

FINAL SOIL CLEANUP REPORT

BUILDING AS-840

NCDENR Incident Numbers: 87399

Marine Corps Air Station New River

Jacksonville, North Carolina

August 28, 2006

Prepared for:



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Contract Number: N62470-04-D-0205

Task Order: 0012

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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
2L GWQS	Underground Storage Tank Section (Effective July 1, 2001)
AS	NCAC T15A:02L Groundwater Quality Standards
AST	Air Sparge
BDL	Aboveground Storage Tank
BN	Below Detection Limit
BNA	Base/Neutral (extractables)
BQL	Base/Neutral/Acid (extractables)
BLS	Below Quantitation Limit
BTEX	Below Land Surface
CAP	Benzene, Toluene, Ethylbenzene, Xylenes
CFR	Corrective Action Plan
Cr	Code of Federal Regulations
CSA	Chromium
DIPE	Comprehensive Site Assessment
DO	Di-isopropyl Ether
DOD	Dissolved Oxygen
DPT	Department of Defense
DWQ	Direct Push Technology
DWM	Division of Water Quality
DTW	Division of Waste Management
EDB	Depth to Water
EMD	Ethylene di-bromide
EPA	Environmental Management Division
EPH	Environmental Protection Agency
EQB	Extractable Petroleum Hydrocarbons
Fe	Environmental Quality Branch
FID	Iron
FT	Flame Ionization Detector
GCL	Feet
GIS	Gross Contaminant Level
GPS	Geographic Information System
Guidelines Vol. II	Global Positioning System
HDPE	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume II, Petroleum Underground Storage Tanks (January 2, 1998)
I/C	High Density Polyethylene
ID	Industrial/Commercial
I&E	Identification
IGWQS	Installations and Environment Department
IPE	Interim Groundwater Quality Standards
LSA	Isopropyl Ether
LUST	Limited Site Assessment
m	Leaking Underground Storage Tank
MADEP	Meter
MCAS	Massachusetts Department of Environmental Protection
	Marine Corps Air Station

MCB	Marine Corps Base
MDL	Method Detection Limit
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
MSCC	Maximum Soil Contaminant Concentration
MSL	Mean Sea Level
MTBE	Methyl tertiary butyl ether
µg/Kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
NA	Not Analyzed
N/A	Not Applicable
NAVFAC	Naval Facilities Engineering Command Atlantic
NC	North Carolina
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environment and Natural Resources
NE	None Established
NM	Not Measured
NMT	No Measurable Thickness
NS	Not Sampled
OVA	Organic Vapor Analyzer
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
SOW	Scope of Work
STGW	Soil-to-Groundwater
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
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
WiRO	NCDENR Wilmington Regional Office

EXECUTIVE SUMMARY

The Building AS-840 project site is located aboard the Marine Corps Air Station (MCAS) New River, Jacksonville, North Carolina. The project area is in the vicinity of Building AS-840 and the Building AS-840 Radar Tower Area (Building SAS-839). An existing 2,900-gallon capacity aboveground storage tank (AST) located south of Building AS-840 supplies diesel fuel to a boiler system located within the building, and an underground pipeline is utilized to transfer fuel from the AST to the boiler system.

In the spring of 2000, Building AS-840 personnel reported observing petroleum sheen in water puddles on the ground surface following periods of heavy rain. Subsequently, J.A. Jones Environmental Services (J.A. Jones) investigated the integrity of the fuel transfer system by excavation and confirmed a leak in the pipeline in April 2000. The leaking pipeline was removed from the subsurface, and a new, self-contained, double-walled fuel distribution line was installed.

Law Engineering and Environmental Services, Inc. (Law) was retained to complete a Comprehensive Site Assessment (CSA) at the site. The findings of this investigation were summarized in a report dated August 14, 2002. CATLIN Engineers and Scientists (CATLIN) subsequently completed a Comprehensive Site Assessment Addendum (CSAA) report dated January 6, 2004 to summarize additional site information. The site assessments indicated the presence of soil contamination, free-phase product, and dissolved phase groundwater contamination in excess of applicable state action levels.

CATLIN prepared a corrective action plan (CAP) for the site, which proposed soil excavation with accelerated natural attenuation to address the soil and groundwater contamination. The goals of the implemented remedial action were to remove soil contamination by excavation, remediate free-phase product to a thickness of less than 1/8 inch by excavation, and remediate groundwater contaminant concentrations to below 2L GWQS by accelerated natural attenuation.

Sovereign Consulting Inc. (Sovereign) was tasked to implement the CAP as presented in the CATLIN April 2005 CAP report. Sovereign performed a pre-excavation gauging and sampling event of the site monitoring wells (MW01 – MW08) in March 2006. Free phase product and dissolved phase groundwater contamination was identified. Monitoring MW02 was abandoned after the event in preparation of the soil excavation activities.

Soil excavation was then performed in April and May 2006. Approximately 474 tons of soil was removed from a final excavation, which measured approximately 25 feet long, 25 feet wide, and seven (7) feet deep. Confirmation soil samples were obtained and analyzed for total petroleum hydrocarbons (TPH). Diesel and gasoline range organics (DRO, GRO) were removed to below North Carolina Department of Environment and Natural Resources (NCDENR) action levels from the South, East and West sidewalls. The North sidewall confirmation samples, however, indicated the presence of TPH-DRO and TPH-GRO at concentrations above action levels. Excavation activities were hindered on the north sidewall due to the presence of underground utilities, and as a result, additional excavation was not performed. Per CAP recommendations, oxygen releasing compound (ORC[®]) was added to the excavation prior to backfilling with clean soil.

Once excavation activities were complete, Sovereign replaced MW02 (renamed MW09) and conducted a post excavation groundwater gauging and sampling event in June 2006. No measurable free product was detected at the site. Groundwater contaminant concentrations, however, were detected in monitoring wells MW09 (which replaced MW02), MW03, MW05, MW06, and MW07. Bis(2-ethylhexyl)phthalate and Massachusetts Department of Environmental Protection (MADEP) C₉-C₂₂ Aromatics were detected above their established groundwater quality standards.

Initial results indicate that the soil excavation and ORC[®] application has had a positive effect on free phase and dissolved phase contamination at the site. Sovereign recommends that MCB Camp Lejeune implement the additional soil removal and groundwater natural attenuation monitoring schedule described in Section 6.0. Once the soil source is completely removed, the recommended groundwater monitoring will track plume migration and the attenuation/degradation of the contaminants.

1.0 TITLE PAGE

Date of Report: August 28, 2006

Facility I.D.: N/A

NCDENR Incident Number: 87399

Site Name: Building AS-840

Site Location: Marine Corps Air Station New River, Jacksonville, North Carolina

Nearest City/Town: Jacksonville

County: Onslow

AST Owner: Commanding Officer – MCB Camp Lejeune

I&E/EMD/EQB

PSC Box 20004

Address: MCB Camp Lejeune, NC 28542-0004

Phone: (910) 451-5068

AST 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: MCB Camp Lejeune, NC

Phone: None

Consultant/Contractor: Sovereign Consulting Inc.

Address: 405 Oakmeads Crescent, Suite 1
Virginia Beach, VA 23462

Phone: (757) 456-5093

Release Information

Date Discovered: April 2000

Latitude: 34° 42' 40" N Longitude: 77° 25' 59" W

Estimated Quantity of Release: Unknown

Cause of Release: Unknown

Source of Release (Piping/AST): Failed underground piping

Sizes and contents of the AST system(s): Underground piping associated with an existing 2,900-gallon capacity diesel fuel AST located south of Building AS-840.



I, Nicole L. Hall a Professional Engineer for Sovereign Consulting Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.

2.0 INTRODUCTION

Sovereign was authorized to perform this work by Naval Facilities Engineering Command Mid-Atlantic Marine Corp North Carolina IPT Division under Navy Contract N62470-04-D-0205, Task Order No. 0012.

This report summarizes field activities from a recent soil removal action and associated groundwater sampling conducted in the vicinity of Building AS-840 and the Building AS-840 Radar Tower Area (Building SAS-839). An existing 2,900-gallon capacity aboveground storage tank (AST), located south of Building AS-840, supplies diesel fuel to a boiler system located within Building AS-840. An evaluation for site closure was also performed for the site.

The project's scope of work entailed the excavation of contaminated soils at the site as proposed in the CATLIN April 2005 CAP. Gauging and sampling of site monitoring wells was also completed. Objectives of Sovereign's activities include reducing soil contaminant concentrations at AS-840 by means of excavation; remediating free-phase product to a thickness of less than 1/8 inch by means of excavation; and remediating groundwater contaminant concentrations by accelerated natural attenuation.

3.0 SITE HISTORY

Building AS-840 is located aboard MCAS New River in Jacksonville, North Carolina. The subject site is a result of the former underground piping associated with an existing 2,900 gallon-capacity diesel fuel AST, which is located to the south of Building AS-840. The piping transferred diesel fuel from the AST to a boiler within Building AS-840. The former pipeline ran underground east from the AST then made a right-angle turn toward the north and Building AS-840.

MCAS personnel noticed a petroleum-sheen on puddles of surface-water after heavy rains in the area of the underground piping. As a result, EMD initiated an investigation into the cause of the sheen. J.A. Jones excavated the area along the piping and found a leak in the line. They subsequently removed the leaking pipeline in April 2000. A new doubled-walled fuel distribution line from the AST to Building AS-840 was installed in place of the former leaking line.

J. A. Jones collected ten soil samples along the former piping location on April 5, 2000 for laboratory analysis. The ten soil samples were analyzed for gasoline-range and diesel-range total petroleum hydrocarbons (TPH). Six of these soil samples exhibited gasoline-range and diesel-range TPH concentrations in excess of their respective State Action Levels. Appendix A has the J.A. Jones presenting the soil analytical results.

A CSA and CSA addendum were conducted at the site by Law and CATLIN, respectively. Findings of the assessments were detailed in reports dated August 2002 and January 2004. Soil samples collected during CSA activities were analyzed for volatile organic compounds, semi-volatile organic compounds, and MADEP constituents. Laboratory analysis revealed concentrations of benzene, 2-methylnaphthalene, naphthalene, and C9-C22 Aromatics in excess of NCDENR STGW MSCCs at a portion of the locations sampled.

Groundwater samples were also collected during the CSA activities and were analyzed for selected volatile organic compounds, semi-volatile organic compounds, and MADEP hydrocarbon fractions. Laboratory analysis revealed concentrations of benzene, ethylbenzene, naphthalene, C5-C8 Aliphatics, and C9-C22 Aromatics in excess of the North Carolina Administrative Code (NCAC) Title 15A, Subchapter 2L Groundwater Quality Standards (2L GWQS).

Assessment work also documented the presence of free phase product. Occurrence was generally in the area of MW02. OHM/IT Remediation Services Corporation, now known as Shaw Environmental, Inc. (Shaw), was contracted to periodically recover free phase product at the project site by use of AFVR events. Shaw reportedly completed 58 AFVR events from July 2001 through November 17, 2004, which recovered approximately 600 gallons of free-phase product as vapor and liquid. Available AFVR data is located in Appendix A.

CATLIN conducted an additional sampling event on November 18, 2004 in order to evaluate natural attenuation parameters at the AS-840 project site. As part of this evaluation, additional groundwater samples were collected from selected monitoring wells and analyzed for volatile organic compounds and semi-volatile organic compounds. Laboratory analysis revealed a concentration of benzene in excess of the 2L GWQS.

Once assessments of the site were complete, CATLIN was then directed to prepare a CAP, dated April 28, 2005, based on the findings and recommendations of the CSA and CSA Addendum. The CATLIN CAP report evaluated various remedial approaches to address the presence of free phase product, soil contamination, and groundwater contamination. CATLIN proposed the use of excavation, application of oxygen releasing compound (ORC[®]), and natural attenuation as the recommended remedial approach for the site.

Sovereign was tasked to carry out the excavation of contaminated soils and apply the ORC[®] as detailed in the CAP. Sovereign also conducted pre and post-excavation groundwater sampling at the site. This report details and describes the field activities associated with the soil excavation, ORC[®] application, and groundwater sampling conducted at the site in 2006.

4.0 SITE REMEDIATION

J.A. Jones excavated the area along the piping and found a leak in the line. They subsequently removed the leaking line from the subsurface in April 2000. A new doubled-walled fuel distribution line from the AST to Building AS-840 was installed to the west of the former distribution line trench. Site assessments, and a resultant CAP, provided information to conduct the larger scale soil excavation and groundwater corrective action that is described in this section.

Based on the CATLIN April 2005 CAP recommendations, Sovereign conducted additional soil excavation at the AS840 site. A preliminary groundwater gauging and sampling event was performed on March 27-28, 2006 to obtain baseline groundwater contaminant levels. All site monitoring wells (MW01 and MW03 through MW08) were sampled with the exception of MW02, since it contained free product. Each well was also gauged. Depth to water from top of casing ranged from 5.92 – 8.04 feet. Free product was measured in MW02 in the amount of 0.51 feet. Once gauging and sampling was complete, monitoring well MW02 was abandoned since

the soil removal area encompassed the well. Abandonment records are located in Appendix E. The preliminary groundwater samples were sent for groundwater analysis per EPA Methods 602, 625, and MADEP EPH/VPH. Groundwater contaminants were noted in MW03, MW04, and MW07 during this sampling event. Summary tables of the results are included in Tables 2 through 5, and a full laboratory report and chain of custody is included as Appendix B.

Prior to site excavation, a utility mark out was conducted. Removal efforts concentrated around the location of the former leaking pipeline and areas containing free product (MW02), as shown in Figure 3. Removal activities took place in April and May of 2006. Excavation was performed using an excavator, which removed approximately 474 tons of soil from the subsurface. The excavation was approximately 25 feet long, 25 feet wide, and approximately seven (7) feet deep. Groundwater was also encountered during excavation activities.

Once removal activities were complete, confirmation soil samples were obtained from each sidewall at a depth of approximately 5-6 feet. The excavation was left open in order to obtain confirmation soil sampling results. The soil samples were packed in pre-labeled jars, stored on ice, and shipped to SGS to be analyzed for TPH-DRO and TPH-GRO. Laboratory analysis confirmed the presence of TPH contamination above action levels in the samples obtained from each excavated sidewall (North, South, East and West). Results are summarized in Table 1, as well as shown on Figure 3.

Since initial confirmation soil sampling results showed soil contamination above NCDENR action levels, Sovereign conducted additional soil removal along the sidewalls. Additional soil was removed from the eastern, southern and western side walls in an attempt to remediate adsorbed phase soil concentrations to below the TPH action levels. Further excavation was not conducted along the northern sidewall due to the location of a water main line located immediately adjacent to the open excavation (see site photographs in Appendix E).

Confirmation soil samples were again obtained from each sidewall at a depth of approximately 5-6 feet once re-excavation was complete. The soil samples were packed in pre-labeled jars, stored on ice, and shipped to SGS for analysis via TPH-GRO and TPH-DRO. Laboratory analysis confirmed the absence of TPH contamination from the samples obtained from each re-excavated sidewall, which include the South, East, and West walls. Results are summarized in Table 1 and the laboratory reports and chain of custodies are included in Appendix C.

Prior to backfilling the open excavation in two foot lifts, Sovereign mixed in approximately 550 pounds of ORC[®] powder, as recommended in the CAP, to the open excavation along with the certified clean backfill. The excavation was then backfilled to grade and then graded and seeded in an attempt to restore the site to its original condition. Monitoring well MW02 was then reinstalled in its original location and renamed as monitoring well MW09. Well construction and abandonment records are in Appendix E, and well construction data is in Table 6.

On June 14, 2006, Sovereign conducted a post excavation and ORC[®] application groundwater sampling event. The intent of the sampling event was to assess the post remedial action groundwater quality. Sovereign gauged and sampled monitoring wells MW01 and MW03 through MW09. The static groundwater depth at the site ranged from 4.31 to 7.26 feet below top

of casing. Note that the depth decreased as compared to the March gauging and sampling event, which was indicative of the more frequent rain events. No free product was detected at the site during the June 2006 event.

Sovereign purged and sampled each site well, then sent the samples under chain of custody for analysis to SGS. The lab tested the groundwater sample for volatiles via EPA method 602, semivolatiles using EPA method 625, and volatile and extractable petroleum hydrocarbons with the MADEP methods. Laboratory reports and chain of custody documentation are included in Appendix D and the data is summarized in Tables 2 through 5.

Post excavation laboratory data showed detected contaminants in the groundwater samples collected from wells MW09 (which replaced MW02), MW03, MW05, MW06, and MW07. Volatiles detected include ethylbenzene, toluene, and total xylenes. None of the concentrations, however, are above the applicable NCGWQSS. Semivolatile compounds detected include acenaphthene, bis(2-ethylhexyl)phthalate, fluorene, and naphthalene. Only bis(2-ethylhexyl)phthalate was detected above its groundwater quality standard of 2.5 µg/L at a concentration of 19.5 µg/L. Tentatively identified compounds (TICs) were detected in MW05, MW07, MW08, and MW09 during the June sampling event. Most TICs were unknown, with the exception of three compounds as summarized below:

Well	Compound	Match probability	Concentration (µg/L)
MW05	Diethyltoluamide	91%	20.3
MW07	1-Methylnaphthalene	100%	15.2
	2-Methylnaphthalene	100%	12.7

MADEP constituents, specifically C₉-C₂₂ Aromatics, were also detected at the site in monitoring wells MW07 and MW09 (the replacement well for MW02). The C₉-C₂₂ Aromatics concentration was above the 2L groundwater quality standard of 210 µg/L in each monitoring well. The post remedial action concentration in MW07 was <270 µg/L as compared to the pre-remedial action concentration of <550 µg/L. Monitoring well MW09 also contained C₉-C₂₂ Aromatics at a post remedial action concentration of <230 µg/L.

5.0 RECEPTOR SURVEY

Sovereign reassessed site conditions and concluded that the receptor surveys previously completed in the Law CSA (August 2002) and CATLIN CAP (April 2005) reports still apply. There have been no changes in receptor impact, and there have been no changes to land use of the sites or the surrounding areas. Survey information is located in Appendix A.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on fieldwork and laboratory analytical data gathered during historical site assessments and the Sovereign 2006 excavation and groundwater sampling event, the following conclusions are presented:

1. Soil samples collected during underground transfer line removal confirmed the presence of soil contamination above NCDENR TPH action levels.
2. Free product was identified at the site during comprehensive site assessment activities. Subsequent remedial efforts included AFVR events, which collected approximately 600 gallons of free product as vapor and liquid.
3. Groundwater samples collected at AS840 during the CSA and subsequent assessments contained contaminants above 2L standards.
4. Sovereign conducted additional soil excavation activities at AS840 in April and May 2006. Approximately 474 tons of contaminated soil was removed and properly disposed.
5. Sovereign took sidewall confirmation soil samples from the AS840 excavation area at a depth of 5-6 feet and analyzed them for TPH-DRO and TPH-GRO constituents. Soil contaminants were below quantitation limits in the final confirmation samples along the South, East, and West sidewalls. The North sidewall contained 5,620 ppm and 586 ppm of TPH-DRO and TPH-GRO, respectively. Re-excavation of the North sidewall was not performed due to utility constraints.
6. Groundwater conditions were monitored at AS840 both before and after remedial action implementation. Samples were collected for groundwater analysis per EPA Methods 602 and 625 parameters and MADEP EPH/VPH parameters to confirm contamination degradation and attenuation. Contamination was noted in monitoring wells MW03, MW05, MW06, MW07 and MW09 (the replacement well for MW02) during the post excavation sampling event (June 2006). Monitoring wells MW05, MW07, and MW09 contained contaminants above their applicable NCGWQSS - bis(2-ethylhexyl)phthalate and MADEP C₉-C₂₂ Aromatics.
7. Free product was not detected at the site during the June 2006 gauging and sampling event.

Excavation activities were restricted in the north direction due to the presence of underground utilities. As a result, soil contamination remains on the north wall above NCDENR TPH action levels. Sovereign recommends MCB Camp Lejeune conduct additional soil excavation on the north side of the utility line to remove any remaining vadose zone contamination. Confirmation soil samples, per EPA Methods 5030 and 3550, should be taken along the sidewall to ensure contaminant removal. Results of the excavation should be summarized and provided in an addendum report.

Groundwater at the AS840 site also continues to exhibit petroleum contamination. Post remedial action groundwater sampling, however, shows that contamination is degrading and attenuating. Sovereign also recommends that MCB Camp Lejeune implement the proposed CAP monitoring

schedule in order to track plume migration and the attenuation/degradation of the contaminants. Specifically, groundwater sampling of all site monitoring wells should occur quarterly for one year to track contaminant concentrations. Per the approved CAP, samples should be analyzed for EPA Methods 602 and 625 parameters, as well as MADEP EPH/VPH. The continual need for the analysis of the parameters should be evaluated as part of the Annual Monitoring Report. In particular, the MADEP analyses should be discontinued once contaminant levels attenuate to below the applicable standard.

After one year, the sampling frequency should be revised to semi-annual until monitoring well samples meet remediation objectives (NCGWQSs). The monitoring well schedule should be evaluated annually and revised when groundwater samples from select wells have been below 2L standards for a period of one year. An annual groundwater monitoring report should be prepared for submittal to NCDENR/APS in order to summarize monitoring activities. Termination of monitoring and site closeout should be requested when all dissolved phase groundwater contaminants are below 2L groundwater quality standards for at least one year.

7.0 REFERENCES

AH Environmental Consultants, *Final Report, Wellhead Protection Plan – 2002 Update, Marine Corps Base, Camp Lejeune*, August 2002.

CATLIN Engineers and Scientists, *Comprehensive Site Assessment Addendum for Building AS-840, Aircraft Hangar Facility, Aboveground Storage Tank Distribution Fuel Line Release, Marine Corps Air Station New River, North Carolina*, January 6, 2004.

CATLIN Engineers and Scientists, *Corrective Action Plan (CAP) Report for AS840, Marine Corps Air Station New River, North Carolina*, April 28, 2005.

LAW Engineering and Environmental Services, *Comprehensive Site Assessment Report, Aboveground Storage Tank Fuel Distribution Line Release, Building AS-840, Aircraft Hangar Facility, Marine Corps Air Station New River, North Carolina*, August 14, 2002.

North Carolina Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section, *Groundwater Section Guidelines for the Investigation and Remediation Of Soil and Groundwater*, July 2000.

TABLES

TABLE 1
SUMMARY OF SOIL CONFIRMATION SAMPLING RESULTS

Date: May 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Analytical Method: EPA Method 3550 and 5030

Comment	Sample ID	Contaminant of Concern →		TPH-DRO	TPH-GRO
		Date Collected (mm/dd/yy)	Sample Depth (ft BGS)		
Initial Confirmation Sample North Sidewall	AS840-N001	5-2-2006	5-6	5,620	586
Initial Confirmation Sample South Sidewall	AS840-S001	5-2-2006	5-6	1,340	BQL
Second Confirmation Sample South Sidewall	AS840-S013A	5-19-2006	5-6	BQL	BQL
Initial Confirmation Sample East Sidewall	AS840-E001	5-2-2006	5-6	1,180	BQL
Second Confirmation Sample East Sidewall	AS840-E011A	5-19-2006	5-6	BQL	BQL
Initial Confirmation Sample West Sidewall	AS840-W001	5-2-2006	5-6	225	BQL
Second Confirmation Sample West Sidewall	AS840-W012A	5-19-2006	5-6	BQL	BQL
NCDENR Action Level (mg/kg)				40	10

- MSCC = maximum soil contamination concentration
- Results reported in mg/kg
- mg/kg = milligrams per kilogram
- **BOLDED** = detected concentration
- **BOLDED** and **shaded** = detected concentration above NCDENR action level.
- Note – Second confirmation soil samples were taken after re-excavation activities in which Sovereign attempted to remove the contamination identified in the initial confirmation soil samples.
- ft. BGS = feet below ground surface

TABLE 2
SUMMARY OF GROUNDWATER SAMPLING RESULTS

Date: March 27, 2006 and June 14, 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Analytical Method: EPA Method 602

Contaminant of Concern			Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes
Well ID	Sample ID	Date Collected						
UST840-MW01	UST840-MW01	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW02 UST840-MW09	UST840-MW02 UST840-MW09	3/27/2006 6/14/2006	NS BQL	NS BQL	NS 3.74	NS BQL	NS BQL	NS 2.29
UST840-MW03	UST840-MW03	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW04	UST840-MW04	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW05	UST840-MW05	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW06	UST840-MW06	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL 2.03	BQL 2.15
UST840-MW07	UST840-MW07	3/27/2006 6/14/2006	1.32 BQL	BQL BQL	1.58 1.95	1.99 BQL	BQL BQL	BQL BQL
UST840-MW08	UST840-MW08	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
2L Standard (µg/l)			1	70	550	200	1,000	530
GCL (µg/l)			5,000	70,000	84,500	200,000	257,500	87,500

- All results reported in µg/l
- µg/L = micrograms per liter
- GCL = gross contamination level
- BQL = Below Quantitation Limits
- **BOLDED** = detected concentration
- **BOLDED and shaded** = detected concentration above NCGWQSS
- NS = Not sampled due to the presence of free product
- MW09 is the replacement well for MW02.

Table 3
SUMMARY OF GROUNDWATER SAMPLING RESULTS

Date: March 27, 2006 and June 14, 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Analytical Method: EPA Method 625 plus 10 largest TICS¹

Contaminant of Concern			Acenaphthene	Fluorene	Naphthalene	Phenanthrene	Bis(2-ethylhexyl)phthalate
Well ID	Sample ID	Date Collected					
UST840-MW01	UST840-MW01	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW02	UST840-MW02	3/27/2006	NS	NS	NS	NS	NS
UST840-MW09	UST840-MW09	6/14/2006	BQL	BQL	BQL	BQL	BQL
UST840-MW03	UST840-MW03	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	2.00 1.50
UST840-MW04	UST840-MW04	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW05	UST840-MW05	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL 19.5
UST840-MW06	UST840-MW06	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840-MW07	UST840-MW07	3/27/2006 6/14/2006	2.60 1.80	2.60 1.80	8.70 6.10	2.70 BQL	BQL BQL
UST840-MW08	UST840-MW08	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
2L Standard (µg/l)			80	280	21	210	2.5
GCL (µg/l)			2,120	280	15,500	410	2,500

- ¹ Note – TICS identified in MW05, MW07, MW08, and MW09 during June 2006 event.
- All results reported in µg/l
- µg/L = micrograms per liter
- GCL = gross contamination level
- BQL = Below Quantitation Limits
- J = detected below the quantitation limit
- BOLDED** = detected concentration
- BOLDED** and **SHADED** = detected concentration exceeds NCGWQS
- NS = Not sampled due to the presence of free product
- MW09 is the replacement well for MW02.

TABLE 4
SUMMARY OF GROUNDWATER SAMPLING RESULTS

Date: March 27, 2006 and June 14, 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Analytical Method: MADEP Method VPH/EPH

Contaminant of Concern			C ₃ -C ₈ Aliphatics	C ₉ -C ₁₂ Aliphatics	C ₉ -C ₁₀ Aromatics	C ₉ -C ₁₈ Aliphatics	C ₁₉ -C ₃₆ Aliphatics	C ₁₁ -C ₂₂ Aromatics
Well ID	Sample ID	Date Collected						
UST840-MW01	UST840-MW01	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100
UST840-MW02 UST840-MW09	UST840-MW02 UST840-MW09	3/27/2006 6/14/2006	NS <100	NS <100	NS <100	NS <100	NS <100	NS 130
UST840-MW03	UST840-MW03	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100
UST840-MW04	UST840-MW04	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100
UST840-MW05	UST840-MW05	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100
UST840-MW06	UST840-MW06	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100
UST840-MW07	UST840-MW07	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	450 170
UST840-MW08	UST840-MW08	3/27/2006 6/14/2006	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100	<100 <100

- All results reported in µg/l
- µg/L =micrograms per liter
- GCL = gross contamination level
- NS = Not sampled due to the presence of free product
- MW09 is the replacement well for MW02.

TABLE 5
SUMMARY OF GROUNDWATER SAMPLING RESULTS

Date: March 27, 2006 and June 14, 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Analytical Method: MADEP Method VPH/EPH as compared to NCDENR 2L Interim GWQS

Contaminant of Concern →			C ₅ -C ₈ Aliphatics	C ₉ -C ₁₈ Aliphatics	C ₉ -C ₂₂ Aromatics	C ₁₉ -C ₃₆ Aliphatics
Well ID	Sample ID	Date Collected				
UST840-MW01	UST840-MW01	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
UST840-MW02 UST840-MW09	UST840-MW02 UST840-MW09	3/27/2006	NS	NS	NS	NS
		6/14/2006	<100	<200	<230	<100
UST840-MW03	UST840-MW03	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
UST840-MW04	UST840-MW04	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
UST840-MW05	UST840-MW05	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
UST840-MW06	UST840-MW06	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
UST840-MW07	UST840-MW07	3/27/2006	<100	<200	<550	<100
		6/14/2006	<100	<200	<270	<100
UST840-MW08	UST840-MW08	3/27/2006	<100	<200	<200	<100
		6/14/2006	<100	<200	<200	<100
2L Standard (µg/l)			420	4,200	210	42,000

- All results reported in µg/l
- µg/L = micrograms per liter
- GCL = Gross Contaminant Level
- NE = Not Established
- **BOLDED** = detected concentration
- **BOLDED** and **SHADED** = detected concentration exceeds NCGWQS
- NS = Not sampled due to the presence of free product
- MW09 is the replacement well for MW02.

TABLE 6
WELL CONSTRUCTION INFORMATION

Date: March 27-28, 2006 and June 14, 2006
Incident Number and Name: Pending and AS840
Facility ID#: N/A

Well ID	Date Installed (mm/dd/yy)	Date Water Level Measured (mm/dd/yy)	Well Casing Depth (ft. BGS)	Screened Interval (x to y ft. BGS)	Bottom of Well (ft. BGS)	Top of Casing Elevation (ft.)	Depth to Water from Top of Casing (ft.)	Free Product Thickness (ft.)	Comments
MW01	6/19/2001	3/28/2006	3.0	3.0-18.0	18.0	13.70	5.92	None	
		6/14/2006					4.31	None	
MW02	6/19/2001	3/27/2006	3.0	3.0-18.0	18.0	13.83	6.67	0.51	Well abandoned April 2006
MW03	6/20/2001	3/27/2006	22.0	22.0-27.0	27.0	13.97	6.53	None	
		6/14/2006					5.50	None	
MW04	6/20/2001	3/28/2006	3.0	3.0-18.0	18.0	14.70	7.30	None	
		6/14/2006					6.15	None	
MW05	6/20/2001	3/28/2006	3.0	3.0-18.0	18.0	14.20	7.13	None	
		6/14/2006					6.30	None	
MW06	6/20/2001	3/28/2006	3.0	3.0-18.0	18.0	13.84	6.56	None	
		6/14/2006					5.58	None	
MW07	10/6/2003	3/27/2006	4.0	4.0-14.0	14.0	14.88	7.65	None	
		6/14/2006					7.26	None	
MW08	10/6/2003	3/27/2006	4.0	4.0-14.0	14.0	14.94	8.04	None	
		6/14/2006					6.82	None	
MW09	6/8/2006	6/14/2006	3.0	3.0-16.0	16.0	13.28	5.60	None	Replacement well for MW02; same location

FIGURES



500 250 0 500
Feet

SCALE

From: USGS Jacksonville South, NC. Topographic Quadrangle (Dated 1997)



SOVEREIGN CONSULTING INC.
VIRGINIA BEACH, VIRGINIA

PROJECT

BUILDING AS840
CLEAN UP SOIL REPORT
MARINE CORPS BASE
CAMP LEJEUNE, N.C.

