



Post Office Box 10279
Wilmington, NC 28404-0279
Telephone: (910) 452-5861
Fax: (910) 452-7563

December 16, 2004

Commander
Naval Facilities Engineering Command
Atlantic Division
6506 Hampton Blvd., Bldg. A, Room 1306
Norfolk, VA 23508

Attention: EV23DC Mr. David Cleland, P.G.

Re: **FINAL** Soil Assessment Report
Building AS-4158
Marine Corps Air Station
New River, North Carolina
Navy Contract No. N62470-01-D-3009
Delivery Order No. 0119
CATLIN Project No. 204-037

Dear Mr. Cleland:

CATLIN Engineers and Scientists (CATLIN) are pleased to submit the FINAL Soil Assessment Report for the above referenced site. We have reviewed the comments to the referenced draft report, made the appropriate changes to the final report and offer the following responses to the comments/concerns offered by Ms. Nikki Hall via a telephone conference call on December 7, 2004.

Executive Summary

- **3rd paragraph - Insert "on" after based.**

Acknowledged. Text has been changed.

Site History

- **2nd paragraph, first sentence - Change "10,000" to 4,000 and delete "flight line" after AS-4158.**

Acknowledged. Text has been changed.

- **3rd paragraph - Change "two" to one. Change "USTs" to ASTs. Delete last sentence in paragraph.**

Acknowledged. Text has been changed.

Tables

- **Table 1 - Change "10,000" to 4,000 for Diesel ASTs.**

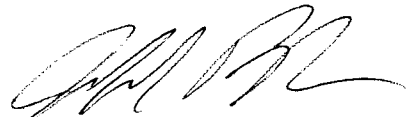
Acknowledged. Text has been changed.

CATLIN Engineers and Scientists appreciates the opportunity to continue to provide services to LANTDIV and the MCB on your environmental projects.

Sincerely,



Michael E. Mason, P.E.
CATLIN Program Manager



Jeffery K. Becken, P.E.
CATLIN Engineer

Attachments: Final Report

cc: Ms. Pamela Argilan, - Code AQ11B Contracts, correspondence only
Commanding General, Attn: Director I&E/EMD/EQB (w/two attachments)

204037_finalrpt_1ltr.doc

SOIL ASSESSMENT REPORT
FOR
BUILDING AS-4158
MARINE CORPS AIR STATION
NEW RIVER, NORTH CAROLINA

NCDENR UST INCIDENT NO. 10804
RICK CLASSIFICATION: HIGH RISK
LAND USE CLASSIFICATION: INDUSTRIAL/COMMERCIAL

DECEMBER 16, 2004

CONTRACT NO. N62470-01-D-3009
DELIVERY ORDER NO. 0119
CATLIN PROJECT NO. 204-037



PREPARED BY:
CATLIN ENGINEERS AND SCIENTISTS
P. O. BOX 10279
WILMINGTON, NORTH CAROLINA 28404-0279
(910) 452-5861

REPRODUCTIONS

This report has been prepared on behalf of and exclusively for the use of NAVFAC Atlantic. This report and findings contained herein shall not, in whole or in part, be disseminated or conveyed to any parties other than NAVFAC Atlantic, or be used or relied upon by any other party, in whole or in part, without the prior written consent of NAVFAC Atlantic and CATLIN Engineers and Scientists.

TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF ACRONYMS	i
A. TITLE PAGE	1
B. EXECUTIVE SUMMARY	2
C. SITE HISTORY	3
D. RECEPTOR INFORMATION	4
E. SITE GEOLOGY	4
F. SOIL INVESTIGATION	5
G. CONCLUSIONS AND RECOMMENDATIONS	5
H. PROPOSED REMEDY FOR SOIL CONTAMINATION	6
I. LIMITATIONS	6
J. REFERENCES	7

TABLES

TABLE 1	SITE HISTORY – UST & AST SYSTEM INFORMATION
TABLE 2	SITE HISTORY - UST OWNER/OPERATOR INFORMATION
TABLE 3A	SUMMARY OF SOIL LABORATORY RESULTS – EPA METHOD 8260B/5035
TABLE 3B	SUMMARY OF SOIL LABORATORY RESULTS – EPA METHOD 8270
TABLE 3C	SUMMARY OF SOIL LABORATORY RESULTS – MADEP VPH/EPH
TABLE 3D	SUMMARY OF SOIL LABORATORY RESULTS – MADEP VPH/EPH AS COMPARED TO NCDENR MSCCs
TABLE 4	SUMMARY OF GROUNDWATER LABORATORY RESULTS (NOT USED)
TABLE 5	WATER SUPPLY WELL INFORMATION (NOT USED)
TABLE 6	PROPERTY OWNERS/OCCUPANTS (NOT USED)
TABLE 7	WELL CONSTRUCTION INFORMATION (NOT USED)

FIGURES

FIGURE 1	SITE LOCATION AND WATER SURVEY
FIGURE 2	SITE LOCATION WITH PLACES OF PUBLIC ASSEMBLY
FIGURE 3	SITE PLAN WITH UTILITIES
FIGURE 4A	SITE PLAN WITH SOIL LABORATORY RESULTS – EPA METHOD 8260B/5035
FIGURE 4B	SITE PLAN WITH SOIL LABORATORY RESULTS – EPA METHOD 8270
FIGURE 4C	SITE PLAN WITH SOIL LABORATORY RESULTS – MADEP EPH/VPH AS COMPARED TO NCDENR MSCCs
FIGURE 5	SITE PLAN WITH GROUNDWATER LABORATORY RESULTS (NOT USED)
FIGURE 6A	CROSS-SECTION – PLAN VIEW (NOT USED)
FIGURE 6B	CROSS-SECTION – A-A' (NOT USED)
FIGURE 6C	CROSS-SECTION – B-B' (NOT USED)

APPENDICES

APPENDIX A	BORING LOGS
APPENDIX B	NORTH CAROLINA WELL CONSTRUCTION RECORDS (NOT USED)
APPENDIX C	FIELD MEASUREMENTS (NOT USED)
APPENDIX D	STANDARD PROCEDURES
APPENDIX E	LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

LIST OF ACRONYMS

2000 Guidelines	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater
2001 Guidelines	Guidelines for Assessment and Corrective Action, North Carolina Underground Storage Tank Section (Effective July 1, 2001)
2L GWQS	NCAC T15A:02L Groundwater Quality Standards
ARO	Asheville Regional Office
AS	Air Sparge
AST	Aboveground Storage Tank
BDL	Below Detection Limit
BN	Base/Neutral (extractables)
BNA	Base/Neutral/Acid (extractables)
BQL	Below Quantitation Limit
BLS	Below Land Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAP	Corrective Action Plan
CATLIN	CATLIN Engineers and Scientists (Formerly RC&A)
CFR	Code of Federal Regulations
Cr	Chromium
CSA	Comprehensive Site Assessment
CNP	Carbon Nitrogen Phosphorous
CPT	Cone Penetrometer Test
DEM	Division of Environmental Management
DIPE	Diisopropyl Ether
DO	Dissolved Oxygen
DOD	Department of Defense
DPT	Direct Push Technology
DWQ	Division of Water Quality
DWM	Division of Waste Management
DTW	Depth to Water
EAD	Environmental Affairs Department
EDB	Ethylene di-bromide
EMD	Environmental Management Division
EPA	Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbons
EQB	Environmental Quality Branch
Fe	Iron
FID	Flame Ionization Detector
FOD	Foreign Object Debris
FRO	Fayetteville Regional Office
FT	Feet
GCL	Gross Contaminant Level
GIS	Geographic Information System
GPS	Global Positioning System

Guidelines Vol. I	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume I, Sources Other Than Petroleum Underground Storage Tanks (May 1998)
Guidelines Vol. II	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume II, Petroleum Underground Storage Tanks (January 2, 1998)
HDPE	High Density Polyethylene
I/C	Industrial/Commercial
ID	Identification
I&E	Installations and Environment Department
IGWQS	Interim Groundwater Quality Standards
IPE	Isopropyl Ether
LANTDIV	Atlantic Division
LSA	Limited Site Assessment
LUST	Leaking Underground Storage Tank
m-	meta
m	meter
MADEP	Massachusetts Department of Environmental Protection
MCALF	Marine Corps Auxiliary Landing Field
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCOLF	Marine Corps Outlying Landing Field
MDL	Method Detection Limit
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Litre
MRO	Mooresville Regional Office
MSCC	Maximum Soil Contaminant Concentration
MSL	Mean Sea Level
MTBE	Methyl tertiary butyl ether
µg/Kg	Micrograms per Kilogram
µg/L	Micrograms per Litre
NA	Not Analyzed
N/A	Not Applicable
NC	North Carolina
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environment and Natural Resources
NCDOC	North Carolina Department of Corrections
NCDOT	North Carolina Department of Transportation
NCSP	North Carolina State Plane
NCSPA	North Carolina State Ports Authority
NE	None Established
NM	Not Measured
NMT	No Measurable Thickness
NS	Not Sampled
o-	ortho
OVA	Organic Vapor Analyzer
p-	para
PAH	Polynuclear Aromatic Hydrocarbons
Pb	Lead
PPB	Parts Per Billion
PPM	Parts Per Million

PID	Photo Ionization Detector
PQL	Practical Quantitation Limit
PVC	Polyvinyl chloride
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
Res	Residential
ROI	Radius of Influence
RRO	Raleigh Regional Office
SOW	Scope of Work
STGW	Soil-to-Groundwater
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
TDHF	Toxicologically Defined Hydrocarbons Fractions
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TOC	Top of Casing
TPH	Total Petroleum Hydrocarbons
US	United States
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons
WaRO	Washington Regional Office
WiRO	Wilmington Regional Office
WSRO	Winston-Salem Regional Office

SOIL ASSESSMENT REPORT (SAR)

A. TITLE PAGE

DATE OF REPORT: December 16, 2004
Facility ID: N/A UST Incident Number (if known): 10804
Site Name: Building AS-4158
Site Location: Marine Corps Air Station, New River
Nearest City/Town: New River County: Onslow
Risk Classification: High Land Use Classification: Industrial/Commercial

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

UST Operator: Same as above
Address: Same as above Phone: Same as above

Property Owner: Same as above
Address: Same as above Phone: Same as above

Property Occupant: Same as above
Address: Unknown Phone: Unknown

Consultant/Contractor: CATLIN Engineers and Scientists
Address: 220 Old Dairy Road, Wilmington, North Carolina 28405 Phone: (910) 452-5861

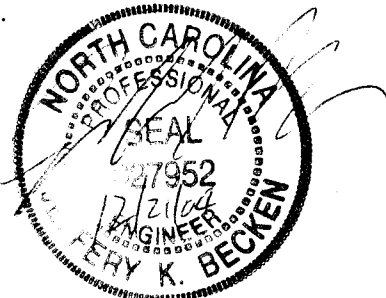
Release Information

Date Discovered: August 18, 1992
Longitude: 34° 42' 42" N Latitude: 77° 27' 27" W
Estimated Quantity of Release: Unknown
Cause of Release: Unknown
Source of Release (e.g. Piping/UST):
Possible leaking UST and/or associated piping.

Sizes and contents of UST system(s) from which the release occurred:
Gasoline and Diesel fuel from three permanently closed 3,000 gallon USTs.

I, Jeffery K. Becken a Professional Engineer Licensed Geologist (circle one) for
CATLIN Engineers and Scientists, do certify that the information contained in this report is correct and
accurate to the best of my knowledge.

(Please Affix Seal and Signature)



B. EXECUTIVE SUMMARY

The project site is located in the vicinity of Building AS-4158 aboard MCAS, New River in Onslow County, North Carolina. The Building AS-4158 project site has historically been and is currently used to provide fuel and maintenance services for MCAS vehicles.

On August 18, 1992, three USTs were removed. The UST closure report indicated that the UST systems had potentially released hydrocarbons into the subsurface. Subsequently, various site assessments were conducted that indicated the presence of soil and groundwater contamination. Based on the findings of these site assessments a Corrective Action Plan (CAP) was prepared and proposed an air sparge/soil vapor extraction system to remediate contaminated soil and groundwater at the Building AS-4158 project site. An air sparge/soil vapor extraction system has been operational at the Building AS-4158 project site since April 1998.

This Soil Assessment Report (SAR) has been prepared based on the soil contamination identified in the previously referenced site assessments and a letter dated March 12, 2004 from Mr. Bruce Reed of the North Carolina Department of Environment and Natural Resources (NCDENR) which requested soils beneath the existing dispensers at the Building AS-4158 project site be evaluated.

Soil samples were collected by the advancement of sixteen direct push probe and/or hand auger soil borings to a depth of four feet below land surface (bls). Based on the results of the soil samples collected during this SAR, it appears that current soil conditions exhibit no soil contamination above the laboratory quantitation limits for soils in the vicinity of the former USTs and pipelines. Therefore, no additional soil remediation activities are warranted at this time.

C. SITE HISTORY

The Building AS-4158 project site has historically been and is currently used to provide fuel and maintenance services for MCAS vehicles located aboard MCAS, New River in Onslow County, North Carolina. The site vicinity is presented on Figure 1 and the site layout is presented on Figure 3.

According to information presented in a Final Annual Monitoring Report prepared by Shaw Environmental, Inc. (Shaw) dated January 2004, two 4,000 gallon ASTs currently store diesel fuel at the Building AS-4158 project site. The diesel fuel is transported from the ASTs to the dispensers located adjacent to the Building AS-4158 via an underground pipeline. The ASTs are replacements for three USTs that were used prior to August 18, 1992. One of the USTs was utilized to store gasoline and had a capacity of 3,000 gallons. The additional two USTs were utilized to store diesel fuel and each had a capacity of 3,000 gallons. The USTs and associated piping were reportedly excavated and removed from the subgrade or rendered non-usable in August 1992 as reported by Environmental and Regulatory Consultants, Inc. (ERC). The UST/AST history and owner information is included on Tables 1 and 2.

Additionally, a 1,000 gallon used oil AST has reportedly been present at the Building AS-4158 project.

According to the UST closure report prepared by ERC, soils located beneath the USTs were not submitted for laboratory analysis due to the apparent presence of liquid phase hydrocarbon on water that accumulated with the excavation. The findings reported by ERC indicated a potential release from the UST system.

Groundwater Technology Government Services (GTGS) performed a three well site check in March and April 1993. The activities conducted by GTGS included the advancement of three soil borings that were converted in to monitoring wells identified as MW-1, MW-2 and MW-3. Soil samples were collected from each of these borings for laboratory analyses of total petroleum hydrocarbons (TPH) as diesel and gasoline. Laboratory results from soil samples collected from the borings associated with MW-1 and MW-3 did not identify detectable concentrations of TPH-Diesel or TPH-Gasoline. TPH-Diesel concentrations of 99 mg/Kg and non-detectable concentrations of TPH-Gasoline were observed in soil samples collected from the borings associated with MW-2.

Law Engineering, Inc. (LAW) prepared a Site Assessment Report dated October 4, 1994 that presented the findings of additional soil and groundwater investigations at the Building AS-4158 project site. The assessment activities included the analyses of soil samples for TPH-Diesel and TPH-Gasoline, pH, flashpoint and total lead. LAW reported that the majority of soil contamination appears to be located within the immediate vicinity and downgradient of the former UST system. Groundwater contamination and free-phase product were also reportedly present at the Building AS-4158 project site.

Based on the findings of the Site Assessment Report prepared by LAW, Richard Catlin and Associates, Inc. (now known as CATLIN Engineers and Scientists (CATLIN)) prepared a

Leaking Underground Storage Tank Corrective Action Plan (CAP) dated September 11, 1995. The CAP proposed an air sparge/soil vapor extraction system to remediate contaminated soil and groundwater at the Building AS-4158 project site. JA Jones Environmental Services Company (JA Jones) constructed and operated the remediation system from start-up in April 1998 through January 2003. Shaw prepared an Annual Monitoring report dated January 2004 that documented JA Jones' activities between April 1998 and January 2003. Engineering & Environment, Inc. (E&E) began system operation in early 2003 and continues to operate the remediation system.

Based on a review of the above referenced reports, CATLIN identified soil contamination above the final clean-up goal of 40 mg/Kg as TPH-Gasoline and 160 mg/Kg as TPH-Diesel established within the CAP at only one location, monitoring well MW-9. However, no soil samples were collected in the vicinity of the fuel dispensers or inactive pipelines. Mr. Bruce Reed of the NCDENR requested in a letter dated March 12, 2004 that the soils beneath the existing dispensers at the Building AS-4158 project site be evaluated. Therefore, an investigation of the potential soil contamination was conducted and the findings are presented within this SAR report.

D. RECEPTOR INFORMATION

This section of the report is intended to update the potential receptors. CATLIN was not tasked with this activity as part of the scope associated with this project. However, CATLIN is in the process of developing a Remedial Action Optimization Plan for the active remediation system at the project site that will include an evaluation of the current potential receptors in accordance with the current regulatory requirements. Please note that portions of the potential receptors are illustrated on Figures 1, 2, and 3. These Figures will be updated as part of the Remedial Action Optimization Plan.

E. SITE GEOLOGY

As identified in the Geologic Map of North Carolina (North Carolina Department of Natural Resources and Community Development, 1985), the subject site lies within the Coastal Plain physiographic province. To some degree, seven of the ten aquifers identified to date in the North Carolina Coastal Plain are typically present beneath portions of the MCAS, New River. In order of increasing depth, these aquifers include the Surficial, Castle Hayne, Beaufort, Peedee, Black Creek, and upper and lower Cape Fear aquifers.

Field observations noted during direct push and/or hand auger boring advancement as part of this investigation indicate site geology to be comprised of brown to tan, very fine to fine grained, silty sands to a depth of approximately two feet below ground surface. Grading to a dark brown to orange, silty, very fine to fine grained, clayey sand from approximately two to four feet. Boring logs for the soil boring are included in Appendix A. The soils encountered during this investigation are comparable to the soils encountered during the previous soil investigations. The cross-sections submitted as part of the Site Assessment Report prepared by LAW are still relevant; therefore, new cross-sections were not prepared as part of this SAR.

F. SOIL INVESTIGATION

On September 20 and 21, 2004, CATLIN personnel conducted a soil sampling event at the Building AS-4158 project site in response to the previously referenced letter from Mr. Bruce Reed of the NCDENR. Additionally, this soil investigation included the assessment of the current soil conditions in the vicinity of the inactive pipelines associated with the former USTs and monitoring wells MW-2 and MW-9 (location of historical soil contamination). Soil samples were collected by the advancement of sixteen direct push probe soil borings to a depth of four feet below land surface (bls) at the locations indicated on Figures 4A through 4C. The soil samples were identified in the field and labeled on the chain of custody as USTAS4158-SB01 (3-4) through USTAS4158-SB16 (3-4). The laboratory reports and chain of custody documentation are provided in Appendix E.

All sampling was conducted in general accordance with CATLIN's Standard Procedures included in Appendix D and the approved Workplan. The soil borings were immediately abandoned with cuttings following the collection of the samples. The soil samples were placed in laboratory glassware, labeled, placed immediately on ice in a cooler, and transported under proper chain of custody protocol to Paradigm Analytical Laboratories, Inc. in Wilmington, North Carolina. Analytical results are summarized as follows:

EPA Method 8260B/5035 (includes DIPE + MTBE)

As indicated in Table 3A and illustrated in Figure 4A, there were no EPA Method 8260B/5035 target compounds detected in the soil samples collected on September 20 and 21, 2004 at concentrations above the laboratory practical quantitation limits.

EPA Method 8270

As indicated in Table 3B and illustrated in Figure 4B, there were no EPA Method 8270 target compounds detected in the soil samples collected on September 20 and 21, 2004 at concentrations above the laboratory practical quantitation limits with the exception of benzoic acid at levels below the lowest Maximum Soil Contaminant Concentration (MSCC) in samples USTAS4158-SB02(3-4), USTAS4158-SB03(3-4), USTAS4158-SB04(3-4).

MADEP VPH/EPH

As indicated in Tables 3C and 3D and illustrated in Figure 4C, there were no MADEP Aliphatic or Aromatic hydrocarbon fractions detected in the soil samples collected on September 20 and 21, 2004 above the laboratory practical quantitation limits.

G. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the soil samples collected during this SAR, it appears that current soil conditions exhibit no soil contamination above the lowest MSCC for soils in the vicinity of

the former USTs and pipelines. Therefore, no additional soil remediation activities are warranted at this time.

H. PROPOSED REMEDY FOR SOIL CONTAMINATION

As stated above, no additional soil remediation activities are warranted at this time.

I. LIMITATIONS

The soil samples analyzed as part of this investigation only provide isolated data points and may not represent conditions at every location in the project area. Analyses and conclusions of this report, being based on interpolation between data points at the project area, may not be completely representative of all site conditions. Conclusions and recommendations of this investigation and report are based on the best available data in an effort to comply with current regulatory requirements.

J. REFERENCES

- Cardinell, A.P. and Others, 1993, *Hydrogeologic Framework of U.S. Marine Corps Base at Camp Lejeune, North Carolina; U.S. Geological Survey Water-Resources Investigation Report 93-4049*: U.S. Geological Survey, Raleigh, North Carolina.
- CATLIN Engineers and Scientists, *Workplan, Building As-4158 Additional Soil Assessment, Marine Corps Air Station, New River, North Carolina*, August 18, 2004.
- Environmental & Regulatory Consultants, Inc., *Tank Removal Report, Marine Corps Air Station, Building AS-4158, New River, North Carolina*, September 15, 1992.
- J.A. Jones Environmental Services Company, *Annual Monitoring Report, Soil and Groundwater Remediation, Building AS-4158, Marine Corps Air Station, New River, North Carolina*, December 2002.
- J.A. Jones Environmental Services Company, *Workplan, RAC Action for Statement of Work Design, Building 45, UST S941-1 and 2 Camp Lejeune, Building TC-912 Camp Geiger, Building TC-341 Camp Geiger, Building AS-4158 MCAS New River*, May 1997.
- LAW Engineering and Environmental Services, *Leaking Underground Storage Tank Site Assessment Report, Building AS-4158, Marine Corps Air Station, Camp Lejeune, North Carolina*, October 4, 1994.
- North Carolina Department of Environment and Natural Resources, Division of Waste Management, UST Section, "Guidelines for Assessment and Corrective Action," effective July 1, 2001.
- Richard Catlin and Associates, Inc., *Leaking Underground Storage Tank Corrective Action Plan*, MCAS New River, North Carolina, September 11, 1995.
- Richard Catlin and Associates, Inc., *Statement of Work Design, Building AS-4158 at the MCAS New River, North Carolina*, May 2, 1996.
- Shaw Environmental, Inc., *Final Annual Monitoring Report, Soil and Groundwater Remediation Building AS-4158, Marine Corps Air Station, New River, North Carolina*, January 2004.
- Stuckey, J.L., 1965, *North Carolina- It's Geology and Mineral Resources*, Raleigh, North Carolina: Department of Conservation and Development, 550 p.
- Winner, M.D., Jr., and Coble, R.W., 1989, *Hydrogeologic Framework of the North Carolina Coastal Plain Aquifer System: U.S. Geological Survey Open-File Report 87-690*, 155 p.

TABLES

TABLE 1
SITE HISTORY
UST & AST SYSTEM INFORMATION
BUILDING AS-4158

UST/AST ID Number	Product (gasoline, diesel, jet fuel, etc.)	Capacity (gallons)	Date Installed (m/dd/yy)	Date Permanently Closed (P), or Still in Use* (C) (m/dd/yy)	Was Release Associated With UST/AST System? (Yes / No)
UST- Unknown	Gasoline	3,000	Unknown	(P) August 1992	Yes
UST- Unknown	Diesel	3,000	Unknown	(P) August 1992	Yes
UST- Unknown	Diesel	3,000	Unknown	(P) August 1992	Yes
AST- Unknown	Diesel	4,000	Unknown	(C) As of January 2004	No
AST- Unknown	Diesel	4,000	Unknown	(C) As of January 2004	No
UST- Unknown	Used Oil Storage	1,000	Unknown	(C) Unknown	No
UST- Unknown	Used Oil Storage	1,000	Unknown	(C) Unknown	No

* Still in use means not permanently closed.

