

FINAL
POL IMPACTED SOIL REMOVAL ACTIONS
PARADISE POINT and CAMP JOHNSON, MCB CAMP LEJEUNE,
NORTH CAROLINA

Prepared for:

Commander
Naval Facilities Engineering Command



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Task Order 0023
Shaw Project No. 102420

October 2004

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DEPARTMENT OF THE NAVY
Contract No. N62470-02-D-3260
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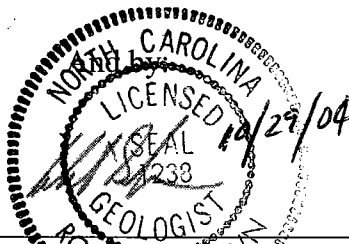
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LIST OF ACRONYMS

bls	below land surface
DRO	Diesel Range Organics
EPH	Method for the Determination of Extractable Petroleum Hydrocarbons
GRO	Gasoline Range Organics
LANTDIV	Naval Facilities Engineering Command, Atlantic Division
MADEP	Massachusetts Department of Environmental Protection
MCB	Marine Corps Base
MSCCs	Maximum Soil Contaminant Concentrations
mg/kg	milligram per kilogram
NCDENR	North Carolina Department of Environmental and Natural Resources
NFA	No Further Action
OHM	OHM Remediation Services, Inc.
OVA-FID	Organic Vapor Analyzer – Flame Ionization Detector
POL	Petroleum Oil Lubricant
ppb	parts per billion
ppm	parts per million
QC	Quality Control
Shaw	Shaw Environmental, Inc.
SVOC	Semi-Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Potential
TPH	Total Petroleum Hydrocarbon
µg/kg	microgram per kilogram
UST	Underground Storage Tank
VOC	Volatile Organic Compound
VPH	Method for the Determination of Volatile Petroleum Hydrocarbons

TITLE PAGE

The facility name, UST owner, UST operator, and UST information is provided below:

UST Incident Number: 24009 (PP-3326)
24010 (PP-3330)
24011 (PP-3332)
24014 (PP-3350)
12677 (Building M-230)

ID Number: Not Applicable

Risk Classification: Low Risk

UST Owner: Commanding General, MCB
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-5068

UST Operator: Commanding General, MCB
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-5068

Primary Responsible Party Contact: Nikki Hall
Environmental Engineer
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-9610

Source of Release: USTs/Line Leak
Latitude and Longitude: 34.68N and 77.36W – Paradise Point
35.7246N and 77.4128W – Building M-230

Tank Number	Date Release Discovered	Tank Capacity	Tank Dimensions	Last Contents	Date Removed
CC-3326	Sept-2001	285	unknown	Fuel Oil	Oct-2001
CC-3330	Sept-13-2001	285	unknown	Fuel Oil	Sept-2001
CC-3332	Sept-13-2001	285	unknown	Fuel Oil	Sept-2001
CC-3350	Sept-6-2001	285	unknown	Fuel Oil	Sept-2001\
M-230-1	Oct-7 1993	15,000	unknown	Fuel Oil	Sept-1993-
M-230-2	Oct-7 1993	15,000	unknown	Fuel Oil	Sept-1993

EXECUTIVE SUMMARY

The soil removal actions at Paradise Point and Camp Johnson were completed in the vicinity of former fuel oil underground storage tanks that were previously removed and was initiated in response to a soil assessment performed by CATLIN Engineers and Scientists in the spring of 2003. Results of the assessments were presented in reports dated May and June 2003. Volatile and semi-volatile organic compounds as well as MADEP EPH/VPH constituents were found in the soil surrounding the former tank locations at concentrations above the North Carolina Residential Maximum Soil Contaminant Concentrations.

The following work was accomplished at the site during March 2003:

- Excavation of 130 tons of non-hazardous TPH impacted soil from four locations at Paradise Point.
- Excavation of 95 tons of non-hazardous TPH impacted soil from one location at Camp Johnson.
- Collection of 5 initial confirmation samples from each of the locations for TPH-DRO and TPH-GRO analysis.
- Re-excavation at House PP-3326 and M-230, and collection of 5 final confirmation samples for MADEP-EPH and MADEP-VPH analysis.
- Using a hand auger, collection of 5 final confirmation samples from each of the other locations for MADEP-EPH and MADEP-VPH analysis.
- Collection of 1 confirmation sample from each of the locations for VOCs Method 8260 and SVOCs Method 8270 analysis.
- Collection of one composite sample for Toxicity Characteristic Leaching Procedure analysis for disposal purposes.
- Restoration of each site by backfilling, compacting, grading, seeding and mulching the affected area.
- Transportation to and disposal of soil at an in-State petroleum permitted disposal facility.

During soil removal activities only the excavation at House PP-3326 displayed visible hydrocarbon contamination. Over excavation removed the hydrocarbon stained soil. The depth of excavations at Paradise Point extended to five feet below land surface. Groundwater was observed in the excavation at House PP-3326.

Confirmation soil samples indicated that at least one sample from each excavation exceeded the North Carolina Department of Environmental and Natural Resources Residential MSCCs for hydrocarbon constituents.

For disposal purposes, a sample from the excavated soils was analyzed for full TCLP analyses, TPH-GRO, TPH-DRO, and general chemical analysis. Results from these analyses met the allowable State disposal levels. The soils were disposed at ES&J Enterprise, Inc. located in Autryville, NC.

1.0 INTRODUCTION

1.1 BACKGROUND

This document is a summary report describing soil removal actions completed at Buildings PP-3326, PP-3330, PP-3332, and PP-3350 located at Paradise Point and Building M-230 located at Camp Johnson, Marine Corps Base Camp Lejeune during April and May of 2004. The Department of the Navy, Naval Facilities Engineering Command, Atlantic Division (LANTDIV) tasked Shaw Environmental, Inc. to implement this removal action under Contract No. N62470-02-D-3260, Task Order 023.

This report contains five sections and six appendices: Section 1.0 is an introduction, Section 2.0 is a description of the remedial activities, Section 3.0 presents a summary of analytical results, Section 4.0 presents a summary of field activity and conclusions, and Section 5.0 provides references.

1.2 ENVIRONMENTAL SETTING

MCB Camp Lejeune is located in Onslow County, North Carolina. MCB Camp Lejeune is a training base for the United States Marine Corps. The Base covers approximately 236 square miles and includes 14 miles of coastline. MCB Camp Lejeune is bounded to the southeast by the Atlantic Ocean and the northeast by State Route 24. **Figure 1-1** presents a portion of MCB in the vicinity of Paradise Point and Camp Johnson.

1.3 SITE DESCRIPTIONS

Paradise Point is a residential housing complex located in the north-northeast portion of the MCB. Camp Johnson is located northwest (across the New River) from Paradise Point.

1.3.1 House PP-3326

The UST and associated pipe was removed from this location in October 2001. Four of the five confirmation soil samples collected during UST closure exceeded the State Residential Maximum Soil Contaminant Concentrations (MSCCs). The subsequent Phase I LSA was conducted by CATLIN in July 2002 with additional sampling performed in March 2003. The subsequent investigations (Phase I LSA and SAR) yielded the following findings:

- The site is classified as Residential and Low Risk.

- Free product was not observed in the subsurface at the site.
- Dissolved hydrocarbons were discovered in groundwater at the site, however, no concentrations were detected in excess of Gross Contaminant Levels (GCLs).
- The extent of soil contamination was delineated and appeared to be limited to the immediate vicinity of the former tank basin to a depth of two feet below land surface (bls).

Due to the apparent limited extent of soil contamination, soils with contaminant concentrations in excess of Residential MSCCs were proposed for excavation. An estimated 12 cubic yards (cy) were expected to require removal and disposal.

1.3.2 House PP-3330

The UST system was removed at this location by J.A. Jones in September 2001. All five confirmation soil samples collected during UST closure exceeded the State Residential MSCCs. The subsequent Phase I LSA was conducted by CATLIN in July 2002 with additional sampling performed in March 2003. The subsequent investigations (Phase I LSA and SAR) yielded the following findings:

- The site is classified as Residential and Low Risk.
- Free product was not observed in the subsurface at the site.
- Dissolved hydrocarbons were discovered in groundwater at the site, however, no concentrations were detected in excess of GCLs.
- The extent of soil contamination was delineated and appeared to be limited to the immediate vicinity of the former tank basin to a depth of three feet bls.

Due to the apparent limited extent of soil contamination, soils with contaminant concentrations in excess of Residential MSCCs were proposed for excavation. An estimated 26 cy were expected to require removal and disposal.

1.3.3 House PP-3332

This UST was removed in September 2001. Four confirmation soil samples collected during UST closure exceeded the State Residential MSCCs. The subsequent Phase I LSA was conducted by CATLIN in July 2002 with additional sampling performed in March 2003. The subsequent investigations (Phase I LSA and SAR) yielded the following findings:

- The site is classified as Residential and Low Risk.

- Free product was not observed in the subsurface at the site.
- Dissolved hydrocarbons were discovered in groundwater at the site, however, no concentrations were detected in excess of GCLs.
- The extent of soil contamination was delineated and appeared to be limited to the immediate vicinity of the former tank basin to a depth of 3.5 feet bls.

Due to the apparent limited extent of soil contamination, soils with contaminant concentrations in excess of Residential MSCCs were proposed for excavation. An estimated 28 cy were expected to require removal and disposal.

1.3.4 House PP-3350

This UST was removed by J.A. Jones in September of 2001. Three of the five confirmation soil samples collected during UST closure exceeded the State Residential MSCCs. The subsequent Phase I LSA was conducted by CATLIN in July 2002 with additional sampling performed in March 2003. The subsequent investigations (Phase I LSA and SAR) yielded the following findings:

- The site is classified as Residential and Low Risk.
- Free product was not observed in the subsurface at the site.
- Dissolved hydrocarbons were discovered in groundwater at the site, however, no concentrations were detected in excess of GCLs.
- The extent of soil contamination was delineated and appeared to be limited to the immediate vicinity of the former tank basin to a depth of two feet bls.

Due to the apparent limited extent of soil contamination, soils with contaminant concentrations in excess of Residential MSCCs were proposed for excavation. An estimated 6 cy were expected to require removal and disposal.

1.3.5 Building M-230 (Camp Johnson)

Building M-230 is a steam generation facility for Camp Johnson in Camp Lejeune, North Carolina. Two 15,000 gallon diesel fuel oil USTs used for steam generation were removed in September 1993. Following completion of UST removal activities, an UST Closure Assessment and a Limited Site Assessment were completed. Results of these assessments identified three SVOCs (benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene) at concentrations above the Residential MSCCs. Based on the initial site assessment results a Soil Assessment Report (SAR) was completed in March 2003. Results of these investigations are summarized below:

- The site is classified as Residential and Low Risk.
- Free product was not observed in the subsurface at the site.
- The extent of soil contamination was delineated and appeared to be limited to the immediate vicinity of Monitoring Well M230-MW1.

Due to the apparent limited extent of soil contamination, soils with contaminant concentrations in excess of Residential MSCCs were proposed for excavation. An estimated 6 cy were expected to require removal and disposal.

2.0 REMEDIAL ACTIVITIES

2.1 REMEDIAL ALTERNATIVE

Based on findings of soil assessment activities at each site, it was determined that the limits of hydrocarbon contamination at each site had been delineated. Soil contamination was assumed to be limited to the areas adjacent to the sidewalls of the former tank basin. Because of the relative small quantity of contaminated soil, on-site treatment was not practical for this project. Therefore, soil excavation and disposal was determined to be the most cost-effective technology for remediation of POL contaminated soils at each site. The remedial approach at each site was to excavate and dispose petroleum contaminated soil in the vicinity of the former USTs, as defined by Catlin's soil assessment report and the Soil Removal Action Work Plan for each site.

2.2 SITE REMEDIATION CHRONOLOGY

The following activities were completed during implementation of the soil removal action:

- All excavation activities were completed using a mini excavator.
- Removal of POL contaminated soil at House PP-3326 over an approximate area of 186 ft² to a depth of 5 bls (35 cy).
- Removal of POL contaminated soil at House PP-3330 over an approximate area of 144 ft² to a depth of 5 feet bls (27 cy).
- Removal of POL contaminated soil at House PP-3332 over an approximate area of 156 ft² to a depth of 5 feet bls (29 cy).
- Removal of POL contaminated soil at House PP-3350 over an approximate area of 36 ft² to a depth of 5 feet bls (7 cy)
- Abandonment of Monitoring Well M230-MW1 at Building M-230
- Removal of POL contaminated soil at Building M-230 over an approximate area of 176 ft² to a depth of 11 feet bls (72 cy).
- Collection of confirmation and disposal soil samples.
- Restoration of affected areas.
- Disposal of contaminated soil at an appropriate facility.

Following completion of initial excavation activities, sidewall and floor confirmation soil samples were collected for TPH-DRO and TPH-GRO analysis. If analytical results exceeded 10 mg/kg a second confirmation soil sample was collected and analyzed for MADEP

EPH/VPH. In addition, the soil sample with the highest OVA-FID reading from each excavation was also analyzed for VOCs (Method 8260) and SVOCs (Method 8270). The remedial objectives were based on soil contaminant concentrations that exceeded the State Residential MSCCs for VOCs, SVOCs and MADEP EPH/VPH. Soils were disposed of at a permitted, in-State Non-Hazardous RCRA Subtitle D disposal facility.

April 26-27, 2004: Site Preparation. Equipment and personnel currently working at Camp Lejeune performed this remedial project. The initial site preparation activities included:

- Acquiring dig permits and proper safety forms.
- Examining each site to determine access to the proposed excavation area.
- Delineation of each job site perimeter and work zones.
- Location of all utilities within the project area.
- Placement of a mini-excavator into the excavation area.
- Designating a soil staging area.
- Placement of temporary fence/barricades surrounding each work area.
- Procurement of required equipment and materials.

Setting up an exclusion zone and implementing erosion and sedimentation control measures, such as silt fence and hay bale placement, were not necessary for these field activities.

Prior to excavation activities a local utility locator, contracted by Shaw, identified and marked known utilities within each work zone.

Project kick-off and Health & Safety Meeting. All site personnel were informed of the project objectives. Site hazards and contaminants of concern were discussed.

April 28, 2004: Soil Removal, House PP-3326. During excavation activities the sidewall of the excavation was screened with a Flame Ionization Detector (OVA-FID). Field measurements ranged from 0 ppm to 364 ppm. The original soil removal area was excavated in one day. Since the excavations were taking place within a residential area, the contaminated soil was transported by dump truck to a secured area and covered while awaiting disposal. The initial excavation area was approximately 64-ft² (8 ft x 8 ft) to a depth of 5 feet bls.

Based on visual observation of stained soil and elevated OVA-FID readings the excavation was expanded approximately six feet on either side of the excavation and one foot on the side

away from the house. The dimensions of the final excavation were approximately 20 feet x 9 feet x 5 feet deep (33 cy). Four sidewall samples were collected for TPH-DRO/GRO analysis. The final excavated area is shown in **Figure 2-1** and a series of photographs are provided in **Appendix A**.

Groundwater and some product were observed in the bottom of the excavation. The fluids were recovered using a vacuum recovery truck. Because groundwater was encountered in the bottom of the excavation, a confirmation soil sample was not collected from the bottom of the excavation.

Routine air monitoring in the breathing zone was performed during excavation activities using an OVA-FID to monitor for the presence of volatile hydrocarbons. No readings were detected in the breathing zone above the ambient level of 0.0 parts per million (ppm); therefore no upgrade in protective equipment was required.

April 29, 2004: Soil Removal, House PP-3330. During excavation activities the sidewall of the excavation was screened with an OVA-FID. Field measurements ranged from 0 ppm to 20 ppm. No visible soil staining or hydrocarbon odors were observed during excavation activities. Excavated soil was transported to a secure area and covered while awaiting disposal. The excavated area is shown in **Figure 2-2** and a series of photographs are provided in **Appendix A**. An approximate area of 144-ft² (12 ft x 12 ft) was excavated to a depth of 5 feet bls (27 cy). Groundwater was not observed in the bottom of the excavation. Four sidewall samples and one bottom sample were collected for TPH-DRO/GRO analysis.

Routine air monitoring in the breathing zone was performed during excavation activities using an OVA-FID to monitor for the presence of volatile hydrocarbons. No readings were detected above the ambient level of 0.0 ppm; therefore no upgrade in protective equipment was required.

April 30, 2004: Site Restoration, Houses PP-3326 and PP-3330. The excavations at House PP-3326 and PP-3330 were backfilled and compacted in 2 foot lifts. Locator tape was placed 2 feet above the underground utilities (electrical and telephone) identified during excavation activities. Final restoration was completed by placing sod on the backfilled excavation.

May 6, 2004: Soil Removal, Houses PP-3332 and PP-3350. During excavation activities the sidewall of the excavation was screened with an OVA-FID. Field measurements ranged from 0 ppm to 20 ppm. No visible soil staining or hydrocarbon odors were observed during

excavation activities. Excavated soil was transported by dump truck to a secured area and covered while awaiting disposal. The excavated areas are shown in **Figures 2-3 and 2-4**. Photographs are provided in **Appendix A**. At House PP-3332 an approximate area of 156-ft² (12 ft x 13 ft) was excavated to a depth of 5 feet bls (30 cy). At House PP-3350 an approximate area of 36-ft² (6 ft x 6 ft) was excavated to a depth of 5 feet bls (7 cy). Groundwater was observed in the bottom of the excavation at House PP-3332. Four sidewall samples and one bottom sample were collected for TPH-DRO/GRO analysis from each excavation.

Routine air monitoring in the breathing zone was performed during excavation activities using an OVA-FID to monitor for the presence of volatile hydrocarbons. No readings were detected above the ambient level of 0.0 parts per million (ppm); therefore no upgrade in protective equipment was required.

May 7, 2004: Houses PP-3332 and PP-3350 Site Restoration. The excavations at House PP-3332 and PP-3350 were backfilled and compacted in 2 feet lifts. Final restoration was completed by placing sod on the backfilled excavations.

May 10, 2004: Camp Johnson Building M-230 Excavation. Monitoring Well M230-MW1 was properly abandoned by a North Carolina registered driller on April 30, 2004. A copy of the monitoring well abandonment form is provided in **Appendix B**. Excavation activities removed soil (as well as the abandoned monitoring well) in a 5 feet radius around the monitoring well to a total depth of 8 feet bls. Four sidewall samples and one bottom sample were collected for TPH-DRO/GRO analysis from the excavation.

May 20-21, 2004: Camp Johnson Building M-230 Additional Excavation. Based on TRPH-GRO/DRO analytical results exceeding 10 mg/kg in two sidewall samples and the floor sample, the excavation was extended an additional 2.5 feet around the monitoring well (15 feet total diameter) and an additional 3 feet deep (11 feet total depth). At the conclusion of the additional excavation work, two confirmation sidewall soil samples and one floor soil sample were collected. The samples were analyzed for VOCs (Method 8260), SVOCs (Method 8270) and MADEP EPH/VPH.

May 26, 2004: Paradise Point Soil Confirmation Sample Collection Houses PP-3326, PP-3330, PP-3332, and PP-3350. Using a hand auger, confirmation soil samples were collected approximately two feet from each excavation sidewall and a floor sample was collected from the center of each excavation. The samples were collected from a depth of seven feet bls. A

floor sample was not collected at House PP-3326 because groundwater was encountered at a depth of five feet bls during excavation activities. All the soil samples were analyzed for MADEP EPH/VPH. In addition, the soil sample displaying the highest OVA-FID reading from each excavation was analyzed for VOCs (Method 8260) and SVOCs (Method 8270).

Transport and Disposal of Contaminated Soil. A total of 254 tons of soil was loaded onto trucks and transported and disposed of by ES&J Enterprises. ES&J Enterprise operates a State-permitted TPHC recycling facility located in Autryville, North Carolina. Manifests were obtained from ES&J Enterprises and are included in **Appendix C**.

The Safety Meeting Reports, Job Safety Analyses Forms, Excavation Inspection Report, and field notes are presented in **Appendix D**.

3.0 POST EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS

3.1 NORTH CAROLINA REGULATORY STANDARDS

The remedial action cleanup criteria for the Paradise Point and Camp Johnson soils were based on the NCDENR Maximum Soil Contaminant Concentrations for Residential Soil Cleanup Levels established in the April 2001 guidelines.

3.2 CONFIRMATION SAMPLING

Following initial excavation activities, confirmation soil samples were collected and sent to an off-site laboratory for TPH-DRO and TPH-GRO analysis. When analytical results exceeded 10 mg/kg, additional soil removal was completed and an additional set of confirmation samples were collected. These confirmation soil samples were analyzed for MADEP EPH/VPH, EPA Method 8260B, and EPA Method 8270 analysis according to the Sampling and Analysis Plan, *Appendix B of the Soil Removal Action Work Plan for Paradise Point POL Remedial Measures Houses PP-3326, PP-3330, PP-3332, PP-3350 and Building M-230, dated April 2004*. The following sections present analytical results from each of the excavations.

3.2.1 House PP-3326

Analytical results indicated that TPH-DRO and TPH-GRO were detected at concentrations above 10 mg/kg in soil samples 3326-NW-001 (30,700 mg/kg, TPH-DRO; 676 mg/kg, TPH-GRO) and 3326-EW-003 (61.7 mg/kg, TPH-DRO). **Table 3.1** presents TPH-GRO/DRO analytical results.

Analytical results indicated that some VOC and SVOC constituents were detected at very low concentrations in soil sample 3326-WW-004. The concentrations of these constituents were, however, below North Carolina's Residential MSCCs. Only 2-methylnaphthalene (3.14 mg/kg) was detected at a concentration slightly above the Soil-to-Groundwater MSCC (3.0 mg/kg). **Table 3.2** presents VOC and SVOC analytical results.

Analytical results indicated that some MADEP EPH/VPH carbon ranges were detected at concentrations in soil samples 3326-NW-001, 3326-SW-002 and 3326-WW-004. The C9-C18 Aliphatics concentration (18,100 mg/kg) exceeded the Residential MSCC in sample 3326-WW-004. The C9-C22 Aromatics concentration exceeded the Residential MSCC in samples 3326-NW-001 (3,429 mg/kg) and 3326-WW-004 (4,183 mg/kg). **Table 3.3** presents

MADEP EPH/VPH analytical results. The laboratory analytical reports are provided in **Appendix E**.

3.2.2 House PP-3330

Analytical results indicated that TPH DRO and TPH-GRO were detected at concentrations above 10 mg/kg in soil samples 3330-NW-001 (78.9 mg/kg, TPH-DRO), 3330-SW-002 (4,970 mg/kg, TPH-DRO) and 3330-F-005 (16,200 mg/kg, TPH-DRO; 99.5 mg/kg, TPH-GRO). **Table 3.1** presents TPH-GRO/DRO analytical results.

Analytical results did not detect any VOC or SVOC constituents above the method reporting limit in soil sample 3330-SW-002. The method reporting limit was below both North Carolina's Residential MSCCs as well as the Soil-to-Groundwater MSCCs for all the constituents in each analytical method with the exception of benzo(a)pyrene. **Table 3.4** presents VOC and SVOC analytical results.

Analytical results indicated that some MADEP EPH/VPH carbon ranges were detected at concentrations in soil samples 3330-NW-001, 3330-WW-004, and 3330-F-005. The C9-C22 Aromatics concentration exceeded the Residential MSCC in samples 3330-NW-001 (769 mg/kg) and 3330-WW-004 (9,120 mg/kg). The C9-C18 Aliphatics concentration exceeded the Residential MSCC in sample 3330-WW-004 (11,400 mg/kg). **Table 3.5** presents MADEP EPH/VPH analytical results. The laboratory analytical reports are provided in **Appendix E**.

3.2.3 House PP-3332

Analytical results indicated that TPH DRO and TPH-GRO were detected at concentrations above 10 mg/kg in soil samples 3332-NW-001 (16.1 mg/kg, TPH-DRO), 3332-SW-002 (3,720 mg/kg, TPH-DRO), 3332-WW-004 (17.4 mg/kg, TPH-DRO) and 3332-F-005 (13,500 mg/kg, TPH-DRO; 130 mg/kg, TPH-GRO). **Table 3.1** presents TPH-GRO/DRO analytical results.

Analytical results indicated that some VOC and SVOC constituents were detected at very low concentrations in soil sample 3332-SW-002. The concentrations of these constituents were, however, below North Carolina's Residential MSCCs. Only 2-methylnaphthalene (14.1 mg/kg) and naphthalene (4.52 mg/kg) were detected at concentrations above their respective Soil-to-Groundwater MSCCs (2-methylnaphthalene, 3.0 mg/kg; and naphthalene, 0.58 mg/kg). **Table 3.6** presents VOC and SVOC analytical results.

Analytical results indicated that some MADEP EPH/VPH carbon ranges were detected at concentrations in soil samples 3332-NW-001, 3332-SW-002, 3332-WW-004, and 3332-F-005. The C9-C22 Aromatics concentration exceeded the Residential MSCC in samples 3332-NW-001 (5,438 mg/kg), 3332-SW-002 (1,848 mg/kg), and 3332-F-005 (1,232 mg/kg). The C9-C18 Aliphatics concentration exceeded the Residential MSCC in sample 3332-NW-001 (14,600 mg/kg). **Table 3.7** presents MADEP EPH/VPH analytical results. The laboratory analytical reports are provided in **Appendix E**.

3.2.4 House PP-3350

Analytical results indicated that TPH DRO and TPH-GRO were detected at concentrations above 10 mg/kg in soil samples 3350-EW-003 (83.3 mg/kg, TPH-DRO), 3350-WW-004 (68.8 mg/kg, TPH-DRO) and 3350-F-005 (16,800 mg/kg, TPH-DRO). **Table 3.1** presents TPH-GRO/DRO analytical results.

Analytical results did not detect any VOC or SVOC constituents above the method reporting limit in soil sample 3350-WW-004. The method reporting limit was below both North Carolina's Residential MSCCs as well as the Soil-to-Groundwater MSCCs for all the constituents in each analytical method with the exception of benzo(a)pyrene. **Table 3.8** presents VOC and SVOC analytical results.

Analytical results indicated that some MADEP EPH/VPH carbon ranges were detected at concentrations in soil samples 3350-NW-001, 3350-SW-002, 3350-EW-003, 3350-WW-004, and 3350-F-005. The C9-C22 Aromatics concentration exceeded the Residential MSCC in samples 3350-NW-001 (512 mg/kg), 3350-SW-002 (1,207 mg/kg), and 3350-F-005 (2,850 mg/kg). **Table 3.9** presents MADEP EPH/VPH analytical results. The laboratory analytical reports are provided in **Appendix E**.

3.2.5 Building M-230

Analytical results indicated that TPH DRO and TPH-GRO were detected at concentrations above 10 mg/kg in soil samples M230-NW-001 (71.1 mg/kg, TPH-DRO), M230-WW-004 (63 mg/kg, TPH-DRO) and M230-F-005 (341 mg/kg, TPH-DRO). **Table 3.1** presents TPH-GRO/DRO analytical results.

Analytical results indicated that some VOC and SVOC constituents were detected at very low concentrations in soil samples M230-NW-001 and M230-F-005. The concentrations of these constituents were, however, below North Carolina's Residential MSCCs with the

exception of benzo(a)pyrene (0.256 mg/kg) in sample M230-F-005. Only benzo(a)pyrene was detected at a concentration above the Soil-to-Groundwater MSCC of 0.091 mg/kg. **Table 3.10** presents VOC and SVOC analytical results.

Analytical results indicated that some MADEP EPH/VPH carbon ranges were detected at concentrations in soil samples M230-NW-001 and M230-F-004. The concentrations of these constituents were, however, below North Carolina's Residential MSCCs. Only the C9-C22 Aromatics in samples M230-NW-001 (34.5 mg/kg) and M230-F-004 (42.4 mg/kg) were detected at concentrations above the Soil-to-Groundwater MSCC (34 mg/kg). **Table 3.11** presents MADEP EPH/VPH analytical results. The laboratory analytical reports are provided in **Appendix E**.

3.3 DISPOSAL SAMPLING

The contaminant concentrations for the composite soil sample were below laboratory detection limit for VOC TCLP, SVOC TCLP, pesticide TCLP, and herbicide TCLP analyses (**Table 3.12**). TPH results for composite GRO and DRO analyses were 195 mg/kg and 7,230 mg/kg respectively. The soil was determined to be non-hazardous and disposed of at ES&J Enterprises, Inc. facility located in Autryville, North Carolina. The non-hazardous waste shipping documents are provided in **Appendix C**. The laboratory analytical reports for TCLP results and TPH analyses are presented in **Appendix F**.

4.0 SUMMARY AND CONCLUSIONS

Approximately 130 tons of POL contaminated soil was removed to eliminate a source of petroleum contamination from four locations at Paradise Point. An additional 95 tons of POL contaminated soil was removed from one location at Camp Johnson. The soil contained elevated levels of constituents of fuel oil. The following conclusions have been developed based on results from the remedial action:

- The remedial action was successful in removing a majority of soil contaminated with petroleum hydrocarbons in the unsaturated zone at each location. However, confirmation soil sample analytical results indicate some hydrocarbon constituents continues to persist at concentrations above the Residential NCDENR soil cleanup levels at the Paradise Point sites.
- House PP-3326: Soil samples from the sidewall adjacent to the house (3326-NW-001) and the sidewall to the left (as you face the house) (3326-WW-004) exceeded Residential MSSCs for at least one constituent.
- House PP-3330: Soil samples from the sidewall adjacent to the house (3330-NW-001) and the sidewall to the left (as you face the house) (3330-WW-004) exceeded Residential MSSCs for at least one constituent.
- House PP-3332: Soil samples from the sidewall adjacent to the house (3330-NW-001), the sidewall farthest from the house (3332-WW-002) and the floor sample (3332-F-005, 5 feet bls) exceeded Residential MSSCs for at least one constituent.
- House PP-3350: Soil samples from the sidewall adjacent to the house (3350-NW-001), the sidewall on the other side of the excavation (3350-SW-002) and the floor sample (3350-F-005, 5 feet bls) exceeded Residential MSSCs for at least one constituent.
- Because of the proximity of the houses to the excavation, additional soil removal is not possible in the direction of the house.
- Building M-230: Only Floor sample M230-F-005 detected any hydrocarbon constituents (benzo(a)pyrene) above Residential MSSCs. This sample was collected from an approximate depth of 11 feet bls.

- Additional soil removal activities are required at locations that exceeded Residential MSCCs with the exception of those locations that are adjacent to the house.

5.0 REFERENCES

CATLIN Engineers and Scientists, May 28, 2003, *Soil assessment Report for PP-3330, Marine Corps. Base, Camp Lejeune, North Carolina.*

CATLIN Engineers and Scientists, June 10, 2003, *Soil assessment Report for PP-3326, Marine Corps. Base, Camp Lejeune, North Carolina.*

CATLIN Engineers and Scientists, June 18, 2003, *Soil assessment Report for PP-3332, Marine Corps. Base, Camp Lejeune, North Carolina.*

CATLIN Engineers and Scientists, June 18, 2003, *Soil assessment Report for PP-3350, Marine Corps. Base, Camp Lejeune, North Carolina.*

Mid-Atlantic Associates, Inc, April 24, 2003, *Soil assessment Report for UST M230-2, Camp Johnson, Marine Corps Base, Camp Lejeune, North Carolina.*

Shaw Environmental, Inc., 2004 *Final Work Plan for Paradise Point POL Remedial Measures, Houses PP-3326, 3330, 3332, 3350 and Building M-230, MCB, Camp Lejeune, North Carolina.*

TABLES

Table 3-1
TPH-GRO/DRO Soil Sampling Results

Sample ID		M230-NW-001	M230-SW-002	M230-EW-003	M230-WW-004	M230-F-005
M230 Sample Location		Excavation North Wall	Excavation South Wall	Excavation East Wall	Excavation West Wall	Excavation Floor
Contaminant of Concern	Units					
TPH - GRO (C6-C10)	ppm (mg/kg)	<5.5	<5.6	<5.9	<5.5	<5.5
TPH - DRO (C10-C28)	ppm (mg/kg)	71.1	<9.4	<9.2	63	341

Sample ID		3326-NW-001	3326-SW-002	3326-EW-003	3326-WW-004
3326 Sample Location		Excavation North Wall	Excavation South Wall	Excavation East Wall	Excavation West Wall
Contaminant of Concern	Units				
TPH - GRO (C6-C10)	ppm (mg/kg)	676	<4.8	<5.6	<5.6
TPH - DRO (C10-C28)	ppm (mg/kg)	30700	<8.6	61.7	<9.1

Sample ID		3330-NW-001	3330-SW-002	3330-EW-003	3330-WW-004	3330-F-005
3330 Sample Location		Excavation North Wall	Excavation South Wall	Excavation East Wall	Excavation West Wall	Excavation Floor
Contaminant of Concern	Units					
TPH - GRO (C6-C10)	ppm (mg/kg)	<6.2	<5.8	<6.0	<6.4	99.5
TPH - DRO (C10-C28)	ppm (mg/kg)	78.9	4970	<9.6	<9.6	16200

Sample ID		3332-NW-001	3332-SW-002	3332-EW-003	3332-WW-004	3332-F-005
3332 Sample Location		Excavation North Wall	Excavation South Wall	Excavation East Wall	Excavation West Wall	Excavation Floor
Contaminant of Concern	Units					
TPH - GRO (C6-C10)	ppm (mg/kg)	<6.0	<5.8	<5.8	<5.8	130
TPH - DRO (C10-C28)	ppm (mg/kg)	16.1	3720	<9.4	17.4	13500

Sample ID		3350-NW-001	3350-SW-002	3350-EW-003	3350-WW-004	3350-F-005
3350 Sample Location		Excavation North Wall	Excavation South Wall	Excavation East Wall	Excavation West Wall	Excavation Floor
Contaminant of Concern	Units					
TPH - GRO (C6-C10)	ppm (mg/kg)	<6.0	<5.9	<6.1	<5.8	<5.8
TPH - DRO (C10-C28)	ppm (mg/kg)	<10	<10	83.3	68.8	16800

Table 3-2
Paradise Point Building 3326
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3326																
Analytical Method:			8260B																
Contaminant of Concern			Acetone	Benzene	Bromodichloromethane	Bromoform	Chlorobenzene	Chloroethane	Chloroform	Carbon disulfide	Carbon tetrachloride	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Dibromochloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	trans-1,2-Dichloroethene
Sample ID	Date Collected	Sample Depth (ft bgs)																	
Excavation West Wall 3326-WW-0004	5/26/2004	NA	<3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Soil to Groundwater MSCC (mg/kg)			3	0.0056	NS	NS	NS	NS	0.001	4	NS	4	0.045	0.0018	0.0029	0.002	0.35	0.0009	0.38
Residential MSCC (mg/kg)			1564	22	NS	NS	NS	NS	100	1564	NS	1560	1	7	9	7	156	4	320
Industrial/Commercial MSCC (mg/kg)			40800	200	NS	NS	NS	NS	938	40880	NS	40000	10	63	84	68	4000	33	8200

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Date:		10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3326																			
Analytical Method:				8260B																			
Sample ID		Date Collected		Sample Depth (ft bgs)		Contaminant of Concern																	
Excavation West Wall 3326-WW-0004		5/26/2004		NA		trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone	4-Methyl-2-pentanone	Methyl bromide	Methyl chloride	Methylene chloride	Methyl ethyl ketone	Styrene	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)	
						<0.3	0.236 J	<1.5	<1.5	<0.3	<0.3	<0.6	<1.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.226 J	<0.3	<0.3	1.13
						0.0009	0.24	1.9	NS	NS	0.02	0.02	0.7	2.24	NS	NS	0.001	NS	0.0074	7	0.0183	NS	5
						4	1560	625	NS	NS	49	86	9385	3128	NS	NS	3	NS	12	3200	58	NS	32000
						33	40000	16352	NS	NS	440	763	245280	81760	NS	NS	28	NS	110	82000	520	NS	200000

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Table 3-2
Paradise Point Building 3326
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3326																
Analytical Method:		8270C																
Sample ID		Date Collected		Sample Depth (ft bgs)		Contaminant of Concern												
Excavation West Wall 3326-WW-0004		5/26/2004		NA														
						Soil to Groundwater MSCC (mg/kg)												
						Residential MSCC (mg/kg)												
						Industrial/Commercial MSCC (mg/kg)												
						0.921 J												
						Acenaphthylene												
						Acenaphthene												
						2,4,6-Trichlorophenol												
						2,4,5-Trichlorophenol												
						Phenol												
						Pentachlorophenol												
						4-Nitrophenol												
						2-Nitrophenol												
						3&4-Methylphenol												
						2-Methylphenol												
						4,6-Dinitro-o-cresol												
						2,4-Dinitrophenol												
						2,4-Dimethylphenol												
						2,4-Dichlorophenol												
						4-Chloro-3-methylphenol												
						2-Chlorophenol												
						Benzoic acid												

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3326																			
Analytical Method:		8270C																			
Contaminant of Concern		Sample ID		Date Collected	Sample Depth (ft bgs)																
		Excavation West Wall 3326-WW-0004		5/26/2004	NA																
		4-Chlorophenyl phenyl et		<4	<4	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrotoluene	2,6-Dinitrotoluene	3,3'-Dichlorobenzidine	Dibenzo(a,h)anthracene	Dibenzofuran	Di-n-butyl phthalate	Di-n-octyl phthalate	Diethyl phthalate	Dimethyl phthalate	Bis(2-ethylhexyl)phthalate	Fluoranthene	Fluorene	Hexachlorobenzene
		NS		7	24	1	NS	NS	<4	<4	<4	<8.1	<4	<4	<8.1	<8.1	<8.1	<8.1	<8.1	<4	<4
Soil to Groundwater MSCC (mg/kg)		NS		7	24	1	NS	NS	NS	NS	NS	0.17	4.7	NS	NS	NS	NS	6.67	276	44	NS
Residential MSCC (mg/kg)		NS		1400	1400	27	NS	NS	NS	NS	NS	0.088	62	NS	NS	NS	NS	46	620	620	NS
Industrial/Commercial MSCC (mg/kg)		NS		36000	36000	240	NS	NS	NS	NS	NS	0.78	1635	NS	NS	NS	NS	410	16400	16400	NS

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Table 3-2
Paradise Point Building 3326
VOC and SVOC Confirmation Soil Sample Analytical Results

Date:		10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3326													
Analytical Method:				8270C													
Sample ID		Date Collected		Sample Depth (ft bgs)		Contaminant of Concern											
Excavation West Wall 3326-VW-0004		5/26/2004		NA		Soil to Groundwater MSCC (mg/kg)											
						Residential MSCC (mg/kg)											
						Industrial/Commercial MSCC (mg/kg)											
						Antracene											
						Benzo(a)anthracene											
						Benzo(a)pyrene											
						Benzo(b)fluoranthene											
						Benzo(g,h,i)perylene											
						Benzo(k)fluoranthene											
						4-Bromophenyl phenyl ether											
						Butyl benzyl phthalate											
						Benzyl alcohol											
						2-Chloronaphthalene											
						4-Chloroaniline											
						Carbazole											
						Chrysene											
						Bis(2-chloroethoxy)methane											
						Bis(2-chloroethyl)ether											
						Bis(2-chloroisopropyl)ether											