TITLE

**GENERAL VICINITY
TOPOGRAPHIC MAP**

FIGURE

1

JOB NO.

206-063

DATE

AUG 2006

SCALE

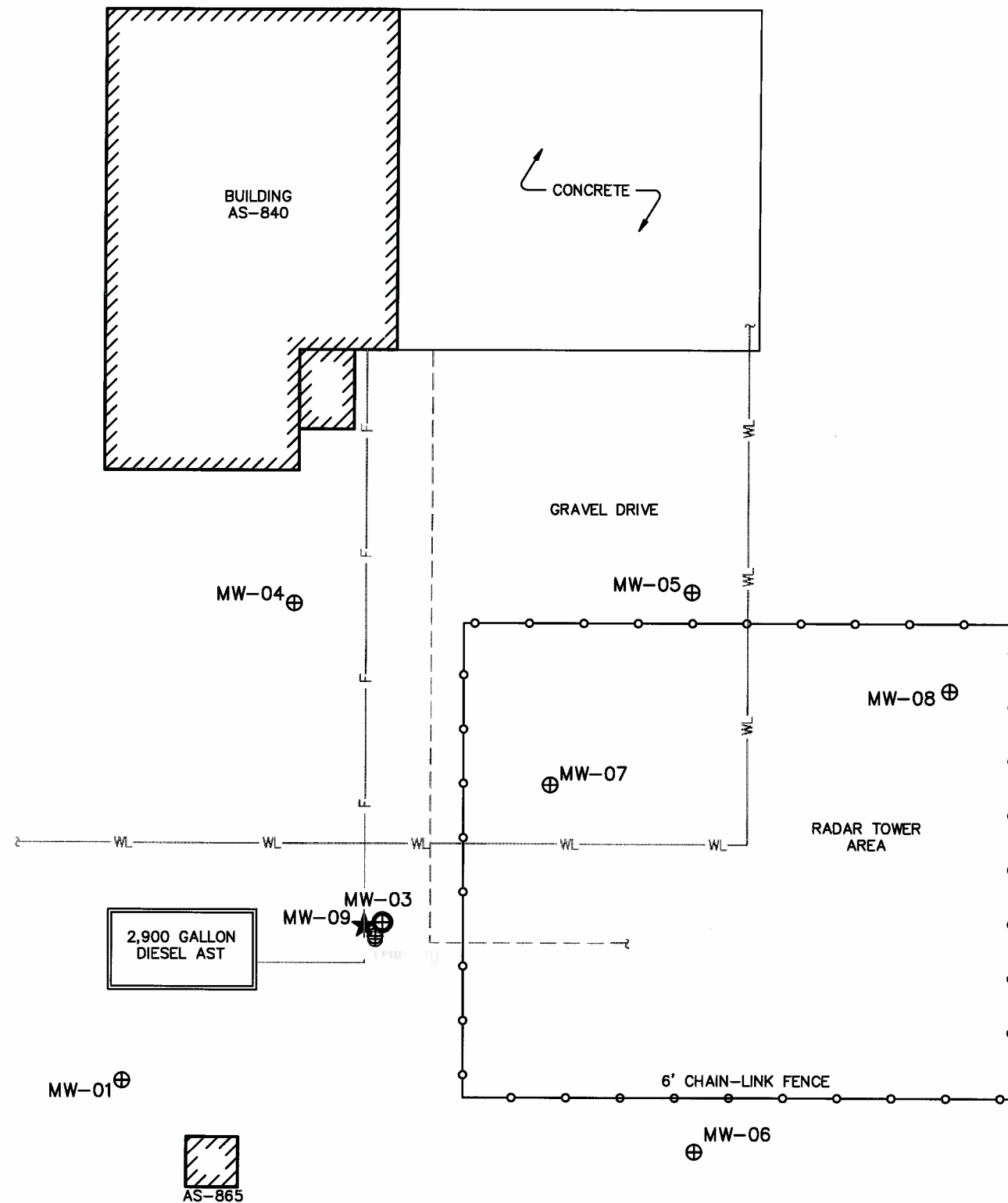
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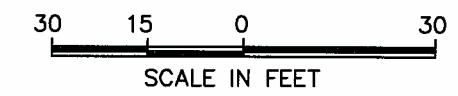
KAWS

CHECKED BY

JKB



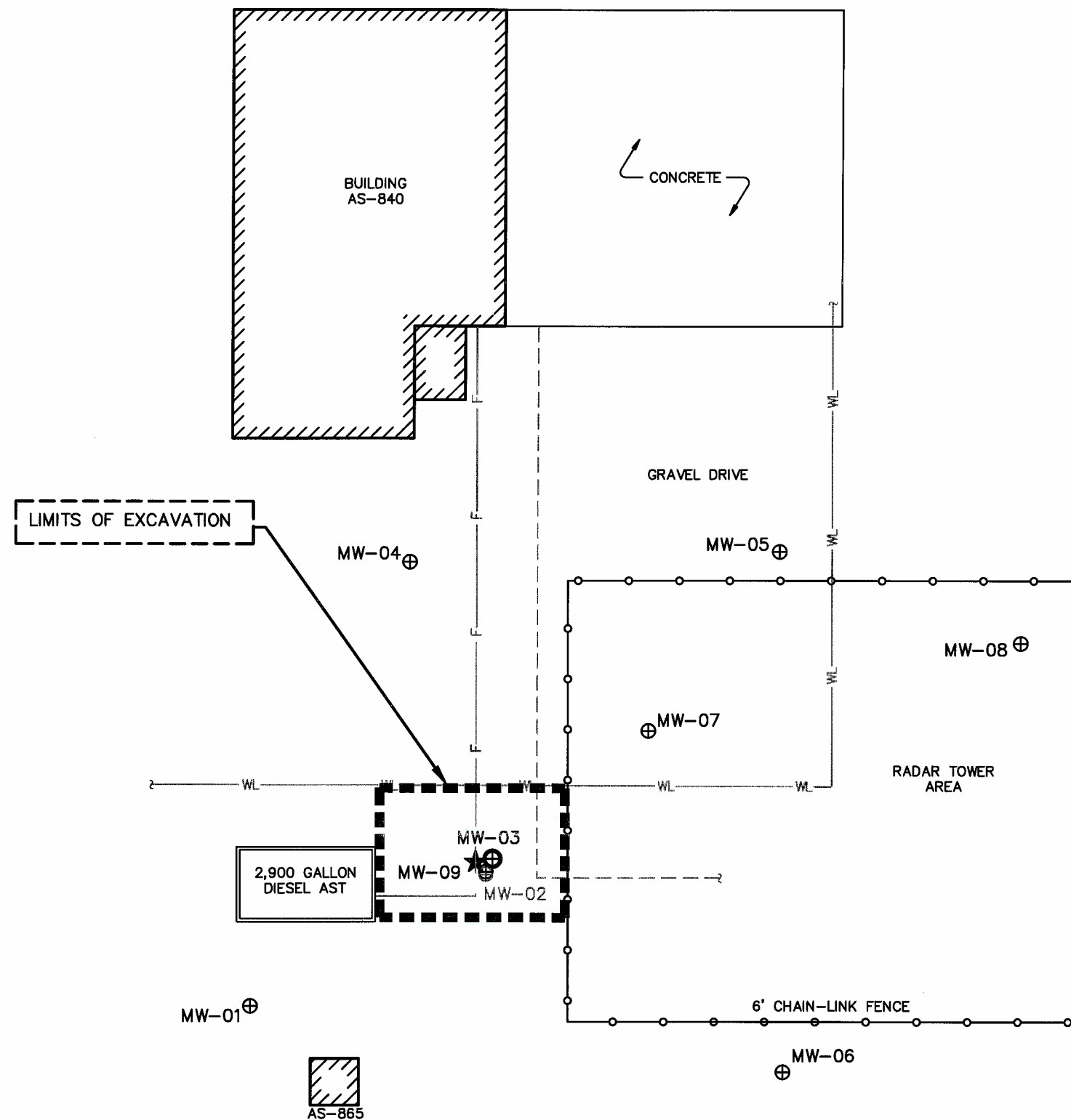
LEGEND	
EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE SITE MAP WITH MONITORING WELL LOCATIONS		FIGURE
	JOB NO. 206-063 DATE: AUG 2006	SCALE: 1"=30'	DRAWN BY: KAWS CHECKED BY: JKB	2

206063-AS-840-02

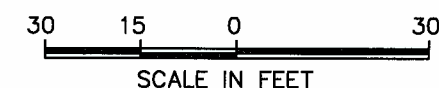


Comment	Sample ID	Contaminant of Concern →		TPH-DRO	TPH-GRO
		Date Collected (mm/dd/yy)	Sample Depth (ft BGS)		
Initial Confirmation Sample North Sidewall	AS840-N001	5-2-2006	5-6	5,620	586
Initial Confirmation Sample South Sidewall	AS840-S001	5-2-2006	5-6	1,340	BQL
Second Confirmation Sample South Sidewall	AS840-S013A	5-19-2006	5-6	BQL	BQL
Initial Confirmation Sample East Sidewall	AS840-E001	5-2-2006	5-6	1,180	BQL
Second Confirmation Sample East Sidewall	AS840-E011A	5-19-2006	5-6	BQL	BQL
Initial Confirmation Sample West Sidewall	AS840-W001	5-2-2006	5-6	225	BQL
Second Confirmation Sample West Sidewall	AS840-W012A	5-19-2006	5-6	BQL	BQL
NCDENR Action Level (mg/kg)				40	10

* MSCC = maximum soil contamination concentration
 * Results reported in mg/kg
 mg/kg = milligrams per kilogram
 * BOLDED = detected concentration
 * BOLDED and shaded = detected concentration above NCDENR action level.
 * Note - Second confirmation soil samples were taken after re-excavation activities in which Sovereign attempted to remove the contamination identified in the initial confirmation soil samples.
 * ft. BGS = feet below ground surface

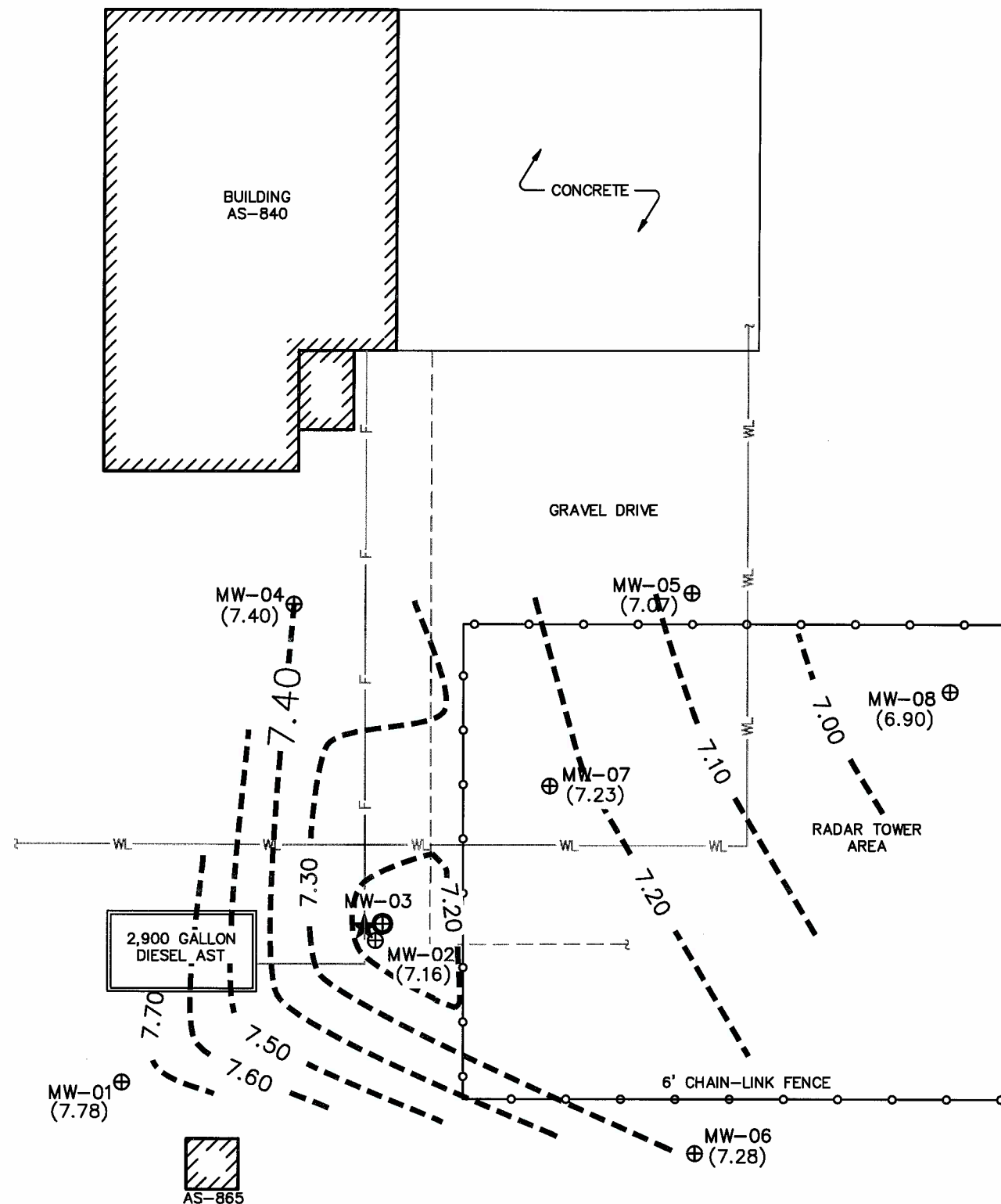
LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



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 1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE FINAL EXCAVATION WITH 2006 SOIL SAMPLE RESULTS		FIGURE 3
	JOB NO. 206-063 DATE: AUG 2006	SCALE: 1"=30'	DRAWN BY: KAWS CHECKED BY: JKB	206063-AS-840-03



LEGEND

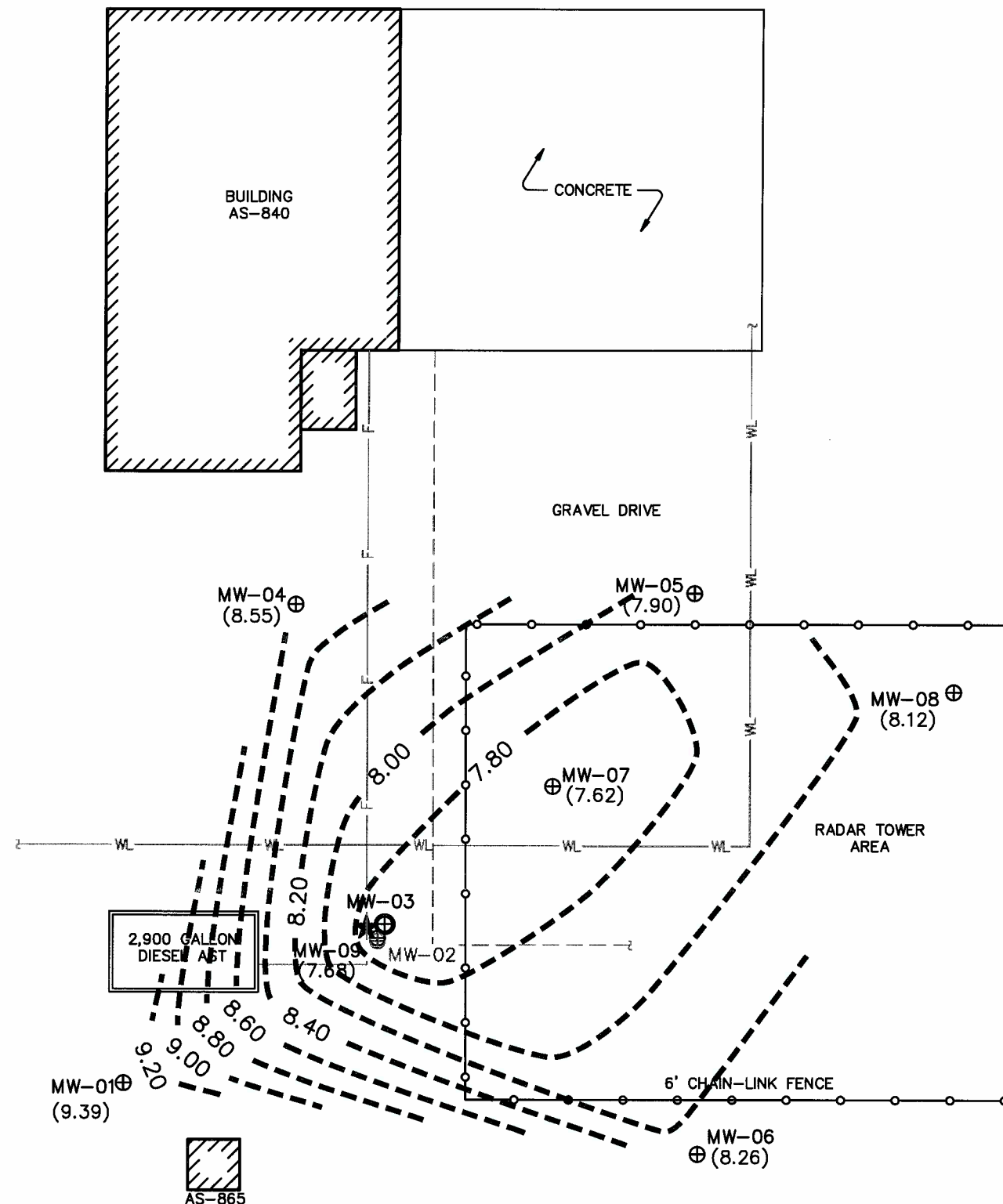
EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY

30 15 0 30
SCALE IN FEET

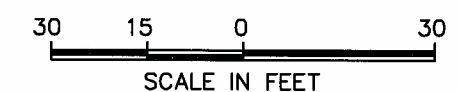
NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
2. TYPE III MONITORING WELL NOT CONSIDERED IN CONTOURING.

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE SHALLOW MONITORING WELL GROUNDWATER ELEVATIONS - MARCH 2006		FIGURE 4
	JOB NO. 206-063 DATE AUG 2006	SCALE: 1"=30'	DRAWN BY: KAWS CHECKED BY: JKB	

206063-AS-840-04



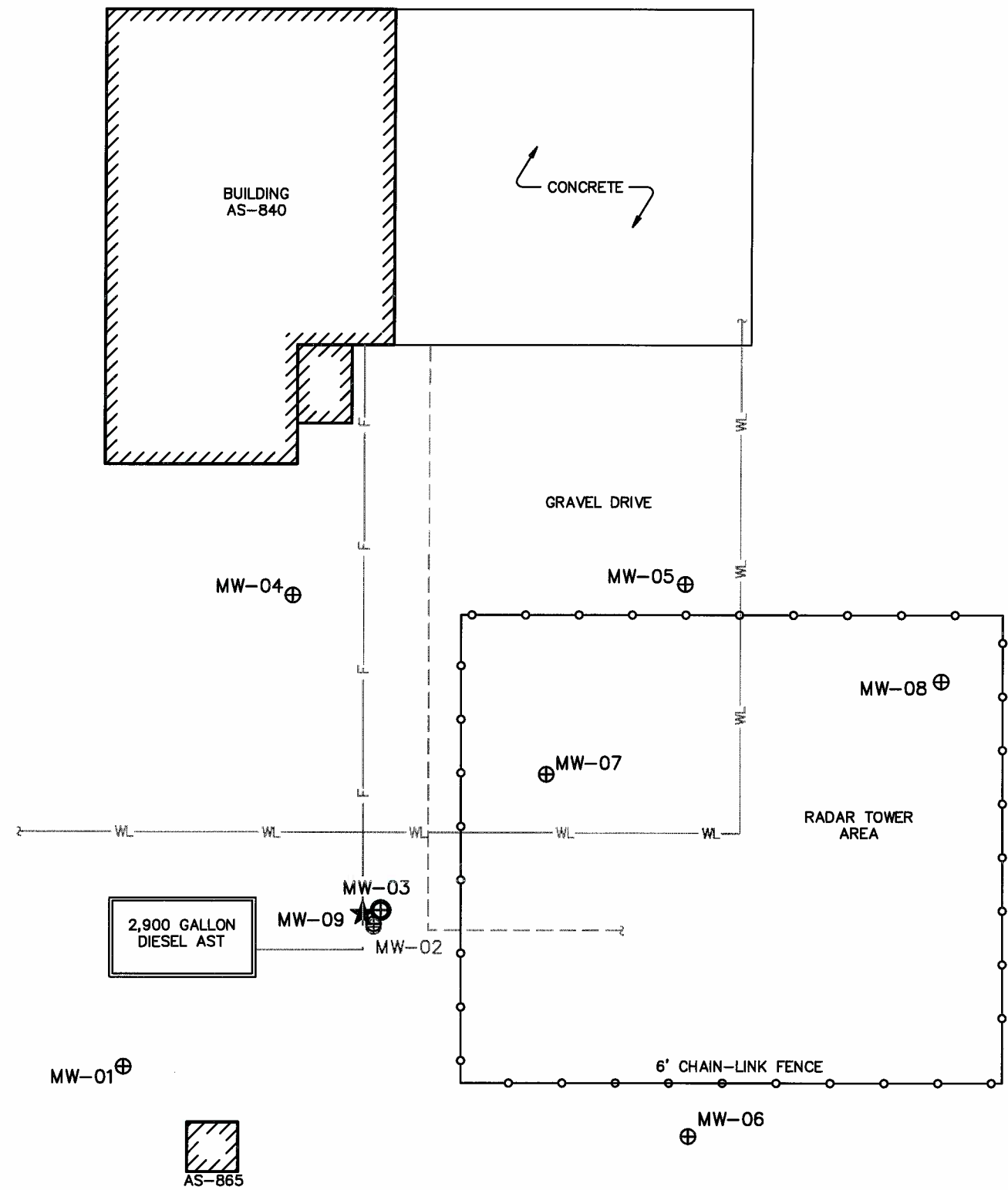
LEGEND	
EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
2. TYPE III MONITORING WELL NOT CONSIDERED IN CONTOURING.

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC		TITLE SHALLOW MONITORING WELL GROUNDWATER ELEVATIONS – JUNE 2006			FIGURE
						5
	JOB NO. 206-063	DATE: AUG 2006	SCALE: 1"=30'	DRAWN BY: KAWS	CHECKED BY: JKB	

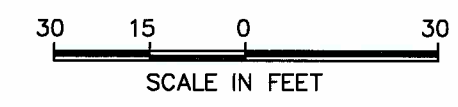
206063-AS-840-05



Contaminant of Concern →			Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyltert butyl ether (MTBE)	Toluene	Total Xylenes
Well ID	Sample ID	Date Collected						
UST840 MW01	UST840 MW01	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840 MW02	UST840 MW02	3/27/2006	NS	NS	NS	NS	NS	NS
UST840 MW09	US840 MW09	6/14/2006	BQL	BQL	3.74	BQL	BQL	2.29
UST840 MW03	UST840 MW03	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840 MW04	UST840 MW04	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840 MW05	UST840 MW05	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840 MW06	UST840 MW06	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL 2.03	BQL 2.15
UST840 MW07	UST840 MW07	3/27/2006 6/14/2006	1.32 BQL	BQL BQL	1.58 1.95	1.99 BQL	BQL BQL	BQL BQL
UST840 MW08	UST840 MW08	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
2L Standard (µg/l)			1	70	550	200	1,000	530
GCL (µg/l)			5,000	70,000	84,500	200,000	257,500	87,500

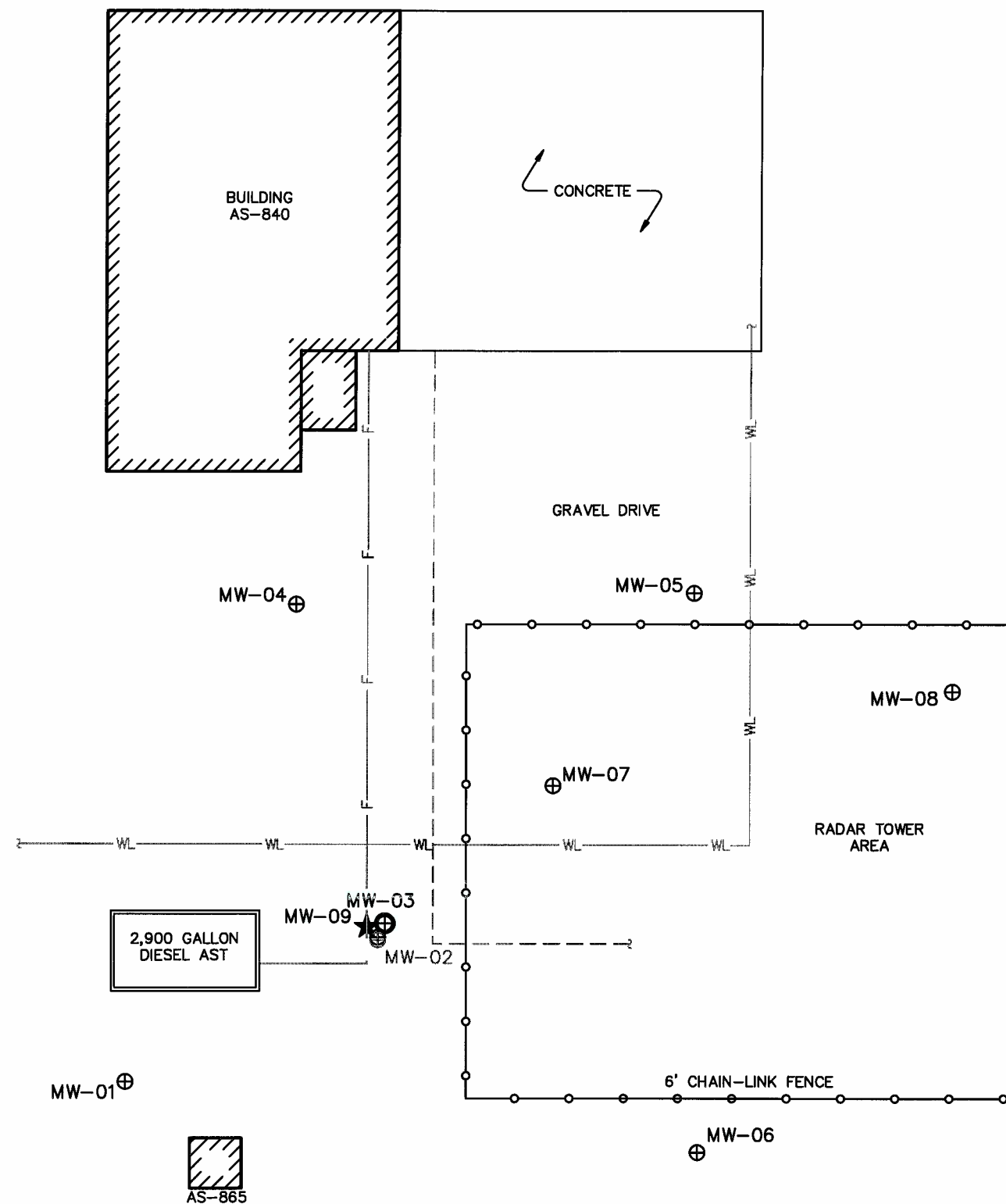
* All results reported in µg/l
 * µg/L = micrograms per liter
 * GCL = gross contamination level
 * BQL = Below Quantitation Limits
 * BOLDDED = detected concentration
 * BOLDDED and shaded = detected concentration above NCGWQSs
 * NS = Not sampled due to the presence of free product
 * MW09 is the replacement well for MW02.

LEGEND	
EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
 1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE SITE MAP WITH GROUNDWATER SAMPLING RESULTS - EPA METHOD 602		FIGURE 6
	JOB NO. 206-063 DATE AUG 2006	SCALE: 1"=30'	DRAWN BY: KAWS	CHECKED BY: JKB

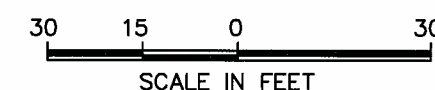


Contaminant of Concern →			Acenaphthene	Fluorene	Naphthalene	Phenanthrene	Bis(2-ethylhexyl)phthalate
Well ID	Sample ID	Date Collected					
UST840- MW01	UST840- MW01	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840- MW02	UST840- MW02	3/27/2006 6/14/2006	NS BQL	NS BQL	NS BQL	NS BQL	NS BQL
UST840- MW03	UST840- MW03	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	2.00 1.50
UST840- MW04	UST840- MW04	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840- MW05	UST840- MW05	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL 10.95
UST840- MW06	UST840- MW06	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST840- MW07	UST840- MW07	3/27/2006 6/14/2006	2.60 1.80	2.60 1.80	8.70 6.10	2.70 BQL	BQL BQL
UST840- MW08	UST840- MW08	3/27/2006 6/14/2006	BQL BQL	BQL BQL	BQL BQL	BQL BQL	BQL BQL
2L Standard (µg/l)			80	280	21	210	2.5
GCL (µg/l)			2,120	280	15,500	410	2,500

* Note: TICS identified in MW05, MW07, MW08, and MW09 during June 2006 event.
 * All results reported in µg/l
 * µg/L = micrograms per liter
 * GCL = gross contamination level
 * BQL = Below Quantitation Limits
 * J = detected below the quantitation limit
 * BOLDED = detected concentration
 * BOLDED and SHADED = detected concentration exceeds NCGWQS
 * NS = Not sampled due to the presence of free product
 * MW09 is the replacement well for MW02.

