/kg         0.002         I         08/26/06         15.21         SW846         8260B         60/	sec-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Inter-Bury herezone         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Carbon disulfide         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chirotoherzene         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chirotoherzene         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chirotoherzene         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chirotohera         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chiorotohera         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996           Chiorotohera         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         82608         6085996 </td <td>n-Butylbenzene</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	n-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Carbon disulified         ND         mg/kg         0.005         1         08/26/06         15/21         SW846         8260B         6085996           Carbon disulified         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           Chiorobetzne         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           Chiorobettane         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           Chioromethane         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           Chioromethane         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           Chioromethane         ND         mg/kg         0.002         1         08/26/06         15/21         SW846         8260B         6085996           1/2-Dibinomethane         ND         mg/kg         0.002         1         08/26/06         15/21         SW8468260B         6085996 <t< td=""><td>tert-Butylbenzene</td><td>ND</td><td></td><td>mg/kg</td><td>0.002</td><td>1</td><td>08/26/06 15:21</td><td>SW846 8260B</td><td>6085096</td></t<>	tert-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Carbon Tetrachloride         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           2.Chloroberzene         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           1.2-Dibromoe3-chloropopane         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           1.2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         0.826/06.15.21         SW846 82608         6083996           1.	Carbon disulfide	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
Chiorobenzene         ND         mg/kg         0.02         1         08/26/06 15:21         SW846 8260B         6085096           Chiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           Chioromethane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           Chioromethane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           2-Chiorotoluene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dibromo-3-chioropropane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dibromo-thane (EDB)         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Drchiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Drchiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           <	Carbon Tetrachloride	ND		mg/kg	0.002	Ĩ	08/26/06 15:21	SW846 8260B	6085096
Chiocolitoromenthane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6083096           Chiorotitoromenthane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6083096           Chiorotituene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6083096           2-Chiorotituene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6083096           2-Chiorotituene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Dichiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Dichiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Dichiorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	Chlotobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Chiototethane         ND         mg/kg         0.005         1         0.82/26/06 15:21         SW846 8260B         6085096           Chiototethane         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           Chiototethane         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           2-Chiototoluene         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           1,2-Dibrome-3-chiotopropane         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           1,2-Dibromechane (EDB)         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           1,3-Dichiorobenzene         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           1,3-Dichiorobenzene         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096           1,3-Dichiorobenzene         ND         mg/kg         0.002         1         0.82/26/06 15:21         SW846 8260B         6085096	Chlorodibromomethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Chiloroform         ND         mg/kg         0.002         1         0.82/06/01 52.1         SW44 82/08         608/396           Chloroform         ND         mg/kg         0.002         1         0.82/06/01 52.1         SW44 82/08         608/396           Chlorofoluene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW44 82/08         608/396           4.Chlorotoluene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW44 82/08         608/396           1.2-Dibromorthane (EDB)         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW46 82/08         608/396           1.4-Dichlorobenzene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW46 82/08         608/596           1.3-Dichlorobenzene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW46 82/08         608/596           1.3-Dichlorobenzene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW46 82/08         608/596           1.2-Dichlorobenzene         ND         mg/kg         0.002         1         0.82/26/06 152.1         SW46 82/08         608/596	Chloroethane	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
Chloromethane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.2-Dibromo-s-chloropropane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.2-Dibromo-s-chloropropane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1.2-Dichlorothane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846 <t< td=""><td>Chloroform</td><td>ND</td><td></td><td>mg/kg</td><td>0.002</td><td>1</td><td>08/26/06 15:21</td><td>SW846 8260B</td><td>6085096</td></t<>	Chloroform	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Chilorobiane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           4.Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B	Chloromethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Performance         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,4-Dichorobenzene         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,4-Dichorobenzene         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846         82.60B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         0.8726/06         15.21         SW846	2-Chlorotoluene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
L2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	4-Chlorotoluene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           Dibromomethane         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           Dichlorodifluoromethane         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.1-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 15.21         SW846 82608         6085096           J.2-Dichloropropane </td <td>1 2-Dibromo-3-chloropropane</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.005</td> <td>1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	1 2-Dibromo-3-chloropropane	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
Number         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,1-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,1-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B         6085096           1,1-Dichloroethene         ND         mg/kg         0.002         1         08/26/06         15.21         SW846         8260B	1 2-Dibromoethane (EDB)	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
I.4-DichlorobenzeneNDmg/kg0.002108/26/0615:21SW846Sec0961,3-DichlorobenzeneNDmg/kg0.002108/26/0615:21SW846Sec0961,2-DichlorobenzeneNDmg/kg0.002108/26/0615:21SW846Sec096DichlorodifluoromethaneNDmg/kg0.002108/26/0615:21SW846Sec0961,1-DichloroethaneNDmg/kg0.002108/26/0615:21SW846Sec0961,2-DichloroethaneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,2-DichloroethaneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,1-DichloroetheneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,3-DichloroetheneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,3-DichloroptopaneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,2-DichloropropaneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,2-DichloropropeneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,2-DichloropropeneNDmg/kg0.002108/26/0615:21SW846Sec0860850961,2-Dichlorop	Dibromomethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       608509         1,3-Dichlorobenzene       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         Dichlorodifluoromethane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,1-Dichloroethane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,2-Dichloroethane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,2-Dichloroethane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,1-Dichloroethene       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,3-Dichloroethene       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,3-Dichloropropane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B       6085096         1,2-Dichloropropane       ND       mg/kg       0.002       1       08/26/06 15.21       SW846 8260B	1 4-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
NDmg/kg0.002108/26/06 15:21SW846 8260B6085096DichlorodifluoromethaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1.3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1.3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-Dichloropropene <td>1 3-Dichlorobenzene</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	1 3-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
NDmg/kg0.002108/26/0615:21SW84686081,1-DichlorodifluoromethaneNDmg/kg0.002108/26/0615:21SW8468260B1,2-DichloroethaneNDmg/kg0.002108/26/0615:21SW8468260B60850961,2-DichloroethaneNDmg/kg0.002108/26/0615:21SW8468260B60850961,1-DichloroetheneNDmg/kg0.002108/26/0615:21SW8468260B60850961,3-DichloroetheneNDmg/kg0.002108/26/0615:21SW8468260B60850961,2-DichloroetheneNDmg/kg0.002108/26/0615:21SW8468260B60850961,2-DichloropropaneNDmg/kg0.002108/26/0615:21SW8468260B60850961,2-DichloropropaneNDmg/kg0.002108/26/0615:21SW8468260B60850962,2-DichloropropaneNDmg/kg0.002108/26/0615:21SW8468260B60850962,2-DichloropropaneNDmg/kg0.002108/26/0615:21SW8468260B60850961,3-DichloropropeneNDmg/kg0.002108/26/0615:21SW8468260B60850961,1-DichloropropeneNDmg/kg0.002108/26/0615:21SW8468260B6085096 <tr< td=""><td>1.2-Dichlorobenzene</td><td>ND</td><td></td><td>mg/kg</td><td>0.002</td><td>1</td><td>08/26/06 15:21</td><td>SW846 8260B</td><td>6085096</td></tr<>	1.2-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
DistributionNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1,2-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-Dich	Dichlorodifluoromethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,2-DichloroethaneNDmg/kg0.00210.8746/06/15.21SW846/8260B60850961,2-DichloroetheneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloroetheneNDmg/kg0.00210.8726/06/15.21SW846/8260B6085096trans-1,2-DichloroetheneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,3-DichloropropaneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,2-DichloropropaneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06/15.21SW846/8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06/15.21SW846/8260B6085096 </td <td>1 L-Dichloroethane</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	1 L-Dichloroethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
NDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloroetheneNDmg/kg0.00210.8726/06 15:21SW846 8260B6085096trans-1,2-DichloroetheneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,3-DichloropropaneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,2-DichloropropaneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,2-DichloropropeneNDmg/kg0.00210.8726/06 15:21SW846 8260B60850961,2-Dichlo	1.2-Dichloroethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
IndicationIndicationIndicationIndicationIndicationIndicationIndication1,1-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,2-DichloroetheneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096EthylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096EthylbenzeneNDmg/kg0.005108/26/06 15:21SW846 8260B6085096LybenzeneNDmg/kg0.005108/26/06 15:21SW846 8260B6085096Lybenzene <td>cis-1.2-Dichloroethene</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>. 1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	cis-1.2-Dichloroethene	ND		mg/kg	0.002	. 1	08/26/06 15:21	SW846 8260B	6085096
In planetic fieldIngringFieldIngringFieldIngringField <td>1 1-Dichloroethene</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>1</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	1 1-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Handle LigIngrkgOronIngrkgIngr	trans-1 2-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096EthylbenzeneNDmg/kg0.005108/26/06 15:21SW846 8260B6085096-HexachlorobutadieneNDmg/kg0.050108/26/06 15:21SW846 8260B60850962-HexanoneNDmg/kg0.050108/26/06 15:21SW846 8260B6085096IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropyltolueneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096 <td>1.3-Dichloropropane</td> <td>ND</td> <td></td> <td>mg/kg</td> <td>0.002</td> <td>1 .</td> <td>08/26/06 15:21</td> <td>SW846 8260B</td> <td>6085096</td>	1.3-Dichloropropane	ND		mg/kg	0.002	1 .	08/26/06 15:21	SW846 8260B	6085096
1,2-DichloropropaneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096cis-1.3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096EthylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096HexachlorobutadieneNDmg/kg0.005108/26/06 15:21SW846 8260B60850962-HexanoneNDmg/kg0.050108/26/06 15:21SW846 8260B6085096IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-IsopropyltolueneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096	1.2-Dichloropropane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Lie bindicipitationNDmg/kg0.002108/26/06 15:21SW846 8260B6085096trans-1,3-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B60850961,1-DichloropropeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096EthylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096HexachlorobutadieneNDmg/kg0.005108/26/06 15:21SW846 8260B60850962-HexanoneNDmg/kg0.050108/26/06 15:21SW846 8260B6085096IsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-lsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096p-lsopropylbenzeneNDmg/kg0.002108/26/06 15:21SW846 8260B6085096	2 2-Dichloropropane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
ing kg       ing kg	cis-1 3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
International state         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           Ethylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           Hexachlorobutadiene         ND         mg/kg         0.005         1         08/26/06 15:21         SW846 8260B         6085096           2-Hexanone         ND         mg/kg         0.050         1         08/26/06 15:21         SW846 8260B         6085096           Isopropylbenzene         ND         mg/kg         0.050         1         08/26/06 15:21         SW846 8260B         6085096           p-lsopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           p-lsopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	trans-1.3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Ethylbenzene       ND       mg/kg       0.002       1       08/26/06 15:21       SW846 8260B       6085096         Hexachlorobutadiene       ND       mg/kg       0.005       1       08/26/06 15:21       SW846 8260B       6085096         2-Hexanone       ND       mg/kg       0.050       1       08/26/06 15:21       SW846 8260B       6085096         Isopropylbenzene       ND       mg/kg       0.002       1       08/26/06 15:21       SW846 8260B       6085096         p-Isopropylbenzene       ND       mg/kg       0.002       1       08/26/06 15:21       SW846 8260B       6085096	1.1-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Hexachlorobutadiene         ND         mg/kg         0.005         1         08/26/06 15:21         SW846 8260B         6085096           2-Hexanone         ND         mg/kg         0.005         1         08/26/06 15:21         SW846 8260B         6085096           Isopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           p-Isopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	Ethylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
2-Hexanone         ND         mg/kg         0.050         1         08/26/06 15:21         SW846 8260B         6085096           Isopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           p-Isopropyltoluene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	Hexachlorobutadiene	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
Isopropylbenzene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096           p-Isopropyltoluene         ND         mg/kg         0.002         1         08/26/06 15:21         SW846 8260B         6085096	2-Hexanone	ND		me/ke	0.050	1	08/26/06 15:21	SW846 8260B	6085096
p-Isopropyltoluene ND mg/kg 0.002 1 08/26/06 15:21 SW846 8260B 6085096	Isopropylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
	p-Isopropyltoluene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150	Work Order: Project Name:	NPH2665 AFRH
	Ashburn, VA 20147	Project Number:	3552060897
Attn	Brent Chapman	Received	08/18/06 08:00