TABLE 2
SITE HISTORY
UST OWNER/OPERATOR INFORMATION
BUILDING AS-4158

UST ID Number	Name of Owner or Operator	Dates of Ownership/Operation (m/dd/yy) to (m/dd/yy)	Owner or Operator?
Unknown	Commanding General Marine Corps Base Camp Lejeune, NC	Unknown to August 18, 1992	Owner and Operator
Address		Telephone Number	
I&E/EMD/EQB PSC 20004 Marine Corps Base, Camp Lejeune, NC 28542		910-451-5068	

TABLE 3A SUMMARY OF SOIL LABORATORY RESULTS

Date: September 2004

Incident Number and Name: 10804- Building AS-4158

Facility ID#: N/A

Analytical Method: EPA Method 8260B/5035

Sample ID	Contaminant of Concern →		All Target Analytes
	Date Collected	Sample Depth (ft. BLS)	
Residential MSCC (mg/kg) Industrial/Commercial MSCC (mg/kg) Soil to Groundwater MSCC (mg/kg)			Varies Varies Varies
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	BQL

All results in mg/kg.

ft. BLS = feet below land surface

BQL = Below Quantitation Limits

TABLE 3B SUMMARY OF SOIL LABORATORY RESULTS

Date: September 2004

Incident Number and Name: 10804- Building AS-4158

Facility ID#: N/A

Analytical Method: EPA Method 8270

Sample ID	Contaminant of Concern →		Benzoic Acid	All Other Target Analytes
	Date Collected	Sample Depth (ft. BLS)		
Residential MSCC (mg/kg)			62,571	Varies
Industrial/Commercial MSCC (mg/kg)			1,635,200	Varies
Soil to Groundwater MSCC (mg/kg)			112	Varies
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	<0.743	BQL
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	2.99	BQL
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	0.811	BQL
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	1.34	BQL
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	<0.674	BQL
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	<0.721	BQL
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	<0.741	BQL
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	<0.663	BQL
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	<0.817	BQL
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	<0.906	BQL
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	<0.686	BQL
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	<0.681	BQL
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	<0.851	BQL
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	<0.753	BQL
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	<0.805	BQL
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	<0.787	BQL
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	<0.916	BQL

All results in mg/kg.

ft. BLS = feet below land surface

BQL = Below Quantitation Limits

TABLE 3C SUMMARY OF SOIL LABORATORY RESULTS

Date: September 2004

Incident Number and Name: 10804- Building AS-4158

Facility ID#: N/A

Analytical Method: MADEP VPH/EPH

Sample ID	Contaminant of Concern →		C9-C18 Aliphatics	C19-C36 Aliphatics	C11-C22 Aromatics	C5-C8 Aliphatics	C9-C12 Aliphatics	C9-C10 Aromatics
	Date Collected	Sample Depth (ft. BLS)						
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	<10	<10	<10	<10	<10	<10

All results in mg/kg.

ft. BLS = feet below land surface

TABLE 3D SUMMARY OF SOIL LABORATORY RESULTS

Date: September 2004

Incident Number and Name: 10804- Building AS-4158

Facility ID#: N/A

Analytical Method: MADEP VPH/EPH AS COMPARED TO NCDENR MSCCs

Sample ID	Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Date Collected	Sample Depth (ft. BLS)				
Residential MSCC (mg/kg)			939	9,386	93,860	469
Industrial/Commercial MSCC (mg/kg)			24,528	245,280	#	12,264
Soil to Groundwater MSCC (mg/kg)			72	3,255	##	34
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	<10	<20	<10	<20

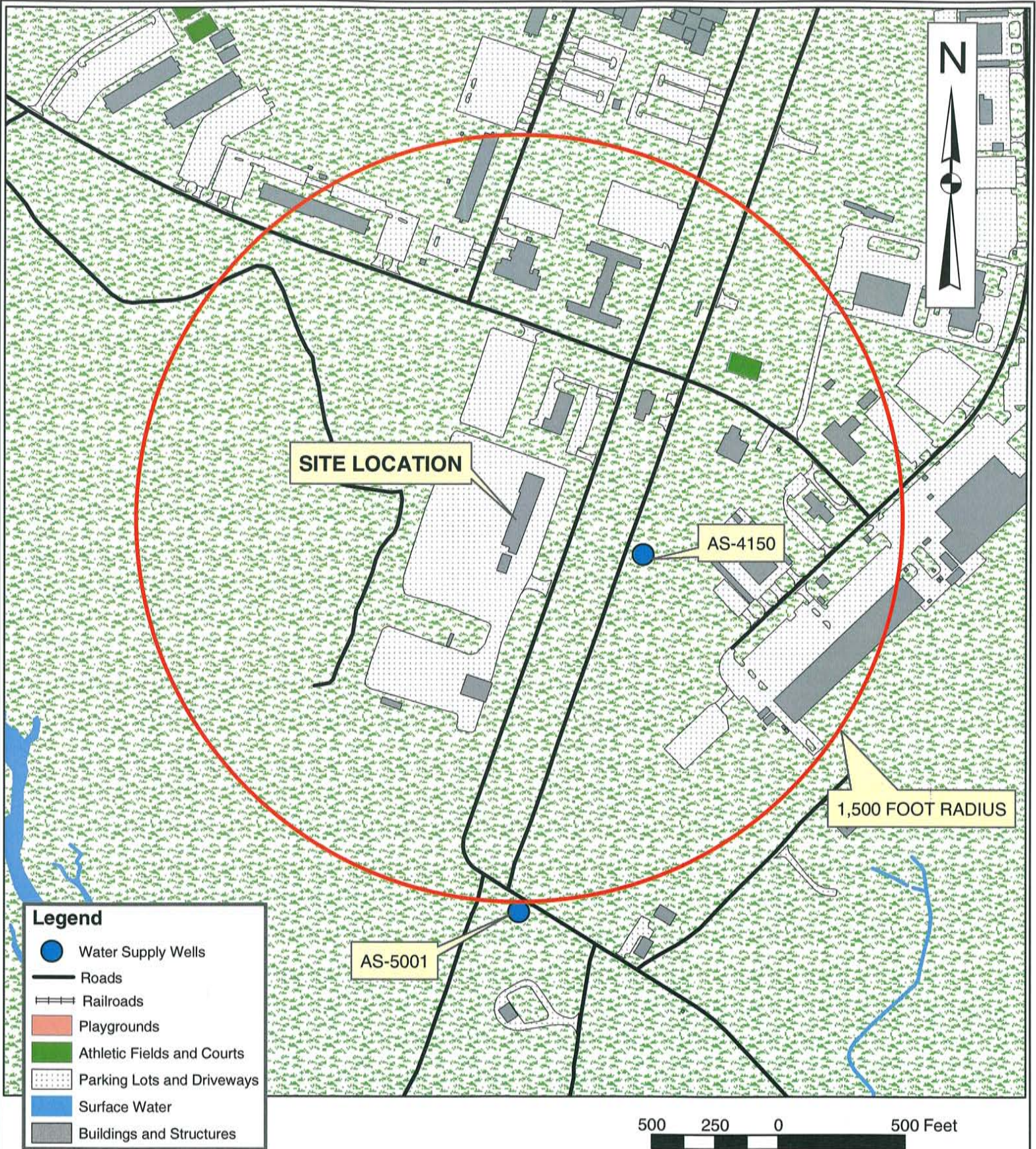
All results in mg/kg.

ft. BLS = feet below land surface

Health based level > 100%

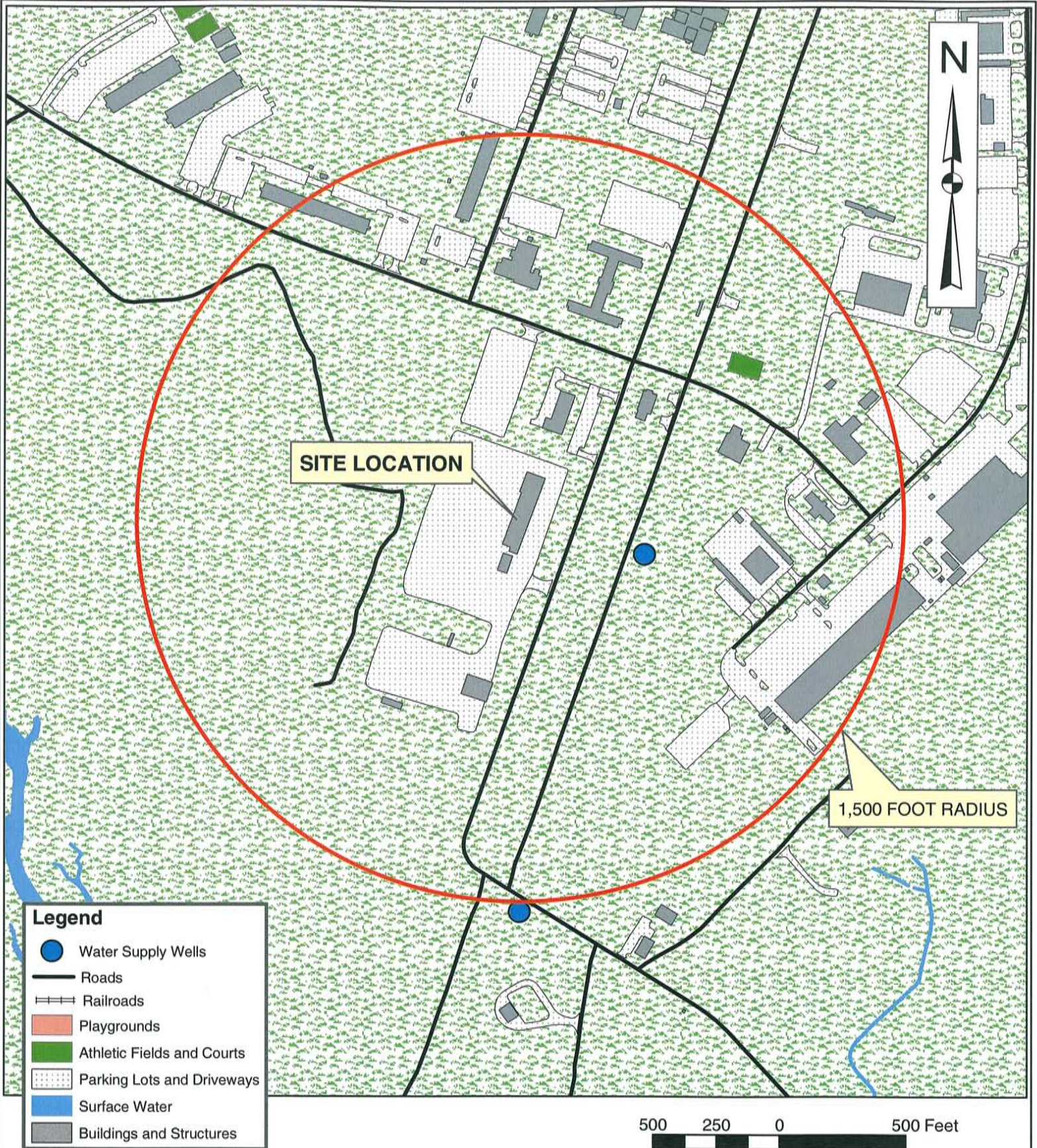
Considered immobile

FIGURES



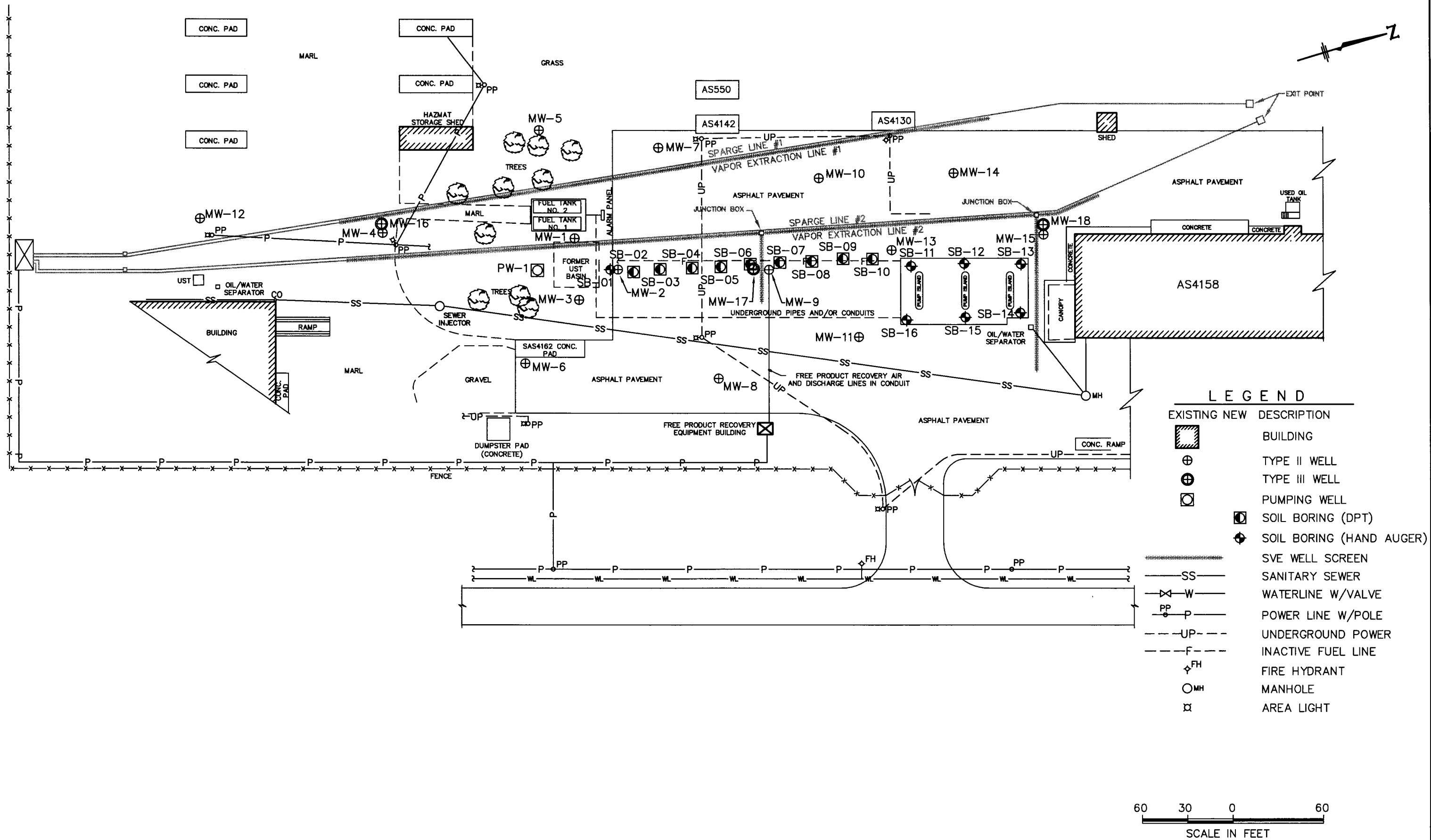
Data Sources: Data Layers provided by MCB Camp Lejeune GIS Office.

 CATLIN ENGINEERS and SCIENTISTS WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 SOIL ASSESSMENT REPORT MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE SITE LOCATION AND WATER SURVEY			FIGURE
	JOB NO. 204-037	DATE OCT 2004	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY JKB	1



Data Sources: Data Layers provided by MCB Camp Lejeune GIS Office.

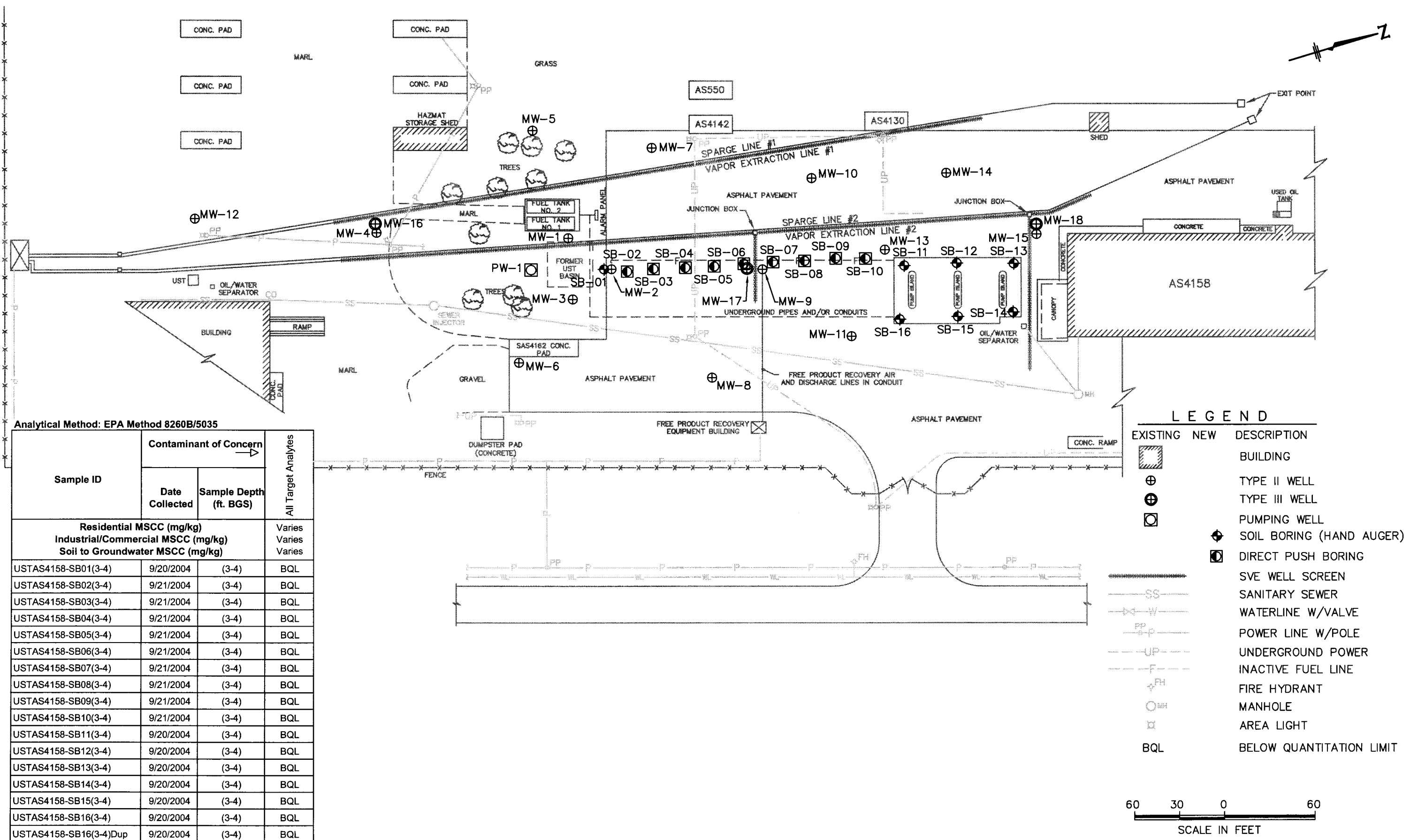
 WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 SOIL ASSESSMENT REPORT MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE SITE LOCATION WITH PLACES OF PUBLIC ASSEMBLY			FIGURE 2
	JOB NO. 204-037	DATE OCT 2004	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY JKB	



NOTE:
 1. DRAWING ADAPTED FROM THE 2002 ANNUAL MONITORING REPORT
 SITE PLAN BY J.A. JONES ENVIRONMENTAL SERVICES, DATED DECEMBER 2002.
 2. SOIL BORING LOCATIONS SB-12 AND SB-13 ARE APPROXIMATE.
 3. ALL DIRECT PUSH BORING IDS "SB-" ARE PRECEDED BY "USTAS4158-".

CATLIN ENGINEERS and SCIENTISTS WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 MARINE CORPS BASE CAMP LEJEUENE, N.C.	TITLE SITE PLAN WITH UTILITIES	FIGURE 3
	JOB NO. 204-037 DATE: OCT 2004	SCALE: 1"=60'	DRAWN BY: HCS CHECKED BY: JKB

204037-2041-03



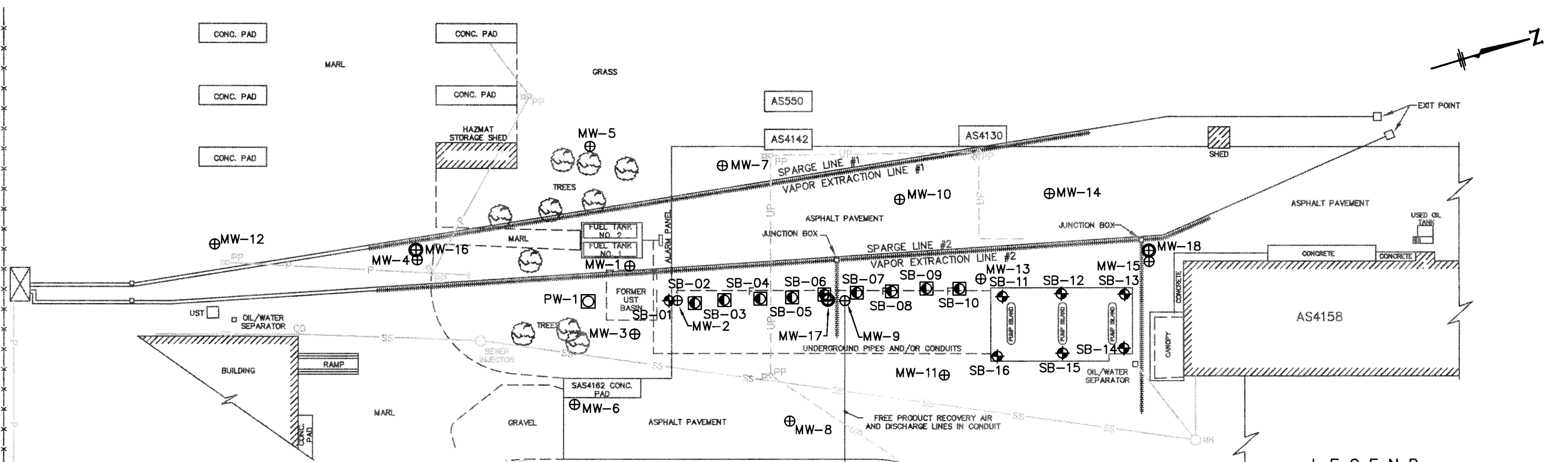
Analytical Method: EPA Method 8260B/5035

Sample ID	Contaminant of Concern		All Target Analytes
	Date Collected	Sample Depth (ft. BGS)	
	Residential MSCC (mg/kg)		Varies
	Industrial/Commercial MSCC (mg/kg)		Varies
	Soil to Groundwater MSCC (mg/kg)		Varies
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	BQL
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	BQL
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	BQL

NOTE:

1. DRAWING ADAPTED FROM THE 2002 ANNUAL MONITORING REPORT SITE PLAN BY J.A. JONES ENVIRONMENTAL SERVICES, DATED DECEMBER 2002.
2. SOIL BORING LOCATIONS SB-12 AND SB-13 ARE APPROXIMATE.
3. ALL DIRECT PUSH BORING IDs "SB-" ARE PRECEDED BY "USTAS4158-".
4. ALL RESULTS IN mg/Kg.

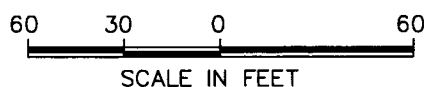
CAELIN ENGINEERS and SCIENTISTS WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 MARINE CORPS BASE CAMP LEJEUENE, N.C.	TITLE SITE PLAN WITH SOIL LABORATORY RESULTS - EPA METHOD 8260B/5035	FIGURE 4A
	JOB NO. 204-037 DATE: OCT 2004	SCALE: 1"=60'	DRAWN BY: HCS CHECKED BY: JKB



Analytical Method: EPA Method 8270

Sample ID	Contaminant of Concern		Benzoic Acid	All Other Target Analytes
	Date Collected	Sample Depth (ft. BGS)		
			Residential MSCC (mg/kg)	Varies
			Industrial/Commercial MSCC (mg/kg)	Varies
			Soil to Groundwater MSCC (mg/kg)	Varies
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	<0.743	BQL
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	2.99	BQL
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	0.811	BQL
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	1.34	BQL
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	<0.674	BQL
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	<0.721	BQL
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	<0.741	BQL
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	<0.663	BQL
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	<0.817	BQL
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	<0.906	BQL
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	<0.686	BQL
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	<0.681	BQL
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	<0.851	BQL
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	<0.753	BQL
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	<0.805	BQL
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	<0.787	BQL
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	<0.916	BQL

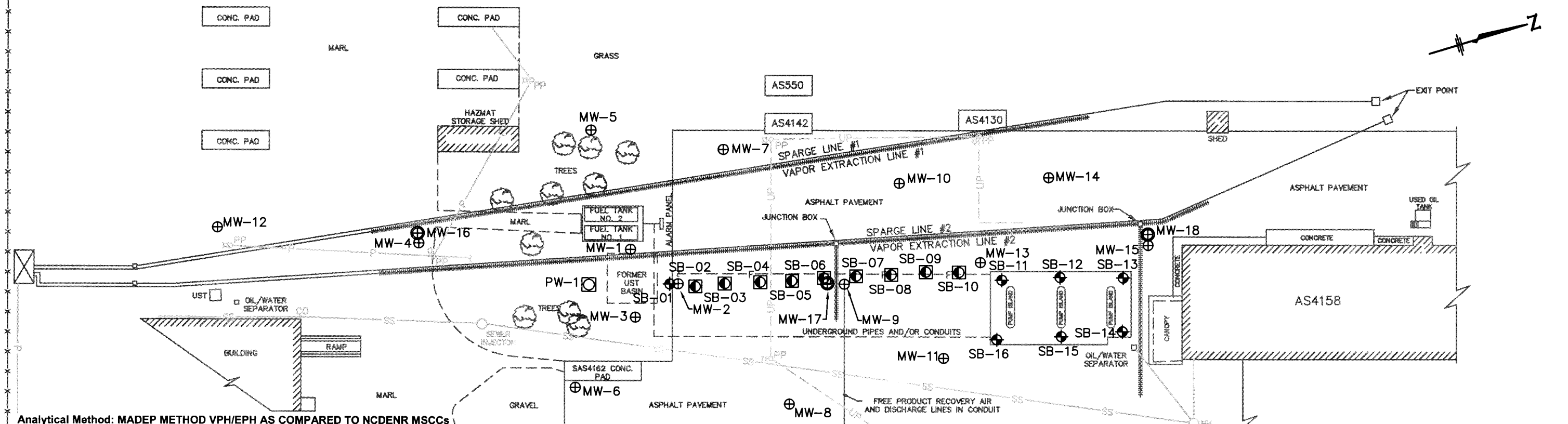
LEGEND		
EXISTING	NEW	DESCRIPTION
		BUILDING
		TYPE II WELL
		TYPE III WELL
		PUMPING WELL
		SOIL BORING (HAND AUGER)
		DIRECT PUSH BORING
		SVE WELL SCREEN
		SANITARY SEWER
		WATERLINE W/VALVE
		POWER LINE W/POLE
		UNDERGROUND POWER
		INACTIVE FUEL LINE
		FIRE HYDRANT
		MANHOLE
		AREA LIGHT
BQL		BELOW QUANTITATION LIMIT



NOTE:
 1. DRAWING ADAPTED FROM THE 2002 ANNUAL MONITORING REPORT
 SITE PLAN BY J.A. JONES ENVIRONMENTAL SERVICES, DATED DECEMBER 2002.
 2. SOIL BORING LOCATIONS SB-12 AND SB-13 ARE APPROXIMATE.
 3. ALL DIRECT PUSH BORING IDS "SB-" ARE PRECEDED BY "USTAS4158-".
 4. ALL RESULTS IN mg/Kg.