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3326																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno(1,2,3-cd)pyrene Isophorone 2-Methylnaphthalene 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline Naphthalene Nitrobenzene N-Nitroso-di-n-propylamin N-Nitrosodiphenylamine Phenanthrene Pyrene 1,2,4-Trichlorobenzene			<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	&lt

Table 3-3 Summary of Analytical Results: MADEP-EPH/VPH (House P-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results						
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3326-NW-		
EPH Surrogate Standards		Date Collected		001		
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004		
Aromatic: o-Terphenyl		Date Extracted		05/27/2004		
EPH Fractionation Surrogates		Date Analyzed		06/01/2004		
#1: 2-Fluorobiphenyl		% Dry Solids		06/10/2004		
#2: 2-Bromonaphthalene		Dilution Factor		77.3		
				80		
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK
C9-C18 Aliphatics		ug/kg		680000	680000	4220000
C19-C36 Aliphatics		ug/kg		680000	680000	765000
C11-C22 Aromatics (Unadj.)		ug/kg		680000	680000	3170000
Sample Surrogate Acceptance Range						40-140
Aliphatic Surrogate % Recovery						59
Aromatic Surrogate % Recovery						97
Fractionation Surrogate Acceptance Range						
Fractionation Surrogate #1 % Recovery						94
Fractionation Surrogate #2 % Recovery						96
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.						
MDL = Method Detection Limit						

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Was blank correction applied as a significant modification of the method? Yes
 Were any significant modifications to the eph method made? No

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results				
Method for Ranges: MADEP VPH	Sample Identification		3326-NW-	
VPH Surrogate Standards	Collection Option (for soil)*		001	
Aliphatic: BFB	Date Collected		05/26/2004	
Aromatic: BFB	Date Received		05/27/2004	
	Date Extracted		05/27/2004	
	Date Analyzed		06/03/2004	
	% Dry Solids		77.3	
	Dilution Factor		1	
Hydrocarbon Ranges	MDL	RL	BLANK	
C5- C8 Aliphatics (Unadj.)	120000	220000	ND	
C9- C12 Aliphatics (Unadj.)	87000	160000	ND	480000
C9- C10 Aromatics (Unadj.)	29000	58000	ND	259000
Sample Surrogate Acceptance Range			70-130%	70-130%
Aliphatic Surrogate % Recovery - FID			105	89
Aromatic Surrogate % Recovery - PID			105	104
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCoreTM) Option 3 = Field weight of soil				
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.				
MDL = Method Detection Limit			RL = Reporting Limit	

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3326-SW-					
EPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/27/2004					
Aromatic: o-Terphenyl		Date Extracted		06/01/2004					
EPH Fractionation Surrogates		Date Analyzed		06/14/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		80.2					
#2: 2-Bromonaphthalene		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		8200		8200		ND	
C19-C36 Aliphatics		ug/kg		8200		8200		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		8200		8200		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						59		47	
Aromatic Surrogate % Recovery						97		77	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								94	
Fractionation Surrogate #2 % Recovery								96	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH Rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3326-SW-002				
			Collection Option (for soil)*		1				
VPH Surrogate Standards			Date Collected		05/26/2004				
Aliphatic: BFB			Date Received		05/27/2004				
Aromatic: BFB			Date Extracted		05/27/2004				
			Date Analyzed		06/03/2004				
			% Dry Solids		80.2				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		2300	4300	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		1700	3200	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		580	1200	ND		
Sample Surrogate Acceptance Range							70-130%		70-130%
Aliphatic Surrogate % Recovery - FID							105		88
Aromatic Surrogate % Recovery - PID							105		89
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3326-EW-					
EPH Surrogate Standards		Date Collected		003					
Aliphatic:		Date Received		05/26/2004					
Aromatic:		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/01/2004					
#1:		% Dry Solids		78.7					
#2:		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		8300		8300		ND	
C19-C36 Aliphatics		ug/kg		8300		8300		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		8300		8300		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery								55	
Aromatic Surrogate % Recovery								84	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								90	
Fractionation Surrogate #2 % Recovery								92	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results					
Method for Ranges: MADEP VPH		Sample Identification		3326-EW-	
VPH Surrogate Standards Aliphatic: BFB Aromatic: BFB		Collection Option (for soil)*		003	
		Date Collected		1	
		Date Received		05/26/2004	
		Date Extracted		05/27/2004	
		Date Analyzed		05/27/2004	
		% Dry Solids		78.7	
		Dilution Factor		1	
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK
C5- C8 Aliphatics (Unadj.)		ug/kg	2300	4400	ND
C9- C12 Aliphatics (Unadj.)		ug/kg	1800	3200	ND
C9- C10 Aromatics (Unadj.)		ug/kg	590	1200	ND
Sample Surrogate Acceptance Range				70-130%	70-130%
Aliphatic Surrogate % Recovery - FID				105	85
Aromatic Surrogate % Recovery - PID				105	85
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil					
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.					
MDL = Method Detection Limit					

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1				Sample Identification			3326-VW-004		
EPH Surrogate Standards				Date Collected			05/26/2004		
Aliphatic:				Date Received			05/27/2004		
Aromatic:				Date Extracted			06/01/2004		
EPH Fractionation Surrogates				Date Analyzed			06/10/2004		
#1:				% Dry Solids			81.5		
#2:				Dilution Factor			200		
Hydrocarbon Ranges				Units of Measure		MDL	RL	BLANK	
C9-C18 Aliphatics				ug/kg		1600000	1600000	ND	
C19-C36 Aliphatics				ug/kg		1600000	1600000	ND	
C11-C22 Aromatics (Unadj.)				ug/kg		1600000	1600000	ND	
Sample Surrogate Acceptance Range							40-140	40-140	
Aliphatic Surrogate % Recovery							59	0.00 *	
Aromatic Surrogate % Recovery							97	0.00 *	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery							94	0.00 *	
Fractionation Surrogate #2 % Recovery							96	0.00 *	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit						RL = Reporting Limit			

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Was blank correction applied as a significant modification of the method? Yes
 Were any significant modifications to the eph method made? No

Table 3-3 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3326)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3326 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3326-WW-		004			
VPH Surrogate Standards		Collection Option (for soil)*		1					
Aliphatic: BFB		Date Collected		05/26/2004					
Aromatic: BFB		Date Received		05/27/2004					
		Date Extracted		05/27/2004					
		Date Analyzed		06/03/2004					
		% Dry Solids		81.5					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		240000		450000		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		180000		330000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		60000		120000		ND	
Sample Surrogate Acceptance Range								70-130%	
Aliphatic Surrogate % Recovery - FID								105	
Aromatic Surrogate % Recovery - PID								105	
* Option 1 = Established fill line on vial		Option 2 = Sampling Device (indicate brand, e.g. EnCore™)		Option 3 = Field weight of soil					
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit		RL = Reporting Limit							

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-4
Paradise Point Building 3330
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3330																			
Analytical Method:			8260B																		
Sample ID		Contaminant of Concern		Sample Depth (ft bgs)	Acetone	Benzene	Bromodichloromethane	Bromoform	Chlorobenzene	Chloroethane	Chloroform	Carbon disulfide	Carbon tetrachloride	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloropropane	Dibromochloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	trans-1,2-Dichloroethene	
Excavation South Wall 3330-SW-002					<0.058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	>0.0058	<0.0058	<0.0058	<0.0058	
Soil to Groundwater: MSCC (mg/kg)					NA																
Residential MSCC (mg/kg)					1564	22	NS	NS	NS	NS	0.001	4	NS	4	0.045	0.0018	0.0029	0.002	0.35	0.0009	0.38
Industrial/Commercial MSCC (mg/kg)					40800	200	NS	NS	NS	NS	938	40880	NS	40000	10	63	84	68	4000	33	8200

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)

List any contaminant detected above the method detection limit

MSCC = Maximum Soil Contamination Concentration

ft bgs = feet below ground surface

Results must be reported in mg/kg

mg/kg = milligrams per kilogram

NA = not applicable

NS = no standard

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3330																		
Analytical Method:			8260B																	
Sample ID		Contaminant of Concern		trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone	4-Methyl-2-pentanone	Methyl bromide	Methyl chloride	Methylene chloride	Methyl ethyl ketone	Styrene	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)	
		Date Collected	Sample Depth (ft bgs)																	
Excavation South Wall 3330-SW-002		5/26/2004	NA	<0.0058	<0.0058	<0.029	<0.029	<0.0058	<0.0058	<0.012	<0.029	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.018	
Soll to Groundwater MSCC (mg/kg)			0.0009	0.24	1.9	NS	NS	NS	0.02	0.7	2.24	NS	0.001	NS	0.0074	7	0.0183	NS	5	
Residential MSCC (mg/kg)			4	1560	625	NS	NS	NS	49	85	9385	3128	NS	3	NS	12	3200	58	NS	32000
Industrial/Commercial MSCC (mg/kg)			33	40000	16352	NS	NS	NS	440	763	245280	81760	NS	28	NS	110	32000	520	NS	200000

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)

List any contaminant detected above the method detection limit

MSCC = Maximum Soil Contamination Concentration

ft bgs = feet below ground surface

Results must be reported in mg/kg

mg/kg = milligrams per kilogram

NA = not applicable

NS = no standard

Table 3-4
Paradise Point Building 3330
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3330																				
Analytical Method:			8270C																				
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)																			
					Benzoic acid	2-Chlorophenol	4-Chloro-3-methylphenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-o-cresol	2-Methylphenol	3&4-Methylphenol	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene		
Excavation South Wall 3330-SW-002			5/26/2004	NA	<1.1	<0.21	<0.21	<0.21	<0.21	<1.1	<0.43	<0.21	<0.21	<0.21	<1.1	<1.1	<0.21	<0.21	<0.21	<0.21	<0.21		
Soil to Groundwater MSCC (mg/kg) Residential MSCC (mg/kg) Industrial/Commercial MSCC (mg/kg)					NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8	11	
					NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	940	469
					NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24000

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date:		10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3330																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Analytical Method:				8270C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Sample ID		Date Collected		Sample Depth (ft bgs)		Contaminant of Concern												4-Chlorophenyl phenyl et			1,2-Dichlorobenzene		1,3-Dichlorobenzene		1,4-Dichlorobenzene		2,4-Dinitrotoluene		2,6-Dinitrotoluene		3,3'-Dichlorobenzidine		Dibenzo(a,h)anthracene		Dibenzofuran		Di-n-butyl phthalate		Di-n-octyl phthalate		Diethyl phthalate		Dimethyl phthalate		Bis(2-ethylhexyl)phthalate		Fluoranthene		Fluorene		Hexachlorobenzene																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Table 3-4
Paradise Point Building 3330
VOC and sVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3330																					
Analytical Method:			8270C																					
Contaminant of Concern			Sample ID		Date Collected	Sample Depth (ft bgs)																		
			Excavation South Wall 3330-SW-002		5/26/2004	NA	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.43	<0.21	<0.21	<0.85	<0.21	<0.21	<0.21	<0.21	<0.21
			Soil to Groundwater MSCC (mg/kg) Residential MSCC (mg/kg)		995		0.34	0.091	1	6720	12	NS	NS	NS	NS	NS	NS	NS	NS	NS	38	NS	0.0002	NS
					4600		0.88	0.088	0.88	469	9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	88	NS	0.58
			Industrial/Commercial MSCC (mg/kg)		122000		8	0.78	8	12264	78	NS	NS	NS	NS	NS	NS	NS	NS	780	NS	5.2	NS	

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3330																		
Analytical Method:			8270C																	
Sample ID		Contaminant of Concern		Sample Depth (ft bgs)																
		Date Collected																		
Excavation South Wall 3330-SW-002		5/26/2004	NA	<0.21	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Naphthalene	Nitrobenzene	N-Nitroso-di-n-propylamin	N-Nitrosodiphenylamine	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene
				0.26	NS	NS	NS	3	NS	<0.21	<0.43	NS	NS	0.58	NS	NS	NS	<0.21	<0.21	<0.21
Soil to Groundwater MSCC (mg/kg)				3.1	NS	NS	NS	0.88	NS	63	NS	NS	NS	63	NS	NS	NS	469	469	156
Residential MSCC (mg/kg)																				
Industrial/Commercial MSCC (mg/kg)				73	NS	NS	NS	8	NS	1635	NS	NS	NS	1635	NS	NS	NS	12264	12264	4088

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Table 3-5 Summary of Analytical Results: MADEP-EPH/NVP (House PP-3330)

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1				Sample Identification		3330-NW-			
EPH Surrogate Standards				Date Collected		001			
Aliphatic: 1-Chlorooctadecane				Date Received		05/26/2004			
Aromatic: o-Terphenyl				Date Extracted		05/27/2004			
EPH Fractionation Surrogates				Date Analyzed		06/02/2004			
#1: 2-Fluorobiphenyl				% Dry Solids		06/07/2004			
#2: 2-Bromonaphthalene				Dilution Factor		81.2			
				25					
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK				
C9-C18 Aliphatics		ug/kg	200000	200000	ND	1910000			
C19-C36 Aliphatics		ug/kg	200000	200000	ND	695000			
C11-C22 Aromatics (Unadj.)		ug/kg	200000	200000	ND	757000			
Sample Surrogate Acceptance Range					40-140	40-140			
Aliphatic Surrogate % Recovery					65	0.00 *			
Aromatic Surrogate % Recovery					86	0.00 *			
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery					84	0.00 *			
Fractionation Surrogate #2 % Recovery					86	0.00 *			
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit RL = Reporting Limit									

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3330-NW-					
VPH Surrogate Standards		Collection Option (for soil)*		1					
Aliphatic: BFB		Date Collected		05/26/2004					
Aromatic: BFB		Date Received		05/27/2004					
		Date Extracted		05/27/2004					
		Date Analyzed		06/04/2004					
		% Dry Solids		81.2					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		3700		6900		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		2700		5000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		910		1800		ND	
Sample Surrogate Acceptance Range						70-130%		70-130%	
Aliphatic Surrogate % Recovery - FID						105		93	
Aromatic Surrogate % Recovery - PID						106		92	

* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCoreTM) Option 3 = Field weight of soil

** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3330-SW-					
EPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic:		Date Received		05/27/2004					
Aromatic:		Date Extracted		06/02/2004					
EPH Fractionation Surrogates		Date Analyzed		06/05/2004					
#1:		% Dry Solids		77.9					
#2:		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		8400		8400		ND	
C19-C36 Aliphatics		ug/kg		8400		8400		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		8400		8400		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery								65	
Aromatic Surrogate % Recovery								82	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								84	
Fractionation Surrogate #2 % Recovery								86	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.								91	
MDL = Method Detection Limit									
EPH rev. 11/00									

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3330-SW-002				
VPH Surrogate Standards			Collection Option (for soil)*		1				
Aliphatic:			Date Collected		05/26/2004				
Aromatic:			Date Received		05/27/2004				
			Date Extracted		05/27/2004				
			Date Analyzed		06/03/2004				
			% Dry Solids		77.9				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		2400	4500	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		1800	3300	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		610	1200	ND		
Sample Surrogate Acceptance Range							70-130%		
Aliphatic Surrogate % Recovery - FID							105		
Aromatic Surrogate % Recovery - PID							105		
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VP (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3330-EW-					
EPH Surrogate Standards		Date Collected		003					
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004					
Aromatic: o-Terphenyl		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/02/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		06/06/2004					
#2: 2-Bromonaphthalene		Dilution Factor		74.6					
		1							
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK			
C9-C18 Aliphatics		ug/kg		8900	8900	ND		ND	
C19-C36 Aliphatics		ug/kg		8900	8900	ND		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		8900	8900	ND		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		67	
Aromatic Surrogate % Recovery						86		76	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84		90	
Fractionation Surrogate #2 % Recovery						86		84	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results					
Method for Ranges:	MADEP VPH	Sample Identification		3330-EW-003	
VPH Surrogate Standards		Collection Option (for soil)*		1	
Aliphatic:	BFB	Date Collected		05/26/2004	
Aromatic:	BFB	Date Received		05/27/2004	
		Date Extracted		05/27/2004	
		Date Analyzed		06/03/2004	
		% Dry Solids		74.6	
		Dilution Factor		1	
Hydrocarbon Ranges	Units of Measure	MDL	RL	BLANK	
C5- C8 Aliphatics (Unadj.)	ug/kg	2500	4800	ND	ND
C9- C12 Aliphatics (Unadj.)	ug/kg	1900	3500	ND	ND
C9- C10 Aromatics (Unadj.)	ug/kg	640	1300	ND	ND
Sample Surrogate Acceptance Range					
Aliphatic Surrogate % Recovery - FID				70-130%	70-130%
Aromatic Surrogate % Recovery - PID				105	85
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil					
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.					
MDL = Method Detection Limit		RL = Reporting Limit			

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3330-WW-					
EPH Surrogate Standards		Date Collected		004					
Aliphatic:		Date Received		05/26/2004					
Aromatic:		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/02/2004					
#1:		% Dry Solids		84.5					
#2:		Dilution Factor		200					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		1600000		1600000		ND	
C19-C36 Aliphatics		ug/kg		1600000		1600000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		1600000		1600000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery								65	
Aromatic Surrogate % Recovery								86	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								84	
Fractionation Surrogate #2 % Recovery								86	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3330-WW-				
VPH Surrogate Standards			Collection Option (for soil)*		004				
Aliphatic:			Date Collected		05/26/2004				
Aromatic:			Date Received		05/27/2004				
			Date Extracted		05/27/2004				
			Date Analyzed		06/03/2004				
			% Dry Solids		84.5				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		240000	450000	ND		ND
C9- C12 Aliphatics (Unadj.)			ug/kg		180000	330000	ND		2140000
C9- C10 Aromatics (Unadj.)			ug/kg		60000	120000	ND		1260000
Sample Surrogate Acceptance Range							70-130%		70-130%
Aliphatic Surrogate % Recovery - FID							105		0.000 *
Aromatic Surrogate % Recovery - PID							105		0.000 *
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit RL = Reporting Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification				3330-F-005			
EPH Surrogate Standards		Date Collected				05/26/2004			
Aliphatic: 1-Chlorooctadecane		Date Received				05/27/2004			
Aromatic: o-Terphenyl		Date Extracted				06/02/2004			
EPH Fractionation Surrogates		Date Analyzed				06/06/2004			
#1: 2-Fluorobiphenyl		% Dry Solids				82.2			
#2: 2-Bromonaphthalene		Dilution Factor				10			
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		80000		80000		ND	
C19-C36 Aliphatics		ug/kg		80000		80000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		80000		80000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		64	
Aromatic Surrogate % Recovery						86		92	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84		95	
Fractionation Surrogate #2 % Recovery						86		99	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results				
Method for Ranges:	MADEP VPH	Sample Identification	3330-F-005	
VPH Surrogate Standards Aliphatic: BFB Aromatic: BFB		Collection Option (for soil)*	1	
		Date Collected	05/26/2004	
		Date Received	05/27/2004	
		Date Extracted	05/27/2004	
		Date Analyzed	06/04/2004	
		% Dry Solids	82.2	
		Dilution Factor	1	
Hydrocarbon Ranges	Units of Measure	MDL	RL	BLANK
C5- C8 Aliphatics (Unadj.)	ug/kg	4700	8900	ND
C9- C12 Aliphatics (Unadj.)	ug/kg	3600	6500	ND
C9- C10 Aromatics (Unadj.)	ug/kg	1200	2400	ND
Sample Surrogate Acceptance Range			70-130%	70-130%
Aliphatic Surrogate % Recovery - FID			101	84
Aromatic Surrogate % Recovery - PID			100	78
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range. MDL = Method Detection Limit RL = Reporting Limit				

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3330-WWV-					
EPH Surrogate Standards		Date Collected		004D					
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004					
Aromatic: o-Terphenyl		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/02/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		86					
#2: 2-Bromonaphthalene		Dilution Factor		200					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		1500000		1500000		ND	
C19-C36 Aliphatics		ug/kg		1500000		1500000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		1500000		1500000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery								65	
Aromatic Surrogate % Recovery								86	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								84	
Fractionation Surrogate #2 % Recovery								86	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-5 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3330)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3330 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3330-VWV-004D				
VPH Surrogate Standards			Collection Option (for soil)*		1				
Aliphatic:			Date Collected		05/26/2004				
Aromatic:			Date Received		05/27/2004				
			Date Extracted		05/27/2004				
			Date Analyzed		06/04/2004				
			% Dry Solids		86				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		250000	460000	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		180000	340000	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		61000	120000	ND		
Sample Surrogate Acceptance Range							70-130%		
Aliphatic Surrogate % Recovery - FID							101		
Aromatic Surrogate % Recovery - PID							100		
* Option 1 = Established fill line on vial			Option 2 = Sampling Device (indicate brand, e.g. EnCore™)		Option 3 = Field weight of soil				
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit RL = Reporting Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-6
Paradise Point Building 3332
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3332																			
Analytical Method:			8260B																		
Sample ID		Date Collected	Sample Depth (ft bgs)	Contaminant of Concern	Acetone	Benzene	Bromodichloromethane	Bromoform	Chlorobenzene	Chloroethane	Chloroform	Carbon disulfide	Carbon tetrachloride	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloropropane	Dibromochloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	trans-1,2-Dichloroethene
					Excavation South Wall 3332-SW-002	5/26/2004	NA	Soll to Groundwater MSCC (mg/kg)	Residential MSCC (mg/kg)	Industrial/Commercial MSCC (mg/kg)											
				<2.8	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
				3	0.0056	NS	NS	NS	NS	NS	0.001	4	NS	4	0.045	0.0018	0.0029	0.002	0.35	0.0009	0.38
				1564	22	NS	NS	NS	NS	NS	100	1564	NS	1560	1	7	9	7	156	4	320
				40800	200	NS	NS	NS	NS	NS	938	40880	NS	40000	10	63	84	68	4000	33	8200

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3332																					
Analytical Method:			8260B																					
Contaminant of Concern			Sample ID		Date Collected	Sample Depth (ft bgs)																		
			Excavation South Wall 3332-SW-002		5/26/2004	NA	trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone	4-Methyl-2-pentanone	Methyl bromide	Methyl chloride	Methylene chloride	Methyl ethyl ketone	Styrene	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)		
							<0.28	0.191	<1.4	<1.4	<0.28	<0.28	<0.55	<1.4	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	1.89	
			Soil to Groundwater MSCC (mg/kg)				0.0009	0.24	1.9	NS	NS	NS	0.02	0.02	0.7	2.24	NS	0.001	NS	0.0074	7	0.0183	NS	5
			Residential MSCC (mg/kg)				4	1560	625	NS	NS	49	85	9385	3128	NS	3	NS	12	3200	58	NS	32000	
			Industrial/Commercial MSCC (mg/kg)				33	40000	16352	NS	NS	440	763	245280	81760	NS	28	NS	110	82000	520	NS	200000	

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Table 3-6
Paradise Point Building 3332
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3332																		
Analytical Method:		8270C																		
Sample ID	Contaminant of Concern		Sample Depth (ft bgs)																	
	Date Collected																			
Excavation South Wall 3332-SW-002	5/26/2004	NA	<10	<2	2-Chlorophenol	4-Chloro-3-methylphenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	4,6-Dinitro-o-cresol	2-Methylphenol	3&4-Methylphenol	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	Acenaphthene	Acenaphthylene
	Soil to Groundwater MSCC (mg/kg)			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8	11
	Residential MSCC (mg/kg)			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	940	469
	Industrial/Commercial MSCC (mg/kg)			NS	NS	NS	NS	NS	8176	NS	NS	NS	NS	NS	NS	NS	NS	NS	24000	12264

Table 3-6
Paradise Point Building 3332
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3332																		
Analytical Method:			8270C																		
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)																	
			5/26/2004	NA																	
Excavation South Wall 3332-SW-002	Soil to Groundwater MSCC (mg/kg)				995	0.34	0.091	1	6720	12	NS	NS	NS	<2	<8.1	<2	<2	Chrysene	Bis(2-chloroethoxy)metha	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)eth
	Residential MSCC (mg/kg)				4600	0.88	0.088	0.88	469	9	NS	NS	NS	NS	NS	NS	NS	88	NS	0.58	NS
	Industrial/Commercial MSCC (mg/kg)				122000	8	0.78	8	12264	78	NS	NS	NS	NS	NS	NS	NS	780	NS	5.2	NS

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date: 10/27/2004		Incident Number and Name: 102420 Paradise Point Building 3332																		
Analytical Method:		8270C																		
Sample ID		Contaminant of Concern		Sample Depth (ft bgs)																
		Date Collected																		
Excavation South Wall 3332-SW-002	NA		5/26/2004																	
	Soil to Groundwater MSCC (mg/kg)																			
	Residential MSCC (mg/kg)																			
	Industrial/Commercial MSCC (mg/kg)																			
					Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Naphthalene	Nitrobenzene	N-Nitroso-di-n-propylamin	N-Nitrosodiphenylamine	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene
		0.26	NS	NS	NS	3	NS	3	NS	3	NS	NS	NS	0.58	NS	NS	NS	60	286	2.6
		3.1	NS	NS	NS	0.88	NS	NS	NS	63	NS	NS	NS	63	NS	NS	NS	469	469	156
		73	NS	NS	NS	8	NS	NS	1635	NS	NS	NS	NS	1635	NS	NS	NS	12264	12264	4088

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Table 3-7 Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1 EPH Surrogate Standards Aliphatic: 1-Chlorooctadecane Aromatic: o-Terphenyl EPH Fractionation Surrogates #1: 2-Fluorobiphenyl #2: 2-Bromonaphthalene				Sample Identification		3332-NW-			
				Date Collected		001			
				Date Received		05/26/2004			
				Date Extracted		05/27/2004			
				Date Analyzed		06/02/2004			
				% Dry Solids		87			
				Dilution Factor		200			
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK				
C9-C18 Aliphatics		ug/kg	1500000	1500000	ND	14600000			
C19-C36 Aliphatics		ug/kg	1500000	1500000	ND	2510000			
C11-C22 Aromatics (Unadj.)		ug/kg	1500000	1500000	ND	4770000			
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		0.00 *	
Aromatic Surrogate % Recovery						86		0.00 *	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84		0.00 *	
Fractionation Surrogate #2 % Recovery						86		0.00 *	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3332-NW-					
VPH Surrogate Standards		Collection Option (for soil)*		001					
Aliphatic: BFB		Date Collected		05/26/2004					
Aromatic: BFB		Date Received		05/27/2004					
		Date Extracted		05/27/2004					
		Date Analyzed		06/04/2004					
		% Dry Solids		87					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK				
C5- C8 Aliphatics (Unadj.)		ug/kg	220000	410000	ND				
C9- C12 Aliphatics (Unadj.)		ug/kg	160000	300000	ND	1280000			
C9- C10 Aromatics (Unadj.)		ug/kg	55000	110000	ND	668000			
Sample Surrogate Acceptance Range					70-130%	70-130%			
Aliphatic Surrogate % Recovery - FID					101	0.000 *			
Aromatic Surrogate % Recovery - PID					100	0.000 *			
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range. MDL = Method Detection Limit RL = Reporting Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1				Sample Identification		3332-SW-			
EPH Surrogate Standards				Date Collected		002			
Aliphatic: 1-Chlorooctadecane				Date Received		05/26/2004			
Aromatic: o-Terphenyl				Date Extracted		05/27/2004			
EPH Fractionation Surrogates				Date Analyzed		06/02/2004			
#1: 2-Fluorobiphenyl				% Dry Solids		06/07/2004			
#2: 2-Bromonaphthalene				Dilution Factor		81.9			
						100			
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK				
C9-C18 Aliphatics		ug/kg	800000	800000	ND	7180000			
C19-C36 Aliphatics		ug/kg	800000	800000	ND	1300000			
C11-C22 Aromatics (Unadj.)		ug/kg	800000	800000	ND	1610000			
Sample Surrogate Acceptance Range					40-140	40-140			
Aliphatic Surrogate % Recovery					65	0.00 *			
Aromatic Surrogate % Recovery					86	0.00 *			
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery					84	0.00 *			
Fractionation Surrogate #2 % Recovery					86	0.00 *			
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit RL = Reporting Limit									

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3332-SW-					
		Collection Option (for soil)*		002					
VPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: BFB		Date Received		05/27/2004					
Aromatic: BFB		Date Extracted		05/27/2004					
		Date Analyzed		06/04/2004					
		% Dry Solids		81.9					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		48000		90000		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		36000		66000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		12000		24000		ND	
Sample Surrogate Acceptance Range						70-130%		70-130%	
Aliphatic Surrogate % Recovery - FID						105		65.0 *	
Aromatic Surrogate % Recovery - PID						106		75	

* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil
 ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.
 MDL = Method Detection Limit RL = Reporting Limit

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1			Sample Identification		3332-EW-				
EPH Surrogate Standards			Date Collected		003				
Aliphatic: 1-Chlorooctadecane			Date Received		05/26/2004				
Aromatic: o-Terphenyl			Date Extracted		05/27/2004				
EPH Fractionation Surrogates			Date Analyzed		06/02/2004				
#1: 2-Fluorobiphenyl			% Dry Solids		82.8				
#2: 2-Bromonaphthalene			Dilution Factor		1				
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK				
C9-C18 Aliphatics		ug/kg	7900	7900	ND				
C19-C36 Aliphatics		ug/kg	7900	7900	ND				
C11-C22 Aromatics (Unadj.)		ug/kg	7900	7900	ND				
Sample Surrogate Acceptance Range					40-140	40-140			
Aliphatic Surrogate % Recovery					65	44			
Aromatic Surrogate % Recovery					86	74			
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery					84	82			
Fractionation Surrogate #2 % Recovery					86	85			
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit					RL = Reporting Limit				

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3332-EW-003				
VPH Surrogate Standards			Collection Option (for soil)*		1				
Aliphatic: BFB			Date Collected		05/26/2004				
Aromatic: BFB			Date Received		05/27/2004				
			Date Extracted		05/27/2004				
			Date Analyzed		06/04/2004				
			% Dry Solids		82.8				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		2300	4300	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		1700	3100	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		570	1100	ND		
Sample Surrogate Acceptance Range							70-130%		70-130%
Aliphatic Surrogate % Recovery - FID							105		89
Aromatic Surrogate % Recovery - PID							106		89
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3332-WW-					
EPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/27/2004					
Aromatic: o-Terphenyl		Date Extracted		06/02/2004					
EPH Fractionation Surrogates		Date Analyzed		06/07/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		80.6					
#2: 2-Bromonaphthalene		Dilution Factor		20					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		170000		170000		ND	
C19-C36 Aliphatics		ug/kg		170000		170000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		170000		170000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		0.00 *	
Aromatic Surrogate % Recovery						86		0.00 *	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery									
Fractionation Surrogate #2 % Recovery						84		0.00 *	
						86		0.00 *	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results			
Method for Ranges: MADEP VPH	Sample Identification		
	Collection Option (for soil)*	3332-VWV-	004
VPH Surrogate Standards	Date Collected	05/26/2004	1
Aliphatic: BFB	Date Received	05/27/2004	
Aromatic: BFB	Date Extracted	05/27/2004	
	Date Analyzed	06/04/2004	
	% Dry Solids	80.6	
	Dilution Factor	1	
Hydrocarbon Ranges	MDL	RL	BLANK
C5- C8 Aliphatics (Unadj.)	5000	9300	ND
C9- C12 Aliphatics (Unadj.)	3700	6800	35500
C9- C10 Aromatics (Unadj.)	1200	2500	28100
Sample Surrogate Acceptance Range			70-130%
Aliphatic Surrogate % Recovery - FID			105
Aromatic Surrogate % Recovery - PID			106
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil			
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.			
MDL = Method Detection Limit RL = Reporting Limit			

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3332-F-005					
EPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/27/2004					
Aromatic: o-Terphenyl		Date Extracted		06/02/2004					
EPH Fractionation Surrogates		Date Analyzed		06/07/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		81.7					
#2: 2-Bromonaphthalene		Dilution Factor		40					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		330000		330000		ND	
C19-C36 Aliphatics		ug/kg		330000		330000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		330000		330000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		0.00 *	
Aromatic Surrogate % Recovery						86		0.00 *	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								84	
Fractionation Surrogate #2 % Recovery								86	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Was blank correction applied as a significant modification of the method? Yes
 Were any significant modifications to the eph method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results				
Method for Ranges:	MADEP VPH	Sample Identification		
		Collection Option (for soil)*	3332-F-005	
VPH Surrogate Standards		Date Collected	05/26/2004	
Aliphatic: BFB		Date Received	05/27/2004	
Aromatic: BFB		Date Extracted	05/27/2004	
		Date Analyzed	06/04/2004	
		% Dry Solids	81.7	
		Dilution Factor	1	
Hydrocarbon Ranges	Units of Measure	MDL	RL	BLANK
C5- C8 Aliphatics (Unadj.)	ug/kg	230000	420000	ND
C9- C12 Aliphatics (Unadj.)	ug/kg	170000	310000	823000
C9- C10 Aromatics (Unadj.)	ug/kg	56000	110000	329000
Sample Surrogate Acceptance Range				
Aliphatic Surrogate % Recovery - FID				70-130%
Aromatic Surrogate % Recovery - PID				101
				100
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil				
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.				
MDL = Method Detection Limit		RL = Reporting Limit		

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-7 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3332)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3332 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Trip Blank Soil

Sample Information and Analytical Results						
Method for Ranges: MADEP VPH		Sample Identification		TRIP BLANK		
VPH Surrogate Standards		Collection Option (for soil)*		1		
Aliphatic: BFB		Date Collected		05/26/2004		
Aromatic: BFB		Date Received		05/27/2004		
		Date Extracted		05/27/2004		
		Date Analyzed		06/02/2004		
		% Dry Solids		N/A		
		Dilution Factor		1		
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK	
C5- C8 Aliphatics (Unadj.)		ug/l	50	75	ND	
C9- C12 Aliphatics (Unadj.)		ug/l	30	55	ND	
C9- C10 Aromatics (Unadj.)		ug/l	10	20	ND	
Sample Surrogate Acceptance Range						
Aliphatic Surrogate % Recovery - FID					70-130%	70-130%
					106	86
Aromatic Surrogate % Recovery - PID					110	91
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil						
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.						
MDL = Method Detection Limit						

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-8
Paradise Point Building 3350
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3350													
Analytical Method:			8260B													
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)												
			5/26/2004	NA												
Excavation West Wall 3350-WW-004	Acetone		<0.055	3	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	Benzene		<0.0055	0.0056	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Bromodichloromethane		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Bromofom		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Chlorobenzene		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Chloroethane		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Chloroform		<0.0055	0.001	4	1564	40880	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Carbon disulfide		<0.0055	4	1564	40880	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Carbon tetrachloride		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1-Dichloroethane		<0.0055	4	1560	40000	10	63	84	68	4000	33	8200	0.38	<0.0055	<0.0055
	1,1-Dichloroethene		<0.0055	0.045	1	7	9	7	9	7	156	4	320	0.0009	<0.0055	<0.0055
	1,2-Dichloroethane		<0.0055	0.0018	0.0029	0.002	0.002	0.0029	0.002	0.002	0.35	0.0009	4	320	0.0009	<0.0055
	1,2-Dichloropropane		<0.0055	0.0029	0.002	0.002	0.002	0.0029	0.002	0.002	0.35	0.0009	4	320	0.0009	<0.0055
	Dibromochloromethane		<0.0055	0.002	0.002	0.002	0.002	0.0029	0.002	0.002	0.35	0.0009	4	320	0.0009	<0.0055
	cis-1,2-Dichloroethene		<0.0055	0.002	0.002	0.002	0.002	0.0029	0.002	0.002	0.35	0.0009	4	320	0.0009	<0.0055
	cis-1,2-Dichloropropene		<0.0055	0.0009	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	trans-1,2-Dichloroethene		<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3350													
Analytical Method:			8260B													
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)												
			5/26/2004	NA												
Excavation West Wall 3350-WW-004	trans-1,3-Dichloropropene		<0.0055	0.0009	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	Ethylbenzene		<0.0055	0.24	1560	40000	10	63	84	68	4000	33	8200	0.38	<0.0055	<0.0055
	2-Hexanone		<0.0055	0.0056	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4-Methyl-2-pentanone		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Methyl bromide		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Methyl chloride		<0.0055	0.02	49	9385	245280	81760	520	3200	58	NS	NS	NS	NS	NS
	Methylene chloride		<0.011	0.02	85	9385	245280	81760	520	3200	58	NS	NS	NS	NS	NS
	Methyl ethyl ketone		<0.028	0.7	9385	245280	81760	520	3200	58	NS	NS	NS	NS	NS	NS
	Styrene		<0.0055	2.24	3128	81760	81760	520	3200	58	NS	NS	NS	NS	NS	NS
	1,1,1-Trichloroethane		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,1,2,2-Tetrachloroethane		<0.0055	0.001	3	28	28	28	28	28	28	28	28	28	28	28
	1,1,2-Trichloroethane		<0.0055	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Tetrachloroethene		<0.0055	0.0074	12	110	82000	520	3200	58	NS	NS	NS	NS	NS	NS
	Toluene		<0.0055	7	3200	58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Vinyl chloride		<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055
	Xylenes (total)		<0.017	5	32000	200000	200000	200000	200000	200000	200000	200000	200000	200000	200000	200000

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Table 3-8
Paradise Point Building 3350
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3350														
Analytical Method:			8270C														
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)													
			5/26/2004	NA													
Excavation West Wall 3350-WW-004	Benzic acid		<0.18	NS	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2-Chlorophenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4-Chloro-3-methylphenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4-Dichlorophenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4-Dimethylphenol		<0.18	NS	0.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4-Dinitrophenol		<0.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4,6-Dinitro-o-cresol		<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2-Methylphenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3&4-Methylphenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2-Nitrophenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4-Nitrophenol		<0.091	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Pentachlorophenol		<0.091	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Phenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4,5-Trichlorophenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4,6-Trichlorophenol		<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Acenaphthene		<0.18	NS	8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Acenaphthylene		<0.18	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Building 3350														
Analytical Method:			8270C														
Sample ID	Contaminant of Concern		Date Collected	Sample Depth (ft bgs)													
			5/26/2004	NA													
Excavation West Wall 3350-WW-004	4-Chlorophenyl phenyl ether		<0.18	NS	7	24	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,2-Dichlorobenzene		<0.18	NS	1400	36000	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,3-Dichlorobenzene		<0.18	NS	24	1400	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1,4-Dichlorobenzene		<0.18	NS	1	27	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,4-Dinitrotoluene		<0.18	NS	NS	NS	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2,6-Dinitrotoluene		<0.18	NS	NS	NS	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3,3'-Dichlorobenzidine		<0.37	NS	NS	NS	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dibenzo(a,h)anthracene		<0.18	NS	0.17	0.088	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dibenzofuran		<0.18	NS	4.7	62	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Di-n-butyl phthalate		<0.37	NS	NS	NS	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Di-n-octyl phthalate		<0.37	NS	NS	NS	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Diethyl phthalate		<0.37	NS	NS	NS	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Dimethyl phthalate		<0.37	NS	NS	NS	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Bis(2-ethylhexyl)phthalate		<0.37	NS	6.67	46	<0.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Fluoranthene		<0.18	NS	276	620	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Fluorene		<0.18	NS	44	620	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Hexachlorobenzene		<0.18	NS	NS	NS	<0.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Table 3-8
Paradise Point Building 3350
VOC and SVOC Confirmation Soil Sample Analytical Results