		A	NALYTICAL RI	EPORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2665-01 (G75-4(1)	0.5-12) - Soil) -	- cont. Sam	pled: 08/17/06	07:30				
Volatile Organic Compounds by EPA N	Method 8260B -	cont.						
Methyl tert-Butyl Ether	ND -		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Methylene Chloride	ND		mg/kg	0.010	1	08/26/06 15:21	SW846 8260B	6085096
4-Methyl-2-pentanone	ND		mg/kg	0.050	1	08/26/06 15:21	SW846 8260B	6085096
Naphthalene	ND		mg/kg	0.005	- 1	08/26/06 15:21	SW846 8260B	6085096
n-Propylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Styrene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,1,1,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Tetrachloroethene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Toluene	ND		mg/kg	0:002	. 1,	08/26/06 15:21	SW846 8260B	6085096
1,2,3-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1.2.4-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,1,2-Trichloroethane	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
1,1,1-Trichloroethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Trichloroethene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Trichlorofluoromethane	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1,2,3-Trichloropropane	ND		mg/kg	0.002	. 1	08/26/06 15:21	SW846 8260B	6085096
1.3.5-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
1.2.4-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Vinvl chloride	ND		mg/kg	0.002	1	08/26/06 15:21	SW846 8260B	6085096
Xylenes, total	ND		mg/kg	0.005	1	08/26/06 15:21	SW846 8260B	6085096
Surr: 1,2-Dichloroethane-d4 (72-125%)	95 %		0 0			08/26/06 15:21	SW846 8260B	6085096
Surr: Dibromofluoromethane (73-124%)	98 %					08/26/06 15:21	SW846 8260B	6085096
Surr: Toluene-d8 (80-124%)	103 %					08/26/06 15:21	SW846 8260B	6085096
Surr: 4-Bromofluorobenzene (25-185%)	112 %					08/26/06 15:21	SW846 8260B	6085096
Extractable Petroleum Hydrocarbons								
Diesel	ND		mg/kg	49.8	10	08/30/06 00:08	SW846 8015B	6085659
Surr: o-Terphenyl (56-143%)	*	Z3				08/30/06 00:08	SW846 8015B	6085659
Purgeable Petroleum Hydrocarbons								
GRO as Gasoline	ND		ma/ka	5.00	50	08/23/06 13:58	SW846 8015B	6084012
Surr: a,a,a-Trifluorotoluene (56-145%)	110 %		ing/kg	5.00		08/23/06 13:58	SW846 8015B	6084012
Sample ID: NPH2665-02 (G/5-3(1.	.5-3) - Soll) Sa	mpled: 08	17/06 08:15					
Volatile Organic Compounds by EPA N	Method 8260B							
Acetone	0.093		mg/kg	0.050	1	08/26/06 15:52	SW846 8260B	608,5096
Benzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Bromobenzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Bromochloromethane	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Bromodichloromethane	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Bromoform	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Bromomethane	ND ,		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
2-Butanone	ND		mg/kg	0.050	1	08/26/06 15:52	SW846 8260B	6085096
sec-Butylbenzene	ND		mg/kg	0.002	- 1	08/26/06 15:52	SW846 8260B	6085096

ANALYTICAL TESTING CORPORATION

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

Chent	MACTEC Engineering & Consulting, Inc. (3740)	Work Order:	NPH2665
	21740 Beaumeade Circle, Suite 150	Project Name;	AFRH
	Ashburn, VA 20147	Project Number:	3552060 <b>8</b> 97
Attn	Brent Chapman	Received:	08/18/06 08:00

#### ANALYTICAL REPORT

Analyte		Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2665	-02 (G75-3(1.5-	3) - Soil) - 1	cont. Samnle	ed: 08/17/06	08.15				
Volatile Organic Compo	unds by FPA Me	thod 8260B	- cont		00.12				
n Butylbenzene	unds by Di It ivie	ND	cont.	ma/ka	0.002	1	08/26/06 15:52	SW846 8260B	6085006
tort Putulbonzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW046 0200D	6085090
Corbon disulfide		0.016		mg/kg	0.002	1	08/26/06 15:52	SW846 8200D	6085090
Carbon Tatrashlarida		ND		mg/kg	0.003	1	08/26/06 15:52	SW046 0200D	6005000
Carbon Tetrachionde		ND		mg/kg	0.002	1	08/20/00 15:52	5 W 840 8200B	6085096
Chiorobenzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Chlorodibromomethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Chioroethane		ND		mg/kg	0.005	1	08/26/06 15:52	SW846 8260B	6085096
Chloroform		ND .		mg/kg	0.002		08/26/06 15:52	SW846 8260B	6085096
Chloromethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
2-Chlorotoluene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
4-Chlorotoluene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,2-Dibromo-3-chloropropa	ne	ND		mg/kg	0.005	1	08/26/06 15:52	SW846 8260B	6085096
1,2-Dibromoethane (EDB)		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Dibromomethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,4-Dichlorobenzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,3-Dichlorobenzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,2-Dichlorobenzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Dichlorodifluoromethane		ND		mg/kg	0.002	- 1	08/26/06 15:52	SW846 8260B	6085096
1.1-Dichloroethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,2-Dichloroethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
cis-1,2-Dichloroethene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1.1-Dichloroethene		ND		mg/kg	0.002	. 1	08/26/06 15:52	SW846 8260B	6085096
trans-1.2-Dichloroethene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1.3-Dichloropropane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1.2-Dichloropropane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
2 2-Dichloropropane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
cis-1.3-Dichloropropene		ND		mg/kg	0.002	. 1	08/26/06 15:52	SW846 8260B	6085096
trans-1 3-Dichloropropene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1 1-Dichloropropene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Ethulbenzene	6	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085006
Havachlarabutadiana		ND		mg/kg	0.002	1	08/26/06 15:52	SW046 0260D	6085090
2 Havanana		ND		mg/kg	0.005	1	08/26/06 15:52	SW040 0200D	4005004
2-riexanone		ND ·		mg/kg	0.030	1	08/20/06 15:52	SW846 8260B	0085090
Isopropyidenzene		ND		mg/kg	0.002	. 1	08/26/06 15:52	SW846 8260B	6085096
p-isopropyitoluene		ND		mg/kg	0.002	. I . 1	08/26/06 15:52	SW846 8260B	6085096
Methyl tert-Butyl Ether		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Methylene Chloride		ND		mg/kg	0.010	1	08/26/06 15:52	SW846 8260B	6085096
4-Methyl-2-pentanone		ND		mg/kg	0.050	]	08/26/06 15:52	SW846 8260B	6085096
Naphthalene		ND		mg/kg	0.005	. 1	08/26/06 15:52	SW846 8260B	6085096
n-Propylbenzene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Styrene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,1,1,2-Tetrachloroethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
1,1,2,2-Tetrachloroethane		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096
Tetrachloroethene		ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096

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ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150	Work Order: Project Name:	NPH2665 AFRH
	Ashburn, VA 20147	Project Number:	3552060897
Attn	Brent Chapman	Received	08/18/06 08:00

		A	NALYTICAL R	SPORT						
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch		
Sample ID: NPH2665-02 (G75-3(1,	.5-3) - Soil) - co	nt. Samp	led: 08/17/06 0	8:15						
Volatile Organic Compounds by EPA M	Method 8260B -	cont.								
Toluene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1.2.3-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1,2,4-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1,1,2-Trichloroethane	ND		mg/kg	0.005	1	08/26/06 15:52	SW846 8260B	6085096		
1.1.1-Trichloroethane	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
Trichloroethene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
Trichlorofluoromethane	ND .		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1,2,3-Trichloropropane	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1,3,5-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
1.2.4-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
Vinyl chloride	ND		mg/kg	0.002	1	08/26/06 15:52	SW846 8260B	6085096		
Xylenes, total	ND		mg/kg	0.005	- 1	08/26/06 15:52	SW846 8260B	6085096		
Surr: 1.2-Dichloroethane-d4 (72-125%)	100 %					08/26/06 15:52	SW846 8260B	6085096		
Surr: Dibromofluoromethane (73-124%)	98 %		•			08/26/06 15:52	SW846 8260B	6085096		
Surr: Toluene-d8 (80-124%)	101 %					08/26/06 15:52	SW846 8260B	6085096		
Surr: 4-Bromofluorobenzene (25-185%)	107 %			· · ·		08/26/06 15:52	SW846 8260B	6085096		
Extractable Petroleum Hydrocarbons										
Diesel	ND		mg/kg	4.79	1	08/30/06 00:27	SW846 8015B	6085659		
Surr: o-Terphenyl (56-143%)	87 %					08/30/06 00:27	SW846 8015B	6085659		
Purgeable Petroleum Hydrocarbons								,		
CDO as Coopling	10.0			4.05	50	00/22/06 14:41	CW046 0016D	C004010		
GRO as Gasoline $T_{\rm eff}(R) = 1000  {\rm gs}(S_{\rm eff}(R) + 1000  {\rm gs}(R))$	10.9		mg/kg	4.95	50	08/23/06 14:41	SW846 8015B	6084012		
Surr: a,a.a-1 rifiuorototuene (50-145%)	103 %					08/23/06 14:41	SW840 8015B	6084012		
Sample ID: NPH2665-03 (G75-2(3-	4.5) - Soil) Sar	npled: 08	/17/06 08:45							
Volatile Organic Compounds by EPA M	Aethod 8260B									
Acetone	0.090		mg/kg	0.050	1	08/26/06 16:23	SW846 8260B	6085096		
Benzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Bromobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Bromochloromethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Bromodichloromethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Bromoform	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Bromomethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
2-Butanone	ND		mg/kg	0.050	1	08/26/06 16:23	SW846 8260B	6085096		
sec-Butylbenzene	ND		mg/kg	0.002	. 1	08/26/06 16:23	SW846 8260B	6085096		
n-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
tert-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Carbon disulfide	ND		mg/kg	0.005	I	08/26/06 16:23	SW846 8260B	6085096		
Carbon Tetrachloride	ND		mg/kg	0.002	Ĩ	08/26/06 16:23	SW846 8260B	6085096		
Chlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Chlorodibromomethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Chloroethane	ND		mg/kg	0.005	1	08/26/06 16:23	SW846 8260B	6085096		
Chloroform	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
Chloromethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096		
			0.0							

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740)	Work Order:	NPH2665
	21740 Beaumeade Circle, Suite 150	Project Name:	AFRH
	Ashburn, VA 20147	Project Number:	35552060897
Attn	Brent Chapman	Received:	08/18/06 08:00