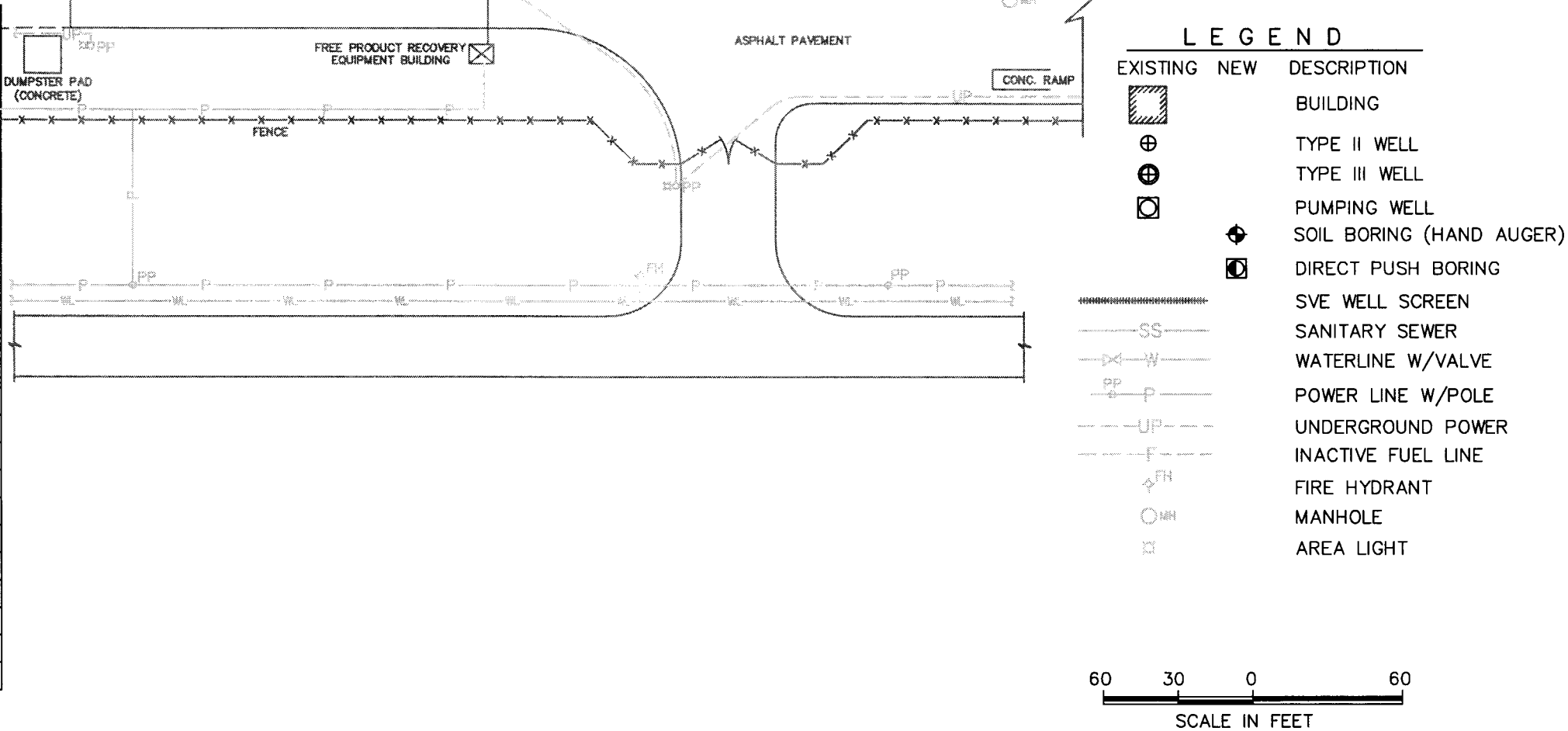
 ENGINEERS and SCIENTISTS WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 MARINE CORPS BASE CAMP LEJEUENE, N.C.	TITLE SITE PLAN WITH SOIL LABORATORY RESULTS - EPA METHOD 8270	FIGURE 4B
	JOB NO. 204-037 DATE: OCT 2004	SCALE: 1"=60'	DRAWN BY: HCS CHECKED BY: JKB

204037-2041-04B



Analytical Method: MADEP METHOD VPH/EPH AS COMPARED TO NCDENR MSCCs

Sample ID	Contaminant of Concern		C5-C8 Aliphatics	C9-C18 Aliphatics	C19-C36 Aliphatics	C9-C22 Aromatics
	Date Collected	Sample Depth (ft. BGS)				
Residential MSCC (mg/kg)			939	9,386	93,860	469
Industrial/Commercial MSCC (mg/kg)			24,528	245,280	#	12,264
Soil to Groundwater MSCC (mg/kg)			72	3,255	##	34
USTAS4158-SB01(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB02(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB03(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB04(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB05(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB06(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB07(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB08(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB09(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB10(3-4)	9/21/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB11(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB12(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB13(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB14(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB15(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB16(3-4)	9/20/2004	(3-4)	<10	<20	<10	<20
USTAS4158-SB16(3-4)Dup	9/20/2004	(3-4)	<10	<20	<10	<20



- NOTE:
1. DRAWING ADAPTED FROM THE 2002 ANNUAL MONITORING REPORT SITE PLAN BY J.A. JONES ENVIRONMENTAL SERVICES, DATED DECEMBER 2002.
 2. SOIL BORING LOCATIONS SB-12 AND SB-13 ARE APPROXIMATE.
 3. ALL DIRECT PUSH BORING IDs "SB-" ARE PRECEDED BY "USTAS4158-".
 4. ALL RESULTS IN mg/Kg.
 5. # HEALTH BASED LEVEL > 100%.
 6. ## CONSIDERED IMMOBILE.

CAELIN ENGINEERS and SCIENTISTS WILMINGTON, NORTH CAROLINA	PROJECT BUILDING AS-4158 MARINE CORPS BASE CAMP LEJEUNE, N.C.	TITLE SITE PLAN WITH SOIL LABORATORY RESULTS - MADEP EPH/VPH AS COMPARED TO NCDENR MSCCs	FIGURE 4C
	JOB NO. 204-037 DATE OCT 2004	SCALE 1'=60' DRAWN BY: HCS CHECKED BY: JKB	

APPENDIX A
BORING LOGS

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB01
		DRILLER:	
LATITUDE: 353,121.9	LONGITUDE: 2,463,407.2	CREW: Tom Stetler	
SYSTEM: NCSP NAD 83 (ft)	BORING LOCATION: See Map		LAND ELEV.: NM
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA	▲162		SM		0.0	Dark brown, SILTY, v.f. to f. SAND with gravels. Moist.	
1.0	H A H A	HA	▲2.4		SM		1.0	S.A.A except without gravels. Moist.	
2.0	H A H A	HA	▲0				2.0		
3.0	H A H A	HA	▲0		SC			Dark brown, tan, SILTY, v.f. to f., CLAYEY SAND. Moist.	
	H A H A	HA	▲0	USTAS4158-SB01 (3-4)					
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB02
		DRILLER:	
LATITUDE: 353,136.3	LONGITUDE: 2,463,413.1	CREW: Steve Tyler	
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
	0.5 0.5 0.5 0.5		0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0							0.0		
							0.5	Asphalt to 0.3' and sandy gravels to 0.5'.	
	D P D P	DP	▲0		SM		1.0	Tan, SILTY, v.f. to f. SAND.	
2.0					CL			Dark brown, SILTY, v.f. to f., SANDY CLAY with low plasticity and organics.	
	D P D P	DP	▲34.3				3.0		
3.0								Dark brown, SILTY, v.f. to f., CLAYEY SAND. Moist.	
	D P D P	DP	▲50.0	USTAS4158-SB02 (3-4)	SC		4.0		
4.0								Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB03
		DRILLER:	
LATITUDE: 353,153.5	LONGITUDE: 2,463,416.4	CREW: Steve Tyler	
SYSTEM: NCSP NAD 83 (ft) BORING LOCATION: See Map			LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
	0.5 0.5 0.5 0.5		0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0							0.0	Asphalt to 0.3' and sandy gravels.	
							0.5		
	D P D P	DP	▲0		SM		2.0	Tan, SILTY, v.f. to f. SAND. Moist.	
2.0									
	D P D P	DP	▲0		SC		3.0	Dark brown, SILTY, v.f. to f. CLAYEY SAND.	
3.0									
	D P D P	DP	▲0	USTAS4158-SB03 (3-4)	CL		4.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity.	
4.0								Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB04
		DRILLER:	
LATITUDE: 353,174.0	LONGITUDE: 2,463,421.8	CREW: Steve Tyler	
SYSTEM: NCSP NAD 83 (ft) BORING LOCATION: See Map			LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm) 0 1000 2000 3000 4000	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0							0.0	LAND SURFACE	
							0.0		
							0.5	Asphalt to 0.3' and sandy gravels.	
	D P D P	DP	▲0		SM			Brown, tan, SILTY, v.f. to f. SAND. Moist.	
2.0							2.0		
	D P D P	DP	▲0		SC			Dark brown, tan, orange, SILTY, v.f. to f., CLAYEY SAND. Moist.	
3.0							3.0		
	D P D P	DP	▲0	USTAS4158-SB04 (3-4)	SC			Tan, orange, S.A.A with wood fragments at 3.0 to 3.2'.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB05
LATITUDE: 353,192.5		LONGITUDE: 2,463,426.5	CREW: Steve Tyler
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
							0.0	Asphalt to 0.3' and sandy gravels.	
							0.5		
	D P D P	DP	▲0		SM		2.0	Brown, SILTY, v.f. to f. SAND. Moist.	
2.0									
	D P D P	DP	▲0		SC		3.0	Tan, SILTY, v.f. to f., CLAYEY SAND. Moist.	
3.0									
	D P D P	DP	▲0	USTAS4158-SB05 (3-4)	CL		4.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity. Moist.	
4.0								Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB06
LATITUDE: 353,211.6		LONGITUDE: 2,463,430.4	CREW: Steve Tyler
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
							0.0	Asphalt to 0.3' and sandy gravels.	
							0.5		
	D P D P	DP	▲0		SM			Dark brown, SILTY, v.f. to f. SAND with organics. Moist.	
2.0									
	D P D P	DP	▲468.6						
3.0							3.0		
	D P D P	DP	▲0	USTAS4158-SB06 (3-4)	SC			Orange, SILTY, v.f. to f., CLAYEY SAND. Moist.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB07
		DRILLER:	
LATITUDE: 353,230.4	LONGITUDE: 2,463,434.8	CREW: Steve Tyler	
SYSTEM: NCSP NAD 83 (ft)	BORING LOCATION: See Map		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
	0.5 0.5 0.5 0.5		0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0							0.0		
							0.6	Asphalt to 0.3' and sandy gravels.	
	D P D P	DP	▲0		SM			Dark brown, SILTY, v.f. to f. SAND. Moist.	
2.0									
	D P D P	DP	▲74						
3.0							3.0		
	D P D P	DP	▲62	USTAS4158-SB07 (3-4)	CL			Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity. Moist.	
4.0							4.0		
								Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB08
LATITUDE: 353,250.7		LONGITUDE: 2,463,440.1	CREW: Steve Tyler
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
							0.0		
							0.6	Asphalt to 0.3' and sandy gravels.	
	D P D P	DP	▲0						
2.0					SM			Dark brown, SILTY, v.f. to f. SAND. Moist.	
	D P D P	DP	▲0						
3.0					SM		3.0	Tan, S.A.A.	
	D P D P	DP	▲0	USTAS4158-SB08 (3-4)			3.5		
4.0					CL		4.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity. Moist.	
								Boring Terminated at Depth 4.0 ft	

SHEET 1 OF 1

DEPTH	BLOW COUNT				SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	L O G	SOIL AND ROCK	
	0.5	0.5	0.5	0.5						DEPTH	DESCRIPTION
0.0										0.0	LAND SURFACE
										0.0	
										0.5	Asphalt to 0.3' and sandy gravels.
	D P D P		DP	▲0				SM			Dark brown, SILTY, v.f. to f. SAND. Moist.
2.0											
	D P D P		DP	▲0							
3.0											
	D P D P		DP	▲0		USTAS4158-SB09 (3-4)	CL			3.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity.
4.0										4.0	Boring Terminated at Depth 4.0 ft

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB10
		DRILLER:	
LATITUDE: 353,289.9	LONGITUDE: 2,463,450.3	CREW: Steve Tyler	
SYSTEM: NCSP NAD 83 (ft)	BORING LOCATION: See Map		LAND ELEV.: NM
DRILL MACHINE: Power Probe	METHOD: Direct Push	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/21/04	FINISH DATE: 09/21/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
							0.0	Asphalt.	
							0.3		
	D P D P	DP	▲4.0		SM			Dark brown, tan, SILTY, v.f. to f. SAND. Moist.	
2.0									
	D P D P	DP	▲3.6						
3.0							3.0		
	D P D P	DP	▲2.8	USTAS4158-SB10 (3-4)	CL			Orange, SILTY, v.f. to f., SANDY CLAY. Moist.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB11
LATITUDE: 353,313.2		LONGITUDE: 2,463,462.1	CREW: Tom Stetler
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	LAND ELEV.: NM
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA					0.0	Concrete.	
1.0	H A H A	HA	▲293			GW	0.8	Gravels.	
2.0	H A H A	HA	▲30.7		SM		1.0	Brown, SILTY, v.f. to f. SAND with some clayey sand. Moist. Slight HCO.	
3.0	H A H A	HA	▲0	USTAS4158-SB11 (3-4)	CL		3.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB12
LATITUDE:		DRILLER:	CREW: Tom Stetler
LONGITUDE:			
SYSTEM: N/A	BORING LOCATION: See Map		LAND ELEV.: NM
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA					0.0	Concrete.	
1.0	H A H A	HA	▲426				0.8		
							1.0	Gravels.	
2.0	H A H A	HA	▲149				2.0	Dark brown, SILTY, v.f. to f. SAND. Moist. Slight HCO.	
3.0	H A H A	HA	▲124				3.0	S.A.A with wood fragments and organic odor.	
4.0	H A H A	HA					4.0	Gray, SILTY, v.f. to f. SAND. Moist.	
								Boring Terminated at Depth 4.0 ft	

USTAS4158-SB12
(3-4)

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB13
LATITUDE:		DRILLER:	
LONGITUDE:		CREW: Tom Stetler	
SYSTEM: N/A		BORING LOCATION: See Map	
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	LAND ELEV.: NM
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	BORING DEPTH: 4.0
		ROCK DEPTH: --	

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA					0.0	Concrete.	
1.0	H A H A	HA	▲860			GW	0.8	Gravels.	
2.0	H A H A	HA	▲435		SM		1.0	Dark brown, gray, SILTY, v.f. to f. SAND. Moist.	
3.0	H A H A	HA	▲230		SM		3.0	Gray, tan, S.A.A.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN
ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB14
		DRILLER:	
LATITUDE: 353,383.1	LONGITUDE: 2,463,515.6	CREW: Tom Stetler	
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	LAND ELEV.: NM
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0							0.0	Concrete.	
	H A H A	HA					0.5		
					GW		1.0	Gravels.	
1.0									
	H A H A	HA	▲0		SM		2.0	Tan, gray, SILTY, v.f. to f. SAND. Moist.	
2.0									
	H A H A	HA	▲20.8		SM		3.0	Dark brown, tan, gray, S.A.A. Moist. Slight HCO.	
3.0									
	H A H A	HA	▲18.1	USTAS4158-SB14 (3-4)	CL		4.0	Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity. Moist. Slight HCO.	
4.0									
								Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB15
LATITUDE: 353,332.3		LONGITUDE: 2,463,541.9	CREW: Tom Stetler
SYSTEM: NCSP NAD 83 (ft)		BORING LOCATION: See Map	
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	U S C S	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA					0.0	Concrete.	
1.0	H A H A	HA	▲+3748		GW		0.8	Gravels.	
2.0	H A H A	HA	▲1347		SM		1.0	Dark brown, gray, SILTY, v.f. to f. SAND. Moist.	
3.0	H A H A	HA			SM		2.0	S.A.A with clay layers.	
4.0	H A H A	HA	▲292	USTAS4158-SB15 (3-4)	CL		3.0	Dark brown, gray, SILTY, v.f. to f., SANDY CLAY with low plasticity.	
							4.0	Boring Terminated at Depth 4.0 ft	

BORING LOG

CATLIN

ENGINEERS and SCIENTISTS
ENGLISH
Wilmington, North Carolina

SHEET 1 OF 1

PROJECT NO.: 204-037	STATE: NC	COUNTY: Onslow	LOCATION: Camp Lejeune
PROJECT NAME: BUILDING AS-4158		LOGGED BY: Charles Ray	BORING ID: USTAS4158-SB16
		DRILLER:	
LATITUDE: 353,299.9	LONGITUDE: 2,463,495.6	CREW: Tom Stetler	
SYSTEM: NCSP NAD 83 (ft)	BORING LOCATION: See Map		LAND ELEV.: NM
DRILL MACHINE: Hand Auger	METHOD: Hand Auger	0 HOUR DTW:	BORING DEPTH: 4.0
START DATE: 09/20/04	FINISH DATE: 09/20/04	24 HOUR DTW:	ROCK DEPTH: --

DEPTH	BLOW COUNT 0.5 0.5 0.5 0.5	SAMP. TYPE	OVA RESULTS (ppm)	LAB.	USCS	LOG	DEPTH	SOIL AND ROCK DESCRIPTION	ELEVATION
0.0			0 1000 2000 3000 4000				0.0	LAND SURFACE	
0.0	H A H A	HA					0.0	Concrete.	
1.0	H A H A	HA	▲1400				0.8 1.0	Gravels.	
2.0	H A H A	HA	▲0.5				2.5	Dark brown, SILTY, v.f. to f. SAND. Moist.	
3.0	H A H A	HA	▲0					Orange, SILTY, v.f. to f., SANDY CLAY with low plasticity. Moist.	
4.0							4.0	Boring Terminated at Depth 4.0 ft	

USTAS4158-SB16
(3-4)

APPENDIX B

NORTH CAROLINA WELL CONSTRUCTION RECORDS

(NOT USED)

APPENDIX C
FIELD MEASUREMENTS
(NOT USED)

APPENDIX D

STANDARD PROCEDURES

CATLIN STANDARD METHODS OF INVESTIGATION

1.0 DATA COLLECTION

1.1 BACKGROUND DATA

Background data and history information relevant to the site investigation is generated through numerous sources. These sources may include, but are not limited to, the following:

- Conversations with the client and regulatory officials involved with the incident.
- Review of pertinent regulatory correspondence.
- Review of previous and existing reports and other technical data.
- Review of available historical records.

1.2 SURVEYS AND POTENTIAL RECEPTOR DATA

Physical survey and potential receptor data is collected in accordance with the intended level of investigation. In general, the purpose is to collect sufficient information for site assessment and corrective action planning.

Individual receptors are identified and evaluated in the context of their potential for contaminant impact. Potential receptors of contamination can include surface water bodies, groundwater supply wells, wellhead protection areas, and subsurface building structures.

1.2.1 Horizontal Survey

Horizontal survey data is generated using either accepted general field surveying techniques, or existing survey maps; or by using a combination of existing data and field generated information. The survey area generally extends to a point at least 50 feet beyond suspected plume boundaries. A receptor scale survey of a larger area surrounding a site will be made if appropriate and necessary.

1.2.2 Vertical Survey

A vertical survey is conducted at the site typically within an accuracy of 0.01 foot. The datum plane is generally assumed unless otherwise noted. Assumed temporary benchmarks (TBM) are selected near ground level. The vertical survey includes such points as top of all well casings, selected ground shots, important utility inverts, utility fluid levels, important surface water levels, and other items determined to be significant.

1.3 DRILLING AND MONITORING WELL/PIEZOMETER INSTALLATION

Necessary permits are applied for and obtained in accordance with federal, state, and local requirements prior to drilling or well construction activities. Additionally, the well locations are scanned for underground utilities prior to conducting intrusive subsurface activities. Wells are installed under applicable licensing requirements, and are designed and constructed in accordance with accepted standards and practices. Any wells purposely installed at off-site locations are permitted through appropriate right-of-entry agreements with all necessary property owners and/or their agents.

1.3.1 Drilling Methods and Subsurface Data Collection

Drilling is accomplished utilizing one or more of the following methods:

Auger Drilling

Auger drilling is the preferred, most often used method of subsurface investigation and is accomplished using a vehicle or trailer mounted drill rig. Continuous flight auger types used vary upon the site and situation; ranging from the 4-inch outside diameter solid stem to the 12-inch outside diameter hollow stem. Auger type is selected based upon appropriateness and/or site-specific requirements.

Hand Augering

Hand augering is utilized when economically and scientifically feasible, or when no other method is suitable. Hand augers typically produce three-inch diameter holes and are generally limited to depths of less than 15 feet.

Direct Push

Direct push methods of subsurface investigation are used generally for soil screening purposes or collection of groundwater samples where permanent wells are not viable.

Other Methods

Other drilling methods, such as mud and air rotary, rock coring, cable tool, and large bucket augering are used when site conditions or project requirements dictate.

Regardless of the drilling method used, the drill rig(s) and all drilling tools are thoroughly cleaned between boreholes to prevent cross introduction of contaminants. Split spoon samples are collected and field-described at intervals of five feet or less, and cuttings are continuously monitored for organic vapors. Drill cuttings are containerized for off-site disposal or are spread on the ground surface in proximity to the well or boring in accordance with North Carolina Department of Environment and Natural Resources (NCDENR) requirements. A geologist or engineer, trained in using visual/manual techniques, is always present during drilling and is responsible for subsurface contaminant and geologic data collection. Soils are classified in general agreement with the Unified Soils Classification System (USCS).

1.3.2 Hydropunch Installation

Hydropunch penetrometers (Hydropunches) are used to delineate the spatial extent of dissolved and free phase plumes. Soil borings are advanced to the appropriate depth and then the Hydropunch is advanced through the soil boring into undisturbed material. Groundwater samples are collected by pulling back on the body of the Hydropunch and allowing the groundwater to enter the screened portion of the sample chamber. Samples are retrieved using a decontaminated Teflon bailer or peristaltic pump.

1.3.3 Well Installation

Wells are typically constructed of threaded PVC casing and screen. No glues or cements are used in joining PVC components. Well diameter, slot sizes, and protective covers vary depending upon site-specific conditions or situation-specific requirements.

1.3.4 Well Development

Wells are developed by over-pumping or surging using appropriate pumps, blocks, or bailers. Through development, unwanted fine materials are removed from the natural formation surrounding the well. Well development will be performed no sooner than 24-hours after grouting is completed for the Type III wells. Water generated during development is containerized and properly disposed or is discharged onto the ground in proximity of the well in accordance with NCDENR requirements.

1.4 HYDROGEOLOGIC DATA COLLECTION

Data used to help characterize hydrogeologic conditions at a site are obtained through various procedures including, but not necessarily limited to, those described below:

1.4.1 Regional Geology

Information pertaining to the regional geologic framework is compiled from existing publications, maps, and scientific papers.

1.4.2 Site Geology

Shallow site geology is generally determined from field descriptions and borehole samples. Interpretations with regard to hydrogeologically important contacts, zones, fractures, faults, cleavage, and face changes are made when possible.

1.4.3 Groundwater Occurrence and Characteristics

Groundwater data is obtained utilizing a number of methods and procedures, not limited to the general list below:

Well Water Levels

After well development, wells are allowed to stabilize for a minimum of 24 hours prior to measuring. Water level and free product thickness (where applicable) measurements are performed using an electronic interface probe or steel tape with water/product finding pastes.

The specific gravity of any accumulated product is determined and used to calculate true hydraulic grade from measured water levels. This information is combined with vertical survey data to determine relative potentiometric surface elevations for all wells.

Aquifer Testing

Various aquifer tests may be used to make determinations of hydraulic conductivity. Slug or pumping tests are often used to characterize site hydrogeologic conditions and to develop remedial action alternatives utilizing appropriate pumping technologies.

Other Methods

Other methods may be deemed appropriate for determining various groundwater characteristics. These other methods may include nested well configurations and/or clustered piezometer installations; sieve or pipette analysis; fracture trace analysis; computer modeling; and geophysical logging.

1.5 PETROLEUM HYDROCARBON DATA COLLECTION

1.5.1 Collection Methods

Petroleum hydrocarbon data is obtained through various methods including, but not limited to, the following:

Field Analysis

- Direct thickness measurement of phase separated components using tapes and/or probes.
- Manual vapor analysis using a photoionization detector (PID) or flame ionization detector (FID).
- Detectable odor and visual observation.

Laboratory Analysis

- Laboratory analysis of phase-separated products.
- Laboratory vapor, soil, and groundwater analysis using appropriate EPA Methods.

1.5.2 Field Sampling

Field sampling procedures are performed in accordance with recommended protocol, accepted industry standards, and under appropriate chain-of-custody procedures. Generally, sampling procedures are as follows:

Product Samples

Product samples are obtained using clean equipment and containers. Each is shipped to the analytical laboratory in protective containers.

Vapor Samples

PID/FID readings are measured from soil sample headspace using containerized samples that have been brought to ambient temperature.

Carbon tubes are utilized in conjunction with a laboratory calibrated vacuum pump to obtain vapor samples. The carbon tubes are sealed and refrigerated for shipment to the analytical laboratory (This method is known as the Carbon Adsorption Method).

Soil Samples

Soil samples are immediately packed into clean containers, and refrigerated for shipment to the analytical laboratory.

Groundwater Samples

Groundwater samples are collected in accordance with the following procedures:

- Creeks/Lakes/Etc.

Grab samples are obtained.

- Domestic Wells

Wells are pumped for a time sufficient to completely purge the well and any pressure or holding tanks prior to sampling.

- Monitoring Wells

Water level measurements are made and well volumes calculated for each well.

Three well volumes are removed from each well using a thoroughly cleaned Teflon bailer or appropriate purging pump. If it is not possible to remove three volumes, due to very low yields, a minimum of one volume is removed prior to obtaining a sample.

Where analysis for metals is required, wells are typically sampled utilizing low flow techniques, which reduce turbidity and the potential for matrix interference.

Samples are collected and containerized in a manner that minimizes agitation and contact with the air.

Sampling records are field prepared.

Samples are labeled and proper chain of custody documents are maintained.

Samples are promptly protectively packed, refrigerated, and shipped to the analytical laboratory for analysis.

2.0 DATA EVALUATION

Data obtained as a result of the site investigation is compiled and evaluated and a report is prepared for client review and distribution to the appropriate agencies. Generally, specific data is evaluated as follows:

- Background data is evaluated in context with the suspected or confirmed problem.
- Survey data is utilized to develop site maps and to evaluate contaminant receptors.
- Well construction records are compiled and presented as part of the report. As-built information is used in combination with other data to evaluate subsurface conditions and monitoring well screen settings as they relate to the investigation.
- Subsurface drilling logs are used to develop geologic cross-sections, fence diagrams, isopachs, structure contours, or other constructions. Regional geologic data are used to obtain an overall framework.
- Hydrogeologic data is used to develop contour maps, flow nets and other constructions. The data is also used to calculate various hydrogeologic parameters that describe aquifer characteristics.
- Hydrocarbon data is utilized to develop various plume geometry and isoconcentration maps.
- All data is compiled and utilized for making specific recommendations with regard to remedial action alternatives.

APPENDIX E

LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY DOCUMENTATION

FILE COPY

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Jeff Becken
Richard Catlin & Associates
P.O. Box 10280
Wilmington NC 28404-0280

Report Number: G128-1385

Client Project: AS-4158

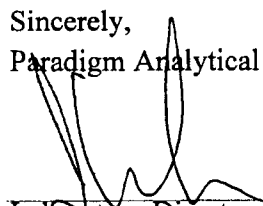
Dear Mr. Becken:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.