[illegible]

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)

List any contaminant detected above the method detection limit

MSCC = Maximum Soil Contamination Concentration

ft bgs = feet below ground surface

Results must be reported in mg/kg

mg/kg = milligrams per kilogram

NA = not applicable

NS = no standard

Date:	10/27/2004	Incident Number and Name:	102420 Paradise Point Building 3350
Analytical Method:	8270C		
Sample ID	Contaminant of Concern		
	Date Collected	Sample Depth (ft bgs)	
Excavation West Wall 3350-WW-004	5/26/2004	NA	
Soil to Groundwater MSCC (mg/kg)			
	0.26	<0.18	Hexachlorobutadiene
		<0.18	Hexachlorocyclopentadiene
		NS	Hexachloroethane
		3	Indeno(1,2,3-cd)pyrene
		NS	Isoophorene
		<0.18	2-Methylnaphthalene
		NS	2-Nitroaniline
		NS	3-Nitroaniline
		NS	4-Nitroaniline
		<0.18	Naphthalene
		<0.18	Nitrobenzene
		NS	N-Nitroso-di-n-propylamine
		NS	N-Nitrosodiphenylamine
		<0.18	Phenanthrene
		286	Pyrene
		<0.18	1,2,4-Trichlorobenzene
Residential MSCC (mg/kg)			
	3.1	NS	Hexachlorocyclopentadiene
		NS	Hexachloroethane
		3	Indeno(1,2,3-cd)pyrene
		NS	Isoophorene
		63	2-Methylnaphthalene
		NS	2-Nitroaniline
		NS	3-Nitroaniline
		NS	4-Nitroaniline
		63	Naphthalene
		NS	Nitrobenzene
		NS	N-Nitroso-di-n-propylamine
		NS	N-Nitrosodiphenylamine
		60	Phenanthrene
		286	Pyrene
		<0.18	1,2,4-Trichlorobenzene
Industrial/Commercial MSCC (mg/kg)			
	73	NS	Hexachlorobutadiene
		NS	Hexachlorocyclopentadiene
		NS	Hexachloroethane
		8	Indeno(1,2,3-cd)pyrene
		NS	Isoophorene
		1635	2-Methylnaphthalene
		NS	2-Nitroaniline
		NS	3-Nitroaniline
		NS	4-Nitroaniline
		1635	Naphthalene
		NS	Nitrobenzene
		NS	N-Nitroso-di-n-propylamine
		NS	N-Nitrosodiphenylamine
		12264	Phenanthrene
		12264	Pyrene
		<0.18	1,2,4-Trichlorobenzene

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)

List any contaminant detected above the method detection limit

MSCC = Maximum Soil Contamination Concentration

ft = feet below ground surface

Results must be reported in mg/kg

mg/kg = milligrams per kilogram

NA = not applicable

NS = no standard

Table 3-9 Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results						
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3350-NW-		
EPH Surrogate Standards		Date Collected		001		
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004		
Aromatic: o-Terphenyl		Date Extracted		05/27/2004		
EPH Fractionation Surrogates		Date Analyzed		06/02/2004		
#1: 2-Fluorobiphenyl		% Dry Solids		88		
#2: 2-Bromonaphthalene		Dilution Factor		10		
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK	
C9-C18 Aliphatics		ug/kg	75000	75000	ND	717000
C19-C36 Aliphatics		ug/kg	75000	75000	ND	108000
C11-C22 Aromatics (Unadj.)		ug/kg	75000	75000	ND	424000
Sample Surrogate Acceptance Range					40-140	40-140
Aliphatic Surrogate % Recovery					65	56
Aromatic Surrogate % Recovery					86	128
Fractionation Surrogate Acceptance Range						
Fractionation Surrogate #1 % Recovery					84	106
Fractionation Surrogate #2 % Recovery					86	109
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.						
MDL = Method Detection Limit			RL = Reporting Limit			

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3350-NW-					
		Collection Option (for soil)*		001					
VPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: BFB		Date Received		05/27/2004					
Aromatic: BFB		Date Extracted		05/27/2004					
		Date Analyzed		06/07/2004					
		% Dry Solids		88					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		10000		19000		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		7700		14000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		2600		5200		ND	
Sample Surrogate Acceptance Range								70-130%	
Aliphatic Surrogate % Recovery - FID								84	
Aromatic Surrogate % Recovery - PID								92	
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range. MDL = Method Detection Limit RL = Reporting Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1				Sample Identification		3350-SW-			
EPH Surrogate Standards				Date Collected		002			
Aliphatic: 1-Chlorooctadecane				Date Received		05/26/2004			
Aromatic: o-Terphenyl				Date Extracted		05/27/2004			
EPH Fractionation Surrogates				Date Analyzed		06/02/2004			
#1: 2-Fluorobiphenyl				% Dry Solids		67.3			
#2: 2-Bromonaphthalene				Dilution Factor		40			
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK			
C9-C18 Aliphatics		ug/kg		400000	400000	ND		2000000	
C19-C36 Aliphatics		ug/kg		400000	400000	ND		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		400000	400000	ND		1060000	
Sample Surrogate Acceptance Range						40-140			
Aliphatic Surrogate % Recovery						65		0.00 *	
Aromatic Surrogate % Recovery						86		0.00 *	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84		0.00 *	
Fractionation Surrogate #2 % Recovery						86		0.00 *	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3350-SW-					
		Collection Option (for soil)*		002					
VPH Surrogate Standards		Date Collected		1					
Aliphatic: BFB		Date Received		05/26/2004					
Aromatic: BFB		Date Extracted		05/27/2004					
		Date Analyzed		06/04/2004					
		% Dry Solids		67.3					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		150000		280000		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		110000		210000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		37000		75000		ND	
Sample Surrogate Acceptance Range						70-130%		70-130%	
Aliphatic Surrogate % Recovery - FID						101		90	
Aromatic Surrogate % Recovery - PID						101		107	
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3350-EW-					
EPH Surrogate Standards		Date Collected		003					
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004					
Aromatic: o-Terphenyl		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/02/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		06/09/2004					
#2: 2-Bromonaphthalene		Dilution Factor		79.7					
				1					
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK			
C9-C18 Aliphatics		ug/kg		8200	8200	ND			
C19-C36 Aliphatics		ug/kg		8200	8200	ND			
C11-C22 Aromatics (Unadj.)		ug/kg		8200	8200	ND			
Sample Surrogate Acceptance Range						40-140	40-140		
Aliphatic Surrogate % Recovery						65	56		
Aromatic Surrogate % Recovery						86	86		
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84	119		
Fractionation Surrogate #2 % Recovery						86	118		
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		3350-EW-003					
		Collection Option (for soil)*		1					
VPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: BFB		Date Received		05/27/2004					
Aromatic: BFB		Date Extracted		05/27/2004					
		Date Analyzed		06/04/2004					
		% Dry Solids		79.7					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK			
C5- C8 Aliphatics (Unadj.)		ug/kg		2300	4300	ND			
C9- C12 Aliphatics (Unadj.)		ug/kg		1700	3100	ND		10000	
C9- C10 Aromatics (Unadj.)		ug/kg		570	1100	ND		4850	
Sample Surrogate Acceptance Range						70-130%		70-130%	
Aliphatic Surrogate % Recovery - FID						101		91	
Aromatic Surrogate % Recovery - PID						101		88	
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3350-WW-					
EPH Surrogate Standards		Date Collected		004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/26/2004					
Aromatic: o-Terphenyl		Date Extracted		05/27/2004					
EPH Fractionation Surrogates		Date Analyzed		06/02/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		90.3					
#2: 2-Bromonaphthalene		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL	RL	BLANK			
C9-C18 Aliphatics		ug/kg		7400	7400	ND		29200	
C19-C36 Aliphatics		ug/kg		7400	7400	ND		11900	
C11-C22 Aromatics (Unadj.)		ug/kg		7400	7400	ND		8680	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						65		60	
Aromatic Surrogate % Recovery						86		86	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						84		120	
Fractionation Surrogate #2 % Recovery						86		118	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit				RL = Reporting Limit					

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification		3350-WW-				
			Collection Option (for soil)*		004				
VPH Surrogate Standards			Date Collected		05/26/2004				
Aliphatic: BFB			Date Received		05/27/2004				
Aromatic: BFB			Date Extracted		05/27/2004				
			Date Analyzed		06/04/2004				
			% Dry Solids		90.3				
			Dilution Factor		1				
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		2000	3800	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		1500	2800	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		510	1000	ND		
Sample Surrogate Acceptance Range							70-130%		70-130%
Aliphatic Surrogate % Recovery - FID							101		87
Aromatic Surrogate % Recovery - PID							101		87
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		3350-F-005					
EPH Surrogate Standards		Date Collected		05/26/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/27/2004					
Aromatic: o-Terphenyl		Date Extracted		06/02/2004					
EPH Fractionation Surrogates		Date Analyzed		06/08/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		88.7					
#2: 2-Bromonaphthalene		Dilution Factor		40					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		300000		300000		ND	
C19-C36 Aliphatics		ug/kg		300000		300000		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		300000		300000		ND	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery								65	
Aromatic Surrogate % Recovery								86	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								84	
Fractionation Surrogate #2 % Recovery								86	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-9 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (House PP-3350)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point 3350 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges:		MADEP VPH	Sample Identification			3350-F-005			
VPH Surrogate Standards Aliphatic: BFB Aromatic: BFB			Collection Option (for soil)*			1			
			Date Collected			05/26/2004			
			Date Received			05/27/2004			
			Date Extracted			05/27/2004			
			Date Analyzed			06/04/2004			
			% Dry Solids			88.7			
			Dilution Factor			1			
Hydrocarbon Ranges			Units of Measure		MDL	RL	BLANK		
C5- C8 Aliphatics (Unadj.)			ug/kg		250000	470000	ND		
C9- C12 Aliphatics (Unadj.)			ug/kg		190000	340000	ND		
C9- C10 Aromatics (Unadj.)			ug/kg		62000	120000	ND		
Sample Surrogate Acceptance Range							70-130% 70-130%		
Aliphatic Surrogate % Recovery - FID							101 180 *		
Aromatic Surrogate % Recovery - PID							101 213 *		
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil									
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.									
MDL = Method Detection Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
 Were any significant modifications to the VPH method made? No

Table 3-10
Paradise Point Monitoring Well M230
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230																
Analytical Method:			8260B																
Contaminant of Concern			Acetone	Benzene	Bromochloromethane	Bromoform	Chlorobenzene	Chloroethane	Chloroform	Carbon disulfide	Carbon tetrachloride	1,1-Dichloroethane	1,2-Dichloroethane	1,2-Dichloropropane	Dibromochloromethane	cis-1,2-Dichloroethane	cis-1,3-Dichloropropene	trans-1,2-Dichloroethene	
Sample ID	Date Collected	Sample Depth (ft bgs)																	
Excavation North Wall M230-NW-001	5/21/2004	NA	<0.048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	
Excavation West Wall M230-WW-004	5/21/2004	NA	<0.055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	
Excavation Floor M230-F-005	5/21/2004	NA	<0.052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	
Soil to Groundwater MSCC (mg/kg)			3	0.0056	NS	NS	NS	NS	0.001	4	NS	4	0.045	0.0018	0.0028	0.002	0.35	0.0009	0.38
Residential MSCC (mg/kg)			1564	22	NS	NS	NS	NS	100	1584	NS	1560	1	7	9	7	156	4	320
Industrial/Commercial MSCC (mg/kg)			40600	200	NS	NS	NS	NS	938	40880	NS	40000	10	63	84	66	4000	33	8200

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230																
Analytical Method:			8260B																
Contaminant of Concern			trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone	4-Methyl-2-pentanone	Methyl bromide	Methyl chloride	Methylene chloride	Methyl ethyl ketone	Styrene	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	Tetrachloroethene	Toluene	Trichloroethene	Vinyl chloride	Xylenes (total)
Sample ID	Date Collected	Sample Depth (ft bgs)																	
Excavation North Wall M230-NW-001	5/21/2004	NA	<0.0048	<0.0048	<0.024	<0.024	<0.0048	<0.0048	<0.0097	<0.024	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.015
Excavation West Wall M230-WW-004	5/21/2004	NA	<0.0055	<0.0055	<0.027	<0.027	<0.0055	<0.0055	<0.011	<0.027	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.016
Excavation Floor M230-F-005	5/21/2004	NA	<0.0052	<0.0052	<0.026	<0.026	<0.0052	<0.0052	<0.01	<0.026	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.016
Soil to Groundwater MSCC (mg/kg)			0.0069	0.24	1.9	NS	NS	NS	0.02	0.7	2.24	NS	0.001	NS	0.0074	7	0.0183	NS	5
Residential MSCC (mg/kg)			4	1560	625	NS	NS	NS	85	9385	3128	NS	3	NS	12	3200	58	NS	32000
Industrial/Commercial MSCC (mg/kg)			33	40000	16352	NS	NS	NS	763	245280	81760	NS	28	NS	110	82000	520	NS	200000

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Table 3-10
Paradise Point Monitoring Well M230
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230																		8270C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Analytical Method:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Contaminant of Concern			Sample ID		Date Collected	Sample Depth (ft bgs)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			Excavation North Wall M230-NW-001	NA	5/21/2004	NA	<0.93	<0.19	<0.19	<0.19	<0.93	<0.37	<0.19	<0.19	<0.19	<0.19	<0.93	<0.93	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	&lt

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230															8270C									
Analytical Method:																											
Contaminant of Concern			Sample ID		Date Collected	Sample Depth (ft bgs)	4-Chlorophenyl phenyl eth																				
							1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4-Dinitrofluorene	2,6-Dinitrofluorene	3,3'-Dichlorobenzidine	Dibenz(a,h)anthracene	Dibenzofuran	Di-n-butyl phthalate	Di-n-octyl phthalate	Diethyl phthalate	Dimethyl phthalate	Bis(2-ethylhexyl)phthalate	Fluoranthene	Fluorene	Hexachlorobenzene					
Excavation North Well M230-NW-001					5/21/2004	NA	<0.19	<0.19	<0.19	<0.19	<0.19	<0.37	<0.19	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.19	<0.19	<0.19				
Excavation West Well M230-WW-004					5/21/2004	NA	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.18	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.18	<0.18	<0.18					
Excavation Floor M230-F-005					5/21/2004	NA	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.18	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	0.0512 J	<0.18	<0.18					
Soil to Groundwater MSCC (mg/kg)			NS		7	24	1	NS	NS	NS	NS	0.17	4.7	NS	NS	NS	NS	NS	NS	6.67	44	NS					
Residential MSCC (mg/kg)			NS		1400	1400	27	NS	NS	NS	NS	0.088	62	NS	NS	NS	NS	NS	NS	46	620	NS					
Industrial/Commercial MSCC (mg/kg)			NS		36000	36000	240	NS	NS	NS	NS	0.78	1635	NS	NS	NS	NS	NS	NS	410	16400	NS					

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
 List any contaminant detected above the method detection limit
 MSCC = Maximum Soil Contamination Concentration
 ft bgs = feet below ground surface
 Results must be reported in mg/kg
 mg/kg = milligrams per kilogram
 NA = not applicable
 NS = no standard

Table 3-10
Paradise Point Monitoring Well M230
VOC and SVOC Confirmation Soil Sample Analytical Results

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230																
Analytical Method:			8270C																
Contaminant of Concern			Sample ID		Benzyl alcohol														
			Date Collected	Sample Depth (ft bgs)	Anthracene	Benzo(a)anthracene	Benzo(e)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	4-Bromophenyl phenyl ether	Butyl benzyl phthalate	4-Chloroaniline	Carbazole	Chrysene	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	
Excavation North Wall M230-NW-001	5/21/2004	NA	0.042 J	0.0807 J	0.0773 J	0.0871 J	0.0785 J	0.0468 J	<0.19	<0.37	<0.19	<0.18	<0.75	<0.19	0.0762 J	<0.19	<0.19	<0.19	
Excavation West Wall M230-WW-004	5/21/2004	NA	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.18	<0.73	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
Excavation Floor M230-F-005	5/21/2004	NA	0.0827 J	0.204	0.256	0.302	0.122 J	0.17 J	<0.18	<0.36	<0.18	<0.71	0.0692 J	0.246	<0.18	<0.18	<0.18	<0.18	
Soil to Groundwater MSCC (mg/kg)			995	0.34	0.091	1	6720	12	NS	NS	NS	NS	NS	NS	38	NS	0.0002	NS	
Residential MSCC (mg/kg)			4500	0.88	0.088	0.88	469	9	NS	NS	NS	NS	NS	NS	88	NS	0.58	NS	
Industrial/Commercial MSCC (mg/kg)			122000	8	0.78	8	12264	78	NS	NS	NS	NS	NS	NS	780	NS	5.2	NS	

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

Date: 10/27/2004			Incident Number and Name: 102420 Paradise Point Monitoring Well M230																				
Analytical Method:			8270C																				
Contaminant of Concern			Sample ID	Date Collected	Sample Depth (ft bgs)	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Naphthalene	Nitrobenzene	N-Nitroso-di-n-propylamine	N-Nitrosodiphenylamine	Phenanthrene	Pyrene	1,2,4-Trichlorobenzene		
			Excavation North Wall M230-NW-001	5/21/2004	NA	<0.19	<0.19	<0.19	0.0789	<0.19	0.0543	<0.37	<0.37	<0.37	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	0.0809	0.0949	<0.19
			Excavation West Wall M230-WW-004	5/21/2004	NA	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.36	<0.36	<0.36	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Excavation Floor M230-F-005	5/21/2004	NA	<0.18	<0.18	<0.18	<0.18	0.137 J	<0.18	0.0511 J	<0.36	<0.36	<0.36	<0.36	<0.18	<0.18	<0.18	<0.18	<0.18	0.285	0.743	<0.18		
Soil to Groundwater MSCC (mg/kg) Residential MSCC (mg/kg) Industrial/Commercial MSCC (mg/kg)			0.26	NS	NS	3	NS	3	NS	3	NS	NS	NS	NS	0.58	NS	NS	NS	60	286	2.6		
			3.1	NS	NS	0.88	NS	63	NS	NS	NS	63	NS	NS	NS	63	NS	NS	NS	469	469	156	
			73	NS	NS	8	NS	1635	NS	NS	NS	1635	NS	NS	NS	1635	NS	NS	NS	12264	12264	4088	

Indicate method detection limit for contaminants when analyzed but not detected (i.e., <1.0)
List any contaminant detected above the method detection limit
MSCC = Maximum Soil Contamination Concentration
ft bgs = feet below ground surface
Results must be reported in mg/kg
mg/kg = milligrams per kilogram
NA = not applicable
NS = no standard

1

2

Table 3-11 Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
 Site Location: Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		M230-NW-					
EPH Surrogate Standards		Date Collected		05/21/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/22/2004					
Aromatic: o-Terphenyl		Date Extracted		05/25/2004					
EPH Fractionation Surrogates		Date Analyzed		05/28/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		89.3					
#2: 2-Bromonaphthalene		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C9-C18 Aliphatics		ug/kg		7500		7500		ND	
C19-C36 Aliphatics		ug/kg		7500		7500		ND	
C11-C22 Aromatics (Unadj.)		ug/kg		7500		7500		ND	
Sample Surrogate Acceptance Range								40-140	
Aliphatic Surrogate % Recovery								55	
Aromatic Surrogate % Recovery								76	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery								81	
Fractionation Surrogate #2 % Recovery								82	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-11 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
Site Location: Sample Matrix : Soil

Sample Information and Analytical Results					
Method for Ranges:	MADEP VPH	Sample Identification	M230-NW-		
VPH Surrogate Standards		Collection Option (for soil)*	001		
Aliphatic:	BFB	Date Collected	05/21/2004		
Aromatic:	BFB	Date Received	05/22/2004		
		Date Extracted	05/22/2004		
		Date Analyzed	05/25/2004		
		% Dry Solids	89.3		
		Dilution Factor	1		
Hydrocarbon Ranges	Units of Measure	MDL	RL	BLANK	
C5- C8 Aliphatics (Unadj.)	ug/kg	2000	3700	ND	
C9- C12 Aliphatics (Unadj.)	ug/kg	1500	2700	ND	
C9- C10 Aromatics (Unadj.)	ug/kg	500	990	ND	
Sample Surrogate Acceptance Range				70-130%	70-130%
Aliphatic Surrogate % Recovery - FID				109	97
Aromatic Surrogate % Recovery - PID				109	96
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil					
** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.					
MDL = Method Detection Limit		RL = Reporting Limit			

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes
Were any significant modifications to the VPH method made? No

Table 3-11 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results						
Method for Ranges: MADEP-EPH-98-1		Sample Identification		M230-VWV-004		
EPH Surrogate Standards		Date Collected				
Aliphatic: 1-Chlorooctadecane		Date Received				
Aromatic: o-Terphenyl		Date Extracted				
EPH Fractionation Surrogates		Date Analyzed				
#1: 2-Fluorobiphenyl		% Dry Solids		91.8		
#2: 2-Bromonaphthalene		Dilution Factor		1		
Hydrocarbon Ranges		Units of Measure	MDL	RL	BLANK	
C9-C18 Aliphatics		ug/kg	7200	7200	ND	
C19-C36 Aliphatics		ug/kg	7200	7200	ND	
C11-C22 Aromatics (Unadj.)		ug/kg	7200	7200	ND	
Sample Surrogate Acceptance Range					40-140	
Aliphatic Surrogate % Recovery					55	
Aromatic Surrogate % Recovery					76	
Fractionation Surrogate Acceptance Range						
Fractionation Surrogate #1 % Recovery					81	
Fractionation Surrogate #2 % Recovery					82	
* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.						
MDL = Method Detection Limit			RL = Reporting Limit			

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-11 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP VPH		Sample Identification		M230-VWV-		004			
VPH Surrogate Standards		Collection Option (for soil)*		1					
Aliphatic: BFB		Date Collected		05/21/2004					
Aromatic: BFB		Date Received		05/22/2004					
		Date Extracted		05/22/2004					
		Date Analyzed		05/25/2004					
		% Dry Solids		91.8					
		Dilution Factor		1					
Hydrocarbon Ranges		Units of Measure		MDL		RL		BLANK	
C5- C8 Aliphatics (Unadj.)		ug/kg		2200		4100		ND	
C9- C12 Aliphatics (Unadj.)		ug/kg		1600		3000		ND	
C9- C10 Aromatics (Unadj.)		ug/kg		540		1100		ND	
Sample Surrogate Acceptance Range						70-130%		70-130%	
Aliphatic Surrogate % Recovery - FID						109		102	
Aromatic Surrogate % Recovery - PID						109		101	
* Option 1 = Established fill line on vial Option 2 = Sampling Device (Indicate brand, e.g. EnCore™) Option 3 = Field weight of soil ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range. MDL = Method Detection Limit RL = Reporting Limit									

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-11 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)

EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results									
Method for Ranges: MADEP-EPH-98-1		Sample Identification		M230-F-005					
EPH Surrogate Standards		Date Collected		05/21/2004					
Aliphatic: 1-Chlorooctadecane		Date Received		05/22/2004					
Aromatic: o-Terphenyl		Date Extracted		05/25/2004					
EPH Fractionation Surrogates		Date Analyzed		05/28/2004					
#1: 2-Fluorobiphenyl		% Dry Solids		91.3					
#2: 2-Bromonaphthalene		Dilution Factor		1					
Hydrocarbon Ranges		MDL		RL		BLANK			
C9-C18 Aliphatics		ug/kg		7300		ND		83800	
C19-C36 Aliphatics		ug/kg		7300		ND		49200	
C11-C22 Aromatics (Unadj.)		ug/kg		7300		ND		42400	
Sample Surrogate Acceptance Range						40-140		40-140	
Aliphatic Surrogate % Recovery						55		66	
Aromatic Surrogate % Recovery						76		84	
Fractionation Surrogate Acceptance Range									
Fractionation Surrogate #1 % Recovery						81		86	
Fractionation Surrogate #2 % Recovery						82		85	

* Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range.

MDL = Method Detection Limit RL = Reporting Limit

EPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? Yes

Was blank correction applied as a significant modification of the method? Yes

Were any significant modifications to the eph method made? No

Table 3-11 (cont.) Summary of Analytical Results: MADEP-EPH/VPH (Building M-230)
EPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Shaw E & I, Inc. Laboratory Name: Accutest Southeast
 Project Name: Camp Lejeune-Paradise Point M230 NC Certification # (Lab): 573
 Site Location: _____ Sample Matrix : Soil

Sample Information and Analytical Results				
Method for Ranges:	MADEP VPH	Sample Identification		
VPH Surrogate Standards Aliphatic: BFB Aromatic: BFB		Collection Option (for soil)*	M230-F-005	
		Date Collected	05/21/2004	
		Date Received	05/22/2004	
		Date Extracted	05/22/2004	
		Date Analyzed	05/25/2004	
		% Dry Solids	91.3	
		Dilution Factor	1	
Hydrocarbon Ranges	Units of Measure	MDL	RL	BLANK
C5- C8 Aliphatics (Unadj.)	ug/kg	2200	4200	ND
C9- C12 Aliphatics (Unadj.)	ug/kg	1700	3100	ND
C9- C10 Aromatics (Unadj.)	ug/kg	560	1100	ND
Sample Surrogate Acceptance Range			70-130%	70-130%
Aliphatic Surrogate % Recovery - FID			109	97
Aromatic Surrogate % Recovery - PID			109	95
* Option 1 = Established fill line on vial Option 2 = Sampling Device (indicate brand, e.g. EnCore™) Option 3 = Field weight of soil ** Unadjusted value. Should exclude the concentration of any surrogate(s), internal standards, and/or concentrations of other ranges that elute within the specified range. MDL = Method Detection Limit RL = Reporting Limit				

VPH rev. 11/00

Were all performance/acceptance standards for required QA/QC procedures achieved? **Yes**
 Were any significant modifications to the VPH method made? **No**

Table 3-12

**Paradise Point-Camp Johnson
Soil Disposal Analytical Results**

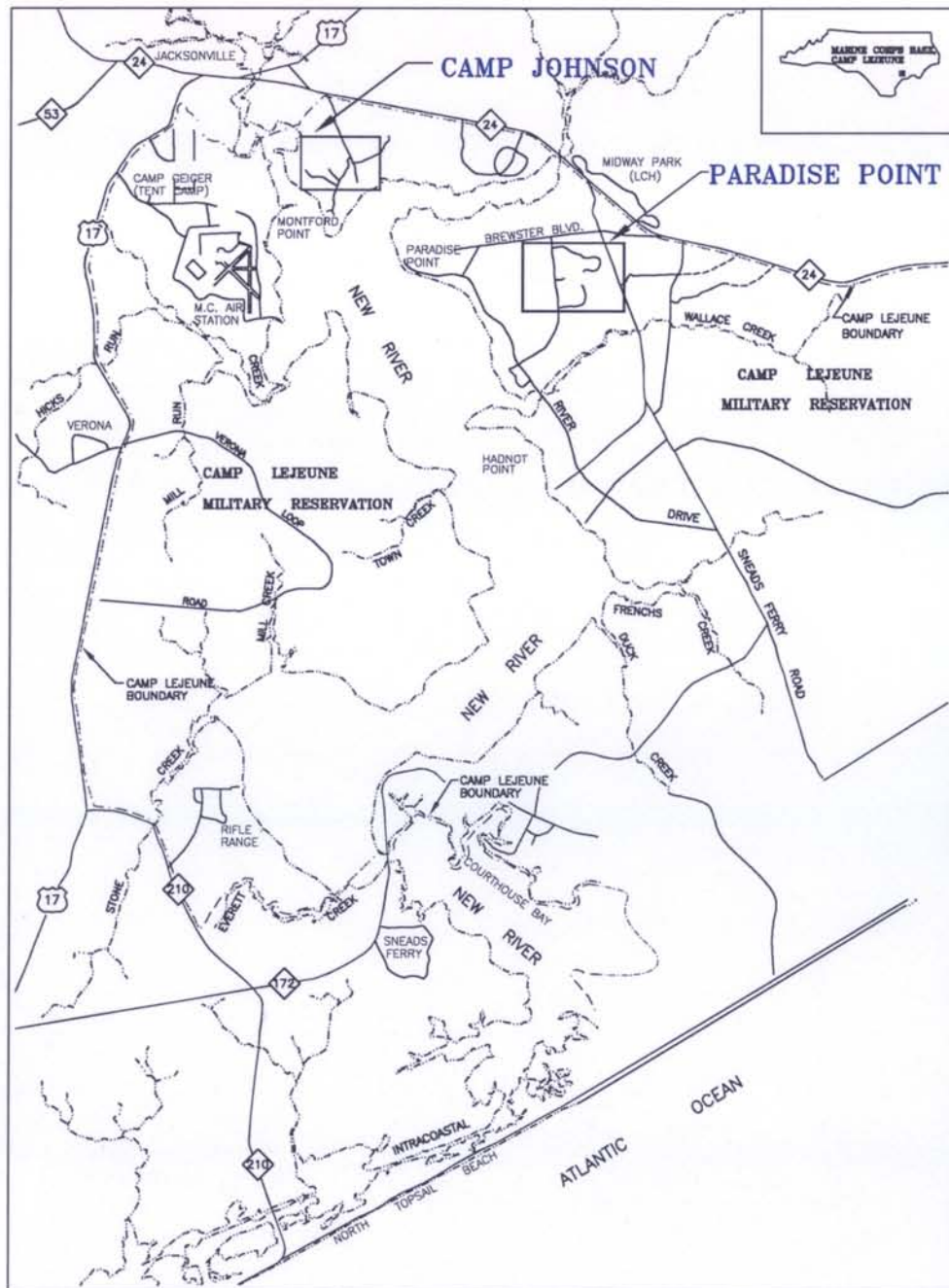
Compound	Reg. Limit	PP-COPM-1
Organics		
TPH-DRO (mg/Kg)		7230
TPH-GRO (mg/Kg)		195
General Chemistry		
Reactive Cyanide (mg/Kg)	250	<1.9
Reactive Sulfide (mg/Kg)	500	<62
Corrosivity (pH units)		6.4
Ignitability (°F)		>200
TCLP (mg/L)		
Arsenic	5	0.01
Barium	100	0.092
Benzene	0.5	<0.01
Cadmium	1	<0.005
Carbon tetrachloride	0.5	<0.02
Chlorobenzene	100	<0.02
Chlordane	0.03	<0.005
Chloroform	6	<0.02
Chromium	5	0.0013
o-Cresols	200	<0.05
m+p-Cresols	200	<0.05
2,4-D	10	<0.1
1,4-Dichlorobenzene	7.5	<0.02
1,2-Dichloroethane	0.5	<0.02
1,1-Dichloroethene	0.7	<0.02
2,4-Dinitrotoluene	0.13	<0.05
Endrin	0.02	<0.001
Heptachlor	0.008	<0.0005
Heptachlor epoxide	0.008	<0.0005
Hexachlorobenzene	0.13	<0.05
Hexachlorobutadiene	0.5	<0.05
Hexachloroethane	3	<0.05
Lead	5	0.046
Lindane	0.4	<0.0005
Mercury	0.2	<0.01
Methoxychlor	10	<0.001
Methyl ethyl ketone	200	<0.1
Nitrobenzene	2	<0.05
Pentachlorophenol	100	<0.25
Pyridine	5	<0.1
Selenium	1	<0.05
Silver	5	<0.01
Tetrachloroethene	0.7	<0.02
Trichloroethene	0.5	<0.02
2,4,5-TP (Silvex)	1	<0.01
2,4,5-Trichlorophenol	400	<0.05
2,4,6-Trichlorophenol	2	<0.05
Toxaphene	0.5	<0.025
Vinyl chloride	0.2	<0.01

Bold print shows detectable concentrations.

No results exceed regulatory limits.

FIGURES

MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

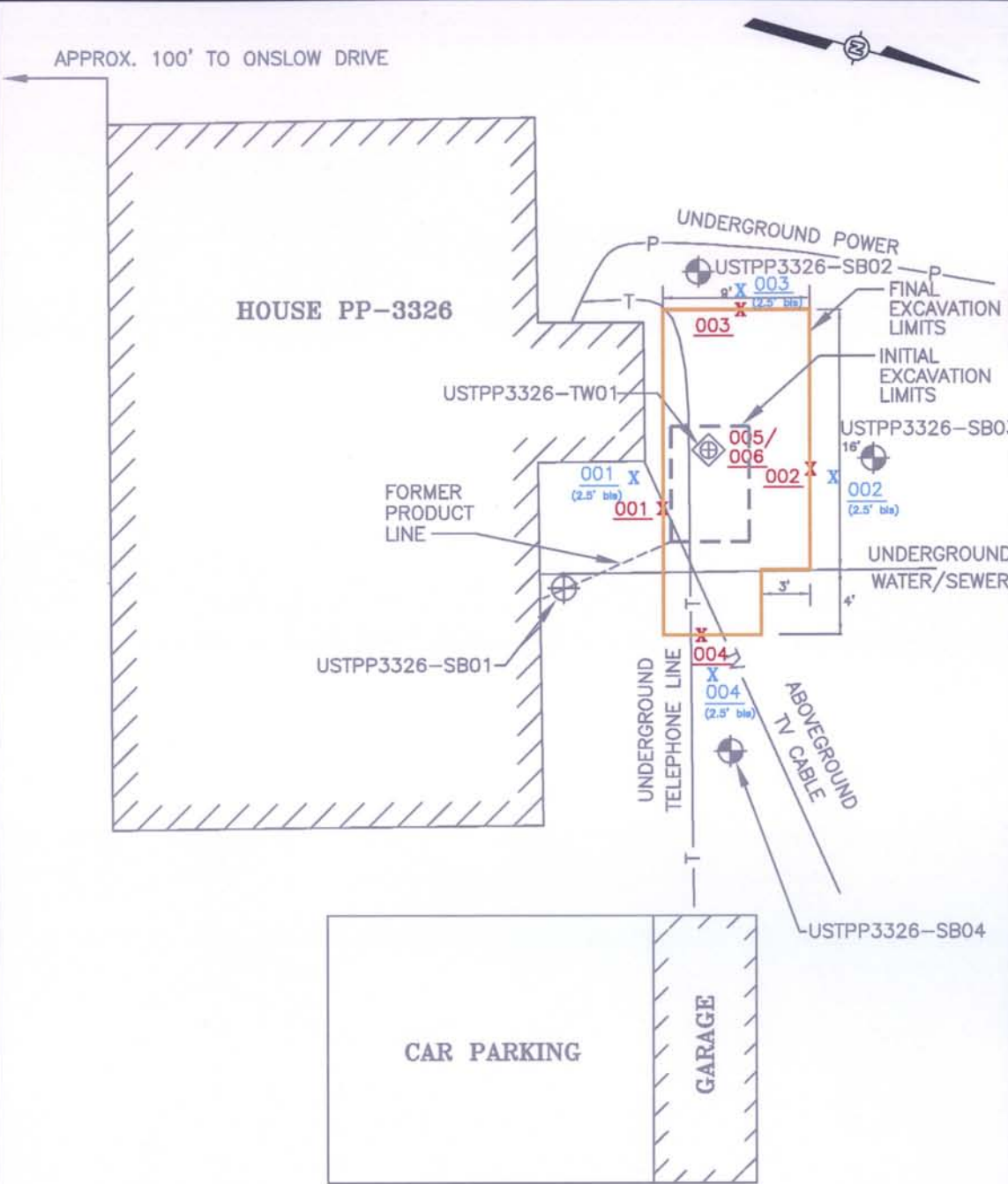


VICINITY MAP

1" = 1.5 MILES

DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND	
NAVAL STATION		NORFOLK, VIRGINIA	
ATLANTIC DIVISION		YORKTOWN, VIRGINIA	
NAVAL FLEET & INDUSTRIAL SUPPLY CENTER			
SCALE:		SIZE:	
AS SHOWN		A	
DELIVERY ORDER NO.			
005			
CONSTR. CONTRACT NO.			
N62470-02-D-3260			
NAVFAC DRAWING NO.			
?			
SHEET I.D.			
1.1			

PLOT DATE: ?/?/99
 FORMAT REVISION 2/09/04



HEALTH BASED LEVEL >100% SOLUBILITY

EXISTING	NEW	DESCRIPTION
		BUILDING
		SOIL BORING (HAND AUGER)
		TYPE II WELL (TEMPORARY)

	Residential SCL	Soil to GW MCC	3326 NW-001	3326 SW-002	3326 EW-003	3326 WW-004
C9-C18 ALIPHATICS	9,386	3,255	4,220	11.6	<8.3	18,100
C19-C36 ALIPHATICS	93,860	#	765	8.6	<8.3	3,170
C9-C22 AROMATICS	469	34	3,429	<8.2	<8.3	4,180
C5-C8 ALIPHATICS	939	72	<220	<4.3	<4.4	<450

	DRO	GRO
3326-NW-001	30,700	676
3326-SW-002	<8.6	<4.8
3326-EW-003	61.7	<5.6
3326-WW-004	<9.1	<5.6

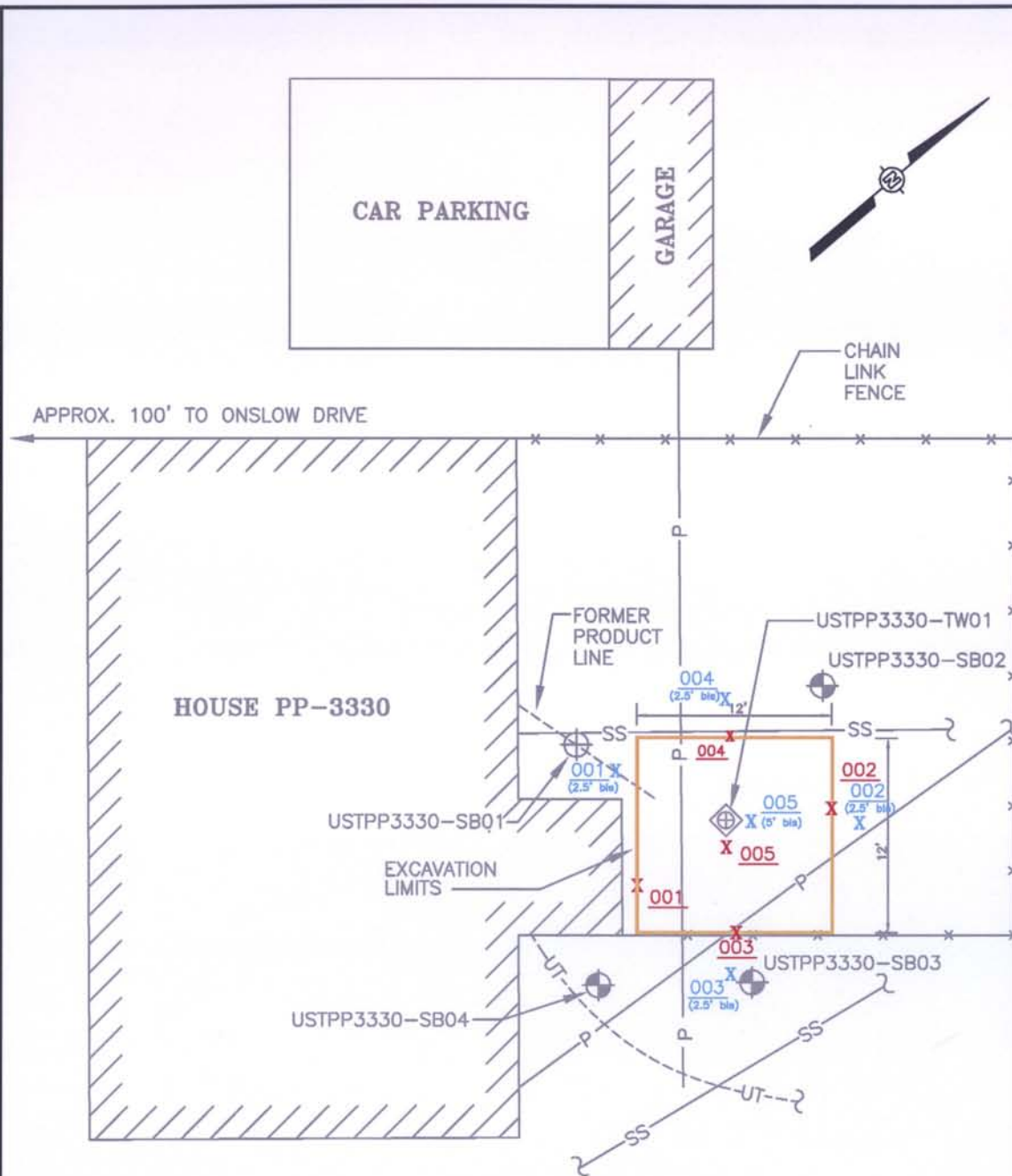
RESULTS ARE IN mg/kg
 EXCAVATION 5 FEET DEEP
 BOLD INDICATES ABOVE RESIDENTIAL MSCC



MAP ADAPTED FROM CATLIN ENGINEERS AND SCIENTISTS, DATED MAY, 2003.