		A	NALYTICAL F	EPORT			· · · · ·	
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2665-03 (G75-	2(3-4.5) - Soil) - c	ont. Sampl	ed: 08/17/06 0	8:45				
Volatile Organic Compounds by El	PA Method 8260B -	cont.						
2-Chlorotoluene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
4-Chlorotoluene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1 2-Dibromo-3-chloropropane	ND		mg/kg	0.005	1	08/26/06 16:23	SW846 8260B	6085096
1 2-Dibromoethane (EDB)	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Dibromomethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.4-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.3-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.2-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Dichlorodifluoromethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.1-Dichloroethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.2-Dichloroethane	ND		mg/kg	0.002	-1	08/26/06 16:23	SW846 8260B	6085096
cis-1.2-Dichloroethene	ND		mg/kg	0.002	1 -	08/26/06 16:23	SW846 8260B	6085096
1_1-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
trans-1.2-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.3-Dichloropropane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,2-Dichloropropane	ND		mg/kg	0.002	1 -	08/26/06 16:23	SW846 8260B	6085096
2.2-Dichloropropane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
cis-1,3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
trans-1,3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1.1-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Ethylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Hexachlorobutadiene	ND		mg/kg	0.005	1.	08/26/06 16:23	SW846 8260B	6085096
2-Hexanone	ND		mg/kg	0.050	1	08/26/06 16:23	SW846 8260B	6085096
Isopropylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
p-Isopropyltoluene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Methyl tert-Butyl Ether	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Methylene Chloride	ND		mg/kg	0.010	1	08/26/06 16:23	SW846 8260B	6085096
4-Methyl-2-pentanone	ND		mg/kg	0.050	1	08/26/06 16:23	SW846 8260B	6085096
Naphthalene	ND		mg/kg	0.005	1	08/26/06 16:23	SW846 8260B	6085096
n-Propylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Styrene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,1,1,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Tetrachloroethene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Toluene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,2,3-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,2,4-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,1,2-Trichloroethane	ND		mg/kg	0.005	1	08/26/06 16:23	SW846 8260B	6085096
1,1,1-Trichloroethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Trichloroethene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Trichlorofluoromethane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,2,3-Trichloropropane	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
1,3,5-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740)	Work Order:	NPH2665	
	21740 Beaumeade Circle, Suite 150	Project Name:	AFRH	ć
	Ashburn, VA 20147	Project Number:	3552060897	
Attn	Brent Chapman	Received:	08/18/06 08:00	

Analyte	Docult	Flog	Linita	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
	Kesun	Plag	Units					Daten
Sample ID: NPH2665-03 (G75-2(3	-4.5) - Soil) - co	nt. Sampl	ed: 08/17/06 08	:45				
Volatile Organic Compounds by EPA	Method 8260B - a	cont.				а. Ж		
1,2,4-Trimethylbenzene	ND .		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Vinyl chloride	ND		mg/kg	0.002	1	08/26/06 16:23	SW846 8260B	6085096
Xylenes, total	ND		mg/kg	0.005	. 1	08/26/06 16:23	SW846 8260B	6085096
Surr: 1,2-Dichloroethane-d4 (72-125%)	98 %					08/26/06 16:23	SW846 8260B	6085096
Surr: Dibromofluoromethane (73-124%)	99 %					08/26/06 16:23	SW846 8260B	6085096
Surr: Toluene-d8 (80-124%)	102 %					08/26/06 16:23	SW846 8260B	6085096
Surr: 4-Bromofluorobenzene (25-185%)	106 %					08/26/06 16:23	SW846 8260B	6085096
Extractable Petroleum Hydrocarbons								
Diesel	ND		mg/kg	4.98	1	08/30/06 00:47	SW846 8015B	6085659
Surr: o-Terphenyl (56-143%)	82 %					08/30/06.00:47	SW846 8015B	6085659
Purgeable Petroleum Hydrocarbons								
GRO as Gasoline	ND		mg/kg	4.96	50	08/23/06 15:23	SW846 8015B	6084012
Surr: a,a.a-Trifluorotoluene (56-145%)	104 %					08/23/06 15:23	SW846 8015B	6084012
Sample ID: NPH2665-04 (G75-1(4 Volatile Organic Compounds by EPA I	<b>.5-6) - Soil) San</b> Method 8260B	npled: 08	/17/06 09:05					
Acetone	0.095		mg/kg	0.050	1	08/26/06 16:54	SW846 8260B	6085096
Benzene	0.002		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Bromobenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Bromochloromethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Bromodichloromethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Bromoform	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Bromomethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
2-Butanone	ND		mg/kg	0.050	1	08/26/06 16:54	SW846 8260B	6085096
sec-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
n-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
tert-Butylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Carbon disulfide	0.010		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
Carbon Tetrachloride	ND		mg/kg ·	. 0:002	1	08/26/06 16:54	SW846 8260B	6085096
Chlorobenzene	ND		mg/kg	0.002	I	08/26/06 16:54	SW846 8260B	6085096
Chlorodibromomethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Chloroethane	ND		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
Chloroform	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Chloromethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
2-Chlorotoluene	ND		mg/kg	0.002		08/26/06 16:54	SW846 8260B	6085096
4-Chlorotoluene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,2-Dibromo-3-chloropropane	ND		mg/kg	0.005	1	08/26/06 16:54	SW846-8260B	6085096
1,2-Dibromoethane (EDB)	ND		mg/kg	0.002	1.	08/26/06 16:54	SW846 8260B	6085096
Dibromomethane	ND		mg/kg	0.002		08/26/06 16:54	SW846 8260B	6085096
1,4-Dichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,3-Dichlorobenzene	ND		mg/kg	0.002		08/26/06 16:54	SW846 8260B	6085096
	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Dichlorodifluoromethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150	Work Order: Project Name:	NPH2665 AFRH 3552060897
Attn	Brent Chapman	Received:	08/18/06 08:00

	D. K			MDI	Dilution	Analysis Date/Time	Method	Datab
Analyte	Result	Flag	Units	IVIINE.	Pactor	Daterrint	(victiou	Daten
Sample ID: NPH2665-04 (G75-1(4.	5-6) - Soil) - c	ont. Sampl	ed: 08/17/06 09	:05				
Volatile Organic Compounds by EPA M	Aethod 8260B -	cont.						
1,1-Dichloroethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1_2-Dichloroethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
cis-1,2-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,1-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
trans-1,2-Dichloroethene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,3-Dichloropropane	ND		mg/kg	0.002	- 1	08/26/06 16:54	SW846 8260B	6085096
1,2-Dichloropropane	ND		mg/kg	0.002	- 1	08/26/06 16:54	SW846-8260B	6085096
2,2-Dichloropropane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
cis-1,3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
trans-1,3-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,1-Dichloropropene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Ethylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Hexachlorobutadiene	ND		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
2-Hexanone	ND		mg/kg	0.050	1	08/26/06 16:54	SW846 8260B	6085096
lsopropylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
p-Isopropyltoluene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Methyl tert-Butyl Ether	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Methylene Chloride	ND		mg/kg	0.010	1 .	08/26/06 16:54	SW846 8260B	6085096
4-Methyl-2-pentanone	ND		mg/kg	0.050	1	08/26/06 16:54	SW846 8260B	6085096
Naphthalene	ND		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
n-Propylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Styrene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,1,1,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,1,2,2-Tetrachloroethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Tetrachloroethene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Toluene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,2,3-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,2,4-Trichlorobenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,1,2-Trichloroethane	ND		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
1,1,1-Trichloroethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Trichloroethene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Trichlorofluoromethane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,2,3-Trichloropropane	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,3,5-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
1,2,4-Trimethylbenzene	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Vinyl chloride	ND		mg/kg	0.002	1	08/26/06 16:54	SW846 8260B	6085096
Xylenes, total	ND		mg/kg	0.005	1	08/26/06 16:54	SW846 8260B	6085096
Surr: 1,2-Dichloroethane-d4 (72-125%)	99 %					08/26/06 16:54	SW846 8260B	6085096
Surr: Dibromofluoromethane (73-124%)	99 %					08/26/06 16:54	SW846 8260B	6085096
Surr: Toluene-d8 (80-124%)	99 %					08/26/06 16:54	SW846 8260B	6085096
Surr: 4-Bromofluorobenzene (25-185%)	103 %					08/26/06 16:54	SW846-8260B	6085096
Extractable Petroleum Hydrocarbons								
Diesel	ND		mg/kg	4.86	. 1	08/30/06 01:07	SW846 8015B	6085659