Laboratory Director
J. Patrick Weaver



Date

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB01(3-4)

Client Project ID: AS-4158

Lab Sample ID G128-1385-1A

Lab Project ID: G128-1385

Report Basis: Dry Weight

Analyzed By: JTF

Date Collected: 09-20-2004 12:30

Date Received: 09/22/2004

Matrix: Soil

%Solids: 84.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0432	1	09/23/2004
Benzene	BQL	0.00432	1	09/23/2004
Bromobenzene	BQL	0.00432	1	09/23/2004
Bromochloromethane	BQL	0.00432	1	09/23/2004
Bromodichloromethane	BQL	0.00432	1	09/23/2004
Bromoform	BQL	0.00432	1	09/23/2004
Bromomethane	BQL	0.00432	1	09/23/2004
2-Butanone	BQL	0.0216	1	09/23/2004
n-Butylbenzene	BQL	0.00432	1	09/23/2004
sec-Butylbenzene	BQL	0.00432	1	09/23/2004
tert-Butylbenzene	BQL	0.00432	1	09/23/2004
Carbon disulfide	BQL	0.00432	1	09/23/2004
Carbon tetrachloride	BQL	0.00432	1	09/23/2004
Chlorobenzene	BQL	0.00432	1	09/23/2004
Chloroethane	BQL	0.00432	1	09/23/2004
Chloroform	BQL	0.00432	1	09/23/2004
Chloromethane	BQL	0.00432	1	09/23/2004
2-Chlorotoluene	BQL	0.00432	1	09/23/2004
4-Chlorotoluene	BQL	0.00432	1	09/23/2004
Dibromochloromethane	BQL	0.00432	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00432	1	09/23/2004
Dibromomethane	BQL	0.00432	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00432	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00432	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00432	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00432	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00432	1	09/23/2004
1,1-Dichloroethane	BQL	0.00432	1	09/23/2004
1,1-Dichloroethene	BQL	0.00432	1	09/23/2004
1,2-Dichloroethane	BQL	0.00432	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00432	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00432	1	09/23/2004
1,2-Dichloropropane	BQL	0.00432	1	09/23/2004
1,3-Dichloropropane	BQL	0.00432	1	09/23/2004
2,2-Dichloropropane	BQL	0.00432	1	09/23/2004
1,1-Dichloropropene	BQL	0.00432	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00432	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00432	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00432	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00432	1	09/23/2004
Ethylbenzene	BQL	0.00432	1	09/23/2004
Hexachlorobutadiene	BQL	0.00432	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB01(3-4)
 Client Project ID: AS-4158
 Lab Sample ID G128-1385-1A
 Lab Project ID: G128-1385
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 09-20-2004 12:30
 Date Received: 09/22/2004
 Matrix: Soil
 %Solids: 84.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00432	1	09/23/2004
Iodomethane	BQL	0.00432	1	09/23/2004
Isopropylbenzene	BQL	0.00432	1	09/23/2004
4-Isopropyltoluene	BQL	0.00432	1	09/23/2004
Methylene chloride	BQL	0.0173	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00432	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00432	1	09/23/2004
Naphthalene	BQL	0.00432	1	09/23/2004
n-Propyl benzene	BQL	0.00432	1	09/23/2004
Styrene	BQL	0.00432	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00432	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00432	1	09/23/2004
Tetrachloroethene	BQL	0.00432	1	09/23/2004
Toluene	BQL	0.00432	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00432	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00432	1	09/23/2004
Trichloroethene	BQL	0.00432	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00432	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00432	1	09/23/2004
Trichlorofluoromethane	BQL	0.00432	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00432	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00432	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00432	1	09/23/2004
Vinyl chloride	BQL	0.00432	1	09/23/2004
m-,p-Xylene	BQL	0.00864	1	09/23/2004
o-Xylene	BQL	0.00432	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0469	94
1,2-Dichloroethane-d4	0.05	0.0583	117
Toluene-d8	0.05	0.0489	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNF

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB02(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-2A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 12:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 84.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0476	1	09/23/2004
Benzene	BQL	0.00476	1	09/23/2004
Bromobenzene	BQL	0.00476	1	09/23/2004
Bromochloromethane	BQL	0.00476	1	09/23/2004
Bromodichloromethane	BQL	0.00476	1	09/23/2004
Bromoform	BQL	0.00476	1	09/23/2004
Bromomethane	BQL	0.00476	1	09/23/2004
2-Butanone	BQL	0.0238	1	09/23/2004
n-Butylbenzene	BQL	0.00476	1	09/23/2004
sec-Butylbenzene	BQL	0.00476	1	09/23/2004
tert-Butylbenzene	BQL	0.00476	1	09/23/2004
Carbon disulfide	BQL	0.00476	1	09/23/2004
Carbon tetrachloride	BQL	0.00476	1	09/23/2004
Chlorobenzene	BQL	0.00476	1	09/23/2004
Chloroethane	BQL	0.00476	1	09/23/2004
Chloroform	BQL	0.00476	1	09/23/2004
Chloromethane	BQL	0.00476	1	09/23/2004
2-Chlorotoluene	BQL	0.00476	1	09/23/2004
4-Chlorotoluene	BQL	0.00476	1	09/23/2004
Dibromochloromethane	BQL	0.00476	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00476	1	09/23/2004
Dibromomethane	BQL	0.00476	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00476	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00476	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00476	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00476	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00476	1	09/23/2004
1,1-Dichloroethane	BQL	0.00476	1	09/23/2004
1,1-Dichloroethene	BQL	0.00476	1	09/23/2004
1,2-Dichloroethane	BQL	0.00476	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00476	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00476	1	09/23/2004
1,2-Dichloropropane	BQL	0.00476	1	09/23/2004
1,3-Dichloropropane	BQL	0.00476	1	09/23/2004
2,2-Dichloropropane	BQL	0.00476	1	09/23/2004
1,1-Dichloropropene	BQL	0.00476	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00476	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00476	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00476	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00476	1	09/23/2004
Ethylbenzene	BQL	0.00476	1	09/23/2004
Hexachlorobutadiene	BQL	0.00476	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB02(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-2A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 12:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 84.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	0.00720	0.00476	1	09/23/2004
Iodomethane	BQL	0.00476	1	09/23/2004
Isopropylbenzene	BQL	0.00476	1	09/23/2004
4-Isopropyltoluene	BQL	0.00476	1	09/23/2004
Methylene chloride	BQL	0.0191	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00476	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00476	1	09/23/2004
Naphthalene	BQL	0.00476	1	09/23/2004
n-Propyl benzene	BQL	0.00476	1	09/23/2004
Styrene	BQL	0.00476	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00476	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00476	1	09/23/2004
Tetrachloroethene	BQL	0.00476	1	09/23/2004
Toluene	BQL	0.00476	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00476	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00476	1	09/23/2004
Trichloroethene	BQL	0.00476	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00476	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00476	1	09/23/2004
Trichlorofluoromethane	BQL	0.00476	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00476	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00476	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00476	1	09/23/2004
Vinyl chloride	BQL	0.00476	1	09/23/2004
m-,p-Xylene	BQL	0.00953	1	09/23/2004
o-Xylene	BQL	0.00476	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0457	91
1,2-Dichloroethane-d4	0.05	0.0668	134
Toluene-d8	0.05	0.0497	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: PNF

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB03(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-3A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:45
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0490	1	09/23/2004
Benzene	BQL	0.00490	1	09/23/2004
Bromobenzene	BQL	0.00490	1	09/23/2004
Bromochloromethane	BQL	0.00490	1	09/23/2004
Bromodichloromethane	BQL	0.00490	1	09/23/2004
Bromoform	BQL	0.00490	1	09/23/2004
Bromomethane	BQL	0.00490	1	09/23/2004
2-Butanone	BQL	0.0245	1	09/23/2004
n-Butylbenzene	BQL	0.00490	1	09/23/2004
sec-Butylbenzene	BQL	0.00490	1	09/23/2004
tert-Butylbenzene	BQL	0.00490	1	09/23/2004
Carbon disulfide	BQL	0.00490	1	09/23/2004
Carbon tetrachloride	BQL	0.00490	1	09/23/2004
Chlorobenzene	BQL	0.00490	1	09/23/2004
Chloroethane	BQL	0.00490	1	09/23/2004
Chloroform	BQL	0.00490	1	09/23/2004
Chloromethane	BQL	0.00490	1	09/23/2004
2-Chlorotoluene	BQL	0.00490	1	09/23/2004
4-Chlorotoluene	BQL	0.00490	1	09/23/2004
Dibromochloromethane	BQL	0.00490	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00490	1	09/23/2004
Dibromomethane	BQL	0.00490	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00490	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00490	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00490	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00490	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00490	1	09/23/2004
1,1-Dichloroethane	BQL	0.00490	1	09/23/2004
1,1-Dichloroethene	BQL	0.00490	1	09/23/2004
1,2-Dichloroethane	BQL	0.00490	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00490	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00490	1	09/23/2004
1,2-Dichloropropane	BQL	0.00490	1	09/23/2004
1,3-Dichloropropane	BQL	0.00490	1	09/23/2004
2,2-Dichloropropane	BQL	0.00490	1	09/23/2004
1,1-Dichloropropene	BQL	0.00490	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00490	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00490	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00490	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00490	1	09/23/2004
Ethylbenzene	BQL	0.00490	1	09/23/2004
Hexachlorobutadiene	BQL	0.00490	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB03(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-3A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:45
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00490	1	09/23/2004
Iodomethane	BQL	0.00490	1	09/23/2004
Isopropylbenzene	BQL	0.00490	1	09/23/2004
4-Isopropyltoluene	BQL	0.00490	1	09/23/2004
Methylene chloride	BQL	0.0196	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00490	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00490	1	09/23/2004
Naphthalene	BQL	0.00490	1	09/23/2004
n-Propyl benzene	BQL	0.00490	1	09/23/2004
Styrene	BQL	0.00490	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00490	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00490	1	09/23/2004
Tetrachloroethene	BQL	0.00490	1	09/23/2004
Toluene	BQL	0.00490	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00490	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00490	1	09/23/2004
Trichloroethene	BQL	0.00490	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00490	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00490	1	09/23/2004
Trichlorofluoromethane	BQL	0.00490	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00490	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00490	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00490	1	09/23/2004
Vinyl chloride	BQL	0.00490	1	09/23/2004
m-,p-Xylene	BQL	0.00981	1	09/23/2004
o-Xylene	BQL	0.00490	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0482	96
1,2-Dichloroethane-d4	0.05	0.063	126
Toluene-d8	0.05	0.0496	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: end

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB04(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-4A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:30
Date Received: 09/22/2004
Matrix: Soil
%Solids: 84.7

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0492	1	09/23/2004
Benzene	BQL	0.00492	1	09/23/2004
Bromobenzene	BQL	0.00492	1	09/23/2004
Bromochloromethane	BQL	0.00492	1	09/23/2004
Bromodichloromethane	BQL	0.00492	1	09/23/2004
Bromoform	BQL	0.00492	1	09/23/2004
Bromomethane	BQL	0.00492	1	09/23/2004
2-Butanone	BQL	0.0246	1	09/23/2004
n-Butylbenzene	BQL	0.00492	1	09/23/2004
sec-Butylbenzene	BQL	0.00492	1	09/23/2004
tert-Butylbenzene	BQL	0.00492	1	09/23/2004
Carbon disulfide	BQL	0.00492	1	09/23/2004
Carbon tetrachloride	BQL	0.00492	1	09/23/2004
Chlorobenzene	BQL	0.00492	1	09/23/2004
Chloroethane	BQL	0.00492	1	09/23/2004
Chloroform	BQL	0.00492	1	09/23/2004
Chloromethane	BQL	0.00492	1	09/23/2004
2-Chlorotoluene	BQL	0.00492	1	09/23/2004
4-Chlorotoluene	BQL	0.00492	1	09/23/2004
Dibromochloromethane	BQL	0.00492	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00492	1	09/23/2004
Dibromomethane	BQL	0.00492	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00492	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00492	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00492	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00492	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00492	1	09/23/2004
1,1-Dichloroethane	BQL	0.00492	1	09/23/2004
1,1-Dichloroethene	BQL	0.00492	1	09/23/2004
1,2-Dichloroethane	BQL	0.00492	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00492	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00492	1	09/23/2004
1,2-Dichloropropane	BQL	0.00492	1	09/23/2004
1,3-Dichloropropane	BQL	0.00492	1	09/23/2004
2,2-Dichloropropane	BQL	0.00492	1	09/23/2004
1,1-Dichloropropene	BQL	0.00492	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00492	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00492	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00492	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00492	1	09/23/2004
Ethylbenzene	BQL	0.00492	1	09/23/2004
Hexachlorobutadiene	BQL	0.00492	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB04(3-4)
 Client Project ID: AS-4158
 Lab Sample ID G128-1385-4A
 Lab Project ID: G128-1385
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 09-21-2004 11:30
 Date Received: 09/22/2004
 Matrix: Soil
 %Solids: 84.7

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00492	1	09/23/2004
Iodomethane	BQL	0.00492	1	09/23/2004
Isopropylbenzene	BQL	0.00492	1	09/23/2004
4-Isopropyltoluene	BQL	0.00492	1	09/23/2004
Methylene chloride	BQL	0.0197	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00492	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00492	1	09/23/2004
Naphthalene	BQL	0.00492	1	09/23/2004
n-Propyl benzene	BQL	0.00492	1	09/23/2004
Styrene	BQL	0.00492	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00492	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00492	1	09/23/2004
Tetrachloroethene	BQL	0.00492	1	09/23/2004
Toluene	BQL	0.00492	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00492	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00492	1	09/23/2004
Trichloroethene	BQL	0.00492	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00492	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00492	1	09/23/2004
Trichlorofluoromethane	BQL	0.00492	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00492	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00492	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00492	1	09/23/2004
Vinyl chloride	BQL	0.00492	1	09/23/2004
m-,p-Xylene	BQL	0.00984	1	09/23/2004
o-Xylene	BQL	0.00492	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0465	93
1,2-Dichloroethane-d4	0.05	0.0667	133
Toluene-d8	0.05	0.0491	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB05(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-5A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 88.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0506	1	09/23/2004
Benzene	BQL	0.00506	1	09/23/2004
Bromobenzene	BQL	0.00506	1	09/23/2004
Bromochloromethane	BQL	0.00506	1	09/23/2004
Bromodichloromethane	BQL	0.00506	1	09/23/2004
Bromoform	BQL	0.00506	1	09/23/2004
Bromomethane	BQL	0.00506	1	09/23/2004
2-Butanone	BQL	0.0253	1	09/23/2004
n-Butylbenzene	BQL	0.00506	1	09/23/2004
sec-Butylbenzene	BQL	0.00506	1	09/23/2004
tert-Butylbenzene	BQL	0.00506	1	09/23/2004
Carbon disulfide	BQL	0.00506	1	09/23/2004
Carbon tetrachloride	BQL	0.00506	1	09/23/2004
Chlorobenzene	BQL	0.00506	1	09/23/2004
Chloroethane	BQL	0.00506	1	09/23/2004
Chloroform	BQL	0.00506	1	09/23/2004
Chloromethane	BQL	0.00506	1	09/23/2004
2-Chlorotoluene	BQL	0.00506	1	09/23/2004
4-Chlorotoluene	BQL	0.00506	1	09/23/2004
Dibromochloromethane	BQL	0.00506	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00506	1	09/23/2004
Dibromomethane	BQL	0.00506	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00506	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00506	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00506	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00506	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00506	1	09/23/2004
1,1-Dichloroethane	BQL	0.00506	1	09/23/2004
1,1-Dichloroethene	BQL	0.00506	1	09/23/2004
1,2-Dichloroethane	BQL	0.00506	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00506	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00506	1	09/23/2004
1,2-Dichloropropane	BQL	0.00506	1	09/23/2004
1,3-Dichloropropane	BQL	0.00506	1	09/23/2004
2,2-Dichloropropane	BQL	0.00506	1	09/23/2004
1,1-Dichloropropene	BQL	0.00506	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00506	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00506	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00506	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00506	1	09/23/2004
Ethylbenzene	BQL	0.00506	1	09/23/2004
Hexachlorobutadiene	BQL	0.00506	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB05(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-5A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 88.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00506	1	09/23/2004
Iodomethane	BQL	0.00506	1	09/23/2004
Isopropylbenzene	BQL	0.00506	1	09/23/2004
4-Isopropyltoluene	BQL	0.00506	1	09/23/2004
Methylene chloride	BQL	0.0202	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00506	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00506	1	09/23/2004
Naphthalene	BQL	0.00506	1	09/23/2004
n-Propyl benzene	BQL	0.00506	1	09/23/2004
Styrene	BQL	0.00506	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00506	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00506	1	09/23/2004
Tetrachloroethene	BQL	0.00506	1	09/23/2004
Toluene	BQL	0.00506	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00506	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00506	1	09/23/2004
Trichloroethene	BQL	0.00506	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00506	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00506	1	09/23/2004
Trichlorofluoromethane	BQL	0.00506	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00506	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00506	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00506	1	09/23/2004
Vinyl chloride	BQL	0.00506	1	09/23/2004
m,p-Xylene	BQL	0.0101	1	09/23/2004
o-Xylene	BQL	0.00506	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0483	97
1,2-Dichloroethane-d4	0.05	0.0667	133
Toluene-d8	0.05	0.0489	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB06(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-6A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0478	1	09/23/2004
Benzene	BQL	0.00478	1	09/23/2004
Bromobenzene	BQL	0.00478	1	09/23/2004
Bromochloromethane	BQL	0.00478	1	09/23/2004
Bromodichloromethane	BQL	0.00478	1	09/23/2004
Bromoform	BQL	0.00478	1	09/23/2004
Bromomethane	BQL	0.00478	1	09/23/2004
2-Butanone	BQL	0.0239	1	09/23/2004
n-Butylbenzene	BQL	0.00478	1	09/23/2004
sec-Butylbenzene	BQL	0.00478	1	09/23/2004
tert-Butylbenzene	BQL	0.00478	1	09/23/2004
Carbon disulfide	BQL	0.00478	1	09/23/2004
Carbon tetrachloride	BQL	0.00478	1	09/23/2004
Chlorobenzene	BQL	0.00478	1	09/23/2004
Chloroethane	BQL	0.00478	1	09/23/2004
Chloroform	BQL	0.00478	1	09/23/2004
Chloromethane	BQL	0.00478	1	09/23/2004
2-Chlorotoluene	BQL	0.00478	1	09/23/2004
4-Chlorotoluene	BQL	0.00478	1	09/23/2004
Dibromochloromethane	BQL	0.00478	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00478	1	09/23/2004
Dibromomethane	BQL	0.00478	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00478	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00478	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00478	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00478	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00478	1	09/23/2004
1,1-Dichloroethane	BQL	0.00478	1	09/23/2004
1,1-Dichloroethene	BQL	0.00478	1	09/23/2004
1,2-Dichloroethane	BQL	0.00478	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00478	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00478	1	09/23/2004
1,2-Dichloropropane	BQL	0.00478	1	09/23/2004
1,3-Dichloropropane	BQL	0.00478	1	09/23/2004
2,2-Dichloropropane	BQL	0.00478	1	09/23/2004
1,1-Dichloropropene	BQL	0.00478	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00478	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00478	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00478	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00478	1	09/23/2004
Ethylbenzene	BQL	0.00478	1	09/23/2004
Hexachlorobutadiene	BQL	0.00478	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles
by GCMS 8260-5035

Client Sample ID: USTAS4158-SB06(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-6A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 11:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00478	1	09/23/2004
Iodomethane	BQL	0.00478	1	09/23/2004
Isopropylbenzene	BQL	0.00478	1	09/23/2004
4-Isopropyltoluene	BQL	0.00478	1	09/23/2004
Methylene chloride	BQL	0.0191	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00478	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00478	1	09/23/2004
Naphthalene	BQL	0.00478	1	09/23/2004
n-Propyl benzene	BQL	0.00478	1	09/23/2004
Styrene	BQL	0.00478	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00478	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00478	1	09/23/2004
Tetrachloroethene	BQL	0.00478	1	09/23/2004
Toluene	BQL	0.00478	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00478	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00478	1	09/23/2004
Trichloroethene	BQL	0.00478	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00478	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00478	1	09/23/2004
Trichlorofluoromethane	BQL	0.00478	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00478	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00478	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00478	1	09/23/2004
Vinyl chloride	BQL	0.00478	1	09/23/2004
m-,p-Xylene	BQL	0.00956	1	09/23/2004
o-Xylene	BQL	0.00478	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0477	95
1,2-Dichloroethane-d4	0.05	0.0667	133
Toluene-d8	0.05	0.0495	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB07(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-7A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:45
Date Received: 09/22/2004
Matrix: Soil
%Solids: 91.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0412	1	09/23/2004
Benzene	BQL	0.00412	1	09/23/2004
Bromobenzene	BQL	0.00412	1	09/23/2004
Bromochloromethane	BQL	0.00412	1	09/23/2004
Bromodichloromethane	BQL	0.00412	1	09/23/2004
Bromoform	BQL	0.00412	1	09/23/2004
Bromomethane	BQL	0.00412	1	09/23/2004
2-Butanone	BQL	0.0206	1	09/23/2004
n-Butylbenzene	BQL	0.00412	1	09/23/2004
sec-Butylbenzene	BQL	0.00412	1	09/23/2004
tert-Butylbenzene	BQL	0.00412	1	09/23/2004
Carbon disulfide	BQL	0.00412	1	09/23/2004
Carbon tetrachloride	BQL	0.00412	1	09/23/2004
Chlorobenzene	BQL	0.00412	1	09/23/2004
Chloroethane	BQL	0.00412	1	09/23/2004
Chloroform	BQL	0.00412	1	09/23/2004
Chloromethane	BQL	0.00412	1	09/23/2004
2-Chlorotoluene	BQL	0.00412	1	09/23/2004
4-Chlorotoluene	BQL	0.00412	1	09/23/2004
Dibromochloromethane	BQL	0.00412	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00412	1	09/23/2004
Dibromomethane	BQL	0.00412	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00412	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00412	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00412	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00412	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00412	1	09/23/2004
1,1-Dichloroethane	BQL	0.00412	1	09/23/2004
1,1-Dichloroethene	BQL	0.00412	1	09/23/2004
1,2-Dichloroethane	BQL	0.00412	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00412	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00412	1	09/23/2004
1,2-Dichloropropane	BQL	0.00412	1	09/23/2004
1,3-Dichloropropane	BQL	0.00412	1	09/23/2004
2,2-Dichloropropane	BQL	0.00412	1	09/23/2004
1,1-Dichloropropene	BQL	0.00412	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00412	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00412	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00412	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00412	1	09/23/2004
Ethylbenzene	BQL	0.00412	1	09/23/2004
Hexachlorobutadiene	BQL	0.00412	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB07(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-7A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:45
Date Received: 09/22/2004
Matrix: Soil
%Solids: 91.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00412	1	09/23/2004
Iodomethane	BQL	0.00412	1	09/23/2004
Isopropylbenzene	BQL	0.00412	1	09/23/2004
4-Isopropyltoluene	BQL	0.00412	1	09/23/2004
Methylene chloride	BQL	0.0165	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00412	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00412	1	09/23/2004
Naphthalene	BQL	0.00412	1	09/23/2004
n-Propyl benzene	BQL	0.00412	1	09/23/2004
Styrene	BQL	0.00412	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00412	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00412	1	09/23/2004
Tetrachloroethene	BQL	0.00412	1	09/23/2004
Toluene	BQL	0.00412	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00412	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00412	1	09/23/2004
Trichloroethene	BQL	0.00412	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00412	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00412	1	09/23/2004
Trichlorofluoromethane	BQL	0.00412	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00412	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00412	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00412	1	09/23/2004
Vinyl chloride	BQL	0.00412	1	09/23/2004
m,p-Xylene	BQL	0.00824	1	09/23/2004
o-Xylene	BQL	0.00412	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0484	97
1,2-Dichloroethane-d4	0.05	0.0661	132
Toluene-d8	0.05	0.0493	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB08(3-4)

Client Project ID: AS-4158

Lab Sample ID G128-1385-8A

Lab Project ID: G128-1385

Report Basis: Dry Weight

Analyzed By: JTF

Date Collected: 09-21-2004 10:30

Date Received: 09/22/2004

Matrix: Soil

%Solids: 87.1

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0501	1	09/23/2004
Benzene	BQL	0.00501	1	09/23/2004
Bromobenzene	BQL	0.00501	1	09/23/2004
Bromochloromethane	BQL	0.00501	1	09/23/2004
Bromodichloromethane	BQL	0.00501	1	09/23/2004
Bromoform	BQL	0.00501	1	09/23/2004
Bromomethane	BQL	0.00501	1	09/23/2004
2-Butanone	BQL	0.0250	1	09/23/2004
n-Butylbenzene	BQL	0.00501	1	09/23/2004
sec-Butylbenzene	BQL	0.00501	1	09/23/2004
tert-Butylbenzene	BQL	0.00501	1	09/23/2004
Carbon disulfide	BQL	0.00501	1	09/23/2004
Carbon tetrachloride	BQL	0.00501	1	09/23/2004
Chlorobenzene	BQL	0.00501	1	09/23/2004
Chloroethane	BQL	0.00501	1	09/23/2004
Chloroform	BQL	0.00501	1	09/23/2004
Chloromethane	BQL	0.00501	1	09/23/2004
2-Chlorotoluene	BQL	0.00501	1	09/23/2004
4-Chlorotoluene	BQL	0.00501	1	09/23/2004
Dibromochloromethane	BQL	0.00501	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00501	1	09/23/2004
Dibromomethane	BQL	0.00501	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00501	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00501	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00501	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00501	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00501	1	09/23/2004
1,1-Dichloroethane	BQL	0.00501	1	09/23/2004
1,1-Dichloroethene	BQL	0.00501	1	09/23/2004
1,2-Dichloroethane	BQL	0.00501	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00501	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00501	1	09/23/2004
1,2-Dichloropropane	BQL	0.00501	1	09/23/2004
1,3-Dichloropropane	BQL	0.00501	1	09/23/2004
2,2-Dichloropropane	BQL	0.00501	1	09/23/2004
1,1-Dichloropropene	BQL	0.00501	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00501	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00501	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00501	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00501	1	09/23/2004
Ethylbenzene	BQL	0.00501	1	09/23/2004
Hexachlorobutadiene	BQL	0.00501	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB08(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-8A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:30
Date Received: 09/22/2004
Matrix: Soil
%Solids: 87.1