RECORD DRAWING

DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

PLOT DATE: 2/2/99
FORMAT REVISION 2/09/04

	Residential SCL	Soil to GW MCC	3330 NW-001	3330 SW-002	3330 EW-003	3330 WW-004	3330 F-005
C9-C18 ALIPHATICS	9,386	3,255	1,910	<8.4	<8.9	11,400	415
C19-C36 ALIPHATICS	93,860	#	695	<8.4	<8.9	2,110	108
C9-C22 AROMATICS	469	34	769	<8.4	<8.9	9,120	149
C5-C8 ALIPHATICS	939	72	<6.9	<4.5	<4.8	<450	<8.4

HEALTH BASED LEVEL >100% SOLUBILITY

LEGEND		HEALTH BASED LEVEL
EXISTING	NEW	DESCRIPTION
		BUILDING
		SOIL BORING (HAND AUGER)
		TYPE II WELL (TEMPORARY)
— P —		POWER LINE
— SS —		SANITARY SEWER
--- UT ---		UNDERGROUND TELEPHONE

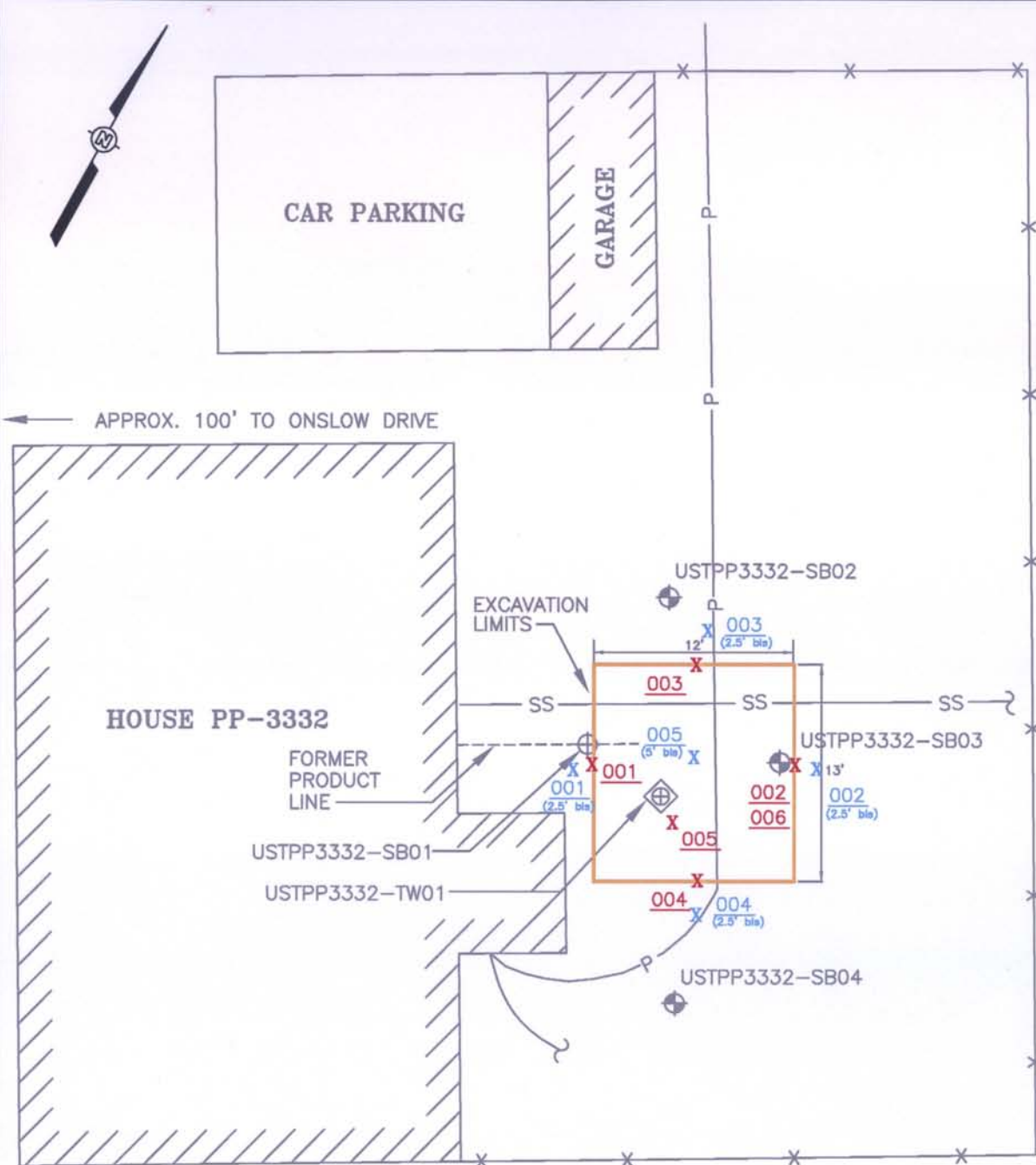
	<u>DRO</u>	<u>GRO</u>
3330-NW-001	78.9	<6.2
3330-SW-002	4,970	<5.8
3330-EW-003	<9.6	<6.0
3330-WW-004	<9.6	<6.4
3330-F-005	16,200	99.5

RESULTS ARE IN mg/kg
EXCAVATION 5 FEET DEEP
BOLD INDICATES ABOVE RESIDENTIAL MSCC



MAP ADAPTED FROM CATLIN ENGINEERS AND SCIENTISTS, DATED MAY, 2003.

DEPARTMENT OF THE NAVY						NAVAL FACILITIES ENGINEERING COMMAND							
ATLANTIC DIVISION						NORFOLK, VIRGINIA							
NAVAL STATION						YORKTOWN, VIRGINIA							
NAVAL FLEET & INDUSTRIAL SUPPLY CENTER													
PARADISE POINT-HOUSE PP-3330						PROJECT NO. 102420							
PP-3330						RECORD DRAWINGS							
SITE MAP						DESCRIPTION / ISSUE							
SCALE: AS SHOWN						SIZE: A							
DELIVERY ORDER NO. 005						CONSTR. CONTRACT NO. N62470-02-D-3260							
NAVFAC DRAWING NO. ?						DRAWN BY 							
SHEET I.D.						CHECKED BY 							
2.2						APPROVED BY 							
						REVISED							



	Residential SCL	Soil to GW MCC	3332 NW-001	3332 SW-002	3332 EW-003	3332 WW-004	3332 F-005
C9-C18 ALIPHATICS	9,386	3,255	14,800	7,180	<7.9	988	2,850
C19-C36 ALIPHATICS	93,860	#	2,510	1,300	<7.9	354	612
C9-C22 AROMATICS	469	34	5,438	1,848	<7.9	396	1,232
C5-C8 ALIPHATICS	939	72	<410	<90	<4.3	<9.3	<420

HEALTH BASED LEVEL >100% SOLUBILITY

LEGEND		DESCRIPTION
EXISTING	NEW	
		BUILDING
		SOIL BORING (HAND AUGER)
		TYPE II WELL (TEMPORARY)
		POWER LINE
		SANITARY SEWER

	DRO	GRO
3332-NW-001	16.1	<6.0
3332-SW-002	3,720	<5.8
3332-SWD-006	3,170	<5.8
3332-EW-003	<9.4	<5.8
3332-WW-004	17.4	<5.8
3332-F-005	13,500	130

RESULTS ARE IN mg/kg
 EXCAVATION 5 FEET DEEP
 BOLD INDICATES ABOVE RESIDENTIAL MSCC



Shaw Environmental, Inc.

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NO. 102420
REV	DATE	BY	CHK'D	APPROV'D
1	6/04	JEL	-	RK
RECORD DRAWINGS				
DESCRIPTION/ISSUE				

DEPARTMENT OF THE NAVY

NAVAL FACILITIES ENGINEERING COMMAND

ATLANTIC DIVISION

NAVAL STATION

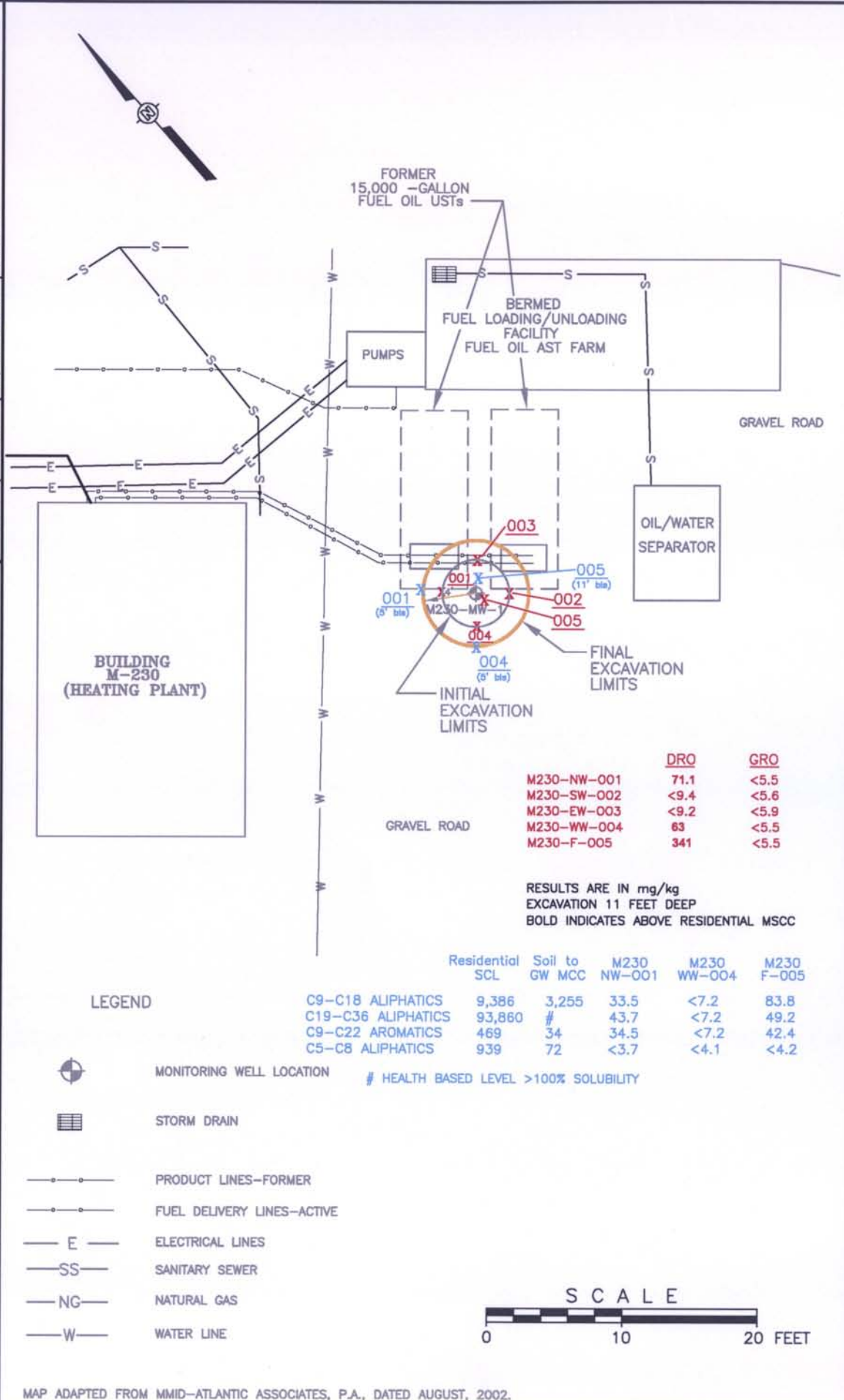
NAVAL FLEET & INDUSTRIAL SUPPLY CENTER

PAARADISE POINT-HOUSE PP-3332

PP-3332

SITE MAP

SCALE:	AS SHOWN	SIZE:	A
DELIVERY ORDER NO. 005			
CONSTR. CONTRACT NO. N62470-02-D-3260			
NAVFAC DRAWING NO. ?			
SHEET I.D. 2.3			



PROJECT NO. 102420
 Shaw Environmental, Inc.
 DESIGNED BY
 DRAWN BY

CHECKED BY
 APPROVED BY

DEPARTMENT OF THE NAVY
 NAVAL STATION
 NAVAL FLEET & INDUSTRIAL SUPPLY CENTER
 ATLANTIC DIVISION
 NORFOLK, VIRGINIA
 YORKTOWN, VIRGINIA

PARADISE POINT-BUILDING M-230
 M-230-2
 SITE MAP

SCALE: AS SHOWN
 DELIVERY ORDER NO. 005
 CONSTR. CONTRACT NO. N62470-02-D-3260
 NAWAC DRAWING NO. ?
 SHEET I.D.

SIZE: A
 2.5

APPENDIX A

Photographs



Building M-230 Excavations



Soil Stockpiles



House pp-3326 Backfil



House pp-3226 Final



House pp-3330 Excavation



House pp-3330 Final



House pp-3332 Excavation



House pp-3332 Final



House pp-3350 Excavation



House pp-3350 Final

APPENDIX B

Monitoring Well M230-MW1 Abandonment Form

North Carolina Department of Environment and Natural Resources-Division of Water Quality-Groundwater Section-1636 Mall Service Center
Raleigh, N.C. 27699-1639 Phone No. (919) 733-3221

M230 MW-1
WELL ABANDONMENT RECORD

Well Contractor: MANN DRILLING COMPANY
Well Contractor Certification # 2156

1. WELL USE (check applicable box) residential municipal industrial agricultural x monitoring recovery
Heat pump water injection other if other, list use: _____

2. WELL LOCATION: (show a sketch of the location on back of form)

Nearest Town: CAMP JOHNSON County: ONSLOW

TAFT ST. BLDG. M230 STEAM PLANT
(Road, community, Subdivision, Lot No.)

3. OWNER: COMMANDING GENERAL

4. ADDRESS: PO BOX 8006 CAMP LEJUENE NC 28547

5. TOPOGRAPHY: draw, slope, hilltop, valley, flat flat

6. TOTAL DEPTH: 17.3 DIAMETER: 2

7. CASING REMOVED:

Feet	diameter
7.3'	2
1.0' Screen	2

8. DISINFECTION: 2 OZ.

(amount of 70% hypochlorite used)

SEALING MATERIAL:

Neat cement	sand cement
Bags of cement: _____	bags of cement _____
Gals. Of water: _____	yds. Of sand _____
	Gals. Of water _____

OTHER:

Type material: BENTONITE GROUT
Amount: 4 GALLONS

10. EXPLAIN METHOD EMPLACEMENT OF MATERIAL:

TREMIE PIPE TO BOTTOM OF WELL, PUMPED GROUT TO SURFACE.

11. DATE WELL ABANDONED: 4/30/04

I do hereby certify that this well was abandoned in accordance with 15A NCAC 2C, well construction Standards, and that a copy of the record has been provided to the well owner.

Signature of person abandoning the well [Signature] Date 5-3-04

WELL LOCATION:

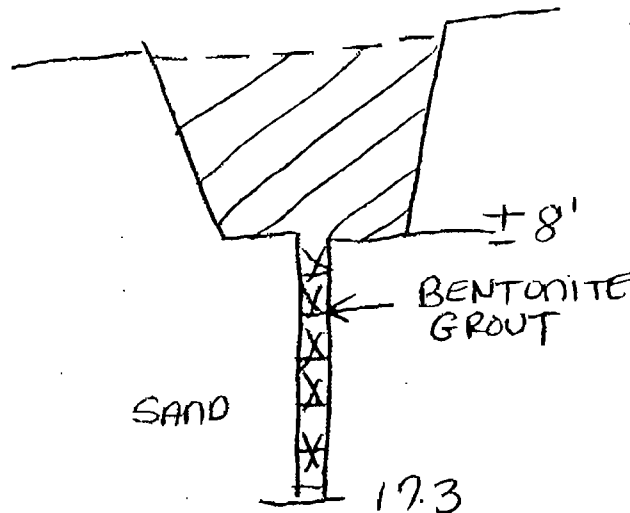
Draw a location sketch on the reverse of this sheet, showing the direction and distance of the well to at least two (2) nearby reference points such as roads, intersections and streams. Identify roads with State Highway road identification numbers.

Submit original to the Division of Water Quality, Groundwater section, one copy to the owner within 30 days from completion of abandonment. GW-30 Revised 12/99

Quadrangle No.

WELL DIAGRAM: Draw a detailed sketch of The well showing total depth, depth and diameter of screens remaining in the well, gravel intervals, intervals of casing perforations, and depths and types of fill materials used.

HOLE TO BE BACKFILLED W/ CLEAN SOIL AFTER EXCAVATION



CLIENT TO CUT OFF WELL AT BOTTOM OF EXCAVATION

APPENDIX C

Soil Disposal Manifests

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

04613

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of	
Generator's Name & Mailing Address: <u>COMMANDING GENERAL</u> <u>AC/S, I&E (EMD)</u> <u>MARINE CORPS BASE</u> <u>PSC BOX 20004</u> <u>CAMP LEJEUNE, NC 28542-0004</u>			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antrimville, W.C. 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antrimville, W.C. 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>TPH Contaminated Soil, Non Haz</u>	<u>001</u>	<u>DT</u>	<u>48,140</u>	<u>165</u>
			<u>2407</u>	<u>Tons.</u>
Container/Tag Number: <u>Lab: ZB-19297 #163</u>			Profile #: _____	
Additional Information and Discrepancy Indication: <u>D.L. # 3820321 N.C.</u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>DAVID COX</u>		<u>David Cox</u>		<u>8-5-04</u>
Transporter's Name		Signature:		Date:
<u>Mack Culbreth</u>		<u>Mack Culbreth</u>		<u>8-5-04</u>
Accepting Facility		Signature:		Date:
<u>ES & J</u>		<u>Reed Wm.</u>		<u>8-5-04</u>

Return Original form to Generator

Marine Corps Base, Camp Lejeune Non-Hazardous Waste Shipping Document

04614

Document #: _____

Site: <u>Paradise Point</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antriville, N.C. 28318</u>		(910) 567-6138	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antriville, N.C. 28318</u>		(910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>DT</u>	<u>45,820</u>
		<u>Res</u>	
Container/Tag Number:	Profile #:		
Lab: <u>LM-9285 #MAC 41</u>			
Additional Information and Discrepancy Indication:			
<u>D.C. # 7118620</u>			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
<u>Greg Tarborough</u>	<u>Greg Tarborough</u>	<u>8-5-04</u>	
Transporter's Name	Signature:	Date:	
<u>DAVID COX</u>	<u>David Cox</u>	<u>8-5-04</u>	
Accepting Facility	Signature:	Date:	
<u>EESEJ</u>	<u>Reck Wm.</u>	<u>8-5-04</u>	

Return Original form to Generator

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of	
Generator's Name & Mailing Address: <u>COMMANDING GENERAL</u> <u>AC/S, I&E (EMD)</u> <u>MARINE CORPS BASE</u> <u>PSC BOX 20004</u> <u>CAMP LEJEUNE, NC 28542-0004</u>			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road, Antrimville, N.C. 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises Inc.</u> <u>1555 Holland Road Antrimville, N.C. 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>DT</u>	<u>46.060</u>	<u>lbs</u>
			<u>23.03</u>	<u>Tons.</u>
Container/Tag Number: <u>Lab #38 Lk 3020</u>		Profile #: _____		
Additional Information and Discrepancy Indication: <u>O.C. 3412310</u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>DAVID Cox</u>		<u>David Cox</u>		<u>8-5-04</u>
Transporter's Name		Signature:		Date:
<u>Allen Monney</u>		<u>Allen Monney</u>		<u>8-5-04</u>
Accepting Facility		Signature:		Date:
<u>ES & J</u>		<u>Reckwinn</u>		<u>8-5-04</u>

Return Original form to Generator

Marine Corps Base, Camp Lejeune Non-Hazardous Waste Shipping Document

04616

Document #: _____

Site: <u>Paradise Point</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number: <u>NC6170022580</u>	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			
Generator's Telephone #:			
<u>(910) 451-1482</u>			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
<u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Aubreyville, N.C. 28318</u>		<u>(910) 567-6138</u>	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
<u>ES and J Enterprises, Inc.</u> <u>1555 Holland Rd Aubreyville, N.C. 28318</u>		<u>(910) 567-6138</u>	
Waste Shipping Name and Description	Containers	Total Quantity	Units
	Number	Type	
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>06</u>	<u>49,940</u>
			<u>165</u>
			<u>2497 Tons</u>
Container/Tag Number:		Profile #:	
Lab: <u>#161</u> <u>ZB-27927</u>			
Additional Information and Discrepancy Indication:			
<u>X D.L. 3420419</u>			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
<u>DAVID COX</u>	<u>David Cox</u>	<u>8-5-04</u>	
Transporter's Name	Signature:	Date:	
<u>X Lloyd Sassoms</u>	<u>X Lloyd Sassoms</u>	<u>X 8-5-04</u>	
Accepting Facility	Signature:	Date:	
<u>ES & J</u>	<u>Reed Wm.</u>		

Return Original form to Generator

Marine Corps Base, Camp Lejeune Non-Hazardous Waste Shipping Document

04617

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Rd Aubreyville, N.C. 28318</u>			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Rd Aubreyville, N.C. 28318</u>			US EPA ID Number: _____	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>07</u>	<u>48,620</u>	<u>lbs.</u>
			<u>24.31 Tons</u>	
Container/Tag Number: Lab: <u>T-3</u>		Profile #: _____		
Additional Information and Discrepancy Indication: <u>O.L.# 20132696</u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>DAVID CX</u>		<u>[Signature]</u>		<u>8-5-04</u>
Transporter's Name		Signature:		Date:
<u>x Larry Parks</u>		<u>x Larry Parks</u>		<u>8/5/04</u>
Accepting Facility		Signature:		Date:
<u>ES & J.</u>		<u>Reck Wm.</u>		<u>8/5/04</u>

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04618 Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>ES&J Enterprises Inc.</u> <u>1555 Holland Rd Axtellville, N.C 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES&J Enterprises Inc.</u> <u>1555 Holland Rd Axtellville, N.C 28318</u> <u>(910) 567-6138</u>			US EPA ID Number: _____	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>TPH Contaminated Soil, Non Hazardous</u>	<u>001</u>	<u>Dr</u>	<u>48,260</u>	<u>lbs</u>
			<u>2413</u>	<u>Tons</u>
Container/Tag Number: <u>Lab: # Mac 41 Lm. 9285</u>			Profile #: _____	
Additional Information and Discrepancy Indication: <u>D.L. # 7115620</u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>DAVID Cox</u>		<u>David Cox</u>		<u>8-5-04</u>
Transporter's Name		Signature:		Date:
<u>* Greg Karb...</u>		<u>* Greg Karb...</u>		<u>8-5-04</u>
Accepting Facility		Signature:		Date:
<u>ES&J</u>		<u>Rick Wm.</u>		<u>8-5-04</u>

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04619

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of		
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>		
Generator's Telephone #: <u>(910) 451-1482</u>					
Transporter's Name, Mailing Address & Telephone Number: <u>ESand J Enterprises Inc.</u> <u>1555 Holland Road Aubreyville, N.C. 28318</u>			US EPA ID Number: _____		
Destination's Name, Mailing Address & Telephone Number: <u>ESand J Enterprises Inc.</u> <u>1555 Holland Road Aubreyville, N.C. 28318</u>			US EPA ID Number: _____		
Waste Shipping Name and Description			Containers	Total Quantity	
			Number	Units	
<u>TPH Contaminated Soil, Non Haz</u>			<u>001</u>	<u>DT</u>	
					<u>78,840</u>
					<u>44,780</u>
					<u>2239</u>
				<u>165</u>	
				<u>Tons.</u>	
Container/Tag Number: Lab: <u>#161 3420419</u>			Profile #:		
Additional Information and Discrepancy Indication: <u>DL</u>					
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:					
Printed/Typed Name			Signature:	Date:	
<u>DAVID COX</u>			<u>David Cox</u>	<u>8-5-04</u>	
Transporter's Name			Signature:	Date:	
<u>Lloyd Syssom</u>			<u>Lloyd Syssom</u>	<u>8-5-04</u>	
Accepting Facility			Signature:	Date:	
<u>ES&J</u>			<u>Rich Wm</u>	<u>8-5-04</u>	

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04620

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number: <u>NC6170022580</u>	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			
Generator's Telephone #:			
<u>(910) 451-1482</u>			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
<u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road, Aultryville N.C. 28318</u>		<u>(910) 567-6138</u>	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
<u>ES and J Enterprises Inc.</u> <u>1555 Holland Road, Aultryville N.C. 28318</u>		<u>(910) 567-6138</u>	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>DT</u>	<u>47,140</u>
			<u>2357</u>
			<u>165</u>
			<u>Tons.</u>
Container/Tag Number:		Profile #:	
<u>Lab: #163 ZB -19297</u>			
Additional Information and Discrepancy Indication:			
<u>O.C. # 3820321 M.C.</u>			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
<u>DAVID COX</u>	<u>David Cox</u>	<u>8-5-04</u>	
Transporter's Name	Signature:	Date:	
<u>Mack Culbreth</u>	<u>Mack Culbreth</u>	<u>8-5-04</u>	
Accepting Facility	Signature:	Date:	
<u>ES & J</u>	<u>Reed Wm.</u>	<u>8-5-04</u>	

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04621

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>		Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>			
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Rd Antrimville, N.C. 28318</u>		US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Rd Antrimville, N.C. 28318</u>		US EPA ID Number: _____	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
<u>TPH Contaminated Soil, Non-Haz</u>	<u>001</u>	<u>Dr</u>	<u>43,500</u>
			<u>21.75</u>
			<u>Tons.</u>
Container/Tag Number: Lab: <u>#38 LK 3020</u>		Profile #: _____	
Additional Information and Discrepancy Indication: <u>D.L. 3412310</u>			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
<u>DAVID D COX</u>	<u>[Signature]</u>	<u>8-5-04</u>	
Transporter's Name	Signature:	Date:	
<u>X Allen Denny</u>	<u>X [Signature]</u>	<u>8-5-04</u>	
Accepting Facility	Signature:	Date:	
<u>ES&J</u>	<u>[Signature]</u>	<u>8-5-04</u>	

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04622

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of			
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>			
Generator's Telephone #: <u>(910) 451-1482</u>						
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antrimville, N.C.</u>			US EPA ID Number: _____			
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Antrimville, N.C.</u>			US EPA ID Number: _____			
Waste Shipping Name and Description			Containers Number Type	Total Quantity	Units	
<u>TPH Contaminated Soil, Non-Haz</u> <u>(22 Ton Min)</u>			<u>201</u>	<u>D+</u>	<u>69,520</u>	<u>165</u>
					<u>36,940</u>	<u>1847 Ton</u>
Container/Tag Number: Lab: <u>T-3</u>			Profile #:			
Additional Information and Discrepancy Indication: <u>D.L. 20132696</u>						
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:						
Printed/Typed Name			Signature:		Date:	
<u>DAVID Cox</u>			<u>David Cox</u>			
Transporter's Name			Signature:		Date:	
<u>x Larry Parks</u>			<u>x Larry Parks</u>		<u>x 8-5-04</u>	
Accepting Facility			Signature:		Date:	
<u>ESCI</u>			<u>Rich Wm</u>		<u>8-5-04</u>	

Return Original form to Generator

Marine Corps Base, Camp Lejeune 04623

Non-Hazardous Waste Shipping Document

Document #: _____

Site: <u>Paradise Point</u>			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Aubryville N.C. 28318</u>			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: <u>ES and J Enterprises, Inc.</u> <u>1555 Holland Road Aubryville, N.C. 28318</u>			US EPA ID Number: _____	
Waste Shipping Name and Description			Containers	
			Number	Type
<u>TPH Contaminated Soil, Non-HAZ</u>			<u>001</u>	<u>DT</u>
			<u>48,600</u>	<u>lbs</u>
			<u>24.30</u>	<u>Tons</u>
Container/Tag Number: <u>Lab: T-3 2B-28641</u>			Profile #: _____	
Additional Information and Discrepancy Indication: <u>D.L.#20132696</u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>DAVID Cox</u>		<u>David Cox</u>		<u>8-6-04</u>
Transporter's Name		Signature:		Date:
<u>x Larry Parks</u>		<u>x Larry Parks</u>		<u>8/6/04</u>
Accepting Facility		Signature:		Date:
<u>ES&J</u>		<u>Rick Wm.</u>		<u>8-6-04</u>

Return Original form to Generator

APPENDIX D

Safety Assessments and Reports, and Field Notes



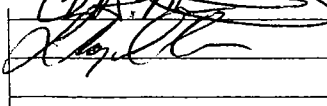
JOB SAFETY ANALYSIS

DATE: 5/26/04
JOB#: 102420
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project): <u>SH Paradise Point</u>		
Required PPE: <u>Hard Hat</u> <u>Glasses</u>	Safety Access/ Location	Supervisor of Work: <u>Mark Martin, C. McTier</u>
	Safe Haven:	JSA Prepared By: <u>C. McTier</u>
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Wind Direction:	Are other crews in area? <u>No</u>
	Evacuation Route:	
	Assembly Point:	New:
		Revised:
Job Task (What are You Doing)		Audit the Job Audit Time:
<u>1) Marking Utilities for Hand Augering samples</u>		<u>0630</u>
<u>2) Collecting Hand Auger Samples Behind 3326, 3330, 3332, 3350 M-230</u>		
Potential Hazards		Supervisors Comments
<u>1) Back Strains</u>		
<u>2) Neck Stress</u>		
<u>3) Bugs</u>		
Recommended Action or Procedure		Supervisor's Initials:
<u>1) Drink lots of fluids</u>		<u>CHM</u>
<u>2) Use common sense</u>		
<u>3) Use proper bug repellent</u>		
Signature		
<u>CHM</u>		

JOB SAFETY ANALYSIS

DATE:
JOB#:
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project):		M-230 Camp Johnson (Paradise Pt.)	
Required PPE:	Safety Access/ Location	Supervisor of Work: C. McTier	
	Safe Haven:	JSA Prepared By: C. McTier	
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Wind Direction:	Are other crews in area?	
	Evacuation Route:		
	Assembly Point:	New:	
		Revised:	
Job Task (What are You Doing)		Audit the Job Audit Time:	
① Excavation re-dig		0600	
② stockpile soil			
③ Backfill Hole			
Potential Hazards		Supervisors Comments	
① Excavation cave in			
② slips, trips, falls			
Recommended Action or Procedure		Supervisor's Initials:	
① stay clear of excavation		CAM	
② Use proper footing			
Crew Name Signatures:			
			
			

JOB SAFETY ANALYSIS

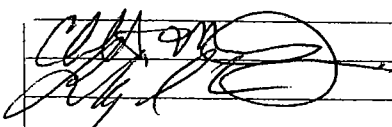
DATE: 5/20/04
 JOB#:
 PERMIT#:
 ISSUED BY:

Location of Job (Unit/Location on Project): Paradise Point / Camp Johnson	
Required PPE:	Safety Access/ Location
	Supervisor of Work: C. McTier
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Safe Haven:
	Wind Direction:
	Evacuation Route:
	Assembly Point:
JSA Prepared By: C. McTier	
Are other crews in area?	
New:	
Revised:	

Job Task (What are You Doing)	Audit the Job Audit Time:
① Excavation of a well M-230	1500
② Stockpile soil	

Potential Hazards	Supervisors Comments
① Deep excavation / sides cave in	
② Heat stress	

Recommended Action or Procedure	Supervisor's Initials:
① Stay clear of the sides of excavations	C/Hm
② Plenty of fluids	

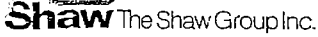
Crew Name Signatures:		
		



JOB SAFETY ANALYSIS

DATE: 5/10/04
JOB#: 102420
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project): <u>Camp Johnson / Paradise Point</u>	
Required PPE:	Safety Access/ Location
	Supervisor of Work: <u>P. McTier</u>
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Safe Haven:
	Wind Direction:
	Evacuation Route:
	Assembly Point:
JSA Prepared By: <u>P. McTier</u>	
Are other crews in area?	
New:	
Revised:	
Job Task (What are You Doing)	
<u>1) Excavating around well at</u>	
<u>Build M-230</u>	
<u>2) stockpiling soil</u>	
<u>3) securing site</u>	
Potential Hazards	
<u>1) underground utilities</u>	
<u>2) moving equipment</u>	
<u>3) pinch points</u>	
Recommended Action or Procedure	
<u>1) dig away from marked utilities</u>	
<u>2) keep eye contact w/ operator</u>	
<u>3) keep hands / feet away from equipment</u>	
Audit the Job Audit Time: <u>0700</u>	
Supervisors Comments	
Supervisor's Initials: <u>CHM</u>	
Crew Name Signatures:	
<u>[Signature]</u>	
<u>[Signature]</u>	



JOB SAFETY ANALYSIS

DATE: 5/7/04
JOB#:
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project):		Safety Access/ Location		Supervisor of Work:	
Required PPE:		Safe Haven:		JSA Prepared By:	
Pre-Job Preparation		Wind Direction:		Are other crews in area?	
Evacuation Route:		New:			
Assembly Point:		Revised:			
1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)					
Job Task (What are You Doing)				Audit the Job Audit Time:	
① Backfilling excavations				0700	
② Restoring sites					
③ Compacting Soil					
Potential Hazards				Supervisors Comments	
① Pedestrian Traffic					
② Bucking up					
③ Moving equipment					
Recommended Action or Procedure				Supervisor's Initials:	
① Use spotters				CHM	
② work carefully					
③ stay clear of moving equipment					
Crew Name Signatures:					
					



JOB SAFETY ANALYSIS

DATE: 5/6/04
JOB#: 102420
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project): <u>Paradise Point</u>	
Required PPE:	Safety Access/ Location
	Safe Haven:
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Wind Direction:
	Evacuation Route:
	Assembly Point:
Supervisor of Work: <u>C. McTier</u>	
JSA Prepared By: <u>C. McTier</u>	
Are other crews in area?	
New: ☐	
Revised: ☐	
Job Task (What are You Doing)	
① Moving loader back to site	
② Continue excavations of site 2232	
3350	
Potential Hazards	
① traveling on road with equipment	
② excavating, hitting utilities	
③ Moving equipment	
Recommended Action or Procedure	
① use an escort	
② use spotter when digging use loader	
③ stay clear of moving equipment	
Audit the Job Audit Time: <u>0600</u>	
Supervisors Comments	
Supervisor's Initials: <u>CHM</u>	
Crew Name/Signatures: <u>[Signature]</u> <u>[Signature]</u>	

JOB SAFETY ANALYSIS

DATE: 5/5/04
 JOB#: 102420
 PERMIT#:
 ISSUED BY:

Location of Job (Unit/Location on Project): <u>Paradise Point</u>	
Required PPE: <u>Hard Hat</u> <u>Glasses</u>	Safety Access/ Location Safe Haven: Wind Direction: Evacuation Route: Assembly Point:
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Supervisor of Work: <u>C. McTier</u> JSA Prepared By: <u>C. McTier</u> Are other crews in area? New: Revised:
Job Task (What are You Doing) <u>① Excavation of yard #3320</u> <u>② Restoration</u>	
Potential Hazards <u>① ticks, snakes</u> <u>② slips, trips, falls</u>	
Recommended Action or Procedure <u>① wear proper repellents</u> <u>② stay away from edge of excavation</u>	
Audit the Job Audit Time: <u>0700</u>	
Supervisors Comments	
Supervisor's Initials: <u>CHM</u>	
Crew Name Signatures: <u>[Signature]</u> <u>Christopher M. Allen</u>	

JOB SAFETY ANALYSIS

DATE: 4/30/04
 JOB#:
 PERMIT#:
 ISSUED BY:

Location of Job (Unit/Location on Project): <u>Paradise Point</u>	
Required PPE: Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Safety Access/ Location Safe Haven: Wind Direction: Evacuation Route: Assembly Point:
	Supervisor of Work: <u>C. McTier</u> JSA Prepared By: <u>C. McTier</u> Are other crews in area? New: ☐ Revised: ☐
Job Task (What are You Doing) <u>① Backfill excavations at 3326, 3330</u> <u>② tamping soil in lifts</u>	
Potential Hazards <u>① Backing trucks</u> <u>② Moving equipment</u> <u>③ Heavy liftings</u>	
Recommended Action or Procedure <u>① use a spotter when backing</u> <u>② Watch out for moving equipment keep an eye on operator</u> <u>③ use ~~app~~ buddy system when lifting heavy</u>	
Audit the Job Audit Time: <u>0700</u>	
Supervisors Comments	
Supervisor's Initials:	
Crew Name Signatures: <u>[Signature]</u> <u>Kennedy / [Signature]</u> <u>Tim Cotton</u>	



Shaw The Shaw Group Inc.