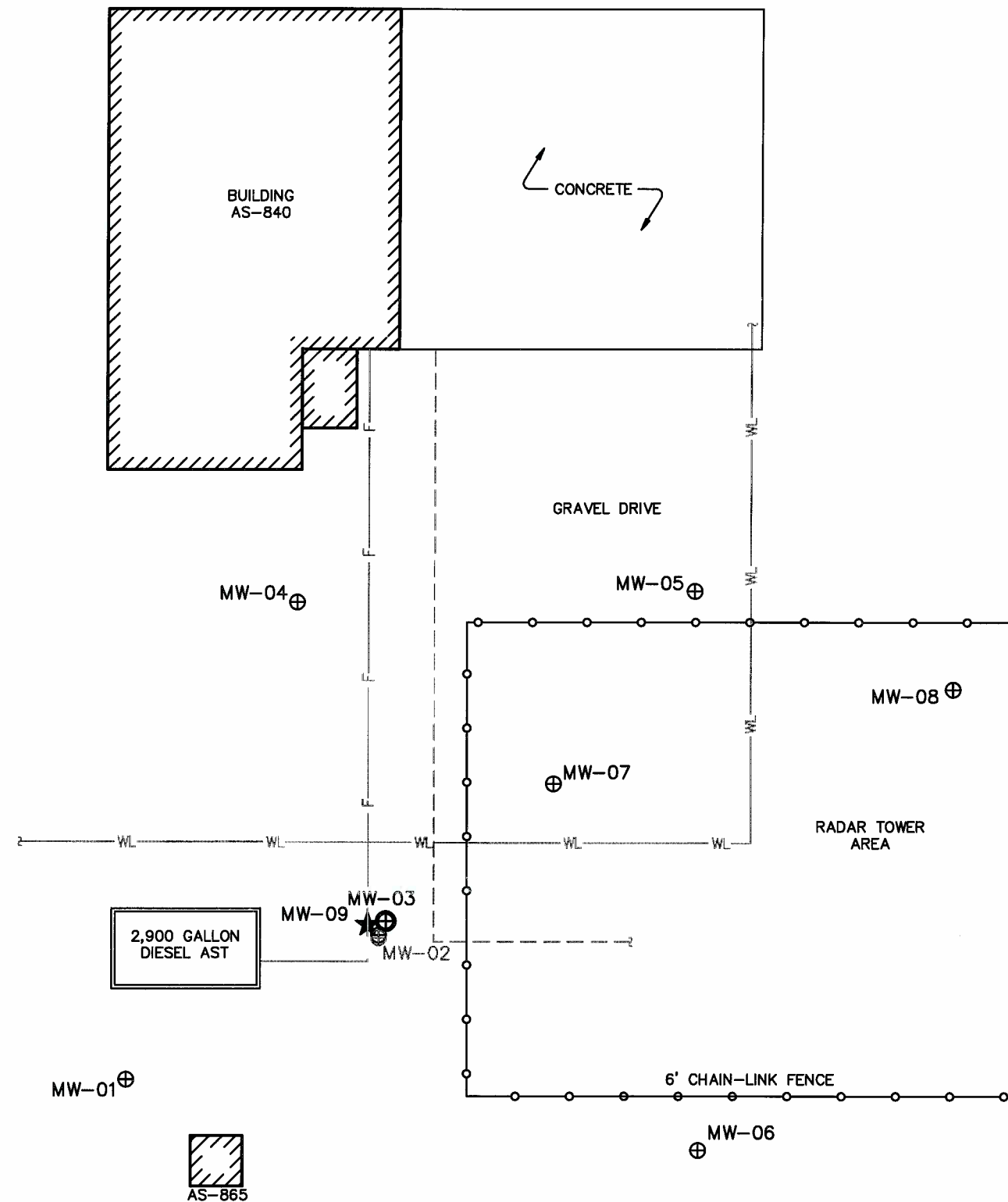
LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
 1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE SITE MAP WITH GROUNDWATER SAMPLING RESULTS – EPA METHOD 625 + 10 TICS	FIGURE 7
	JOB NO. 206-063 DATE: AUG 2006	SCALE: 1"=30' DRAWN BY: KAWS CHECKED BY: JKB	

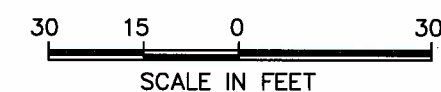


Contaminant of Concern →			C ₆ -C ₈ Aliphatics	C ₉ -C ₁₀ Aliphatics	C ₉ -C ₁₀ Aromatics	C ₁₁ -C ₁₄ Aliphatics
Well ID	Sample ID	Date Collected				
UST840- MW01	UST840- MW01	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
UST840- MW02	UST840- MW02	3/27/2006	NS	NS	NS	NS
UST840- MW09	UST840- MW09	6/14/2006	<100	<200	<200	<100
UST840- MW03	UST840- MW03	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
UST840- MW04	UST840- MW04	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
UST840- MW05	UST840- MW05	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
UST840- MW06	UST840- MW06	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
UST840- MW07	UST840- MW07	3/27/2006 6/14/2006	<100 <100	<200 <200	<550 <270	<100 <100
UST840- MW08	UST840- MW08	3/27/2006 6/14/2006	<100 <100	<200 <200	<200 <200	<100 <100
2L Standard (µg/l)			420	4,200	210	42,000

* All results reported in µg/l
 * µg/L = micrograms per liter
 * GCL = Gross Contaminant Level
 * NE = Not Established
 * BOLDED = detected concentration
 * BOLDED and SHADED = detected concentration exceeds NCGWQS
 * NS = Not sampled due to the presence of free product
 * MW09 is the replacement well for MW02.

LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	ABANDONED TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
 1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING AS-840 DRAFT SOIL CLEANUP REPORT MARINE CORPS AIR STATION NEW RIVER, NC	TITLE SITE MAP WITH GROUNDWATER SAMPLING RESULTS - MADEP METHOD VPH/EPH AS COMPARED TO 2L GWQSs	FIGURE 8
	JOB NO. 206-063 DATE: AUG 2006	SCALE: 1"=30' DRAWN BY: KAWS CHECKED BY: JKB	

206063-AS-840-08

APPENDIX A

HISTORICAL SOIL AND GROUNDWATER DATA AND FIGURES

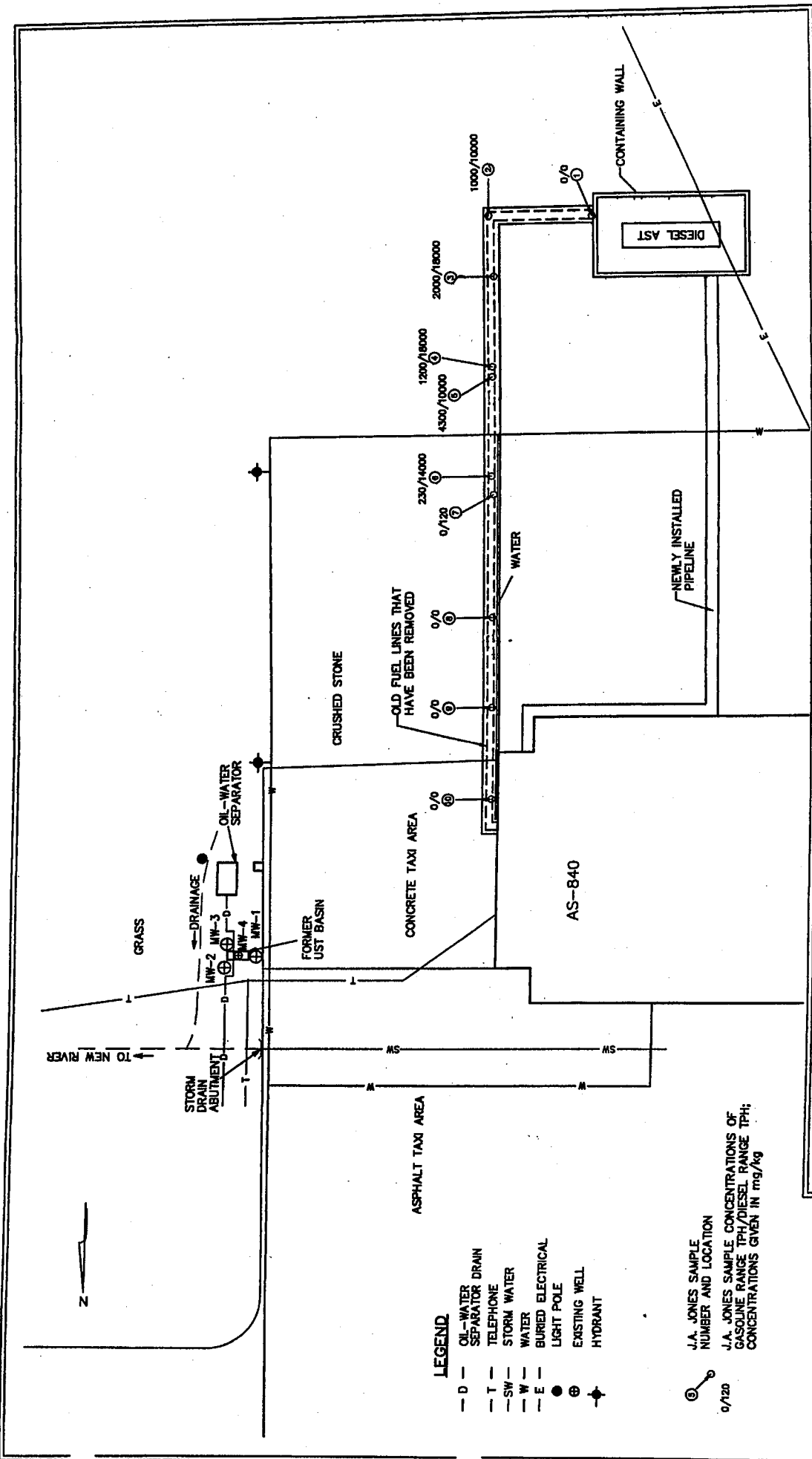
JAJones/LAW CSA Data

CATLIN CAP Data

Shaw AFVR Data

Receptor Survey Data

JAJones/LAW CSA Data



LAW

LAWGIBB Group Member

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

RALEIGH, NORTH CAROLINA

DRAWN:	LGL	DATE:	FEBRUARY 2000
DFT CHECK:	6/87	SCALE:	1"=30'
ENG CHECK:	2/00	JOB:	30740-6-0600
APPROVAL:	2/00	FIGURE:	2

SOIL ANALYTICAL RESULTS MAP

BUILDING AS-840

MARINE CORPS AIR STATION

NEW RIVER, NORTH CAROLINA

REFERENCE: J.A. JONES ENVIRONMENTAL SERVICES; FUEL SUPPLY PIPES REMOVAL SITE MAP.

AS-840 PLAN 2

ALC/BR/22

Table 3
Date: 12/06/01

Summary of Soil Sampling Results: Comprehensive Site Assessment (Page 1 of 2)
Incident No. and Name: No. Pending, MCAS Building AS 840

Facility ID#: Not Applicable

Analytical Method →				Volatile Organic Compounds by EPA Method 8260												Total Xylenes	
Probe ID	Sample ID	Date Collected	Sample Depth (ft./in.)	Benzene	n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	4-Isopropyltoluene	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Propylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene			
				Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →	Contaminant of Concern →		Contaminant of Concern →	
SB01	ASTAS840-SB01-01	4/19/01	1-2	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.012		
SB01	ASTAS840-SB01-03	4/19/01	5-6	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	0.024	<0.0069	0.02	<0.0069	<0.014		
SB02	ASTAS840-SB02-02	4/19/01	3-4	<0.0069	<0.0069	<0.0069	0.0071	<0.0069	<0.0069	0.018	0.017	<0.0069	0.019	0.0084	0.02		
SB02	ASTAS840-SB02-03	4/19/01	5-6	<0.007	<0.007	<0.007	0.014	<0.007	<0.007	0.054	0.11	<0.007	0.049	0.011	0.016		
SB03	ASTAS840-SB03-02	4/19/01	3-4	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.0064	<0.006	<0.006	<0.006	<0.006		
SB03	ASTAS840-SB03-03	4/19/01	5-6	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.017	<0.0071	<0.0071	<0.0071	<0.0071		
SB04	ASTAS840-SB04-02	4/19/01	3-4	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	0.014	<0.0055	0.011	0.0058	<0.011		
SB04	ASTAS840-SB04-03	4/19/01	5-6	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	0.058	<0.0068	0.041	0.010	<0.014		
SB05	ASTAS840-SB05-01	4/19/01	1-2	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.011		
SB05	ASTAS840-SB05-03	4/19/01	5-6		<0.0073	0.011	0.045	0.014	0.0075	0.044	0.19	0.024	0.15	0.035	0.039		
SB06	ASTAS840-SB06-01	4/19/01	1-2	<0.0057	<0.0057	0.01	0.016	0.0082	0.0089	<0.0057	0.05	0.012	0.08	0.03	0.096		
SB06	ASTAS840-SB06-03	4/19/01	5-6		<0.0072	0.012	0.057	0.015	0.0083	0.047	0.22	0.025	0.15	0.037	0.163		
SB07	ASTAS840-SB07-02	4/19/01	3-4	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.012		
SB07	ASTAS840-SB07-03	4/19/01	5-6	<0.0072	0.0092	0.017	0.042	0.016	0.013	0.029	0.28	0.031	0.21	0.05	0.124		
SB08	ASTAS840-SB08-02	4/19/01	3-4	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.013		
SB08	ASTAS840-SB08-03	4/19/01	5-6	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.076	<0.0071	0.032	<0.0071	0.011		
Soil-to-Groundwater MSCC →				0.0056	4	3	0.24	2	*	0.92	0.58	2	156	8	7	5	
Residential MSCC →				22	156	156	1,560	1,564	*	156	63	156	782	782	782	32,000	

All laboratory results and Maximum Soil Contaminant Concentrations (MSCCs) are reported in milligrams per kilogram (mg/kg).

Unshaded cells listing laboratory detection limit indicate compound not detected.

Shaded cell indicates concentration identified above laboratory detection limit.

Shaded cell with bold numbers indicate detected concentration exceeds the Soil to Groundwater MSCC.

* A soil to groundwater MSCC for 4-isopropyltoluene cannot be determined because an octanol-water partitioning coefficient has not been established for this compound. Similarly, residential or commercial/industrial MSCCs cannot be established for this compound due to a lack of health-based risk information (reference dose or cancer slope factor) for 4-isopropyltoluene.

ft. lbs = Feet below land surface

Prepared By: L.V. Date: 4/16/01
Checked By: W.B.D. Date: 12/6/01

0681BB12

Table 3

Date: 12/06/01

Summary of Soil Sampling Results: Comprehensive Site Assessment (Page 2 of 2)

Incident No. and Name: No. Pending, MCAS Building AS 840

Facility ID#: Not Applicable

DATE: 12/06/01				Semi-Volatile Organic Compounds, Base Neutral Acid Extractables by EPA Method 8270										Hydrocarbon Fractions by the Massachusetts Department of Environmental Protection (MADEP) Method																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Analytical Method				Acenaphthene					Fluorene					2-Methylnaphthalene					Naphthalene					Phenanthrene					Pyrene					MADEP VPH Compounds					MADEP EPH Compounds					Combined MADEP Compounds																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Probe ID	Sample ID	Concentration of Concentrator		Time Collected	Sample Depth (ft. bsl)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

All laboratory results and Maximum Soil Contaminant Concentrations (MSCCs) are reported in milligrams per kilogram (mg/kg)

Unshaded cells listing laboratory detection limit indicate compound not detected

Shaded cell indicates concentration identified above laboratory detection limit

VPB = Volatile Petroleum Hydrocarbons

EPH = Extractable Petroleum Hydrocarbons

HBL = Health Based Level

ft. bsl = Feet below land surface

Prepared By: *ef* Date: 11/16/01Checked By: *ef* Date: 12/16/01

Table 5 **Free Product Recovery Results**
Date: 1/08/02 **Incident No. and Name: No. Pending, MCAS Building AS-840 Facility ID#: NA**
Free Product Recovery Method: Aggressive Fluid Vapor Recovery
Method of Measurement: Interface Probe and Flame Ionization Detector

Well ID	Product Type	Date of Recovery (m/dd/yy)	Well Casing Diameter (inches)	Product Thickness before Recovery (feet)	Product Thickness after Recovery (feet)	Product Recovered as Vapor (gallons)	Product Recovered as Liquid (gallons)	Total Estimated Product Recovered (gallons)	Depth to Water (feet)
MW02	Diesel	7/31/01	2	2.70	Non Detect	8.9	4.0	12.9	8.81
MW02	Diesel	8/08/01	2	1.51	Non Detect	8.6	3.0	11.6	7.93
MW02	Diesel	8/13/01	2	0.61	Non Detect	8.9	3.0	11.9	7.24
MW02	Diesel	8/21/01	2	0.60	Non Detect	8.8	4.0	12.8	7.53
MW02	Diesel	8/27/01	2	0.82	Non Detect	10.0	4.0	14.0	7.70
MW02	Diesel	9/07/01	2	0.86	Non Detect	8.8	3.0	11.8	7.48
MW02	Diesel	9/25/01	2	1.83	Non Detect	8.9	4.0	12.9	8.21
MW02	Diesel	10/11/01	2	0.26	Non Detect	9.1	2.0	11.1	8.45
MW02	Diesel	10/23/01	2	0.43	Non Detect	9.0	3.0	12.0	8.61
MW02	Diesel	10/30/01	2	1.59	Non Detect	9.0	3.5	12.5	9.41
MW02	Diesel	11/03/01	2	0.23	Non Detect	4.7	0.5	5.2	8.24
MW02	Diesel	11/16/01	2	0.44	Non Detect	5.7	1.0	6.7	8.69
MW02	Diesel	12/11/01	2	0.35	Non Detect	6.0	0.5	6.5	9.24
MW02	Diesel	1/13/02	2	1.56	Non Detect	4.6	1.0	5.6	9.55
MW02	Diesel	1/24/02	2	1.41	Non Detect	4.4	1.2	5.6	8.17
MW02	Diesel	2/5/02	2	0.28	Non Detect	5.9	0.5	6.4	7.43
MW02	Diesel	2/25/02	2	0.95	Non Detect	5.9	1.0	6.9	7.62
MW02	Diesel	3/5/02	2	0.49	Non Detect	6.2	0.5	6.7	7.33
MW02	Diesel	3/15/02	2	0.87	Non Detect	5.7	0.8	6.5	6.10
MW02	Diesel	3/26/02	2	1.19	Non Detect	7.0	1.5	8.5	7.42
MW02	Diesel	4/9/02	2	0.84	Non Detect	7.3	1.0	8.3	7.40
MW02	Diesel	4/19/02	2	0.85	Non Detect	8.4	1.3	9.7	7.92
MW02	Diesel	4/29/02	2	0.72	Non Detect	7.2	1.0	8.2	7.78
MW02	Diesel	5/13/02	2	0.87	Non Detect	10.6	1.2	11.8	8.03
MW02	Diesel	5/20/02	2	0.87	Non Detect	11.3	1.2	12.5	8.38
MW02	Diesel	5/28/02	2	0.56	Non Detect	8.6	0.7	9.3	8.44
MW02	Diesel	6/4/02	2	0.48	Non Detect	9.7	0.5	10.2	8.37
MW02	Diesel	6/14/02	2	0.43	Non Detect	9.5	0.5	10.0	8.49
MW02	Diesel	6/25/02	2	0.56	Non Detect	10.7	0.8	11.5	8.70
MW02	Diesel	7/12/02	2	0.70	Non Detect	10.9	1.0	11.9	8.43
MW02	Diesel	7/23/02	2	0.65	Non Detect	10.9	1.0	11.9	8.36
Total Gallons of Product Recovered to through July 2002						251.2	51.5	302.7	

CATLIN CAP Data

TABLE 3A SUMMARY OF GROUNDWATER LABORATORY RESULTS
 Incident Number and Name: Pending - AS-840
 Date: November 2004

Analytical Method: EPA Method 602

Well ID	Contaminant of Concern		Benzene	Ethylbenzene	All Other Analytes
	Sample ID	Date Collected			
2L GWQS (µg/L)					
ASTAS840-MW01	MW-01	11/23/2004	<1.00	<1.00	BQL
ASTAS840-MW01 DUP	MW-01 DUP	11/23/2004	<1.00	<1.00	BQL
ASTAS840-MW04	MW-04	11/23/2004	<1.00	<1.00	BQL
ASTAS840-MW07	MW-07	11/23/2004	1.99	1.39	BQL

All results in µg/L

BQL = Below Quantitation Limit

Shading indicates concentration in excess of NCAC 2L GWQS.

TABLE 3B SUMMARY OF GROUNDWATER LABORATORY RESULTS
 Date: November 2004 Incident Number and Name: Pending - AS-840

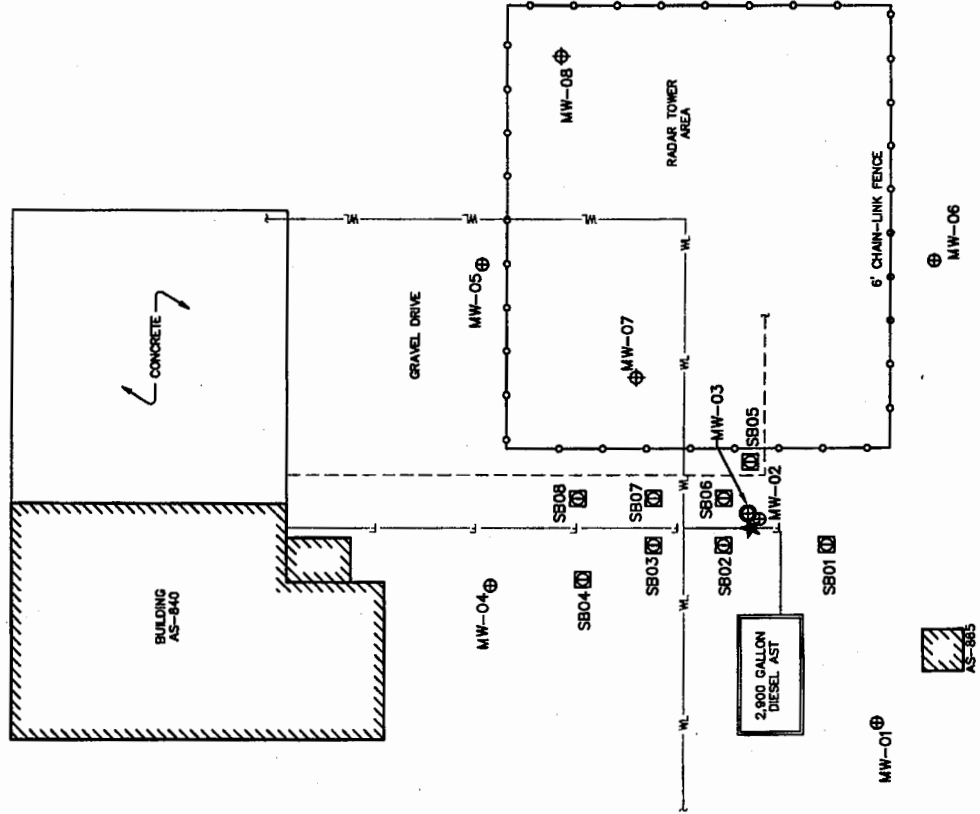
Analytical Method: EPA Method 625

Well ID	Contaminant of Concern		All Analytes
	Sample ID	Date Collected	
	2L GWQS (µg/L)		Varies
ASTAS840-MW01	MW-01	11/23/2004	BQL
ASTAS840-MW04	MW-04	11/23/2004	BQL
ASTAS840-MW07	MW-07	11/23/2004	BQL

All results in µg/L

BQL = Below Quantitation Limit

Shading indicates concentration in excess of NCAC 2L GWQS.



LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	SOIL BORING (OPT)
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY

PROJECT
CORRECTIVE ACTION PLAN
BUILDING AS-840
MARINE CORPS AIR STATION
NEW RIVER, NC

DATE 204-045 **DATE** JAN 2005

SCALE 1"=30'

FIGURE 2

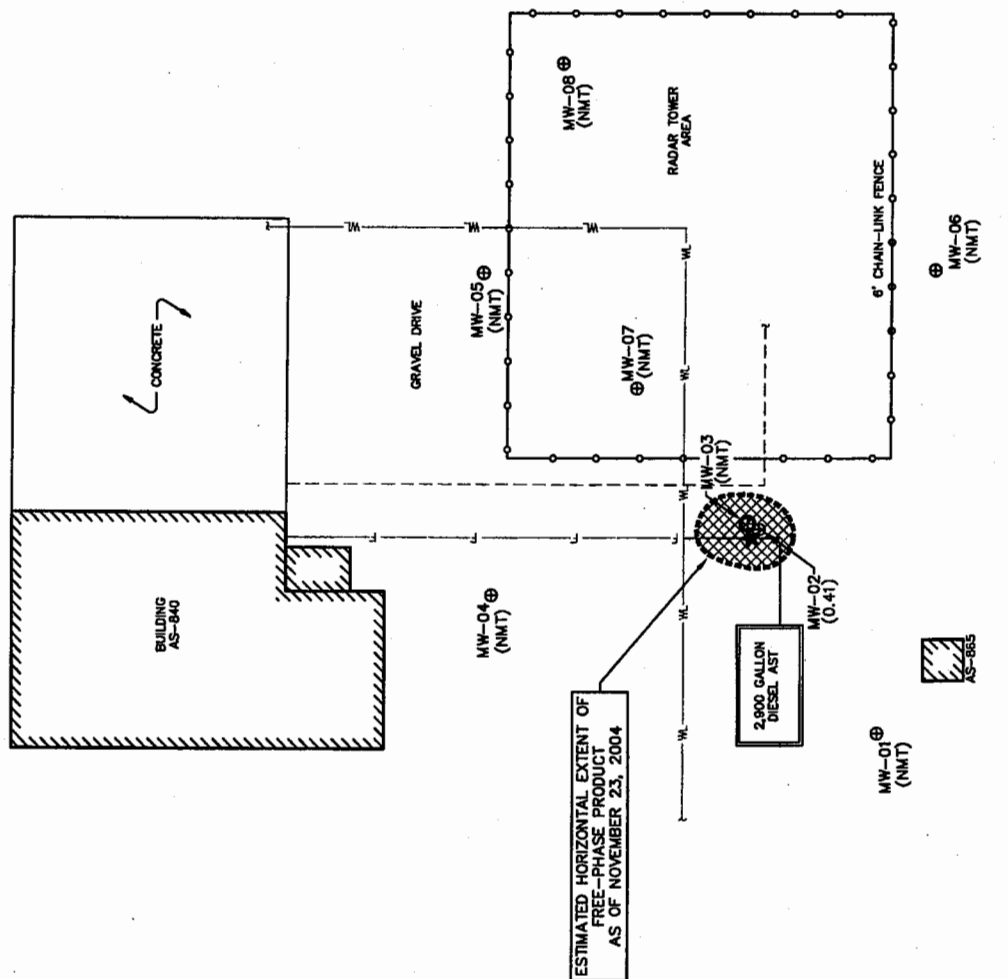
SOIL BORING, MONITORING WELL AND POWER PROBE LOCATION MAP

DATE 1"=30'

FIGURE 2

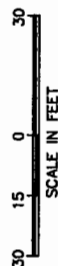
FIGURE 2

NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.



LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY
	FREE-PHASE PRODUCT THICKNESS IN FEET
	NO MEASURABLE THICKNESS



PROJECT: CORRECTIVE ACTION PLAN
BUILDING AS-840
MARINE CORPS AIR STATION
NEW RIVER, NC
JOB NO: 204-045 DATE: JAN 2005
SCALE: 1" = 30'

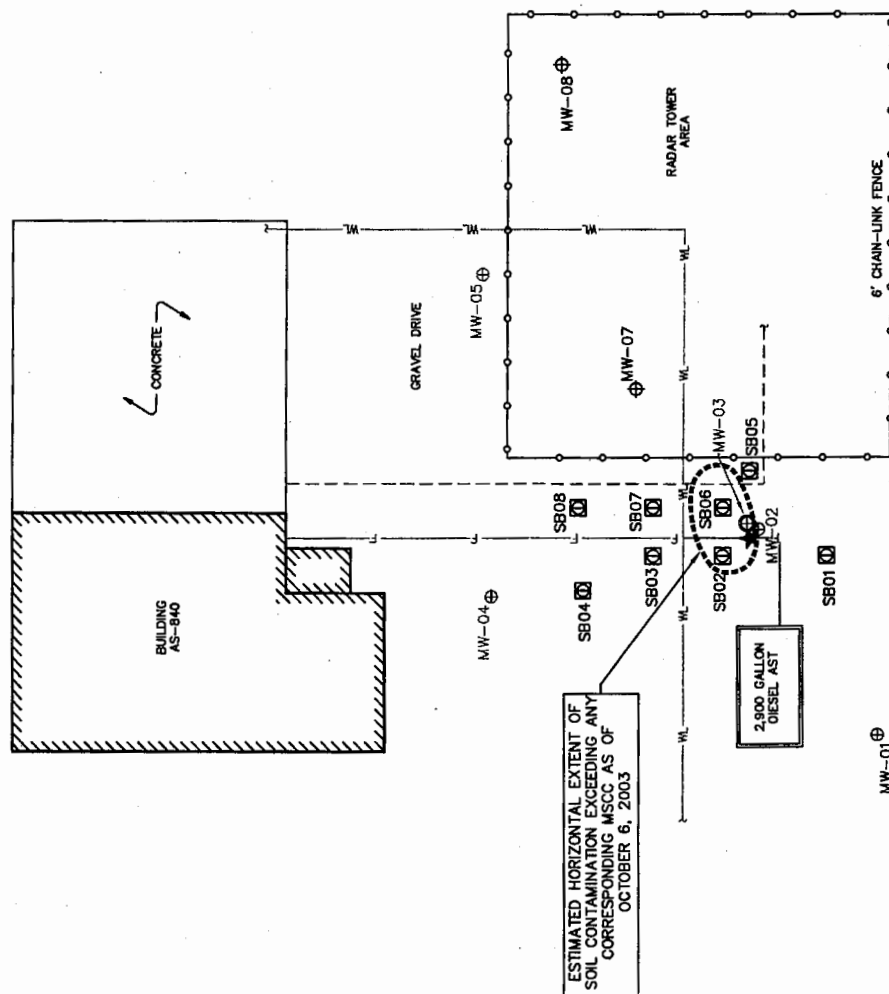
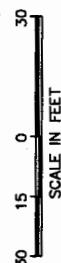
FIGURE 3
ESTIMATED
EXTENT OF FREE-PHASE PRODUCT
AS OF NOVEMBER 23, 2004
DRAWN BY: HCS
CHECKED BY: JKB

NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
2. ESTIMATED HORIZONTAL EXTENT BASED ON FIELD DATA COLLECTED AS PART OF THE CAP ON NOVEMBER 23, 2004.