Citem         MACTES Ensenements & Consulting, Inc. (3740)         Walk Order:         NPIE2005           27400 Bearmande Crafte, Saise 1.50         Marken	ANALYTICAL 1	ESTING CORPOR	ATION	2960 Fost	ter Creighton I	Road Nashvi	lle, TN 37204 * 800-	765-0980 * Fax 615-7	26-3404	
Analyte         Result         Flag         Units         MRL         Factor         Duttion         Analysis           Sample ID: NP12665-04RF1 (G75-1(4.5-6) - Soil) - cont. Sampled:         08/17/06 09:05         Extractible Perioducin Hydrocarbons - cont.         06/2006 01.07         ST0346 80159         603565           Extractible Perioducin Hydrocarbons - cont.         06/2006 01.07         ST0346 80159         603505         608306         604305         603206         08/2016         603505         608306         603807         603206         604206         603505         608307         603206         604206         603505         608307         603206         604206         603206         604206         603206         604206         603206         604206         603206         <	Client MACTEC Engineering & Cons 21740 Beaumeade Circle, Suite Ashburn, VA 20147 Attn Brent Chapman	sulting, Inc. (3740) 2150		•	Work Or Project N Project N Received	der: lame: lumber:	NPH2665 AFRH 3552060897 08/18/06 08:00			
Analyte         Result         Flag         Units         MR1         Parter         Dilution         Analysis           Sample ID: NP12665-04ELI (C75-1(4.5-6) - Soil) - cont. Sampled: 08/17/06 09:05         Extractable Perrolsum Hydrocarbons         69/3066 01 07         NIR46 A015E         69/5056           Sample ID: NP12665-04ELI (C75-1(4.5-6) - Soil) - cont. Sampled: 08/17/06 09:05         Extractable Perrolsum Hydrocarbons         69/3066 01 07         NIR46 A015E         69/5056           Sample ID: NP12665-05 (C46-1(10.5-12) - Soil) Sampled: 08/17/06 10:00         Volatic Organization         08/21/06 12:5         SWA46 8204B         608/2012           Sample ID: NP12665-05 (C46-1(10.5-12) - Soil) Sampled: 08/17/06 10:00         Volatic Organization         08/21/06 17:25         SWA46 8204B         608/2016           Acatore         ND         mg/sg         0.802         1         08/20/61 7:25         SWA46 8204B         608/204           Acatore         ND         mg/sg         0.802         1         08/20/61 7:25         SWA46 8204B         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204         608/204				ANALYTICA	L REPOF	RT -	a ka ga ng ang ang ang ang ang ang ang ang		*********	
Sample ID: NP112665-04RE1 (C75-14.4-56) - Soil) - cont. Samplet: 08/1706 09:05         Sample ID: NP112665-04RE1 (C75-14.5-6) - Soil) - cont. Samplet: 08/1706 09:05         Sample ID: NP11266-14736         Sample ID: NP11266-1473         Sample ID	Analyte	Result	Flag	Units		MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Extractable Perturban Platforazinos - control         83 0         08 000 07 07         08 000 07 07         08 000 07 07         08 000 07 07         08 000 07	Sample ID: NPH2665-04RE1 (G	75-1(4.5-6) - Soil)	- cont.	Sampled: 08	/17/06 09	:05				
Sum a-zerghward (26.143%)         85 %         66.306.60.01.07         500 8036.00         500 8036.00         500 8036.00         500 8036.00         500 8036.00         500 8032.06	Extractable Petroleum Hydrocarbons	- cont.								
Purgeable Petroleum Hydrocarhons         ND         ng/kg         SD         SD         B82306 10.00         SW486 80.01.8         di/8/012           Sins: a.a.e.T/Tphrotrolohoms (561425%)         104%	Surr: o-Terphenyl (56-143%)	85 %						08/30/06 01:07	SW846 8015B	6085659
ND         mg/kg         5.01         50         06/23:06/16/06         SW846.80138         60/84:012           Sample LD: NP112(65-05 (G4-1(1) 6-12) - Soil) Sampled: 08/17/06 10:00         Volatile Organic Compounds by EPA Method S260B           8826/66 17.25         SW466.8200B         6085996           Acetone         ND         mg/kg         0.060         1         08226/66 17.25         SW466.8200B         6085996           Bremochenzene         ND         mg/kg         0.062         1         08226/66 17.25         SW466.8200B         6085996           Bromodelhoromethane         ND         mg/kg         0.062         1         08226/66 17.25         SW466.8200B         6085996           Bromodelhoromethane         ND         mg/kg         0.062         1         08226/66 17.25         SW46.8200B         6085996           Bromodelhoromethane         ND         mg/kg         0.062         1         08226/66 17.25         SW46.8200B         6085996           See_Hai/Jetrazone         ND         mg/kg         0.062         1         08226/66 17.25         SW46.8200B         6085996           See_Hai/Jetrazone         ND         mg/kg         0.062         1         08226/66 17.25         SW46.8200B         685996	Purgeable Petroleum Hydrocarbons									
Number of the second	GPO as Gasoline	ND		ma/ka		5.01	50	08/23/06 16:06	SW846 8015B	6084012
Sample D: NPL2668-05 (G46-1(10.5-12) - Soil) Samplet: 08/17/06 10:00         Soilite         Organic Compounds by EPA Method 82608           Acetone         ND         mg/kg         0.050         1         08/26/06 17.25         SW46 82008         64850%           Bernzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         64850%           Bromochizorne         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Bromochizorneothane         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Bromochizhorneothane         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Schalanone         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Cathon relatione         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Cathon relatione         ND         mg/kg         0.002         1         08/26/06 17.25         SW46 82008         66850%           Cathon relatione         ND         mg/kg         0.00	Surr: a a a-Trifluorotoluene (56-145%)	104 %		ing ng		0.01	00	08/23/06 16:06	SW846 8015B	6084012
Sample ID: NPI12665-15 (G46-1(10.5-12) - Soil) Sampled: 08/17/06 10:00 Volatile Organic Compounds by EPA Method 8260B Acetone ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochenzen ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Bronochiromethane ND mg/kg 0.002 1 08/26/06 17.25 8W48 6206 068596 Chlorothanc ND mg/kg 0.002 1 08/26/06 17.25 8W4										
Volatile Organic Compounds by EPA Method \$260B           Acetone         ND         mg/kg         0.050         1         08/20/06 17.25         SW416 \$2606         6085096           Benznen         ND         mg/kg         0.002         1         08/20/06 17.25         SW416 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/20/06 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/20/06 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/20/06 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/20/06 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/20/06 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/2006 17.25         SW446 \$2006         6085096           Bromochloromethane         ND         mg/kg         0.002         1         08/2006 17.25         SW4	Sample ID: NPH2665-05 (G46-1)	(10.5-12) - Soil) S	ampled	08/17/06 10	:00					
Acetone         ND         mg/kg         0.000         1         0.802,006         7.25         SW446 S2008         6085096           Bernomeherzene         ND         mg/kg         0.002         1         0.822,006         17.25         SW446 S2008         6085096           Bromochizomethane         ND         mg/kg         0.002         1         0.822,006         17.25         SW446 S2008         6085096           Bromochizomethane         ND         mg/kg         0.002         1         0.822,006         17.25         SW446 S2008         6085096           Bromochizom         ND         mg/kg         0.002         1         0.822,006         17.25         SW446 S2008         6085096           Bromomotizom         ND         mg/kg         0.002         1         0.82,006         17.25         SW446 S2008         6085096           Bromotizome         ND         mg/kg         0.002         1         0.82,006         17.25         SW446 S2008         6085096           Lei buytemezne         ND         mg/kg         0.002         1         0.82,006         17.25         SW446 S2008         6085096           Carbon disulfide         0.005         mg/kg         0.002         1	Volatile Organic Compounds by EPA	A Method 8260B								
Banzene         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           Bromschloromethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           Bromschloromethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           Bromschloromethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           2-Butanone         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           2-Butanone         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           e-Butylbenzene         ND         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           Carbon distlife         0.005         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         6985096           Carbon distlife         0.005         mg/kg         0.002         1         0.826/06 17.25         SW446 S260B         685096           Carbon distlife	Acetone	ND		mg/kg		0.050	1	08/26/06 17:25	SW846 8260B	6085096
Bromoebneene         ND         mg/kg         0.002         1         08/20/06         17.25         SW846         82608         60/83096           Bromoebnioromethane         ND         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/83096           Bromodehnoromethane         ND         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/83096           Bromomethane         ND         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/85096           Sec-Butylbenzene         ND         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/85096           Carbon disulfide         0.005         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/85096           Carbon disulfide         0.005         mg/kg         0.002         1         08/20/06         17.25         SW846         82089         60/85096           Carbon disulfide         0.005         1         08/20/06         17.25         SW846         820899         60/85096         60/85096	Benzene	. ND		mg/kg		0.002	. 1	08/26/06 17:25	SW846 8260B	6085096
Bromochloromethane         ND         mg/kg         0.002         1         08/26/06         672.55         SW846         82608         6085096           Bromodchloromethane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         82608         6085096           Bromodorthane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846<82608	Bromobenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Bromodichloromethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 820/05         6085/06           Bromomethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Bromomethane         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           2-Bunanore         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Bromotifue         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Carbon disulfide         OD05         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Carbon Tatrachloride         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Chlorotharac         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Chlorotharac         ND         mg/kg         0.002         1         0.826/06 17.25         SW46 82006         6085/06           Chlorotharac         ND<	Bromochloromethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Bromoform         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085996           Bromomethane         ND         mg/kg         0.050         1         08/26/06 17.25         SW846 82008         6085996           2-Butanone         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085996           n-Butylbenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           n-Butylbenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           Carbon disulfide         0.005         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           Chlorodinromothane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           Chlorodinromothane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           Chlorodinrom         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82008         6085906           Chlorodinene	Bromodichloromethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Bromomethane         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           2-Butamone         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           car-Butylbenzene         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Carbon disulfide         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Carbon disulfide         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Chlorothenzene         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Chlorothenzene         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Chlorothenae         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Chlorothenae         ND         mg/kg         0.002         I         0.82.6/6 17.25         SW46 82.008         6085096           Chlorotobure <td< td=""><td>Bromoform</td><td>ND</td><td></td><td>mg/kg</td><td></td><td>0.002</td><td>1</td><td>08/26/06 17:25</td><td>SW846 8260B</td><td>6085096</td></td<>	Bromoform	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
2-Butanone         ND         mg/kg         0.050         1         08/26/06         17.25         SW486 3260B         6083096           secButylbenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6083096           n-Burylbenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Carbon disulfide         0.005         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Carbon disulfide         0.005         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Chiorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Chiorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Chiorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW486 3260B         6085096           Chiorobenzene         ND         mg/kg         0.002         1	Bromomethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
sec-Butylbenzene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           n-Burylbenzene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           carbon disulfide         0.005         1         0.8/26/06 17.25         SW846 8260B         6085096           Carbon disulfide         0.005         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobienzene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobienzene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobironomethane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobironomethane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobinene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chiorobinene         ND         mg/kg         0.002	2-Butanone	ND		mg/kg		0.050	1	08/26/06 17:25	SW846 8260B	6085096
n-Butylbenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Carbon disulfide         0.005         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Carbon cirachloride         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Chlorobenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Chlorodibromomethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Chlorodibromomethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           Chloroform         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096           1.2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 82608         6085096 <t< td=""><td>sec-Butylbenzene</td><td>ND</td><td></td><td>mg/kg</td><td></td><td>0.002</td><td>1</td><td>08/26/06 17:25</td><td>SW846 8260B</td><td>6085096</td></t<>	sec-Butylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
http         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Carbon disulfide         0.005         mg/kg         0.005         1         08/26/06         17.25         SW846         8260B         6085096           Chorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorotofuene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorotofuene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           1.2-Dibrome-3-chloropropane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096	n-Butylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096.
Carbon disulfide         0.005         mg/kg         0.005         1         0.8/26/06 17.25         SW846 8260B         6085096           Carbon Tetrachloride         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chlorodbromomethane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chlorodbromomethane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chlorodbrane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chlorodbrane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           Chlorodbuene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096           1,4-Dichiorobenzene         ND         mg/kg         0.002         1         0.8/26/06 17.25         SW846 8260B         6085096	tert-Butylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Carbon Tetrachloride         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chlorobenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chlorodenane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chloroform         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chloroform         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chlorofoluene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1_2-Dibromo-3-chloropopapae         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1_4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1_2-Dibromo-3-chloropopane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1	Carbon disulfide	0.005		mg/kg		0.005	1	08/26/06 17:25	SW846 8260B	6085096
Chlorobenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chlorodibromomethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chlorodibromomethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chloronethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           Chloronethane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1,2-Dibromo-thane (EDB)         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17.25         SW846 8260B         6085096      1	Carbon Tetrachloride	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Chlorodibromomethane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorodithane         ND         mg/kg         0.005         1         08/26/06         17.25         SW846         8260B         6085096           Chlorodithane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           Chlorodithane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         17.25         SW846         8260B	Chlorobenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Chloroethane         ND         mg/kg         0.005         1         08/26/06         17:25         SW846         8260B         6085096           Chloroethane         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           Chloroethane         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B	Chlorodibromomethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           Chloroform         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           4-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,2-Dibromo-thane (EDB)         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096           1,1-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06         17:25         SW846         8260B         6085096	Chloroethane	ND		mg/kg		0.005	. 1	08/26/06 17:25	SW846 8260B	6085096
Differentiation         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2-Chlorottoluene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2-Chlorottoluene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           Dibromomethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	Chloroform	ND		mg/kg		0.002	. 1	08/26/06 17:25	SW846 8260B	6085096
2-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           4-Chlorotoluene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dibromo-3-chloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dibromoethane (EDB)         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           Dibromomethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	Chloromethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
A-ChlorotolueneNDmg/kg0.002108/26/0617.25SW8468260B60850961,2-Dibromo-3-chloropropaneNDmg/kg0.005108/26/0617.25SW8468260B60850961,2-Dibromoethane (EDB)NDmg/kg0.002108/26/0617.25SW8468260B6085096DibromomethaneNDmg/kg0.002108/26/0617.25SW8468260B60850961,4-DichlorobenzeneNDmg/kg0.002108/26/0617.25SW8468260B60850961,3-DichlorobenzeneNDmg/kg0.002108/26/0617.25SW8468260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/0617.25SW8468260B60850961,1-DichloroethaneNDmg/kg0.002108/26/0617.25SW8468260B60850961,2-DichloroethaneNDmg/kg0.002108/26/0617.25SW8468260B60850961,2-DichloroethaneNDmg/kg0.002108/26/0617.25SW8468260B60850961,1-DichloroetheneNDmg/kg0.002108/26/0617.25SW8468260B60850961,1-DichloroetheneNDmg/kg0.002108/26/0617.25SW8468260B60850961,1-DichloroetheneNDmg/kg0.002108/26/0617.25 </td <td>2-Chlorotoluene</td> <td>ND</td> <td></td> <td>mg/kg</td> <td></td> <td>0.002</td> <td>1</td> <td>08/26/06 17:25</td> <td>SW846 8260B</td> <td>6085096</td>	2-Chlorotoluene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
J2-Dibromo-3-chloropropaneNDmg/kg0.005108/26/0617:25SW8468260B60850961,2-Dibromoethane (EDB)NDmg/kg0.002108/26/0617:25SW8468260B6085096DibromomethaneNDmg/kg0.002108/26/0617:25SW8468260B60850961,4-DichlorobenzeneNDmg/kg0.002108/26/0617:25SW8468260B60850961,3-DichlorobenzeneNDmg/kg0.002108/26/0617:25SW8468260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/0617:25SW8468260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/0617:25SW8468260B60850961,1-DichloroethaneNDmg/kg0.002108/26/0617:25SW8468260B60850961,2-DichloroethaneNDmg/kg0.002108/26/0617:25SW8468260B60850961,1-DichloroethaneNDmg/kg0.002108/26/0617:25SW8468260B60850961,1-DichloroetheneNDmg/kg0.002108/26/0617:25SW8468260B60850961,3-DichloroptopaneNDmg/kg0.002108/26/0617:25SW8468260B60850961,3-DichloroptopaneNDmg/kg0.002108/26/0617	4-Chlorotoluene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
NDmg/kg0.002108/26/06 17:25SW846 8260B6085096DibromoethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,4-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096DichlorodifluoromethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneND	1 2-Dibromo-3-chloropropane	ND		mg/kg		0.005	1	08/26/06 17:25	SW846 8260B	6085096
Dibromethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,4-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,3-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichlorobenzene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           Dichlorodifluoromethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,1-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloroethane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,1-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,1-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	1 2-Dibromoethane (EDB)	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,4-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-Dichloropr	Dibromomethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,3-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096DichlorodifluoromethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2	1 4-Dichlorobenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2-DichlorobenzeneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096DichlorodifluoromethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,	1 3-Dichlorobenzene	ND		mg/kg	•	0.002	1	08/26/06 17:25	SW846 8260B	6085096
DicklorodifluoromethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DickloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DickloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DickloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DickloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DickloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DickloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,3-DickloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096 <t< td=""><td>1 2-Dichlorobenzene</td><td>ND</td><td></td><td>mg/kg</td><td></td><td>0.002</td><td>. 1</td><td>08/26/06 17:25</td><td>SW846 8260B</td><td>6085096</td></t<>	1 2-Dichlorobenzene	ND		mg/kg		0.002	. 1	08/26/06 17:25	SW846 8260B	6085096
1,1-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,2-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,3-DichloropropaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096 <t< td=""><td>Dichlorodifluoromethane</td><td>ND</td><td></td><td>mg/kg</td><td></td><td>0.002</td><td>1</td><td>08/26/06 17:25</td><td>SW846 8260B</td><td>6085096</td></t<>	Dichlorodifluoromethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2-DichloroethaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,2-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,1-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096trans-1,2-DichloroetheneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,3-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850961,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B60850962,2-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,3-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096cis-1,3-DichloroptopaneNDmg/kg0.002108/26/06 17:25SW846 8260B6085096	1.1-Dichloroethane	ND		mg/kg		0.002	• . 1	08/26/06 17:25	SW846 8260B	6085096
vicis-1,2-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,1-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           trans-1,2-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096 <td>1.2-Dichloroethane</td> <td>ND</td> <td></td> <td>mg/kg</td> <td></td> <td>0.002</td> <td>1</td> <td>08/26/06 17:25</td> <td>SW846 8260B</td> <td>6085096</td>	1.2-Dichloroethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           trans-1,2-Dichloroethene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	cis-1.2-Dichloroethene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
trans-1,2-Dichloroethene         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           1,3-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096	1.1-Dichloroethene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,3-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           1,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096           cis-I,3-Dichloropropene         ND         mg/kg         0.002         I         08/26/06 17:25         SW846 8260B         6085096	trans-1.2-Dichloroethene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           2,2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           cis-1,3-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	1.3-Dichloropropane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
z.2-Dichloropropane         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096           cis-1.3-Dichloropropene         ND         mg/kg         0.002         1         08/26/06 17:25         SW846 8260B         6085096	1 2-Dichloropropane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
cis-1.3-Dichloropropene ND mg/kg 0.002 1 08/26/06 17:25 SW846 8260B 6085096	2 2-Dichloropropane	ND		me/ke		0.002	1	08/26/06 17:25	SW846 8260B	6085096
	cis-1.3-Dichloropropene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147	Work Order: Project Name: Project Number:	NPH2665 AFRH
Attn	Brent Chapman	Received:	08/18/06 08:00