JOB SAFETY ANALYSIS

DATE: 4/29/04
JOB#:
PERMIT#:
ISSUED BY:

Location of Job (Unit/Location on Project): <u>Paradise Point</u>	
Required PPE:	Safety Access/ Location
	Supervisor of Work: <u>C. McTier</u>
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)	Safe Haven:
	Wind Direction:
	Evacuation Route:
	Assembly Point:
JSA Prepared By: <u>C. McTier</u>	
Are other crews in area? <u>No</u>	
New:	
Revised:	
Job Task (What are You Doing)	
① Hole excavation	
② stockpiling soil	
③ trucking ~~soil~~ soil to office	
Potential Hazards	
① Sides of excavation sluffing off	
② product exposure	
③ pedestrians	
Recommended Action or Procedure	
① stay clear of sides of excavation	
② watch out for people in neighborhood.	
Audit the Job Audit Time: <u>0700</u>	
Supervisors Comments	
Supervisor's Initials: <u>CLM</u>	
Crew Name Signatures:	
<u>[Signature]</u>	
<u>[Signature]</u>	
<u>[Signature]</u>	



Shaw The Shaw Group Inc.

JOB SAFETY ANALYSIS

DATE: 4/28/04
 JOB#: 102420
 PERMIT#:
 ISSUED BY:

Location of Job (Unit/Location on Project): <u>Paradise Point</u>		Supervisor of Work: <u>C. McTier</u>	
Required PPE: <u>Mod D</u>	Safety Access/ Location Safe Haven: <u>NA</u> Wind Direction: <u>SE</u> Evacuation Route:	JSA Prepared By: <u>C. McTier</u> Are other crews in area? <u>No</u>	
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)		Assembly Point: <u>Edge of ~~Grass~~</u> <u>Cooper St.</u>	New: ☐ Revised: ☐
Job Task (What are You Doing)		Audit the Job Audit Time: <u>0700</u>	
<u>① Excavation of Tank Area</u> <u>behind houses for contaminated</u> <u>soil.</u>		Supervisors Comments	
<u>② loading Dump Truck with soil</u>			
Potential Hazards		Supervisor's Initials:	
<u>① close proximity to houses</u>			
<u>② pedestrians, children</u>			
<u>③ moving equipment</u>			
Recommended Action or Procedure			
<u>① watch out for ~~go~~ children, keep</u> <u>them out of work Area</u>			
<u>② stay clear of moving equipment</u>			
Crew Name Signatures:			
<u>Ch. H. [Signature]</u>			
<u>[Signature]</u>			
<u>B. J. [Signature]</u>			

JOB SAFETY ANALYSIS

DATE: 4/26/04
 JOB#:
 PERMIT#:
 ISSUED BY:

Location of Job (Unit/Location on Project):		
Required PPE: <u>Level D</u> <u>Hard Hat, Glasses</u>	Safety Access/ Location Safe Haven: Wind Direction: Evacuation Route: Assembly Point:	Supervisor of Work: <u>C. McTier</u> JSA Prepared By: <u>C. McTier</u> Are other crews in area? <u>No</u> New: ☐ ☐ Revised: ☐ ☐
Pre-Job Preparation 1. Fill out JSA 2. Review JSA (EVERYONE) 3. Sign JSA (EVERYONE)		
Job Task (What are You Doing) <u>① Utilities locating around excavations at Paradise Point</u>		Audit the Job Audit Time: <u>0830</u>
Potential Hazards <u>① Dogs in the yard</u> <u>② ticks</u>		Supervisors Comments
Recommended Action or Procedure <u>① Beware of Animals</u> <u>② Use bug repellent</u>		
Supervisor's Initials: <u>CHM</u>		
Crew Name Signatures: <u>CHM</u>		

SAFETY MEETINGS REPORT

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011 102420

Meeting conducted by:

Date 5/26/04

SAFETY TOPICS PRESENTED

Bugs, Ticks,
Heat Stress
Utilities

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Signature

Charles H. McTier Jr

CHM

Tim Cotton

Mark Martin

Kimberly Lewis

SAFETY MEETINGS REPORT

780790, F2920704, 920901, 824603, 808021, 803538, 781774,

Job 785143, 837030, 803011 /02420

Location Camp Lejeune

Meeting conducted by:

Date 5/21/04

SAFETY TOPICS PRESENTED

Safe Driving

watch out for Joggers

keep clear of excavation

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

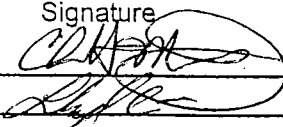
Attendees

Name printed and Employee #

Charles H. McTier Jr

Loy L Evans

Signature



SAFETY MEETINGS REPORT

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011

Meeting conducted by:

Date 5/20/04

SAFETY TOPICS PRESENTED

- 1 Head Stress
- 2 Cave-Ins of excavations
- 3 Moving Equipment

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

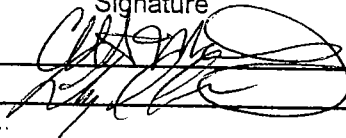
☐ Other

Attendees

Name printed and Employee #

Charles McTier
Lloyd Evans

Signature



SAFETY MEETINGS REPORT

(102420)

780790, F2920704, 920901, 824603, 808021, 803538, 781774,
Job 785143, 837030, 803011

Location Camp Lejeune

Job

Meeting conducted by:

Date 5/10/04

SAFETY TOPICS PRESENTED

- 1 Look out for underground utilities
- 2 Stay clear of joggers
- 3 Use common sense
- 4
- 5

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Charles METIER
[Signature]

Signature

[Signature]
Roy E. Eick

Paradise Point

102420

SAFETY MEETINGS REPORT

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011

Meeting conducted by:

Date 5/7/04

SAFETY TOPICS PRESENTED

- 1 Watch for children
- 2 Use safe Backing Procedure
- 3 Use spotter
- 4 Heavy lifting
- 5

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Hot Work

☐ Excavator

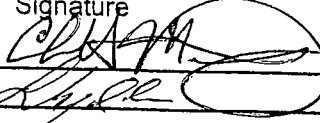
☐ Other

Attendees

Name printed and Employee #

Signature

Charles H. McTear Jr



Lloyd Evans 442125

SAFETY MEETINGS REPORT

102420

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011

Meeting conducted by:

Date 5/6/04

SAFETY TOPICS PRESENTED

1. Moving Equipment

2. Use Escorts when transporting
Equipment

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Signature

C. McTier
Ray L.

[Signature]
Lloyd Evers

SAFETY MEETINGS REPORT

Location Camp Lejeune

Job

780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011 02 420

Meeting conducted by:

Date

5/5/04

SAFETY TOPICS PRESENTED

1. Slips, Trips, Falls
2. Ticks, Spiders, snakes
3. Heavy lifting
4. Moving Equipment
5. Backing up truck.

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Charles H. McTier Jr
Lloyd Evans

Signature

[Signature]
[Signature]

SAFETY MEETINGS REPORT

Location Camp Lejeune Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774, 785143, 837030, 803011

Meeting conducted by: _____

Date 4/30/04

SAFETY TOPICS PRESENTED

- 1 Use spotter when backing
- 2 Wear proper PPE
- 3 Watch for neighborhood children

Additional Comments: _____

Permits required this date

Confined Space Entry

Hot Work

Excavator

Other

Attendees

Name printed and Employee #

Signature

Charles H. McTier Jr

[Signature]

Kenneth Lewis

[Signature]

Tin Cotton

[Signature]

[Signature]

[Signature]

SAFETY MEETINGS REPORT

780790, F2920704, 920901, 824603, 808021, 803538, 781774,
Job 785143, 837030, 803011

Location Camp Lejeune

Job

Meeting conducted by:

Date

4/29/04

SAFETY TOPICS PRESENTED

Wear Proper PPE

stay clear of sides of excavations

Communication

watch for pedestrians

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Charles McTier Jr

B. Evans

Lloyd Evans

Signature

Charles McTier Jr

B. Evans

LLOYD EVANS

SAFETY MEETINGS REPORT

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011 102420

Meeting conducted by:

Date 4/28/04

SAFETY TOPICS PRESENTED

- 1 Wear Proper PPE
- 2 Watch out for pedestrians
- 3 Watch out for those working around you
- 4 Use proper hand signals
- 5 Stay clear of underground utilities

Additional Comments: _____

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

☐ Other

Attendees

Name printed and Employee #

Charles H. McTier Jr.

L. Log L. Evans

B. Gause

Signature

[Signature]
[Signature]
[Signature]

SAFETY MEETINGS REPORT

Location Camp Lejeune

Job 780790, F2920704, 920901, 824603, 808021, 803538, 781774,
785143, 837030, 803011

Meeting conducted by:

Date 4/26/04

SAFETY TOPICS PRESENTED

Beware of Dogs Around Houses
Use proper PPE (Hard Hat, glasses)
Heat Stress

Additional Comments:

Permits required this date

☐ Confined Space Entry

☐ Excavator

☐ Hot Work

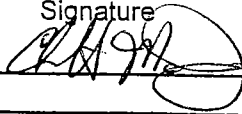
☐ Other

Attendees

Name printed and Employee #

Signature

Charles H. McTier Jr



CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470- -D-				Date
SITE NAME: <u>Paradise Point</u>		T.O. # <u>102420</u>		<u>4.26.04</u>
PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
				<u>Locating Contractors on site to find utilities</u>
	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐	
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
FOLLOW-UP	<u>work:</u> On site to prep area for excavation. Locate yards, (2) have fenced backyards with dogs. Locating Contractors on site to find utilities. House # 3326 have the most utilities crossing excavation area. Locate all 4 houses and M-230 well at Camp Johnson, area 5 foot radius around the well. Utilities relatively clear in this area. Housing 3326, 3330, 3332, 3350			
	<u>SAFETY:</u> All activities performed safely and without incident			
	<u>NOTES:</u> Mini-excavator ordered from Hertz to be delivered tomorrow.			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)		REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
<u>NA</u>		<u>NA</u>		
REMARKS, CHANGES OR APPROVALS:				
<u>will do initial site walk around at Paradise Point neighborhood tomorrow 4/27/04 with Randy Smith.</u>				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				QC MANAGER DATE
GOVERNMENT QUALITY ASSURANCE				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No. 001
Shaw Environmental, Inc. CONTRACT: N62470 -D-				Date
SITE NAME: Paradise Point		T.O. # 102420		4/28/04
FOLLOW-UP	PHASE	(BLANK NOT APPLICABLE)	YES	NO
	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT			
	TESTING PERFORMED & WHO PERFORMED TEST			
	SAMPLING: Mark Martin			
	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	
WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐		
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
work: Preparatory meeting for contaminated soil excavation of Houses PP-3326, 3330, 3332, 3350. Holes will be in close proximity to homes so any open excavation will be barricaded off to prevent injuries. No soil will be stockpiled ~~on~~ in yards, but will be transported to lot 203 for sampling and disposal. Care will be taken not to damage any of the homeowners properties and environmental intrusions with equipment will be minimal. Proper PPE will be worn at all times, and crew will use ^{proper} safety procedures while executing these excavations. Soil samples will be taken as soon as each hole is complete so that the backfill process can be handled to restore the yards. Work will begin with house # 3326, an excavation of 8'x8'x5' deep.				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
NA			NA	
REMARKS, CHANGES OR APPROVALS:				
NA				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
QC MANAGER				DATE
GOVERNMENT QUALITY ASSURANCE				
				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

SITE NAME:

Paradise Point

T.O. # 102420

Date

4/28/04

PHASE

(BLANK NOT APPLICABLE)

YES

NO

IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT

TESTING PERFORMED & WHO PERFORMED TEST

WORK COMPLIES WITH
CONTRACT AS APPROVED
INITIAL PHASE

☒

☐

FID grab samples performed by
Deborah Hoyt.

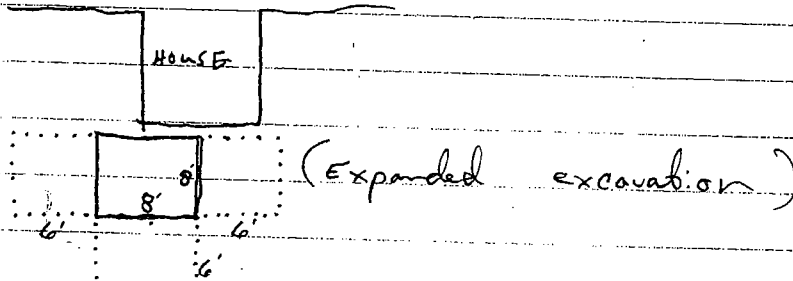
WORK COMPLIES WITH
SAFETY REQUIREMENTS

☒

☐

DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

NOTE: Excavate 8'x8'x5' hole as specified by work plan
at home #3326. Hole completed and product smell
is strong. What appears to be visible staining on
side walls. Rainer Smith directs us to take
the excavation out 6' more on the 3 sides



Crew removes approx. 25 yds³ of soil from excavation,
stockpile it at lot 203.

SAFETY: All activities performed safely and w/out
incident. Site secured with safety fence
and all tools removed from yard.

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

NA

REMARKS, CHANGES OR APPROVALS:

Base representative on site to speak to homeowner
about product situation

On behalf of the contractor, I certify that this report is completed and correct
and equipment and material used and work performed during this reporting
period is in compliance with the contract drawings and specifications to the
best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470- -D-				Date
SITE NAME: <u>Paradise Point</u>		T.O. # <u>102420</u>		<u>4/29/04</u>
PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	sampling: Deborah Hoyt collects samples from #3326 and #3330	
WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐	FID samples with FID instrument C. McTier, Deborah Hoyt	
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
work: Repair phone line again at #3326. Use vac truck to remove ground water and product from bottom of hole at #3326. Take FID readings at #3326, hits are avg where from 25 ppm up to 467 ppm (see sample chart.) Pull samples per direction of base inspector on 4 sidewalls, does not want one from the floor since there is groundwater there. #3330: Excavate 12' x 12' x 5' hole as directed by specs. Not only visible staining and just a few surface hits with FID. Complete the excavation and pull samples on 4 sidewalls and one on the bottom of the excavation. Base Inspector wants samples on today and both holes backfilled and compacted by the end of business 4/30/04.				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
NA			NA	
REMARKS, CHANGES OR APPROVALS:				
Change by direction of Base inspector to pull samples, send them to lab and restore excavations by the end of business. On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
QC MANAGER			DATE	
GOVERNMENT QUALITY ASSURANCE				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470- -D-				Date
SITE NAME:	Paradise Point Excavations T.O. #102420			4/30/04
PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	NA	
WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐		
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
<u>work:</u> Backfill and compaction of excavations at #3326, #3330 as directed by base inspector after samples have been taken. Compact each hole in 2'-3' lifts to ensure good compaction. Put down locator tape 2' above underground utilities such as electrical and telephone. Complete back fill and clean up both areas around the homes. (use vac-truck to remove ground water at #3326 before backfilling; dispose of it at GWTP.) Order 2 pallets of sod to restore excavations area for Monday. <u>Safety:</u> All activities performed safely and w/out incidents				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
NA			NA	
REMARKS, CHANGES OR APPROVALS:				
Will provide to #3332 if directed by base inspector				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				DATE
QC MANAGER				
GOVERNMENT QUALITY ASSURANCE				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470-D-				Date
SITE NAME: <u>Paradise Point</u>		T.O. # <u>102420</u>		<u>5/15/04</u>
FOLLOW-UP	PHASE	(BLANK NOT APPLICABLE)	YES	NO
	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT			
	TESTING PERFORMED & WHO PERFORMED TEST			
	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	<u>samples</u>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐	
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
<u>work:</u> Notification of homeowner to begin excavation removal of fence for access to yard. Locating Contractors back on site to find utilities. Measure out excavation and set flags. Expose electrical conduit running through excavation. Pump truck not working. Cannot excavate soil, shut down operations and secure area with safety fence. Notify homeowner of activities and that we will return tomorrow to complete excavation. <u>SAFETY:</u> All activities performed safely and w/out incidents.				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
<u>NA</u>			<u>NA</u>	
REMARKS, CHANGES OR APPROVALS:				
<u>NA</u>				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
QC MANAGER			DATE	
GOVERNMENT QUALITY ASSURANCE				
DATE				
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER			DATE	

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470- -D-				Date
SITE NAME: <u>Paradise Point</u>		T.O. # <u>102420</u>		<u>5/6/04</u>
PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐		Sampling of home # 3332 Deborah Hoyt, C. McTier
WORK COMPLIES WITH SAFETY REQUIREMENTS	☐	☐		FID Readings taken of excavation.
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
FOLLOW-UP	work: Excavation of house #3332, 12'x13' size. remove chain link fence to gain better access to site. locate and had dig power line running to garage. Stockpile soil on plastic behind house #3350. Water line was not marked by locator and we break it. Make repair, (see photos) and restore water to home. Flush line from outside fences. Complete excavations at both #3332 and #3350. Sample 3332 and ship them out, will sample #3350 in the morning. Both sites secured and fenced off in each yard. Safety: All activities performed safely and without incidents.			
	REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS) <u>NA</u> REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST) <u>NA</u>			
REMARKS, CHANGES OR APPROVALS:				
<u>Repair of water line at #3332.</u>				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
QC MANAGER				DATE
GOVERNMENT QUALITY ASSURANCE				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT				Report No.
Shaw Environmental, Inc. CONTRACT: N62470 -D-				Date
SITE NAME: <u>Paradise Point</u>		T.O. # <u>102420</u>		<u>5/7/04</u>
PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	☒	☐	<u>yes: Sampling and FIP readings at hole # 3350 Deborah Host and C. McTier</u>	
WORK COMPLIES WITH SAFETY REQUIREMENTS	☒	☐		
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:				
<u>work: Sample hole at home #3350, 6'x6' excavation Backfill hole in 2' lifts, compacting each lift with plate tamper as we go. Samples taken were one off of each side wall, and 1 on with a duplicate off the floor. Restore area around excavation using blade on excavator and rakes. Put safety fence around excavation and soils stockpile.</u> <u>#3332 - Remove excess ground water in excavation with vac-truck before backfilling. Dispose of water at ground water plant in case there is any product in the holes. Backfill excavation in 2' lifts and compact it with plate tamper. Re-assemble swing set and dog fence in the yard. Put up safety fence around restored excavation area.</u> <u>Safety: All activities performed safely and w/out incident</u>				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
<u>NA</u>			<u>NA</u>	
REMARKS, CHANGES OR APPROVALS:				
<u>NA</u>				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
			QC MANAGER	DATE
GOVERNMENT QUALITY ASSURANCE			DATE	
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
			GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

Date

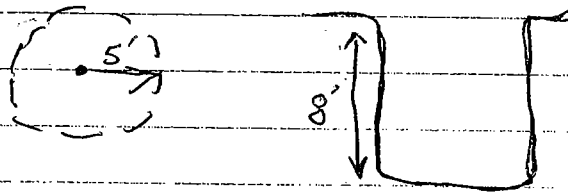
SITE NAME: Paradise Point / M-230 T.O. # 02420

5/10/04

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
				TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE		☒	☐	NA
WORK COMPLIES WITH SAFETY REQUIREMENTS		☒	☐	

DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

work: Camp Johnson, well #M-230 excavation well has been abandoned. Remove concrete pad around well. Excavate 5' radius around well center, to an 8' depth.



Excavation yields approx. 23 yds³. All soils put on plastic and covered site is secured with safety fence

SAFETY: All activities performed safely and without incident.

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

NA

REMARKS, CHANGES OR APPROVALS:

NA

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

Date

SITE NAME:

Ranges Paradise Point

T.O. # 102420

5/20/04

PHASE

(BLANK NOT APPLICABLE)

YES

NO

IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT

TESTING PERFORMED & WHO PERFORMED TEST

WORK COMPLIES WITH
CONTRACT AS APPROVED
INITIAL PHASE

☒

☐

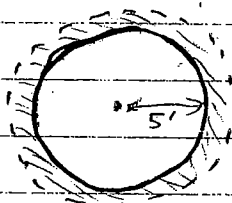
WORK COMPLIES WITH
SAFETY REQUIREMENTS

☒

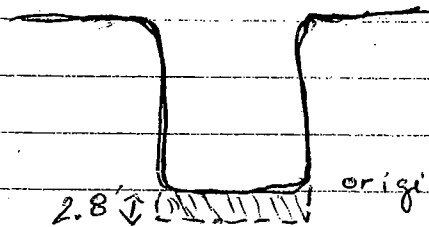
☐

DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

work: re-dig of excavation at M-230 for sampling analysis. Excavation is expanded 2.5' on sides and 2.8' on bottom,



new dig



original dig

new dig

stockpile all excavated soils on plastic cover pile when short rain occurs excavate approx. 15 yds³ of soil, will complete the dig tomorrow with approx 5 more yds³.

SAFETY: All activities performed safely and without incidents.

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

re-dig for new samples

REMARKS, CHANGES OR APPROVALS:

will be sure to put down rock on top layer after backfill

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

Date

SITE NAME:

Paradise Point / M-203 T.O. # 102420
m-230

5/21/04

PHASE

(BLANK NOT APPLICABLE)

YES

NO

IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT

TESTING PERFORMED & WHO PERFORMED TEST

WORK COMPLIES WITH
CONTRACT AS APPROVED
INITIAL PHASE

☒

☐

Re-dig samples collected
by Mark Martin.

WORK COMPLIES WITH
SAFETY REQUIREMENTS

☒

☐

DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

WORK: Complete re-dig of excavation at well M-230
take samples of 4 side-walls and one floor sample
take 2' x 2' x 2' off of outer wall of excavation
and off bottom. No groundwater encountered but
sidewalls are sluffing off. Fence off excavation
and stockpiles covered with plastic. Samples sent for analysis
Paradise Point. Soils stockpiled behind # 3350
at paradise point neighborhood were transferred
by dump truck to ~~paradise~~ lot 203 for
disposal.

SAFETY: All activities performed safely and
without incident.

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

NA

REMARKS, CHANGES OR APPROVALS:

On behalf of the contractor, I certify that this report is completed and correct
and equipment and material used and work performed during this reporting
period is in compliance with the contract drawings and specifications to the
best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

Date

SITE NAME: Paradise Point

T.O. # 102420

5/26/04

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT
TESTING PERFORMED & WHO PERFORMED TEST				SAMPLING Houses: 3326, 3330, 3332, 3350 Mark Martin, Tim Cotton, Kinney Lewis
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE		☒	☐	
WORK COMPLIES WITH SAFETY REQUIREMENTS		☒	☐	

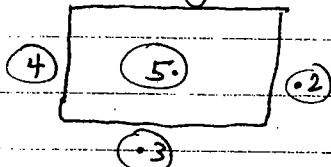
DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

WORK: Hand Auger Sampling of homes at Paradise Point; 2' outside of completed excavations, and 1 Hand Auger sample from the floor of excavation. All samples were pulled to 7' depth, or less if product or heavy smell was detected.

3330
House

(Example)

3330, 3332, 3350 All received 5 samples in this format.



House # 3326 did not get a floor sample because ground water was achieved at 5'. Each sample was checked with an Encore® for volatiles and a composite of the soil was made for analysis. See sample results for parameters of analysis.

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

NA

REMARKS, CHANGES OR APPROVALS:

Restoration will consist of sod rather than seed per direction of Base Inspector.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

FOLLOW-UP

CONTRACTOR QUALITY CONTROL FOLLOW-UP REPORT

Shaw Environmental, Inc. CONTRACT: N62470- -D-

Report No.

Date

SITE NAME:

Paradise Point

T.O. # 102420

5/27/04

PHASE

(BLANK NOT APPLICABLE)

YES

NO

IDENTIFY DEFINABLE FEATURE OF WORK, SPECIFICATION SECTION, LOCATION AND LIST PERSONNEL PRESENT

TESTING PERFORMED & WHO PERFORMED TEST

WORK COMPLIES WITH
CONTRACT AS APPROVED
INITIAL PHASE

☒

☐

NA Check healthiness of sod, it is
very green and moist
6 pallets

WORK COMPLIES WITH
SAFETY REQUIREMENTS

☒

☐

DEFINABLE FEATURES OF WORK AND WORK CONDUCTED:

WORK: Putting down sod at homes 3326, 3330,
3350, 3332. Setting up sprinklers and hoses
at each house. Notify home owners to water
the sod approx. 1-2 hrs in the morning.
Seed, fertilize, rake and straw areas where
stockpile of clean backfill was. Complete 3332
and 3350 as well. Use up all 6 pallets
of sod, and begin watering.
Each homeowner is satisfied with sod
and will water each morning for
1 to 2 hrs.
All equipment removed and neighborhood
is restored.

SAFETY: All activities performed safely
and without incidents

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

NA

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

NA

REMARKS, CHANGES OR APPROVALS:

NA

On behalf of the contractor, I certify that this report is completed and correct
and equipment and material used and work performed during this reporting
period is in compliance with the contract drawings and specifications to the
best of my knowledge except as noted in this report.

QC MANAGER

DATE

GOVERNMENT QUALITY ASSURANCE

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

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ATTACHMENT 2
EXCAVATION INSPECTION

THIS INSPECTION IS TO BE COMPLETED BY THE COMPETENT PERSON
EACH DAY THAT EMPLOYEES WILL BE ENTERING AN EXCAVATION.

Project Name: Paradise Point Project No.: 102420
Date: 4/28/04 Time: 0700 Competent Person: Charlie McTier
Soil Classification (see Soil Classification Worksheet): Type C
Excavation Depth: 5' Excavation Width: 8'
Type of Protective System Used: Sloping

☒		
YES	NO	N/A

1 GENERAL

Surface encumbrances removed or supported	☒		
Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the	☒		
Hard hats, steel-toed boots, and safety glasses worn by all employees.	☒		
Spoils, materials, and equipment set back at least 2 feet from the edge of the excavation.	☒		
Walkways over excavations 6 feet or more above lower levels are equipped with standard guardrails.	☒		
Warning vest or other highly visible clothing provided and worn by all employees exposed to public	☒		☒
Employees required to stand away from vehicles being loaded or unloaded.	☒		
Warning system established and utilized when mobile equipment is operating near excavation edge.	☒		
Employees prohibited from going under suspended loads.	☒		

2 UTILITIES

Utility companies contacted and/or utility locations delineated.	☒		
Underground installations protected, supported, or removed while excavation is open.	☒		

3. MEANS OF ACCESS AND EGRESS:

Lateral travel to means of egress no greater than 25 feet in trench excavations 4 feet or more in depth.	☒		
Ladders used in excavations secured and extended 3 feet above the edge of the trench.	☒		
Structural ramps used by employees designed by a competent person.			☒
Structural ramps used for equipment designed by a registered professional engineer.			☒

4. WET CONDITIONS:

Precautions taken to protect from the accumulation of water.	☒		



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Water removal equipment monitored by a competent person.			✓
Surface water or runoff diverted or controlled to prevent accumulation in the excavation.			✓
Inspections made after every rainstorm or other hazard-increasing occurrence.			✓
5. HAZARDOUS ATMOSPHERE:			
Atmosphere within the excavation tested where there is a reasonable possibility of an oxygen deficient, combustible, or otherwise hazardous atmosphere.			✓
Adequate precautions taken to protect employee from exposure to a hazardous atmosphere.	✓		
Testing conducted to ensure that the atmosphere remains safe.			✓
Emergency equipment, such as breathing apparatus, safety harness and line, and basket stretcher readily available where hazardous atmosphere does exist.			✓
6. SUPPORT SYSTEMS:			
Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.	✓		
Materials and equipment used for protective systems inspected and in good condition.	✓		
Damaged materials and equipment used for protective systems inspected by a Registered Professional Engineer after repairs and before being placed back into service.	✓		
Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or from being struck by materials or equipment.	✓		
Members of support systems securely fastened to prevent failure.	✓		
Support systems provided to insure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.	✓		
Excavations below the level of the base or footings approved by a registered professional engineer.			✓
Removal of support systems progresses from the bottom, and members are released slowly as to note any indication of possible failure.	✓		
Excavation of material to a level of greater than 2 feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth.	✓		✓
Shield system placed to prevent lateral movement.	✓		✓
Employees are prohibited from remaining in shield system during vertical movement.			
7. REMARKS:			

APPENDIX E

Confirmation Soil Sample Laboratory Analytical Reports



05/13/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point M230

102420

Accutest Job Number: F24035

Sampling Date: 05/10/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 25



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24035

Camp Lejeune-Paradise Point M230
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F24035-1	05/10/04	13:40 MM	05/11/04	SO Soil	M230-NW-001
F24035-2	05/10/04	13:50 MM	05/11/04	SO Soil	M230-SW-002
F24035-3	05/10/04	13:45 MM	05/11/04	SO Soil	M230-EW-003
F24035-4	05/10/04	13:55 MM	05/11/04	SO Soil	M230-WW-004
F24035-5	05/10/04	13:35 MM	05/11/04	SO Soil	M230-F-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

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2.1

2

Client Sample ID: M230-NW-001

Lab Sample ID: F24035-1

Date Sampled: 05/10/04

Matrix: SO - Soil

Date Received: 05/11/04

Method: SW846 8015 SW846 5035

Percent Solids: 90.5

Project: Camp Lejeune-Paradise Point M230

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013072.D	1	05/11/04	NJ	05/11/04 12:10	n/a	GUV786
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.98 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		62-135%
98-08-8	aaa-Trifluorotoluene	86%		65-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID:	M230-NW-001	Date Sampled:	05/10/04
Lab Sample ID:	F24035-1	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13254.D	1	05/13/04	SM	05/12/04	OP10405	GZF614
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) ^a	71.1	9.2	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	95%		65-118%		

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.2
2

Client Sample ID:	M230-SW-002	Date Sampled:	05/10/04
Lab Sample ID:	F24035-2	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013075.D	1	05/11/04	NJ	05/11/04 12:10	n/a	GUV786
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		62-135%
98-08-8	aaa-Trifluorotoluene	89%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.2

2

Client Sample ID:	M230-SW-002	Date Sampled:	05/10/04
Lab Sample ID:	F24035-2	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13230.D	1	05/12/04	SM	05/12/04	OP10405	GZF614
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	5.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.3

2

Client Sample ID:	M230-EW-003	Date Sampled:	05/10/04
Lab Sample ID:	F24035-3	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013076.D	1	05/11/04	NJ	05/11/04 12:10	n/a	GUV786
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.77 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.9	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	74%		62-135%
98-08-8	aaa-Trifluorotoluene	70%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3

2

Client Sample ID:	M230-EW-003	Date Sampled:	05/10/04
Lab Sample ID:	F24035-3	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	ZF13234.D	1	05/12/04	SM	05/12/04	OP10405	GZF614

Run #1	Initial Weight	Final Volume
Run #2	30.4 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.2	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	89%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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2.4

2

Client Sample ID:	M230-WW-004	Date Sampled:	05/10/04
Lab Sample ID:	F24035-4	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013077.D	1	05/11/04	NJ	05/11/04 12:10	n/a	GUV786
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.21 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		62-135%
98-08-8	aaa-Trifluorotoluene	90%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.4
2

Client Sample ID:	M230-WW-004	Date Sampled:	05/10/04
Lab Sample ID:	F24035-4	Date Received:	05/11/04
Matrix:	SO - Soil	Percent Solids:	87.6
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13260.D	1	05/13/04	SM	05/12/04	OP10405	GZF615
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) ^a	63.0	9.4	5.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%		65-118%

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.5

2

Client Sample ID: M230-F-005

Lab Sample ID: F24035-5

Date Sampled: 05/10/04

Matrix: SO - Soil

Date Received: 05/11/04

Method: SW846 8015 SW846 5035

Percent Solids: 88.6

Project: Camp Lejeune-Paradise Point M230

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013078.D	1	05/11/04	NJ	05/11/04 12:10	n/a	GUV786
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.16 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		62-135%
98-08-8	aaa-Trifluorotoluene	87%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.5
2

Client Sample ID: M230-F-005

Lab Sample ID: F24035-5

Date Sampled: 05/10/04

Matrix: SO - Soil

Date Received: 05/11/04

Method: SW846 8015 M SW846 3550B

Percent Solids: 88.6

Project: Camp Lejeune-Paradise Point M230

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13236.D	10	05/12/04	SM	05/12/04	OP10405	GZF614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) ^a	341	92	55	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		65-118%

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PPM230-051004



Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390							Receiving LAB: Accutest													
Project Name CAMP LEJEUNE - Paradise Point M230				Project Location CAMP LEJEUNE, NC			Analysis Desired													
Project Number 102420		Contact Mark Marth		P.O. Number		Reviewed by														
Client Rep US NAVY - LANTDIV				Project Manager Ron Kenyon																
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	DROPCERO 8015BAC0A04550												
1	M230-NW-001	5/10/04	13:40		X	Excavation North Wall	2	X												
2	M230-SW-002	5/10/04	13:50		X	Excavation South Wall	2	X												
3	M230-EW-003	5/10/04	13:45		X	Excavation East Wall	2	X												
4	M230-WW-004	5/10/04	13:55		X	Excavation West Wall	2	X												
5	M230-F-005	5/10/04	13:35		X	Excavation Floor	2	X												
6																				
7																				
8																				
9																				
10																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 5	[Signature]	FEDEX #	5/10/04	16:00	24 Hour TAT
2		Fed Ex	[Signature]	5/11/04	09:00	
3						

F24035: Chain of Custody

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05/07/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3326

102420

Accutest Job Number: F23788

Sampling Date: 04/29/04

Report to:

Shaw E & I, Inc.
5700 Thurston Ave. Suite 116-B
Virginia Beach, VA 23455
natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 26



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F23788

Camp Lejeune-Paradise Point 3326

Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F23788-1	04/29/04	14:30 MM	04/30/04	SO	Soil	3326-NW-001
F23788-2	04/29/04	14:40 MM	04/30/04	SO	Soil	3326-SW-002
F23788-3	04/29/04	14:35 MM	04/30/04	SO	Soil	3326-EW-003
F23788-4	04/29/04	14:45 MM	04/30/04	SO	Soil	3326-WW-004
F23788-5	04/29/04	00:00 MM	04/30/04	AQ	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-NW-001	Date Sampled:	04/29/04
Lab Sample ID:	F23788-1	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012881.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.82 g	5.0 ml	5.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	676	120	59	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	72%		62-135%		
98-08-8	aaa-Trifluorotoluene	93%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID:	3326-NW-001	Date Sampled:	04/29/04
Lab Sample ID:	F23788-1	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13022.D	800	05/01/04	SM	04/30/04	OP10318	GZF605
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	30700	15000	9100	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2
2

Client Sample ID:	3326-SW-002	Date Sampled:	04/29/04
Lab Sample ID:	F23788-2	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	96.1
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012882.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.40 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	4.8	2.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	88%		62-135%		
98-08-8	aaa-Trifluorotoluene	99%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2
2

Client Sample ID: 3326-SW-002

Lab Sample ID: F23788-2

Date Sampled: 04/29/04

Matrix: SO - Soil

Date Received: 04/30/04

Method: SW846 8015 M SW846 3550B

Percent Solids: 96.1

Project: Camp Lejeune-Paradise Point 3326

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13023.D	1	05/01/04	SM	04/30/04	OP10318	GZF605
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q

	TPH (C10-C28)	ND	8.6	5.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits

84-15-1	o-Terphenyl	78%		65-118%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3
2

Client Sample ID:	3326-EW-003	Date Sampled:	04/29/04
Lab Sample ID:	F23788-3	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	86.9
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3326		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012884.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		62-135%
98-08-8	aaa-Trifluorotoluene	95%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3
2

Client Sample ID: 3326-EW-003

Lab Sample ID: F23788-3

Date Sampled: 04/29/04

Matrix: SO - Soil

Date Received: 04/30/04

Method: SW846 8015 M SW846 3550B

Percent Solids: 86.9

Project: Camp Lejeune-Paradise Point 3326

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13010.D	5	05/01/04	SM	04/30/04	OP10318	GZF604
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	61.7	48	29	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	81%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.4
2

Client Sample ID: 3326-WW-004

Lab Sample ID: F23788-4

Matrix: SO - Soil

Method: SW846 8015

Project: Camp Lejeune-Paradise Point 3326

Date Sampled: 04/29/04

Date Received: 04/30/04

Percent Solids: 91.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012885.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.91 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q

	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits

460-00-4	4-Bromofluorobenzene	90%		62-135%

98-08-8	aaa-Trifluorotoluene	91%		65-118%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.4
2

Client Sample ID:	3326-WW-004	Date Sampled:	04/29/04
Lab Sample ID:	F23788-4	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	91.6
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13024.D	1	05/01/04	SM	04/30/04	OP10318	GZF605
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.1	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	82%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	TRIP BLANK			
Lab Sample ID:	F23788-5		Date Sampled:	04/29/04
Matrix:	AQ - Trip Blank Soil		Date Received:	04/30/04
Method:	SW846 8015		Percent Solids:	n/a
Project:	Camp Lejeune-Paradise Point 3326			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012949.D	1	05/06/04	NJ	n/a	n/a	GUV780
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	76%		65-127%
98-08-8	aaa-Trifluorotoluene	76%		65-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F23788

COC Number:

102420-PP3328-042804



Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest												
Project Name CAMP LEJEUNE					Project Location Paradise Point 3328 CAMP LEJEUNE, NC					Analysis Desired												
Project Number 102420					Contact Mark Martin					P.O. Number					Reviewed by							
Client Rep US NAVY - LANTDIV					Project Manager Ron Kenyon					8115B-00001550 [Grid for Analysis Desired]												
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description														Number of Containers		
1	3326-NW-001	4/29/04	14:30		X	Excavation North Wall				2		X										
2	3326-SW-002	4/29/04	14:40		X	Excavation South Wall				2		X										
3	3326-EW-003	4/29/04	14:35		X	Excavation East Wall				2		X										
4	3326-WW-004	4/29/04	14:45		X	Excavation West Wall				2		X										
5	Trip Blank	4/29/04			X	Trip Blank				2		X										
6																						
7																						
8																						
9																						
10																						