LEGEND

EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	SOIL BORING (DPT)
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



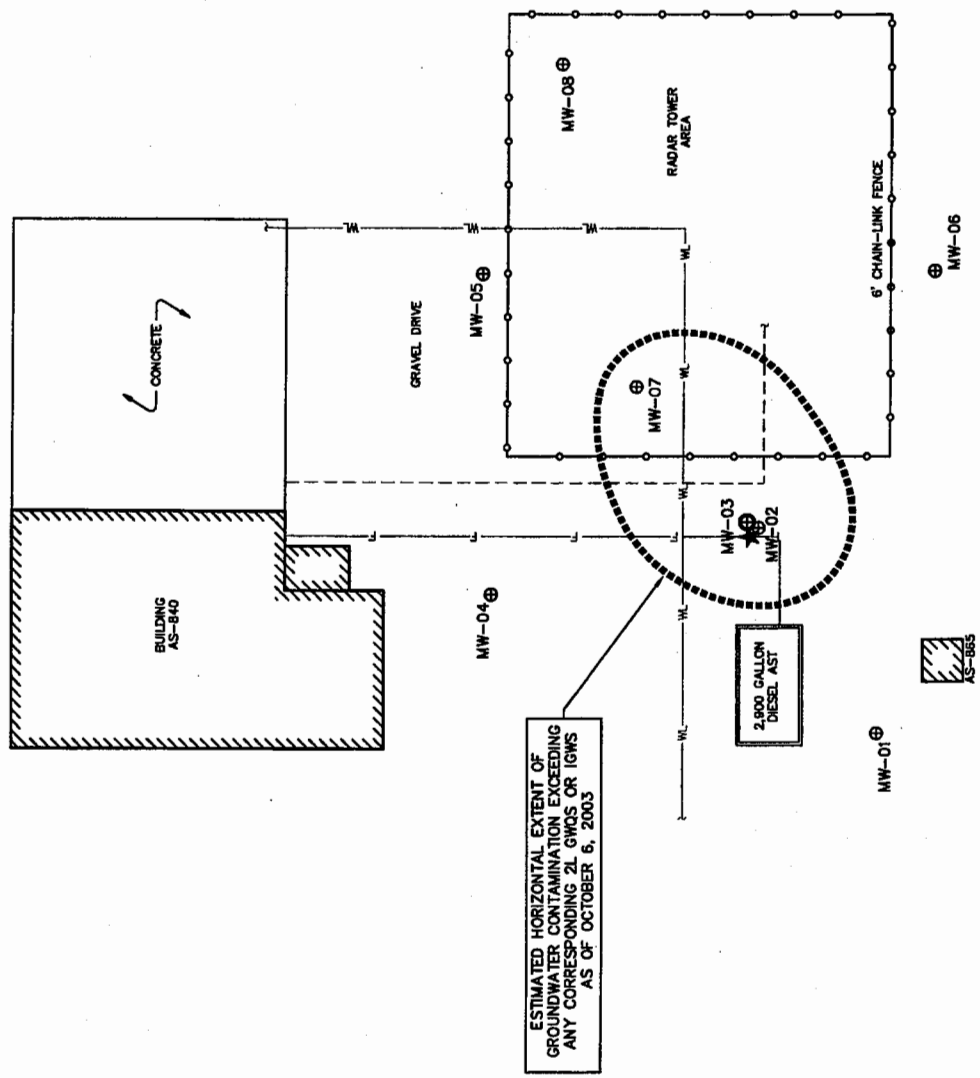
ESTIMATED HORIZONTAL EXTENT OF SOIL CONTAMINATION EXCEEDING ANY CORRESPONDING MSCC AS OF OCTOBER 6, 2003

- NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
 2. ESTIMATED HORIZONTAL EXTENT OF SOIL CONTAMINATION WAS BASED ON DATA OBTAINED FROM FIGURES 3 & 4 OF THE CSA ADDENDUM REPORT BY TAYLOR, WISEMAN & TAYLOR, DATED NOVEMBER 2003.
 3. REFER TO THE CSA ADDENDUM REPORT FOR A COMPLETE LIST OF ANALYTES AND RESULTS.



CORRECTIVE ACTION PLAN
BUILDING AS-840
MARINE CORPS AIR STATION
NEW RIVER, NC
JOB NO. 204-043 DATE JAN 2005

THE
ESTIMATED
EXTENT OF SOIL CONTAMINATION
AS OF OCTOBER 6, 2003
SCALE 1"=30'
DRAWN BY: HCS
CHECKED BY: JKB
FIGURE 4



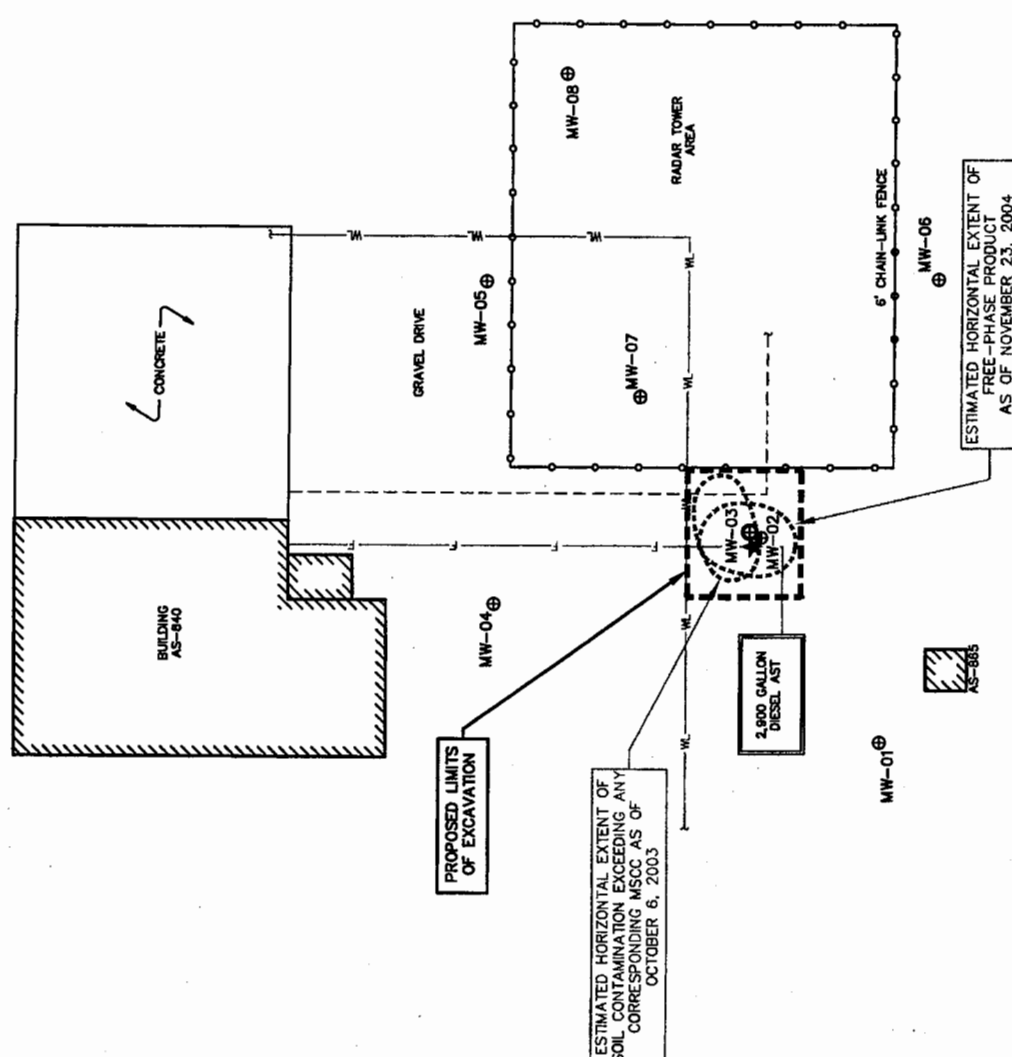
LEGEND	
EXISTING	DESCRIPTION
	BUILDING
	APPROXIMATE POINT OF DIESEL FUEL RELEASE
	TYPE II MONITORING WELL
	TYPE III MONITORING WELL
	FORMER FUEL DISTRIBUTION LINE
	WATER LINE
	UNKNOWN UTILITY



NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISDMAN & TAYLOR, PROVIDED BY LAW ENGINEERING
2. ESTIMATED HORIZONTAL EXTENT OF GROUNDWATER CONTAMINATION WAS BASED ON DATA OBTAINED
FROM FIGURES 6, 7 AND 8 OF THE CSA ADDENDUM REPORT BY CALIN, DATED NOVEMBER 2003.
3. REFER TO THE CSA ADDENDUM REPORT FOR A COMPLETE LIST OF ANALYTES AND RESULTS.

CATALIN
ENGINEERING and CONSTRUCTION
WILMINGTON, NORTH CAROLINA

PROJECT	CORRECTIVE ACTION PLAN	DATE	SCALE	FIGURE
BUILDING AS-840	BUILDING AS-840	JAN 2005	1" = 30'	5
MARINE CORPS AIR STATION	MARINE CORPS AIR STATION			
NEW RIVER, NC	NEW RIVER, NC			
204-045	204-045			
HCS	HCS			
JKB	JKB			



PROJECT
CORRECTIVE ACTION PLAN
BUILDING AS-840
MARINE CORPS AIR STATION
NEW RIVER, NC
JOB NO. 204-045
DATE JAN 2005

CLIENT
MARINE CORPS
WASHINGTON, NORTH CAROLINA

FIGURE
6

**SITE MAP
WITH UTILITIES AND PROPOSED
SOIL EXCAVATION AREA**

DESIGNED BY: HCS
CHECKED BY: JKB

NOTE:
1. MODIFIED FROM ORIGINAL BASE MAP BY TAYLOR, WISEMAN & TAYLOR, PROVIDED BY LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Shaw AFVR Data

Aggressive Fluid Vapor Recovery (AFVR) Summary of Free Product Recovery Events

TABLE 3

Facility: Building AS-840
 Location: MCB Camp Lejeune, North Carolina
 Date: 6/4/2002

Event #	Date	Rec Prod (lbs)	Rec Prod. (gals)	Total Cum (lbs) to date	Level (ft TOC)	AFVR WELLS		MONITORING WELLS	
						NW-2		MW-3	
17	2/25/2002	43.2	6.9	1044.3	Product level	6.67		0	
					Water level	7.62		6.94	
18	3/5/2002	42.0	6.7	1086.3	Product level	6.84		0	
					Water level	7.33		6.13	
19	3/15/2002	40.8	6.5	1127.1	Product level	5.23		0	
					Water level	6.10		5.74	
20	3/26/2002	53.2	8.5	1180.3	Product level	6.23		0	
					Water level	7.42		6.52	
21	4/9/2002	51.8	8.3	1232.1	Product level	6.56		0	
					Water level	7.40		6.78	
22	4/19/2002	60.6	9.7	1292.7	Product level	7.07		0	
					Water level	7.92		7.41	
23	4/29/2002	51.5	8.2	1344.2	Product level	7.06		0	
					Water level	7.78		7.33	
24	5/13/2002	74.3	11.8	1418.5	Product level	7.16		0	
					Water level	8.03		7.39	
25	5/20/2002	78.6	12.5	1497.1	Product level	7.51		0	
					Water level	8.38		7.54	
26	5/28/2002	58.7	9.3	1555.8	Product level	7.88		0	
					Water level	8.44		8.01	
27	6/4/2002	64.4	10.2	1620.2	Product level	7.89		0	
					Water level	8.37		8.08	

NOTE: N = Not Encountered
 Product type: Gasoline

Aggressive Fluid Vapor Recovery (AFVR) Summary of Free Product Recovery Events

TABLE 3

Facility: Building AS-840
 Location: MCB Camp Lejeune, North Carolina
 Date: 12/10/2002

Event #	Date	Rec Prod (lbs)	Rec Prod (gals)	Total Cum (lbs) to date	Level (ft TOC)	AFVR WELLS		MONITORING WELLS	
						MW-2		MW-3	
27	6/4/2002	64.4	10.2	1620.2	Product level	7.89		0	
					Water level	8.37		8.08	
28	6/14/2002	64.0	10.0	1682.8	Product level	8.06		0	
					Water level	8.49		8.22	
29	6/25/2002	71.9	11.5	1692.1	Product level	8.14		0	
					Water level	8.70		8.33	
30	7/12/2002	74.6	11.9	1766.7	Product level	7.73		0	
					Water level	8.43		7.91	
31	7/23/2002	74.9	11.9	1841.6	Product level	7.71		0	
					Water level	8.36		7.94	
32	8/2/2002	72.1	11.5	1913.7	Product level	6.71		0	
					Water level	7.28		6.90	
33	8/13/2002	73.1	11.6	1986.8	Product level	7.46		0	
					Water level	8.06		7.95	
34	9/11/2002	71.9	11.4	2058.7	Product level	5.94		0	
					Water level	6.58		6.21	
35	10/4/2002	71.1	11.3	2129.8	Product level	6.14		0	
					Water level	6.68		6.41	
36	11/8/2002	76.7	12.2	2206.5	Product level	6.41		0	
					Water level	7.60		6.78	
37	11/13/2002	53.8	8.6	2260.3	Product level	6.33		0	
					Water level	7.05		6.60	
38	12/10/2002	60.3	9.6	2320.6	Product level	6.89		0	
					Water level	7.40		7.22	

NOTE: N = Not Encountered
 Product type: Gasoline

Aggressive Fluid Vapor Recovery (AFVR) Summary of Free Product Recovery Events

TABLE 3

Facility: Building AS-840
Location: MCB Camp Lejeune, North Carolina
Date: 11/11/2003

Event #	Date	Rec Prod (lbs)	Rec Prod. (gals)	Total Cum (lbs) to date	Level (ft TOC)	AFVR WELLS			MONITORING WELLS		
						MW-2			MW-3		
35	10/4/2002	71.1	11.3	2129.8	Product level	6.14			0		
					Water level	6.68			6.41		
36	11/8/2002	76.7	12.2	2206.5	Product level	6.41			0		
					Water level	7.60			6.78		
37	11/13/2002	53.8	8.6	2260.3	Product level	6.33			0		
					Water level	7.05			6.60		
38	12/10/2002	60.3	9.6	2320.6	Product level	6.89			0		
					Water level	7.40			7.22		
39	1/3/2003	58.5	9.3	2379.1	Product level	5.09			0		
					Water level	5.58			5.56		
40	1/21/2003	60.7	9.7	2439.8	Product level	6.67			0		
					Water level	7.28			6.94		
41	2/14/2003	59.2	9.4	2499.0	Product level	5.78			0		
					Water level	6.47			6.19		
42	6/6/2003	86.9	13.8	2585.9	Product level	4.79			0		
					Water level	5.59			4.98		
43	7/8/2003	87.9	14.0	2673.8	Product level	5.97			0		
					Water level	6.58			6.24		
44	9/3/2003	86.5	13.8	2760.3	Product level	5.63			0		
					Water level	6.23			5.89		
45	10/3/2003	72.7	11.6	2833.0	Product level	5.77			0.00		
					Water level	6.46			6.07		
46	11/11/2003	66.9	10.7	2899.9	Product level	4.86			0		
					Water level	5.51			5.32		

NOTE: N = Not Encountered
 Product type: Gasoline

Aggressive Fluid Vapor Recovery (AFVR) Summary of Free Product Recovery Events **TABLE 3**

Facility: Building AS-840
 Location: MCB Camp Lejeune, North Carolina
 Date: 11/17/2004

Event #	Date	Rec Prod (lbs)	Rec Prod. (gals)	Total Cum (lbs) to date	Level (ft TOC)	AFVR WELLS		MONITORING WELLS	
						MW-2		MW-3	
47	1/21/2004	68.4	10.9	2968.3	Product level	6.19		0	
					Water level	7.09		6.41	
48	3/14/2004	76.0	12.1	3044.3	Product level	5.73		0	
					Water level	6.45		5.94	
49	4/7/2004	38.5	6.1	3082.8	Product level	6.34		0	
					Water level	6.93		6.40	
50	4/23/2004	39.8	6.3	3122.6	Product level	5.86		0	
					Water level	6.72		6.13	
51	6/18/2004	67.6	10.8	3190.2	Product level	7.02		0	
					Water level	7.98		7.65	
52	6/30/2004	70.8	11.3	3261.0	Product level	7.01		0	
					Water level	7.49		7.26	
53	7/9/2004	72.2	11.5	3333.2	Product level	7.31		0	
					Water level	8.05		7.59	
54	8/20/2004	71.4	11.4	3404.6	Product level	3.96		0	
					Water level	4.53		4.19	
55	9/16/2004	71.0	11.3	3475.6	Product level	4.54		0	
					Water level	5.26		4.76	
56	10/13/2004	71.5	11.4	3547.1	Product level	5.87		0	
					Water level	6.43		6.13	
57	10/29/2004	74.1	11.8	3621.2	Product level	6.65		0	
					Water level	7.16		6.92	
58	11/17/2004	74.0	11.8	3695.2	Product level	7.10		0	
					Water level	7.64		7.33	

NOTE: N = Not Encountered
 Product type: Gasoline

Receptor Survey Data

2.0 RECEPTOR INFORMATION

2.1 Water-Supply Wells

There are no water-supply wells within 1500 feet of the site.

2.2 Public Water Supplies

Public water is provided to buildings within 1500 feet of the Building AS-840 site by water mains which carry treated potable water.

The potable water supply used in the area is obtained from the MCAS water treatment plant. Groundwater obtained from the Castle Hayne Aquifer beneath the MCAS is the raw water source that is treated at the plant.

2.3 Surface Water

The closest surface water body to the source area is shown on the USGS topographic map as the New River. The New River is located approximately 1300 feet to the east (See Figures 1 and 2).

2.4 Wellhead Protection Areas

At this time, the state of North Carolina has not designated wellhead protection areas that include Camp Lejeune or the MCAS. Additionally, the source area is not located within an MCB-designated wellhead protection area, according to our review of the Marine Corps Base Geographic Information System and the Wellhead Protection Plan Update (Triangle Environmental, 1999).

2.5 Deep Aquifers in the Coastal Plain Physiographic Region

Aquifers below the surficial aquifer in the area of Building AS-840 include the Castle Hayne Aquifer, the Beaufort Aquifer and the Peedee Aquifer, in order of increasing depth. Both the Beaufort and Peedee aquifers contain saltwater in the Camp Lejeune area and are not used for water supply. The Castle Hayne Aquifer contains freshwater and is the principal aquifer used in the area for water supply. As previously discussed, the subject site is not located within an MCB-designated wellhead protection. Consequently, groundwater contamination at the site is not within the capture zone of major pumping influences on the MCAS. Based on distances from the source area to the MCAS boundary, municipal and private pumping influences in the Jacksonville area would be located miles from the source area.

The thickness of the surficial aquifer, is reported by Cardinell and others (1993), to range from 0 to 73 feet, with an average of approximately 25 feet over most of the MCAS. Based on our boring records, the surficial aquifer extends to the depth of approximately 30 feet bls at the site. LAW previously installed a Type III monitoring well to a depth of 50 feet bls, approximately 1900 feet northwest of the subject site, at Building AS-872. The well boring was advanced into the Castle Hayne confining unit, composed of calcareous, clayey silt containing limestone fragments, between the depths of 28 and 50 feet bls. The Type III well boring apparently did not penetrate the base of the confining unit. Based on this information, the top Castle Hayne Aquifer is a minimum of 50 feet bls at the site. According to Cardinell and others (1993), the surficial aquifer

supplies the primary recharge to the Castle Hayne Aquifer and the water levels in the surficial aquifer are typically 2 to 6 feet higher than those in the Castle Hayne Aquifer.

Cardinell and others (1993) estimate the vertical hydraulic conductivity of the Castle Hayne confining unit to range from 0.0014 to 0.41 feet per day.

2.6 Subsurface Structures

Underground utilities located in the vicinity of the subject AST are shown on Figure 3. We are not aware of other underground structures in the vicinity of Building AS-840.

2.7 Land Use

The immediate area around the subject site is developed with office and maintenance facilities and aircraft taxiways. The adjoining properties consist of offices, supply warehouses, communication facilities, officers club, flight lines and MCAS housing (See Figure 2).

2.8 Property Owners and Occupants

The U.S. Government owns the Building AS-840 property and adjacent properties within the MCAS (See Table 1).

3.0 REGIONAL AND SITE GEOLOGY AND HYDROGEOLOGY

3.1 Regional Geology and Hydrogeology

The MCAS lies within the Tidewater Region of the Coastal Plain Physiographic province (Stuckey, 1965). The North Carolina Coastal Plain is approximately 90 to 150 miles wide from the Atlantic Ocean westward to its boundary with the Piedmont Province. The Tidewater region consists of the eastern coastal area of the physiographic province, where large streams and many of their tributaries are affected by ocean tides (Winner and Coble, 1989).

In the Camp Lejeune area, sediments deposited in marine or near-marine environments are about 1,500 feet thick and overlie igneous and metamorphic basement rocks. The MCAS is situated on an eastward thickening wedge consisting of interfingering sands, silts, clays, calcareous clays, shell beds, sandstone and limestone which were deposited in marine or near shore environments (Cardinell and others, 1993).

Seven of the ten aquifers identified to date in the North Carolina Coastal Plain are present beneath the MCAS. In order of increasing depth, these aquifers include the surficial, Castle Hayne, Beaufort, Peedee, Black Creek, and upper and lower Cape Fear aquifers. They consist of predominantly permeable sand or limestone beds and are separated by less-permeable clay and silt beds (confining units) that serve to impede the flow of groundwater between the aquifers (Cardinell and others, 1993; Harned, 1989). The surficial and Castle Hayne aquifers thicken from the northern to the southern portion of the base.

The surficial aquifer is a series of sand, clay, sandy clay, and silt beds with occasional peat and shells. Beds of clay, sandy clay and silt which occur in the surficial aquifer are typically thin, discontinuous, and of

2.0 RECEPTOR INFORMATION

2.1 POTENTIAL RECEPTORS AT RISK

LAW conducted a receptor survey as part of the CSA and identified the following potential receptors within 1,500 feet of the project site:

- Underground utilities were found to exist within the area of concern. These utilities included underground electrical, water, and fuel distribution lines, as well as an unknown utility line.
- The closest surface water body to the source area as shown on Figure 1 is the New River, approximately 1,300 feet to the east of the project site.
- As stated in the CSA, the State of North Carolina had not designated wellhead protection areas that include the MCAS New River. However, the source area is not located within a designated wellhead protection area based on information presented within the Wellhead Protection Plan – 2002 Update by AH Environmental Consultants. The nearest water supply well appears to be PSWA-4150, located approximately 7,000 feet west of the Building AS-840 source area.

Based on information provided by the MCB Camp Lejeune, these potential receptors have not been reported to be impacted by the potentially contaminated soils and/or groundwater.

3.0 OBJECTIVES OF CORRECTIVE ACTION PLAN

3.1 GENERAL DESCRIPTION

The objectives of this CAP are to present a proposed remedial method to address the presence of free-phase product, soil contamination and dissolved-phase groundwater contamination at the Building AS-840 project site. Refer to Table 4 of this report for the site rehabilitation goals and a summary of current maximum contaminant concentrations (or most recent results).

3.1.1 Soil Contamination

One of the remedial objectives presented within this CAP is to describe proposed mechanisms by which contaminated soils above the applicable STGW MSCCs can be removed in order to satisfy the requirements of the NCAC Title 15A, Subchapter 2L, paragraph .0106.

APPENDIX B

**GROUNDWATER LABORATORY REPORTS AND CHAIN OF CUSTODY
DOCUMENTATION FROM MARCH 2006 EVENT**



Mr. Chris Murray
Sovereign Consulting
606 Thimble Shoals Rd.
Suite A1
Newport-News VA 23606
Report Number: G650-34
Client Project: NV012

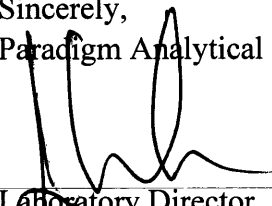
Dear Mr. Murray:

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

4/19/2006
Date



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW03

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/27/2006 13:15

Lab Sample ID: G650-34-1A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.5	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW08

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/27/2006 14:12

Lab Sample ID: G650-34-2A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.9	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW07

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/27/2006 15:00

Lab Sample ID: G650-34-3A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	1.32	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	1.58	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	1.99	2.00	0.588	1	4/4/2006	J
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.7	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW05

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/28/2006 9:49

Lab Sample ID: G650-34-4A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	43.4	109

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW04

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/28/2006 10:29

Lab Sample ID: G650-34-5A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	1.97	2.00	0.588	1	4/4/2006	J
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.4	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW01

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/28/2006 11:02

Lab Sample ID: G650-34-6A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.9	105

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: USTAS840-MW06

Analyzed By: MJC

Client Project ID: NV012

Date Collected: 3/28/2006 11:40

Lab Sample ID: G650-34-7A

Date Received: 3/29/2006

Lab Project ID: G650-34

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.6	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: JTF

Client Project ID:

Date Collected:

Lab Sample ID: VBLK5040306B

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.4	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Method: 602 Spike[ppb]: 10

Filename : 040306/024F

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.4	104.2	77.0	123.0	104	39	150
Chlorobenzene	10.1	100.8	80.5	119.5	101	55	135
1,2-Dichlorobenzene	9.2	91.7	68.0	132.0	92	37	154
1,3-Dichlorobenzene	18.1	90.6	72.5	127.5	91	50	141
1,4-Dichlorobenzene	9.0	90.3	69.5	130.5	90	42	143
• Diisopropyl ether	10.4	103.7	43.1	156.9	104	30	170
Ethylbenzene	10.1	100.6	63.0	137.0	101	32	160
• MTBE	20.9	104.3	46.8	153.2	104	35	165
Toluene	10.4	103.8	77.5	127.0	104	46	148
• m,p-Xylene	19.7	98.4	11.2	188.8	98	D	239
• o-Xylene	9.9	99.2	47.6	152.4	99	36	164

Flags :

- + = out of QC limits.
- = lab generated limits.
- D = Detected



Method: 602 Spike[ppb]: 10

Sample: 040306/040F

MS: 040306/041F

MSD: 040306/042F

Compound	µg/L			%REC		Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	ND	10.7	10.9	106	107	39	150
Chlorobenzene	ND	10.0	10.2	100	102	55	135
1,2-Dichlorobenzene	ND	9.0	9.5	90	95	37	154
1,3-Dichlorobenzene	ND	18.8	19.5	94	98	50	141
1,4-Dichlorobenzene	ND	9.1	9.5	91	95	42	143
• Diisopropyl ether	29.8	37.1	38.9	73	91	30	170
Ethylbenzene	ND	10.4	10.7	104	107	32	160
• MTBE	ND	20.5	21.5	103	108	35	165
Toluene	ND	10.4	10.5	104	105	46	148
• m,p-Xylene	ND	20.1	20.5	100	103	D	239
• o-Xylene	ND	19.9	20.5	100	102	36	164

Flags:

- + = out of QC limits.
- = lab generated limits.
- D = Detected
- ND = None Detected



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: MJC

Client Project ID:

Date Collected:

Lab Sample ID: VBLK1040406A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	4/4/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	4/4/2006	
Ethylbenzene	BQL	1.00	0.299	1	4/4/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	4/4/2006	
Toluene	BQL	1.00	0.302	1	4/4/2006	
m/p-Xylene	BQL	2.00	0.608	1	4/4/2006	
o-Xylene	BQL	2.00	0.596	1	4/4/2006	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.3	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Control Limits for MS-MSD

Method: 602 Spike[ppb]: 10
 Instrument: gc1
 Sample: 040406\031r0101.txt
 MS: 040406\032r0101.txt
 MSD: 040406\033r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	ND	8.3	10.2	79	98	39	150
Chlorobenzene	ND	10.6	12.2	106	122	55	135
1,2-Dichlorobenzene	1.2	11.6	12.5	104	113	37	154
1,3-Dichlorobenzene	1.1	11.3	12.3	102	112	50	141
1,4-Dichlorobenzene	ND	10.9	11.8	109	118	42	143
• Diisopropyl ether	ND	8.0	9.8	80	98	30	170
Ethylbenzene	19.4	30.0	31.9	105	125	32	160
• MTBE	ND	8.9	10.6	89	106	35	165
Toluene	ND	10.5	12.1	103	119	46	148
• m,p-Xylene	82.0	98.5	102.9	82	104	D	239
• o-Xylene	ND	11.6	12.9	116	129	36	164

Flags :

+ = out of QC limits.
 • = lab generated limits.
 D = Detected
 ND = None Detected

Reviewed by: RNV



Control Limits for QC Check / Laboratory Control Spike

Method: 602 Spike[ppb] : 10
 Instrument : gc1
 Filename : 040406\016r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.4	104.4	77.0	123.0	104	39	150
Chlorobenzene	10.9	108.6	80.5	119.5	109	55	135
1,2-Dichlorobenzene	10.3	102.9	68.0	132.0	103	37	154
1,3-Dichlorobenzene	10.2	101.8	72.5	127.5	102	50	141
1,4-Dichlorobenzene	10.1	101.5	69.5	130.5	101	42	143
• Diisopropyl ether	11.6	116.5	43.1	156.9	116	30	170
Ethylbenzene	10.9	109.4	63.0	137.0	109	32	160
• MTBE	10.3	102.9	46.8	153.2	103	35	165
Toluene	10.9	108.8	77.5	127.0	109	46	148
• m,p-Xylene	21.7	108.7	11.2	188.8	109	D	239
• o-Xylene	10.8	108.4	47.6	152.4	108	36	164

Flags :

- + = out of QC limits.
- ♦ = lab generated limits.
- D = Detected

Reviewed by: EW



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW03
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	110
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: g650-34-1d

Reviewed By: BP



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW08
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	110
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: g650-34-2d

Reviewed By: EW



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW07
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	110
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: g650-34-3d

Reviewed By: RF



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW05
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	99
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: g650-34-4d

Reviewed By: PW



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW04
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	100
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: g650-34-5d

Reviewed By: PNP



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW01
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	100
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: g650-34-6d

Reviewed By: PN



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW06
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	04/01/06
Date Analyzed	04/01/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	110
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: g650-34-7d

Reviewed By: md



Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 02/11/06PID Initial Calibration Date: 02/11/06

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	10.8	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	19.30	Calibration Factor
	250		
	500		
	750		
	1000		

Calibration Check Date: 03/31/06

Calibration Check

Range	Levels (mg/Kg) (µg/L)	RPD
C ₅ -C ₈ Aliphatics	2000 200	1.9
C ₉ -C ₁₂ Aliphatics	500 50	-9.0
C ₉ -C ₁₀ Aromatics	500 50	4.7

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW03
Sample Matrix	Water
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	91
Aromatic Surrogate % Recovery	86

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-11

Reviewed By: BP



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW08
Sample Matrix	Water
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	88
Aromatic Surrogate % Recovery	70

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-2I

Reviewed By: BNP



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW07
Sample Matrix	Water
Date Collected	03/27/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/06/06
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	450 (ug/L)
Aliphatic Surrogate % Recovery	66
Aromatic Surrogate % Recovery	55
Fractionation Surrogate 1 % Recovery	74

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G650-34-31

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW05
Sample Matrix	Water
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	86
Aromatic Surrogate % Recovery	64

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-4I

Reviewed By: Bel



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW04
Sample Matrix	Water
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	88
Aromatic Surrogate % Recovery	85

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-5I

Reviewed By: [Signature]



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW01
Sample Matrix	Water
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	89
Aromatic Surrogate % Recovery	67

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-6I

Reviewed By: RV



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: NV012

Sample Information and Analytical Results	
Sample Identification	USTAS840-MW06
Sample Matrix	Water
Date Collected	03/28/06
Date Received	03/29/06
Date Extracted	03/30/06
Date Analyzed	04/03/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	84
Aromatic Surrogate % Recovery	83

Comments:

* = Excludes any surrogates or internal standards.