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00501	1	09/23/2004
Iodomethane	BQL	0.00501	1	09/23/2004
Isopropylbenzene	BQL	0.00501	1	09/23/2004
4-Isopropyltoluene	BQL	0.00501	1	09/23/2004
Methylene chloride	BQL	0.0200	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00501	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00501	1	09/23/2004
Naphthalene	BQL	0.00501	1	09/23/2004
n-Propyl benzene	BQL	0.00501	1	09/23/2004
Styrene	BQL	0.00501	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00501	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00501	1	09/23/2004
Tetrachloroethene	BQL	0.00501	1	09/23/2004
Toluene	BQL	0.00501	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00501	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00501	1	09/23/2004
Trichloroethene	BQL	0.00501	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00501	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00501	1	09/23/2004
Trichlorofluoromethane	BQL	0.00501	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00501	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00501	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00501	1	09/23/2004
Vinyl chloride	BQL	0.00501	1	09/23/2004
m,p-Xylene	BQL	0.0100	1	09/23/2004
o-Xylene	BQL	0.00501	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0481	96
1,2-Dichloroethane-d4	0.05	0.0672	134
Toluene-d8	0.05	0.0492	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNF

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB09(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-9B
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 88.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0452	1	09/23/2004
Benzene	BQL	0.00452	1	09/23/2004
Bromobenzene	BQL	0.00452	1	09/23/2004
Bromochloromethane	BQL	0.00452	1	09/23/2004
Bromodichloromethane	BQL	0.00452	1	09/23/2004
Bromoform	BQL	0.00452	1	09/23/2004
Bromomethane	BQL	0.00452	1	09/23/2004
2-Butanone	BQL	0.0226	1	09/23/2004
n-Butylbenzene	BQL	0.00452	1	09/23/2004
sec-Butylbenzene	BQL	0.00452	1	09/23/2004
tert-Butylbenzene	BQL	0.00452	1	09/23/2004
Carbon disulfide	BQL	0.00452	1	09/23/2004
Carbon tetrachloride	BQL	0.00452	1	09/23/2004
Chlorobenzene	BQL	0.00452	1	09/23/2004
Chloroethane	BQL	0.00452	1	09/23/2004
Chloroform	BQL	0.00452	1	09/23/2004
Chloromethane	BQL	0.00452	1	09/23/2004
2-Chlorotoluene	BQL	0.00452	1	09/23/2004
4-Chlorotoluene	BQL	0.00452	1	09/23/2004
Dibromochloromethane	BQL	0.00452	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00452	1	09/23/2004
Dibromomethane	BQL	0.00452	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00452	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00452	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00452	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00452	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00452	1	09/23/2004
1,1-Dichloroethane	BQL	0.00452	1	09/23/2004
1,1-Dichloroethene	BQL	0.00452	1	09/23/2004
1,2-Dichloroethane	BQL	0.00452	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00452	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00452	1	09/23/2004
1,2-Dichloropropane	BQL	0.00452	1	09/23/2004
1,3-Dichloropropane	BQL	0.00452	1	09/23/2004
2,2-Dichloropropane	BQL	0.00452	1	09/23/2004
1,1-Dichloropropene	BQL	0.00452	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00452	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00452	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00452	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00452	1	09/23/2004
Ethylbenzene	BQL	0.00452	1	09/23/2004
Hexachlorobutadiene	BQL	0.00452	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB09(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-9B
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 88.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00452	1	09/23/2004
Iodomethane	BQL	0.00452	1	09/23/2004
Isopropylbenzene	BQL	0.00452	1	09/23/2004
4-Isopropyltoluene	BQL	0.00452	1	09/23/2004
Methylene chloride	BQL	0.0181	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00452	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00452	1	09/23/2004
Naphthalene	BQL	0.00452	1	09/23/2004
n-Propyl benzene	BQL	0.00452	1	09/23/2004
Styrene	BQL	0.00452	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00452	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00452	1	09/23/2004
Tetrachloroethene	BQL	0.00452	1	09/23/2004
Toluene	BQL	0.00452	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00452	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00452	1	09/23/2004
Trichloroethene	BQL	0.00452	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00452	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00452	1	09/23/2004
Trichlorofluoromethane	BQL	0.00452	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00452	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00452	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00452	1	09/23/2004
Vinyl chloride	BQL	0.00452	1	09/23/2004
m-,p-Xylene	BQL	0.00905	1	09/23/2004
o-Xylene	BQL	0.00452	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0499	100
1,2-Dichloroethane-d4	0.05	0.0643	129
Toluene-d8	0.05	0.0494	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB10(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-10A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0483	1	09/23/2004
Benzene	BQL	0.00483	1	09/23/2004
Bromobenzene	BQL	0.00483	1	09/23/2004
Bromochloromethane	BQL	0.00483	1	09/23/2004
Bromodichloromethane	BQL	0.00483	1	09/23/2004
Bromoform	BQL	0.00483	1	09/23/2004
Bromomethane	BQL	0.00483	1	09/23/2004
2-Butanone	BQL	0.0242	1	09/23/2004
n-Butylbenzene	BQL	0.00483	1	09/23/2004
sec-Butylbenzene	BQL	0.00483	1	09/23/2004
tert-Butylbenzene	BQL	0.00483	1	09/23/2004
Carbon disulfide	BQL	0.00483	1	09/23/2004
Carbon tetrachloride	BQL	0.00483	1	09/23/2004
Chlorobenzene	BQL	0.00483	1	09/23/2004
Chloroethane	BQL	0.00483	1	09/23/2004
Chloroform	BQL	0.00483	1	09/23/2004
Chloromethane	BQL	0.00483	1	09/23/2004
2-Chlorotoluene	BQL	0.00483	1	09/23/2004
4-Chlorotoluene	BQL	0.00483	1	09/23/2004
Dibromochloromethane	BQL	0.00483	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00483	1	09/23/2004
Dibromomethane	BQL	0.00483	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00483	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00483	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00483	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00483	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00483	1	09/23/2004
1,1-Dichloroethane	BQL	0.00483	1	09/23/2004
1,1-Dichloroethene	BQL	0.00483	1	09/23/2004
1,2-Dichloroethane	BQL	0.00483	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00483	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00483	1	09/23/2004
1,2-Dichloropropane	BQL	0.00483	1	09/23/2004
1,3-Dichloropropane	BQL	0.00483	1	09/23/2004
2,2-Dichloropropane	BQL	0.00483	1	09/23/2004
1,1-Dichloropropene	BQL	0.00483	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00483	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00483	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00483	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00483	1	09/23/2004
Ethylbenzene	BQL	0.00483	1	09/23/2004
Hexachlorobutadiene	BQL	0.00483	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB10(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-10A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-21-2004 10:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00483	1	09/23/2004
Iodomethane	BQL	0.00483	1	09/23/2004
Isopropylbenzene	BQL	0.00483	1	09/23/2004
4-Isopropyltoluene	BQL	0.00483	1	09/23/2004
Methylene chloride	BQL	0.0193	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00483	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00483	1	09/23/2004
Naphthalene	BQL	0.00483	1	09/23/2004
n-Propyl benzene	BQL	0.00483	1	09/23/2004
Styrene	BQL	0.00483	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00483	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00483	1	09/23/2004
Tetrachloroethene	BQL	0.00483	1	09/23/2004
Toluene	BQL	0.00483	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00483	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00483	1	09/23/2004
Trichloroethene	BQL	0.00483	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00483	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00483	1	09/23/2004
Trichlorofluoromethane	BQL	0.00483	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00483	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00483	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00483	1	09/23/2004
Vinyl chloride	BQL	0.00966	1	09/23/2004
m,p-Xylene	BQL	0.00483	1	09/23/2004
o-Xylene	BQL	0.00483	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0477	95
1,2-Dichloroethane-d4	0.05	0.0668	134
Toluene-d8	0.05	0.0498	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB11(3-4)
 Client Project ID: AS-4158
 Lab Sample ID G128-1385-11A
 Lab Project ID: G128-1385
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 09-20-2004 14:45
 Date Received: 09/22/2004
 Matrix: Soil
 %Solids: 85.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0474	1	09/23/2004
Benzene	BQL	0.00474	1	09/23/2004
Bromobenzene	BQL	0.00474	1	09/23/2004
Bromochloromethane	BQL	0.00474	1	09/23/2004
Bromodichloromethane	BQL	0.00474	1	09/23/2004
Bromoform	BQL	0.00474	1	09/23/2004
Bromomethane	BQL	0.00474	1	09/23/2004
2-Butanone	BQL	0.0237	1	09/23/2004
n-Butylbenzene	BQL	0.00474	1	09/23/2004
sec-Butylbenzene	BQL	0.00474	1	09/23/2004
tert-Butylbenzene	BQL	0.00474	1	09/23/2004
Carbon disulfide	BQL	0.00474	1	09/23/2004
Carbon tetrachloride	BQL	0.00474	1	09/23/2004
Chlorobenzene	BQL	0.00474	1	09/23/2004
Chloroethane	BQL	0.00474	1	09/23/2004
Chloroform	BQL	0.00474	1	09/23/2004
Chloromethane	BQL	0.00474	1	09/23/2004
2-Chlorotoluene	BQL	0.00474	1	09/23/2004
4-Chlorotoluene	BQL	0.00474	1	09/23/2004
Dibromochloromethane	BQL	0.00474	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00474	1	09/23/2004
Dibromomethane	BQL	0.00474	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00474	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00474	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00474	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00474	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00474	1	09/23/2004
1,1-Dichloroethane	BQL	0.00474	1	09/23/2004
1,1-Dichloroethene	BQL	0.00474	1	09/23/2004
1,2-Dichloroethane	BQL	0.00474	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00474	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00474	1	09/23/2004
1,2-Dichloropropane	BQL	0.00474	1	09/23/2004
1,3-Dichloropropane	BQL	0.00474	1	09/23/2004
2,2-Dichloropropane	BQL	0.00474	1	09/23/2004
1,1-Dichloropropene	BQL	0.00474	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00474	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00474	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00474	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00474	1	09/23/2004
Ethylbenzene	BQL	0.00474	1	09/23/2004
Hexachlorobutadiene	BQL	0.00474	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB11(3-4)
 Client Project ID: AS-4158
 Lab Sample ID G128-1385-11A
 Lab Project ID: G128-1385
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 09-20-2004 14:45
 Date Received: 09/22/2004
 Matrix: Soil
 %Solids: 85.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00474	1	09/23/2004
Iodomethane	BQL	0.00474	1	09/23/2004
Isopropylbenzene	BQL	0.00474	1	09/23/2004
4-Isopropyltoluene	BQL	0.00474	1	09/23/2004
Methylene chloride	BQL	0.0190	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00474	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00474	1	09/23/2004
Naphthalene	BQL	0.00474	1	09/23/2004
n-Propyl benzene	BQL	0.00474	1	09/23/2004
Styrene	BQL	0.00474	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00474	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00474	1	09/23/2004
Tetrachloroethene	BQL	0.00474	1	09/23/2004
Toluene	BQL	0.00474	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00474	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00474	1	09/23/2004
Trichloroethene	BQL	0.00474	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00474	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00474	1	09/23/2004
Trichlorofluoromethane	BQL	0.00474	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00474	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00474	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00474	1	09/23/2004
Vinyl chloride	BQL	0.00474	1	09/23/2004
m-,p-Xylene	BQL	0.00948	1	09/23/2004
o-Xylene	BQL	0.00474	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0473	95
1,2-Dichloroethane-d4	0.05	0.0676	135
Toluene-d8	0.05	0.05	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB12(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-12A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:45
Date Received: 09/22/2004
Matrix: Soil
%Solids: 87.2

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0432	1	09/23/2004
Benzene	BQL	0.00432	1	09/23/2004
Bromobenzene	BQL	0.00432	1	09/23/2004
Bromochloromethane	BQL	0.00432	1	09/23/2004
Bromodichloromethane	BQL	0.00432	1	09/23/2004
Bromoform	BQL	0.00432	1	09/23/2004
Bromomethane	BQL	0.00432	1	09/23/2004
2-Butanone	BQL	0.0216	1	09/23/2004
n-Butylbenzene	BQL	0.00432	1	09/23/2004
sec-Butylbenzene	BQL	0.00432	1	09/23/2004
tert-Butylbenzene	BQL	0.00432	1	09/23/2004
Carbon disulfide	BQL	0.00432	1	09/23/2004
Carbon tetrachloride	BQL	0.00432	1	09/23/2004
Chlorobenzene	BQL	0.00432	1	09/23/2004
Chloroethane	BQL	0.00432	1	09/23/2004
Chloroform	BQL	0.00432	1	09/23/2004
Chloromethane	BQL	0.00432	1	09/23/2004
2-Chlorotoluene	BQL	0.00432	1	09/23/2004
4-Chlorotoluene	BQL	0.00432	1	09/23/2004
Dibromochloromethane	BQL	0.00432	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00432	1	09/23/2004
Dibromomethane	BQL	0.00432	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00432	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00432	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00432	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00432	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00432	1	09/23/2004
1,1-Dichloroethane	BQL	0.00432	1	09/23/2004
1,1-Dichloroethene	BQL	0.00432	1	09/23/2004
1,2-Dichloroethane	BQL	0.00432	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00432	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00432	1	09/23/2004
1,2-Dichloropropane	BQL	0.00432	1	09/23/2004
1,3-Dichloropropane	BQL	0.00432	1	09/23/2004
2,2-Dichloropropane	BQL	0.00432	1	09/23/2004
1,1-Dichloropropene	BQL	0.00432	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00432	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00432	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00432	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00432	1	09/23/2004
Ethylbenzene	BQL	0.00432	1	09/23/2004
Hexachlorobutadiene	BQL	0.00432	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB12(3-4)
 Client Project ID: AS-4158
 Lab Sample ID G128-1385-12A
 Lab Project ID: G128-1385
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 09-20-2004 13:45
 Date Received: 09/22/2004
 Matrix: Soil
 %Solids: 87.2

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00432	1	09/23/2004
Iodomethane	BQL	0.00432	1	09/23/2004
Isopropylbenzene	BQL	0.00432	1	09/23/2004
4-Isopropyltoluene	BQL	0.00432	1	09/23/2004
Methylene chloride	BQL	0.0173	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00432	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00432	1	09/23/2004
Naphthalene	BQL	0.00432	1	09/23/2004
n-Propyl benzene	BQL	0.00432	1	09/23/2004
Styrene	BQL	0.00432	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00432	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00432	1	09/23/2004
Tetrachloroethene	BQL	0.00432	1	09/23/2004
Toluene	BQL	0.00432	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00432	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00432	1	09/23/2004
Trichloroethene	BQL	0.00432	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00432	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00432	1	09/23/2004
Trichlorofluoromethane	BQL	0.00432	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00432	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00432	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00432	1	09/23/2004
Vinyl chloride	BQL	0.00432	1	09/23/2004
m-,p-Xylene	BQL	0.00863	1	09/23/2004
o-Xylene	BQL	0.00432	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0487	97
1,2-Dichloroethane-d4	0.05	0.0652	130
Toluene-d8	0.05	0.0495	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNF

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB13(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-13A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:30
Date Received: 09/22/2004
Matrix: Soil
%Solids: 90.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0435	1	09/23/2004
Benzene	BQL	0.00435	1	09/23/2004
Bromobenzene	BQL	0.00435	1	09/23/2004
Bromochloromethane	BQL	0.00435	1	09/23/2004
Bromodichloromethane	BQL	0.00435	1	09/23/2004
Bromoform	BQL	0.00435	1	09/23/2004
Bromomethane	BQL	0.00435	1	09/23/2004
2-Butanone	BQL	0.0218	1	09/23/2004
n-Butylbenzene	BQL	0.00435	1	09/23/2004
sec-Butylbenzene	BQL	0.00435	1	09/23/2004
tert-Butylbenzene	BQL	0.00435	1	09/23/2004
Carbon disulfide	BQL	0.00435	1	09/23/2004
Carbon tetrachloride	BQL	0.00435	1	09/23/2004
Chlorobenzene	BQL	0.00435	1	09/23/2004
Chloroethane	BQL	0.00435	1	09/23/2004
Chloroform	BQL	0.00435	1	09/23/2004
Chloromethane	BQL	0.00435	1	09/23/2004
2-Chlorotoluene	BQL	0.00435	1	09/23/2004
4-Chlorotoluene	BQL	0.00435	1	09/23/2004
Dibromochloromethane	BQL	0.00435	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00435	1	09/23/2004
Dibromomethane	BQL	0.00435	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00435	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00435	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00435	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00435	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00435	1	09/23/2004
1,1-Dichloroethane	BQL	0.00435	1	09/23/2004
1,1-Dichloroethene	BQL	0.00435	1	09/23/2004
1,2-Dichloroethane	BQL	0.00435	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00435	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00435	1	09/23/2004
1,2-Dichloropropane	BQL	0.00435	1	09/23/2004
1,3-Dichloropropane	BQL	0.00435	1	09/23/2004
2,2-Dichloropropane	BQL	0.00435	1	09/23/2004
1,1-Dichloropropene	BQL	0.00435	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00435	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00435	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00435	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00435	1	09/23/2004
Ethylbenzene	BQL	0.00435	1	09/23/2004
Hexachlorobutadiene	BQL	0.00435	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB13(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-13A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:30
Date Received: 09/22/2004
Matrix: Soil
%Solids: 90.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00435	1	09/23/2004
Iodomethane	BQL	0.00435	1	09/23/2004
Isopropylbenzene	BQL	0.00435	1	09/23/2004
4-Isopropyltoluene	BQL	0.00435	1	09/23/2004
Methylene chloride	BQL	0.0174	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00435	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00435	1	09/23/2004
Naphthalene	BQL	0.00435	1	09/23/2004
n-Propyl benzene	BQL	0.00435	1	09/23/2004
Styrene	BQL	0.00435	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00435	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00435	1	09/23/2004
Tetrachloroethene	BQL	0.00435	1	09/23/2004
Toluene	BQL	0.00435	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00435	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00435	1	09/23/2004
Trichloroethene	BQL	0.00435	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00435	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00435	1	09/23/2004
Trichlorofluoromethane	BQL	0.00435	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00435	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00435	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00435	1	09/23/2004
Vinyl chloride	BQL	0.00435	1	09/23/2004
m-,p-Xylene	BQL	0.00871	1	09/23/2004
o-Xylene	BQL	0.00435	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0489	98
1,2-Dichloroethane-d4	0.05	0.0669	134
Toluene-d8	0.05	0.0494	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB14(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-14A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 85.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0441	1	09/23/2004
Benzene	BQL	0.00441	1	09/23/2004
Bromobenzene	BQL	0.00441	1	09/23/2004
Bromochloromethane	BQL	0.00441	1	09/23/2004
Bromodichloromethane	BQL	0.00441	1	09/23/2004
Bromoform	BQL	0.00441	1	09/23/2004
Bromomethane	BQL	0.00441	1	09/23/2004
2-Butanone	BQL	0.0220	1	09/23/2004
n-Butylbenzene	BQL	0.00441	1	09/23/2004
sec-Butylbenzene	BQL	0.00441	1	09/23/2004
tert-Butylbenzene	BQL	0.00441	1	09/23/2004
Carbon disulfide	BQL	0.00441	1	09/23/2004
Carbon tetrachloride	BQL	0.00441	1	09/23/2004
Chlorobenzene	BQL	0.00441	1	09/23/2004
Chloroethane	BQL	0.00441	1	09/23/2004
Chloroform	BQL	0.00441	1	09/23/2004
Chloromethane	BQL	0.00441	1	09/23/2004
2-Chlorotoluene	BQL	0.00441	1	09/23/2004
4-Chlorotoluene	BQL	0.00441	1	09/23/2004
Dibromochloromethane	BQL	0.00441	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00441	1	09/23/2004
Dibromomethane	BQL	0.00441	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00441	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00441	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00441	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00441	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00441	1	09/23/2004
1,1-Dichloroethane	BQL	0.00441	1	09/23/2004
1,1-Dichloroethene	BQL	0.00441	1	09/23/2004
1,2-Dichloroethane	BQL	0.00441	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00441	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00441	1	09/23/2004
1,2-Dichloropropane	BQL	0.00441	1	09/23/2004
1,3-Dichloropropane	BQL	0.00441	1	09/23/2004
2,2-Dichloropropane	BQL	0.00441	1	09/23/2004
1,1-Dichloropropene	BQL	0.00441	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00441	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00441	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00441	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00441	1	09/23/2004
Ethylbenzene	BQL	0.00441	1	09/23/2004
Hexachlorobutadiene	BQL	0.00441	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles
by GCMS 8260-5035

Client Sample ID: USTAS4158-SB14(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-14A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 85.3

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00441	1	09/23/2004
Iodomethane	BQL	0.00441	1	09/23/2004
Isopropylbenzene	BQL	0.00441	1	09/23/2004
4-Isopropyltoluene	BQL	0.00441	1	09/23/2004
Methylene chloride	BQL	0.0176	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00441	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00441	1	09/23/2004
Naphthalene	BQL	0.00441	1	09/23/2004
n-Propyl benzene	BQL	0.00441	1	09/23/2004
Styrene	BQL	0.00441	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00441	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00441	1	09/23/2004
Tetrachloroethene	BQL	0.00441	1	09/23/2004
Toluene	BQL	0.00441	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00441	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00441	1	09/23/2004
Trichloroethene	BQL	0.00441	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00441	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00441	1	09/23/2004
Trichlorofluoromethane	BQL	0.00441	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00441	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00441	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00441	1	09/23/2004
Vinyl chloride	BQL	0.00441	1	09/23/2004
m-,p-Xylene	BQL	0.00881	1	09/23/2004
o-Xylene	BQL	0.00441	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0487	97
1,2-Dichloroethane-d4	0.05	0.0656	131
Toluene-d8	0.05	0.0495	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB15(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-15A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0460	1	09/23/2004
Benzene	BQL	0.00460	1	09/23/2004
Bromobenzene	BQL	0.00460	1	09/23/2004
Bromochloromethane	BQL	0.00460	1	09/23/2004
Bromodichloromethane	BQL	0.00460	1	09/23/2004
Bromoform	BQL	0.00460	1	09/23/2004
Bromomethane	BQL	0.00460	1	09/23/2004
2-Butanone	BQL	0.0230	1	09/23/2004
n-Butylbenzene	BQL	0.00460	1	09/23/2004
sec-Butylbenzene	BQL	0.00460	1	09/23/2004
tert-Butylbenzene	BQL	0.00460	1	09/23/2004
Carbon disulfide	BQL	0.00460	1	09/23/2004
Carbon tetrachloride	BQL	0.00460	1	09/23/2004
Chlorobenzene	BQL	0.00460	1	09/23/2004
Chloroethane	BQL	0.00460	1	09/23/2004
Chloroform	BQL	0.00460	1	09/23/2004
Chloromethane	BQL	0.00460	1	09/23/2004
2-Chlorotoluene	BQL	0.00460	1	09/23/2004
4-Chlorotoluene	BQL	0.00460	1	09/23/2004
Dibromochloromethane	BQL	0.00460	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00460	1	09/23/2004
Dibromomethane	BQL	0.00460	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00460	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00460	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00460	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00460	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00460	1	09/23/2004
1,1-Dichloroethane	BQL	0.00460	1	09/23/2004
1,1-Dichloroethene	BQL	0.00460	1	09/23/2004
1,2-Dichloroethane	BQL	0.00460	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00460	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00460	1	09/23/2004
1,2-Dichloropropane	BQL	0.00460	1	09/23/2004
1,3-Dichloropropane	BQL	0.00460	1	09/23/2004
2,2-Dichloropropane	BQL	0.00460	1	09/23/2004
1,1-Dichloropropene	BQL	0.00460	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00460	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00460	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00460	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00460	1	09/23/2004
Ethylbenzene	BQL	0.00460	1	09/23/2004
Hexachlorobutadiene	BQL	0.00460	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles
by GCMS 8260-5035

Client Sample ID: USTAS4158-SB15(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-15A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 13:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.6

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00460	1	09/23/2004
Iodomethane	BQL	0.00460	1	09/23/2004
Isopropylbenzene	BQL	0.00460	1	09/23/2004
4-Isopropyltoluene	BQL	0.00460	1	09/23/2004
Methylene chloride	BQL	0.0184	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00460	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00460	1	09/23/2004
Naphthalene	BQL	0.00460	1	09/23/2004
n-Propyl benzene	BQL	0.00460	1	09/23/2004
Styrene	BQL	0.00460	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00460	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00460	1	09/23/2004
Tetrachloroethene	BQL	0.00460	1	09/23/2004
Toluene	BQL	0.00460	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00460	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00460	1	09/23/2004
Trichloroethene	BQL	0.00460	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00460	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00460	1	09/23/2004
Trichlorofluoromethane	BQL	0.00460	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00460	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00460	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00460	1	09/23/2004
Vinyl chloride	BQL	0.00460	1	09/23/2004
m-,p-Xylene	BQL	0.00919	1	09/23/2004
o-Xylene	BQL	0.00460	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.049	98
1,2-Dichloroethane-d4	0.05	0.0668	134
Toluene-d8	0.05	0.0494	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNV

PARADIGM ANALYTICAL LABORATORIES, INC.