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 -- 5	<i>[Signature]</i>	FedEx	4/29/04	16:00	24 HR. TAT
2		Fed Ex	<i>[Signature]</i>	4/30/04	09:00	2.6°C
3						

F23788: Chain of Custody

Page 1 of 2



Southeast

05/17/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3326

102420

Accutest Job Number: F23787

Sampling Date: 04/29/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 25



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F23787

Camp Lejeune-Paradise Point 3326
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F23787-1	04/29/04	16:00 MM	04/30/04	SO Soil	3330-NW-001
F23787-2	04/29/04	16:10 MM	04/30/04	SO Soil	3330-SW-002
F23787-3	04/29/04	16:05 MM	04/30/04	SO Soil	3330-EW-003
F23787-4	04/29/04	16:15 MM	04/30/04	SO Soil	3330-WW-004
F23787-5	04/29/04	15:55 MM	04/30/04	SO Soil	3330-F-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID: 3330-NW-001

Lab Sample ID: F23787-1

Matrix: SO - Soil

Method: SW846 8015

Project: Camp Lejeune-Paradise Point 3326

Date Sampled: 04/29/04

Date Received: 04/30/04

Percent Solids: 86.2

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012886.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.65 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		62-135%
98-08-8	aaa-Trifluorotoluene	92%		65-118%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID:	3330-NW-001	Date Sampled:	04/29/04
Lab Sample ID:	F23787-1	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	86.2
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13002.D	5	04/30/04	SM	04/30/04	OP10318	GZF604
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	78.9	47	28	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2
2

Client Sample ID:	3330-SW-002	Date Sampled:	04/29/04
Lab Sample ID:	F23787-2	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012889.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	85%		62-135%		
98-08-8	aaa-Trifluorotoluene	99%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2
2

Client Sample ID:	3330-SW-002	Date Sampled:	04/29/04
Lab Sample ID:	F23787-2	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13020.D	40	05/01/04	SM	04/30/04	OP10318	GZF605
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4970	350	210	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		65-118%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3
2

Client Sample ID: 3330-EW-003

Lab Sample ID: F23787-3

Date Sampled: 04/29/04

Matrix: SO - Soil

Date Received: 04/30/04

Method: SW846 8015

Percent Solids: 85.9

Project: Camp Lejeune-Paradise Point 3326

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012890.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.84 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q

	TPH-GRO (C6-C10)	ND	6.0	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits

460-00-4	4-Bromofluorobenzene	105%		62-135%

98-08-8	aaa-Trifluorotoluene	98%		65-118%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3
2

Client Sample ID:	3330-EW-003	Date Sampled:	04/29/04
Lab Sample ID:	F23787-3	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	85.9
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13004.D	1	04/30/04	SM	04/30/04	OP10318	GZF604
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.6	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3330-WW-004	Date Sampled:	04/29/04
Lab Sample ID:	F23787-4	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012891.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.48 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		62-135%
98-08-8	aaa-Trifluorotoluene	99%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.4

2

Client Sample ID:	3330-WW-004	Date Sampled:	04/29/04
Lab Sample ID:	F23787-4	Date Received:	04/30/04
Matrix:	SO - Soil	Percent Solids:	86.8
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13005.D	1	04/30/04	SM	04/30/04	OP10318	GZF604
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.6	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3330-F-005

Lab Sample ID: F23787-5

Date Sampled: 04/29/04

Matrix: SO - Soil

Date Received: 04/30/04

Method: SW846 8015

Percent Solids: 85.9

Project: Camp Lejeune-Paradise Point 3326

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV012892.D	1	04/30/04	NJ	n/a	n/a	GUV776
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.79 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	99.5	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	67% ^a		62-135%
460-00-4	4-Bromofluorobenzene	34% ^b		62-135%
98-08-8	aaa-Trifluorotoluene	80%		65-118%

(a) Result reported from PID.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.5
2

Client Sample ID: 3330-F-005

Lab Sample ID: F23787-5

Matrix: SO - Soil

Method: SW846 8015 M SW846 3550B

Project: Camp Lejeune-Paradise Point 3326

Date Sampled: 04/29/04

Date Received: 04/30/04

Percent Solids: 85.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13021.D	1000	05/01/04	SM	04/30/04	OP10318	GZF605
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	16200	9500	5700	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		65-118%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PP3330-042804



Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest										
Project Name				Project Location				Analysis Desired												
CAMP LEJEUNE - Paradise Point 3330				CAMP LEJEUNE, NC																
Project Number		Contact		P.O. Number		Reviewed by														
102420		Mark Martin																		
Client Rep				Project Manager																
US NAVY - LANTDIV				Ron Kenyon																
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers													
1	3330-NW-001	4/29/04	1600		X	Excavation North Wall	2	X												
2	3330-SW-002	4/29/04	1610		X	Excavation South Wall	2	X												
3	3330-EW-003	4/29/04	1605		X	Excavation East Wall	2	X												
4	3330-WW-004	4/29/04	1615		X	Excavation West Wall	2	X												
5	3330-F-005	4/29/04	1555		X	Excavation Floor	2	X												
6																				
7																				
8																				
9																				
10																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 5	<i>[Signature]</i>	FedEx	4/29/04	16:00	24 hr T+T 2.6°C
2		Fed Ex	<i>[Signature]</i>	4/30/04	09:00	
3						

F23787: Chain of Custody

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1

1



Southeast

05/13/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3332

102420

Accutest Job Number: F23938

Sampling Date: 05/06/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 35



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F23938

Camp Lejeune-Paradise Point 3332
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F23938-1	05/06/04	15:00 MM	05/07/04	SO Soil	3332-NW-001
F23938-2	05/06/04	15:07 MM	05/07/04	SO Soil	3332-SW-002
F23938-3	05/06/04	15:05 MM	05/07/04	SO Soil	3332-EW-003
F23938-4	05/06/04	15:12 MM	05/07/04	SO Soil	3332-WW-004
F23938-5	05/06/04	15:15 MM	05/07/04	SO Soil	3332-F-005
F23938-6	05/06/04	15:09 MM	05/07/04	SO Soil	3332-SWD-006
F23938-7	05/06/04	00:00 MM	05/07/04	AQ Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-NW-001	Date Sampled:	05/06/04
Lab Sample ID:	F23938-1	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	85.6
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013006.D	1	05/07/04	NJ	05/07/04 11:40	n/a	GUV783
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.90 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		62-135%
98-08-8	aaa-Trifluorotoluene	92%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID:	3332-NW-001	Date Sampled:	05/06/04
Lab Sample ID:	F23938-1	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	85.6
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13121.D	1	05/07/04	SKW	05/07/04	OP10369	GZF609
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	16.1	9.5	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	77%		65-118%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-SW-002	Date Sampled:	05/06/04
Lab Sample ID:	F23938-2	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013009.D	1	05/07/04	NJ	05/07/04 11:40	n/a	GUV783
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.60 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		62-135%
98-08-8	aaa-Trifluorotoluene	105%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2
2

Client Sample ID:	3332-SW-002	Date Sampled:	05/06/04
Lab Sample ID:	F23938-2	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13140.D	40	05/08/04	SKW	05/07/04	OP10369	GZF610
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	3720	350	210	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3

2

Client Sample ID:	3332-EW-003	Date Sampled:	05/06/04
Lab Sample ID:	F23938-3	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013010.D	1	05/08/04	NJ	05/07/04 11:40	n/a	GUV783
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.87 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	113% ^a		62-135%		
460-00-4	4-Bromofluorobenzene	169%		62-135%		
98-08-8	aaa-Trifluorotoluene	101%		65-118%		

(a) Result reported from PID.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-EW-003	Date Sampled:	05/06/04
Lab Sample ID:	F23938-3	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	87.9
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13123.D	1	05/07/04	SKW	05/07/04	OP10369	GZF609
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-WW-004	Date Sampled:	05/06/04
Lab Sample ID:	F23938-4	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013011.D	1	05/08/04	NJ	05/07/04 11:40	n/a	GUV783
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		62-135%
98-08-8	aaa-Trifluorotoluene	104%		65-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.4

2

Client Sample ID:	3332-WW-004	Date Sampled:	05/06/04
Lab Sample ID:	F23938-4	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13125.D	1	05/07/04	SKW	05/07/04	OP10369	GZF609
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	17.4	9.6	5.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-F-005	Date Sampled:	05/06/04
Lab Sample ID:	F23938-5	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	76.4
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013032.D	1	05/10/04	NJ	05/07/04 11:40	n/a	GUV784
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.98 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	130	6.6	3.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	66% ^a		62-135%		
460-00-4	4-Bromofluorobenzene	24% ^b		62-135%		
98-08-8	aaa-Trifluorotoluene	96%		65-118%		

(a) Result reported from PID.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-F-005	Date Sampled:	05/06/04
Lab Sample ID:	F23938-5	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	76.4
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13141.D	200	05/08/04	SKW	05/07/04	OP10369	GZF610
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	13500	2200	1300	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-SWD-006	Date Sampled:	05/06/04
Lab Sample ID:	F23938-6	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013013.D	1	05/08/04	NJ	05/07/04 11:40	n/a	GUV783
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.81 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		62-135%
98-08-8	aaa-Trifluorotoluene	105%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-SWD-006	Date Sampled:	05/06/04
Lab Sample ID:	F23938-6	Date Received:	05/07/04
Matrix:	SO - Soil	Percent Solids:	94.1
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13156.D	100	05/10/04	SM	05/07/04	OP10369	GZF611
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	3170	870	520	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	TRIP BLANK	Date Sampled:	05/06/04
Lab Sample ID:	F23938-7	Date Received:	05/07/04
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3332		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	HH007268.D	1	05/11/04	NJ	n/a	n/a	GHH337

Run #1	Purge Volume
Run #2	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	88%		65-127%		
98-08-8	aaa-Trifluorotoluene	85%		65-124%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PP3332-050604



Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390							Receiving LAB: Accutest	
CAMP LEJEUNE - Paradise Point 3332			CAMP LEJEUNE, NC				Analysis Desired	
Project Number	Contact		P.O. Number		Reviewed by	DRO/GRO 801SB/909043510		
102420	Mark Martin							
Client Rep			Project Manager					
US NAVY - LANTDIV			Ron Kenyon					
Item No.	Sample Number	Date	Time	Comp	Grab		Sample Description	Number of Containers
(1)	3332-NW-001	5/6/04	15:00	X			Excavation North Wall	2
(2)	3332-SW-002	5/6/04	15:07	X			Excavation South Wall	2
(3)	3332-EW-003	5/6/04	15:05	X			Excavation East Wall	2
(4)	3332-WV-004	5/6/04	15:12	X		Excavation West Wall	2	
(5)	3332-F-005	5/6/04	15:15	X		Excavation Floor	2	
(6)	3332-SWD-006	5/6/04	15:09	X		Excavation South Wall DUP	2	
(7)	Trip Blank	5/6/04	---	X		Trip Blank	2	
8								
9								
10								

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 7	[Signature]	FedEx	5-6-04	16:00	24 Hour TAT
2		[Signature]		5-7-04	09:30	
3						

3.4

F23938: Chain of Custody

Page 1 of 2



05/13/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3350
102420

Accutest Job Number: F23986

Sampling Date: 05/07/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 31



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3350
Project No: 102420

Job No: F23986

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F23986-1	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-NW-001
F23986-2	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-SW-002
F23986-3	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-EW-003
F23986-4	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-WW-004
F23986-5	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-F-005
F23986-6	05/07/04	00:00 MM	05/08/04	SO	Soil	3350-FD-006
F23986-7	05/07/04	00:00 MM	05/08/04	AQ	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

2.1

2

Client Sample ID:	3350-NW-001	Date Sampled:	05/07/04
Lab Sample ID:	F23986-1	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	80.9
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013044.D	1	05/10/04	NJ	n/a	n/a	GUV784
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.18 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	3.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	92%		62-135%		
98-08-8	aaa-Trifluorotoluene	92%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-NW-001	Date Sampled:	05/07/04
Lab Sample ID:	F23986-1	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	80.9
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13186.D	1	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	6.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	82%		65-118%		

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2

2

Client Sample ID:	3350-SW-002	Date Sampled:	05/07/04
Lab Sample ID:	F23986-2	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	83.1
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013045.D	1	05/11/04	NJ	n/a	n/a	GUV784
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.9	2.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	76%		62-135%		
98-08-8	aaa-Trifluorotoluene	73%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.2

2

Client Sample ID:	3350-SW-002	Date Sampled:	05/07/04
Lab Sample ID:	F23986-2	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	83.1
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13191.D	1	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	6.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	83%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-EW-003	Date Sampled:	05/07/04
Lab Sample ID:	F23986-3	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013046.D	1	05/11/04	NJ	n/a	n/a	GUV784
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.1	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		62-135%
98-08-8	aaa-Trifluorotoluene	84%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.3
2

Client Sample ID:	3350-EW-003	Date Sampled:	05/07/04
Lab Sample ID:	F23986-3	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	82.7
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13188.D	5	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	83.3	49	29	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	92%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3350-WW-004

Lab Sample ID: F23986-4

Date Sampled: 05/07/04

Matrix: SO - Soil

Date Received: 05/08/04

Method: SW846 8015

Percent Solids: 78.6

Project: Camp Lejeune-Paradise Point 3350

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013047.D	1	05/11/04	NJ	n/a	n/a	GUV784
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.46 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		62-135%
98-08-8	aaa-Trifluorotoluene	87%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.4
2

Client Sample ID:	3350-WW-004	Date Sampled:	05/07/04
Lab Sample ID:	F23986-4	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	78.6
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13192.D	1	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) ^a	68.8	11	6.3	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	71%		65-118%		

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.5
2

Client Sample ID:	3350-F-005	Date Sampled:	05/07/04
Lab Sample ID:	F23986-5	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	80.7
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3350		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	UV013050.D	1	05/11/04	NJ	n/a	n/a	GUV784

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #2	5.30 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		62-135%
98-08-8	aaa-Trifluorotoluene	88%		65-118%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.5
2

Client Sample ID:	3350-F-005	Date Sampled:	05/07/04
Lab Sample ID:	F23986-5	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	80.7
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13209.D	200	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	16800	2000	1200	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3350-FD-006

Lab Sample ID: F23986-6

Date Sampled: 05/07/04

Matrix: SO - Soil

Date Received: 05/08/04

Method: SW846 8015

Percent Solids: 75.0

Project: Camp Lejeune-Paradise Point 3350

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013051.D	1	05/11/04	NJ	n/a	n/a	GUV784
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.37 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	571	62	31	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78% ^a		62-135%
460-00-4	4-Bromofluorobenzene	41% ^b		62-135%
98-08-8	aaa-Trifluorotoluene	79%		65-118%

(a) Result reported from PID.

(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

2.6
2

Client Sample ID:	3350-FD-006	Date Sampled:	05/07/04
Lab Sample ID:	F23986-6	Date Received:	05/08/04
Matrix:	SO - Soil	Percent Solids:	75.0
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13195.D	200	05/11/04	SM	05/10/04	OP10385	GZF613
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	10000	2200	1300	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		65-118%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.7

2

Client Sample ID:	TRIP BLANK	Date Sampled:	05/07/04
Lab Sample ID:	F23986-7	Date Received:	05/08/04
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8015		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH007269.D	1	05/11/04	NJ	n/a	n/a	GHH337
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		65-127%
98-08-8	aaa-Trifluorotoluene	85%		65-124%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN-OF-CUSTODY RECORD

COC Number:
102420-PP3350-050704

F23986

Shaw
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest
Analysis Desired

Project Name CAMP LEJEUNE - Paradise Point 3350		Project Location CAMP LEJEUNE, NC		Receiving LAB: Accutest Analysis Desired	
Project Number 102420	Contact Mark Martin	P.O. Number	Reviewed by		
Client Rep US NAVY - LANTDIV		Project Manager Ron Kenyon			
Item No.	Sample Number	Date	Time	Comp	Grab
					Sample Description
					Number of Containers
1	3350-NW-001	5/7/04		X	Excavation North Wall
2	3350-SW-002	5/7/04		X	Excavation South Wall
3	3350-EW-003	5/7/04		X	Excavation East Wall
4	3350-WW-004	5/7/04		X	Excavation West Wall
5	3350-F-005	5/7/04		X	Excavation Floor
6	3350-FD-006	5/7/04		X	Excavation Floor Dup
7	Trip Blank	5/7/04		X	Trip Blank
8					
9					
10					

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 -- 7	<i>[Signature]</i>	FEDEX # 841839016838	5/7/04	16:00	24 Hour TAT
2		<i>[Signature]</i>	<i>[Signature]</i>	5/6/04	16:00	
3						

2.80

F23986: Chain of Custody

Page 1 of 2

C

1

2



06/01/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point M230

102420

Accutest Job Number: F24341

Sampling Date: 05/21/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 62



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

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Sample Summary

Shaw E & I, Inc.

Job No: F24341

Camp Lejeune-Paradise Point M230
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F24341-1	05/21/04	09:00 MM	05/22/04	SO Soil	M230-NW-001
F24341-2	05/21/04	09:15 MM	05/22/04	SO Soil	M230-WW-004
F24341-3	05/21/04	09:30 MM	05/22/04	SO Soil	M230-F-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 2

Client Sample ID:	M230-NW-001	Date Sampled:	05/21/04
Lab Sample ID:	F24341-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H025637.D	1	05/27/04	NAF	05/22/04 12:55	n/a	VH957
Run #2							

Run #	Initial Weight
Run #1	5.78 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	48	24	ug/kg	
71-43-2	Benzene	ND	4.8	1.9	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	1.9	ug/kg	
75-25-2	Bromoform	ND	4.8	1.9	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	1.9	ug/kg	
75-00-3	Chloroethane	ND	4.8	1.9	ug/kg	
67-66-3	Chloroform	ND	4.8	1.9	ug/kg	
75-15-0	Carbon disulfide	ND	4.8	1.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	1.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	1.9	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	2.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	1.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	1.9	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	1.9	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	1.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	1.9	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	1.9	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	1.9	ug/kg	
591-78-6	2-Hexanone	ND	24	9.7	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	24	9.7	ug/kg	
74-83-9	Methyl bromide	ND	4.8	1.9	ug/kg	
74-87-3	Methyl chloride	ND	4.8	1.9	ug/kg	
75-09-2	Methylene chloride	ND	9.7	9.7	ug/kg	
78-93-3	Methyl ethyl ketone	ND	24	9.7	ug/kg	
100-42-5	Styrene	ND	4.8	1.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	1.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	1.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	1.9	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	1.9	ug/kg	
108-88-3	Toluene	ND	4.8	1.9	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	1.9	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-NW-001	Date Sampled:	05/21/04
Lab Sample ID:	F24341-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	4.8	2.4	ug/kg	
1330-20-7	Xylene (total)	ND	15	4.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		78-123%
2037-26-5	Toluene-D8	98%		71-137%
460-00-4	4-Bromofluorobenzene	109%		61-157%
17060-07-0	1,2-Dichloroethane-D4	93%		74-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

Client Sample ID: M230-NW-001
 Lab Sample ID: F24341-1
 Matrix: SO - Soil
 Method: SW846 8270C SW846 3550B
 Project: Camp Lejeune-Paradise Point M230

Date Sampled: 05/21/04
 Date Received: 05/22/04
 Percent Solids: 89.3

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L021663.D	1	05/27/04	ME	05/25/04	OP10516	SL1165

Run #1	Initial Weight	Final Volume
Run #2	30.0 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	930	560	ug/kg	
95-57-8	2-Chlorophenol	ND	190	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	930	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	75	ug/kg	
95-48-7	2-Methylphenol	ND	190	37	ug/kg	
	3&4-Methylphenol	ND	190	37	ug/kg	
88-75-5	2-Nitrophenol	ND	190	37	ug/kg	
100-02-7	4-Nitrophenol	ND	930	370	ug/kg	
87-86-5	Pentachlorophenol	ND	930	370	ug/kg	
108-95-2	Phenol	ND	190	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	37	ug/kg	
83-32-9	Acenaphthene	ND	190	37	ug/kg	
208-96-8	Acenaphthylene	ND	190	37	ug/kg	
120-12-7	Anthracene	42.0	190	37	ug/kg	
56-55-3	Benzo(a)anthracene	60.7	190	37	ug/kg	J
50-32-8	Benzo(a)pyrene	77.3	190	37	ug/kg	J
205-99-2	Benzo(b)fluoranthene	97.1	190	37	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	78.5	190	75	ug/kg	J
207-08-9	Benzo(k)fluoranthene	46.8	190	37	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	190	37	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	93	ug/kg	
100-51-6	Benzyl Alcohol	ND	190	37	ug/kg	
91-58-7	2-Chloronaphthalene	ND	190	37	ug/kg	
106-47-8	4-Chloroaniline	ND	750	280	ug/kg	
86-74-8	Carbazole	ND	190	37	ug/kg	
218-01-9	Chrysene	76.2	190	37	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	190	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	190	75	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-NW-001	Date Sampled:	05/21/04
Lab Sample ID:	F24341-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	190	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	190	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	190	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	190	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	190	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	190	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	190	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	190	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	190	75	ug/kg	
132-64-9	Dibenzofuran	ND	190	37	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	93	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	190	ug/kg	
84-66-2	Diethyl phthalate	ND	370	93	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	93	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	190	ug/kg	
206-44-0	Fluoranthene	105	190	37	ug/kg	J
86-73-7	Fluorene	ND	190	37	ug/kg	
118-74-1	Hexachlorobenzene	ND	190	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	190	75	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	190	75	ug/kg	
67-72-1	Hexachloroethane	ND	190	75	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	78.9	190	75	ug/kg	J
78-59-1	Isophorone	ND	190	37	ug/kg	
91-57-6	2-Methylnaphthalene	54.3	190	37	ug/kg	J
88-74-4	2-Nitroaniline	ND	370	93	ug/kg	
99-09-2	3-Nitroaniline	ND	370	93	ug/kg	
100-01-6	4-Nitroaniline	ND	370	93	ug/kg	
91-20-3	Naphthalene	ND	190	37	ug/kg	
98-95-3	Nitrobenzene	ND	190	37	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	190	75	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	37	ug/kg	
85-01-8	Phenanthrene	80.9	190	37	ug/kg	J
129-00-0	Pyrene	94.9	190	75	ug/kg	J
120-82-1	1,2,4-Trichlorobenzene	ND	190	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		45-114%
4165-62-2	Phenol-d5	66%		44-124%
118-79-6	2,4,6-Tribromophenol	83%		50-128%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.1

2

Client Sample ID:	M230-NW-001	Date Sampled:	05/21/04
Lab Sample ID:	F24341-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		41-123%
321-60-8	2-Fluorobiphenyl	68%		46-122%
1718-51-0	Terphenyl-d14	81%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: M230-NW-001

Lab Sample ID: F24341-1

Date Sampled: 05/21/04

Matrix: SO - Soil

Date Received: 05/22/04

Method: MADEP VPH

Percent Solids: 89.3

Project: Camp Lejeune-Paradise Point M230

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013318.D	1	05/25/04	NJ	n/a	n/a	GUV798
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.63 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	250	99	ug/kg	
100-41-4	Ethylbenzene	ND	250	120	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	750	250	ug/kg	
91-20-3	Naphthalene	ND	500	270	ug/kg	
108-88-3	Toluene	ND	750	250	ug/kg	
	m,p-Xylene	ND	990	370	ug/kg	
95-47-6	o-Xylene	ND	500	250	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	3700	2000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2700	1500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	990	500	ug/kg	
	C5- C8 Aliphatics	ND	3700	2000	ug/kg	
	C9- C12 Aliphatics	ND	2700	1500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	96%		70-130%
460-00-4	BFB	97%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	M230-NW-001	Date Sampled:	05/21/04
Lab Sample ID:	F24341-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13487.D	1	05/28/04	ME	05/25/04	OP10518	GZF627
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	370	150	ug/kg	
208-96-8	Acenaphthylene	ND	370	150	ug/kg	
120-12-7	Anthracene	ND	370	150	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	150	ug/kg	
50-32-8	Benzo(a)pyrene	ND	370	150	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	370	150	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	370	150	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	370	150	ug/kg	
218-01-9	Chrysene	ND	370	150	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	370	150	ug/kg	
206-44-0	Fluoranthene	ND	370	150	ug/kg	
86-73-7	Fluorene	ND	370	150	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	370	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	150	ug/kg	
91-20-3	Naphthalene	ND	370	150	ug/kg	
85-01-8	Phenanthrene	ND	370	150	ug/kg	
129-00-0	Pyrene	ND	370	150	ug/kg	
	C11-C22 Aromatics (Unadj.)	34500	7500	7500	ug/kg	
	C9-C18 Aliphatics	33500	7500	7500	ug/kg	
	C11-C22 Aromatics	34500	7500	7500	ug/kg	
	C19-C36 Aliphatics	43700	7500	7500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	49%		40-140%
580-13-2	2-Bromonaphthalene	82%		40-140%
84-15-1	o-Terphenyl	78%		40-140%
321-60-8	2-Fluorobiphenyl	88%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0028670.D	1	05/26/04	NAF	05/22/04 12:55	n/a	VG1067
Run #2							

	Initial Weight
Run #1	4.97 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	55	27	ug/kg	
71-43-2	Benzene	ND	5.5	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	2.2	ug/kg	
75-25-2	Bromoform	ND	5.5	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.5	2.2	ug/kg	
67-66-3	Chloroform	ND	5.5	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	5.5	2.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.5	3.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.5	2.2	ug/kg	
591-78-6	2-Hexanone	ND	27	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	27	11	ug/kg	
74-83-9	Methyl bromide	ND	5.5	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.5	2.2	ug/kg	
75-09-2	Methylene chloride	ND	11	11	ug/kg	
78-93-3	Methyl ethyl ketone	ND	27	11	ug/kg	
100-42-5	Styrene	ND	5.5	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.5	2.2	ug/kg	
108-88-3	Toluene	ND	5.5	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.5	2.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	2.7	ug/kg	
1330-20-7	Xylene (total)	ND	16	4.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		78-123%
2037-26-5	Toluene-D8	95%		71-137%
460-00-4	4-Bromofluorobenzene	100%		61-157%
17060-07-0	1,2-Dichloroethane-D4	82%		74-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021664.D	1	05/27/04	ME	05/25/04	OP10516	SL1165
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	910	540	ug/kg	
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	910	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	73	ug/kg	
95-48-7	2-Methylphenol	ND	180	36	ug/kg	
	3&4-Methylphenol	ND	180	36	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	910	360	ug/kg	
87-86-5	Pentachlorophenol	ND	910	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
83-32-9	Acenaphthene	ND	180	36	ug/kg	
208-96-8	Acenaphthylene	ND	180	36	ug/kg	
120-12-7	Anthracene	ND	180	36	ug/kg	
56-55-3	Benzo(a)anthracene	ND	180	36	ug/kg	
50-32-8	Benzo(a)pyrene	ND	180	36	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	180	36	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	180	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	180	36	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	91	ug/kg	
100-51-6	Benzyl Alcohol	ND	180	36	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	730	270	ug/kg	
86-74-8	Carbazole	ND	180	36	ug/kg	
218-01-9	Chrysene	ND	180	36	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	73	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	73	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	180	73	ug/kg	
132-64-9	Dibenzofuran	ND	180	36	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	91	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	91	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	91	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	
206-44-0	Fluoranthene	ND	180	36	ug/kg	
86-73-7	Fluorene	ND	180	36	ug/kg	
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	73	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	73	ug/kg	
67-72-1	Hexachloroethane	ND	180	73	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	180	73	ug/kg	
78-59-1	Isophorone	ND	180	36	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	36	ug/kg	
88-74-4	2-Nitroaniline	ND	360	91	ug/kg	
99-09-2	3-Nitroaniline	ND	360	91	ug/kg	
100-01-6	4-Nitroaniline	ND	360	91	ug/kg	
91-20-3	Naphthalene	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	73	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
85-01-8	Phenanthrene	ND	180	36	ug/kg	
129-00-0	Pyrene	ND	180	73	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	80%		45-114%
4165-62-2	Phenol-d5	80%		44-124%
118-79-6	2,4,6-Tribromophenol	87%		50-128%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.2
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Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		41-123%
321-60-8	2-Fluorobiphenyl	79%		46-122%
1718-51-0	Terphenyl-d14	81%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013319.D	1	05/25/04	NJ	n/a	n/a	GUV798
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	270	110	ug/kg	
100-41-4	Ethylbenzene	ND	270	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	810	270	ug/kg	
91-20-3	Naphthalene	ND	540	300	ug/kg	
108-88-3	Toluene	ND	810	270	ug/kg	
	m,p-Xylene	ND	1100	410	ug/kg	
95-47-6	o-Xylene	ND	540	270	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4100	2200	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3000	1600	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1100	540	ug/kg	
	C5- C8 Aliphatics	ND	4100	2200	ug/kg	
	C9- C12 Aliphatics	ND	3000	1600	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	101%		70-130%
460-00-4	BFB	102%		70-130%

ND = Not detected MDL - Method Detection Limit
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 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	M230-WW-004	Date Sampled:	05/21/04
Lab Sample ID:	F24341-2	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	ZF13489.D	1	05/28/04	ME	05/25/04	OP10518	GZF627

Run #1	Initial Weight	Final Volume
Run #2	30.4 g	2.0 ml

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	360	140	ug/kg	
208-96-8	Acenaphthylene	ND	360	140	ug/kg	
120-12-7	Anthracene	ND	360	140	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	140	ug/kg	
50-32-8	Benzo(a)pyrene	ND	360	140	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	360	140	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	360	140	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	360	140	ug/kg	
218-01-9	Chrysene	ND	360	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	360	140	ug/kg	
206-44-0	Fluoranthene	ND	360	140	ug/kg	
86-73-7	Fluorene	ND	360	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	360	140	ug/kg	
91-57-6	2-Methylnaphthalene	ND	360	140	ug/kg	
91-20-3	Naphthalene	ND	360	140	ug/kg	
85-01-8	Phenanthrene	ND	360	140	ug/kg	
129-00-0	Pyrene	ND	360	140	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	7200	7200	ug/kg	
	C9-C18 Aliphatics	ND	7200	7200	ug/kg	
	C11-C22 Aromatics	ND	7200	7200	ug/kg	
	C19-C36 Aliphatics	ND	7200	7200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	46%		40-140%
580-13-2	2-Bromonaphthalene	84%		40-140%
84-15-1	o-Terphenyl	74%		40-140%
321-60-8	2-Fluorobiphenyl	86%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0028671.D	1	05/26/04	NAF	05/22/04 12:55	n/a	VG1067
Run #2							

Run #	Initial Weight
Run #1	5.22 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	52	26	ug/kg	
71-43-2	Benzene	ND	5.2	2.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	2.1	ug/kg	
75-25-2	Bromoform	ND	5.2	2.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	2.1	ug/kg	
75-00-3	Chloroethane	ND	5.2	2.1	ug/kg	
67-66-3	Chloroform	ND	5.2	2.1	ug/kg	
75-15-0	Carbon disulfide	ND	5.2	2.1	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	2.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	2.1	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	3.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	2.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	2.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	2.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	2.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	2.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	2.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	2.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	2.1	ug/kg	
591-78-6	2-Hexanone	ND	26	10	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	26	10	ug/kg	
74-83-9	Methyl bromide	ND	5.2	2.1	ug/kg	
74-87-3	Methyl chloride	ND	5.2	2.1	ug/kg	
75-09-2	Methylene chloride	ND	10	10	ug/kg	
78-93-3	Methyl ethyl ketone	ND	26	10	ug/kg	
100-42-5	Styrene	ND	5.2	2.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	2.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	2.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	2.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	2.1	ug/kg	
108-88-3	Toluene	ND	5.2	2.1	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	2.1	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point M230		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.2	2.6	ug/kg	
1330-20-7	Xylene (total)	ND	16	4.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		78-123%
2037-26-5	Toluene-D8	93%		71-137%
460-00-4	4-Bromofluorobenzene	95%		61-157%
17060-07-0	1,2-Dichloroethane-D4	90%		74-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021665.D	1	05/27/04	ME	05/25/04	OP10516	SL1165
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	890	530	ug/kg	
95-57-8	2-Chlorophenol	ND	180	36	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	36	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	890	360	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	360	71	ug/kg	
95-48-7	2-Methylphenol	ND	180	36	ug/kg	
	3&4-Methylphenol	ND	180	36	ug/kg	
88-75-5	2-Nitrophenol	ND	180	36	ug/kg	
100-02-7	4-Nitrophenol	ND	890	360	ug/kg	
87-86-5	Pentachlorophenol	ND	890	360	ug/kg	
108-95-2	Phenol	ND	180	36	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	36	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	36	ug/kg	
83-32-9	Acenaphthene	ND	180	36	ug/kg	
208-96-8	Acenaphthylene	ND	180	36	ug/kg	
120-12-7	Anthracene	92.7	180	36	ug/kg	J
56-55-3	Benzo(a)anthracene	204	180	36	ug/kg	
50-32-8	Benzo(a)pyrene	256	180	36	ug/kg	
205-99-2	Benzo(b)fluoranthene	302	180	36	ug/kg	
191-24-2	Benzo(g,h,i)perylene	122	180	71	ug/kg	J
207-08-9	Benzo(k)fluoranthene	170	180	36	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	180	36	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	360	89	ug/kg	
100-51-6	Benzyl Alcohol	ND	180	36	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	36	ug/kg	
106-47-8	4-Chloroaniline	ND	710	270	ug/kg	
86-74-8	Carbazole	69.2	180	36	ug/kg	J
218-01-9	Chrysene	246	180	36	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	36	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	71	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	36	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	36	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	36	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	36	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	36	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	71	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	360	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	180	71	ug/kg	
132-64-9	Dibenzofuran	ND	180	36	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	360	89	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	360	180	ug/kg	
84-66-2	Diethyl phthalate	ND	360	89	ug/kg	
131-11-3	Dimethyl phthalate	ND	360	89	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	360	180	ug/kg	
206-44-0	Fluoranthene	480	180	36	ug/kg	
86-73-7	Fluorene	51.2	180	36	ug/kg	J
118-74-1	Hexachlorobenzene	ND	180	36	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	71	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	71	ug/kg	
67-72-1	Hexachloroethane	ND	180	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	137	180	71	ug/kg	J
78-59-1	Isophorone	ND	180	36	ug/kg	
91-57-6	2-Methylnaphthalene	51.1	180	36	ug/kg	J
88-74-4	2-Nitroaniline	ND	360	89	ug/kg	
99-09-2	3-Nitroaniline	ND	360	89	ug/kg	
100-01-6	4-Nitroaniline	ND	360	89	ug/kg	
91-20-3	Naphthalene	ND	180	36	ug/kg	
98-95-3	Nitrobenzene	ND	180	36	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	71	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	36	ug/kg	
85-01-8	Phenanthrene	285	180	36	ug/kg	
129-00-0	Pyrene	743	180	71	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		45-114%
4165-62-2	Phenol-d5	76%		44-124%
118-79-6	2,4,6-Tribromophenol	82%		50-128%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		41-123%
321-60-8	2-Fluorobiphenyl	74%		46-122%
1718-51-0	Terphenyl-d14	83%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound



Report of Analysis

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Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013320.D	1	05/25/04	NJ	n/a	n/a	GUV798
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.93 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	280	110	ug/kg	
100-41-4	Ethylbenzene	ND	280	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	830	280	ug/kg	
91-20-3	Naphthalene	ND	560	310	ug/kg	
108-88-3	Toluene	ND	830	280	ug/kg	
	m,p-Xylene	ND	1100	420	ug/kg	
95-47-6	o-Xylene	ND	560	280	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4200	2200	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3100	1700	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1100	560	ug/kg	
	C5- C8 Aliphatics	ND	4200	2200	ug/kg	
	C9- C12 Aliphatics	ND	3100	1700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	95%		70-130%
460-00-4	BFB	97%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	M230-F-005	Date Sampled:	05/21/04
Lab Sample ID:	F24341-3	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	91.3
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point M230		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13490.D	1	05/28/04	ME	05/25/04	OP10518	GZF627
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	360	150	ug/kg	
208-96-8	Acenaphthylene	ND	360	150	ug/kg	
120-12-7	Anthracene	ND	360	150	ug/kg	
56-55-3	Benzo(a)anthracene	ND	360	150	ug/kg	
50-32-8	Benzo(a)pyrene	ND	360	150	ug/kg	
205-99-2	Benzo(b)fluoranthene	202	360	150	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	360	150	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	360	150	ug/kg	
218-01-9	Chrysene	171	360	150	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	360	150	ug/kg	
206-44-0	Fluoranthene	462	360	150	ug/kg	
86-73-7	Fluorene	153	360	150	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	360	150	ug/kg	
91-57-6	2-Methylnaphthalene	175	360	150	ug/kg	J
91-20-3	Naphthalene	ND	360	150	ug/kg	
85-01-8	Phenanthrene	389	360	150	ug/kg	
129-00-0	Pyrene	740	360	150	ug/kg	
	C11-C22 Aromatics (Unadj.)	42400	7300	7300	ug/kg	
	C9-C18 Aliphatics	83800	7300	7300	ug/kg	
	C11-C22 Aromatics	39900	7300	7300	ug/kg	
	C19-C36 Aliphatics	49200	7300	7300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	66%		40-140%
580-13-2	2-Bromonaphthalene	85%		40-140%
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	86%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PPM230-052104



Shaw Environmental & Infrastructure, Inc.