		A	NALYHCAL	REPORT			****		delmanimetersetting that and a data
Analyte	Result	Flag	Units		MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH2665-05 (G46-1(1	0.5-12) - Soil) -	· cont. Sam	pled: 08/17/	06 10:00					
Volatile Organic Compounds by EPA I	Method 8260B -	cont.							
trans-1,3-Dichloropropene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1.1-Dichloropropene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Ethylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Hexachlorobutadiene	ND		mg/kg		0.005	1	08/26/06 17:25	SW846 8260B	6085096
2-Hexanone	ND		mg/kg		0.050	1	08/26/06 17:25	SW846 8260B	6085096
lsopropylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
p-Isopropyltoluene	ND		mg/kg		0.002	- 1	08/26/06 17:25	SW846 8260B	6085096
Methyl tert-Butyl Ether	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Methylene Chloride	ND		mg/kg		0.010	1	08/26/06 17:25	SW846 8260B	6085096
4-Methyl-2-pentanone	ND		mg/kg		0.050	1 .	08/26/06 17:25	SW846 8260B	6085096
Naphthalene	1.82		mg/kg		0.250	50	08/28/06 14:01	SW846 8260B	6083477
n-Propylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Styrene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,1,1,2-Tetrachloroethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,1,2,2-Tetrachloroethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Tetrachloroethene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Toluene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2,3-Trichlorobenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2,4-Trichlorobenzene	ND		mg/kg		0:002	. 1	08/26/06 17:25	SW846 8260B	6085096
1,1,2-Trichloroethane	ND		mg/kg		0.005	. 1.	08/26/06 17:25	SW846 8260B	6085096
1,1,1-Trichloroethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Trichloroethene	ND		mg/kg		0.002	. 1	08/26/06 17:25	SW846-8260B	6085096
Trichlorofluoromethane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2,3-Trichloropropane	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,3,5-Trimethylbenzene	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
1,2,4-Trimethylbenzene	0.002		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Vinyl chloride	ND		mg/kg		0.002	1	08/26/06 17:25	SW846 8260B	6085096
Xylenes, total	ND		mg/kg		0.005	1	08/26/06 17:25	SW846 8260B	6085096
Surr: 1,2-Dichloroethane-d4 (72-125%)	100 %						08/26/06 17:25	SW846 8260B	6085096
Surr: 1,2-Dichloroethane-d4 (72-125%)	93 %						08/28/06 14:01	SW846 8260B	6083477
Surr: Dibromofluoromethane (73-124%)	99 %						08/26/06 17:25	SW846 8260B	6085096
Surr: Dibromofluoromethane (73-124%)	96 %						08/28/06 14:01	SW846 8260B	6083477
Surr: Toluene-d8 (80-124%)	102 %						08/26/06 17:25	SW846 8260B	6085096
Surr: Toluene-d8 (80-124%)	101 %						08/28/06 14:01	SW846 8260B	6083477
Surr: 4-Bromofluorobenzene (25-185%)	105 %						. 08/26/06 17:25	SW846 8260B	6085096
Surr. 4-Bromojiuorovenzene (23-185%)	102 %						08/28/00 14:01	SW840 8200B	00834/7

ANALYTICAL TESTING CORPORATION

Client	MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150	Work Order: Project Name:	NPH4081 AFRH	
	Ashburn, VA 20147	Project Number:	3552060897	
Attn	Brent Chapman	Received:	08/30/06 08:00	

		A	NALYTICAL RE	PORT				
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NPH4081-03 (TB	- Water) - cont. Sa	mpled: 08	/29/06 00:01					
Volatile Organic Compounds by H	EPA Method 8260B							
Acetone	ND		ug/L	50.0	1	09/04/06 21:52	SW846 8260B	609023
Benzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Bromobenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Bromochloromethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Bromodichloromethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Bromoform	ND		ug/L	1.00	1 .	09/04/06 21:52	SW846 8260B	609023
Bromomethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
2-Butanone	NĎ		ug/L	50.0	1	09/04/06 21:52	SW846 8260B	609023
sec-Butylbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846-8260B	609023
n-Butvlbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
tert-Butvlbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Carbon disulfide	ND		ug/L	1.00	. 1	09/04/06 21:52	SW846 8260B	609023
Carbon Tetrachloride	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Chlorobenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Chlorodibromomethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Chloroethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Chloroform	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
Chloromethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
2-Chlorotoluene	ND		ug/I	1.00	. 1	09/04/06 21:52	SW846 8260B	600023
4-Chlorotoluene	ND		ug/I	1.00	1	09/04/06 21:52	SW846 8260B	600023
1 2-Dibromo-3-chloropropane	ND		ug/l	5.00	. 1	09/04/06 21:52	SW846 8260B	600023
1.2-Dibromoethane (FDB)	ND		ug/I	1.00	1	09/04/06 21:52	SW846 8260D	600023
Dibromomethane	ND		ug/l	1.00	1	09/04/06 21:52	SW846 8260B	600023
1 4-Dichlorobenzene	ND		ug/l	1.00	1	09/04/06 21:52	SW846 8260B	600023
1.3-Dichlorobenzene	ND		ug/I	1.00	1	09/04/06 21:52	SW846 8260D	600023
1.2-Dichlorobenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW840 8200B	6000022
Dichlorodifluoromethane	ND		ug/L	1.00	1	09/04/06 21:52	SW040 0200D	600022
1 1-Dichloroethane	ND		ug/L	1.00		09/04/06 21:52	SW040 0200B	6000223
1.2-Dichloroethane	ND	,	ug/L	1.00	1	09/04/06 21:52	SW840 8200B	600023
cis 1.2 Dichloroethene	ND		ug/L	1.00	. 1	09/04/06 21:52	SW846 8260B	609023
1.1. Dishloroothana	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
trans 1.2 Diablaroathana	ND		ug/L	1.00	I' 1	09/04/06 21:52	SW846 8260B	609023
1.2 Dichloropropona	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
1,3-Dichloropropane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	609023
2.2 Dichleropropane	ND		ug/L	1.00	. 1	09/04/06 21:52	SW846 8260B	609023
2,2-Dichloropropane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
trans 1.2 Dishlarannanan	ND		ug/L	1.00	· I	09/04/06 21:52	SW846 8260B	6090237
La Dichlemenenene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Ethylhongone			ug/L	. 1.00	1	09/04/06 21:52	5 W 846 8260B	6090237
	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
	UND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
	ND .		ug/L	50.0		09/04/06 21:52	SW846 8260B	6090237
Isopropyibenzene	ND		ug/L	1.00		09/04/06 21:52	SW846 8260B	6090237
p-isopropyltoluene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