**Results for Volatiles
by GCMS 8260-5035**

Client Sample ID: USTAS4158-SB16(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-16A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 14:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0450	1	09/24/2004
Benzene	BQL	0.00450	1	09/24/2004
Bromobenzene	BQL	0.00450	1	09/24/2004
Bromochloromethane	BQL	0.00450	1	09/24/2004
Bromodichloromethane	BQL	0.00450	1	09/24/2004
Bromoform	BQL	0.00450	1	09/24/2004
Bromomethane	BQL	0.00450	1	09/24/2004
2-Butanone	BQL	0.0225	1	09/24/2004
n-Butylbenzene	BQL	0.00450	1	09/24/2004
sec-Butylbenzene	BQL	0.00450	1	09/24/2004
tert-Butylbenzene	BQL	0.00450	1	09/24/2004
Carbon disulfide	BQL	0.00450	1	09/24/2004
Carbon tetrachloride	BQL	0.00450	1	09/24/2004
Chlorobenzene	BQL	0.00450	1	09/24/2004
Chloroethane	BQL	0.00450	1	09/24/2004
Chloroform	BQL	0.00450	1	09/24/2004
Chloromethane	BQL	0.00450	1	09/24/2004
2-Chlorotoluene	BQL	0.00450	1	09/24/2004
4-Chlorotoluene	BQL	0.00450	1	09/24/2004
Dibromochloromethane	BQL	0.00450	1	09/24/2004
1,2-Dibromo-3-chloropropane	BQL	0.00450	1	09/24/2004
Dibromomethane	BQL	0.00450	1	09/24/2004
1,2-Dibromoethane (EDB)	BQL	0.00450	1	09/24/2004
1,2-Dichlorobenzene	BQL	0.00450	1	09/24/2004
1,3-Dichlorobenzene	BQL	0.00450	1	09/24/2004
1,4-Dichlorobenzene	BQL	0.00450	1	09/24/2004
trans-1,4-Dichloro-2-butene	BQL	0.00450	1	09/24/2004
1,1-Dichloroethane	BQL	0.00450	1	09/24/2004
1,1-Dichloroethene	BQL	0.00450	1	09/24/2004
1,2-Dichloroethane	BQL	0.00450	1	09/24/2004
cis-1,2-Dichloroethene	BQL	0.00450	1	09/24/2004
trans-1,2-dichloroethene	BQL	0.00450	1	09/24/2004
1,2-Dichloropropane	BQL	0.00450	1	09/24/2004
1,3-Dichloropropane	BQL	0.00450	1	09/24/2004
2,2-Dichloropropane	BQL	0.00450	1	09/24/2004
1,1-Dichloropropene	BQL	0.00450	1	09/24/2004
cis-1,3-Dichloropropene	BQL	0.00450	1	09/24/2004
trans-1,3-Dichloropropene	BQL	0.00450	1	09/24/2004
Dichlorodifluoromethane	BQL	0.00450	1	09/24/2004
Diisopropyl ether (DIPE)	BQL	0.00450	1	09/24/2004
Ethylbenzene	BQL	0.00450	1	09/24/2004
Hexachlorobutadiene	BQL	0.00450	1	09/24/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB16(3-4)
Client Project ID: AS-4158
Lab Sample ID G128-1385-16A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 14:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.4

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00450	1	09/24/2004
Iodomethane	BQL	0.00450	1	09/24/2004
Isopropylbenzene	BQL	0.00450	1	09/24/2004
4-Isopropyltoluene	BQL	0.00450	1	09/24/2004
Methylene chloride	BQL	0.0180	1	09/24/2004
4-Methyl-2-pentanone	BQL	0.00450	1	09/24/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00450	1	09/24/2004
Naphthalene	BQL	0.00450	1	09/24/2004
n-Propyl benzene	BQL	0.00450	1	09/24/2004
Styrene	BQL	0.00450	1	09/24/2004
1,1,1,2-Tetrachloroethane	BQL	0.00450	1	09/24/2004
1,1,2,2-Tetrachloroethane	BQL	0.00450	1	09/24/2004
Tetrachloroethene	BQL	0.00450	1	09/24/2004
Toluene	BQL	0.00450	1	09/24/2004
1,2,3-Trichlorobenzene	BQL	0.00450	1	09/24/2004
1,2,4-Trichlorobenzene	BQL	0.00450	1	09/24/2004
Trichloroethene	BQL	0.00450	1	09/24/2004
1,1,1-Trichloroethane	BQL	0.00450	1	09/24/2004
1,1,2-Trichloroethane	BQL	0.00450	1	09/24/2004
Trichlorofluoromethane	BQL	0.00450	1	09/24/2004
1,2,3-Trichloropropane	BQL	0.00450	1	09/24/2004
1,2,4-Trimethylbenzene	BQL	0.00450	1	09/24/2004
1,3,5-Trimethylbenzene	BQL	0.00450	1	09/24/2004
Vinyl chloride	BQL	0.00450	1	09/24/2004
m,p-Xylene	BQL	0.00900	1	09/24/2004
o-Xylene	BQL	0.00450	1	09/24/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0472	94
1,2-Dichloroethane-d4	0.05	0.0652	130
Toluene-d8	0.05	0.0496	99

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: ENP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles
by GCMS 8260-5035

Client Sample ID: USTAS4158-SB16(3-4)Dup
Client Project ID: AS-4158
Lab Sample ID G128-1385-17A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 14:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.7

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0440	1	09/24/2004
Benzene	BQL	0.00440	1	09/24/2004
Bromobenzene	BQL	0.00440	1	09/24/2004
Bromochloromethane	BQL	0.00440	1	09/24/2004
Bromodichloromethane	BQL	0.00440	1	09/24/2004
Bromoform	BQL	0.00440	1	09/24/2004
Bromomethane	BQL	0.00440	1	09/24/2004
2-Butanone	BQL	0.0220	1	09/24/2004
n-Butylbenzene	BQL	0.00440	1	09/24/2004
sec-Butylbenzene	BQL	0.00440	1	09/24/2004
tert-Butylbenzene	BQL	0.00440	1	09/24/2004
Carbon disulfide	BQL	0.00440	1	09/24/2004
Carbon tetrachloride	BQL	0.00440	1	09/24/2004
Chlorobenzene	BQL	0.00440	1	09/24/2004
Chloroethane	BQL	0.00440	1	09/24/2004
Chloroform	BQL	0.00440	1	09/24/2004
Chloromethane	BQL	0.00440	1	09/24/2004
2-Chlorotoluene	BQL	0.00440	1	09/24/2004
4-Chlorotoluene	BQL	0.00440	1	09/24/2004
Dibromochloromethane	BQL	0.00440	1	09/24/2004
1,2-Dibromo-3-chloropropane	BQL	0.00440	1	09/24/2004
Dibromomethane	BQL	0.00440	1	09/24/2004
1,2-Dibromoethane (EDB)	BQL	0.00440	1	09/24/2004
1,2-Dichlorobenzene	BQL	0.00440	1	09/24/2004
1,3-Dichlorobenzene	BQL	0.00440	1	09/24/2004
1,4-Dichlorobenzene	BQL	0.00440	1	09/24/2004
trans-1,4-Dichloro-2-butene	BQL	0.00440	1	09/24/2004
1,1-Dichloroethane	BQL	0.00440	1	09/24/2004
1,1-Dichloroethene	BQL	0.00440	1	09/24/2004
1,2-Dichloroethane	BQL	0.00440	1	09/24/2004
cis-1,2-Dichloroethene	BQL	0.00440	1	09/24/2004
trans-1,2-dichloroethene	BQL	0.00440	1	09/24/2004
1,2-Dichloropropane	BQL	0.00440	1	09/24/2004
1,3-Dichloropropane	BQL	0.00440	1	09/24/2004
2,2-Dichloropropane	BQL	0.00440	1	09/24/2004
1,1-Dichloropropene	BQL	0.00440	1	09/24/2004
cis-1,3-Dichloropropene	BQL	0.00440	1	09/24/2004
trans-1,3-Dichloropropene	BQL	0.00440	1	09/24/2004
Dichlorodifluoromethane	BQL	0.00440	1	09/24/2004
Diisopropyl ether (DIPE)	BQL	0.00440	1	09/24/2004
Ethylbenzene	BQL	0.00440	1	09/24/2004
Hexachlorobutadiene	BQL	0.00440	1	09/24/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: USTAS4158-SB16(3-4)Dup
Client Project ID: AS-4158
Lab Sample ID G128-1385-17A
Lab Project ID: G128-1385
Report Basis: Dry Weight

Analyzed By: JTF
Date Collected: 09-20-2004 14:15
Date Received: 09/22/2004
Matrix: Soil
%Solids: 86.7

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00440	1	09/24/2004
Iodomethane	BQL	0.00440	1	09/24/2004
Isopropylbenzene	BQL	0.00440	1	09/24/2004
4-Isopropyltoluene	BQL	0.00440	1	09/24/2004
Methylene chloride	BQL	0.0176	1	09/24/2004
4-Methyl-2-pentanone	BQL	0.00440	1	09/24/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00440	1	09/24/2004
Naphthalene	BQL	0.00440	1	09/24/2004
n-Propyl benzene	BQL	0.00440	1	09/24/2004
Styrene	BQL	0.00440	1	09/24/2004
1,1,1,2-Tetrachloroethane	BQL	0.00440	1	09/24/2004
1,1,2,2-Tetrachloroethane	BQL	0.00440	1	09/24/2004
Tetrachloroethene	BQL	0.00440	1	09/24/2004
Toluene	BQL	0.00440	1	09/24/2004
1,2,3-Trichlorobenzene	BQL	0.00440	1	09/24/2004
1,2,4-Trichlorobenzene	BQL	0.00440	1	09/24/2004
Trichloroethene	BQL	0.00440	1	09/24/2004
1,1,1-Trichloroethane	BQL	0.00440	1	09/24/2004
1,1,2-Trichloroethane	BQL	0.00440	1	09/24/2004
Trichlorofluoromethane	BQL	0.00440	1	09/24/2004
1,2,3-Trichloropropane	BQL	0.00440	1	09/24/2004
1,2,4-Trimethylbenzene	BQL	0.00440	1	09/24/2004
1,3,5-Trimethylbenzene	BQL	0.00440	1	09/24/2004
Vinyl chloride	BQL	0.00440	1	09/24/2004
m-,p-Xylene	BQL	0.00881	1	09/24/2004
o-Xylene	BQL	0.00440	1	09/24/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0484	97
1,2-Dichloroethane-d4	0.05	0.0662	132
Toluene-d8	0.05	0.0499	100

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: Trip Blank
Client Project ID: AS-4158
Lab Sample ID G128-1385-18A
Lab Project ID: G128-1385
Report Basis: 0.0

Analyzed By: JTF
Date Collected: 09-20-2004 00:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	0.0500	1	09/23/2004
Benzene	BQL	0.00500	1	09/23/2004
Bromobenzene	BQL	0.00500	1	09/23/2004
Bromochloromethane	BQL	0.00500	1	09/23/2004
Bromodichloromethane	BQL	0.00500	1	09/23/2004
Bromoform	BQL	0.00500	1	09/23/2004
Bromomethane	BQL	0.00500	1	09/23/2004
2-Butanone	BQL	0.0250	1	09/23/2004
n-Butylbenzene	BQL	0.00500	1	09/23/2004
sec-Butylbenzene	BQL	0.00500	1	09/23/2004
tert-Butylbenzene	BQL	0.00500	1	09/23/2004
Carbon disulfide	BQL	0.00500	1	09/23/2004
Carbon tetrachloride	BQL	0.00500	1	09/23/2004
Chlorobenzene	BQL	0.00500	1	09/23/2004
Chloroethane	BQL	0.00500	1	09/23/2004
Chloroform	BQL	0.00500	1	09/23/2004
Chloromethane	BQL	0.00500	1	09/23/2004
2-Chlorotoluene	BQL	0.00500	1	09/23/2004
4-Chlorotoluene	BQL	0.00500	1	09/23/2004
Dibromochloromethane	BQL	0.00500	1	09/23/2004
1,2-Dibromo-3-chloropropane	BQL	0.00500	1	09/23/2004
Dibromomethane	BQL	0.00500	1	09/23/2004
1,2-Dibromoethane (EDB)	BQL	0.00500	1	09/23/2004
1,2-Dichlorobenzene	BQL	0.00500	1	09/23/2004
1,3-Dichlorobenzene	BQL	0.00500	1	09/23/2004
1,4-Dichlorobenzene	BQL	0.00500	1	09/23/2004
trans-1,4-Dichloro-2-butene	BQL	0.00500	1	09/23/2004
1,1-Dichloroethane	BQL	0.00500	1	09/23/2004
1,1-Dichloroethene	BQL	0.00500	1	09/23/2004
1,2-Dichloroethane	BQL	0.00500	1	09/23/2004
cis-1,2-Dichloroethene	BQL	0.00500	1	09/23/2004
trans-1,2-dichloroethene	BQL	0.00500	1	09/23/2004
1,2-Dichloropropane	BQL	0.00500	1	09/23/2004
1,3-Dichloropropane	BQL	0.00500	1	09/23/2004
2,2-Dichloropropane	BQL	0.00500	1	09/23/2004
1,1-Dichloropropene	BQL	0.00500	1	09/23/2004
cis-1,3-Dichloropropene	BQL	0.00500	1	09/23/2004
trans-1,3-Dichloropropene	BQL	0.00500	1	09/23/2004
Dichlorodifluoromethane	BQL	0.00500	1	09/23/2004
Diisopropyl ether (DIPE)	BQL	0.00500	1	09/23/2004
Ethylbenzene	BQL	0.00500	1	09/23/2004
Hexachlorobutadiene	BQL	0.00500	1	09/23/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Volatiles by GCMS 8260-5035

Client Sample ID: Trip Blank
Client Project ID: AS-4158
Lab Sample ID G128-1385-18A
Lab Project ID: G128-1385
Report Basis: 0.0

Analyzed By: JTF
Date Collected: 09-20-2004 00:00
Date Received: 09/22/2004
Matrix: Soil
%Solids: 100.0

Report Name Compound	Result MG/KG	Quantitation Limit MG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	0.00500	1	09/23/2004
Iodomethane	BQL	0.00500	1	09/23/2004
Isopropylbenzene	BQL	0.00500	1	09/23/2004
4-Isopropyltoluene	BQL	0.00500	1	09/23/2004
Methylene chloride	BQL	0.0200	1	09/23/2004
4-Methyl-2-pentanone	BQL	0.00500	1	09/23/2004
Methyl-tert-butyl ether (MTBE)	BQL	0.00500	1	09/23/2004
Naphthalene	BQL	0.00500	1	09/23/2004
n-Propyl benzene	BQL	0.00500	1	09/23/2004
Styrene	BQL	0.00500	1	09/23/2004
1,1,1,2-Tetrachloroethane	BQL	0.00500	1	09/23/2004
1,1,2,2-Tetrachloroethane	BQL	0.00500	1	09/23/2004
Tetrachloroethene	BQL	0.00500	1	09/23/2004
Toluene	BQL	0.00500	1	09/23/2004
1,2,3-Trichlorobenzene	BQL	0.00500	1	09/23/2004
1,2,4-Trichlorobenzene	BQL	0.00500	1	09/23/2004
Trichloroethene	BQL	0.00500	1	09/23/2004
1,1,1-Trichloroethane	BQL	0.00500	1	09/23/2004
1,1,2-Trichloroethane	BQL	0.00500	1	09/23/2004
Trichlorofluoromethane	BQL	0.00500	1	09/23/2004
1,2,3-Trichloropropane	BQL	0.00500	1	09/23/2004
1,2,4-Trimethylbenzene	BQL	0.00500	1	09/23/2004
1,3,5-Trimethylbenzene	BQL	0.00500	1	09/23/2004
Vinyl chloride	BQL	0.00500	1	09/23/2004
m-,p-Xylene	BQL	0.0100	1	09/23/2004
o-Xylene	BQL	0.00500	1	09/23/2004

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.05	0.0485	97
1,2-Dichloroethane-d4	0.05	0.0664	133
Toluene-d8	0.05	0.0487	97

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB01(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	84
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	97
Surrogate % Recovery - FID	110

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-1e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB02(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	85
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	89
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-2e

Reviewed By: RM

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB03(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/22/04
Date Analyzed	09/25/04
Dry Weight	86
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	96
Surrogate % Recovery - FID	110

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-3d

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB04(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	85
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	91
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-4e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB05(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	88
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	96
Surrogate % Recovery - FID	110

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-5e

Reviewed By: PN

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB06(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	86
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₈ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	90
Surrogate % Recovery - FID	99

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-6e

Reviewed By: ENP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB07(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	91
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	94
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-7e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB08(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	87
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₈ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	85
Surrogate % Recovery - FID	93

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-8e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB09(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	88
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	84
Surrogate % Recovery - FID	93

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-9e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB10(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/25/04
Dry Weight	86
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	90
Surrogate % Recovery - FID	98

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-10e

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB11(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	85
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	88
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-11a

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB12(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	87
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	87
Surrogate % Recovery - FID	98

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-12a

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB13(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	90
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	95
Surrogate % Recovery - FID	110

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-13aReviewed By: END

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB14(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	85
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	96
Surrogate % Recovery - FID	110

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-14a

Reviewed By: RLP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB15(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	87
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	89
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-15a

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB16(3-4)
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	86
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	86
Surrogate % Recovery - FID	99

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-16a

Reviewed By: ENP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB16(3-4)Dup
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/21/04
Date Analyzed	09/27/04
Dry Weight	87
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	87
Surrogate % Recovery - FID	99

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-17a

Reviewed By: RNP

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	Trip Blank
Sample Matrix	Soil
Collection Option (for Soil)*	2
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/20/04
Date Analyzed	09/27/04
Dry Weight	100
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₂ Aliphatics**	< 10 (mg/Kg)
C ₉ -C ₁₀ Aromatics**	< 10 (mg/Kg)
Surrogate % Recovery - PID	88
Surrogate % Recovery - FID	100

* = Option 1 = Established fill line on vial, Option 2 = Sampling Device/Brand, or Option 3 = Field weight of soil.

** = Excludes any surrogates or internal standards.

Lab Info: g128-1385-18b

Reviewed By: ENC

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 08/27/04PID Initial Calibration Date: 08/27/04

Calibration Ranges and Limits

Range	MDL (07/15/2004) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)	
C ₅ -C ₈ Aliphatics	4.4	14	100	10
C ₉ -C ₁₂ Aliphatics	3.4	11	100	10
C ₉ -C ₁₀ Aromatics	0.13	0.41	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD or CCC	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	5.5	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	17.3	Calibration Factor
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	2.8	Calibration Factor
	250		
	500		
	750		
	1000		

Calibration Check Date: 09/24/04

Calibration Check

Range	Levels (µg/L) (mg/Kg)		RPD
C ₅ -C ₈ Aliphatics	2000	200	0.7
C ₉ -C ₁₂ Aliphatics	500	50	9.5
C ₉ -C ₁₀ Aromatics	500	50	-6.9

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 08/27/04PID Initial Calibration Date: 08/27/04

Calibration Ranges and Limits

Range	MDL (07/15/2004) (µg/L)	ML (µg/L)	RL (µg/L) (mg/Kg)	
C ₅ -C ₈ Aliphatics	4.4	14	100	10
C ₉ -C ₁₂ Aliphatics	3.4	11	100	10
C ₉ -C ₁₀ Aromatics	0.13	0.41	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	%RSD or CCC	Method of Quantitation
C ₅ -C ₈ Aliphatics	40	5.5	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	17.3	Calibration Factor
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	2.8	Calibration Factor
	250		
	500		
	750		
	1000		

Calibration Check Date: 09/27/04

Calibration Check

Range	Levels (µg/L) (mg/Kg)		RPD
C ₅ -C ₈ Aliphatics	2000	200	8.9
C ₉ -C ₁₂ Aliphatics	500	50	23.4
C ₉ -C ₁₀ Aromatics	500	50	1.6

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB01(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-1H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 12:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 84.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.371	1	10/06/2004
Acenaphthylene	BQL	0.371	1	10/06/2004
Anthracene	BQL	0.371	1	10/06/2004
Benzo[a]anthracene	BQL	0.371	1	10/06/2004
Benzo[a]pyrene	BQL	0.371	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.371	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.371	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.371	1	10/06/2004
Benzoic Acid	BQL	0.743	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.371	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.371	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.371	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.371	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.371	1	10/06/2004
Butylbenzylphthalate	BQL	0.371	1	10/06/2004
2-Chloronaphthalene	BQL	0.371	1	10/06/2004
2-Chlorophenol	BQL	0.371	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.371	1	10/06/2004
4-Chloroaniline	BQL	1.86	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.371	1	10/06/2004
Chrysene	BQL	0.371	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.371	1	10/06/2004
Dibenzofuran	BQL	0.371	1	10/06/2004
Di-n-Butylphthalate	BQL	0.371	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.371	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.371	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.371	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.743	1	10/06/2004
2,4-Dichlorophenol	BQL	0.371	1	10/06/2004
Diethylphthalate	BQL	0.371	1	10/06/2004
Dimethylphthalate	BQL	0.371	1	10/06/2004
2,4-Dimethylphenol	BQL	0.371	1	10/06/2004
Di-n-octylphthalate	BQL	0.371	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.86	1	10/06/2004
2,4-Dinitrophenol	BQL	1.86	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.371	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.371	1	10/06/2004
Fluoranthene	BQL	0.371	1	10/06/2004
Fluorene	BQL	0.371	1	10/06/2004
Hexachlorobenzene	BQL	0.371	1	10/06/2004
Hexachlorobutadiene	BQL	0.371	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.743	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB01(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-1H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 12:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 84.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.371	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.371	1	10/06/2004
Isophorone	BQL	0.371	1	10/06/2004
2-Methylnaphthalene	BQL	0.371	1	10/06/2004
2-Methylphenol	BQL	0.371	1	10/06/2004
3- & 4-Methylphenol	BQL	0.371	1	10/06/2004
Naphthalene	BQL	0.371	1	10/06/2004
2-Nitroaniline	BQL	0.371	1	10/06/2004
3-Nitroaniline	BQL	1.86	1	10/06/2004
4-Nitroaniline	BQL	1.86	1	10/06/2004
Nitrobenzene	BQL	0.371	1	10/06/2004
2-Nitrophenol	BQL	0.371	1	10/06/2004
4-Nitrophenol	BQL	1.86	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.371	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.371	1	10/06/2004
Pentachlorophenol	BQL	1.86	1	10/06/2004
Phenanthrene	BQL	0.371	1	10/06/2004
Phenol	BQL	0.371	1	10/06/2004
Pyrene	BQL	0.371	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.371	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.371	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.371	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	11.8	118
Nitrobenzene-d5	10	10.8	108
Phenol-d6	10	11	110
2,4,6-Tribromophenol	10	12.4	124
4-Terphenyl-d14	10	9.6	96

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: JNH

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB02(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-2H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 12:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 84.6

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.374	1	10/06/2004
Acenaphthylene	BQL	0.374	1	10/06/2004
Anthracene	BQL	0.374	1	10/06/2004
Benzo[a]anthracene	BQL	0.374	1	10/06/2004
Benzo[a]pyrene	BQL	0.374	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.374	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.374	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.374	1	10/06/2004
Benzoic Acid	2.99	0.748	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.374	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.374	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.374	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.374	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.374	1	10/06/2004
Butylbenzylphthalate	BQL	0.374	1	10/06/2004
2-Chloronaphthalene	BQL	0.374	1	10/06/2004
2-Chlorophenol	BQL	0.374	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.374	1	10/06/2004
4-Chloroaniline	BQL	1.87	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.374	1	10/06/2004
Chrysene	BQL	0.374	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.374	1	10/06/2004
Dibenzofuran	BQL	0.374	1	10/06/2004
Di-n-Butylphthalate	BQL	0.374	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.374	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.374	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.374	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.748	1	10/06/2004
2,4-Dichlorophenol	BQL	0.374	1	10/06/2004
Diethylphthalate	BQL	0.374	1	10/06/2004
Dimethylphthalate	BQL	0.374	1	10/06/2004
2,4-Dimethylphenol	BQL	0.374	1	10/06/2004
Di-n-octylphthalate	BQL	0.374	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.87	1	10/06/2004
2,4-Dinitrophenol	BQL	1.87	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.374	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.374	1	10/06/2004
Fluoranthene	BQL	0.374	1	10/06/2004
Fluorene	BQL	0.374	1	10/06/2004
Hexachlorobenzene	BQL	0.374	1	10/06/2004
Hexachlorobutadiene	BQL	0.374	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.748	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB02(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-2H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 12:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 84.6

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.374	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.374	1	10/06/2004
Isophorone	BQL	0.374	1	10/06/2004
2-Methylnaphthalene	BQL	0.374	1	10/06/2004
2-Methylphenol	BQL	0.374	1	10/06/2004
3- & 4-Methylphenol	BQL	0.374	1	10/06/2004
Naphthalene	BQL	0.374	1	10/06/2004
2-Nitroaniline	BQL	0.374	1	10/06/2004
3-Nitroaniline	BQL	1.87	1	10/06/2004
4-Nitroaniline	BQL	1.87	1	10/06/2004
Nitrobenzene	BQL	0.374	1	10/06/2004
2-Nitrophenol	BQL	0.374	1	10/06/2004
4-Nitrophenol	BQL	1.87	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.374	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.374	1	10/06/2004
Pentachlorophenol	BQL	1.87	1	10/06/2004
Phenanthrene	BQL	0.374	1	10/06/2004
Phenol	BQL	0.374	1	10/06/2004
Pyrene	BQL	0.374	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.374	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.374	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.374	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	11.3	113
Nitrobenzene-d5	10	11.2	112
Phenol-d6	10	10.7	107
2,4,6-Tribromophenol	10	10.5	105
4-Terphenyl-d14	10	9.5	95

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB03(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-3H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 11:45
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.361	1	10/06/2004
Acenaphthylene	BQL	0.361	1	10/06/2004
Anthracene	BQL	0.361	1	10/06/2004
Benzo[a]anthracene	BQL	0.361	1	10/06/2004
Benzo[a]pyrene	BQL	0.361	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.361	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.361	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.361	1	10/06/2004
Benzoic Acid	0.811	0.721	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.361	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.361	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.361	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.361	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.361	1	10/06/2004
Butylbenzylphthalate	BQL	0.361	1	10/06/2004
2-Chloronaphthalene	BQL	0.361	1	10/06/2004
2-Chlorophenol	BQL	0.361	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.361	1	10/06/2004
4-Chloroaniline	BQL	1.80	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.361	1	10/06/2004
Chrysene	BQL	0.361	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.361	1	10/06/2004
Dibenzofuran	BQL	0.361	1	10/06/2004
Di-n-Butylphthalate	BQL	0.361	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.361	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.361	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.361	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.721	1	10/06/2004
2,4-Dichlorophenol	BQL	0.361	1	10/06/2004
Diethylphthalate	BQL	0.361	1	10/06/2004
Dimethylphthalate	BQL	0.361	1	10/06/2004
2,4-Dimethylphenol	BQL	0.361	1	10/06/2004
Di-n-octylphthalate	BQL	0.361	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.80	1	10/06/2004
2,4-Dinitrophenol	BQL	1.80	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.361	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.361	1	10/06/2004
Fluoranthene	BQL	0.361	1	10/06/2004
Fluorene	BQL	0.361	1	10/06/2004
Hexachlorobenzene	BQL	0.361	1	10/06/2004
Hexachlorobutadiene	BQL	0.361	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.721	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB03(3-4)
 Client Project ID: AS-4158
 Lab Sample ID: G128-1385-3H
 Lab Project ID: G128-1385
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 09/21/2004 11:45
 Date Received: 09/22/2004
 Matrix: Soil
 Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.361	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.361	1	10/06/2004
Isophorone	BQL	0.361	1	10/06/2004
2-Methylnaphthalene	BQL	0.361	1	10/06/2004
2-Methylphenol	BQL	0.361	1	10/06/2004
3- & 4-Methylphenol	BQL	0.361	1	10/06/2004
Naphthalene	BQL	0.361	1	10/06/2004
2-Nitroaniline	BQL	0.361	1	10/06/2004
3-Nitroaniline	BQL	1.80	1	10/06/2004
4-Nitroaniline	BQL	1.80	1	10/06/2004
Nitrobenzene	BQL	0.361	1	10/06/2004
2-Nitrophenol	BQL	0.361	1	10/06/2004
4-Nitrophenol	BQL	1.80	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.361	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.361	1	10/06/2004
Pentachlorophenol	BQL	1.80	1	10/06/2004
Phenanthrene	BQL	0.361	1	10/06/2004
Phenol	BQL	0.361	1	10/06/2004
Pyrene	BQL	0.361	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.361	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.361	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.361	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.3	113
2-Fluorophenol	10	12.2	122
Nitrobenzene-d5	10	11.8	118
Phenol-d6	10	11.6	116
2,4,6-Tribromophenol	10	11.7	117
4-Terphenyl-d14	10	10.4	104