F24341

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest										
Project Name				Project Location						Analysis Desired										
CAMP LEJEUNE - Paradise Point M230				CAMP LEJEUNE, NC																
Project Number		Contact		P.O. Number		Reviewed by														
102420		Mark Martin																		
Client Rep				Project Manager																
US NAVY - LANTDIV				Ron Kenyon																
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description		Number of Containers	MADEP EPH	MADEP VPH	8260	8270								
1	M230-NW-001	5/21/04	9:00		X	Excavation North Wall		2	X	X	X	X								
2	M230-WW-004	5/21/04	9:15		X	Excavation West Wall		2	X	X	X	X								
3	M230-F-005	5/21/04	9:30		X	Excavation Floor		2	X	X	X	X								
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 3		FEDEX # 8436 4375 7116	5/21/04	16:00	7 Day TAT Reexcavation + Resample
2				5/21/04	10:00	
3						

3.4°

F24341: Chain of Custody
Page 1 of 2



06/15/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3326

102420

Accutest Job Number: F24414

Sampling Date: 05/26/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 53



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24414

Camp Lejeune-Paradise Point 3326

Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F24414-1	05/26/04	09:30 MM	05/27/04	SO Soil	3326-NW-001
F24414-2	05/26/04	09:40 MM	05/27/04	SO Soil	3326-SW-002
F24414-3	05/26/04	09:50 MM	05/27/04	SO Soil	3326-EW-003
F24414-4	05/26/04	10:00 MM	05/27/04	SO Soil	3326-WW-004

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

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2.1
2

Client Sample ID:	3326-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24414-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.3
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013459.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.59 g	5.0 ml	2.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	14000	5800	ug/kg	
100-41-4	Ethylbenzene	ND	14000	7200	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	43000	14000	ug/kg	
91-20-3	Naphthalene	ND	29000	16000	ug/kg	
108-88-3	Toluene	ND	43000	14000	ug/kg	
	m,p-Xylene	ND	58000	22000	ug/kg	
95-47-6	o-Xylene	ND	29000	14000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	220000	120000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	488000	160000	87000	ug/kg	
	C9- C10 Aromatics (Unadj.)	259000	58000	29000	ug/kg	
	C5- C8 Aliphatics	ND	220000	120000	ug/kg	
	C9- C12 Aliphatics	221000	160000	87000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	104%		70-130%
460-00-4	BFB	89%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24414-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.3
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13701.D	80	06/10/04	SM	06/01/04	OP10562	GZF637
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	34000	14000	ug/kg	
208-96-8	Acenaphthylene	ND	34000	14000	ug/kg	
120-12-7	Anthracene	ND	34000	14000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	34000	14000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	34000	14000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	34000	14000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	34000	14000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	34000	14000	ug/kg	
218-01-9	Chrysene	ND	34000	14000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	34000	14000	ug/kg	
206-44-0	Fluoranthene	ND	34000	14000	ug/kg	
86-73-7	Fluorene	ND	34000	14000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	34000	14000	ug/kg	
91-57-6	2-Methylnaphthalene	39200	34000	14000	ug/kg	
91-20-3	Naphthalene	ND	34000	14000	ug/kg	
85-01-8	Phenanthrene	ND	34000	14000	ug/kg	
129-00-0	Pyrene	ND	34000	14000	ug/kg	
	C11-C22 Aromatics (Unadj.)	3170000	680000	680000	ug/kg	
	C9-C18 Aliphatics	4220000	680000	680000	ug/kg	
	C11-C22 Aromatics	3130000	680000	680000	ug/kg	
	C19-C36 Aliphatics	765000	680000	680000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3326-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24414-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	80.2
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013460.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.39 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	290	120	ug/kg	
100-41-4	Ethylbenzene	ND	290	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	870	290	ug/kg	
91-20-3	Naphthalene	ND	580	320	ug/kg	
108-88-3	Toluene	ND	870	290	ug/kg	
	m,p-Xylene	ND	1200	430	ug/kg	
95-47-6	o-Xylene	ND	580	290	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3200	1700	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1200	580	ug/kg	
	C5- C8 Aliphatics	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics	ND	3200	1700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	89%		70-130%
460-00-4	BFB	88%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24414-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	80.2
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13712.D	1	06/14/04	SM	06/01/04	OP10562	GZF638
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	410	160	ug/kg	
208-96-8	Acenaphthylene	ND	410	160	ug/kg	
120-12-7	Anthracene	ND	410	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	410	160	ug/kg	
50-32-8	Benzo(a)pyrene	ND	410	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	410	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	410	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	410	160	ug/kg	
218-01-9	Chrysene	ND	410	160	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	410	160	ug/kg	
206-44-0	Fluoranthene	ND	410	160	ug/kg	
86-73-7	Fluorene	ND	410	160	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	410	160	ug/kg	
91-57-6	2-Methylnaphthalene	ND	410	160	ug/kg	
91-20-3	Naphthalene	ND	410	160	ug/kg	
85-01-8	Phenanthrene	ND	410	160	ug/kg	
129-00-0	Pyrene	ND	410	160	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	8200	8200	ug/kg	
	C9-C18 Aliphatics ^a	11600	8200	8200	ug/kg	
	C11-C22 Aromatics	ND	8200	8200	ug/kg	
	C19-C36 Aliphatics ^b	8620	8200	8200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	47%		40-140%
580-13-2	2-Bromonaphthalene	98%		40-140%
84-15-1	o-Terphenyl	77%		40-140%
321-60-8	2-Fluorobiphenyl	99%		40-140%

(a) Estimated value due to possible cartridge contamination.

(b) Estimated value due to possible cartridge contamination.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24414-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	78.7
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013461.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.41 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	290	120	ug/kg	
100-41-4	Ethylbenzene	ND	290	150	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	880	290	ug/kg	
91-20-3	Naphthalene	ND	590	320	ug/kg	
108-88-3	Toluene	ND	880	290	ug/kg	
	m,p-Xylene	ND	1200	440	ug/kg	
95-47-6	o-Xylene	ND	590	290	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4400	2300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3200	1800	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1200	590	ug/kg	
	C5- C8 Aliphatics	ND	4400	2300	ug/kg	
	C9- C12 Aliphatics	ND	3200	1800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	85%		70-130%
460-00-4	BFB	85%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.3
2

Client Sample ID:	3326-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24414-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	78.7
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13677.D	1	06/09/04	SM	06/01/04	OP10562	GZF636
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	420	170	ug/kg	
208-96-8	Acenaphthylene	ND	420	170	ug/kg	
120-12-7	Anthracene	ND	420	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	420	170	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	420	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	420	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	420	170	ug/kg	
218-01-9	Chrysene	ND	420	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	420	170	ug/kg	
206-44-0	Fluoranthene	ND	420	170	ug/kg	
86-73-7	Fluorene	ND	420	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	420	170	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	170	ug/kg	
91-20-3	Naphthalene	ND	420	170	ug/kg	
85-01-8	Phenanthrene	ND	420	170	ug/kg	
129-00-0	Pyrene	ND	420	170	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	8300	8300	ug/kg	
	C9-C18 Aliphatics	ND	8300	8300	ug/kg	
	C11-C22 Aromatics	ND	8300	8300	ug/kg	
	C19-C36 Aliphatics	ND	8300	8300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	55%		40-140%
580-13-2	2-Bromonaphthalene	92%		40-140%
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	90%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K017159.D	1	06/01/04	NAF	05/27/04 12:15	n/a	VK776
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3000	1500	ug/kg	
71-43-2	Benzene	ND	300	120	ug/kg	
75-27-4	Bromodichloromethane	ND	300	120	ug/kg	
75-25-2	Bromoform	ND	300	120	ug/kg	
108-90-7	Chlorobenzene	ND	300	120	ug/kg	
75-00-3	Chloroethane	ND	300	120	ug/kg	
67-66-3	Chloroform	ND	300	120	ug/kg	
75-15-0	Carbon disulfide	ND	300	120	ug/kg	
56-23-5	Carbon tetrachloride	ND	300	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	300	120	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	300	180	ug/kg	
107-06-2	1,2-Dichloroethane	ND	300	120	ug/kg	
78-87-5	1,2-Dichloropropane	ND	300	120	ug/kg	
124-48-1	Dibromochloromethane	ND	300	120	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	300	120	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	300	120	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	300	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	300	120	ug/kg	
100-41-4	Ethylbenzene	236	300	120	ug/kg	J
591-78-6	2-Hexanone	ND	1500	600	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1500	600	ug/kg	
74-83-9	Methyl bromide	ND	300	120	ug/kg	
74-87-3	Methyl chloride	ND	300	120	ug/kg	
75-09-2	Methylene chloride	ND	600	300	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1500	600	ug/kg	
100-42-5	Styrene	ND	300	120	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	300	120	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	300	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	300	120	ug/kg	
127-18-4	Tetrachloroethylene	ND	300	120	ug/kg	
108-88-3	Toluene	226	300	120	ug/kg	J
79-01-6	Trichloroethylene	ND	300	120	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3326		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	300	150	ug/kg	
1330-20-7	Xylene (total)	1130	900	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		78-123%
2037-26-5	Toluene-D8	100%		71-137%
460-00-4	4-Bromofluorobenzene	121%		61-157%
17060-07-0	1,2-Dichloroethane-D4	101%		74-125%

(a) Methanol extract analysis required due to matrix interference (non-target analytes present above calibration range).

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L021725.D	20	06/03/04	ME	06/02/04	OP10581	SL1168
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	20000	12000	ug/kg	
95-57-8	2-Chlorophenol	ND	4000	810	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	4000	810	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	4000	810	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	4000	810	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	20000	8100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	8100	1600	ug/kg	
95-48-7	2-Methylphenol	ND	4000	810	ug/kg	
	3&4-Methylphenol	ND	4000	810	ug/kg	
88-75-5	2-Nitrophenol	ND	4000	810	ug/kg	
100-02-7	4-Nitrophenol	ND	20000	8100	ug/kg	
87-86-5	Pentachlorophenol	ND	20000	8100	ug/kg	
108-95-2	Phenol	ND	4000	810	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	4000	810	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	4000	810	ug/kg	
83-32-9	Acenaphthene	ND	4000	810	ug/kg	
208-96-8	Acenaphthylene	921	4000	810	ug/kg	J
120-12-7	Anthracene	ND	4000	810	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4000	810	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4000	810	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4000	810	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4000	1600	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4000	810	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	4000	810	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	8100	2000	ug/kg	
100-51-6	Benzyl Alcohol	ND	4000	810	ug/kg	
91-58-7	2-Chloronaphthalene	ND	4000	810	ug/kg	
106-47-8	4-Chloroaniline	ND	16000	6100	ug/kg	
86-74-8	Carbazole	ND	4000	810	ug/kg	
218-01-9	Chrysene	ND	4000	810	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	4000	810	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	4000	1600	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

Client Sample ID:	3326-WW-004		
Lab Sample ID:	F24414-4	Date Sampled:	05/26/04
Matrix:	SO - Soil	Date Received:	05/27/04
Method:	SW846 8270C SW846 3550B	Percent Solids:	81.5
Project:	Camp Lejeune-Paradise Point 3326		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	4000	810	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4000	810	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4000	810	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4000	810	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4000	810	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	4000	1600	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	4000	1600	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	8100	4000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4000	1600	ug/kg	
132-64-9	Dibenzofuran	ND	4000	810	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	8100	2000	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	8100	4000	ug/kg	
84-66-2	Diethyl phthalate	ND	8100	2000	ug/kg	
131-11-3	Dimethyl phthalate	ND	8100	2000	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	8100	4000	ug/kg	
206-44-0	Fluoranthene	ND	4000	810	ug/kg	
86-73-7	Fluorene	ND	4000	810	ug/kg	
118-74-1	Hexachlorobenzene	ND	4000	810	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4000	1600	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	4000	1600	ug/kg	
67-72-1	Hexachloroethane	ND	4000	1600	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4000	1600	ug/kg	
78-59-1	Isophorone	ND	4000	810	ug/kg	
91-57-6	2-Methylnaphthalene	3140	4000	810	ug/kg	J
88-74-4	2-Nitroaniline	ND	8100	2000	ug/kg	
99-09-2	3-Nitroaniline	ND	8100	2000	ug/kg	
100-01-6	4-Nitroaniline	ND	8100	2000	ug/kg	
91-20-3	Naphthalene	ND	4000	810	ug/kg	
98-95-3	Nitrobenzene	ND	4000	810	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	4000	1600	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	4000	810	ug/kg	
85-01-8	Phenanthrene	ND	4000	810	ug/kg	
129-00-0	Pyrene	ND	4000	1600	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4000	810	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	0% ^b		45-114%
4165-62-2	Phenol-d5	0% ^b		44-124%
118-79-6	2,4,6-Tribromophenol	0% ^b		50-128%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	0% ^b		41-123%
321-60-8	2-Fluorobiphenyl	0% ^b		46-122%
1718-51-0	Terphenyl-d14	0% ^b		45-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013462.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.08 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	30000	12000	ug/kg	
100-41-4	Ethylbenzene	ND	30000	15000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	91000	30000	ug/kg	
91-20-3	Naphthalene	ND	60000	33000	ug/kg	
108-88-3	Toluene	ND	91000	30000	ug/kg	
	m,p-Xylene	ND	120000	45000	ug/kg	
95-47-6	o-Xylene	ND	60000	30000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	450000	240000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	826000	330000	180000	ug/kg	
	C9- C10 Aromatics (Unadj.)	343000	120000	60000	ug/kg	
	C5- C8 Aliphatics	ND	450000	240000	ug/kg	
	C9- C12 Aliphatics	483000	330000	180000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	0% ^a		70-130%
460-00-4	BFB	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3326-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24414-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.5
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13703.D	200	06/10/04	SM	06/01/04	OP10562	GZF637
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	80000	32000	ug/kg	
208-96-8	Acenaphthylene	ND	80000	32000	ug/kg	
120-12-7	Anthracene	ND	80000	32000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	80000	32000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	80000	32000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	80000	32000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	80000	32000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	80000	32000	ug/kg	
218-01-9	Chrysene	ND	80000	32000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	80000	32000	ug/kg	
206-44-0	Fluoranthene	ND	80000	32000	ug/kg	
86-73-7	Fluorene	ND	80000	32000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	80000	32000	ug/kg	
91-57-6	2-Methylnaphthalene	ND	80000	32000	ug/kg	
91-20-3	Naphthalene	ND	80000	32000	ug/kg	
85-01-8	Phenanthrene	ND	80000	32000	ug/kg	
129-00-0	Pyrene	ND	80000	32000	ug/kg	
	C11-C22 Aromatics (Unadj.)	3840000	1600000	1600000	ug/kg	
	C9-C18 Aliphatics	18100000	1600000	1600000	ug/kg	
	C11-C22 Aromatics	3840000	1600000	1600000	ug/kg	
	C19-C36 Aliphatics	3170000	1600000	1600000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F24414
COC Number: 102420-PP3326-052604



Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest										
Project Name					Project Location					Analysis Desired										
CAMP LEJEUNE - Paradise Point 3326					CAMP LEJEUNE, NC															
Project Number		Contact			P.O. Number			Reviewed by												
102420		Mark Martin																		
Client Rep					Project Manager															
US NAVY - LANTDIV					Ron Kenyon															
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	MADEP EFF	MADEP VPH	8260	8270									
1	3326-NW-001	5/26/04	9:30		X	Excavation North Wall	4	X	X											
2	3326-SW-002	5/26/04	9:40		X	Excavation South Wall	4	X	X											
3	3326-EW-003	5/26/04	9:50		X	Excavation East Wall	4	X	X											
4	3326-WW-004	5/26/04	10:00		X	Excavation West Wall	4	X	X	X	X									
5																				
6																				
7																				
8																				
9																				
10																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 4	<i>[Signature]</i>	FEDEX	5/26/04	16:00	7 Day TAT
2		<i>[Signature]</i>	<i>[Signature]</i>	5/27/04	09:20	
3						

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F24414: Chain of Custody

Page 1 of 2



Southeast

06/08/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3330

102420

Accutest Job Number: F24415

Sampling Date: 05/26/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 59



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24415

Camp Lejeune-Paradise Point 3330
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F24415-1	05/26/04	10:30 MM	05/27/04	SO	Soil	3330-NW-001
F24415-2	05/26/04	10:40 MM	05/27/04	SO	Soil	3330-SW-002
F24415-3	05/26/04	10:50 MM	05/27/04	SO	Soil	3330-EW-003
F24415-4	05/26/04	11:00 MM	05/27/04	SO	Soil	3330-WW-004
F24415-5	05/26/04	11:10 MM	05/27/04	SO	Soil	3330-F-005
F24415-6	05/26/04	11:00 MM	05/27/04	SO	Soil	3330-WW-004D

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	3330-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24415-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.2
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013484.D	1	06/04/04	NJ	n/a	n/a	GUV809
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.37 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	460	180	ug/kg	
100-41-4	Ethylbenzene	ND	460	230	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1400	460	ug/kg	
91-20-3	Naphthalene	643	910	500	ug/kg	J
108-88-3	Toluene	ND	1400	460	ug/kg	
	m,p-Xylene	ND	1800	690	ug/kg	
95-47-6	o-Xylene	ND	910	460	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	6900	3700	ug/kg	
	C9- C12 Aliphatics (Unadj.)	15600	5000	2700	ug/kg	
	C9- C10 Aromatics (Unadj.)	11900	1800	910	ug/kg	
	C5- C8 Aliphatics	ND	6900	3700	ug/kg	
	C9- C12 Aliphatics	3550	5000	2700	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	92%		70-130%
460-00-4	BFB	93%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3330-NW-001

Lab Sample ID: F24415-1

Date Sampled: 05/26/04

Matrix: SO - Soil

Date Received: 05/27/04

Method: MADEP-EPH-98-1 SW846 3550B

Percent Solids: 81.2

Project: Camp Lejeune-Paradise Point 3330

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13654.D	25	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.6 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	10000	4000	ug/kg	
208-96-8	Acenaphthylene	ND	10000	4000	ug/kg	
120-12-7	Anthracene	ND	10000	4000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	10000	4000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	10000	4000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	10000	4000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	10000	4000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	10000	4000	ug/kg	
218-01-9	Chrysene	ND	10000	4000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	10000	4000	ug/kg	
206-44-0	Fluoranthene	ND	10000	4000	ug/kg	
86-73-7	Fluorene	ND	10000	4000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10000	4000	ug/kg	
91-57-6	2-Methylnaphthalene	ND	10000	4000	ug/kg	
91-20-3	Naphthalene	ND	10000	4000	ug/kg	
85-01-8	Phenanthrene	ND	10000	4000	ug/kg	
129-00-0	Pyrene	ND	10000	4000	ug/kg	
	C11-C22 Aromatics (Unadj.)	757000	200000	200000	ug/kg	
	C9-C18 Aliphatics	1910000	200000	200000	ug/kg	
	C11-C22 Aromatics	757000	200000	200000	ug/kg	
	C19-C36 Aliphatics	695000	200000	200000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H025710.D	1	06/02/04	NAF	05/27/04 12:58	n/a	VH960
Run #2							

Run #	Initial Weight
Run #1	5.50 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	58	29	ug/kg	
71-43-2	Benzene	ND	5.8	2.3	ug/kg	
75-27-4	Bromodichloromethane	ND	5.8	2.3	ug/kg	
75-25-2	Bromoform	ND	5.8	2.3	ug/kg	
108-90-7	Chlorobenzene	ND	5.8	2.3	ug/kg	
75-00-3	Chloroethane	ND	5.8	2.3	ug/kg	
67-66-3	Chloroform	ND	5.8	2.3	ug/kg	
75-15-0	Carbon disulfide	ND	5.8	2.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.8	2.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.8	2.3	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.8	3.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.8	2.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.8	2.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.8	2.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.8	2.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	2.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.8	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	2.3	ug/kg	
100-41-4	Ethylbenzene	ND	5.8	2.3	ug/kg	
591-78-6	2-Hexanone	ND	29	12	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	29	12	ug/kg	
74-83-9	Methyl bromide	ND	5.8	2.3	ug/kg	
74-87-3	Methyl chloride	ND	5.8	2.3	ug/kg	
75-09-2	Methylene chloride	ND	12	5.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	29	12	ug/kg	
100-42-5	Styrene	ND	5.8	2.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.8	2.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	2.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.8	2.3	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.8	2.3	ug/kg	
108-88-3	Toluene	ND	5.8	2.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.8	2.3	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.2
2

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3330		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.8	2.9	ug/kg	
1330-20-7	Xylene (total)	ND	18	5.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		78-123%
2037-26-5	Toluene-D8	114%		71-137%
460-00-4	4-Bromofluorobenzene	102%		61-157%
17060-07-0	1,2-Dichloroethane-D4	96%		74-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W020210.D	1	06/03/04	ME	05/29/04	OP10551	SW1063
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1100	640	ug/kg	
95-57-8	2-Chlorophenol	ND	210	43	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	43	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	43	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	43	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	430	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	430	85	ug/kg	
95-48-7	2-Methylphenol	ND	210	43	ug/kg	
	3&4-Methylphenol	ND	210	43	ug/kg	
88-75-5	2-Nitrophenol	ND	210	43	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	430	ug/kg	
87-86-5	Pentachlorophenol	ND	1100	430	ug/kg	
108-95-2	Phenol	ND	210	43	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	43	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	43	ug/kg	
83-32-9	Acenaphthene	ND	210	43	ug/kg	
208-96-8	Acenaphthylene	ND	210	43	ug/kg	
120-12-7	Anthracene	ND	210	43	ug/kg	
56-55-3	Benzo(a)anthracene	ND	210	43	ug/kg	
50-32-8	Benzo(a)pyrene	ND	210	43	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	210	43	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	210	85	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	210	43	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	210	43	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	430	110	ug/kg	
100-51-6	Benzyl Alcohol	ND	210	43	ug/kg	
91-58-7	2-Chloronaphthalene	ND	210	43	ug/kg	
106-47-8	4-Chloroaniline	ND	850	320	ug/kg	
86-74-8	Carbazole	ND	210	43	ug/kg	
218-01-9	Chrysene	ND	210	43	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	210	43	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	210	85	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3330		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	210	43	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	210	43	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	210	43	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	210	43	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	210	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	210	85	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	210	85	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	430	210	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	85	ug/kg	
132-64-9	Dibenzofuran	ND	210	43	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	430	110	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	430	210	ug/kg	
84-66-2	Diethyl phthalate	ND	430	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	430	110	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	430	210	ug/kg	
206-44-0	Fluoranthene	ND	210	43	ug/kg	
86-73-7	Fluorene	ND	210	43	ug/kg	
118-74-1	Hexachlorobenzene	ND	210	43	ug/kg	
87-68-3	Hexachlorobutadiene	ND	210	85	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	210	85	ug/kg	
67-72-1	Hexachloroethane	ND	210	85	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	210	85	ug/kg	
78-59-1	Isophorone	ND	210	43	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	43	ug/kg	
88-74-4	2-Nitroaniline	ND	430	110	ug/kg	
99-09-2	3-Nitroaniline	ND	430	110	ug/kg	
100-01-6	4-Nitroaniline	ND	430	110	ug/kg	
91-20-3	Naphthalene	ND	210	43	ug/kg	
98-95-3	Nitrobenzene	ND	210	43	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	210	85	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	43	ug/kg	
85-01-8	Phenanthrene	ND	210	43	ug/kg	
129-00-0	Pyrene	ND	210	85	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	210	43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		45-114%
4165-62-2	Phenol-d5	74%		44-124%
118-79-6	2,4,6-Tribromophenol	77%		50-128%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3330		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		41-123%
321-60-8	2-Fluorobiphenyl	68%		46-122%
1718-51-0	Terphenyl-d14	85%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013464.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.30 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	300	120	ug/kg	
100-41-4	Ethylbenzene	ND	300	150	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	910	300	ug/kg	
91-20-3	Naphthalene	ND	610	330	ug/kg	
108-88-3	Toluene	ND	910	300	ug/kg	
	m,p-Xylene	ND	1200	450	ug/kg	
95-47-6	o-Xylene	ND	610	300	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4500	2400	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3300	1800	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1200	610	ug/kg	
	C5- C8 Aliphatics	ND	4500	2400	ug/kg	
	C9- C12 Aliphatics	ND	3300	1800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	88%		70-130%
460-00-4	BFB	88%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3330-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24415-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	77.9
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13626.D	1	06/05/04	ME	06/02/04	OP10573	GZF634
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	420	170	ug/kg	
208-96-8	Acenaphthylene	ND	420	170	ug/kg	
120-12-7	Anthracene	ND	420	170	ug/kg	
56-55-3	Benzo(a)anthracene	ND	420	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	420	170	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	420	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	420	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	420	170	ug/kg	
218-01-9	Chrysene	ND	420	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	420	170	ug/kg	
206-44-0	Fluoranthene	ND	420	170	ug/kg	
86-73-7	Fluorene	ND	420	170	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	420	170	ug/kg	
91-57-6	2-Methylnaphthalene	ND	420	170	ug/kg	
91-20-3	Naphthalene	ND	420	170	ug/kg	
85-01-8	Phenanthrene	ND	420	170	ug/kg	
129-00-0	Pyrene	ND	420	170	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	8400	8400	ug/kg	
	C9-C18 Aliphatics	ND	8400	8400	ug/kg	
	C11-C22 Aromatics	ND	8400	8400	ug/kg	
	C19-C36 Aliphatics	ND	8400	8400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	65%		40-140%
580-13-2	2-Bromonaphthalene	91%		40-140%
84-15-1	o-Terphenyl	82%		40-140%
321-60-8	2-Fluorobiphenyl	92%		40-140%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.3
2

Client Sample ID:	3330-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24415-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	74.6
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3330		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013465.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	320	130	ug/kg	
100-41-4	Ethylbenzene	ND	320	160	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	950	320	ug/kg	
91-20-3	Naphthalene	ND	640	350	ug/kg	
108-88-3	Toluene	ND	950	320	ug/kg	
	m,p-Xylene	ND	1300	480	ug/kg	
95-47-6	o-Xylene	ND	640	320	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4800	2500	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3500	1900	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1300	640	ug/kg	
	C5- C8 Aliphatics	ND	4800	2500	ug/kg	
	C9- C12 Aliphatics	ND	3500	1900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	85%		70-130%
460-00-4	BFB	85%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3330-EW-003

Lab Sample ID: F24415-3

Matrix: SO - Soil

Method: MADEP-EPH-98-1 SW846 3550B

Project: Camp Lejeune-Paradise Point 3330

Date Sampled: 05/26/04

Date Received: 05/27/04

Percent Solids: 74.6

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13630.D	1	06/06/04	ME	06/02/04	OP10573	GZF634
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	450	180	ug/kg	
208-96-8	Acenaphthylene	ND	450	180	ug/kg	
120-12-7	Anthracene	ND	450	180	ug/kg	
56-55-3	Benzo(a)anthracene	ND	450	180	ug/kg	
50-32-8	Benzo(a)pyrene	ND	450	180	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	450	180	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	450	180	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	450	180	ug/kg	
218-01-9	Chrysene	ND	450	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	450	180	ug/kg	
206-44-0	Fluoranthene	ND	450	180	ug/kg	
86-73-7	Fluorene	ND	450	180	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	450	180	ug/kg	
91-57-6	2-Methylnaphthalene	ND	450	180	ug/kg	
91-20-3	Naphthalene	ND	450	180	ug/kg	
85-01-8	Phenanthrene	ND	450	180	ug/kg	
129-00-0	Pyrene	ND	450	180	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	8900	8900	ug/kg	
	C9-C18 Aliphatics	ND	8900	8900	ug/kg	
	C11-C22 Aromatics	ND	8900	8900	ug/kg	
	C19-C36 Aliphatics	ND	8900	8900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	67%		40-140%
580-13-2	2-Bromonaphthalene	84%		40-140%
84-15-1	o-Terphenyl	76%		40-140%
321-60-8	2-Fluorobiphenyl	90%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3330-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24415-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	84.5
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013466.D	1	06/03/04	NJ	n/a	n/a	GUV807
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.97 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	30000	12000	ug/kg	
100-41-4	Ethylbenzene	ND	30000	15000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	89000	30000	ug/kg	
91-20-3	Naphthalene	51300	60000	33000	ug/kg	J
108-88-3	Toluene	ND	89000	30000	ug/kg	
	m,p-Xylene	ND	120000	45000	ug/kg	
95-47-6	o-Xylene	ND	60000	30000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	450000	240000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	2140000	330000	180000	ug/kg	
	C9- C10 Aromatics (Unadj.)	1260000	120000	60000	ug/kg	
	C5- C8 Aliphatics	ND	450000	240000	ug/kg	
	C9- C12 Aliphatics	863000	330000	180000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	0% ^a		70-130%
460-00-4	BFB	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3330-WW-004

Lab Sample ID: F24415-4

Matrix: SO - Soil

Method: MADEP-EPH-98-1 SW846 3550B

Project: Camp Lejeune-Paradise Point 3330

Date Sampled: 05/26/04

Date Received: 05/27/04

Percent Solids: 84.5

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13655.D	200	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	79000	32000	ug/kg	
208-96-8	Acenaphthylene	ND	79000	32000	ug/kg	
120-12-7	Anthracene	ND	79000	32000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	79000	32000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	79000	32000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	79000	32000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	79000	32000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	79000	32000	ug/kg	
218-01-9	Chrysene	ND	79000	32000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	79000	32000	ug/kg	
206-44-0	Fluoranthene	ND	79000	32000	ug/kg	
86-73-7	Fluorene	ND	79000	32000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	79000	32000	ug/kg	
91-57-6	2-Methylnaphthalene	105000	79000	32000	ug/kg	
91-20-3	Naphthalene	ND	79000	32000	ug/kg	
85-01-8	Phenanthrene	ND	79000	32000	ug/kg	
129-00-0	Pyrene	ND	79000	32000	ug/kg	
	C11-C22 Aromatics (Unadj.)	7860000	1600000	1600000	ug/kg	
	C9-C18 Aliphatics	11400000	1600000	1600000	ug/kg	
	C11-C22 Aromatics	7700000	1600000	1600000	ug/kg	
	C19-C36 Aliphatics	2110000	1600000	1600000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3330-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24415-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	82.2
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013487.D	1	06/04/04	NJ	n/a	n/a	GUV809
Run #2 ^a	UV013470.D	1	06/03/04	NJ	n/a	n/a	GUV808

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	50.0 ul
Run #2	5.14 g	5.0 ml	100 ul

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	590	240	ug/kg	
100-41-4	Ethylbenzene	ND	590	300	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1800	590	ug/kg	
91-20-3	Naphthalene	1170	1200	650	ug/kg	J
108-88-3	Toluene	ND	1800	590	ug/kg	
	m,p-Xylene	ND	2400	890	ug/kg	
95-47-6	o-Xylene	ND	1200	590	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	8900	4700	ug/kg	
	C9- C12 Aliphatics (Unadj.)	36300	6500	3600	ug/kg	
	C9- C10 Aromatics (Unadj.)	21600	2400	1200	ug/kg	
	C5- C8 Aliphatics	ND	8900	4700	ug/kg	
	C9- C12 Aliphatics	13700	6500	3600	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	78%	92%	70-130%
460-00-4	BFB	84%	94%	70-130%

(a) Confirmation run.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3330-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24415-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	82.2
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3330		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13633.D	10	06/06/04	ME	06/02/04	OP10573	GZF634
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4000	1600	ug/kg	
208-96-8	Acenaphthylene	ND	4000	1600	ug/kg	
120-12-7	Anthracene	ND	4000	1600	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4000	1600	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4000	1600	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4000	1600	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4000	1600	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4000	1600	ug/kg	
218-01-9	Chrysene	ND	4000	1600	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4000	1600	ug/kg	
206-44-0	Fluoranthene	ND	4000	1600	ug/kg	
86-73-7	Fluorene	ND	4000	1600	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4000	1600	ug/kg	
91-57-6	2-Methylnaphthalene	ND	4000	1600	ug/kg	
91-20-3	Naphthalene	ND	4000	1600	ug/kg	
85-01-8	Phenanthrene	ND	4000	1600	ug/kg	
129-00-0	Pyrene	ND	4000	1600	ug/kg	
	C11-C22 Aromatics (Unadj.)	127000	80000	80000	ug/kg	
	C9-C18 Aliphatics	415000	80000	80000	ug/kg	
	C11-C22 Aromatics	127000	80000	80000	ug/kg	
	C19-C36 Aliphatics	108000	80000	80000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	64%		40-140%
580-13-2	2-Bromonaphthalene	99%		40-140%
84-15-1	o-Terphenyl	92%		40-140%
321-60-8	2-Fluorobiphenyl	95%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2

Client Sample ID: 3330-WW-004D

Lab Sample ID: F24415-6

Date Sampled: 05/26/04

Matrix: SO - Soil

Date Received: 05/27/04

Method: MADEP VPH

Percent Solids: 86.0

Project: Camp Lejeune-Paradise Point 3330

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013473.D	1	06/04/04	NJ	n/a	n/a	GUV808
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.74 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	31000	12000	ug/kg	
100-41-4	Ethylbenzene	ND	31000	15000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	92000	31000	ug/kg	
91-20-3	Naphthalene	52100	61000	34000	ug/kg	J
108-88-3	Toluene	ND	92000	31000	ug/kg	
	m,p-Xylene	ND	120000	46000	ug/kg	
95-47-6	o-Xylene	ND	61000	31000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	460000	250000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	1860000	340000	180000	ug/kg	
	C9- C10 Aromatics (Unadj.)	999000	120000	61000	ug/kg	
	C5- C8 Aliphatics	ND	460000	250000	ug/kg	
	C9- C12 Aliphatics	794000	340000	180000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	0% ^a		70-130%
460-00-4	BFB	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: 3330-WW-004D

Lab Sample ID: F24415-6

Date Sampled: 05/26/04

Matrix: SO - Soil

Date Received: 05/27/04

Method: MADEP-EPH-98-1 SW846 3550B

Percent Solids: 86.0

Project: Camp Lejeune-Paradise Point 3330

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13656.D	200	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	77000	31000	ug/kg	
208-96-8	Acenaphthylene	ND	77000	31000	ug/kg	
120-12-7	Anthracene	ND	77000	31000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	77000	31000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	77000	31000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	77000	31000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	77000	31000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	77000	31000	ug/kg	
218-01-9	Chrysene	ND	77000	31000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	77000	31000	ug/kg	
206-44-0	Fluoranthene	ND	77000	31000	ug/kg	
86-73-7	Fluorene	ND	77000	31000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	77000	31000	ug/kg	
91-57-6	2-Methylnaphthalene	115000	77000	31000	ug/kg	
91-20-3	Naphthalene	ND	77000	31000	ug/kg	
85-01-8	Phenanthrene	ND	77000	31000	ug/kg	
129-00-0	Pyrene	ND	77000	31000	ug/kg	
	C11-C22 Aromatics (Unadj.)	9600000	1500000	1500000	ug/kg	
	C9-C18 Aliphatics	12900000	1500000	1500000	ug/kg	
	C11-C22 Aromatics	9420000	1500000	1500000	ug/kg	
	C19-C36 Aliphatics	2300000	1500000	1500000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



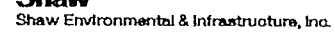
Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COE Number
102420-PP3330-0502604



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06/08/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3332

102420

Accutest Job Number: F24416

Sampling Date: 05/26/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 65



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24416

Camp Lejeune-Paradise Point 3332
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F24416-1	05/26/04	11:20 MM	05/27/04	SO	Soil	3332-NW-001
F24416-2	05/26/04	11:30 MM	05/27/04	SO	Soil	3332-SW-002
F24416-3	05/26/04	11:40 MM	05/27/04	SO	Soil	3332-EW-003
F24416-4	05/26/04	11:50 MM	05/27/04	SO	Soil	3332-WW-004
F24416-5	05/26/04	12:00 MM	05/27/04	SO	Soil	3332-F-005
F24416-6	05/26/04	00:00 MM	05/27/04	AQ	Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: 3332-NW-001
 Lab Sample ID: F24416-1
 Matrix: SO - Soil
 Method: MADEP VPH
 Project: Camp Lejeune-Paradise Point 3332

Date Sampled: 05/26/04
 Date Received: 05/27/04
 Percent Solids: 87.0

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013474.D	1	06/04/04	NJ	n/a	n/a	GUV808
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.24 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	27000	11000	ug/kg	
100-41-4	Ethylbenzene	ND	27000	14000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	82000	27000	ug/kg	
91-20-3	Naphthalene	34400	55000	30000	ug/kg	J
108-88-3	Toluene	ND	82000	27000	ug/kg	
	m,p-Xylene	ND	110000	41000	ug/kg	
	o-Xylene	ND	55000	27000	ug/kg	
95-47-6	C5- C8 Aliphatics (Unadj.)	ND	410000	220000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	1280000	300000	160000	ug/kg	
	C9- C10 Aromatics (Unadj.)	668000	110000	55000	ug/kg	
	C5- C8 Aliphatics	ND	410000	220000	ug/kg	
	C9- C12 Aliphatics	580000	300000	160000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	0% ^a		70-130%
460-00-4	BFB	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected
 = Reporting Limit
 indicates value exceeds calibration range

MDL - Method Detection Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24416-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	87.0
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13657.D	200	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	76000	31000	ug/kg	
208-96-8	Acenaphthylene	ND	76000	31000	ug/kg	
120-12-7	Anthracene	ND	76000	31000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	76000	31000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	76000	31000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	76000	31000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	76000	31000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	76000	31000	ug/kg	
218-01-9	Chrysene	ND	76000	31000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	76000	31000	ug/kg	
206-44-0	Fluoranthene	ND	76000	31000	ug/kg	
86-73-7	Fluorene	ND	76000	31000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	76000	31000	ug/kg	
91-57-6	2-Methylnaphthalene	94400	76000	31000	ug/kg	
91-20-3	Naphthalene	ND	76000	31000	ug/kg	
85-01-8	Phenanthrene	ND	76000	31000	ug/kg	
129-00-0	Pyrene	ND	76000	31000	ug/kg	
	C11-C22 Aromatics (Unadj.)	4770000	1500000	1500000	ug/kg	
	C9-C18 Aliphatics	14600000	1500000	1500000	ug/kg	
	C11-C22 Aromatics	4640000	1500000	1500000	ug/kg	
	C19-C36 Aliphatics	2510000	1500000	1500000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	3332-SW-002						
Lab Sample ID:	F24416-2				Date Sampled:	05/26/04	
Matrix:	SO - Soil				Date Received:	05/27/04	
Method:	SW846 8260B SW846 5035				Percent Solids:	81.9	
Project:	Camp Lejeune-Paradise Point 3332						

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	H025778.D	1	06/05/04	NAF	05/27/04 14:20	n/a	VH963
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.55 g	5.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2800	1400	ug/kg	
71-43-2	Benzene	ND	280	110	ug/kg	
75-27-4	Bromodichloromethane	ND	280	110	ug/kg	
75-25-2	Bromoform	ND	280	110	ug/kg	
108-90-7	Chlorobenzene	ND	280	110	ug/kg	
75-00-3	Chloroethane	ND	280	110	ug/kg	
67-66-3	Chloroform	ND	280	110	ug/kg	
75-15-0	Carbon disulfide	ND	280	110	ug/kg	
56-23-5	Carbon tetrachloride	ND	280	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	280	110	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	280	170	ug/kg	
107-06-2	1,2-Dichloroethane	ND	280	110	ug/kg	
78-87-5	1,2-Dichloropropane	ND	280	110	ug/kg	
124-48-1	Dibromochloromethane	ND	280	110	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	280	110	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	280	110	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	280	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	280	110	ug/kg	
100-41-4	Ethylbenzene	191	280	110	ug/kg	J
591-78-6	2-Hexanone	ND	1400	550	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1400	550	ug/kg	
74-83-9	Methyl bromide	ND	280	110	ug/kg	
74-87-3	Methyl chloride	ND	280	110	ug/kg	
75-09-2	Methylene chloride	ND	550	280	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1400	550	ug/kg	
100-42-5	Styrene	ND	280	110	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	280	110	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	280	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	280	110	ug/kg	
127-18-4	Tetrachloroethylene	ND	280	110	ug/kg	
108-88-3	Toluene	ND	280	110	ug/kg	
79-01-6	Trichloroethylene	ND	280	110	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 3332-SW-002
Lab Sample ID: F24416-2
Matrix: SO - Soil
Method: SW846 8260B SW846 5035
Project: Camp Lejeune-Paradise Point 3332

Date Sampled: 05/26/04
Date Received: 05/27/04
Percent Solids: 81.9

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	280	140	ug/kg	
1330-20-7	Xylene (total)	1890	830	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		78-123%
2037-26-5	Toluene-D8	98%		71-137%
460-00-4	4-Bromofluorobenzene	101%		61-157%
17060-07-0	1,2-Dichloroethane-D4	98%		74-125%

(a) Methanol extract analysis required due to matrix interference (non-target analytes present above calibration range).