Sample did not require fractionation.

Lab info: G650-34-7I

Reviewed By: Paul



Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 12/28/05

Calibration Ranges and Limits

Range	MDL (2/2004) (µg/L)	ML (µg/L)	RL (µg/L)	RL (mg/Kg)
C ₉ -C ₁₈ Aliphatics	3.84	12.2	100	10
C ₁₉ -C ₃₆ Aliphatics	0.57	1.8	100	10
C ₁₁ -C ₂₂ Aromatics	4.54	14.4	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	24.90	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	15.4	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	9.8	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 04/03/06

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	6.3
C ₁₉ -C ₃₆ Aliphatics	160	5.5
C ₁₁ -C ₂₂ Aromatics	340	-5.8

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit

RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve



Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information
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Initial Calibration Date: 12/28/05**Calibration Ranges and Limits**

Range	MDL (2/2004) (µg/L)	ML (µg/L)	RL (µg/L)	RL (mg/Kg)
C ₉ -C ₁₈ Aliphatics	3.84	12.2	100	10
C ₁₉ -C ₃₆ Aliphatics	0.57	1.8	100	10
C ₁₁ -C ₂₂ Aromatics	4.54	14.4	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	24.90	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	15.4	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	9.8	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 04/05/06**Calibration Check**

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	10.1
C ₁₉ -C ₃₆ Aliphatics	160	9.6
C ₁₁ -C ₂₂ Aromatics	340	4.0

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW03

Client Project ID: NV012

Lab Sample ID: G650-34-1H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/27/2006 13:15

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/6/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/6/2006	
Anthracene	BQL	10.0	1.75	1	4/6/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/6/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/6/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/6/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/6/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/6/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/6/2006	
Bis(2-ethylhexyl)phthalate	2.00	10.0	1.33	1	4/6/2006	J
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/6/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/6/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/6/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/6/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/6/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/6/2006	
Chrysene	BQL	10.0	1.11	1	4/6/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/6/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/6/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/6/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/6/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/6/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/6/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/6/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/6/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/6/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/6/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/6/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/6/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/6/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/6/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/6/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/6/2006	
Fluoranthene	BQL	10.0	1.41	1	4/6/2006	
Fluorene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/6/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/6/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/6/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/6/2006	
Isophorone	BQL	10.0	1.27	1	4/6/2006	
Naphthalene	BQL	10.0	1.08	1	4/6/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW03
 Client Project ID: NV012
 Lab Sample ID: G650-34-1H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/27/2006 13:15
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/6/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/6/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/6/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/6/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/6/2006	
Phenanthrene	BQL	10.0	1.38	1	4/6/2006	
Phenol	BQL	10.0	3.38	1	4/6/2006	
Pyrene	BQL	10.0	2.08	1	4/6/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/6/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/6/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	9.5	95
Phenol-d6	10	8.9	89
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	11.2	112

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: BN



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW08
 Client Project ID: NV012
 Lab Sample ID: G650-34-2H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/27/2006 14:12
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/6/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/6/2006	
Anthracene	BQL	10.0	1.75	1	4/6/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/6/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/6/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/6/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/6/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/6/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/6/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/6/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/6/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/6/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/6/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/6/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/6/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/6/2006	
Chrysene	BQL	10.0	1.11	1	4/6/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/6/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/6/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/6/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/6/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/6/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/6/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/6/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/6/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/6/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/6/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/6/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/6/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/6/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/6/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/6/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/6/2006	
Fluoranthene	BQL	10.0	1.41	1	4/6/2006	
Fluorene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/6/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/6/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/6/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/6/2006	
Isophorone	BQL	10.0	1.27	1	4/6/2006	
Naphthalene	BQL	10.0	1.08	1	4/6/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW08
 Client Project ID: NV012
 Lab Sample ID: G650-34-2H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/27/2006 14:12
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/6/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/6/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/6/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/6/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/6/2006	
Phenanthrene	BQL	10.0	1.38	1	4/6/2006	
Phenol	BQL	10.0	3.38	1	4/6/2006	
Pyrene	BQL	10.0	2.08	1	4/6/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/6/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/6/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	10.2	102		
2-Fluorophenol		10	10	100		
Nitrobenzene-d5		10	10.7	107		
Phenol-d6		10	9.8	98		
2,4,6-Tribromophenol		10	9.6	96		
4-Terphenyl-d14		10	12	120		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: *W*



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW07

Client Project ID: NV012

Lab Sample ID: G650-34-3H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/27/2006 15:00

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	2.60	10.0	1.22	1	4/6/2006	J
Acenaphthylene	BQL	10.0	1.12	1	4/6/2006	
Anthracene	BQL	10.0	1.75	1	4/6/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/6/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/6/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/6/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/6/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/6/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/6/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/6/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/6/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/6/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/6/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/6/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/6/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/6/2006	
Chrysene	BQL	10.0	1.11	1	4/6/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/6/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/6/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/6/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/6/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/6/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/6/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/6/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/6/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/6/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/6/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/6/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/6/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/6/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/6/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/6/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/6/2006	
Fluoranthene	BQL	10.0	1.41	1	4/6/2006	
Fluorene	2.60	10.0	1.22	1	4/6/2006	J
Hexachlorobenzene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/6/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/6/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/6/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/6/2006	
Isophorone	BQL	10.0	1.27	1	4/6/2006	
Naphthalene	8.70	10.0	1.08	1	4/6/2006	J



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW07
 Client Project ID: NV012
 Lab Sample ID: G650-34-3H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/27/2006 15:00
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/6/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/6/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/6/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/6/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/6/2006	
Phenanthrene	2.70	10.0	1.38	1	4/6/2006	J
Phenol	BQL	10.0	3.38	1	4/6/2006	
Pyrene	BQL	10.0	2.08	1	4/6/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/6/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/6/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.9	109
2-Fluorophenol	10	10.3	103
Nitrobenzene-d5	10	11	110
Phenol-d6	10	10.1	101
2,4,6-Tribromophenol	10	10	100
4-Terphenyl-d14	10	12.2	122

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: SW



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW05

Client Project ID: NV012

Lab Sample ID: G650-34-4H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/28/2006 9:49

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/6/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/6/2006	
Anthracene	BQL	10.0	1.75	1	4/6/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/6/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/6/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/6/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/6/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/6/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/6/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/6/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/6/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/6/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/6/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/6/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/6/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/6/2006	
Chrysene	BQL	10.0	1.11	1	4/6/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/6/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/6/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/6/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/6/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/6/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/6/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/6/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/6/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/6/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/6/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/6/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/6/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/6/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/6/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/6/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/6/2006	
Fluoranthene	BQL	10.0	1.41	1	4/6/2006	
Fluorene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/6/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/6/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/6/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/6/2006	
Isophorone	BQL	10.0	1.27	1	4/6/2006	
Naphthalene	BQL	10.0	1.08	1	4/6/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW05
 Client Project ID: NV012
 Lab Sample ID: G650-34-4H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/28/2006 9:49
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/6/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/6/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/6/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/6/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/6/2006	
Phenanthrene	BQL	10.0	1.38	1	4/6/2006	
Phenol	BQL	10.0	3.38	1	4/6/2006	
Pyrene	BQL	10.0	2.08	1	4/6/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/6/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/6/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	10.2	102		
2-Fluorophenol		10	9.4	94		
Nitrobenzene-d5		10	10	99		
Phenol-d6		10	9.3	93		
2,4,6-Tribromophenol		10	9.1	91		
4-Terphenyl-d14		10	11.8	118		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: RMP



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: USTAS840-MW04

Client Project ID: NV012

Lab Sample ID: G650-34-5H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/28/2006 10:29

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/7/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/7/2006	
Anthracene	BQL	10.0	1.75	1	4/7/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/7/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/7/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/7/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/7/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/7/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/7/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/7/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/7/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/7/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/7/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/7/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/7/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/7/2006	
Chrysene	BQL	10.0	1.11	1	4/7/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/7/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/7/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/7/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/7/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/7/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/7/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/7/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/7/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/7/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/7/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/7/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/7/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/7/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/7/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/7/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/7/2006	
Fluoranthene	BQL	10.0	1.41	1	4/7/2006	
Fluorene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/7/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/7/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/7/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/7/2006	
Isophorone	BQL	10.0	1.27	1	4/7/2006	
Naphthalene	BQL	10.0	1.08	1	4/7/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW04
 Client Project ID: NV012
 Lab Sample ID: G650-34-5H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/28/2006 10:29
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/7/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/7/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/7/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/7/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/7/2006	
Phenanthrene	BQL	10.0	1.38	1	4/7/2006	
Phenol	BQL	10.0	3.38	1	4/7/2006	
Pyrene	BQL	10.0	2.08	1	4/7/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/7/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/7/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	10.3	103		
2-Fluorophenol		10	9.7	97		
Nitrobenzene-d5		10	10.5	105		
Phenol-d6		10	9.5	95		
2,4,6-Tribromophenol		10	9.4	94		
4-Terphenyl-d14		10	12.3	123		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: RSJ



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW01
Client Project ID: NV012
Lab Sample ID: G650-34-6H
Lab Project ID: G650-34

Analyzed By: MRC
Date Collected: 3/28/2006 11:02
Date Received: 3/29/2006
Date Extracted: 3/29/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/7/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/7/2006	
Anthracene	BQL	10.0	1.75	1	4/7/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/7/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/7/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/7/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/7/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/7/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/7/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/7/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/7/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/7/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/7/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/7/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/7/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/7/2006	
Chrysene	BQL	10.0	1.11	1	4/7/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/7/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/7/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/7/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/7/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/7/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/7/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/7/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/7/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/7/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/7/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/7/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/7/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/7/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/7/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/7/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/7/2006	
Fluoranthene	BQL	10.0	1.41	1	4/7/2006	
Fluorene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/7/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/7/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/7/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/7/2006	
Isophorone	BQL	10.0	1.27	1	4/7/2006	
Naphthalene	BQL	10.0	1.08	1	4/7/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW01
 Client Project ID: NV012
 Lab Sample ID: G650-34-6H
 Lab Project ID: G650-34

Analyzed By: MRC
 Date Collected: 3/28/2006 11:02
 Date Received: 3/29/2006
 Date Extracted: 3/29/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/7/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/7/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/7/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/7/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/7/2006	
Phenanthrene	BQL	10.0	1.38	1	4/7/2006	
Phenol	BQL	10.0	3.38	1	4/7/2006	
Pyrene	BQL	10.0	2.08	1	4/7/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/7/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/7/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	10.2	102		
2-Fluorophenol		10	9.6	96		
Nitrobenzene-d5		10	10.6	106		
Phenol-d6		10	9.2	92		
2,4,6-Tribromophenol		10	8.3	83		
4-Terphenyl-d14		10	11.8	118		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: PWP



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW06

Client Project ID: NV012

Lab Sample ID: G650-34-7H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/28/2006 11:40

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/7/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/7/2006	
Anthracene	BQL	10.0	1.75	1	4/7/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/7/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/7/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/7/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/7/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/7/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/7/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/7/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/7/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/7/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/7/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/7/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/7/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/7/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/7/2006	
Chrysene	BQL	10.0	1.11	1	4/7/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/7/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/7/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/7/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/7/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/7/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/7/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/7/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/7/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/7/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/7/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/7/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/7/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/7/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/7/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/7/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/7/2006	
Fluoranthene	BQL	10.0	1.41	1	4/7/2006	
Fluorene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/7/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/7/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/7/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/7/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/7/2006	
Isophorone	BQL	10.0	1.27	1	4/7/2006	
Naphthalene	BQL	10.0	1.08	1	4/7/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: USTAS840-MW06

Client Project ID: NV012

Lab Sample ID: G650-34-7H

Lab Project ID: G650-34

Analyzed By: MRC

Date Collected: 3/28/2006 11:40

Date Received: 3/29/2006

Date Extracted: 3/29/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/7/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/7/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/7/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/7/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/7/2006	
Phenanthrene	BQL	10.0	1.38	1	4/7/2006	
Phenol	BQL	10.0	3.38	1	4/7/2006	
Pyrene	BQL	10.0	2.08	1	4/7/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/7/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/7/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.7	97
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	7.8	78
4-Terphenyl-d14	10	11.5	115

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: *RM*



Results for Semivolatiles by GCMS 625

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: PB4804
Lab Project ID:

Analyzed By: MRC
Date Collected:
Date Received:
Date Extracted: 3/29/2006
Matrix: WATER

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	4/6/2006	
Acenaphthylene	BQL	10.0	1.12	1	4/6/2006	
Anthracene	BQL	10.0	1.75	1	4/6/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	4/6/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	4/6/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	4/6/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	4/6/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	4/6/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	4/6/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	4/6/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	4/6/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	4/6/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	4/6/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	4/6/2006	
2-Chlorophenol	BQL	10.0	4.22	1	4/6/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	4/6/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	4/6/2006	
Chrysene	BQL	10.0	1.11	1	4/6/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	4/6/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	4/6/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	4/6/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	4/6/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	4/6/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	4/6/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	4/6/2006	
Diethylphthalate	BQL	10.0	1.48	1	4/6/2006	
Dimethylphthalate	BQL	10.0	1.04	1	4/6/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	4/6/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	4/6/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	4/6/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	4/6/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	4/6/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	4/6/2006	
Diphenylamine *	BQL	10.0	1.53	1	4/6/2006	
Fluoranthene	BQL	10.0	1.41	1	4/6/2006	
Fluorene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	4/6/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	4/6/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	4/6/2006	
Hexachloroethane	BQL	10.0	1.58	1	4/6/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	4/6/2006	
Isophorone	BQL	10.0	1.27	1	4/6/2006	
Naphthalene	BQL	10.0	1.08	1	4/6/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB4804
 Lab Project ID:

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 3/29/2006
 Matrix: WATER

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	4/6/2006	
2-Nitrophenol	BQL	10.0	3.52	1	4/6/2006	
4-Nitrophenol	BQL	50.0	3.17	1	4/6/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	4/6/2006	
Pentachlorophenol	BQL	50.0	2.83	1	4/6/2006	
Phenanthrene	BQL	10.0	1.38	1	4/6/2006	
Phenol	BQL	10.0	3.38	1	4/6/2006	
Pyrene	BQL	10.0	2.08	1	4/6/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	4/6/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	4/6/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.3	103
2-Fluorophenol	10	9.5	95
Nitrobenzene-d5	10	10.5	105
Phenol-d6	10	9.7	97
2,4,6-Tribromophenol	10	9.4	94
4-Terphenyl-d14	10	11.5	115

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

J = Detected below the quantitation limit.

Reviewed By: RNP



Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS)
by GCMS

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-4804-MS/MSD/LCS

Date Extracted: 03/29/06

Lab Project ID:

Date Analyzed: 04/06/06

Matrix: WATER

Analyzed By: MRC

Prep Method: 3520

Dilution: 1

	Sample Amount (µg/L)	MS Spike (µg/L)	MS Conc. (µg/L)	MS Spike % Rec.	MSD Spike (µg/L)	MSD Conc. (µg/L)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	222	228	103	222	214	96.3	6.43	30	62.0-119
4-Chloro-3-methylphenol	BQL	222	195	87.9	222	180	81.0	8.17	30	67.0-109
2-Chlorophenol	BQL	222	194	87.3	222	181	81.3	7.12	30	59.0-95.0
1,4-Dichlorobenzene	BQL	222	127	57.1	222	118	53.2	7.07	30	29.0-86.0
2,4-Dinitrotoluene	BQL	222	202	90.8	222	188	84.4	7.31	30	63.0-103
N-Nitrosodi-n-propylamine	BQL	222	187	84.2	222	170	76.7	9.32	30	67.0-107
4-Nitrophenol	BQL	222	160	72.2	222	157	70.8	1.96	30	49.0-146
Pentachlorophenol	BQL	222	143	64.2	222	128	57.5	11.0	30	43.0-106
Phenol	BQL	222	188	84.5	222	175	78.9	6.85	30	61.0-100
Pyrene	BQL	222	203	91.2	222	191	86.0	5.87	30	41.0-123
1,2,4-Trichlorobenzene	BQL	222	172	77.2	222	159	71.7	7.39	30	41.0-96.0

	Spiked Amount (µg/L)	LCS Conc. (µg/L)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	100	90.8	90.8	72.9-127
4-Chloro-3-methylphenol	100	77.1	77.1	61.6-113
2-Chlorophenol	100	73.5	73.5	52.3-104
1,4-Dichlorobenzene	100	51.6	51.6	27.3-85.0
2,4-Dinitrotoluene	100	80.0	80.0	66.5-117
N-Nitrosodi-n-propylamine	100	72.4	72.4	54.4-119
4-Nitrophenol	100	61.9	61.9	32.4-150
Pentachlorophenol	100	49.6	49.6	23.9-115
Phenol	100	72.7	72.7	54.5-106
Pyrene	100	80.6	80.6	63.5-126
1,2,4-Trichlorobenzene	100	67.7	67.7	49.1-98.5

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: RP



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

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.



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1 CLIENT: SOVEREIGN CONSULTING INC

CONTACT: THOMAS EILERTMAN PHONE NO: (910) 526 3941

PROJECT: NV012 SITE/PROJECT ID: AS 840

REPORTS TO: CHRIS MURRAY cmurray@sovercon.com
100 THIMBLESHIPS BLVD
NEWPORT NEWS VA 23606 FAX NO: (757) 594-9227

INVOICE TO: CHRIS MURRAY QUOTE #
P.O. NUMBER NV012

SGS Reference:

G65D-34

PAGE 1 OF 1

2 LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

	USTAS 840-MW03	3/27/06	13:15	W	7
	USTAS 840-MW08	3/27/06	14:12	W	7
	USTAS 840-MW07	3/27/06	15:30	W	7
	USTAS 840-MW05	3/28/06	09:49	W	7
	USTAS 840-MW04	3/28/06	10:29	W	7
	USTAS 840-MW01	3/28/06	11:02	W	7
	USTAS 840-MW06	3/28/06	11:40	W	7

NO

CONTAINERS

SAMPLE TYPE

Preservatives Used

Analysis Required

3

HCL

HCL

HCL

HCL

HCL

HCL

HCL

HCL

HCL

HCL

HCL

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HCL

HCL

4

Shipping Carrier:

Shipping Ticket No:

Special Deliverable Requirements:

Chain of Custody Seal: (Circle)

INTACT

BROKEN

ABSENT

Requested Turnaround Time and Special Instructions:

SEND RESULTS TO: CHRIS MURRAY

EDD FORMAT

cmurray@sovercon.com

757-777-8182

STANDARD TA

757-777-8182

757-777-8182

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SGS ENVIRONMENTAL SERVICES, INC.

APPENDIX C

**SOIL LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION
FROM MAY 2006 EVENT**



Mr. Randy Smith
RES Environmental Corp.
PO Box 8060
Camp Lejeune NC 28547

Report Number: G663-6

Client Project: MCAS AS-840

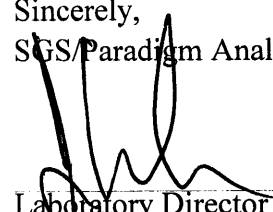
Dear Mr. Smith:

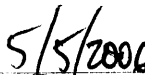
Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period 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 SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/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,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver


Date



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AS840-N001-5'-6'

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-1

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:00

Date Received: 5/2/2006

Matrix: Soil

Solids 87.00

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	586	46.7	5035	10	05/05/06
Diesel Range Organics	5620	354	3541	50	05/06/06



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AS840-S002-5'-6'

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-2

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:05

Date Received: 5/2/2006

Matrix: Soil

Solids 97.45

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.08	5035	1	05/05/06
Diesel Range Organics	1340	57.8	3541	10	05/06/06

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-E003-5'-6'

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-3

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:10

Date Received: 5/2/2006

Matrix: Soil

Solids 93.13

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.75	5035	1	05/05/06
Diesel Range Organics	1180	59.1	3541	10	05/06/06

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-W004-5'-6'
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-4
Lab Project ID: G663-6
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/2/2006 9:15
Date Received: 5/2/2006
Matrix: Soil
Solids 95.67

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.48	5035	1	05/05/06
Diesel Range Organics	225	6.14	3541	1	05/04/06

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-CSP-005

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-5

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:30

Date Received: 5/2/2006

Matrix: Soil

Solids 84.02

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.87	5035	1	05/05/06
Diesel Range Organics	BQL	7.38	3541	1	05/04/06

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-DSP-006

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-6

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:45

Date Received: 5/2/2006

Matrix: Soil

Solids 95.79

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	8.57	8.11	5035	1	05/05/06
Diesel Range Organics	1350	58.1	3541	10	05/06/06



Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: AS840-DSP-007

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-7

Lab Project ID: G663-6

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/2/2006 9:50

Date Received: 5/2/2006

Matrix: Soil

Solids 92.26

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	5.37	5035	1	05/05/06
Diesel Range Organics	1230	62.6	3541	10	05/06/06


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

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID G663-6-11B
 Lab Project ID: G663-6
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 05-02-2006 11:30
 Date Received: 5/2/2006
 Matrix: Soil
 %Solids: 91.2

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	67.8	1	5/10/2006
Benzene	BQL	6.78	1	5/10/2006
Bromobenzene	BQL	6.78	1	5/10/2006
Bromochloromethane	BQL	6.78	1	5/10/2006
Bromodichloromethane	BQL	6.78	1	5/10/2006
Bromoform	BQL	6.78	1	5/10/2006
Bromomethane	BQL	6.78	1	5/10/2006
2-Butanone	BQL	33.9	1	5/10/2006
n-Butylbenzene	BQL	6.78	1	5/10/2006
sec-Butylbenzene	BQL	6.78	1	5/10/2006
tert-Butylbenzene	BQL	6.78	1	5/10/2006
Carbon disulfide	BQL	6.78	1	5/10/2006
Carbon tetrachloride	BQL	6.78	1	5/10/2006
Chlorobenzene	BQL	6.78	1	5/10/2006
Chloroethane	BQL	6.78	1	5/10/2006
Chloroform	BQL	6.78	1	5/10/2006
Chloromethane	BQL	6.78	1	5/10/2006
2-Chlorotoluene	BQL	6.78	1	5/10/2006
4-Chlorotoluene	BQL	6.78	1	5/10/2006
Dibromochloromethane	BQL	6.78	1	5/10/2006
1,2-Dibromo-3-chloropropane	BQL	6.78	1	5/10/2006
Dibromomethane	BQL	6.78	1	5/10/2006
1,2-Dibromoethane (EDB)	BQL	6.78	1	5/10/2006
1,2-Dichlorobenzene	BQL	6.78	1	5/10/2006
1,3-Dichlorobenzene	BQL	6.78	1	5/10/2006
1,4-Dichlorobenzene	BQL	6.78	1	5/10/2006
trans-1,4-Dichloro-2-butene	BQL	6.78	1	5/10/2006
1,1-Dichloroethane	BQL	6.78	1	5/10/2006
1,1-Dichloroethene	BQL	6.78	1	5/10/2006
1,2-Dichloroethane	BQL	6.78	1	5/10/2006
cis-1,2-Dichloroethene	BQL	6.78	1	5/10/2006
trans-1,2-dichloroethene	BQL	6.78	1	5/10/2006
1,2-Dichloropropane	BQL	6.78	1	5/10/2006
1,3-Dichloropropane	BQL	6.78	1	5/10/2006
2,2-Dichloropropane	BQL	6.78	1	5/10/2006
1,1-Dichloropropene	BQL	6.78	1	5/10/2006
cis-1,3-Dichloropropene	BQL	6.78	1	5/10/2006
trans-1,3-Dichloropropene	BQL	6.78	1	5/10/2006
Dichlorodifluoromethane	BQL	6.78	1	5/10/2006
Diisopropyl ether (DIPE)	BQL	6.78	1	5/10/2006
Ethylbenzene	BQL	6.78	1	5/10/2006
Hexachlorobutadiene	BQL	6.78	1	5/10/2006


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

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID G663-6-11B
 Lab Project ID: G663-6
 Report Basis: Dry Weight

Analyzed By: JTF
 Date Collected: 05-02-2006 11:30
 Date Received: 5/2/2006
 Matrix: Soil
 %Solids: 91.2

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	6.78	1	5/10/2006
Iodomethane	BQL	6.78	1	5/10/2006
Isopropylbenzene	BQL	6.78	1	5/10/2006
4-Isopropyltoluene	BQL	6.78	1	5/10/2006
Methylene chloride	BQL	27.1	1	5/10/2006
4-Methyl-2-pentanone	BQL	6.78	1	5/10/2006
Methyl-tert-butyl ether (MTBE)	BQL	6.78	1	5/10/2006
Naphthalene	BQL	6.78	1	5/10/2006
n-Propyl benzene	BQL	6.78	1	5/10/2006
Styrene	BQL	6.78	1	5/10/2006
1,1,1,2-Tetrachloroethane	BQL	6.78	1	5/10/2006
1,1,2,2-Tetrachloroethane	BQL	6.78	1	5/10/2006
Tetrachloroethene	BQL	6.78	1	5/10/2006
Toluene	BQL	6.78	1	5/10/2006
1,2,3-Trichlorobenzene	BQL	6.78	1	5/10/2006
1,2,4-Trichlorobenzene	BQL	6.78	1	5/10/2006
Trichloroethene	BQL	6.78	1	5/10/2006
1,1,1-Trichloroethane	BQL	6.78	1	5/10/2006
1,1,2-Trichloroethane	BQL	6.78	1	5/10/2006
Trichlorofluoromethane	BQL	6.78	1	5/10/2006
1,2,3-Trichloropropane	BQL	6.78	1	5/10/2006
1,2,4-Trimethylbenzene	BQL	6.78	1	5/10/2006
1,3,5-Trimethylbenzene	BQL	6.78	1	5/10/2006
Vinyl chloride	BQL	6.78	1	5/10/2006
m-,p-Xylene	BQL	13.6	1	5/10/2006
o-Xylene	BQL	6.78	1	5/10/2006

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	50	51.9	104
1,2-Dichloroethane-d4	50	72.1	144
Toluene-d8	50	47.9	96

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:



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

Client Sample ID: Trip Blank
Client Project ID: MCAS AS-840
Lab Sample ID G663-6-14A
Lab Project ID: G663-6
Report Basis: 0.0

Analyzed By: JTF
Date Collected: 05-02-2006 00:00
Date Received: 5/2/2006
Matrix: Soil
%Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
Acetone	BQL	50.0	1	5/10/2006
Benzene	BQL	5.00	1	5/10/2006
Bromobenzene	BQL	5.00	1	5/10/2006
Bromochloromethane	BQL	5.00	1	5/10/2006
Bromodichloromethane	BQL	5.00	1	5/10/2006
Bromoform	BQL	5.00	1	5/10/2006
Bromomethane	BQL	5.00	1	5/10/2006
2-Butanone	BQL	25.0	1	5/10/2006
n-Butylbenzene	BQL	5.00	1	5/10/2006
sec-Butylbenzene	BQL	5.00	1	5/10/2006
tert-Butylbenzene	BQL	5.00	1	5/10/2006
Carbon disulfide	BQL	5.00	1	5/10/2006
Carbon tetrachloride	BQL	5.00	1	5/10/2006
Chlorobenzene	BQL	5.00	1	5/10/2006
Chloroethane	BQL	5.00	1	5/10/2006
Chloroform	BQL	5.00	1	5/10/2006
Chloromethane	BQL	5.00	1	5/10/2006
2-Chlorotoluene	BQL	5.00	1	5/10/2006
4-Chlorotoluene	BQL	5.00	1	5/10/2006
Dibromochloromethane	BQL	5.00	1	5/10/2006
1,2-Dibromo-3-chloropropane	BQL	5.00	1	5/10/2006
Dibromomethane	BQL	5.00	1	5/10/2006
1,2-Dibromoethane (EDB)	BQL	5.00	1	5/10/2006
1,2-Dichlorobenzene	BQL	5.00	1	5/10/2006
1,3-Dichlorobenzene	BQL	5.00	1	5/10/2006
1,4-Dichlorobenzene	BQL	5.00	1	5/10/2006
trans-1,4-Dichloro-2-butene	BQL	5.00	1	5/10/2006
1,1-Dichloroethane	BQL	5.00	1	5/10/2006
1,1-Dichloroethene	BQL	5.00	1	5/10/2006
1,2-Dichloroethane	BQL	5.00	1	5/10/2006
cis-1,2-Dichloroethene	BQL	5.00	1	5/10/2006
trans-1,2-dichloroethene	BQL	5.00	1	5/10/2006
1,2-Dichloropropane	BQL	5.00	1	5/10/2006
1,3-Dichloropropane	BQL	5.00	1	5/10/2006
2,2-Dichloropropane	BQL	5.00	1	5/10/2006
1,1-Dichloropropene	BQL	5.00	1	5/10/2006
cis-1,3-Dichloropropene	BQL	5.00	1	5/10/2006
trans-1,3-Dichloropropene	BQL	5.00	1	5/10/2006
Dichlorodifluoromethane	BQL	5.00	1	5/10/2006
Diisopropyl ether (DIPE)	BQL	5.00	1	5/10/2006
Ethylbenzene	BQL	5.00	1	5/10/2006
Hexachlorobutadiene	BQL	5.00	1	5/10/2006


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

Client Sample ID: Trip Blank
 Client Project ID: MCAS AS-840
 Lab Sample ID G663-6-14A
 Lab Project ID: G663-6
 Report Basis: 0.0

Analyzed By: JTF
 Date Collected: 05-02-2006 00:00
 Date Received: 5/2/2006
 Matrix: Soil
 %Solids: 100.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	Dilution Factor	Date Analyzed
2-Hexanone	BQL	5.00	1	5/10/2006
Iodomethane	BQL	5.00	1	5/10/2006
Isopropylbenzene	BQL	5.00	1	5/10/2006
4-Isopropyltoluene	BQL	5.00	1	5/10/2006
Methylene chloride	BQL	20.0	1	5/10/2006
4-Methyl-2-pentanone	BQL	5.00	1	5/10/2006
Methyl-tert-butyl ether (MTBE)	BQL	5.00	1	5/10/2006
Naphthalene	BQL	5.00	1	5/10/2006
n-Propyl benzene	BQL	5.00	1	5/10/2006
Styrene	BQL	5.00	1	5/10/2006
1,1,1,2-Tetrachloroethane	BQL	5.00	1	5/10/2006
1,1,2,2-Tetrachloroethane	BQL	5.00	1	5/10/2006
Tetrachloroethene	BQL	5.00	1	5/10/2006
Toluene	BQL	5.00	1	5/10/2006
1,2,3-Trichlorobenzene	BQL	5.00	1	5/10/2006
1,2,4-Trichlorobenzene	BQL	5.00	1	5/10/2006
Trichloroethene	BQL	5.00	1	5/10/2006
1,1,1-Trichloroethane	BQL	5.00	1	5/10/2006
1,1,2-Trichloroethane	BQL	5.00	1	5/10/2006
Trichlorofluoromethane	BQL	5.00	1	5/10/2006
1,2,3-Trichloropropane	BQL	5.00	1	5/10/2006
1,2,4-Trimethylbenzene	BQL	5.00	1	5/10/2006
1,3,5-Trimethylbenzene	BQL	5.00	1	5/10/2006
Vinyl chloride	BQL	5.00	1	5/10/2006
m-,p-Xylene	BQL	10.0	1	5/10/2006
o-Xylene	BQL	5.00	1	5/10/2006

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	50	51.8	104
1,2-Dichloroethane-d4	50	76.7	153
Toluene-d8	50	48.5	97

Comments:**Flags:**

BQL = Below Quantitation Limits.