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: PNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB04(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-4H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 11:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 84.7

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.404	1	10/06/2004
Acenaphthylene	BQL	0.404	1	10/06/2004
Anthracene	BQL	0.404	1	10/06/2004
Benzo[a]anthracene	BQL	0.404	1	10/06/2004
Benzo[a]pyrene	BQL	0.404	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.404	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.404	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.404	1	10/06/2004
Benzoic Acid	1.34	0.808	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.404	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.404	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.404	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.404	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.404	1	10/06/2004
Butylbenzylphthalate	BQL	0.404	1	10/06/2004
2-Chloronaphthalene	BQL	0.404	1	10/06/2004
2-Chlorophenol	BQL	0.404	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.404	1	10/06/2004
4-Chloroaniline	BQL	2.02	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.404	1	10/06/2004
Chrysene	BQL	0.404	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.404	1	10/06/2004
Dibenzofuran	BQL	0.404	1	10/06/2004
Di-n-Butylphthalate	BQL	0.404	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.404	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.404	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.404	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.808	1	10/06/2004
2,4-Dichlorophenol	BQL	0.404	1	10/06/2004
Diethylphthalate	BQL	0.404	1	10/06/2004
Dimethylphthalate	BQL	0.404	1	10/06/2004
2,4-Dimethylphenol	BQL	0.404	1	10/06/2004
Di-n-octylphthalate	BQL	0.404	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.02	1	10/06/2004
2,4-Dinitrophenol	BQL	2.02	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.404	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.404	1	10/06/2004
Fluoranthene	BQL	0.404	1	10/06/2004
Fluorene	BQL	0.404	1	10/06/2004
Hexachlorobenzene	BQL	0.404	1	10/06/2004
Hexachlorobutadiene	BQL	0.404	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.808	1	10/06/2004

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTAS4158-SB04(3-4)
 Client Project ID: AS-4158
 Lab Sample ID: G128-1385-4H
 Lab Project ID: G128-1385
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 09/21/2004 11:30
 Date Received: 09/22/2004
 Matrix: Soil
 Solids: 84.7

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.404	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.404	1	10/06/2004
Isophorone	BQL	0.404	1	10/06/2004
2-Methylnaphthalene	BQL	0.404	1	10/06/2004
2-Methylphenol	BQL	0.404	1	10/06/2004
3- & 4-Methylphenol	BQL	0.404	1	10/06/2004
Naphthalene	BQL	0.404	1	10/06/2004
2-Nitroaniline	BQL	0.404	1	10/06/2004
3-Nitroaniline	BQL	2.02	1	10/06/2004
4-Nitroaniline	BQL	2.02	1	10/06/2004
Nitrobenzene	BQL	0.404	1	10/06/2004
2-Nitrophenol	BQL	0.404	1	10/06/2004
4-Nitrophenol	BQL	2.02	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.404	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.404	1	10/06/2004
Pentachlorophenol	BQL	2.02	1	10/06/2004
Phenanthrene	BQL	0.404	1	10/06/2004
Phenol	BQL	0.404	1	10/06/2004
Pyrene	BQL	0.404	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.404	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.404	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.404	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.7	107
2-Fluorophenol	10	11	110
Nitrobenzene-d5	10	10.9	109
Phenol-d6	10	10.5	105
2,4,6-Tribromophenol	10	11.8	118
4-Terphenyl-d14	10	9.9	99

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By: RNL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB05(3-4)

Client Project ID: AS-4158

Lab Sample ID: G128-1385-5H

Lab Project ID: G128-1385

Report Basis: Dry weight

Analyzed By: MRC

Date Collected: 09/21/2004 11:15

Date Received: 09/22/2004

Matrix: Soil

Solids: 88.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.337	1	10/06/2004
Acenaphthylene	BQL	0.337	1	10/06/2004
Anthracene	BQL	0.337	1	10/06/2004
Benzo[a]anthracene	BQL	0.337	1	10/06/2004
Benzo[a]pyrene	BQL	0.337	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.337	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.337	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.337	1	10/06/2004
Benzoic Acid	BQL	0.674	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.337	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.337	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.337	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.337	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.337	1	10/06/2004
Butylbenzylphthalate	BQL	0.337	1	10/06/2004
2-Chloronaphthalene	BQL	0.337	1	10/06/2004
2-Chlorophenol	BQL	0.337	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.337	1	10/06/2004
4-Chloroaniline	BQL	1.68	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.337	1	10/06/2004
Chrysene	BQL	0.337	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.337	1	10/06/2004
Dibenzofuran	BQL	0.337	1	10/06/2004
Di-n-Butylphthalate	BQL	0.337	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.337	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.337	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.337	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.674	1	10/06/2004
2,4-Dichlorophenol	BQL	0.337	1	10/06/2004
Diethylphthalate	BQL	0.337	1	10/06/2004
Dimethylphthalate	BQL	0.337	1	10/06/2004
2,4-Dimethylphenol	BQL	0.337	1	10/06/2004
Di-n-octylphthalate	BQL	0.337	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.68	1	10/06/2004
2,4-Dinitrophenol	BQL	1.68	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.337	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.337	1	10/06/2004
Fluoranthene	BQL	0.337	1	10/06/2004
Fluorene	BQL	0.337	1	10/06/2004
Hexachlorobenzene	BQL	0.337	1	10/06/2004
Hexachlorobutadiene	BQL	0.337	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.674	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB05(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-5H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 11:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 88.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.337	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.337	1	10/06/2004
Isophorone	BQL	0.337	1	10/06/2004
2-Methylnaphthalene	BQL	0.337	1	10/06/2004
2-Methylphenol	BQL	0.337	1	10/06/2004
3- & 4-Methylphenol	BQL	0.337	1	10/06/2004
Naphthalene	BQL	0.337	1	10/06/2004
2-Nitroaniline	BQL	0.337	1	10/06/2004
3-Nitroaniline	BQL	1.68	1	10/06/2004
4-Nitroaniline	BQL	1.68	1	10/06/2004
Nitrobenzene	BQL	0.337	1	10/06/2004
2-Nitrophenol	BQL	0.337	1	10/06/2004
4-Nitrophenol	BQL	1.68	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.337	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.337	1	10/06/2004
Pentachlorophenol	BQL	1.68	1	10/06/2004
Phenanthrene	BQL	0.337	1	10/06/2004
Phenol	BQL	0.337	1	10/06/2004
Pyrene	BQL	0.337	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.337	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.337	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.337	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.1	101
2-Fluorophenol	10	10.8	108
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	10.1	101
2,4,6-Tribromophenol	10	12.1	121
4-Terphenyl-d14	10	9.2	92

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB06(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-6H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 11:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.360	1	10/06/2004
Acenaphthylene	BQL	0.360	1	10/06/2004
Anthracene	BQL	0.360	1	10/06/2004
Benzo[a]anthracene	BQL	0.360	1	10/06/2004
Benzo[a]pyrene	BQL	0.360	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.360	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.360	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.360	1	10/06/2004
Benzoic Acid	BQL	0.721	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.360	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.360	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.360	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.360	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.360	1	10/06/2004
Butylbenzylphthalate	BQL	0.360	1	10/06/2004
2-Chloronaphthalene	BQL	0.360	1	10/06/2004
2-Chlorophenol	BQL	0.360	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.360	1	10/06/2004
4-Chloroaniline	BQL	1.80	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.360	1	10/06/2004
Chrysene	BQL	0.360	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.360	1	10/06/2004
Dibenzofuran	BQL	0.360	1	10/06/2004
Di-n-Butylphthalate	BQL	0.360	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.360	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.360	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.360	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.721	1	10/06/2004
2,4-Dichlorophenol	BQL	0.360	1	10/06/2004
Diethylphthalate	BQL	0.360	1	10/06/2004
Dimethylphthalate	BQL	0.360	1	10/06/2004
2,4-Dimethylphenol	BQL	0.360	1	10/06/2004
Di-n-octylphthalate	BQL	0.360	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.80	1	10/06/2004
2,4-Dinitrophenol	BQL	1.80	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.360	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.360	1	10/06/2004
Fluoranthene	BQL	0.360	1	10/06/2004
Fluorene	BQL	0.360	1	10/06/2004
Hexachlorobenzene	BQL	0.360	1	10/06/2004
Hexachlorobutadiene	BQL	0.360	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.721	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB06(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-6H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 11:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.360	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.360	1	10/06/2004
Isophorone	BQL	0.360	1	10/06/2004
2-Methylnaphthalene	BQL	0.360	1	10/06/2004
2-Methylphenol	BQL	0.360	1	10/06/2004
3- & 4-Methylphenol	BQL	0.360	1	10/06/2004
Naphthalene	BQL	0.360	1	10/06/2004
2-Nitroaniline	BQL	0.360	1	10/06/2004
3-Nitroaniline	BQL	1.80	1	10/06/2004
4-Nitroaniline	BQL	1.80	1	10/06/2004
Nitrobenzene	BQL	0.360	1	10/06/2004
2-Nitrophenol	BQL	0.360	1	10/06/2004
4-Nitrophenol	BQL	1.80	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.360	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.360	1	10/06/2004
Pentachlorophenol	BQL	1.80	1	10/06/2004
Phenanthrene	BQL	0.360	1	10/06/2004
Phenol	BQL	0.360	1	10/06/2004
Pyrene	BQL	0.360	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.360	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.360	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.360	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	10.1	101
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.6	96
2,4,6-Tribromophenol	10	12.1	121
4-Terphenyl-d14	10	9.1	91

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB07(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-7H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:45
Date Received: 09/22/2004
Matrix: Soil
Solids: 91.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.370	1	10/06/2004
Acenaphthylene	BQL	0.370	1	10/06/2004
Anthracene	BQL	0.370	1	10/06/2004
Benzo[a]anthracene	BQL	0.370	1	10/06/2004
Benzo[a]pyrene	BQL	0.370	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.370	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.370	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.370	1	10/06/2004
Benzoic Acid	BQL	0.741	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.370	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.370	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.370	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.370	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.370	1	10/06/2004
Butylbenzylphthalate	BQL	0.370	1	10/06/2004
2-Chloronaphthalene	BQL	0.370	1	10/06/2004
2-Chlorophenol	BQL	0.370	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.370	1	10/06/2004
4-Chloroaniline	BQL	1.85	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.370	1	10/06/2004
Chrysene	BQL	0.370	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.370	1	10/06/2004
Dibenzofuran	BQL	0.370	1	10/06/2004
Di-n-Butylphthalate	BQL	0.370	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.370	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.370	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.370	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.741	1	10/06/2004
2,4-Dichlorophenol	BQL	0.370	1	10/06/2004
Diethylphthalate	BQL	0.370	1	10/06/2004
Dimethylphthalate	BQL	0.370	1	10/06/2004
2,4-Dimethylphenol	BQL	0.370	1	10/06/2004
Di-n-octylphthalate	BQL	0.370	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.85	1	10/06/2004
2,4-Dinitrophenol	BQL	1.85	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.370	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.370	1	10/06/2004
Fluoranthene	BQL	0.370	1	10/06/2004
Fluorene	BQL	0.370	1	10/06/2004
Hexachlorobenzene	BQL	0.370	1	10/06/2004
Hexachlorobutadiene	BQL	0.370	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.741	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB07(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-7H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:45
Date Received: 09/22/2004
Matrix: Soil
Solids: 91.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.370	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.370	1	10/06/2004
Isophorone	BQL	0.370	1	10/06/2004
2-Methylnaphthalene	BQL	0.370	1	10/06/2004
2-Methylphenol	BQL	0.370	1	10/06/2004
3- & 4-Methylphenol	BQL	0.370	1	10/06/2004
Naphthalene	BQL	0.370	1	10/06/2004
2-Nitroaniline	BQL	0.370	1	10/06/2004
3-Nitroaniline	BQL	1.85	1	10/06/2004
4-Nitroaniline	BQL	1.85	1	10/06/2004
Nitrobenzene	BQL	0.370	1	10/06/2004
2-Nitrophenol	BQL	0.370	1	10/06/2004
4-Nitrophenol	BQL	1.85	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.370	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.370	1	10/06/2004
Pentachlorophenol	BQL	1.85	1	10/06/2004
Phenanthrene	BQL	0.370	1	10/06/2004
Phenol	BQL	0.370	1	10/06/2004
Pyrene	BQL	0.370	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.370	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.370	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.370	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	10.8	108
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	10.3	103
2,4,6-Tribromophenol	10	12.7	127
4-Terphenyl-d14	10	10.2	102

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB08(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-8H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 87.1

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.332	1	10/06/2004
Acenaphthylene	BQL	0.332	1	10/06/2004
Anthracene	BQL	0.332	1	10/06/2004
Benzo[a]anthracene	BQL	0.332	1	10/06/2004
Benzo[a]pyrene	BQL	0.332	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.332	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.332	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.332	1	10/06/2004
Benzoic Acid	BQL	0.663	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.332	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.332	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.332	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.332	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.332	1	10/06/2004
Butylbenzylphthalate	BQL	0.332	1	10/06/2004
2-Chloronaphthalene	BQL	0.332	1	10/06/2004
2-Chlorophenol	BQL	0.332	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.332	1	10/06/2004
4-Chloroaniline	BQL	1.66	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.332	1	10/06/2004
Chrysene	BQL	0.332	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.332	1	10/06/2004
Dibenzofuran	BQL	0.332	1	10/06/2004
Di-n-Butylphthalate	BQL	0.332	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.332	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.332	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.332	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.663	1	10/06/2004
2,4-Dichlorophenol	BQL	0.332	1	10/06/2004
Diethylphthalate	BQL	0.332	1	10/06/2004
Dimethylphthalate	BQL	0.332	1	10/06/2004
2,4-Dimethylphenol	BQL	0.332	1	10/06/2004
Di-n-octylphthalate	BQL	0.332	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.66	1	10/06/2004
2,4-Dinitrophenol	BQL	1.66	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.332	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.332	1	10/06/2004
Fluoranthene	BQL	0.332	1	10/06/2004
Fluorene	BQL	0.332	1	10/06/2004
Hexachlorobenzene	BQL	0.332	1	10/06/2004
Hexachlorobutadiene	BQL	0.332	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.663	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB08(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-8H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 87.1

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.332	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.332	1	10/06/2004
Isophorone	BQL	0.332	1	10/06/2004
2-Methylnaphthalene	BQL	0.332	1	10/06/2004
2-Methylphenol	BQL	0.332	1	10/06/2004
3- & 4-Methylphenol	BQL	0.332	1	10/06/2004
Naphthalene	BQL	0.332	1	10/06/2004
2-Nitroaniline	BQL	0.332	1	10/06/2004
3-Nitroaniline	BQL	1.66	1	10/06/2004
4-Nitroaniline	BQL	1.66	1	10/06/2004
Nitrobenzene	BQL	0.332	1	10/06/2004
2-Nitrophenol	BQL	0.332	1	10/06/2004
4-Nitrophenol	BQL	1.66	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.332	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.332	1	10/06/2004
Pentachlorophenol	BQL	1.66	1	10/06/2004
Phenanthrene	BQL	0.332	1	10/06/2004
Phenol	BQL	0.332	1	10/06/2004
Pyrene	BQL	0.332	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.332	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.332	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.332	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	9.4	94
Nitrobenzene-d5	10	9.3	93
Phenol-d6	10	8.7	87
2,4,6-Tribromophenol	10	10.8	108
4-Terphenyl-d14	10	9.8	98

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB09(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-9H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 88.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.408	1	10/06/2004
Acenaphthylene	BQL	0.408	1	10/06/2004
Anthracene	BQL	0.408	1	10/06/2004
Benzo[a]anthracene	BQL	0.408	1	10/06/2004
Benzo[a]pyrene	BQL	0.408	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.408	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.408	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.408	1	10/06/2004
Benzoic Acid	BQL	0.817	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.408	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.408	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.408	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.408	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.408	1	10/06/2004
Butylbenzylphthalate	BQL	0.408	1	10/06/2004
2-Chloronaphthalene	BQL	0.408	1	10/06/2004
2-Chlorophenol	BQL	0.408	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.408	1	10/06/2004
4-Chloroaniline	BQL	2.04	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.408	1	10/06/2004
Chrysene	BQL	0.408	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.408	1	10/06/2004
Dibenzofuran	BQL	0.408	1	10/06/2004
Di-n-Butylphthalate	BQL	0.408	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.408	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.408	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.408	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.817	1	10/06/2004
2,4-Dichlorophenol	BQL	0.408	1	10/06/2004
Diethylphthalate	BQL	0.408	1	10/06/2004
Dimethylphthalate	BQL	0.408	1	10/06/2004
2,4-Dimethylphenol	BQL	0.408	1	10/06/2004
Di-n-octylphthalate	BQL	0.408	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.04	1	10/06/2004
2,4-Dinitrophenol	BQL	2.04	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.408	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.408	1	10/06/2004
Fluoranthene	BQL	0.408	1	10/06/2004
Fluorene	BQL	0.408	1	10/06/2004
Hexachlorobenzene	BQL	0.408	1	10/06/2004
Hexachlorobutadiene	BQL	0.408	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.817	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB09(3-4)
 Client Project ID: AS-4158
 Lab Sample ID: G128-1385-9H
 Lab Project ID: G128-1385
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 09/21/2004 10:15
 Date Received: 09/22/2004
 Matrix: Soil
 Solids: 88.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.408	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.408	1	10/06/2004
Isophorone	BQL	0.408	1	10/06/2004
2-Methylnaphthalene	BQL	0.408	1	10/06/2004
2-Methylphenol	BQL	0.408	1	10/06/2004
3- & 4-Methylphenol	BQL	0.408	1	10/06/2004
Naphthalene	BQL	0.408	1	10/06/2004
2-Nitroaniline	BQL	0.408	1	10/06/2004
3-Nitroaniline	BQL	2.04	1	10/06/2004
4-Nitroaniline	BQL	2.04	1	10/06/2004
Nitrobenzene	BQL	0.408	1	10/06/2004
2-Nitrophenol	BQL	0.408	1	10/06/2004
4-Nitrophenol	BQL	2.04	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.408	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.408	1	10/06/2004
Pentachlorophenol	BQL	2.04	1	10/06/2004
Phenanthrene	BQL	0.408	1	10/06/2004
Phenol	BQL	0.408	1	10/06/2004
Pyrene	BQL	0.408	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.408	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.408	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.408	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	10.3	103
4-Terphenyl-d14	10	9.4	94

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB10(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-10H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/21/2004 10:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.453	1	10/06/2004
Acenaphthylene	BQL	0.453	1	10/06/2004
Anthracene	BQL	0.453	1	10/06/2004
Benzo[a]anthracene	BQL	0.453	1	10/06/2004
Benzo[a]pyrene	BQL	0.453	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.453	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.453	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.453	1	10/06/2004
Benzoic Acid	BQL	0.906	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.453	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.453	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.453	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.453	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.453	1	10/06/2004
Butylbenzylphthalate	BQL	0.453	1	10/06/2004
2-Chloronaphthalene	BQL	0.453	1	10/06/2004
2-Chlorophenol	BQL	0.453	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.453	1	10/06/2004
4-Chloroaniline	BQL	2.26	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.453	1	10/06/2004
Chrysene	BQL	0.453	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.453	1	10/06/2004
Dibenzofuran	BQL	0.453	1	10/06/2004
Di-n-Butylphthalate	BQL	0.453	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.453	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.453	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.453	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.906	1	10/06/2004
2,4-Dichlorophenol	BQL	0.453	1	10/06/2004
Diethylphthalate	BQL	0.453	1	10/06/2004
Dimethylphthalate	BQL	0.453	1	10/06/2004
2,4-Dimethylphenol	BQL	0.453	1	10/06/2004
Di-n-octylphthalate	BQL	0.453	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.26	1	10/06/2004
2,4-Dinitrophenol	BQL	2.26	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.453	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.453	1	10/06/2004
Fluoranthene	BQL	0.453	1	10/06/2004
Fluorene	BQL	0.453	1	10/06/2004
Hexachlorobenzene	BQL	0.453	1	10/06/2004
Hexachlorobutadiene	BQL	0.453	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.906	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB10(3-4)
 Client Project ID: AS-4158
 Lab Sample ID: G128-1385-10H
 Lab Project ID: G128-1385
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 09/21/2004 10:00
 Date Received: 09/22/2004
 Matrix: Soil
 Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.453	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.453	1	10/06/2004
Isophorone	BQL	0.453	1	10/06/2004
2-Methylnaphthalene	BQL	0.453	1	10/06/2004
2-Methylphenol	BQL	0.453	1	10/06/2004
3- & 4-Methylphenol	BQL	0.453	1	10/06/2004
Naphthalene	BQL	0.453	1	10/06/2004
2-Nitroaniline	BQL	0.453	1	10/06/2004
3-Nitroaniline	BQL	2.26	1	10/06/2004
4-Nitroaniline	BQL	2.26	1	10/06/2004
Nitrobenzene	BQL	0.453	1	10/06/2004
2-Nitrophenol	BQL	0.453	1	10/06/2004
4-Nitrophenol	BQL	2.26	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.453	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.453	1	10/06/2004
Pentachlorophenol	BQL	2.26	1	10/06/2004
Phenanthrene	BQL	0.453	1	10/06/2004
Phenol	BQL	0.453	1	10/06/2004
Pyrene	BQL	0.453	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.453	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.453	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.453	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.6	116
2-Fluorophenol	10	12	119
Nitrobenzene-d5	10	11.7	117
Phenol-d6	10	11.2	112
2,4,6-Tribromophenol	10	11	110
4-Terphenyl-d14	10	12.1	121

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB11(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-11H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 14:45
Date Received: 09/22/2004
Matrix: Soil
Solids: 85.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.343	1	10/06/2004
Acenaphthylene	BQL	0.343	1	10/06/2004
Anthracene	BQL	0.343	1	10/06/2004
Benzo[a]anthracene	BQL	0.343	1	10/06/2004
Benzo[a]pyrene	BQL	0.343	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.343	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.343	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.343	1	10/06/2004
Benzoic Acid	BQL	0.686	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.343	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.343	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.343	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.343	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.343	1	10/06/2004
Butylbenzylphthalate	BQL	0.343	1	10/06/2004
2-Chloronaphthalene	BQL	0.343	1	10/06/2004
2-Chlorophenol	BQL	0.343	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.343	1	10/06/2004
4-Chloroaniline	BQL	1.71	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.343	1	10/06/2004
Chrysene	BQL	0.343	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.343	1	10/06/2004
Dibenzofuran	BQL	0.343	1	10/06/2004
Di-n-Butylphthalate	BQL	0.343	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.343	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.343	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.343	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.686	1	10/06/2004
2,4-Dichlorophenol	BQL	0.343	1	10/06/2004
Diethylphthalate	BQL	0.343	1	10/06/2004
Dimethylphthalate	BQL	0.343	1	10/06/2004
2,4-Dimethylphenol	BQL	0.343	1	10/06/2004
Di-n-octylphthalate	BQL	0.343	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.71	1	10/06/2004
2,4-Dinitrophenol	BQL	1.71	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.343	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.343	1	10/06/2004
Fluoranthene	BQL	0.343	1	10/06/2004
Fluorene	BQL	0.343	1	10/06/2004
Hexachlorobenzene	BQL	0.343	1	10/06/2004
Hexachlorobutadiene	BQL	0.343	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.686	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB11(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-11H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 14:45
Date Received: 09/22/2004
Matrix: Soil
Solids: 85.0

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.343	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.343	1	10/06/2004
Isophorone	BQL	0.343	1	10/06/2004
2-Methylnaphthalene	BQL	0.343	1	10/06/2004
2-Methylphenol	BQL	0.343	1	10/06/2004
3- & 4-Methylphenol	BQL	0.343	1	10/06/2004
Naphthalene	BQL	0.343	1	10/06/2004
2-Nitroaniline	BQL	0.343	1	10/06/2004
3-Nitroaniline	BQL	1.71	1	10/06/2004
4-Nitroaniline	BQL	1.71	1	10/06/2004
Nitrobenzene	BQL	0.343	1	10/06/2004
2-Nitrophenol	BQL	0.343	1	10/06/2004
4-Nitrophenol	BQL	1.71	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.343	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.343	1	10/06/2004
Pentachlorophenol	BQL	1.71	1	10/06/2004
Phenanthrene	BQL	0.343	1	10/06/2004
Phenol	BQL	0.343	1	10/06/2004
Pyrene	BQL	0.343	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.343	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.343	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.343	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.4	114
2-Fluorophenol	10	12	120
Nitrobenzene-d5	10	11.6	116
Phenol-d6	10	11.3	114
2,4,6-Tribromophenol	10	12	120
4-Terphenyl-d14	10	11.4	114

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RM

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB12(3-4)

Client Project ID: AS-4158

Lab Sample ID: G128-1385-12H

Lab Project ID: G128-1385

Report Basis: Dry weight

Analyzed By: MRC

Date Collected: 09/20/2004 13:45

Date Received: 09/22/2004

Matrix: Soil

Solids: 87.2

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.341	1	10/06/2004
Acenaphthylene	BQL	0.341	1	10/06/2004
Anthracene	BQL	0.341	1	10/06/2004
Benzo[a]anthracene	BQL	0.341	1	10/06/2004
Benzo[a]pyrene	BQL	0.341	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.341	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.341	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.341	1	10/06/2004
Benzoic Acid	BQL	0.681	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.341	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.341	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.341	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.341	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.341	1	10/06/2004
Butylbenzylphthalate	BQL	0.341	1	10/06/2004
2-Chloronaphthalene	BQL	0.341	1	10/06/2004
2-Chlorophenol	BQL	0.341	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.341	1	10/06/2004
4-Chloroaniline	BQL	1.70	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.341	1	10/06/2004
Chrysene	BQL	0.341	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.341	1	10/06/2004
Dibenzofuran	BQL	0.341	1	10/06/2004
Di-n-Butylphthalate	BQL	0.341	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.341	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.341	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.341	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.681	1	10/06/2004
2,4-Dichlorophenol	BQL	0.341	1	10/06/2004
Diethylphthalate	BQL	0.341	1	10/06/2004
Dimethylphthalate	BQL	0.341	1	10/06/2004
2,4-Dimethylphenol	BQL	0.341	1	10/06/2004
Di-n-octylphthalate	BQL	0.341	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.70	1	10/06/2004
2,4-Dinitrophenol	BQL	1.70	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.341	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.341	1	10/06/2004
Fluoranthene	BQL	0.341	1	10/06/2004
Fluorene	BQL	0.341	1	10/06/2004
Hexachlorobenzene	BQL	0.341	1	10/06/2004
Hexachlorobutadiene	BQL	0.341	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.681	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB12(3-4)