 Work Order:
 NPH4081

 Project Name:
 AFRH

 Project Number:
 3552060897

 Received:
 08/30/06 08:00

Analyte         Result         Flag         Units         MRL         Factor         Date/Time         Method           Sample ID: NPH4081-03 (TB - Water) - cont. Sampled:         08/29/06 00:01         Volatile Organic Compounds by EPA Method 8260B - cont.         Stample ID: NPH4081-03 (TB - Water) - cont. Sampled:         08/29/06 00:01         Volatile Organic Compounds by EPA Method 8260B - cont.         Stample ID: NPH4081-03 (TB - Water) - cont. Sampled:         08/29/06 00:01         09/04/06 21:52         SW846 8260B           Methylene Chloride         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           A-Methyl-2-pentianone         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           n-Propylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           L1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           L1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           L2,3-Trichloroethane         ND         ug/L         1.00	4 <mark>7</mark>					Dilution	Analysis		
Sample ID: NPH4081-03 (TB - Water) - cont. Sampled: 08/29/06 00:01           Volatile Organic Compounds by EPA Method         8260B - cont.           Methyl tert-Butyl Ether         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Methylene Chloride         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           4-Methyl-2-pentanone         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           n-Propylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.2,3-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.2,3-Trichlorobenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B	Analyte	Result	Flag	Units	MRL	Factor	Date/Time	Method	Batch
Volatile Organic Compounds by EPA Method 8260B - cont.           Methyl tert-Butyl Ether         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Methylene Chloride         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           4-Methyl-2-pentanone         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           n-Propylbenzene         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.2.3-Trichlorobenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.1.2-Trichlorobenzene         ND         ug/L         1.00         1	Sample ID: NPH4081-03 (TB - Wa	ter) - cont. Sa	mpled: 08/29	/06 00:01					
Methyl tert-Butyl Ether         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Methyl-en Chloride         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           4-Methyl-2-pentanone         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           Naphthalene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2.7-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2.3-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2.4-Trichlorobenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1.1-Trichloroethane         ND	Volatile Organic Compounds by EPA I	Method 8260B -	cont.						
Methylene Chloride         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           4-Methyl-2-pentanone         ND         ug/L         50.0         1         09/04/06 21:52         SW846 8260B           Naphthalene         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           n-Propylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1.2-Trichloroethane         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,2.3-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1.2-Tric	Methyl tert-Butyl Ether	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
4-Methyl-2-pentanone       ND       ug/L       50.0       1       09/04/06 21:52       SW846 8260B         Naphthalene       ND       ug/L       5.00       1       09/04/06 21:52       SW846 8260B         Naphthalene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Styrene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,1,2-Tetrachloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,1,2-Tetrachloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,2-Tretachloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1,1,2-Trichloroethane       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B	Methylene Chloride	ND		ug/L	- 5.00	1	09/04/06 21:52	SW846 8260B	6090237
Naphthatene         ND         ug/L         5.00         1         09/04/06 21:52         SW846 8260B           n-Propylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2.2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloroethan	4-Methyl-2-pentanone	ND		ug/L	50.0	1	09/04/06 21:52	SW846 8260B	6090237
n-Propylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloropropane	Naphthalene	ND		ug/L	5.00	1	09/04/06 21:52	SW846 8260B	6090237
Styrene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichloroethane         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorooptopane </td <td>n-Propylbenzene</td> <td>ND</td> <td></td> <td>ug/L</td> <td>1.00</td> <td>1</td> <td>09/04/06 21:52</td> <td>SW846 8260B</td> <td>6090237</td>	n-Propylbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1,1,1,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,2,2-Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Tetrachloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichloroethane         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloroptopane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trim	Styrene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1,1,2,2-Tetrachloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Tetrachloroethene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Toluene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trichloroethane       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1,1,1-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,1,1-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichloroppane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,3,5-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846	1,1,1,2-Tetrachloroethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Tetrachloroethene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1,1,2-Trichlorobtane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloroptopane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylben	1,1,2,2-Tetrachloroethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Toluene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1.2,3-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1.2,4-Trichlorobenzene         ND         ug/L         2.00         1         09/04/06 21:52         SW846 8260B           1.1,2-Trichlorobenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichlorobthane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichlorobthane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichlorobthane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloropropane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Vinyl chloride	Tetrachloroethene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1.2.3-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1.2.4-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1.1.2-Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.1.1-Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.1.1-Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Trichlorobenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.2.3-Trichloropropane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.2.4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Vinyl chloride       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Surr: 1.2-Dichloroethane-d4 (70-130%)       103 %       0g/04/06 21:52       SW846 8260B       0g/04/06 21:52	Toluene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1.2.4-Trichlorobenzene       ND       ug/L       2.00       1       09/04/06 21:52       SW846 8260B         1.1.2-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.1.1-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.1.1-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.2.3-Trichloroptomethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.2.3-Trichloroptopane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.3.5-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1.2.4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Vinyl chloride       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Surr: 1.2-Dichloroethane-d4 (70-130%)       103 %       0/04/06 21:52       SW846 8260B	1.2.3-Trichlorobenzene	ND		ug/L	2.00	1	09/04/06 21:52	SW846 8260B	6090237
1,1,2-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,1,1-Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichloroethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichloroethene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichlorofluoromethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloropropane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,3,5-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Vinyl chloride         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Surr: 1,2-Dichlor	1,2,4-Trichlorobenzene	- ND		ug/L	2.00	1	09/04/06 21:52	SW846 8260B	6090237
1,1,1-Trichloroethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Trichloroethene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Trichlorofluoromethane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,3-Trichloropropane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,3,5-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Vinyl chloride       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Surr: 1,2-Dichloroethane-d4 (70-130%)       103 %       103 %       09/04/06 21:52       SW846 8260B         Surr: 7 ohuene-d8 (78-121%)       113 %       09/04/06 21:52       SW846 8260B         Surr: 7 ohuene-d8 (	1,1.2-Trichloroethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Trichloroethene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Trichlorofluoromethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloropropane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,3,5-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Vinyl chloride         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Xylenes, total         ND         ug/L         3.00         1         09/04/06 21:52         SW846 8260B           Surr: 1,2-Dichloroethane-d4 (70-130%)         103 %         103 %         09/04/06 21:52         SW846 8260B           Surr: 7 ohuene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B         09/04/06 21:52         SW846 8260B           Surr: 7 ohuene-d8 (78-121%)	1,1,1-Trichloroethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Trichlorofluoromethane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,3-Trichloropropane         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,3,5-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           1,2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Vinyl chloride         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Xylenes, total         ND         ug/L         3.00         1         09/04/06 21:52         SW846 8260B           Surr: 1,2-Dichloroethane-d4 (70-130%)         103 %         103 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4_Bromofluoromethane (78-126%)         104 %         09/04/06 21:52         SW846 8260B	Trichloroethene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1,2,3-Trichloropropane       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,3,5-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Vinyl chloride       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Xylenes, total       ND       ug/L       3.00       1       09/04/06 21:52       SW846 8260B         Surr: 1,2-Dichloroethane-d4 (70-130%)       103 %       09/04/06 21:52       SW846 8260B         Surr: Toluene-d8 (78-121%)       113 %       09/04/06 21:52       SW846 8260B         Surr: Toluene-d8 (78-121%)       104 %       09/04/06 21:52       SW846 8260B	Trichlorofluoromethane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1,3,5-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         1,2,4-Trimethylbenzene       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Vinyl chloride       ND       ug/L       1.00       1       09/04/06 21:52       SW846 8260B         Xylenes, total       ND       ug/L       3.00       1       09/04/06 21:52       SW846 8260B         Surr: 1.2-Dichloroethane-d4 (70-130%)       103 %       09/04/06 21:52       SW846 8260B         Surr: Dibromofluoromethane (79-122%)       107 %       09/04/06 21:52       SW846 8260B         Surr: Toluene-d8 (78-121%)       113 %       09/04/06 21:52       SW846 8260B         Surr: 4-Bromofluorobenzene (78-126%)       104 %       09/04/06 21:52       SW846 8260B	1.2.3-Trichloropropane	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
1.2,4-Trimethylbenzene         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Vinyl chloride         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Xylenes, total         ND         ug/L         3.00         1         09/04/06 21:52         SW846 8260B           Surr: 1.2-Dichloroethane-d4 (70-130%)         103 %         09/04/06 21:52         SW846 8260B           Surr: Dibromofluoromethane (79-122%)         107 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluorohenzene (78-126%)         104 %         09/04/06 21:52         SW846 8260B	1,3,5-Trimethylbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Vinyl chloride         ND         ug/L         1.00         1         09/04/06 21:52         SW846 8260B           Xylenes, total         ND         ug/L         3.00         1         09/04/06 21:52         SW846 8260B           Surr: 1,2-Dichloroethane-d4 (70-130%)         103 %         09/04/06 21:52         SW846 8260B           Surr: Dibromofluoromethane (79-122%)         107 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluorohenzene (78-126%)         104 %         09/04/06 21:52         SW846 8260B	1.2.4-Trimethylbenzene	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Xylenes, total         ND         ug/L         3.00         1         09/04/06 21:52         SW846 8260B           Surr: 1.2-Dichloroethane-d4 (70-130%)         103 %         09/04/06 21:52         SW846 8260B           Surr: Dibromofluoromethane (79-122%)         107 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluorohene-ne (78-126%)         104 %         09/04/06 21:52         SW846 8260B	Vinyl chloride	ND		ug/L	1.00	1	09/04/06 21:52	SW846 8260B	6090237
Surr: 1,2-Dichloroethane-d4 (70-130%)         103 %         09/04/06 21:52         SW846 8260B           Surr: Dibromofluoromethane (79-122%)         107 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluorohenzene (78-126%)         104 %         09/04/06 21:52         SW846 8260B	Xylenes, total	ND		ug/L	3.00	1	09/04/06 21:52	SW846 8260B	6090237
Surr: Dibromofluoromethane (79-122%)         107 %         09/04/06 21:52         SW846 8260B           Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluorohenzene (78-126%)         104 %         09/04/06 21:52         SW846 8260B	Surr: 1,2-Dichloroethane-d4 (70-130%)	103 %					09/04/06 21:52	SW846 8260B	609023
Surr: Toluene-d8 (78-121%)         113 %         09/04/06 21:52         SW846 8260B           Surr: 4-Bromofluoroben-ene (78-126%)         104 %         09/04/06 21:52         SW846 8260B	Surr: Dibromofluoromethane (79-122%)	107 %					09/04/06 21:52	SW846 8260B	609023
Surr: 4-Bromoflyorohenzene (78-126%) 104 % 09/04/06 21:52 SW846 8260B	Surr: Toluene-d8 (78-121%)	113 %					09/04/06 21:52	SW846 8260B	609023
	Surr: 4-Bromofluorobenzene (78-126%)	104 %					09/04/06 21:52	SW846 8260B	609023



March 22, 2007 10:17:12AM

SAMPLE IDENTIFICATION LAB NUMBER COLLECTION	AFRH [none] APO# 78372 03/13/07		
	DATE AND TIME		
SB02 NQC1739-01 03/12	2/07 11:00		
SB04 NQC1739-02 03/12	2/07 13:00		
SB06 NQC1739-03 03/12	2/07 14:00		
Trip (2)         NQC1739-04         03/12	2/07 00:01		

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

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

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

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

Estimated uncertainity is available upon request.

This report has been electronically signed.