Reviewed By:



**Results for Volatiles
by GCMS 8260B TCLP**

Client Sample ID: AS840-TD-008
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-9B
 Lab Project ID: G663-6

Analyzed By: MJC
 Date Collected: 5/2/2006 10:00
 Date Received: 5/2/2006
 Matrix: Leachate

Compound	Result MG/L	Quantitation Limit MG/L	Dilution Factor	Date Analyzed
Benzene	BQL	0.0100	10	5/18/2006
2-Butanone (MEK)	BQL	0.250	10	5/18/2006
Carbon tetrachloride	BQL	0.0100	10	5/18/2006
Chlorobenzene	BQL	0.0100	10	5/18/2006
Chloroform	BQL	0.0100	10	5/18/2006
1,4-Dichlorobenzene	BQL	0.0100	10	5/18/2006
1,1-Dichloroethene	BQL	0.0100	10	5/18/2006
1,2-Dichloroethane	BQL	0.0100	10	5/18/2006
Tetrachloroethene	BQL	0.0100	10	5/18/2006
Trichloroethene	BQL	0.0100	10	5/18/2006
Vinyl chloride	BQL	0.0100	10	5/18/2006

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.01	0.0101	101
1,2-Dichloroethane-d4	0.01	0.0112	112
Toluene-d8	0.01	0.0101	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By:



**Results for Volatiles
by GCMS 8260B TCLP**

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-12F
 Lab Project ID: G663-6

Analyzed By: MJC
 Date Collected: 5/2/2006 11:30
 Date Received: 5/2/2006
 Matrix: Leachate

Compound	Result MG/L	Quantitation Limit MG/L	Dilution Factor	Date Analyzed
Benzene	BQL	0.0100	10	5/18/2006
2-Butanone (MEK)	BQL	0.250	10	5/18/2006
Carbon tetrachloride	BQL	0.0100	10	5/18/2006
Chlorobenzene	BQL	0.0100	10	5/18/2006
Chloroform	BQL	0.0100	10	5/18/2006
1,4-Dichlorobenzene	BQL	0.0100	10	5/18/2006
1,1-Dichloroethene	BQL	0.0100	10	5/18/2006
1,2-Dichloroethane	BQL	0.0100	10	5/18/2006
Tetrachloroethene	BQL	0.0100	10	5/18/2006
Trichloroethene	BQL	0.0100	10	5/18/2006
Vinyl chloride	BQL	0.0100	10	5/18/2006

	Spike Added	Spike Result	Percent Recovered
4-Bromofluorobenzene	0.01	0.00987	99
1,2-Dichloroethane-d4	0.01	0.0112	112
Toluene-d8	0.01	0.0101	101

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: *PM*



Results for Metals

Client Sample ID: AS840-TD-008
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-10
 Lab Project ID: G663-6
 Batch ID: 5127 5138

Analyzed By: PSW
 Date Collected: 5/2/2006 10:00
 Date Received: 5/2/2006
 Matrix: LEACHATE

Metals TCLP	Result	RL	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.100	1	MG/L	6010B	5/16/2006
Barium	BQL	1.00	1	MG/L	6010B	5/16/2006
Cadmium	BQL	0.100	1	MG/L	6010B	5/16/2006
Chromium	BQL	0.100	1	MG/L	6010B	5/16/2006
Lead	BQL	0.100	1	MG/L	6010B	5/16/2006
Mercury	BQL	0.000500	1	MG/L	7470	5/12/2006
Selenium	BQL	0.200	1	MG/L	6010B	5/16/2006
Silver	BQL	0.100	1	MG/L	6010B	5/16/2006

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Reviewed By: 
 MET_LIMS_4.1



Results for Metals

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-13
 Lab Project ID: G663-6
 Batch ID: 5127 5138

Analyzed By: PSW
 Date Collected: 5/2/2006 11:30
 Date Received: 5/2/2006
 Matrix: LEACHATE

Metals TCLP	Result	RL	DF	Units	Method	Date Analyzed
Arsenic	BQL	0.100	1	MG/L	6010B	5/16/2006
Barium	BQL	1.00	1	MG/L	6010B	5/16/2006
Cadmium	BQL	0.100	1	MG/L	6010B	5/16/2006
Chromium	BQL	0.100	1	MG/L	6010B	5/16/2006
Lead	BQL	0.100	1	MG/L	6010B	5/16/2006
Mercury	BQL	0.000500	1	MG/L	7470	5/12/2006
Selenium	BQL	0.200	1	MG/L	6010B	5/16/2006
Silver	BQL	0.100	1	MG/L	6010B	5/16/2006

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Reviewed By: 
 MET_LIMS_4.1

**Results for Inorganics**

Client Sample ID: AS840-TD-008
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-8B
Lab Project ID: G663-6

Analyzed By: PSW
Date Collected: 05-02-2006 10:00
Date Received: 05-02-2006 16:08
Matrix: Soil

Parameter	Result	Units	Procedure	Date Analyzed
pH	5.20	S.U.	9045	05-16-2006 16:30
Temperature	21.7	°C		

Comments:

Samples analyzed out of 15 minute hold time.

Reviewed By:
pH_LIMS_v0.1

**Results for Inorganics**

Client Sample ID: AS840-BF-009
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-11F
Lab Project ID: G663-6

Analyzed By: PSW
Date Collected: 05-02-2006 11:30
Date Received: 05-02-2006 16:08
Matrix: Soil

Parameter	Result	Units	Procedure	Date Analyzed
pH	4.98	S.U.	9045	05-16-2006 16:33
Temperature	22.1	°C		

Comments:

Samples analyzed out of 15 minute hold time.

Reviewed By: *PSW*
pH_LIMS_v0.1

**Analytical Results**

Client Sample ID: AS840-TD-008
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-8
Lab Project ID: G663-6

Date Collected: 5/2/2006
Date Received: 5/2/2006
Matrix: Soil

Analyte	Result	RL	Units	Method	Date Analyzed	Analyst
Reactive Cyanide	BQL	0.116	mg/kg	335.2	5/15/2006	Envirochem
Reactive Sulfide	BQL	0.23	mg/kg	SM 4500 D	5/15/2006	Envirochem

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
RL = Report Limit

Samples reported on dry weight basis.
MDL and PQL adjusted for dry weights.

Reviewed By: 
subout_LIMS_v1.2

**Analytical Results**

Client Sample ID: AS840-BF-009
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-11
Lab Project ID: G663-6

Date Collected: 5/2/2006
Date Received: 5/2/2006
Matrix: Soil

Analyte	Result	RL	Units	Method	Date Analyzed	Analyst
Reactive Cyanide	BQL	0.115	mg/kg	335.2	5/15/2006	Envirochem
Reactive Sulfide	BQL	0.23	mg/kg	SM 4500 D	5/15/2006	Envirochem

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
RL = Report Limit

Samples reported on dry weight basis.
MDL and PQL adjusted for dry weights.

**Results for Ignitability
by EPA 1030**

Client Sample ID: AS840-TD-008
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-8A
Lab Project ID: G663-6

Analyzed By: RSB
Date Collected: 5/2/2006 10:00
Date Received: 5/2/06
Matrix: Soil

Parameter	Result	Units	Date Analyzed
Ignitability	< 0.8	mm/sec	5/22/06

Comments:

Reviewed By: RSB

**Results for Ignitability
by EPA 1030**

Client Sample ID: AS840-BF-009
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-11A
Lab Project ID: G663-6

Analyzed By: RSB
Date Collected: 5/2/2006 11:30
Date Received: 5/2/06
Matrix: Soil

Parameter	Result	Units	Date Analyzed
Ignitability	< 0.8	mm/sec	5/22/06

Comments:

Reviewed By: RSB



**Results for Semivolatiles
by GCMS 8270-TCLP**

Client Sample ID: AS840-TD-008
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-10F
 Lab Project ID: G663-6

Analyzed By: MRC
 Date Collected: 5/2/2006 10:00
 Date Received: 5/2/2006
 Date Extracted: 5/15/2006
 Matrix: Leachate

Compound	Result mg/L	RL mg/L	Dilution Factor	Date Analyzed
1,4-Dichlorobenzene	BQL	0.010	1	5/22/2006
2,4-Dinitrotoluene	BQL	0.010	1	5/22/2006
Hexachlorobenzene	BQL	0.010	1	5/22/2006
Hexachlorobutadiene	BQL	0.010	1	5/22/2006
Hexachloroethane	BQL	0.010	1	5/22/2006
2-Methylphenol	BQL	0.010	1	5/22/2006
3- & 4-Methylphenol	BQL	0.010	1	5/22/2006
Nitrobenzene	BQL	0.010	1	5/22/2006
Pentachlorophenol	BQL	0.050	1	5/22/2006
Pyridine	BQL	0.010	1	5/22/2006
2,4,5-Trichlorophenol	BQL	0.010	1	5/22/2006
2,4,6-Trichlorophenol	BQL	0.010	1	5/22/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.8	68
2-Fluorophenol	10	5.3	53
Nitrobenzene-d5	10	6.6	66
Phenol-d6	10	5.9	59
2,4,6-Tribromophenol	10	7.7	77
4-Terphenyl-d14	10	6.4	64

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: *RL*



**Results for Semivolatiles
by GCMS 8270-TCLP**

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-13H
 Lab Project ID: G663-6

Analyzed By: MRC
 Date Collected: 5/2/2006 11:30
 Date Received: 5/2/2006
 Date Extracted: 5/15/2006
 Matrix: Leachate

Compound	Result mg/L	RL mg/L	Dilution Factor	Date Analyzed
1,4-Dichlorobenzene	BQL	0.010	1	5/22/2006
2,4-Dinitrotoluene	BQL	0.010	1	5/22/2006
Hexachlorobenzene	BQL	0.010	1	5/22/2006
Hexachlorobutadiene	BQL	0.010	1	5/22/2006
Hexachloroethane	BQL	0.010	1	5/22/2006
2-Methylphenol	BQL	0.010	1	5/22/2006
3- & 4-Methylphenol	BQL	0.010	1	5/22/2006
Nitrobenzene	BQL	0.010	1	5/22/2006
Pentachlorophenol	BQL	0.050	1	5/22/2006
Pyridine	BQL	0.010	1	5/22/2006
2,4,5-Trichlorophenol	BQL	0.010	1	5/22/2006
2,4,6-Trichlorophenol	BQL	0.010	1	5/22/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.7	67
2-Fluorophenol	10	5.3	53
Nitrobenzene-d5	10	6.8	68
Phenol-d6	10	6	60
2,4,6-Tribromophenol	10	7.1	71
4-Terphenyl-d14	10	6.6	66

Comments:

Flags:

BQL = Below Quantitation Limits.

Reviewed By: ew



**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-11J
 Lab Project ID: G663-6
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 5/2/2006 11:30
 Date Received: 5/2/2006
 Date Extracted: 5/15/2006
 Matrix: Soil
 % Solids: 91.23

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Acenaphthene	BQL	322	1	5/17/2006
Acenaphthylene	BQL	322	1	5/17/2006
Anthracene	BQL	322	1	5/17/2006
Benzo[a]anthracene	BQL	322	1	5/17/2006
Benzo[a]pyrene	BQL	322	1	5/17/2006
Benzo[b]fluoranthene	BQL	322	1	5/17/2006
Benzo[g,h,i]perylene	BQL	322	1	5/17/2006
Benzo[k]fluoranthene	BQL	322	1	5/17/2006
Benzoic Acid	BQL	645	1	5/17/2006
Bis(2-chloroethoxy)methane	BQL	322	1	5/17/2006
Bis(2-chloroethyl)ether	BQL	322	1	5/17/2006
Bis(2-chloroisopropyl)ether	BQL	322	1	5/17/2006
Bis(2-ethylhexyl)phthalate	BQL	322	1	5/17/2006
4-bromophenyl phenyl ether	BQL	322	1	5/17/2006
Butylbenzylphthalate	BQL	322	1	5/17/2006
2-Chloronaphthalene	BQL	322	1	5/17/2006
2-Chlorophenol	BQL	322	1	5/17/2006
4-Chloro-3-methylphenol	BQL	322	1	5/17/2006
4-Chloroaniline	BQL	1610	1	5/17/2006
4-Chlorophenyl phenyl ether	BQL	322	1	5/17/2006
Chrysene	BQL	322	1	5/17/2006
Dibenzo[a,h]anthracene	BQL	322	1	5/17/2006
Dibenzofuran	BQL	322	1	5/17/2006
Di-n-Butylphthalate	BQL	322	1	5/17/2006
1,2-Dichlorobenzene	BQL	322	1	5/17/2006
1,3-Dichlorobenzene	BQL	322	1	5/17/2006
1,4-Dichlorobenzene	BQL	322	1	5/17/2006
3,3'-Dichlorobenzidine	BQL	645	1	5/17/2006
2,4-Dichlorophenol	BQL	322	1	5/17/2006
Diethylphthalate	BQL	322	1	5/17/2006
Dimethylphthalate	BQL	322	1	5/17/2006
2,4-Dimethylphenol	BQL	322	1	5/17/2006
Di-n-octylphthalate	BQL	322	1	5/17/2006
4,6-Dinitro-2-methylphenol	BQL	1610	1	5/17/2006
2,4-Dinitrophenol	BQL	1610	1	5/17/2006
2,4-Dinitrotoluene	BQL	322	1	5/17/2006
2,6-Dinitrotoluene	BQL	322	1	5/17/2006
Diphenylamine *	BQL	322	1	5/17/2006
Fluoranthene	BQL	322	1	5/17/2006
Fluorene	BQL	322	1	5/17/2006
Hexachlorobenzene	BQL	322	1	5/17/2006
Hexachlorobutadiene	BQL	322	1	5/17/2006
Hexachlorocyclopentadiene	BQL	645	1	5/17/2006
Hexachloroethane	BQL	322	1	5/17/2006



**Results for Semivolatiles
by GCMS 8270**

Client Sample ID: AS840-BF-009
 Client Project ID: MCAS AS-840
 Lab Sample ID: G663-6-11J
 Lab Project ID: G663-6
 Report Basis: Dry weight

Analyzed By: MRC
 Date Collected: 5/2/2006 11:30
 Date Received: 5/2/2006
 Date Extracted: 5/15/2006
 Matrix: Soil
 % Solids: 91.23

Compound	Result ug/Kg	RL ug/Kg	Dilution Factor	Date Analyzed
Indeno(1,2,3-c,d)pyrene	BQL	322	1	5/17/2006
Isophorone	BQL	322	1	5/17/2006
2-Methylnaphthalene	BQL	322	1	5/17/2006
2-Methylphenol	BQL	322	1	5/17/2006
3- & 4-Methylphenol	BQL	322	1	5/17/2006
Naphthalene	BQL	322	1	5/17/2006
2-Nitroaniline	BQL	322	1	5/17/2006
3-Nitroaniline	BQL	1610	1	5/17/2006
4-Nitroaniline	BQL	1610	1	5/17/2006
Nitrobenzene	BQL	322	1	5/17/2006
2-Nitrophenol	BQL	322	1	5/17/2006
4-Nitrophenol	BQL	1610	1	5/17/2006
N-Nitrosodi-n-propylamine	BQL	322	1	5/17/2006
Pentachlorophenol	BQL	1610	1	5/17/2006
Phenanthrene	BQL	322	1	5/17/2006
Phenol	BQL	322	1	5/17/2006
Pyrene	BQL	322	1	5/17/2006
1,2,4-Trichlorobenzene	BQL	322	1	5/17/2006
2,4,5-Trichlorophenol	BQL	322	1	5/17/2006
2,4,6-Trichlorophenol	BQL	322	1	5/17/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10.8	108
2-Fluorophenol	10	10.8	108
Nitrobenzene-d5	10	10.8	108
Phenol-d6	10	10.8	108
2,4,6-Tribromophenol	10	10.2	102
4-Terphenyl-d14	10	11.5	115

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.

Reviewed By:



Results for Pesticides **by EPA 8081**

Client Sample ID: AS840-BF-009

Client Project ID: MCAS AS-840

Lab Sample ID: G663-6-111

Lab Project ID: G663-6

Sample Wt/Vol: 32.18 g

Report Basis: Dry Weight

Analyzed By: CLP

Date Collected: 5/2/06 11:30

Date Received: 5/2/06

Date Extracted: 5/10/06

ColumnID: STX_CLPest Matrix: Soil

% Solids: 91.2

Compound	Result ug/KG	RL ug/KG	Dilution Factor	Date Analyzed	Flags
alpha-BHC	BQL	10.2	1	5/23/06	
beta-BHC	BQL	10.2	1	5/23/06	
delta-BHC	BQL	10.2	1	5/23/06	
gamma-BHC (Lindane)	BQL	10.2	1	5/23/06	
Heptachlor	BQL	10.2	1	5/23/06	
Aldrin	BQL	10.2	1	5/23/06	
Heptachlor epoxide	BQL	10.2	1	5/23/06	
Endosulfan I	BQL	10.2	1	5/23/06	
Dieldrin	BQL	10.2	1	5/23/06	
4,4'-DDE	BQL	10.2	1	5/23/06	
Endrin	BQL	10.2	1	5/23/06	
DDD	BQL	10.2	1	5/23/06	
Endosulfan II	BQL	10.2	1	5/23/06	
4,4'-DDT	BQL	10.2	1	5/23/06	
Methoxychlor	BQL	10.2	1	5/23/06	
Toxaphene	BQL	34.1	1	5/23/06	
alpha-Chlordane	BQL	10.2	1	5/23/06	
gamma-Chlordane	BQL	10.2	1	5/23/06	
Endrin aldehyde	BQL	10.2	1	5/23/06	
Endosulfan sulfate	BQL	10.2	1	5/23/06	
Endrin ketone	BQL	10.2	1	5/23/06	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	85.1	85.1

Comments:

BQL = Below Quantitation Limit

Reviewed By: P



Results for Pesticides
by EPA 8081

Client Sample ID: AS840-TD-008
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-10E
Lab Project ID: G663-6

Analyzed By: CLP
Date Collected: 05-02-2006 10:00
Date Received: 05-02-2006 16:08
Matrix: Leachate

Compound	Result mg/L	Quantitation Limit mg/L	Dilution Factor	Date Analyzed
gamma-BHC (Lindane)	BQL	0.040	1	05-23-2006
Heptachlor	BQL	0.004	1	05-23-2006
Heptachlor epoxide	BQL	0.004	1	05-23-2006
Endrin	BQL	0.002	1	05-23-2006
Methoxychlor	BQL	0.100	1	05-23-2006
Toxaphene	BQL	0.050	1	05-23-2006
Chlordane	BQL	0.003	1	05-23-2006

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	88.1	88.1

Comments:

BQL = Below Quantitation Limit

Reviewed By:



Results for Pesticides
by EPA 8081

Client Sample ID: AS840-BF-009
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-13E
Lab Project ID: G663-6

Analyzed By: CLP
Date Collected: 05-02-2006 11:30
Date Received: 05-02-2006 16:08
Matrix: Leachate

Compound	Result mg/L	Quantitation Limit mg/L	Dilution Factor	Date Analyzed
gamma-BHC (Lindane)	BQL	0.040	1	05-23-2006
Heptachlor	BQL	0.004	1	05-23-2006
Heptachlor epoxide	BQL	0.004	1	05-23-2006
Endrin	BQL	0.002	1	05-23-2006
Methoxychlor	BQL	0.100	1	05-23-2006
Toxaphene	BQL	0.050	1	05-23-2006
Chlordane	BQL	0.003	1	05-23-2006

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
DBC	100	79.2	79.2

Comments:

BQL = Below Quantitation Limit

Reviewed By: CLP

**Results for TCLP Herbicides**
by EPA 8151

Client Sample ID: AS840-TD-008
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-10G
Lab Project ID: G663-6

Analyzed By: CLP
Date Collected: 5/2/06 10:00
Date Received: 5/2/06
Matrix: Leachate

Compound	Result mg/L	Quantitation Limit mg/L	Dilution Factor	Date Analyzed
2,4-D	BQL	0.400	1	5/24/06
2,4,5-TP(Silvex)	BQL	0.100	1	5/24/06

Reviewed By: *EW*

**Results for TCLP Herbicides**
by EPA 8151

Client Sample ID: AS840-BF-009
Client Project ID: MCAS AS-840
Lab Sample ID: G663-6-13I
Lab Project ID: G663-6

Analyzed By: CLP
Date Collected: 5/2/06 11:30
Date Received: 5/2/06
Matrix: Leachate

Compound	Result mg/L	Quantitation Limit mg/L	Dilution Factor	Date Analyzed
2,4-D	BQL	0.400	1	5/24/06
2,4,5-TP(Silvex)	BQL	0.100	1	5/24/06

Reviewed By: EW



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

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.



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052739

CLIENT: YES ENVIRONMENTAL CORP.

CONTACT: LAUDY SMITH PHONE NO: (910) 389-2365

PROJECT: MCAS AS-840 SITE/PINID: _____

REPORTS TO: _____

INVOICE TO: YES ENVIRONMENTAL CORP FAX NO: (252) 393-2048

QUOTE # _____

P.O. NUMBER _____

SGS Reference: _____

G663-6

PAGE 1 OF 1

LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

No	CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Analysis Required		Preservatives Used	REMARKS
			Analysis Required	Preservatives Used		
			(3)			
				TPH GRO	✓	
				TPH DRO	✗	
				Full TCLP	✗	
				IRC	✗	
				PH	✗	
				VOC 8260	✗	
				SVOC 8260	✓	
				Pest 8081	✗	
					✗	

Collected/Relinquished By: (1) SGS

Date 5/2/06 Time 1608

Received By: Paul J. Lee

Relinquished By: (2)

Date _____ Time _____

Received By: _____

Relinquished By: (3)

Date _____ Time _____

Received By: _____

Relinquished By: (4)

Date _____ Time _____

Received By: _____

Shipping Carrier: _____

Shipping Ticket No: _____

Special Deliverable Requirements: _____

Requested Turnaround Time and Special Instructions: _____

Samples Received Cold? (Circle) YES NO

Temperature (C): 12.70 on 1/2 coming

Chain of Custody Seal: (Circle) Intact Broken ABSENT

200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

1258 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler



Mr. Randy Smith
RES Environmental Corp.
PO Box 8060
Camp Lejeune NC 28547

Report Number: G663-8

Client Project: MCAS AS-840

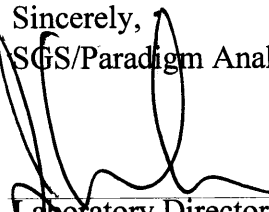
Dear Mr. Smith:

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 SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/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,
SGS/Paradigm Analytical Laboratories, Inc.



Laboratory Director
J. Patrick Weaver

6/6/2006
Date

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-E011A-5-6'
Client Project ID: MCAS AS-840
Lab Sample ID: G663-8-1
Lab Project ID: G663-8
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 5/19/2006 14:10
Date Received: 5/19/2006
Matrix: Soil
Solids 84.91

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.82	5035	1	05/25/06
Diesel Range Organics	BQL	6.43	3541	1	06/01/06

Comments:

Flags:

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-W012A-5-6'

Client Project ID: MCAS AS-840

Lab Sample ID: G663-8-2

Lab Project ID: G663-8

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/19/2006 14:20

Date Received: 5/19/2006

Matrix: Soil

Solids 85.79

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.94	5035	1	05/25/06
Diesel Range Organics	BQL	6.59	3541	1	06/01/06

Comments:

Flags:

**Results for Total Petroleum Hydrocarbons**
by GC/FID 8015

Client Sample ID: AS840-S013A-5-6'

Client Project ID: MCAS AS-840

Lab Sample ID: G663-8-3

Lab Project ID: G663-8

Report Basis: Dry Weight

Analyzed By: MJC

Date Collected: 5/19/2006 14:30

Date Received: 5/19/2006

Matrix: Soil

Solids 86.04

Analyte	Result MG/KG	RL MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.46	5035	1	05/25/06
Diesel Range Organics	BQL	6.89	3541	1	06/01/06

Comments:

Flags:



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

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.



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
• Alaska
• Louisiana
• New Jersey
• West Virginia
• Hawaii
• Maryland
• North Carolina

www.us.sgs.com

052875

1 CLIENT: KES ENVIRONMENTAL CORP

CONTACT: Randy Smith PHONE NO: (910) 389-2365

PROJECT: MCRS AS-840 SITE/PWSID#:

REPORTS TO:

KES ENVIRONMENTAL FAX NO.: 252 393-7048

INVOICE TO: QUOTE #

34ME P.O. NUMBER

SGS Reference:

C663-8

PAGE 1 OF 1

2 LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX
	AS840-E0114-S-6'	5/19/06	1410	SOIL
	AS840-W0124-S-6'	5/19/06	1420	SOIL
	AS840-S013A-S-6'	5/19/06	1430	SOIL

No CONTAINERS
SAMPLE TYPE
C= COMP
G= GRAB

Preservatives Used ☒ X
Analysis Required ☒ X
3
GRO/PRO
REMARKS

3 Collected/Relinquished By: (1) [Signature] Date 5/19/06 Time 1634 Received By: [Signature]

Relinquished By: (2) Date Time Received By:

Relinquished By: (3) Date Time Received By:

Relinquished By: (4) Date Time Received By:

4 Shipping Carrier: Samples Received Cold? (Circle) YES NO

Shipping Ticket No: Temperature (C): 16.1°C 16.1°C

Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:

200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

1258 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

Write - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

APPENDIX D

**GROUNDWATER LABORATORY REPORTS AND CHAIN OF CUSTODY
DOCUMENTATION FROM JUNE 2006 EVENT**



Mr. Chris Murray
Sovereign Consulting
606 Thimble Shoals Rd.
Suite A1
Newport-News VA 23606
Report Number: G650-61
Client Project: CTO 0012

Dear Mr. Murray:

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 SGS/Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS/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,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

7/6/2006
Date



Results for Volatiles

by GC 602

Client Sample ID: ASTAS840-GW01

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 16:40

Lab Sample ID: G650-61-1A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/21/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/21/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/21/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/21/2006	
Toluene	BQL	1.00	0.159	1	6/21/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/21/2006	
o-Xylene	BQL	2.00	0.285	1	6/21/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.9	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC_LIMS_v2.1

**Results for Volatiles**

by GC 602

Client Sample ID: ASTAS840-GW02R

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 13:45

Lab Sample ID: G650-61-2A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	3.74	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	2.29	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	43.2	108

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: ASTAS840-GW03

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 13:13

Lab Sample ID: G650-61-3A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.6	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: ASTAS840-GW04

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 14:30

Lab Sample ID: G650-61-4A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

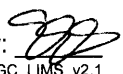
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.7	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC_LIMS_v2.1

**Results for Volatiles**

by GC 602

Client Sample ID: ASTAS840-GW05

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 9:35

Lab Sample ID: G650-61-5A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

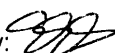
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.8	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC_LIMS_v2.1



Results for Volatiles

by GC 602

Client Sample ID: ASTAS840-GW06

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 10:20

Lab Sample ID: G650-61-6A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	2.03	1.00	0.159	1	6/22/2006	
m/p-Xylene	2.15	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.9	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: ASTAS840-MW07

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 11:20

Lab Sample ID: G650-61-7A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	1.95	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	43.2	108

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: ASTAS840-GW08

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 10:47

Lab Sample ID: G650-61-8A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/22/2006	
o-Xylene	BQL	2.00	0.285	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.8	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By:

GC_LIMS_V2.1

**Results for Volatiles**

by GC 602

Client Sample ID: ASTAS840-Duplicate

Analyzed By: CLP

Client Project ID: CTO 0012

Date Collected: 6/14/2006 0:00

Lab Sample ID: G650-61-9A

Date Received: 6/15/2006

Lab Project ID: G650-61

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/22/2006	
Ethylbenzene	4.31	1.00	0.172	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/22/2006	
Toluene	BQL	1.00	0.159	1	6/22/2006	
m/p-Xylene	2.42	2.00	0.326	1	6/22/2006	
o-Xylene	3.91	2.00	0.285	1	6/22/2006	

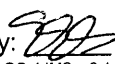
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	43.3	108

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC_LIMS_v2.1



Results for Volatiles

by GC 602

Client Sample ID: Trip Blank

Client Project ID: CTO 0012

Lab Sample ID: G650-61-10A

Lab Project ID: G650-61

Analyzed By: CLP

Date Collected: 6/14/2006 0:00

Date Received: 6/15/2006

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	6/21/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	6/21/2006	
Ethylbenzene	BQL	1.00	0.172	1	6/21/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	6/21/2006	
Toluene	BQL	1.00	0.159	1	6/21/2006	
m/p-Xylene	BQL	2.00	0.326	1	6/21/2006	
o-Xylene	BQL	2.00	0.285	1	6/21/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	43.0	108

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: CLP

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3062106B

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	6/22/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	6/22/2006	
Ethylbenzene	BQL	1.00	0.299	1	6/22/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	6/22/2006	
Toluene	BQL	1.00	0.302	1	6/22/2006	
m/p-Xylene	BQL	2.00	0.608	1	6/22/2006	
o-Xylene	BQL	2.00	0.596	1	6/22/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.8	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Control Limits for QC Check / Laboratory Control Spike

Method: **602** Spike[ppb]: **10**
 Instrument : gc3
 Filename : 062106\023r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.7	106.7	77.0	123.0	107	39	150
Chlorobenzene	10.7	106.5	80.5	119.5	107	55	135
1,2-Dichlorobenzene	10.7	107.0	68.0	132.0	107	37	154
1,3-Dichlorobenzene	10.6	106.3	72.5	127.5	106	50	141
1,4-Dichlorobenzene	10.7	106.5	69.5	130.5	107	42	143
• Diisopropyl ether	10.5	105.4	43.1	156.9	105	30	170
Ethylbenzene	11.1	110.6	63.0	137.0	111	32	160
• MTBE	10.6	106.4	46.8	153.2	106	35	165
Toluene	10.6	105.9	77.5	127.0	106	46	148
• m,p-Xylene	21.8	108.8	11.2	188.8	109	D	239
• o-Xylene	10.8	107.6	47.6	152.4	108	36	164