Client Project ID: AS-4158

Lab Sample ID: G128-1385-12H

Lab Project ID: G128-1385

Report Basis: Dry weight

Analyzed By: MRC

Date Collected: 09/20/2004 13:45

Date Received: 09/22/2004

Matrix: Soil

Solids: 87.2

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.341	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.341	1	10/06/2004
Isophorone	BQL	0.341	1	10/06/2004
2-Methylnaphthalene	BQL	0.341	1	10/06/2004
2-Methylphenol	BQL	0.341	1	10/06/2004
3- & 4-Methylphenol	BQL	0.341	1	10/06/2004
Naphthalene	BQL	0.341	1	10/06/2004
2-Nitroaniline	BQL	0.341	1	10/06/2004
3-Nitroaniline	BQL	1.70	1	10/06/2004
4-Nitroaniline	BQL	1.70	1	10/06/2004
Nitrobenzene	BQL	0.341	1	10/06/2004
2-Nitrophenol	BQL	0.341	1	10/06/2004
4-Nitrophenol	BQL	1.70	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.341	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.341	1	10/06/2004
Pentachlorophenol	BQL	1.70	1	10/06/2004
Phenanthrene	BQL	0.341	1	10/06/2004
Phenol	BQL	0.341	1	10/06/2004
Pyrene	BQL	0.341	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.341	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.341	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.341	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.5	95
2-Fluorophenol	10	9.9	99
Nitrobenzene-d5	10	9.4	94
Phenol-d6	10	9.3	93
2,4,6-Tribromophenol	10	11.1	111
4-Terphenyl-d14	10	8.8	88

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNL

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB13(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-13H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 90.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.426	1	10/06/2004
Acenaphthylene	BQL	0.426	1	10/06/2004
Anthracene	BQL	0.426	1	10/06/2004
Benzo[a]anthracene	BQL	0.426	1	10/06/2004
Benzo[a]pyrene	BQL	0.426	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.426	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.426	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.426	1	10/06/2004
Benzoic Acid	BQL	0.851	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.426	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.426	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.426	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.426	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.426	1	10/06/2004
Butylbenzylphthalate	BQL	0.426	1	10/06/2004
2-Chloronaphthalene	BQL	0.426	1	10/06/2004
2-Chlorophenol	BQL	0.426	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.426	1	10/06/2004
4-Chloroaniline	BQL	2.13	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.426	1	10/06/2004
Chrysene	BQL	0.426	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.426	1	10/06/2004
Dibenzofuran	BQL	0.426	1	10/06/2004
Di-n-Butylphthalate	BQL	0.426	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.426	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.426	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.426	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.851	1	10/06/2004
2,4-Dichlorophenol	BQL	0.426	1	10/06/2004
Diethylphthalate	BQL	0.426	1	10/06/2004
Dimethylphthalate	BQL	0.426	1	10/06/2004
2,4-Dimethylphenol	BQL	0.426	1	10/06/2004
Di-n-octylphthalate	BQL	0.426	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.13	1	10/06/2004
2,4-Dinitrophenol	BQL	2.13	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.426	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.426	1	10/06/2004
Fluoranthene	BQL	0.426	1	10/06/2004
Fluorene	BQL	0.426	1	10/06/2004
Hexachlorobenzene	BQL	0.426	1	10/06/2004
Hexachlorobutadiene	BQL	0.426	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.851	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB13(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-13H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:30
Date Received: 09/22/2004
Matrix: Soil
Solids: 90.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.426	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.426	1	10/06/2004
Isophorone	BQL	0.426	1	10/06/2004
2-Methylnaphthalene	BQL	0.426	1	10/06/2004
2-Methylphenol	BQL	0.426	1	10/06/2004
3- & 4-Methylphenol	BQL	0.426	1	10/06/2004
Naphthalene	BQL	0.426	1	10/06/2004
2-Nitroaniline	BQL	0.426	1	10/06/2004
3-Nitroaniline	BQL	2.13	1	10/06/2004
4-Nitroaniline	BQL	2.13	1	10/06/2004
Nitrobenzene	BQL	0.426	1	10/06/2004
2-Nitrophenol	BQL	0.426	1	10/06/2004
4-Nitrophenol	BQL	2.13	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.426	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.426	1	10/06/2004
Pentachlorophenol	BQL	2.13	1	10/06/2004
Phenanthrene	BQL	0.426	1	10/06/2004
Phenol	BQL	0.426	1	10/06/2004
Pyrene	BQL	0.426	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.426	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.426	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.426	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11	110
2-Fluorophenol	10	11.3	113
Nitrobenzene-d5	10	10.9	109
Phenol-d6	10	10.7	107
2,4,6-Tribromophenol	10	10.9	109
4-Terphenyl-d14	10	10.1	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB14(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-14H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 85.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.377	1	10/06/2004
Acenaphthylene	BQL	0.377	1	10/06/2004
Anthracene	BQL	0.377	1	10/06/2004
Benzo[a]anthracene	BQL	0.377	1	10/06/2004
Benzo[a]pyrene	BQL	0.377	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.377	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.377	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.377	1	10/06/2004
Benzoic Acid	BQL	0.753	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.377	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.377	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.377	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.377	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.377	1	10/06/2004
Butylbenzylphthalate	BQL	0.377	1	10/06/2004
2-Chloronaphthalene	BQL	0.377	1	10/06/2004
2-Chlorophenol	BQL	0.377	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.377	1	10/06/2004
4-Chloroaniline	BQL	1.88	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.377	1	10/06/2004
Chrysene	BQL	0.377	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.377	1	10/06/2004
Dibenzofuran	BQL	0.377	1	10/06/2004
Di-n-Butylphthalate	BQL	0.377	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.377	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.377	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.377	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.753	1	10/06/2004
2,4-Dichlorophenol	BQL	0.377	1	10/06/2004
Diethylphthalate	BQL	0.377	1	10/06/2004
Dimethylphthalate	BQL	0.377	1	10/06/2004
2,4-Dimethylphenol	BQL	0.377	1	10/06/2004
Di-n-octylphthalate	BQL	0.377	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.88	1	10/06/2004
2,4-Dinitrophenol	BQL	1.88	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.377	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.377	1	10/06/2004
Fluoranthene	BQL	0.377	1	10/06/2004
Fluorene	BQL	0.377	1	10/06/2004
Hexachlorobenzene	BQL	0.377	1	10/06/2004
Hexachlorobutadiene	BQL	0.377	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.753	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB14(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-14H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:00
Date Received: 09/22/2004
Matrix: Soil
Solids: 85.3

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.377	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.377	1	10/06/2004
Isophorone	BQL	0.377	1	10/06/2004
2-Methylnaphthalene	BQL	0.377	1	10/06/2004
2-Methylphenol	BQL	0.377	1	10/06/2004
3- & 4-Methylphenol	BQL	0.377	1	10/06/2004
Naphthalene	BQL	0.377	1	10/06/2004
2-Nitroaniline	BQL	0.377	1	10/06/2004
3-Nitroaniline	BQL	1.88	1	10/06/2004
4-Nitroaniline	BQL	1.88	1	10/06/2004
Nitrobenzene	BQL	0.377	1	10/06/2004
2-Nitrophenol	BQL	0.377	1	10/06/2004
4-Nitrophenol	BQL	1.88	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.377	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.377	1	10/06/2004
Pentachlorophenol	BQL	1.88	1	10/06/2004
Phenanthrene	BQL	0.377	1	10/06/2004
Phenol	BQL	0.377	1	10/06/2004
Pyrene	BQL	0.377	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.377	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.377	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.377	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	11.7	117
2-Fluorophenol	10	12.4	124
Nitrobenzene-d5	10	11.9	119
Phenol-d6	10	11.8	118
2,4,6-Tribromophenol	10	10.8	108
4-Terphenyl-d14	10	11.3	113

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RNF

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB15(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-15H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.6

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.403	1	10/06/2004
Acenaphthylene	BQL	0.403	1	10/06/2004
Anthracene	BQL	0.403	1	10/06/2004
Benzo[a]anthracene	BQL	0.403	1	10/06/2004
Benzo[a]pyrene	BQL	0.403	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.403	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.403	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.403	1	10/06/2004
Benzoic Acid	BQL	0.805	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.403	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.403	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.403	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.403	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.403	1	10/06/2004
Butylbenzylphthalate	BQL	0.403	1	10/06/2004
2-Chloronaphthalene	BQL	0.403	1	10/06/2004
2-Chlorophenol	BQL	0.403	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.403	1	10/06/2004
4-Chloroaniline	BQL	2.01	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.403	1	10/06/2004
Chrysene	BQL	0.403	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.403	1	10/06/2004
Dibenzofuran	BQL	0.403	1	10/06/2004
Di-n-Butylphthalate	BQL	0.403	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.403	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.403	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.403	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.805	1	10/06/2004
2,4-Dichlorophenol	BQL	0.403	1	10/06/2004
Diethylphthalate	BQL	0.403	1	10/06/2004
Dimethylphthalate	BQL	0.403	1	10/06/2004
2,4-Dimethylphenol	BQL	0.403	1	10/06/2004
Di-n-octylphthalate	BQL	0.403	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.01	1	10/06/2004
2,4-Dinitrophenol	BQL	2.01	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.403	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.403	1	10/06/2004
Fluoranthene	BQL	0.403	1	10/06/2004
Fluorene	BQL	0.403	1	10/06/2004
Hexachlorobenzene	BQL	0.403	1	10/06/2004
Hexachlorobutadiene	BQL	0.403	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.805	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB15(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-15H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 13:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.6

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.403	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.403	1	10/06/2004
Isophorone	BQL	0.403	1	10/06/2004
2-Methylnaphthalene	BQL	0.403	1	10/06/2004
2-Methylphenol	BQL	0.403	1	10/06/2004
3- & 4-Methylphenol	BQL	0.403	1	10/06/2004
Naphthalene	BQL	0.403	1	10/06/2004
2-Nitroaniline	BQL	0.403	1	10/06/2004
3-Nitroaniline	BQL	2.01	1	10/06/2004
4-Nitroaniline	BQL	2.01	1	10/06/2004
Nitrobenzene	BQL	0.403	1	10/06/2004
2-Nitrophenol	BQL	0.403	1	10/06/2004
4-Nitrophenol	BQL	2.01	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.403	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.403	1	10/06/2004
Pentachlorophenol	BQL	2.01	1	10/06/2004
Phenanthrene	BQL	0.403	1	10/06/2004
Phenol	BQL	0.403	1	10/06/2004
Pyrene	BQL	0.403	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.403	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.403	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.403	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.5	105
2-Fluorophenol	10	10.7	107
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	10.2	102
2,4,6-Tribromophenol	10	12.5	125
4-Terphenyl-d14	10	10.1	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: RMP

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB16(3-4)

Client Project ID: AS-4158

Lab Sample ID: G128-1385-16H

Lab Project ID: G128-1385

Report Basis: Dry weight

Analyzed By: MRC

Date Collected: 09/20/2004 14:15

Date Received: 09/22/2004

Matrix: Soil

Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.394	1	10/06/2004
Acenaphthylene	BQL	0.394	1	10/06/2004
Anthracene	BQL	0.394	1	10/06/2004
Benzo[a]anthracene	BQL	0.394	1	10/06/2004
Benzo[a]pyrene	BQL	0.394	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.394	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.394	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.394	1	10/06/2004
Benzoic Acid	BQL	0.787	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.394	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.394	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.394	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.394	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.394	1	10/06/2004
Butylbenzylphthalate	BQL	0.394	1	10/06/2004
2-Chloronaphthalene	BQL	0.394	1	10/06/2004
2-Chlorophenol	BQL	0.394	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.394	1	10/06/2004
4-Chloroaniline	BQL	1.97	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.394	1	10/06/2004
Chrysene	BQL	0.394	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.394	1	10/06/2004
Dibenzofuran	BQL	0.394	1	10/06/2004
Di-n-Butylphthalate	BQL	0.394	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.394	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.394	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.394	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.787	1	10/06/2004
2,4-Dichlorophenol	BQL	0.394	1	10/06/2004
Diethylphthalate	BQL	0.394	1	10/06/2004
Dimethylphthalate	BQL	0.394	1	10/06/2004
2,4-Dimethylphenol	BQL	0.394	1	10/06/2004
Di-n-octylphthalate	BQL	0.394	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	1.97	1	10/06/2004
2,4-Dinitrophenol	BQL	1.97	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.394	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.394	1	10/06/2004
Fluoranthene	BQL	0.394	1	10/06/2004
Fluorene	BQL	0.394	1	10/06/2004
Hexachlorobenzene	BQL	0.394	1	10/06/2004
Hexachlorobutadiene	BQL	0.394	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.787	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles by GCMS 8270

Client Sample ID: USTAS4158-SB16(3-4)
Client Project ID: AS-4158
Lab Sample ID: G128-1385-16H
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 14:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.4

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.394	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.394	1	10/06/2004
Isophorone	BQL	0.394	1	10/06/2004
2-Methylnaphthalene	BQL	0.394	1	10/06/2004
2-Methylphenol	BQL	0.394	1	10/06/2004
3- & 4-Methylphenol	BQL	0.394	1	10/06/2004
Naphthalene	BQL	0.394	1	10/06/2004
2-Nitroaniline	BQL	0.394	1	10/06/2004
3-Nitroaniline	BQL	1.97	1	10/06/2004
4-Nitroaniline	BQL	1.97	1	10/06/2004
Nitrobenzene	BQL	0.394	1	10/06/2004
2-Nitrophenol	BQL	0.394	1	10/06/2004
4-Nitrophenol	BQL	1.97	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.394	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.394	1	10/06/2004
Pentachlorophenol	BQL	1.97	1	10/06/2004
Phenanthrene	BQL	0.394	1	10/06/2004
Phenol	BQL	0.394	1	10/06/2004
Pyrene	BQL	0.394	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.394	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.394	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.394	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	12	120
2-Fluorophenol	10	12.4	124
Nitrobenzene-d5	10	12	120
Phenol-d6	10	11.8	118
2,4,6-Tribromophenol	10	10.8	108
4-Terphenyl-d14	10	11	110

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: enl

**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: USTAS4158-SB16(3-4)Dup

Client Project ID: AS-4158

Lab Sample ID: G128-1385-17J

Lab Project ID: G128-1385

Report Basis: Dry weight

Analyzed By: MRC

Date Collected: 09/20/2004 14:15

Date Received: 09/22/2004

Matrix: Soil

Solids: 86.7

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	0.458	1	10/06/2004
Acenaphthylene	BQL	0.458	1	10/06/2004
Anthracene	BQL	0.458	1	10/06/2004
Benzo[a]anthracene	BQL	0.458	1	10/06/2004
Benzo[a]pyrene	BQL	0.458	1	10/06/2004
Benzo[b]fluoranthene	BQL	0.458	1	10/06/2004
Benzo[g,h,i]perylene	BQL	0.458	1	10/06/2004
Benzo[k]fluoranthene	BQL	0.458	1	10/06/2004
Benzoic Acid	BQL	0.916	1	10/06/2004
Bis(2-chloroethoxy)methane	BQL	0.458	1	10/06/2004
Bis(2-chloroethyl)ether	BQL	0.458	1	10/06/2004
Bis(2-chloroisopropyl)ether	BQL	0.458	1	10/06/2004
Bis(2-ethylhexyl)phthalate	BQL	0.458	1	10/06/2004
4-bromophenyl phenyl ether	BQL	0.458	1	10/06/2004
Butylbenzylphthalate	BQL	0.458	1	10/06/2004
2-Chloronaphthalene	BQL	0.458	1	10/06/2004
2-Chlorophenol	BQL	0.458	1	10/06/2004
4-Chloro-3-methylphenol	BQL	0.458	1	10/06/2004
4-Chloroaniline	BQL	2.29	1	10/06/2004
4-Chlorophenyl phenyl ether	BQL	0.458	1	10/06/2004
Chrysene	BQL	0.458	1	10/06/2004
Dibenzo[a,h]anthracene	BQL	0.458	1	10/06/2004
Dibenzofuran	BQL	0.458	1	10/06/2004
Di-n-Butylphthalate	BQL	0.458	1	10/06/2004
1,2-Dichlorobenzene	BQL	0.458	1	10/06/2004
1,3-Dichlorobenzene	BQL	0.458	1	10/06/2004
1,4-Dichlorobenzene	BQL	0.458	1	10/06/2004
3,3'-Dichlorobenzidine	BQL	0.916	1	10/06/2004
2,4-Dichlorophenol	BQL	0.458	1	10/06/2004
Diethylphthalate	BQL	0.458	1	10/06/2004
Dimethylphthalate	BQL	0.458	1	10/06/2004
2,4-Dimethylphenol	BQL	0.458	1	10/06/2004
Di-n-octylphthalate	BQL	0.458	1	10/06/2004
4,6-Dinitro-2-methylphenol	BQL	2.29	1	10/06/2004
2,4-Dinitrophenol	BQL	2.29	1	10/06/2004
2,4-Dinitrotoluene	BQL	0.458	1	10/06/2004
2,6-Dinitrotoluene	BQL	0.458	1	10/06/2004
Fluoranthene	BQL	0.458	1	10/06/2004
Fluorene	BQL	0.458	1	10/06/2004
Hexachlorobenzene	BQL	0.458	1	10/06/2004
Hexachlorobutadiene	BQL	0.458	1	10/06/2004
Hexachlorocyclopentadiene	BQL	0.916	1	10/06/2004

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Semivolatiles
by GCMS 8270

Client Sample ID: USTAS4158-SB16(3-4)Dup
Client Project ID: AS-4158
Lab Sample ID: G128-1385-17J
Lab Project ID: G128-1385
Report Basis: Dry weight

Analyzed By: MRC
Date Collected: 09/20/2004 14:15
Date Received: 09/22/2004
Matrix: Soil
Solids: 86.7

Compound	Result mg/Kg	Quantitation Limit mg/Kg	Dilution Factor	Date Analyzed
Hexachloroethane	BQL	0.458	1	10/06/2004
Indeno(1,2,3-c,d)pyrene	BQL	0.458	1	10/06/2004
Isophorone	BQL	0.458	1	10/06/2004
2-Methylnaphthalene	BQL	0.458	1	10/06/2004
2-Methylphenol	BQL	0.458	1	10/06/2004
3- & 4-Methylphenol	BQL	0.458	1	10/06/2004
Naphthalene	BQL	0.458	1	10/06/2004
2-Nitroaniline	BQL	0.458	1	10/06/2004
3-Nitroaniline	BQL	2.29	1	10/06/2004
4-Nitroaniline	BQL	2.29	1	10/06/2004
Nitrobenzene	BQL	0.458	1	10/06/2004
2-Nitrophenol	BQL	0.458	1	10/06/2004
4-Nitrophenol	BQL	2.29	1	10/06/2004
N-Nitrosodi-n-propylamine	BQL	0.458	1	10/06/2004
N-Nitrosodiphenylamine	BQL	0.458	1	10/06/2004
Pentachlorophenol	BQL	2.29	1	10/06/2004
Phenanthrene	BQL	0.458	1	10/06/2004
Phenol	BQL	0.458	1	10/06/2004
Pyrene	BQL	0.458	1	10/06/2004
1,2,4-Trichlorobenzene	BQL	0.458	1	10/06/2004
2,4,5-Trichlorophenol	BQL	0.458	1	10/06/2004
2,4,6-Trichlorophenol	BQL	0.458	1	10/06/2004

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	20	15.5	78
2-Fluorophenol	20	16.4	82
Nitrobenzene-d5	20	16.4	82
Phenol-d6	20	15.9	80
2,4,6-Tribromophenol	20	18.9	95
4-Terphenyl-d14	20	14.2	71

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: Rye

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB01(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	84
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	78
Aromatic Surrogate % Recovery	78

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-1G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB02(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	84.6
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	120
Aromatic Surrogate % Recovery	120

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-2G

Reviewed By: REN

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB03(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	86.4
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	79
Aromatic Surrogate % Recovery	79

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-3G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB04(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	84.7
Dilution Factor	1
C ₈ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	66
Aromatic Surrogate % Recovery	65

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-4G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB05(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	88.3
Dilution Factor	1
C ₈ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	65
Aromatic Surrogate % Recovery	64

Comments:

* = Excludes any surrogates or internal standards.
 Sample did not require fractionation.

Lab info: G128-1385-5G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB06(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	86.3
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	94
Aromatic Surrogate % Recovery	92

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-6G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB07(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	91
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	130
Aromatic Surrogate % Recovery	120

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-7G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB08(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	87.1
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	160
Aromatic Surrogate % Recovery	150

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-8G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB09(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	88
Dilution Factor	1
C ₈ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	110
Aromatic Surrogate % Recovery	110

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-9G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & Associates

Project Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB10(3-4)
Sample Matrix	Soil
Date Collected	09/21/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	86.4
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	82
Aromatic Surrogate % Recovery	80

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-10G

Reviewed By: RWP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB11(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	85
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	90
Aromatic Surrogate % Recovery	87

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-11G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB12(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	09/30/04
Dry Weight	87.2
Dilution Factor	1
C ₈ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	89
Aromatic Surrogate % Recovery	86

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-12G

Reviewed By: RWP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB13(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	10/05/04
Dry Weight	90.3
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	90
Aromatic Surrogate % Recovery	89

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-13G

Reviewed By: RNP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB14(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	10/05/04
Dry Weight	85.3
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	80
Aromatic Surrogate % Recovery	79

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-14G

Reviewed By: renp

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB15(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	10/05/04
Dry Weight	86.6
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	77
Aromatic Surrogate % Recovery	76

Comments:

* = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-15G

Reviewed By: RHP

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB16(3-4)
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	10/05/04
Dry Weight	86.4
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₆ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	76
Aromatic Surrogate % Recovery	76

Comments:

- * = Excludes any surrogates or internal standards.
Sample did not require fractionation.

Lab info: G128-1385-16G

Reviewed By: RND

EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Richard Catlin & AssociatesProject Name: AS-4158

Sample Information and Analytical Results	
Sample Identification	USTAS4158-SB16(3-4)Dup
Sample Matrix	Soil
Date Collected	09/20/04
Date Received	09/22/04
Date Extracted	09/27/04
Date Analyzed	10/05/04
Dry Weight	86.7
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 10 (mg/Kg)
C ₁₉ -C ₃₈ Aliphatics*	< 10 (mg/Kg)
C ₁₁ -C ₂₂ Aromatics*	< 10 (mg/Kg)
Aliphatic Surrogate % Recovery	83
Aromatic Surrogate % Recovery	82

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G128-1385-17G

Reviewed By: RNP

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 08/09/04

Calibration Ranges and Limits

Range	MDL ($\mu\text{g/L}$)		ML ($\mu\text{g/L}$)		RL ($\mu\text{g/L}$) (mg/Kg)	
C ₉ -C ₁₈ Aliphatics	0.1	0.8	0.3	2.6	100	10
C ₁₉ -C ₃₆ Aliphatics	0.1	1.6	0.3	5	100	10
C ₁₁ -C ₂₂ Aromatics	0.2	2.1	0.6	6.7	100	10

Calibration Concentration Levels

Range	Levels ($\mu\text{g/mL}$)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	9.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	8.6	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	7.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 10/05/04

Calibration Check

Range	Levels ($\mu\text{g/mL}$)	RPD
C ₉ -C ₁₈ Aliphatics	120	-6.8
C ₁₉ -C ₃₆ Aliphatics	160	-20.3
C ₁₁ -C ₂₂ Aromatics	340	-16.1

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 08/09/04

Calibration Ranges and Limits

Range	MDL (µg/L)		ML (µg/L)		RL (µg/L) (mg/Kg)	
C ₉ -C ₁₈ Aliphatics	0.1	0.8	0.3	2.6	100	10
C ₁₉ -C ₃₆ Aliphatics	0.1	1.6	0.3	5	100	10
C ₁₁ -C ₂₂ Aromatics	0.2	2.1	0.6	6.7	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	9.70	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	8.6	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	7.9	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 09/30/04

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	-1.8
C ₁₉ -C ₃₆ Aliphatics	160	-12.4
C ₁₁ -C ₂₂ Aromatics	340	-9.8

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve

List of Reporting Abbreviations
and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405

Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 42235

Page 1 of 2

Client: Catlin Eng. & Sci. Project ID: AS-4158
 Address: 220 Old Dairy Rd. Contact: Jeff Becken
 Address: Wilmington NC 28405 Phone: 452-5861
 Quote #: 220101 Fax: 452-7563

Date: 9-21-04
 Turnaround: 5HL
 Job Number: 204-037
 P.O. Number: 240804-4

Report To: Jeff Becken

Invoice To: SLH

Sample ID	Date	Time	Preservatives		Analytes				Comments: Please specify any special reporting requirements
			Sol. B.	MeOH	CPH	CPH	CPH	CPH	
45TAS4158-SB016(4)	9-20-04	1230	✓	-	-	-	-	-	G128-1385
45TAS4158-SB02(34)	9-21-04	1200	-	-	-	-	-	-	- Summary EDD
45TAS4158-SB03(34)		1145	-	-	-	-	-	-	Format
45TAS4158-SB04(34)		1130	-	-	-	-	-	-	- Report low PPH
45TAS4158-SB05(34)		1115	-	-	-	-	-	-	
45TAS4158-SB06(34)		1100	-	-	-	-	-	-	
45TAS4158-SB07(34)		1045	-	-	-	-	-	-	
45TAS4158-SB08(34)		1030	-	-	-	-	-	-	
45TAS4158-SB09(34)		1015	-	-	-	-	-	-	
45TAS4158-SB10(34)		1000	✓	-	-	-	-	-	

Requested By	Date	Time	Received By	Date	Time	Temperature	State of Application Requested
<u>Tom Stitt</u>	9-22-04	1000	<u>Tom Stitt</u>	9-22-04	10:00 a		NC ☒ SC ☐ Other ☐
<u>Tom Stitt</u>	9-22-04	1100	<u>Jeff Becken</u>	9/23/04	1100	5.2°C	SEE REVERSE FOR TERMS AND CONDITIONS

ORIGINAL