Report Approved By:

Fin M. Headley

Lisa Headley Senior Project Manager

ANALYTICAL TESTING CORPORATION

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

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

	ANALYTICAL REPORT											
Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch				
Sample ID: NQC1739-01 (SB02 - S	Soil) Sampled:	03/12/07	11:00									
Extractable Petroleum Hydrocarbons												
Diesel	5.60		mg/kg	4.92	1	03/16/07 02:29	SW846 8015B	7032390				
Surr: o-Terphenyl (32-132%)	96 %					03/16/07 02:29	SW846 8015B	7032390				
Purgeable Petroleum Hydrocarbons												
GRO as Gasoline	ND		mg/kg	4.72	50	03/15/07 14:51	SW846 8015B	7032463				
Surr: a,a,a-Trifluorotoluene (66-146%)	104 %					03/15/07 14:51	SW846 8015B	7032463				
Sample ID: NOC1739-02RE1 (SR)	04 - Soil) Samn	led• 03/12	2/07 13.00									
Extractable Petroleum Hydrocarbons	sen, sump	1041 00/12										
Diesel	ND		mg/kg	4.90	1	03/16/07 09:09	SW846 8015B	7032390				
Surr: o-Terphenyl (32-132%)	49 %		00			03/16/07 09:09	SW846 8015B	7032390				
Purgeable Petroleum Hydrocarbons												
GRO as Gasoline	ND		mg/kg	4.87	50	03/15/07 15:24	SW846 8015B	7032463				
Surr: a,a,a-Trifluorotoluene (66-146%)	102 %					03/15/07 15:24	SW846 8015B	7032463				
Sample ID: NOC1739-03 (SB06 - 5	Soil) Sampled:	03/12/07	14:00									
Extractable Petroleum Hydrocarbons	··, ··											
Diesel	ND		mg/kg	4.88	1	03/16/07 02:46	SW846 8015B	7032390				
Surr: o-Terphenyl (32-132%)	90 %					03/16/07 02:46	SW846 8015B	7032390				
Purgeable Petroleum Hydrocarbons												
GRO as Gasoline	ND		mg/kg	4.98	50	03/15/07 15:56	SW846 8015B	7032463				
Surr: a,a,a-Trifluorotoluene (66-146%)	103 %					03/15/07 15:56	SW846 8015B	7032463				
Sample ID: NQC1739-04 (Trip (2)	- Water) Samı	oled: 03/1	2/07 00:01									
Purgeable Petroleum Hydrocarbons	,											
GRO as Gasoline	ND		ug/L	100	1	03/18/07 21:45	SW846 8015B	7033211				
Surr: a,a,a-Trifluorotoluene (44-152%)	105 %		-			03/18/07 21:45	SW846 8015B	7033211				

ANALYTICAL TESTING CORPORATION

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SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Extractable Petroleum Hydrocarbons							
SW846 8015B	7032390	NQC1739-01	25.39	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-02	25.53	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-02RE1	25.53	1.00	03/14/07 09:00	BJM	EPA 3550B
SW846 8015B	7032390	NQC1739-03	25.60	1.00	03/14/07 09:00	BJM	EPA 3550B
Purgeable Petroleum Hydrocarbons							
SW846 8015B	7032463	NQC1739-01	5.30	5.00	03/14/07 09:15	NKN	EPA 5035A (GC)
SW846 8015B	7032463	NQC1739-02	5.13	5.00	03/14/07 09:16	NKN	EPA 5035A (GC)
SW846 8015B	7032463	NQC1739-03	5.02	5.00	03/14/07 09:17	NKN	EPA 5035A (GC)

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

#### PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time	
Extractable Petroleum Hydrocar	rbons						
7032390-BLK1							
Diesel	<2.00		mg/kg	7032390	7032390-BLK1	03/15/07 21:26	
Surrogate: o-Terphenyl	101%			7032390	7032390-BLK1	03/15/07 21:26	
Purgeable Petroleum Hydrocarb	oons						
7032463-BLK1							
GRO as Gasoline	2.00		mg/kg	7032463	7032463-BLK1	03/15/07 03:20	
Surrogate: a,a,a-Trifluorotoluene	104%			7032463	7032463-BLK1	03/15/07 03:20	
7033211-BLK1							
GRO as Gasoline	<43.0		ug/L	7033211	7033211-BLK1	03/18/07 21:20	
Surrogate: a,a,a-Trifluorotoluene	102%			7033211	7033211-BLK1	03/18/07 21:20	

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

# PROJECT QUALITY CONTROL DATA

### LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Extractable Petroleum Hydrocarbons								
7032390-BS1								
Diesel	40.0	34.9		mg/kg	87%	41 - 141	7032390	03/15/07 21:43
Surrogate: o-Terphenyl	0.800	0.847			106%	32 - 132	7032390	03/15/07 21:43
Purgeable Petroleum Hydrocarbons								
7032463-BS1								
GRO as Gasoline	10.0	9.72		mg/kg	97%	76 - 117	7032463	03/15/07 18:40
Surrogate: a,a,a-Trifluorotoluene	30.0	44.2	Z2		147%	66 - 146	7032463	03/15/07 18:40
7033211-BS1								
GRO as Gasoline	1000	934		ug/L	93%	58 - 138	7033211	03/19/07 06:59
Surrogate: a,a,a-Trifluorotoluene	30.0	24.8			83%	44 - 152	7033211	03/19/07 06:59

ANALYTICAL TESTING CORPORATION

Client MACTEC Engineering & Consulting, Inc. (3740) 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147 Attn Brent Chapman 2960 Foster Creighton Road Nashville, TN 37204 \* 800-765-0980 \* Fax 615-726-3404

Work Order:NQC1739Project Name:AFRHProject Number:[none]Received:03/13/07 08:10

# PROJECT QUALITY CONTROL DATA

# LCS Dup

Analyte	Orig. Val.	Duplicate	Q	Units	Spike Conc	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analyzed Date/Time
Purgeable Petroleum Hydrocarbons 7032463-BSD1												
GRO as Gasoline		9.90		mg/kg	10.0	99%	76 - 117	2	22	7032463		03/15/07 19:15
Surrogate: a,a,a-Trifluorotoluene		45.3	Z2	ug/L	30.0	151%	66 - 146			7032463		03/15/07 19:15

# APPENDIX D PHOTOGRAPHS



Photograph 1. View of USTs adjacent to Building 46/46A.



Photograph 2. View to the north with Building 46 in the distance and monitoring well W72-2 at the northwest corner of Building 72.



Photograph 3. View of the pump island and USTs adjacent to Building 75 facing southwest.



Photograph 5. View of the apparent waste oil spill located adjacent to the southern side of Building 76.



Photograph 4. View of the oil water separator located adjacent to Building 76.



Photograph 6. View of the incinerator chute/stack associated with Building 69.

# APPENDIX E ERT GEOPHYSICAL REPORT

# Earth Resources Technology, Inc.

8106 Stayton Dive, Jessup, MD 20794 Tel: 240-554-0161 Fax: 301-604-0205

August 21, 2006

Brent Chapman MACTEC, Inc. 21740 Beaumeade Circle, Suite 150 Ashburn, VA 20147

Re: Results of Geophysical Survey at the Armed Forces Retirement Home, Washington, D.C.

Dear Mr. Chapman,

**Earth Resources Technology, Inc. (ERT)** performed a geophysical survey around Buildings 46, 75, and 76 at the Armed Forces Retirement Home, Washington, D.C, on August 9, 2006. The purpose of this investigation was to determine the presence or absence of underground storage tanks (UST's).

# 1.0 Equipment

A Geometrics Portable Cesium Magnetometer, Model G-858, was used for the magnetic survey. Using selfoscillating split-beam Cesium vapor (non-radioactive Cs-133), this magnetometer measures the earth's total geomagnetic field (magnetic flux density) at a particular location in units of nanoTeslas (nT) with an accuracy of  $\pm 1.0$  nT. It collects a maximum of 10 magnetic readings per second. The total field consists of three components: the main field of the earth, the external field caused by the sun and moon, and local variations caused by objects at the site. The main field and external field remain relatively constant over the period of time of a field investigation. Local variations are attributable to anomalies near the surface such as buried metal objects or above ground objects containing ferrous metal. Figure 1 shows a contour map of typical magnetic data containing a confirmed UST. This figure is provided to show what to look for when interpreting a magnetic survey, and *does not contain data collected at this site*.

The SIR-3000 Ground Penetrating Radar unit, manufactured by Geophysical Survey Systems, Inc. (GSSI), was used to conduct the GPR survey. The device radiates a polarized electromagnetic wave from a transmitter antenna into the earth and receives at a receiving antenna the reflection of the wave from subsurface interfaces at which changes in the electrical properties (dielectric permittivity and electrical conductivity) of the subsurface materials occur. Dielectric permittivity controls wave speed; and conductivity determines the signal attenuation. Radar reflections occur when the radio waves encounter a change in the velocity or attenuation. The greater the change in properties the more signal is reflected. These properties may be controlled by water in the material, hence by the porosity and quantity of dissolved solids in the water. Also, metallic objects usually exhibit a strong subsurface reflection due to their high electrical impedance or contrast versus surrounding soil or fill. Depth of penetration of the radar signal is inversely proportional to the conductivity of the soil. As a result, electrically resistive earth materials such as coarse-grained, unsaturated sediments allow a deeper radar penetration than the conductive finer-grained soils such as clay and silt. Similarly, reinforced concrete and shallow groundwater are conductive and thus attenuate the radar signals. The 400 MHz antenna was used for this survey.

The collection of the GPR data was performed by pulling the antenna along, and between, grid lines while the positions of each radar reading were recorded with an odometer attached to a survey wheel. The odometer was set up such that 10 radar readings would be acquired every foot. The GPR penetration can be estimated using the radar time range (time for the waves to leave the antenna, reflect and return to the antenna) and an estimate of the radar velocity. After reviewing the GPR data, the results were cropped at about 4.5 feet, as no features were evident on the

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profiles below that depth. The GPR data were recorded digitally in a portable computer for instant display and subsequent processing. An example of a UST seen in a GPR profile is provided in Figure 1. GPR data provided in Figure 1 *is not from this site.* 

# 2.0 Magnetic Survey

## Buildings 75 & 76

A grid was laid out at the site with the north side of building 76 used as X=100, as shown in Figure 2. Other notable features on this map include several concrete pads with exposed tank lids, debris areas (where data could not be collected), and several metallic posts, which held up a large canopy for building 76.

The approach to interpreting magnetic data is to distinguish the local variations from the background. To interpret the data, readings collected from the survey grid were used to construct a contour map. Anomalies often occur as closed or elongated contours that have readings either above or below the background. The closed or elongated contours with readings above the background are considered magnetic highs and typically represent buried metallic objects (such as UST's); while the contours with readings below the background are considered as magnetic lows and are often caused by above-ground objects (such as fences or cars).

Figure 3 shows a magnetic contour map with the site features as reference in the background. Magnetic anomalies are labeled with yellow letters. Anomaly A is associated with a series of weak highs and lows that are correlated with a set of storage tanks with surface lids and a concrete pad. Anomalies B and C are not associated with any surface features. Anomaly D marks the beginning of a possible set of magnetic lows to the north and northwest of the concrete island. Anomaly E is a linear cluster of weak highs that could possibly be influenced by the metal canopy, which runs parallel to the set of anomalies. Anomaly F is a set of weak lows that may be associated with the tank at the northeast corner of building 76. Anomaly G is a weak high that is located on the southern side of the gas island connected to building 75. GPR data was collected over these areas.

## Building 46

A grid was laid out on the site along the south side of building 46, where the Y-axis was nearly parallel to the south wall, as shown in Figure 4. Other notable features of the map include several concrete pads with exposed tank lids, and a retaining wall that divides the site in half.