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3332-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24416-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021714.D	10	06/03/04	ME	05/29/04	OP10551	SL1168
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	10000	6100	ug/kg	
95-57-8	2-Chlorophenol	ND	2000	410	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2000	410	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2000	410	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2000	410	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	10000	4100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	4100	810	ug/kg	
95-48-7	2-Methylphenol	ND	2000	410	ug/kg	
	3&4-Methylphenol	ND	2000	410	ug/kg	
88-75-5	2-Nitrophenol	ND	2000	410	ug/kg	
100-02-7	4-Nitrophenol	ND	10000	4100	ug/kg	
87-86-5	Pentachlorophenol	ND	10000	4100	ug/kg	
108-95-2	Phenol	ND	2000	410	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2000	410	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2000	410	ug/kg	
83-32-9	Acenaphthene	1330	2000	410	ug/kg	J
208-96-8	Acenaphthylene	ND	2000	2000	ug/kg	
120-12-7	Anthracene	ND	2000	410	ug/kg	
56-55-3	Benzo(a)anthracene	ND	2000	410	ug/kg	
50-32-8	Benzo(a)pyrene	ND	2000	410	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	2000	410	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	2000	810	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	2000	410	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	2000	410	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	4100	1000	ug/kg	
100-51-6	Benzyl Alcohol	ND	2000	410	ug/kg	
91-58-7	2-Chloronaphthalene	ND	2000	410	ug/kg	
106-47-8	4-Chloroaniline	ND	8100	3000	ug/kg	
86-74-8	Carbazole	ND	2000	410	ug/kg	
218-01-9	Chrysene	ND	2000	410	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	2000	410	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	2000	810	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3332-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24416-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2000	410	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2000	410	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2000	410	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2000	410	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2000	410	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2000	2000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2000	810	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	4100	2000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	2000	810	ug/kg	
132-64-9	Dibenzofuran	746	2000	410	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	4100	1000	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	4100	2000	ug/kg	
84-66-2	Diethyl phthalate	ND	4100	1000	ug/kg	
131-11-3	Dimethyl phthalate	ND	4100	1000	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4100	2000	ug/kg	
206-44-0	Fluoranthene	ND	2000	410	ug/kg	
86-73-7	Fluorene	2050	2000	410	ug/kg	
118-74-1	Hexachlorobenzene	ND	2000	410	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2000	810	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2000	810	ug/kg	
67-72-1	Hexachloroethane	ND	2000	810	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2000	810	ug/kg	
78-59-1	Isophorone	ND	2000	410	ug/kg	
91-57-6	2-Methylnaphthalene	14100	2000	410	ug/kg	
88-74-4	2-Nitroaniline	ND	4100	1000	ug/kg	
99-09-2	3-Nitroaniline	ND	4100	1000	ug/kg	
100-01-6	4-Nitroaniline	ND	4100	1000	ug/kg	
91-20-3	Naphthalene	4520	2000	410	ug/kg	
98-95-3	Nitrobenzene	ND	2000	410	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	2000	810	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	2000	410	ug/kg	
85-01-8	Phenanthrene	3160	2000	410	ug/kg	
129-00-0	Pyrene	ND	2000	810	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2000	410	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	84%		45-114%
4165-62-2	Phenol-d5	89%		44-124%
118-79-6	2,4,6-Tribromophenol	94%		50-128%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3332-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24416-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	111%		41-123%
321-60-8	2-Fluorobiphenyl	109%		46-122%
1718-51-0	Terphenyl-d14	94%		45-135%

(a) Dilution required due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 3332-SW-002

Lab Sample ID: F24416-2

Matrix: SO - Soil

Method: MADEP VPH

Project: Camp Lejeune-Paradise Point 3332

Date Sampled: 05/26/04

Date Received: 05/27/04

Percent Solids: 81.9

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013488.D	1	06/04/04	NJ	n/a	n/a	GUV809
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	5.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6000	2400	ug/kg	
100-41-4	Ethylbenzene	ND	6000	3000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	18000	6000	ug/kg	
91-20-3	Naphthalene	6690	12000	6600	ug/kg	J
108-88-3	Toluene	ND	18000	6000	ug/kg	
	m,p-Xylene	ND	24000	9000	ug/kg	
95-47-6	o-Xylene	ND	12000	6000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	90000	48000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	405000	66000	36000	ug/kg	
	C9- C10 Aromatics (Unadj.)	238000	24000	12000	ug/kg	
	C5- C8 Aliphatics	ND	90000	48000	ug/kg	
	C9- C12 Aliphatics	162000	66000	36000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	75%		70-130%
460-00-4	BFB	65% ^a		70-130%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3332-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24416-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.9
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13658.D	100	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	40000	16000	ug/kg	
208-96-8	Acenaphthylene	ND	40000	16000	ug/kg	
120-12-7	Anthracene	ND	40000	16000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	40000	16000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	40000	16000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40000	16000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40000	16000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40000	16000	ug/kg	
218-01-9	Chrysene	ND	40000	16000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40000	16000	ug/kg	
206-44-0	Fluoranthene	ND	40000	16000	ug/kg	
86-73-7	Fluorene	ND	40000	16000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	40000	16000	ug/kg	
91-57-6	2-Methylnaphthalene	ND	40000	16000	ug/kg	
91-20-3	Naphthalene	ND	40000	16000	ug/kg	
85-01-8	Phenanthrene	ND	40000	16000	ug/kg	
129-00-0	Pyrene	ND	40000	16000	ug/kg	
	C11-C22 Aromatics (Unadj.)	1610000	800000	800000	ug/kg	
	C9-C18 Aliphatics	7180000	800000	800000	ug/kg	
	C11-C22 Aromatics	1610000	800000	800000	ug/kg	
	C19-C36 Aliphatics	1300000	800000	800000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3332-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24416-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013489.D	1	06/04/04	NJ	n/a	n/a	GUV809
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.32 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	280	110	ug/kg	
100-41-4	Ethylbenzene	ND	280	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	850	280	ug/kg	
91-20-3	Naphthalene	ND	570	310	ug/kg	
108-88-3	Toluene	ND	850	280	ug/kg	
	m,p-Xylene	ND	1100	430	ug/kg	
95-47-6	o-Xylene	ND	570	280	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	3100	1700	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1100	570	ug/kg	
	C5- C8 Aliphatics	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics	ND	3100	1700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	89%		70-130%
460-00-4	BFB	89%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3332-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24416-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13637.D	1	06/06/04	ME	06/02/04	OP10573	GZF634
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	390	160	ug/kg	
208-96-8	Acenaphthylene	ND	390	160	ug/kg	
120-12-7	Anthracene	ND	390	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	390	160	ug/kg	
50-32-8	Benzo(a)pyrene	ND	390	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	390	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	390	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	390	160	ug/kg	
218-01-9	Chrysene	ND	390	160	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	390	160	ug/kg	
206-44-0	Fluoranthene	ND	390	160	ug/kg	
86-73-7	Fluorene	ND	390	160	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	390	160	ug/kg	
91-57-6	2-Methylnaphthalene	ND	390	160	ug/kg	
91-20-3	Naphthalene	ND	390	160	ug/kg	
85-01-8	Phenanthrene	ND	390	160	ug/kg	
129-00-0	Pyrene	ND	390	160	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	7900	7900	ug/kg	
	C9-C18 Aliphatics	ND	7900	7900	ug/kg	
	C11-C22 Aromatics	ND	7900	7900	ug/kg	
	C19-C36 Aliphatics	ND	7900	7900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	44%		40-140%
580-13-2	2-Bromonaphthalene	85%		40-140%
84-15-1	o-Terphenyl	74%		40-140%
321-60-8	2-Fluorobiphenyl	82%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.4
2

Client Sample ID: 3332-WW-004

Lab Sample ID: F24416-4

Date Sampled: 05/26/04

Matrix: SO - Soil

Date Received: 05/27/04

Method: MADEP VPH

Percent Solids: 80.6

Project: Camp Lejeune-Paradise Point 3332

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013490.D	1	06/04/04	NJ	n/a	n/a	GUV809
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	50.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	620	250	ug/kg	
100-41-4	Ethylbenzene	ND	620	310	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1900	620	ug/kg	
91-20-3	Naphthalene	ND	1200	680	ug/kg	
108-88-3	Toluene	ND	1900	620	ug/kg	
	m,p-Xylene	ND	2500	930	ug/kg	
95-47-6	o-Xylene	ND	1200	620	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	9300	5000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	35500	6800	3700	ug/kg	
	C9- C10 Aromatics (Unadj.)	28100	2500	1200	ug/kg	
	C5- C8 Aliphatics	ND	9300	5000	ug/kg	
	C9- C12 Aliphatics	7390	6800	3700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	93%		70-130%
460-00-4	BFB	94%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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2.4
2

Client Sample ID:	3332-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24416-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	80.6
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13660.D	20	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	8300	3300	ug/kg	
208-96-8	Acenaphthylene	ND	8300	3300	ug/kg	
120-12-7	Anthracene	ND	8300	3300	ug/kg	
56-55-3	Benzo(a)anthracene	ND	8300	3300	ug/kg	
50-32-8	Benzo(a)pyrene	ND	8300	3300	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	8300	3300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	8300	3300	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	8300	3300	ug/kg	
218-01-9	Chrysene	ND	8300	3300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	8300	3300	ug/kg	
206-44-0	Fluoranthene	ND	8300	3300	ug/kg	
86-73-7	Fluorene	ND	8300	3300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	8300	3300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	8300	3300	ug/kg	
91-20-3	Naphthalene	ND	8300	3300	ug/kg	
85-01-8	Phenanthrene	ND	8300	3300	ug/kg	
129-00-0	Pyrene	ND	8300	3300	ug/kg	
	C11-C22 Aromatics (Unadj.)	368000	170000	170000	ug/kg	
	C9-C18 Aliphatics	988000	170000	170000	ug/kg	
	C11-C22 Aromatics	368000	170000	170000	ug/kg	
	C19-C36 Aliphatics	354000	170000	170000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3332-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24416-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013479.D	1	06/04/04	NJ	n/a	n/a	GUV808
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.42 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	28000	11000	ug/kg	
100-41-4	Ethylbenzene	ND	28000	14000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	85000	28000	ug/kg	
91-20-3	Naphthalene	44800	56000	31000	ug/kg	J
108-88-3	Toluene	ND	85000	28000	ug/kg	
	m,p-Xylene	ND	110000	42000	ug/kg	
95-47-6	o-Xylene	ND	56000	28000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	420000	230000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	823000	310000	170000	ug/kg	
	C9- C10 Aromatics (Unadj.)	329000	110000	56000	ug/kg	
	C5- C8 Aliphatics	ND	420000	230000	ug/kg	
	C9- C12 Aliphatics	454000	310000	170000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	0% ^a		70-130%
460-00-4	BFB	0% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3332-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24416-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	81.7
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13661.D	40	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16000	6500	ug/kg	
208-96-8	Acenaphthylene	ND	16000	6500	ug/kg	
120-12-7	Anthracene	ND	16000	6500	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16000	6500	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16000	6500	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16000	6500	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16000	6500	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16000	6500	ug/kg	
218-01-9	Chrysene	ND	16000	6500	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	16000	6500	ug/kg	
206-44-0	Fluoranthene	ND	16000	6500	ug/kg	
86-73-7	Fluorene	ND	16000	6500	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16000	6500	ug/kg	
91-57-6	2-Methylnaphthalene	9280	16000	6500	ug/kg	J
91-20-3	Naphthalene	ND	16000	6500	ug/kg	
85-01-8	Phenanthrene	ND	16000	6500	ug/kg	
129-00-0	Pyrene	ND	16000	6500	ug/kg	
	C11-C22 Aromatics (Unadj.)	903000	330000	330000	ug/kg	
	C9-C18 Aliphatics	2850000	330000	330000	ug/kg	
	C11-C22 Aromatics	893000	330000	330000	ug/kg	
	C19-C36 Aliphatics	612000	330000	330000	ug/kg	
	C20	ND	16000		ug/kg	
	C28	ND	16000		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	05/26/04
Lab Sample ID:	F24416-6	Date Received:	05/27/04
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Camp Lejeune-Paradise Point 3332		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J008243.D	1	06/04/04	RA	n/a	n/a	VJ352
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	12.1	2.0	0.50	ug/l	
75-25-2	Bromoform	ND	2.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	1.0	ug/l	
67-66-3	Chloroform	31.9	2.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	2.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
124-48-1	Dibromochloromethane	4.4	2.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	2.5	ug/l	
74-83-9	Methyl bromide	ND	2.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.5	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.30	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	05/26/04
Lab Sample ID:	F24416-6	Date Received:	05/27/04
Matrix:	AQ - Trip Blank Soil	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Camp Lejeune-Paradise Point 3332		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		86-115%
17060-07-0	1,2-Dichloroethane-D4	103%		73-126%
2037-26-5	Toluene-D8	93%		86-112%
460-00-4	4-Bromofluorobenzene	99%		83-119%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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2

Client Sample ID: TRIP BLANK
 Lab Sample ID: F24416-6
 Matrix: AQ - Trip Blank Soil
 Method: MADEP VPH
 Project: Camp Lejeune-Paradise Point 3332

Date Sampled: 05/26/04
 Date Received: 05/27/04
 Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	UV013424.D	1	06/02/04	NJ	n/a	n/a	GUV805
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	15	5.0	ug/l	
91-20-3	Naphthalene	ND	10	5.0	ug/l	
108-88-3	Toluene	ND	15	5.0	ug/l	
	m,p-Xylene	ND	20	7.5	ug/l	
95-47-6	o-Xylene	ND	10	5.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	75	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	55	30	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	20	10	ug/l	
	C5- C8 Aliphatics	ND	75	50	ug/l	
	C9- C12 Aliphatics	ND	55	30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	91%		70-130%
460-00-4	BFB	86%		70-130%

(a) Sample was not preserved to a pH < 2.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



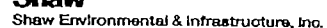
Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PP3332-052604



Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390											Receiving LAB: Accutest									
Project Name				Project Location				Analysis Desired												
CAMP LEJEUNE - Paradise Point 3332				CAMP LEJEUNE, NC				MADEP EPH	MADEP VPH	8260	8270									
Project Number		Contact		P.O. Number		Reviewed by														
102420		Mark Martin																		
Client Rep				Project Manager																
US NAVY - LANTDIV				Ron Kenyon																
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers													
1	3332-NW-001	5/26/04	11:20		X	Excavation North Wall	4	X	X											
2	3332-SW-002	5/26/04	11:30		X	Excavation South Wall	6	X	X	X	X									
3	3332-EW-003	5/26/04	11:40		X	Excavation East Wall	4	X	X											
4	3332-WW-004	5/26/04	11:50		X	Excavation West Wall	4	X	X											
5	3332-F-005	5/26/04	12:00		X	Excavation Floor	4	X	X											
6	Trip Blank	5/26/04	---		X	Trip Blank	2		X											
7																				
8																				
9																				
10																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 -- 7	<i>[Signature]</i>	FedEx	5/26/2004	16:00	7 Day TAT
2		<i>FX</i>	<i>[Signature]</i>	5/27/04	09:10	
3						

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Southeast

06/10/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3350

102420

Accutest Job Number: F24417

Sampling Date: 05/26/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 55



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24417

Camp Lejeune-Paradise Point 3350
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F24417-1	05/26/04	14:00 MM	05/27/04	SO Soil	3350-NW-001
F24417-2	05/26/04	14:10 MM	05/27/04	SO Soil	3350-SW-002
F24417-3	05/26/04	14:20 MM	05/27/04	SO Soil	3350-EW-003
F24417-4	05/26/04	14:30 MM	05/27/04	SO Soil	3350-WW-004
F24417-5	05/26/04	14:40 MM	05/27/04	SO Soil	3350-F-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24417-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	88.0
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013532.D	1	06/07/04	NJ	n/a	n/a	GUV812
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.50 g	5.0 ml	20.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1300	520	ug/kg	
100-41-4	Ethylbenzene	ND	1300	650	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3900	1300	ug/kg	
91-20-3	Naphthalene	1730	2600	1400	ug/kg	J
108-88-3	Toluene	ND	3900	1300	ug/kg	
	m,p-Xylene	ND	5200	1900	ug/kg	
95-47-6	o-Xylene	ND	2600	1300	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	19000	10000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	136000	14000	7700	ug/kg	
	C9- C10 Aromatics (Unadj.)	87900	5200	2600	ug/kg	
	C5- C8 Aliphatics	ND	19000	10000	ug/kg	
	C9- C12 Aliphatics	47200	14000	7700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	92%		70-130%
460-00-4	BFB	84%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-NW-001	Date Sampled:	05/26/04
Lab Sample ID:	F24417-1	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	88.0
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13641.D	10	06/06/04	ME	06/02/04	OP10573	GZF634
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	3700	1500	ug/kg	
208-96-8	Acenaphthylene	ND	3700	1500	ug/kg	
120-12-7	Anthracene	ND	3700	1500	ug/kg	
56-55-3	Benzo(a)anthracene	ND	3700	1500	ug/kg	
50-32-8	Benzo(a)pyrene	ND	3700	1500	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	3700	1500	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	3700	1500	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	3700	1500	ug/kg	
218-01-9	Chrysene	ND	3700	1500	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	3700	1500	ug/kg	
206-44-0	Fluoranthene	ND	3700	1500	ug/kg	
86-73-7	Fluorene	ND	3700	1500	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	3700	1500	ug/kg	
91-57-6	2-Methylnaphthalene	4450	3700	1500	ug/kg	
91-20-3	Naphthalene	ND	3700	1500	ug/kg	
85-01-8	Phenanthrene	ND	3700	1500	ug/kg	
129-00-0	Pyrene	ND	3700	1500	ug/kg	
	C11-C22 Aromatics (Unadj.)	424000	75000	75000	ug/kg	
	C9-C18 Aliphatics	717000	75000	75000	ug/kg	
	C11-C22 Aromatics	417000	75000	75000	ug/kg	
	C19-C36 Aliphatics	108000	75000	75000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	56%		40-140%
580-13-2	2-Bromonaphthalene	109%		40-140%
84-15-1	o-Terphenyl	128%		40-140%
321-60-8	2-Fluorobiphenyl	106%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24417-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013495.D	1	06/04/04	NJ	n/a	n/a	GUV810
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.97 g	5.0 ml	2.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	19000	7500	ug/kg	
100-41-4	Ethylbenzene	ND	19000	9300	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	56000	19000	ug/kg	
91-20-3	Naphthalene	ND	37000	21000	ug/kg	
108-88-3	Toluene	ND	56000	19000	ug/kg	
	m,p-Xylene	ND	75000	28000	ug/kg	
95-47-6	o-Xylene	ND	37000	19000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	280000	150000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	403000	210000	110000	ug/kg	
	C9- C10 Aromatics (Unadj.)	147000	75000	37000	ug/kg	
	C5- C8 Aliphatics	ND	280000	150000	ug/kg	
	C9- C12 Aliphatics	255000	210000	110000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	107%		70-130%
460-00-4	BFB	90%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3350-SW-002	Date Sampled:	05/26/04
Lab Sample ID:	F24417-2	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	67.3
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13662.D	40	06/07/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20000	7900	ug/kg	
208-96-8	Acenaphthylene	ND	20000	7900	ug/kg	
120-12-7	Anthracene	ND	20000	7900	ug/kg	
56-55-3	Benzo(a)anthracene	ND	20000	7900	ug/kg	
50-32-8	Benzo(a)pyrene	ND	20000	7900	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	20000	7900	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	20000	7900	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	20000	7900	ug/kg	
218-01-9	Chrysene	ND	20000	7900	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	20000	7900	ug/kg	
206-44-0	Fluoranthene	ND	20000	7900	ug/kg	
86-73-7	Fluorene	ND	20000	7900	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20000	7900	ug/kg	
91-57-6	2-Methylnaphthalene	ND	20000	7900	ug/kg	
91-20-3	Naphthalene	ND	20000	7900	ug/kg	
85-01-8	Phenanthrene	ND	20000	7900	ug/kg	
129-00-0	Pyrene	ND	20000	7900	ug/kg	
	C11-C22 Aromatics (Unadj.)	1060000	400000	400000	ug/kg	
	C9-C18 Aliphatics	2000000	400000	400000	ug/kg	
	C11-C22 Aromatics	1060000	400000	400000	ug/kg	
	C19-C36 Aliphatics	ND	400000	400000	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%		
580-13-2	2-Bromonaphthalene	0% ^a		40-140%		
84-15-1	o-Terphenyl	0% ^a		40-140%		
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3350-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24417-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013496.D	1	06/04/04	NJ	n/a	n/a	GUV810
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.53 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	280	110	ug/kg	
100-41-4	Ethylbenzene	ND	280	140	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	850	280	ug/kg	
91-20-3	Naphthalene	ND	570	310	ug/kg	
108-88-3	Toluene	ND	850	280	ug/kg	
	m,p-Xylene	ND	1100	430	ug/kg	
95-47-6	o-Xylene	ND	570	280	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics (Unadj.)	10000	3100	1700	ug/kg	
	C9- C10 Aromatics (Unadj.)	4850	1100	570	ug/kg	
	C5- C8 Aliphatics	ND	4300	2300	ug/kg	
	C9- C12 Aliphatics	5200	3100	1700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	88%		70-130%
460-00-4	BFB	91%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3350-EW-003	Date Sampled:	05/26/04
Lab Sample ID:	F24417-3	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	79.7
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13670.D	1	06/09/04	SM	06/02/04	OP10573	GZF636
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	410	160	ug/kg	
208-96-8	Acenaphthylene	ND	410	160	ug/kg	
120-12-7	Anthracene	ND	410	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	410	160	ug/kg	
50-32-8	Benzo(a)pyrene	ND	410	160	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	410	160	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	410	160	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	410	160	ug/kg	
218-01-9	Chrysene	ND	410	160	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	410	160	ug/kg	
206-44-0	Fluoranthene	ND	410	160	ug/kg	
86-73-7	Fluorene	ND	410	160	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	410	160	ug/kg	
91-57-6	2-Methylnaphthalene	ND	410	160	ug/kg	
91-20-3	Naphthalene	ND	410	160	ug/kg	
85-01-8	Phenanthrene	ND	410	160	ug/kg	
129-00-0	Pyrene	ND	410	160	ug/kg	
	C11-C22 Aromatics (Unadj.)	ND	8200	8200	ug/kg	
	C9-C18 Aliphatics	ND	8200	8200	ug/kg	
	C11-C22 Aromatics	ND	8200	8200	ug/kg	
	C19-C36 Aliphatics	ND	8200	8200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	56%		40-140%
580-13-2	2-Bromonaphthalene	118%		40-140%
84-15-1	o-Terphenyl	86%		40-140%
321-60-8	2-Fluorobiphenyl	119%		40-140%

ND = Not detected MDL - Method Detection Limit
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Report of Analysis

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Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H025711.D	1	06/02/04	NAF	05/27/04 15:12	n/a	VH960
Run #2							

Run #	Initial Weight
Run #1	5.00 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	55	28	ug/kg	
71-43-2	Benzene	ND	5.5	2.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	2.2	ug/kg	
75-25-2	Bromoform	ND	5.5	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.5	2.2	ug/kg	
67-66-3	Chloroform	ND	5.5	2.2	ug/kg	
75-15-0	Carbon disulfide	ND	5.5	2.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	2.2	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.5	3.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	2.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.5	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	5.5	2.2	ug/kg	
591-78-6	2-Hexanone	ND	28	11	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	28	11	ug/kg	
74-83-9	Methyl bromide	ND	5.5	2.2	ug/kg	
74-87-3	Methyl chloride	ND	5.5	2.2	ug/kg	
75-09-2	Methylene chloride	ND	11	5.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	28	11	ug/kg	
100-42-5	Styrene	ND	5.5	2.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	2.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.5	2.2	ug/kg	
108-88-3	Toluene	ND	5.5	2.2	ug/kg	
79-01-6	Trichloroethylene	ND	5.5	2.2	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3350		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	2.8	ug/kg	
1330-20-7	Xylene (total)	ND	17	5.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		78-123%
2037-26-5	Toluene-D8	112%		71-137%
460-00-4	4-Bromofluorobenzene	104%		61-157%
17060-07-0	1,2-Dichloroethane-D4	97%		74-125%

ND = Not detected MDL - Method Detection Limit
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Report of Analysis

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Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W020212.D	1	06/03/04	ME	05/29/04	OP10551	SW1063
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	910	550	ug/kg	
95-57-8	2-Chlorophenol	ND	180	37	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	37	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	37	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	37	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	910	370	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	370	73	ug/kg	
95-48-7	2-Methylphenol	ND	180	37	ug/kg	
	3&4-Methylphenol	ND	180	37	ug/kg	
88-75-5	2-Nitrophenol	ND	180	37	ug/kg	
100-02-7	4-Nitrophenol	ND	910	370	ug/kg	
87-86-5	Pentachlorophenol	ND	910	370	ug/kg	
108-95-2	Phenol	ND	180	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	37	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	37	ug/kg	
83-32-9	Acenaphthene	ND	180	37	ug/kg	
208-96-8	Acenaphthylene	ND	180	37	ug/kg	
120-12-7	Anthracene	ND	180	37	ug/kg	
56-55-3	Benzo(a)anthracene	ND	180	37	ug/kg	
50-32-8	Benzo(a)pyrene	ND	180	37	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	180	37	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	180	73	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	180	37	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	180	37	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	370	91	ug/kg	
100-51-6	Benzyl Alcohol	ND	180	37	ug/kg	
91-58-7	2-Chloronaphthalene	ND	180	37	ug/kg	
106-47-8	4-Chloroaniline	ND	730	270	ug/kg	
86-74-8	Carbazole	ND	180	37	ug/kg	
218-01-9	Chrysene	ND	180	37	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	180	37	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	180	73	ug/kg	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	180	37	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	180	37	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	180	37	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	180	37	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	180	37	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	180	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	180	73	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	370	180	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	180	73	ug/kg	
132-64-9	Dibenzofuran	ND	180	37	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	370	91	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	370	180	ug/kg	
84-66-2	Diethyl phthalate	ND	370	91	ug/kg	
131-11-3	Dimethyl phthalate	ND	370	91	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	370	180	ug/kg	
206-44-0	Fluoranthene	ND	180	37	ug/kg	
86-73-7	Fluorene	ND	180	37	ug/kg	
118-74-1	Hexachlorobenzene	ND	180	37	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	73	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	180	73	ug/kg	
67-72-1	Hexachloroethane	ND	180	73	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	180	73	ug/kg	
78-59-1	Isophorone	ND	180	37	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	37	ug/kg	
88-74-4	2-Nitroaniline	ND	370	91	ug/kg	
99-09-2	3-Nitroaniline	ND	370	91	ug/kg	
100-01-6	4-Nitroaniline	ND	370	91	ug/kg	
91-20-3	Naphthalene	ND	180	37	ug/kg	
98-95-3	Nitrobenzene	ND	180	37	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	180	73	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	37	ug/kg	
85-01-8	Phenanthrene	ND	180	37	ug/kg	
129-00-0	Pyrene	ND	180	73	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		45-114%
4165-62-2	Phenol-d5	76%		44-124%
118-79-6	2,4,6-Tribromophenol	83%		50-128%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	SW846 8270C SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		41-123%
321-60-8	2-Fluorobiphenyl	73%		46-122%
1718-51-0	Terphenyl-d14	90%		45-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

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2.4
2

Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013497.D	1	06/04/04	NJ	n/a	n/a	GUV810
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.44 g	5.0 ml	100 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	250	100	ug/kg	
100-41-4	Ethylbenzene	ND	250	130	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	760	250	ug/kg	
91-20-3	Naphthalene	ND	510	280	ug/kg	
108-88-3	Toluene	ND	760	250	ug/kg	
	m,p-Xylene	ND	1000	380	ug/kg	
95-47-6	o-Xylene	ND	510	250	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	3800	2000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	ND	2800	1500	ug/kg	
	C9- C10 Aromatics (Unadj.)	ND	1000	510	ug/kg	
	C5- C8 Aliphatics	ND	3800	2000	ug/kg	
	C9- C12 Aliphatics	ND	2800	1500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	87%		70-130%
460-00-4	BFB	87%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	3350-WW-004	Date Sampled:	05/26/04
Lab Sample ID:	F24417-4	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	90.3
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	ZF13671.D	1	06/09/04	SM	06/02/04	OP10573	GZF636

Run #1	Initial Weight	Final Volume
Run #2	30.0 g	2.0 ml

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	370	150	ug/kg	
208-96-8	Acenaphthylene	ND	370	150	ug/kg	
120-12-7	Anthracene	ND	370	150	ug/kg	
56-55-3	Benzo(a)anthracene	ND	370	150	ug/kg	
50-32-8	Benzo(a)pyrene	ND	370	150	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	370	150	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	370	150	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	370	150	ug/kg	
218-01-9	Chrysene	ND	370	150	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	370	150	ug/kg	
206-44-0	Fluoranthene	ND	370	150	ug/kg	
86-73-7	Fluorene	ND	370	150	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	370	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	370	150	ug/kg	
91-20-3	Naphthalene	ND	370	150	ug/kg	
85-01-8	Phenanthrene	ND	370	150	ug/kg	
129-00-0	Pyrene	ND	370	150	ug/kg	
	C11-C22 Aromatics (Unadj.)	8680	7400	7400	ug/kg	
	C9-C18 Aliphatics	29200	7400	7400	ug/kg	
	C11-C22 Aromatics	8680	7400	7400	ug/kg	
	C19-C36 Aliphatics	11900	7400	7400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	60%		40-140%
580-13-2	2-Bromonaphthalene	118%		40-140%
84-15-1	o-Terphenyl	86%		40-140%
321-60-8	2-Fluorobiphenyl	120%		40-140%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24417-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	88.7
Method:	MADEP VPH		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013498.D	1	06/04/04	NJ	n/a	n/a	GUV810
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.51 g	5.0 ml	1.0 ul
Run #2			

MADEP VPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	31000	12000	ug/kg	
100-41-4	Ethylbenzene	ND	31000	16000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	94000	31000	ug/kg	
91-20-3	Naphthalene	35800	62000	34000	ug/kg	J
108-88-3	Toluene	ND	94000	31000	ug/kg	
	m,p-Xylene	ND	120000	47000	ug/kg	
95-47-6	o-Xylene	ND	62000	31000	ug/kg	
	C5- C8 Aliphatics (Unadj.)	ND	470000	250000	ug/kg	
	C9- C12 Aliphatics (Unadj.)	1460000	340000	190000	ug/kg	
	C9- C10 Aromatics (Unadj.)	710000	120000	62000	ug/kg	
	C5- C8 Aliphatics	ND	470000	250000	ug/kg	
	C9- C12 Aliphatics	747000	340000	190000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	BFB	213% ^a		70-130%
460-00-4	BFB	180% ^a		70-130%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	3350-F-005	Date Sampled:	05/26/04
Lab Sample ID:	F24417-5	Date Received:	05/27/04
Matrix:	SO - Soil	Percent Solids:	88.7
Method:	MADEP-EPH-98-1 SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3350		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF13665.D	40	06/08/04	SM	06/02/04	OP10573	GZF635
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	15000	6000	ug/kg	
208-96-8	Acenaphthylene	ND	15000	6000	ug/kg	
120-12-7	Anthracene	ND	15000	6000	ug/kg	
56-55-3	Benzo(a)anthracene	ND	15000	6000	ug/kg	
50-32-8	Benzo(a)pyrene	ND	15000	6000	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	15000	6000	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	15000	6000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	15000	6000	ug/kg	
218-01-9	Chrysene	ND	15000	6000	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	15000	6000	ug/kg	
206-44-0	Fluoranthene	ND	15000	6000	ug/kg	
86-73-7	Fluorene	ND	15000	6000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	15000	6000	ug/kg	
91-57-6	2-Methylnaphthalene	27800	15000	6000	ug/kg	
91-20-3	Naphthalene	ND	15000	6000	ug/kg	
85-01-8	Phenanthrene	ND	15000	6000	ug/kg	
129-00-0	Pyrene	ND	15000	6000	ug/kg	
	C11-C22 Aromatics (Unadj.)	2140000	300000	300000	ug/kg	
	C9-C18 Aliphatics	2210000	300000	300000	ug/kg	
	C11-C22 Aromatics	2100000	300000	300000	ug/kg	
	C19-C36 Aliphatics	325000	300000	300000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	0% ^a		40-140%
580-13-2	2-Bromonaphthalene	0% ^a		40-140%
84-15-1	o-Terphenyl	0% ^a		40-140%
321-60-8	2-Fluorobiphenyl	0% ^a		40-140%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F24417

COC Number:
102420-PP3350-052604

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest									
Project Name					Project Location					Analysis Desired									
CAMP LEJEUNE - Paradise Point 3350					CAMP LEJEUNE, NC														
Project Number		Contact			P.O. Number		Reviewed by												
102420		Mark Martin																	
Client Rep					Project Manager														
US NAVY - LANTDIV					Ron Kenyon														
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	MADEP EPH	MADEP VPH	8260	8270								
1	3350-NW-001	5/26/04	14:00		X	Excavation North Wall	4	X	X										
2	3350-SW-002	5/26/04	14:10		X	Excavation South Wall	4	X	X										
3	3350-EW-003	5/26/04	14:20		X	Excavation East Wall	4	X	X										
4	3350-WW-004	5/26/04	14:30		X	Excavation West Wall	6	X	X	X	X								
5	3350-F-005	5/26/04	14:40		X	Excavation Floor	4	X	X										
6																			
7																			
8																			
9																			
10																			

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 -- 6	<i>[Signature]</i>	FEDEX	5/7/04	16:00	7 Day TAT
2		<i>FK</i>	<i>Calvin B</i>	5/27/04	09:00	
3						

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F24417: Chain of Custody

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APPENDIX F

Soil Disposal Sample Laboratory Analytical Reports

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Southeast

06/02/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-Paradise Point 3326

102420

Accutest Job Number: F24342

Sampling Date: 05/21/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 49



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F24342

Camp Lejeune-Paradise Point 3326
Project No: 102420

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F24342-1	05/21/04	13:00 MM	05/22/04	SO Soil	PP-COPM-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8260B SW846 5035		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B022185.D	10	06/02/04	KW	05/25/04	OP10521	VB962
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	105%		83-119%
17060-07-0	1,2-Dichloroethane-D4	89%		73-126%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8270C SW846 1311		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L021685.D	1	06/01/04	ME	05/28/04	OP10544	SL1166
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.020	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.10	0.030	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		19-90%
4165-62-2	Phenol-d5	37%		10-68%
118-79-6	2,4,6-Tribromophenol	96%		36-137%
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	90%		45-118%
1718-51-0	Terphenyl-d14	98%		46-135%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8015 SW846 5035		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	UV013340.D	1	05/26/04	NJ	05/22/04 12:55	n/a	GUV799
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.15 g	5.0 ml	10.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	195	60	30	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	63%		62-135%		
98-08-8	aaa-Trifluorotoluene	76%		65-118%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8151		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a		1	05/28/04	SUB	n/a	n/a	R13143
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.10	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.010	mg/l	

(a) Analyzed By Accutest Southeast Subcontract Lab.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8081A SW846 1311		
Project:	Camp Lejeune-Paradise Point 3326		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK03426.D	1	05/28/04	SKW	05/28/04	OP10543	GKK121
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		60-138%
2051-24-3	Decachlorobiphenyl	98%		31-148%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8015 M SW846 3550B		
Project:	Camp Lejeune-Paradise Point 3326		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19979.D	100	05/26/04	SM	05/25/04	OP10515	GIJ974
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	7230	1000	620	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	0% ^a		65-118%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

2.1
2

Client Sample ID: PP-COPM-1	Date Sampled: 05/21/04
Lab Sample ID: F24342-1	Date Received: 05/22/04
Matrix: SO - Soil	Percent Solids: 80.3
Project: Camp Lejeune-Paradise Point 3326	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.010	D004	5.0	0.010	0.0028	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Barium	0.092 B	D005	100	1.0	0.00050	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Cadmium	0.00030 U	D006	1.0	0.0050	0.00030	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Chromium	0.0013 B	D007	5.0	0.010	0.00040	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Lead	0.046 B	D008	5.0	0.050	0.0012	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	05/26/04	05/26/04 SM	SW846 7470A ²
Selenium	0.0020 U	D010	1.0	0.050	0.0020	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹
Silver	0.00060 U	D011	5.0	0.010	0.00060	mg/l	1	05/26/04	05/26/04 DM	SW846 6010B ¹

(1) Instrument QC Batch: MA3818

(2) Instrument QC Batch: MA3819

(3) Prep QC Batch: MP6726

(4) Prep QC Batch: MP6727

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Page 1 of 1

Client Sample ID:	PP-COPM-1	Date Sampled:	05/21/04
Lab Sample ID:	F24342-1	Date Received:	05/22/04
Matrix:	SO - Soil	Percent Solids:	80.3
Project:	Camp Lejeune-Paradise Point 3326		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.4			1	05/29/04	SJL	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	05/29/04	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	05/29/04	SJL	SW846 1010
Solids, Percent	80.3		%	1	05/24/04	LE	EPA 160.3 M
Sulfide Reactivity	< 62	62	mg/kg	1	05/31/04	SJL	SW846 CHAP7

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
102420-PP-052104-2

Shaw **F24342**
Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390										Receiving LAB: Accutest										
Project Name CAMP LEJEUNE - PP					Project Location CAMP LEJEUNE, NC					Analysis Desired										
Project Number 102420		Contact Mark Martin			P.O. Number			Reviewed by												
Client Rep US NAVY - LANTDIV					Project Manager Ron Kenyon															
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	Full TCLP	URC	TPH (DRO/GRO)										
1	PP-COPM-1	6/21/04	13:00	X		Comp. of Soil Piles for PP	2	X	X	X										
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1	<i>[Signature]</i>	8436 4375 7116 FedEx	6/21/04	16:00	- PLEASE FAX RESULTS TO 910-451-1809
2		<i>[Signature]</i>	<i>[Signature]</i>	6/21/04	1000	or e-mail, Mark.Martin@shawgrp.com
3						5 Day TAT

3.4°