Flags :

- + = out of QC limits.
- = lab generated limits.
- D = Detected

Reviewed by: 



Control Limits for MS-MSD

Method: 602 Spike[ppb]: 10

Instrument: gc3

Sample: 062106\031r0101.txt

MS: 062106\035r0101.txt

MSD: 062106\036r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	ND	11.2	11.0	105	103	39	150
Chlorobenzene	ND	10.9	10.7	103	102	55	135
1,2-Dichlorobenzene	1.7	11.8	11.5	101	98	37	154
1,3-Dichlorobenzene	3.3	13.4	13.1	100	98	50	141
1,4-Dichlorobenzene	ND	10.5	10.3	97	95	42	143
• Diisopropyl ether	ND	10.6	10.4	106	104	30	170
Ethylbenzene	2.0	13.1	12.8	111	108	32	160
• MTBE	ND	10.9	10.6	103	101	35	165
Toluene	1.6	12.0	11.8	105	102	46	148
• m,p-Xylene	2.1	23.5	22.8	107	104	D	239
• o-Xylene	ND	12.0	12.1	113	113	36	164

Flags:

- + = out of QC limits.
- ♦ = lab generated limits.
- D = Detected
- ND = None Detected

Reviewed by:



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

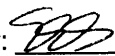
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW01
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	86
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: G650-61-1D

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW02R
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	90
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: G650-61-2E

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

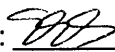
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW03
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	85
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: G650-61-3E

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

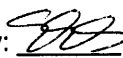
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW04
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	87
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: G650-61-4D

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW05
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
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: G650-61-5B

Reviewed By:



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW06
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	85
Surrogate % Recovery - FID	97

* = 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: G650-61-6E

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-MW07
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	90
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: G650-61-7E

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

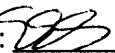
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW08
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	85
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: G650-61-8D

Reviewed By: 



VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-Duplicate
Sample Matrix	Water
Collection Option (for Soil)*	
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/22/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₅ -C ₈ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₂ Aliphatics**	< 100 (µg/L)
C ₉ -C ₁₀ Aromatics**	< 100 (µg/L)
Surrogate % Recovery - PID	90
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: G650-61-9B

Reviewed By: 



Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 05/04/06PID Initial Calibration Date: 05/04/06

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	18.2	Calibration Factor
	1000		
	2000		
	3000		
	4000		
C ₉ -C ₁₂ Aliphatics	10	0.99	Linear Regression
	250		
	500		
	750		
	1000		
C ₉ -C ₁₀ Aromatics	10	18.50	Calibration Factor
	250		
	500		
	750		
	1000		

Calibration Check Date: 06/21/06

Calibration Check

Range	Levels (µg/L) (mg/Kg)		RPD
C ₅ -C ₈ Aliphatics	2000	200	2.1
C ₉ -C ₁₂ Aliphatics	500	50	-8.8
C ₉ -C ₁₀ Aromatics	500	50	15.4

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW01
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	72
Aromatic Surrogate % Recovery	73

Comments:

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

Lab info: G650-61-1H

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

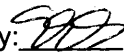
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW02R
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/26/06
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	130 (ug/L)
Aliphatic Surrogate % Recovery	72
Aromatic Surrogate % Recovery	71
Fractionation Surrogate 1 % Recovery	70

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G650-61-2H

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW03
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	75
Aromatic Surrogate % Recovery	73

Comments:

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

Lab info: G650-61-3H

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW04
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	88
Aromatic Surrogate % Recovery	85

Comments:

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

Lab info: G650-61-4I

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW05
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/26/06
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	70
Aromatic Surrogate % Recovery	64
Fractionation Surrogate 1 % Recovery	78

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G650-61-5H

Reviewed By:



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW06
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	86
Aromatic Surrogate % Recovery	83

Comments:

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

Lab info: G650-61-6H

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

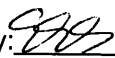
Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-MW07
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/26/06
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	170 (ug/L)
Aliphatic Surrogate % Recovery	84
Aromatic Surrogate % Recovery	64
Fractionation Surrogate 1 % Recovery	58

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G650-61-7H

Reviewed By: 



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-GW08
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/22/06
Dry Weight	
Dilution Factor	1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	< 100 (ug/L)
Aliphatic Surrogate % Recovery	89
Aromatic Surrogate % Recovery	86

Comments:

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

Lab info: G650-61-8H

Reviewed By:



EPH (Aliphatics/Aromatics) Results

by MDEP-EPH

Client Name: Sovereign Consulting

Project Name: CTO 0012

Sample Information and Analytical Results	
Sample Identification	ASTAS840-Duplicate
Sample Matrix	Water
Date Collected	06/14/06
Date Received	06/15/06
Date Extracted	06/20/06
Date Analyzed	06/27/06
Dry Weight	
Dilution Factor	1:1
C ₉ -C ₁₈ Aliphatics*	< 100 (ug/L)
C ₁₉ -C ₃₆ Aliphatics*	< 100 (ug/L)
C ₁₁ -C ₂₂ Aromatics*	120 (ug/L)
Aliphatic Surrogate % Recovery	47
Aromatic Surrogate % Recovery	68
Fractionation Surrogate 1 % Recovery	75

Comments:

* = Excludes any surrogates or internal standards.

Lab info: G650-61-9H

Reviewed By: 



Attachment 3

EPH Laboratory Reporting Form

Calibration and QA/QC Information

Initial Calibration Date: 05/31/06

Calibration Ranges and Limits

Range	MDL (2/2004) (µg/L)	ML (µg/L)	RL (µg/L)	RL (mg/Kg)
C ₉ -C ₁₈ Aliphatics	3.84	12.2	100	10
C ₁₉ -C ₃₆ Aliphatics	0.57	1.8	100	10
C ₁₁ -C ₂₂ Aromatics	4.54	14.4	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	5.30	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	6.4	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	10.4	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 06/22/06

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	2.7
C ₁₉ -C ₃₆ Aliphatics	160	-6.4
C ₁₁ -C ₂₂ Aromatics	340	-18.2

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: 05/31/06

Calibration Ranges and Limits

Range	MDL (2/2004) (µg/L)	ML (µg/L)	RL (µg/L)	RL (mg/Kg)
C ₉ -C ₁₈ Aliphatics	3.84	12.2	100	10
C ₁₉ -C ₃₆ Aliphatics	0.57	1.8	100	10
C ₁₁ -C ₂₂ Aromatics	4.54	14.4	100	10

Calibration Concentration Levels

Range	Levels (µg/mL)	%RSD or CCC	Method of Quantitation
C ₉ -C ₁₈ Aliphatics	6	5.30	Calibration Factor
	30		
	60		
	120		
	240		
C ₁₉ -C ₃₆ Aliphatics	8	6.4	Calibration Factor
	40		
	80		
	160		
	320		
C ₁₁ -C ₂₂ Aromatics	17	10.4	Calibration Factor
	85		
	170		
	340		
	680		

Calibration Check Date: 06/26/06

Calibration Check

Range	Levels (µg/mL)	RPD
C ₉ -C ₁₈ Aliphatics	120	6.3
C ₁₉ -C ₃₆ Aliphatics	160	3.6
C ₁₁ -C ₂₂ Aromatics	340	-1.7

MDL = Method Detection Limit

ML = Minimum Limit

RL = Reportable Limit

RPD = Relative Percent Difference

%RSD = Percent Relative Standard Deviation

CCC = Correlation Coefficient of Curve



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW01
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-11
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 16:40
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/26/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW01
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-11
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 16:40
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	7.1	71		
2-Fluorophenol		10	6.6	66		
Nitrobenzene-d5		10	6.7	67		
Phenol-d6		10	6.3	63		
2,4,6-Tribromophenol		10	6.9	69		
4-Terphenyl-d14		10	6.6	66		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By:



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW01
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-11
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 16:40
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/26/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW02R

Client Project ID: CTO 0012

Lab Sample ID: G650-61-2I

Lab Project ID: G650-61

Analyzed By: MRC

Date Collected: 6/14/2006 13:45

Date Received: 6/15/2006

Date Extracted: 6/21/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/22/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/22/2006	
Anthracene	BQL	10.0	1.75	1	6/22/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/22/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/22/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/22/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/22/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/22/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/22/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/22/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/22/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/22/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/22/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/22/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/22/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/22/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/22/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/22/2006	
Chrysene	BQL	10.0	1.11	1	6/22/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/22/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/22/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/22/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/22/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/22/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/22/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/22/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/22/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/22/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/22/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/22/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/22/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/22/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/22/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/22/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/22/2006	
Fluoranthene	BQL	10.0	1.41	1	6/22/2006	
Fluorene	BQL	10.0	1.22	1	6/22/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/22/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/22/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/22/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/22/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/22/2006	
Isophorone	BQL	10.0	1.27	1	6/22/2006	
Naphthalene	BQL	10.0	1.08	1	6/22/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW02R
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-2I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 13:45
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/22/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/22/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/22/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/22/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/22/2006	
Phenanthrene	BQL	10.0	1.38	1	6/22/2006	
Phenol	BQL	10.0	3.38	1	6/22/2006	
Pyrene	BQL	10.0	2.08	1	6/22/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/22/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/22/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6	60
2-Fluorophenol	10	5.2	51
Nitrobenzene-d5	10	6	60
Phenol-d6	10	5.4	54
2,4,6-Tribromophenol	10	5	50
4-Terphenyl-d14	10	5.7	57

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW02R
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-2I
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 13:45
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/22/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Aromatic, Unknown	8.29			6.15
2	Dimethylnaphthalene, Isomer of	10.93			4.77
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW03
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-3I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 13:13
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	1.50	10.0	1.33	1	6/26/2006	J
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW03
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-3I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 13:13
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.4	64
2-Fluorophenol	10	3	30 #
Nitrobenzene-d5	10	5.5	55
Phenol-d6	10	3.3	33 #
2,4,6-Tribromophenol	10	6.2	62
4-Terphenyl-d14	10	6.7	67

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
 Sample was reanalyzed due to low surrogate recoveries.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.
 # = Surrogate recovery outside In-House statistical limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW03

Client Project ID: CTO 0012

Lab Sample ID: G650-61-3I

Lab Project ID: G650-61

Sample Wt/Vol: 500 ML

Dilution: 1

Analyzed By: MRC

Date Collected: 6/14/2006 13:13

Date Received: 6/15/2006

Date Extracted: 6/21/2006

Date Analyzed: 6/26/2006

Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW03
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-3J
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 13:13
 Date Received: 6/15/2006
 Date Extracted: 6/27/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	11.5	1.40	1	7/1/2006	
Acenaphthylene	BQL	11.5	1.29	1	7/1/2006	
Anthracene	BQL	11.5	2.01	1	7/1/2006	
Benzo[a]anthracene	BQL	11.5	1.56	1	7/1/2006	
Benzo[a]pyrene	BQL	11.5	1.46	1	7/1/2006	
Benzo[b]fluoranthene	BQL	11.5	1.64	1	7/1/2006	
Benzo[g,h,i]perylene	BQL	11.5	5.25	1	7/1/2006	
Benzo[k]fluoranthene	BQL	11.5	1.25	1	7/1/2006	
Bis(2-chloroethoxy)methane	BQL	11.5	1.28	1	7/1/2006	
Bis(2-chloroethyl)ether	BQL	11.5	1.25	1	7/1/2006	
Bis(2-chloroisopropyl)ether	BQL	11.5	1.80	1	7/1/2006	
Bis(2-ethylhexyl)phthalate	BQL	11.5	1.53	1	7/1/2006	
4-bromophenyl phenyl ether	BQL	11.5	2.29	1	7/1/2006	
Butylbenzylphthalate	BQL	11.5	1.76	1	7/1/2006	
2-Chloronaphthalene	BQL	11.5	1.44	1	7/1/2006	
2-Chlorophenol	BQL	11.5	4.85	1	7/1/2006	
4-Chloro-3-methylphenol	BQL	11.5	3.75	1	7/1/2006	
4-Chlorophenyl phenyl ether	BQL	11.5	1.63	1	7/1/2006	
Chrysene	BQL	11.5	1.28	1	7/1/2006	
Dibenzo[a,h]anthracene	BQL	11.5	5.60	1	7/1/2006	
Di-n-Butylphthalate	BQL	11.5	1.90	1	7/1/2006	
1,2-Dichlorobenzene	BQL	11.5	1.44	1	7/1/2006	
1,3-Dichlorobenzene	BQL	11.5	1.43	1	7/1/2006	
1,4-Dichlorobenzene	BQL	11.5	1.38	1	7/1/2006	
3,3'-Dichlorobenzidine	BQL	23.0	4.71	1	7/1/2006	
2,4-Dichlorophenol	BQL	11.5	4.31	1	7/1/2006	
Diethylphthalate	BQL	11.5	1.70	1	7/1/2006	
Dimethylphthalate	BQL	11.5	1.20	1	7/1/2006	
2,4-Dimethylphenol	BQL	11.5	10.6	1	7/1/2006	
Di-n-octylphthalate	BQL	11.5	1.33	1	7/1/2006	
4,6-Dinitro-2-methylphenol	BQL	57.5	4.26	1	7/1/2006	
2,4-Dinitrophenol	BQL	57.5	4.83	1	7/1/2006	
2,4-Dinitrotoluene	BQL	11.5	1.75	1	7/1/2006	
2,6-Dinitrotoluene	BQL	11.5	1.62	1	7/1/2006	
Diphenylamine *	BQL	11.5	1.76	1	7/1/2006	
Fluoranthene	BQL	11.5	1.62	1	7/1/2006	
Fluorene	BQL	11.5	1.40	1	7/1/2006	
Hexachlorobenzene	BQL	11.5	1.40	1	7/1/2006	
Hexachlorobutadiene	BQL	11.5	1.82	1	7/1/2006	
Hexachlorocyclopentadiene	BQL	23.0	23.0	1	7/1/2006	
Hexachloroethane	BQL	11.5	1.82	1	7/1/2006	
Indeno(1,2,3-c,d)pyrene	BQL	11.5	5.25	1	7/1/2006	
Isophorone	BQL	11.5	1.46	1	7/1/2006	
Naphthalene	BQL	11.5	1.24	1	7/1/2006	



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW03
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-3J
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 13:13
 Date Received: 6/15/2006
 Date Extracted: 6/27/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	11.5	1.52	1	7/1/2006	
2-Nitrophenol	BQL	11.5	4.05	1	7/1/2006	
4-Nitrophenol	BQL	57.5	3.64	1	7/1/2006	
N-Nitrosodi-n-propylamine	BQL	11.5	2.15	1	7/1/2006	
Pentachlorophenol	BQL	57.5	3.25	1	7/1/2006	
Phenanthrene	BQL	11.5	1.59	1	7/1/2006	
Phenol	BQL	11.5	3.89	1	7/1/2006	
Pyrene	BQL	11.5	2.39	1	7/1/2006	
1,2,4-Trichlorobenzene	BQL	11.5	1.53	1	7/1/2006	
2,4,6-Trichlorophenol	BQL	11.5	3.36	1	7/1/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.7	67
2-Fluorophenol	10	6.4	64
Nitrobenzene-d5	10	6.2	62
Phenol-d6	10	6.4	64
2,4,6-Tribromophenol	10	6.3	64
4-Terphenyl-d14	10	7.2	72

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.
 Sample was re-extracted and re-analyzed outside the method specified holding time limits.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW03
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-3J
 Lab Project ID: G650-61
 Sample Wt/Vol: 435 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 13:13
 Date Received: 6/15/2006
 Date Extracted: 6/27/2006
 Date Analyzed: 7/1/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW04
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-4J
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 14:30
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/26/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW04
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-4J
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 14:30
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.4	64		
2-Fluorophenol		10	5.6	56		
Nitrobenzene-d5		10	5.7	57		
Phenol-d6		10	5.6	56		
2,4,6-Tribromophenol		10	6.3	63		
4-Terphenyl-d14		10	6.8	68		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW04
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-4J
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 14:30
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/26/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW05
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-5I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 9:35
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	19.5	10.0	1.33	1	6/26/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW05
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-5I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 9:35
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

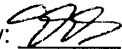
Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.3	63		
2-Fluorophenol		10	5.7	57		
Nitrobenzene-d5		10	5.7	57		
Phenol-d6		10	5.6	56		
2,4,6-Tribromophenol		10	6.5	65		
4-Terphenyl-d14		10	5	50		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds
by GCMS

Client Sample ID: ASTAS840-GW05
Client Project ID: CTO 0012
Lab Sample ID: G650-61-5I
Lab Project ID: G650-61
Sample Wt/Vol: 500 ML
Dilution: 1

Analyzed By: MRC
Date Collected: 6/14/2006
Date Received: 6/15/2006
Date Extracted: 6/21/2006
Date Analyzed: 6/26/2006
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Diethyltoluamide	13.03	000134-62-3	91	20.3
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-GW06
Client Project ID: CTO 0012
Lab Sample ID: G650-61-6I
Lab Project ID: G650-61

Analyzed By: MRC
Date Collected: 6/14/2006 10:20
Date Received: 6/15/2006
Date Extracted: 6/21/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/26/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW06
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-61
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 10:20
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

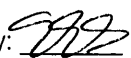
Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.7	67		
2-Fluorophenol		10	6.2	62		
Nitrobenzene-d5		10	6.2	62		
Phenol-d6		10	6.1	61		
2,4,6-Tribromophenol		10	6.9	69		
4-Terphenyl-d14		10	7	70		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW06
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-6I
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

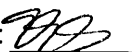
Analyzed By: MRC
 Date Collected: 6/14/2006
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/26/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	No library search compounds detected.				
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: ASTAS840-MW07
Client Project ID: CTO 0012
Lab Sample ID: G650-61-71
Lab Project ID: G650-61

Analyzed By: MRC
Date Collected: 6/14/2006 11:20
Date Received: 6/15/2006
Date Extracted: 6/21/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	1.80	10.0	1.22	1	6/23/2006	J
Acenaphthylene	BQL	10.0	1.12	1	6/23/2006	
Anthracene	BQL	10.0	1.75	1	6/23/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/23/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/23/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/23/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/23/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/23/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/23/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/23/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/23/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/23/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/23/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/23/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/23/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/23/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/23/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/23/2006	
Chrysene	BQL	10.0	1.11	1	6/23/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/23/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/23/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/23/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/23/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/23/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/23/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/23/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/23/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/23/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/23/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/23/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/23/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/23/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/23/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/23/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/23/2006	
Fluoranthene	BQL	10.0	1.41	1	6/23/2006	
Fluorene	1.80	10.0	1.22	1	6/23/2006	J
Hexachlorobenzene	BQL	10.0	1.22	1	6/23/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/23/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/23/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/23/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/23/2006	
Isophorone	BQL	10.0	1.27	1	6/23/2006	
Naphthalene	6.10	10.0	1.08	1	6/23/2006	J
Nitrobenzene	BQL	10.0	1.32	1	6/23/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/23/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/23/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-MW07
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-71
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 11:20
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/23/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/23/2006	
Phenanthrene	BQL	10.0	1.38	1	6/23/2006	
Phenol	BQL	10.0	3.38	1	6/23/2006	
Pyrene	BQL	10.0	2.08	1	6/23/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/23/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/23/2006	
		Spike Added	Spike Result	Percent Recovered		
2-Fluorobiphenyl		10	6.5	65		
2-Fluorophenol		10	5.7	57		
Nitrobenzene-d5		10	6.6	66		
Phenol-d6		10	5.9	59		
2,4,6-Tribromophenol		10	3.3	33		
4-Terphenyl-d14		10	6.4	64		

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-MW07
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-7I
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 11:20
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/23/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	1-Methylnaphthalene	9.96	000090-12-0	100	15.2
2	Dimethylnaphthalene, Isomer of	10.93			12.8
3	2-Methylnaphthalene	9.81	000091-57-6	100	12.7
4	Aromatic, Unknown	8.29			7.12
5	Tetrahydronaphthalene, Isomer of	8.44			4.28
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW08
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-81
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 10:47
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/26/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/26/2006	
Anthracene	BQL	10.0	1.75	1	6/26/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/26/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/26/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/26/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/26/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/26/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/26/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/26/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/26/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/26/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/26/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/26/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/26/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/26/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/26/2006	
Chrysene	BQL	10.0	1.11	1	6/26/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/26/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/26/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/26/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/26/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/26/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/26/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/26/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/26/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/26/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/26/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/26/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/26/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/26/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/26/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/26/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/26/2006	
Fluoranthene	BQL	10.0	1.41	1	6/26/2006	
Fluorene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/26/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/26/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/26/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/26/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/26/2006	
Isophorone	BQL	10.0	1.27	1	6/26/2006	
Naphthalene	BQL	10.0	1.08	1	6/26/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-GW08
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-8I
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 10:47
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/26/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/26/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/26/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/26/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/26/2006	
Phenanthrene	BQL	10.0	1.38	1	6/26/2006	
Phenol	BQL	10.0	3.38	1	6/26/2006	
Pyrene	BQL	10.0	2.08	1	6/26/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/26/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/26/2006	

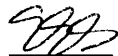
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.9	69
2-Fluorophenol	10	6.3	63
Nitrobenzene-d5	10	6.4	64
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	6.4	64
4-Terphenyl-d14	10	6.4	64

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: ASTAS840-GW08
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-8I
 Lab Project ID: G650-61
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 6/14/2006 10:47
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Date Analyzed: 6/26/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.57			5.34
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-Duplicate
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-9K
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 0:00
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/23/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/23/2006	
Anthracene	BQL	10.0	1.75	1	6/23/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/23/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/23/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/23/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/23/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/23/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/23/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/23/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/23/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/23/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/23/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/23/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/23/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/23/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/23/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/23/2006	
Chrysene	BQL	10.0	1.11	1	6/23/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/23/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/23/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/23/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/23/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/23/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/23/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/23/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/23/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/23/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/23/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/23/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/23/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/23/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/23/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/23/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/23/2006	
Fluoranthene	BQL	10.0	1.41	1	6/23/2006	
Fluorene	BQL	10.0	1.22	1	6/23/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/23/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/23/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/23/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/23/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/23/2006	
Isophorone	BQL	10.0	1.27	1	6/23/2006	
Naphthalene	BQL	10.0	1.08	1	6/23/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: ASTAS840-Duplicate
 Client Project ID: CTO 0012
 Lab Sample ID: G650-61-9K
 Lab Project ID: G650-61

Analyzed By: MRC
 Date Collected: 6/14/2006 0:00
 Date Received: 6/15/2006
 Date Extracted: 6/21/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/23/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/23/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/23/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/23/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/23/2006	
Phenanthrene	BQL	10.0	1.38	1	6/23/2006	
Phenol	BQL	10.0	3.38	1	6/23/2006	
Pyrene	BQL	10.0	2.08	1	6/23/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/23/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/23/2006	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.7	67
2-Fluorophenol	10	5.6	56
Nitrobenzene-d5	10	6.3	63
Phenol-d6	10	5.6	56
2,4,6-Tribromophenol	10	4.1	41
4-Terphenyl-d14	10	5.6	56

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 

**Results of Library Search for Semivolatile Compounds**
by GCMS

Client Sample ID: ASTAS840-Duplicate
Client Project ID: CTO 0012
Lab Sample ID: G650-61-9K
Lab Project ID: G650-61
Sample Wt/Vol: 500 ML
Dilution: 1

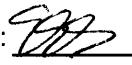
Analyzed By: MRC
Date Collected: 6/14/2006 0:00
Date Received: 6/15/2006
Date Extracted: 6/21/2006
Date Analyzed: 6/23/2006
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Aromatic, Unknown	8.29			5.66
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

Tentatively Identified Compound (TIC) refers to substances which are not present in the list of target compounds. Therefore, not all TICs are identified and quantitated using individual standards. TIC listings are prepared utilizing a computerized library search of electron impact mass spectral data and evaluation of the relevant data by a mass spectral data specialist.

Quantitation is accomplished by relative peak area of the compound compared to that of the nearest internal standard from the total ion chromatogram. TICs are identified and quantitated only if the peak area is equal to or greater than 10% of that of the nearest internal standard. Quantitation provided is an estimate.

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5463
 Lab Project ID:

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 6/21/2006
 Matrix: WATER

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	10.0	1.22	1	6/25/2006	
Acenaphthylene	BQL	10.0	1.12	1	6/25/2006	
Anthracene	BQL	10.0	1.75	1	6/25/2006	
Benzo[a]anthracene	BQL	10.0	1.36	1	6/25/2006	
Benzo[a]pyrene	BQL	10.0	1.27	1	6/25/2006	
Benzo[b]fluoranthene	BQL	10.0	1.43	1	6/25/2006	
Benzo[g,h,i]perylene	BQL	10.0	4.57	1	6/25/2006	
Benzo[k]fluoranthene	BQL	10.0	1.09	1	6/25/2006	
Bis(2-chloroethoxy)methane	BQL	10.0	1.11	1	6/25/2006	
Bis(2-chloroethyl)ether	BQL	10.0	1.09	1	6/25/2006	
Bis(2-chloroisopropyl)ether	BQL	10.0	1.57	1	6/25/2006	
Bis(2-ethylhexyl)phthalate	BQL	10.0	1.33	1	6/25/2006	
4-bromophenyl phenyl ether	BQL	10.0	1.99	1	6/25/2006	
Butylbenzylphthalate	BQL	10.0	1.53	1	6/25/2006	
2-Chloronaphthalene	BQL	10.0	1.25	1	6/25/2006	
2-Chlorophenol	BQL	10.0	4.22	1	6/25/2006	
4-Chloro-3-methylphenol	BQL	10.0	3.26	1	6/25/2006	
4-Chlorophenyl phenyl ether	BQL	10.0	1.42	1	6/25/2006	
Chrysene	BQL	10.0	1.11	1	6/25/2006	
Dibenzo[a,h]anthracene	BQL	10.0	4.87	1	6/25/2006	
Di-n-Butylphthalate	BQL	10.0	1.65	1	6/25/2006	
1,2-Dichlorobenzene	BQL	10.0	1.25	1	6/25/2006	
1,3-Dichlorobenzene	BQL	10.0	1.24	1	6/25/2006	
1,4-Dichlorobenzene	BQL	10.0	1.20	1	6/25/2006	
3,3'-Dichlorobenzidine	BQL	20.0	4.10	1	6/25/2006	
2,4-Dichlorophenol	BQL	10.0	3.75	1	6/25/2006	
Diethylphthalate	BQL	10.0	1.48	1	6/25/2006	
Dimethylphthalate	BQL	10.0	1.04	1	6/25/2006	
2,4-Dimethylphenol	BQL	10.0	9.25	1	6/25/2006	
Di-n-octylphthalate	BQL	10.0	1.16	1	6/25/2006	
4,6-Dinitro-2-methylphenol	BQL	50.0	3.71	1	6/25/2006	
2,4-Dinitrophenol	BQL	50.0	4.20	1	6/25/2006	
2,4-Dinitrotoluene	BQL	10.0	1.52	1	6/25/2006	
2,6-Dinitrotoluene	BQL	10.0	1.41	1	6/25/2006	
Diphenylamine *	BQL	10.0	1.53	1	6/25/2006	
Fluoranthene	BQL	10.0	1.41	1	6/25/2006	
Fluorene	BQL	10.0	1.22	1	6/25/2006	
Hexachlorobenzene	BQL	10.0	1.22	1	6/25/2006	
Hexachlorobutadiene	BQL	10.0	1.58	1	6/25/2006	
Hexachlorocyclopentadiene	BQL	20.0	20.0	1	6/25/2006	
Hexachloroethane	BQL	10.0	1.58	1	6/25/2006	
Indeno(1,2,3-c,d)pyrene	BQL	10.0	4.57	1	6/25/2006	
Isophorone	BQL	10.0	1.27	1	6/25/2006	
Naphthalene	BQL	10.0	1.08	1	6/25/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5463
 Lab Project ID:

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 6/21/2006
 Matrix: WATER

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	10.0	1.32	1	6/25/2006	
2-Nitrophenol	BQL	10.0	3.52	1	6/25/2006	
4-Nitrophenol	BQL	50.0	3.17	1	6/25/2006	
N-Nitrosodi-n-propylamine	BQL	10.0	1.87	1	6/25/2006	
Pentachlorophenol	BQL	50.0	2.83	1	6/25/2006	
Phenanthrene	BQL	10.0	1.38	1	6/25/2006	
Phenol	BQL	10.0	3.38	1	6/25/2006	
Pyrene	BQL	10.0	2.08	1	6/25/2006	
1,2,4-Trichlorobenzene	BQL	10.0	1.33	1	6/25/2006	
2,4,6-Trichlorophenol	BQL	10.0	2.92	1	6/25/2006	

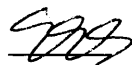
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	6.8	68
2-Fluorophenol	10	6.2	62
Nitrobenzene-d5	10	6.3	64
Phenol-d6	10	5.9	59
2,4,6-Tribromophenol	10	6.3	63
4-Terphenyl-d14	10	6.8	68

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS)
by GCMS

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-5463-MS/MSD/LCS

Date Extracted: 06/21/06

Lab Project ID:

Date Analyzed: 06/26/06

Matrix: WATER

Analyzed By: MRC

Prep Method: 3520

Dilution: 1

	Sample Amount (µg/L)	MS Spike (µg/L)	MS Conc. (µg/L)	MS Spike % Rec.	MSD Spike (µg/L)	MSD Conc. (µg/L)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	222	197	88.7	222	191	86.0	3.09	30	62.0-119
4-Chloro-3-methylphenol	BQL	222	171	77.1	222	161	72.4	6.29	30	67.0-109
2-Chlorophenol	BQL	222	168	75.4	222	159	71.4	5.45	30	59.0-95.0
1,4-Dichlorobenzene	BQL	222	112	50.3	222	112	50.5	0.397	30	29.0-86.0
2,4-Dinitrotoluene	BQL	222	186	83.5	222	182	82.1	1.69	30	63.0-103
N-Nitrosodi-n-propylamine	BQL	222	168	75.4	222	164	74.0	1.87	30	67.0-107
4-Nitrophenol	BQL	222	188	84.5	222	175	78.9	6.85	30	49.0-146
Pentachlorophenol	BQL	222	150	67.4	222	137	61.7	8.83	30	43.0-106
Phenol	BQL	222	166	74.8	222	158	71.1	5.07	30	61.0-100
Pyrene	BQL	222	199	89.5	222	200	90.1	0.668	30	41.0-123
1,2,4-Trichlorobenzene	BQL	222	154	69.3	222	151	68.1	1.75	30	41.0-96.0