Figure 5 shows a magnetic contour map with the site features as reference in the background. Magnetic anomalies are labeled with yellow letters. Anomaly **H** strong high that is possibly associated with the large subsurface storage tank and the retaining wall in the center of the site. Anomaly **I** is a strong low that is probably related to the vent pipes and the building.

## 3.0 GPR Survey

Each GPR profile is made of a series of individual wavelets that have crests and troughs. A GPR profile is constructed by color-coding the crests and troughs of traces and aligning them side-by-side. As shown in the example in Figure 1, the white reflections are crests of individual traces with the highest amplitudes, while the dark gray-black reflections are the troughs of individual traces with the lowest amplitudes. The whitest and blackest reflections are created by interfaces of the highest dielectric contrast.

Interpretation of GPR data is focused on analyzing the reflections created by subsurface objects. On a GPR profile, a cylindrical subsurface feature may be represented by strong hyperbolic reflections in its cross-section and by strong horizontal reflections terminating at both ends in its longitudinal profile. Tanks will often create strong

reflectors. Similarly, pipes or drainage tile will have hyperbolic reflections, but should be smaller and perhaps less intense than those caused by a tank (see Figure 1).

# Buildings 75 & 76

GPR profiles were collected over the area shown in Figure 6 as magenta lines. Magnetic contours are shown in gray. Letters show specific profiles presented in Figures 7, 8, and 9.

The horizontal axes of the GPR profiles shown in Figures 7, 8, and 9 represent the horizontal distance in feet, along lines parallel to the X- and Y-axes of the grid.

The vertical axis represents the approximate depth in feet, using an estimated radar velocity of 0.1 m/ns (All profiles are cropped at exactly 27.5 ns). Features of interest are noted in yellow on the profiles.

Profile A-A' (Figure 7) was collected over magnetic anomaly A. The profile shows a clear image below the concrete pad, which holds three tanks. At a depth of less than a foot, there are a series of small anomalies that can be associated with the rebar in the reinforced concrete pad. The profile also shows a large anomaly at a depth of 2.5 feet, which could be a UST or pipe. Another, even larger anomaly can be identified below this at a depth of 3.5 feet, which is more likely a tank. Profile H-H' (Figure 7) was taken parallel to A-A' and shows the tank lid. Profiles F-F' (Figure 7) and G-G' (Figure 7) display longitudinal profile views of the tank system with rebar in the concrete and the series of tank lids visible. Profile **B-B'** (Figure 7) was collected over magnetic anomaly **D**. Rebar possibly associated with a concrete pad is shown between 155 feet to 173 feet along the profile. Adjacent profiles also show that the pad extends to the northwest of **B-B'**. Under this pad, there seem to be two large structures that could be a series of pipes or UST's. These structures, like the pad, both trend in a northwestern direction. Profile O-O' (Figure 8) was collected diagonally to the grid through magnetic anomalies **B** and **D**. Rebar can be identified from 5 to 27 feet along this profile. The end of the concrete marks the beginning of magnetic anomaly  $\mathbf{D}$ , and shows a similar feature as was discussed in profile B-B'. Profiles J-J' (Figure 8) and I-I' (Figure 8) were taken at the same angle as profile O-O' and cross over both magnetic anomalies B and D. As in profile O-O', profiles J-J' and I-I' show a large anomaly at the end of the concrete gas island between 25 and 35 feet along the profile, which correlates to anomaly B. They also display a large anomaly area that corresponds to magnetic anomaly B between 47 and 63 feet along the profile path. This location also matches the large area of rebar that GPR shows over most of profile K-K' (Figure 8), which possibly is the cover for a set of smaller UST's.

Profiles C-C' and D-D' (Figure 7) show anomalies between 130 and 140 feet in on both of the profiles. This region does not correlate to any magnetic anomaly areas, however shows up consistently in several parallel GPR profiles. Profiles C-C' and D-D' also show a possible UST, which correlates to anomaly G. This anomaly can be seen on the profiles between 145 and 155 feet and is located at a depth of approximately 2 feet. Profile L-L' (Figure 9) was taken directly over the deeper anomaly region of profiles C-C' and D-D', and shows a large concave dip in the brightest reflector in the GPR profile. This could be interpreted as an area where a previous excavation once occurred, and then the area was backfilled. Profile L-L' also shows a concrete pad with a possible set of pipes or UST's directly beneath the pad and are visible between 265 feet and 275 feet along the profile. This set of anomalies also corresponds with magnetic anomaly C. Profile E-E' (Figure 9) was collected over the linear magnetic anomaly of **E**, which parallels building 76. The profile has very little variation and shows no sign of any anomaly until the last 10 feet of the profile. From 270 to 280 feet, GPR shows a reinforced concrete structure that corresponds to magnetic anomaly C and what was shown in profile L-L'. No GPR anomalies correspond to magnetic anomaly E. Magnetic anomaly E could possibly relate to the metal canopy and the pillars that are parallel to building 76. Profile M-M' (Figure 8) crosses magnetic anomaly F. The profile has very little variation and shows no sign of a subsurface source for the magnetic anomaly. It is possible that anomalies E and F are similarly caused by the metal framework for the canopy in front of the building or F could possibly be caused by a nearby vent pipe for the tank to the south of the anomaly. Profile N-N' (Figure 8) is perpendicular to profile M-M' and also

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shows no variation above the location of magnetic anomaly  $\mathbf{F}$ . The profile does show a tank corresponding to the concrete pad at the surface at the northeast corner of building 76.

All anomalies discussed above are shown in red in Figure 12.

## Building 46

GPR profiles were collected over the area shown in Figure 10 as magenta lines. Magnetic contours are shown in gray. The area of GPR investigation was limited due to radar space constraints, therefore the data is not as complete as in other investigation sites. The horizontal axes of the GPR profiles shown in Figure 11 represent the horizontal distance in feet, along lines parallel to the X- and Y-axes of the grid. The vertical axis represents the approximate depth in feet, using an estimated radar velocity of 0.1 m/ns (All profiles are cropped at exactly 27.5 ns). Features of interest are noted in yellow on the profiles.

Profiles **P-P'**, **Q-Q'** and **R-R'** (Figure 11) and were collected over a series of tank ports that were located to the north of magnetic anomaly **H**. Profile **P-P'** shows no anomalies. Both **Q-Q'** and **R-R'** have anomalies around 115 feet along the profile. These anomalies roughly match the location of magnetic anomaly **I** and the vent pipes along the edge of building 46. Also, the anomaly in the profiles does not trend toward the center of this magnetic low. Profile **S-S'** (Figure 11) was collected between the 2 tank ports. The profile shows a strong anomaly at 113 feet, which is probably a large pipe that is connecting the 2 ports. Profiles **U-U'** and **T-T'** (Figure 11) were taken over magnetic anomaly **H**. Only Profile **T-T'** identifies a strong reflector in the subsurface. This is an indication that the object is centered in the region of anomaly **H**. Profile **V-V'** (Figure 11) also shows that the anomalous feature does not extend southward. Only a small portion of the possible UST can be seen in this profile. This reflector is around 2.5 feet deep, which creates an unlikely connection between the visible tank and anomaly **H**, due to the retaining wall. At 2.5 feet in depth, this object may be above ground on the low side of the retaining wall, making it unlikely that this object is related to the tank opposite the retaining wall.

All anomalies discussed above are shown in red in Figure 13.

## 4.0 Closing

Many anomalies have been identified both by magnetic data and by GPR. Several are possible UST's and have been labeled accordingly on Figures 12 and 13.

Sincerely, Earth Resources Technology, Inc.

James L. Stuby, MS., PG. Project Geophysicist

Enclosures: Disclaimer Figures 1-13

### DISCLAIMER

The field procedures and interpretative methodologies used in this project are consistent with standard, recognized practices in similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past result of similar surveys although it is possible that some variation could exist at this site. This warranty is in lieu of all other warranties either implied or expressed. **Earth Resources Technology, Inc. (ERT)** assumes no responsibility for interpretations made by others based on work performed by or recommendations made by **ERT.** 

Magnetic contour maps are generated by contouring spatially controlled data in the units of nannoTeslas (nT), typically collected with a magnetometer. Magnetic anomalies are herein defined as locations on a magnetic contour map that are local maxima (highs) or minima (lows). For purposes of investigation, all magnetic anomalies should be considered indicative of Underground Storage Tanks (UST's) unless proven otherwise.

Ground Penetrating Radar (GPR) profiles collected over a magnetic anomaly can provide evidence for or against interpretation of a magnetic anomaly representing a UST. If a part of a strong-amplitude reflection of any kind occurs on a GPR profile below any part of a magnetic anomaly, then it is likely that the reflection represents the cause of the magnetic anomaly. *Strong-amplitude reflectors such as this should be considered possible UST's unless proven otherwise by excavation.* 

Other factors enter into interpretation of magnetic and GPR data when conducting a search for UST's, such as anomaly intensity (quantity above or below average for the map) or anomaly size or shape. These factors are considered but not given as much weight as the above criteria. Factors such as the presence of vent pipes or fill ports may be important but their significance should be evaluated by the client and not by **ERT**.

Caution should be exercised in any area with a magnetic anomaly, as they may indicate a number of possibilities. When interpreting magnetic anomalies in combination with GPR profiles, there are four general scenarios:

- 1) Magnetic anomaly is at or near a surface feature (such as a light pole, manhole cover, or fire hydrant) made of ferrous metal and is likely caused by this feature; there is probably no UST present, but it leaves the possibility that the magnetic anomaly is caused by a UST but is obscured by the magnetic signature of the surface feature.
- 2) Magnetic anomaly is not associated with a surface feature but GPR profiles show no evidence of UST's or other features; there is also probably no UST present, but it leaves the possibility that the GPR signals failed to penetrate to the depth of the object causing the magnetic anomaly (this can occur when the soil is conductive and thus attenuates the GPR signal, or when the signal is blocked or scattered by rebar or wire mesh). Alternately, the subsurface object causing the anomaly may be too small to be imaged by the GPR unit.
- 3) Magnetic anomaly is not associated with a surface feature and GPR profiles show evidence of subsurface features that are not typical of UST's; there is still a possibility that the GPR profiles show a UST that is deformed or otherwise unusual and may not look like a "typical" UST as seen in Figure 1 of this report.
- 4) Magnetic anomaly is not associated with a surface feature and GPR profiles show evidence of subsurface features typical of UST's (i.e., broad hyperbolic reflectors and/or flat reflectors with ends curving down). This scenario provides the best evidence of a UST in geophysical terms, but a large pipe or some other subsurface object may cause the anomaly identified on the GPR profiles.

One might rank these scenarios from low UST probability (Scenario 1) to high UST probability (Scenario 4), but geophysics cannot be used to state *conclusively* that there is, or is not, a UST at a given location. *Excavation is the only method that can provide proof of the existence or non-existence of a UST.* 













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GPR profiles collected August 9, 2006, using GSSI SIR-3000 with 400 MHz antenna. All profiles cropped at exactly 27.5 ns and converted to approximate depth assuming 0.1 m/ns velocity.



С







С'















GPR profiles collected August 9, 2006, using GSSI SIR-3000 with 400 MHz antenna. All profiles cropped at exactly 27.5 ns and converted to approximate depth assuming 0.1 m/ns velocity.












GPR profiles collected August 9, 2006, using GSSI SIR-3000 with 400 MHz antenna. All profiles cropped at exactly 27.5 ns and converted to approximate depth assuming 0.1 m/ns velocity.



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