	Spiked Amount (µg/L)	LCS Conc. (µg/L)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	100	71.7	73.7	72.9-127
4-Chloro-3-methylphenol	100	62.4	62.4	61.6-113
2-Chlorophenol	100	62.4	62.4	52.3-104
1,4-Dichlorobenzene	100	40.7	40.7	27.3-85.0
2,4-Dinitrotoluene	100	69.6	69.6	66.5-117
N-Nitrosodi-n-propylamine	100	64.1	64.1	54.4-119
4-Nitrophenol	100	59.3	59.3	32.4-150
Pentachlorophenol	100	50.1	50.1	23.9-115
Phenol	100	62.0	62.0	54.5-106
Pyrene	100	70.7	70.7	63.5-126
1,2,4-Trichlorobenzene	100	54.3	54.3	49.1-98.5

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5552
 Lab Project ID:
 Report Basis: Dry Weight

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 6/29/2006
 Matrix: SOIL
 % Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	313	44.7	1	7/1/2006	
Acenaphthylene	BQL	313	41.6	1	7/1/2006	
Anthracene	BQL	313	45.3	1	7/1/2006	
Benzo[a]anthracene	BQL	313	54.1	1	7/1/2006	
Benzo[a]pyrene	BQL	313	47.8	1	7/1/2006	
Benzo[b]fluoranthene	BQL	313	54.7	1	7/1/2006	
Benzo[g,h,i]perylene	BQL	313	85.0	1	7/1/2006	
Benzo[k]fluoranthene	BQL	313	60.3	1	7/1/2006	
Bis(2-chloroethoxy)methane	BQL	313	46.6	1	7/1/2006	
Bis(2-chloroethyl)ether	BQL	313	37.8	1	7/1/2006	
Bis(2-chloroisopropyl)ether	BQL	313	39.1	1	7/1/2006	
Bis(2-ethylhexyl)phthalate	BQL	313	41.9	1	7/1/2006	
4-bromophenyl phenyl ether	BQL	313	52.8	1	7/1/2006	
Butylbenzylphthalate	BQL	313	48.1	1	7/1/2006	
2-Chloronaphthalene	BQL	313	49.1	1	7/1/2006	
2-Chlorophenol	BQL	313	97.8	1	7/1/2006	
4-Chloro-3-methylphenol	BQL	313	97.5	1	7/1/2006	
4-Chlorophenyl phenyl ether	BQL	313	45.9	1	7/1/2006	
Chrysene	BQL	313	33.8	1	7/1/2006	
Dibenzo[a,h]anthracene	BQL	313	87.5	1	7/1/2006	
Di-n-Butylphthalate	BQL	313	37.2	1	7/1/2006	
1,2-Dichlorobenzene	BQL	313	34.7	1	7/1/2006	
1,3-Dichlorobenzene	BQL	313	34.1	1	7/1/2006	
1,4-Dichlorobenzene	BQL	313	35.3	1	7/1/2006	
3,3'-Dichlorobenzidine	BQL	625	78.8	1	7/1/2006	
2,4-Dichlorophenol	BQL	313	113	1	7/1/2006	
Diethylphthalate	BQL	313	40.3	1	7/1/2006	
Dimethylphthalate	BQL	313	37.8	1	7/1/2006	
2,4-Dimethylphenol	BQL	313	223	1	7/1/2006	
Di-n-octylphthalate	BQL	313	51.6	1	7/1/2006	
4,6-Dinitro-2-methylphenol	BQL	1560	184	1	7/1/2006	
2,4-Dinitrophenol	BQL	1560	688	1	7/1/2006	
2,4-Dinitrotoluene	BQL	313	40.6	1	7/1/2006	
2,6-Dinitrotoluene	BQL	313	56.9	1	7/1/2006	
Diphenylamine *	BQL	313	30.6	1	7/1/2006	
Fluoranthene	BQL	313	43.7	1	7/1/2006	
Fluorene	BQL	313	38.8	1	7/1/2006	
Hexachlorobenzene	BQL	313	48.1	1	7/1/2006	
Hexachlorobutadiene	BQL	313	50.0	1	7/1/2006	
Hexachlorocyclopentadiene	BQL	625	32.2	1	7/1/2006	
Hexachloroethane	BQL	313	28.1	1	7/1/2006	
Indeno(1,2,3-c,d)pyrene	BQL	313	80.0	1	7/1/2006	
Isophorone	BQL	313	45.9	1	7/1/2006	
Naphthalene	BQL	313	25.3	1	7/1/2006	



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5552
 Lab Project ID:
 Report Basis: Dry Weight

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 6/29/2006
 Matrix: SOIL
 % Solids: 100

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Nitrobenzene	BQL	313	42.2	1	7/1/2006	
2-Nitrophenol	BQL	313	96.9	1	7/1/2006	
4-Nitrophenol	BQL	1560	86.6	1	7/1/2006	
N-Nitrosodi-n-propylamine	BQL	313	39.7	1	7/1/2006	
Pentachlorophenol	BQL	1560	81.6	1	7/1/2006	
Phenanthrene	BQL	313	35.6	1	7/1/2006	
Phenol	BQL	313	85.6	1	7/1/2006	
Pyrene	BQL	313	60.0	1	7/1/2006	
1,2,4-Trichlorobenzene	BQL	313	39.1	1	7/1/2006	
2,4,6-Trichlorophenol	BQL	313	111	1	7/1/2006	

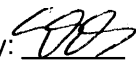
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.4	84
2-Fluorophenol	10	7.9	79
Nitrobenzene-d5	10	7.4	74
Phenol-d6	10	7.8	78
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	7.9	79

Comments:

* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:

BQL = Below Quantitation Limits.
 J = Detected below the quantitation limit.

Reviewed By: 



Results For Matrix Spike / Matrix Spike Duplicate and Laboratory Control Standard (MS/MSD/LCS)
by GCMS

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-5552-MS/MSD/LCS

Date Extracted: 06/29/06

Lab Project ID:

Date Analyzed: 07/03/06

Matrix: SOIL

Analyzed By: MRC

Prep Method: 3540

Dilution: 1

	Sample Amount (µg/kg)	MS Spike (µg/kg)	MS Conc. (µg/kg)	MS Spike % Rec.	MSD Spike (µg/kg)	MSD Conc. (µg/kg)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	3210	3260	102	3210	3020	94.0	7.97	30	73.0-140
4-Chloro-3-methylphenol	BQL	3210	2760	86.2	3210	2580	80.2	7.21	30	80.0-115
2-Chlorophenol	BQL	3210	2630	82.0	3210	2490	77.6	5.51	30	77.1-111
1,4-Dichlorobenzene	BQL	3210	2830	88.2	3210	2740	85.2	3.46	30	70.6-117
2,4-Dinitrotoluene	BQL	3210	3040	94.9	3210	2760	85.9	9.96	30	67.6-136
N-Nitrosodi-n-propylamine	BQL	3210	2950	92.0	3210	2910	90.5	1.64	30	74.3-133
4-Nitrophenol	BQL	3210	2970	92.7	3210	2480	77.1	18.4	30	56.8-133
Pentachlorophenol	BQL	3210	2300	71.7	3210	2130	66.4	7.68	30	29.2-108
Phenol	BQL	3210	2890	90.2	3210	2710	84.3	6.76	30	71.2-120
Pyrene	BQL	3210	3000	93.6	3210	2850	88.9	5.15	30	68.5-140
1,2,4-Trichlorobenzene	BQL	3210	2940	91.6	3210	2740	85.4	7.01	30	68.9-119

	Spiked Amount (µg/kg)	LCS Conc. (µg/kg)	LCS Spike %	QC Limits % Rec.
Acenaphthylene	3125	3370	108	80.9-143
4-Chloro-3-methylphenol	3125	2900	92.8	83.9-124
2-Chlorophenol	3125	2680	85.7	80.3-119
1,4-Dichlorobenzene	3125	2950	94.5	76.3-118
2,4-Dinitrotoluene	3125	3010	96.3	80.6-126
N-Nitrosodi-n-propylamine	3125	2850	91.2	80.3-131
4-Nitrophenol	3125	2910	93.2	60.0-145
Pentachlorophenol	3125	2080	66.5	36.4-114
Phenol	3125	2890	92.6	74.3-117
Pyrene	3125	3110	99.5	74.7-141
1,2,4-Trichlorobenzene	3125	2880	92.0	74.1-120

Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By:



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

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.



Locations Nationwide

- Alaska
- Louisiana
- New Jersey
- West Virginia
- Hawaii
- Maryland
- North Carolina

www.us.sgs.com

054749

[illegible]

APPENDIX E

**WELL CONSTRUCTION AND ABANDONMENT RECORDS
PHOTOGRAPHS AND FIELD NOTES**



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

TRANSMITTAL

TO: DIVISION OF Water Quality
Attn: Information Mgmt
1617 Mail Service Center
Raleigh, NC 27699-1617

DATE: 5/5/06
RE: MCB CAMP LEJEUNE
SITE AS-840
CATLIN Project # _____

We Are Transmitting Herewith The Following:

ITEM	ACTION	TRANSMITTED BY
☐ Drawings	1. For Your Use	☒ US Mail
☐ Specifications	2. For Review	☐ Messenger
☐ Shop Drawings	3. Please Comment	☐ Next Day Service
☐ Contract Documents	4. Reply ASAP	☐ Other
☐ Correspondence	5. Urgent	
☐ Reports	6. Returned	

NO. OF COPIES	DESCRIPTION	ACTION CODE
1	Well Abandonment Record	

COMMENTS: _____

COPY TO: Andrew Smith, MCB Camp Lejeune
Chris Murray, Sovereign

SIGNED: Michael E. Mason

WELL ABANDONMENT RECORD

WELL CONTRACTOR Catlin Eng. + Scientist
WELL CONTRACTOR CERTIFICATION # 2869

MW-02

1. WELL USE (Check Applicable Box): Residential ☐ Municipal ☐ Industrial ☐ Agricultural ☐ Monitoring ☒
Recovery ☐ Heat Pump Water Injection ☐ Other ☐ If Other, List Use: _____

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

Nearest Town: Jacksonville

County: Onslow

AS-845 840

(Road Name and Number, Community, Subdivision, Lot No.)

Quadrangle No. _____

3. OWNER: NAVFAC

4. ADDRESS: _____

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

6. TOTAL DEPTH: 18' (circle one) DIAMETER 2"

7. CASING REMOVED:

feet -0- diameter -0-

8. DISINFECTION: 10oz chlorine
(Amount of 70% hypochlorite used:)

9. SEALING MATERIAL:

Neat Cement bags of cement 3 Sand Cement bags of cement _____
gallons of water 30 gallons of water _____

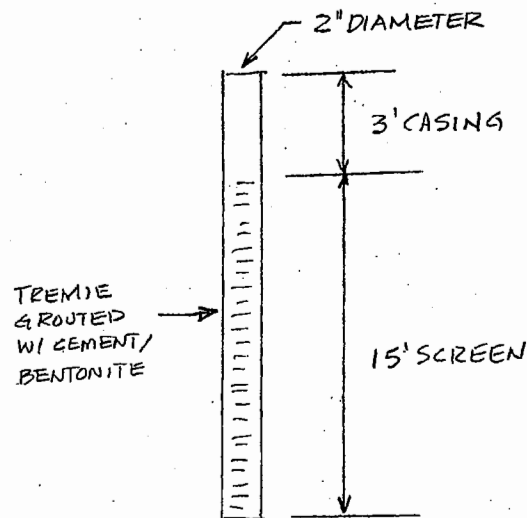
Other Type material Bent. gel
Amount 25lbs.

10. EXPLAIN METHOD EMPLACEMENT OF MATERIAL.

Tremie from Bottom.

11. DATE WELL ABANDONED 4-26-06

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



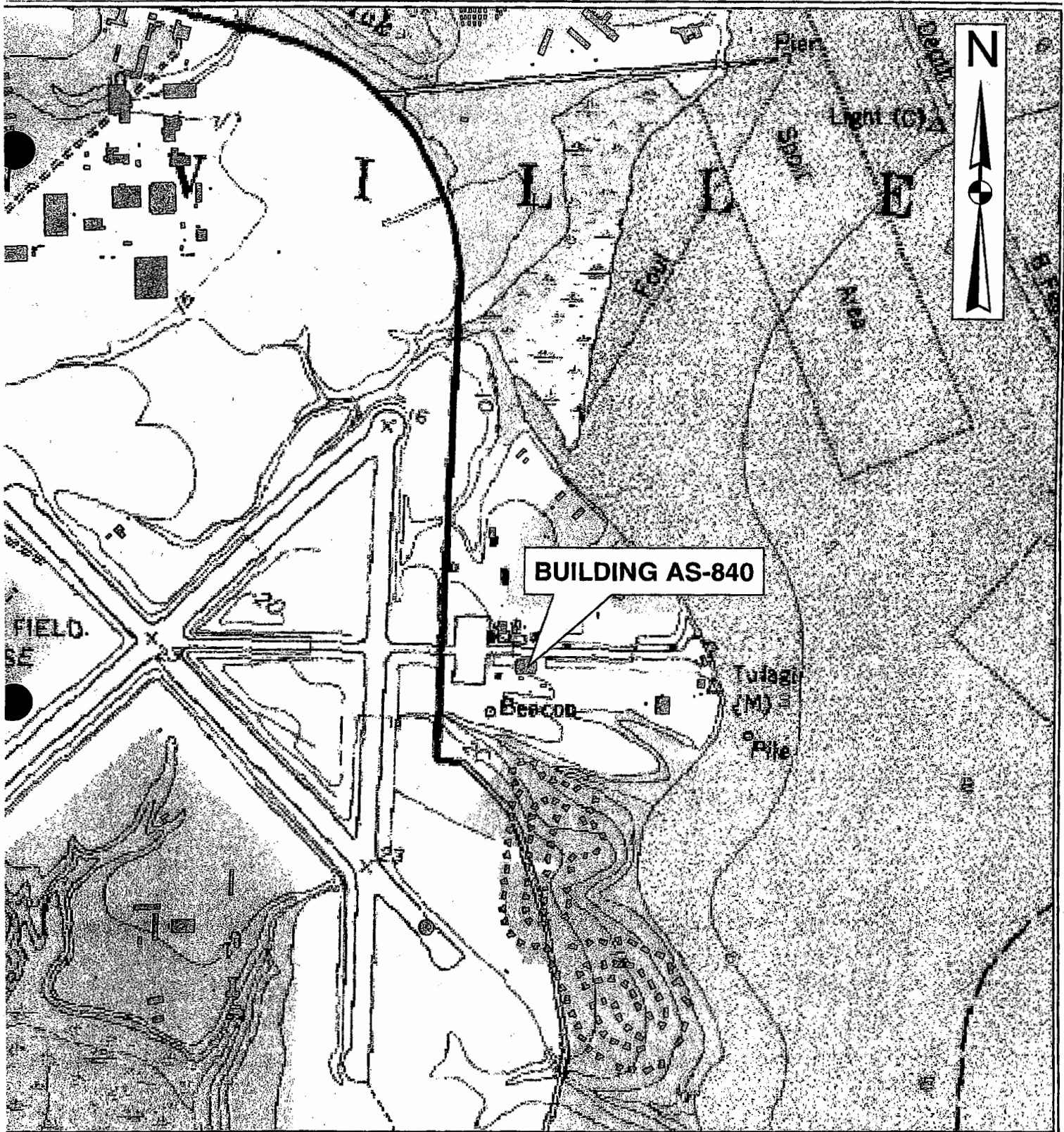
I do hereby certify that this well was abandoned in accordance with 15A NCAC 2C, well construction standards, and that a copy of the record has been provided to the well owner.

Signature of person abandoning the well Bell. Foul

Date 5-1-06

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

Submit original to the Division of Water Quality, Attn: Information Management- 1617 Mail Service Center - Raleigh, NC 27699-1617, Phone No. (919) 733-7015, and one copy to the owner within 30 days from completion of abandonment.



a Sources: USGS Topographic Quadrangles, Jacksonville South (1952, Photorevised 1988). Buildings provided by Camp Lejeune GIS Department.

1,000 500 0 1,000 Feet
SCALE

	PROJECT CORRECTIVE ACTION PLAN BUILDING AS-840 MARINE CORPS AIR STATION NEW RIVER, NORTH CAROLINA		TITLE GENERAL LOCATION USGS TOPOGRAPHIC MAP		FIGURE 1
	JOB NO. 204-045	DATE DEC 2004	SCALE AS SHOWN	DRAWN BY SAC	CHECKED BY JKB

TO: NCDENR, 127 Cadinal Dr. Ext. Wilmington, N.C. 28406, Ph 910-395-3900
FROM: Jimmie Mann—Mann Drilling Co. 805 Chatham St. Newport, N.C. 28570 Ph. 252-223-5646
RE: Submission of well construction/abandonment forms

Attn: Charles Stehman, Ph.D., P.G.

Enclosed are the

- * Well Construction reports
- * Well Abandonment reports

for our project # 06-24

The Client's name and address is: COMMANDING GENERAL

PSC BOX 20004

CAMP LEJEUNE, N.C. 28547

Sincerely,


Jimmie M Mann

RES ENV.
290 RIVER OAKS DR.
STELLA, N.C. 28582

Cc: RANDY SMITH RES.

Cc: SCARLOTT FIELDING SOVEREIGN CONSULTING INC.

USTAS-840 MW02R

WELL CONSTRUCTION RECORD

North Carolina - Department of Environment and Natural Resources-Division of Water Quality-Groundwater Section

WELL CONTRACTOR(INDIVIDUAL) NAME (PRINT) JIM MANN

CERTIFICATION # 2156

WELL CONTRACTOR COMPANY NAME MANN DRILLING COMPANY

PHONE #(252)223-5646

STATE WELL CONSTRUCTION PERMIT#

ASSOCIATED WQ PERMIT #

(IF APPLICABLE)

(IF APPLICABLE)

1. WELL USE(Check Applicable Box) Residential ☐ Municipal/Public ☐ Industrial ☐ Agricultural ☐
 Monitoring ☒ Recovery ☐ Heat Pump Water Injection ☐ Other ☐ If Other, List Use _____

2. WELL LOCATION: (Show sketch of the location below)

Nearest Town: NEW RIVER AIR STATION County: ONSLOW

NEW RIVER AIR STATION BLDG 840

(street name, numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/ Land Setting

Ridge ☐ Slope ☐ Valley ☐ Flat ☒ X

(Check appropriate box)

Latitude/longitude of well location

3. OWNER: COMMANDING GENERAL

Address PSC BOX 20004

(Street or Route No.)

CAMP LEJUNE NC 28547

City or Town

State

Zip Code

Phone: 910-539-6683

degrees/minutes/seconds

Latitude/longitude source: GPS

Topographic map

DEPTH

DRILLING LOG

From

To

Formation Description

0

8'

BRN SILTY SAND (FILL)

8'

14'

BRN SILTY SAND

14'

16'

BRN CLAY SAND

4. DATE DRILLED: 6/8/06

5. TOTAL DEPTH 16'

6. DOES WELL REPLACE EXISTING WELL? YES ☒ NO ☐

7. STATIC WATER LEVEL Below Top of Casing: 6.5 FT

(Use "+" if Above Top of Casing)

8. TOP OF CASING IS -4 FT. Above Land Surface

*Casing Terminated at/or below land surface is illegal unless a variance is issued in accordance with 15A NCAC 2C.015

9. YIELD (gpm) METHOD OF TEST

10. WATER ZONES (depth):

LOCATION SKETCH

11. DISINFECTION: Type _____ Amount _____ Show directions and distance in miles from at least two State Roads, or County Roads. Include the road numbers and common road names.

12. CASING:

Wall Thickness

From	Depth	To	Diameter	or Weight/Ft.	Material
From -4	To 3	Ft 2	SCD40	PVC	
From _____	To _____	Ft _____	_____	_____	_____

From	Depth	To	Material	Method
From 1	To 2	Ft BENTONITE	HAND	
From 0	To 1	Ft CEMENT	HAND	

From	Depth	To	Diameter	Slot Size	Material
From 3	To 16	Ft 2 in. .01	in PVC		
From _____	To _____	Ft _____ in. _____	in. _____		
From _____	To _____	Ft _____ in. _____	in. _____		

15. SAND/GRAVEL PACK:

From	Depth	To	Size	Material
From 2	To 16	Ft #2	SAND	
From _____	To _____	Ft _____	_____	

16. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

SIGNATURE OF PERSON CONSTRUCTING THE WELL

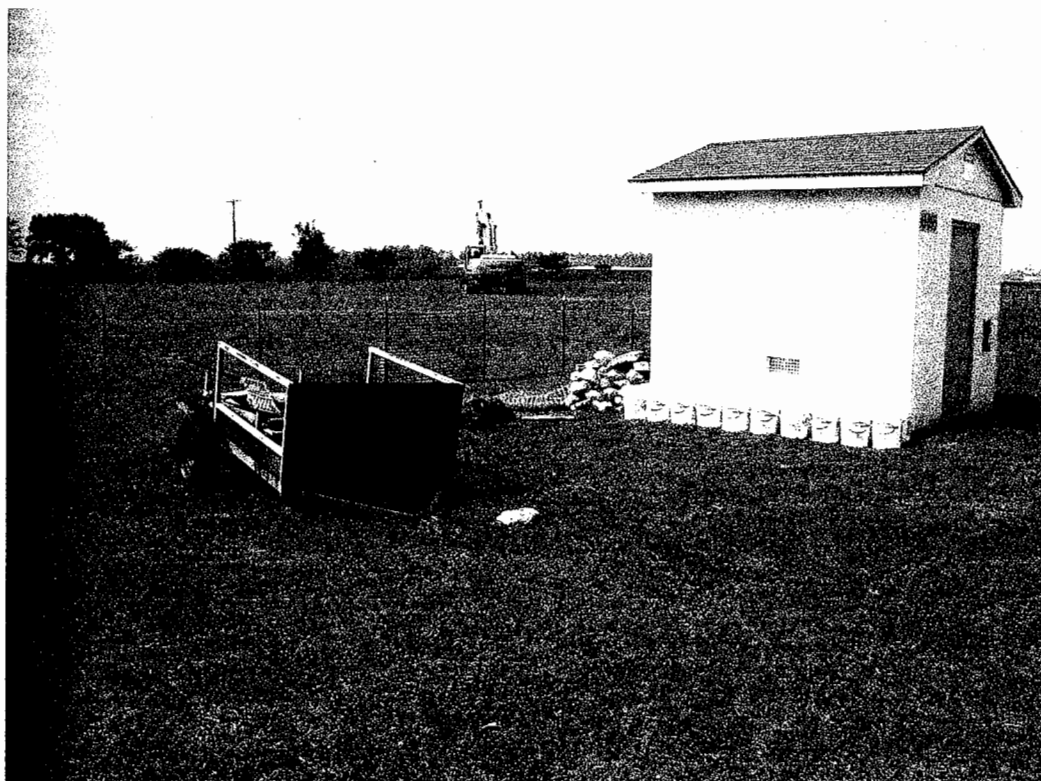
DATE

Submit original to Division of Water Quality, Groundwater Section, 1636 Mail Service Center- Raleigh, NC 27699-1636
 Phone No. (919) 733-3221, within 30 days.

GW-1 REV. 07/2001



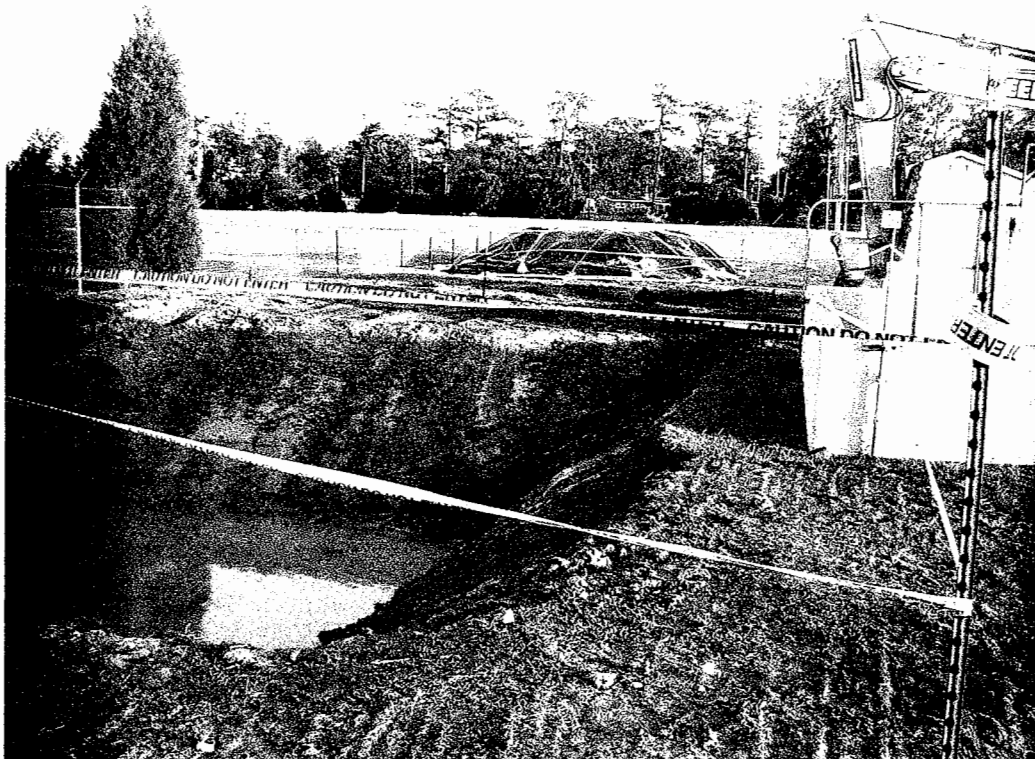
UST840-MW02 Prior to Excavation



Photograph of AS840 and ORC Powder Prior to Excavation



AS840 during Excavation



AS840 during Excavation



Utility Line along North Sidewall



Impacted Soil Stockpiled Just Prior to Disposal



Site Restoration Activities at AS840

[illegible]

[illegible]

Project Number: NV012
Project Name: AS840
Date: 03/28/06
Weather: sunny & mild

[illegible]

Project Number: NY012
Project Name: AS840
Date: 3/28/06
Weather: _____

Well ID: MW06
Sample ID: USTAS840 - MW06
Well Condition:

Protective Casing Diameter (inch):
Inner Casing Diameter (inch):
Inner Casing Material:
Purge/Sample Method:
PID/FID Reading of Well Headspace (ppm)
 Before Cap Removal:
 After Cap Removal:
Depth to Product from TOC (feet):
Initial Depth to Water from TOC (feet):
Product Thickness (feet):
Depth to Top of Screen from TOC (feet):
Total Depth from TOC (feet):

Water Column (feet):	11.44
Casing Volume (gal):	1.86
Pump Intake Setting from TOC (feet):	
DTW After Pump Installed:	
Start Purge Date/Time:	1109
End Purge Date/Time:	1136
Total Volume Purged (gal):	3
Depth to Water After Purge from TOC (feet):	
Pre-Sample Depth to Water from TOC (feet):	
Start Sample Date/Time:	~~1136~~
End Sample Date/Time:	1140
Sampler Name:	TR/SF

[illegible]

[illegible]

Project Number: NO12
Project Name: AS840
Date: 3/27/06
Weather: Sunny / clear

Well ID: MW08
Sample ID: USTAS 840-MW08
Well Condition:

Protective Casing Diameter (inch):
Inner Casing Diameter (inch):
Inner Casing Material:
Purge/Sample Method:
PID/FID Reading of Well Headspace (ppm)
 Before Cap Removal:
 After Cap Removal:
Depth to Product from TOC (feet):
Initial Depth to Water from TOC (feet):
Product Thickness (feet):
Depth to Top of Screen from TOC (feet):
Total Depth from TOC (feet):

Water Column (feet):	5.50
Casing Volume (gal):	0.91
Pump Intake Setting from TOC (feet):	
DTW After Pump Installed:	
* <u>Start Purge Date/Time:</u>	1558
* <u>End Purge Date/Time:</u>	1412
Total Volume Purged (gal):	2.5
Depth to Water After Purge from TOC (feet):	
Pre-Sample Depth to Water from TOC (feet):	
Start Sample Date/Time:	
* <u>End Sample Date/Time:</u>	1412
* <u>Sampler Name:</u>	TE/SE

[illegible]

[illegible]

Project Number: NU012
Project Name: AS840
Date: 27 March 2006
Weather: sunny & mild

[illegible]

Project Number: NV012
Project Name: AS840
Date: 3/29/06
Weather: sunny & mild

Protective Casing Diameter (inch):
Inner Casing Diameter (inch):
Inner Casing Material:
Purge/Sample Method:
PID/FID Reading of Well Headspace (ppm)
Before Cap Removal:
After Cap Removal:
Depth to Product from TOC (feet):
Initial Depth to Water from TOC (feet):
Product Thickness (feet):
Depth to Top of Screen from TOC (feet):
Total Depth from TOC (feet):

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Project Number _____
Project Name _____
Date: _____
Weather: _____

NVO12
AS840
6/14/06

GW01
INST ASSCO-GW01

Protective Casing Diameter (inch) _____ 2 _____

Inner Casing Diameter (inch) _____

Inner Casing Material _____

Purge/Sample Method. _____

PID/FID Reading of Well Headspace (ppm)

 Before Cap Removal. _____

 After Cap Removal. _____

Depth to Product from TOC (feet) _____

Initial Depth to Water from TOC (feet). _____

Product Thickness (feet) _____

Depth to Top of Screen from TOC (feet). _____

Total Depth from TOC (feet) _____ 18.35 _____

Water Column (feet): 14.04

Casing Volume (gal): 2.28

Pump Intake Setting from TOC (feet):

DTW After Pump Installed:

Start Purge Date/Time: 1515

End Purge Date/Time:

Total Volume Purged (gal):

Depth to Water After Purge from TOC (feet):

Pre-Sample Depth to Water from TOC (feet):

Start Sample Date/Time:

End Sample Date/Time: 1640

Sampler Name: TG

[illegible]

Project Number: NVO12
Project Name: A5840
Date: 6/14/06
Weather:

[illegible]

Project Number: NVO12
Project Name: AS840
Date: 6/14/06
Weather: _____

Well ID: GW03
Sample ID: AST15540-GW03
Well Condition:

Protective Casing Diameter (inch): 2
Inner Casing Diameter (inch):
Inner Casing Material:
Purge/Sample Method:
PID/FID Reading of Well Headspace (ppm)
Before Cap Removal:
After Cap Removal:
Depth to Product from TOC (feet):
Initial Depth to Water from TOC (feet):
Product Thickness (feet):
Depth to Top of Screen from TOC (feet):
Total Depth from TOC (feet): 27.81

Water Column (feet):	22.5
Casing Volume (gal):	3.63
Pump Intake Setting from TOC (feet):	
DTW After Pump Installed:	
Start Purge Date/Time:	12/40
End Purge Date/Time:	
Total Volume Purged (gal):	
Depth to Water After Purge from TOC (feet):	
Pre-Sample Depth to Water from TOC (feet):	
Start Sample Date/Time:	
End Sample Date/Time:	1/3/3
Sampler Name:	TE

[illegible]

Project Number: NV012
Project Name: AS840
Date: 6/14/56
Weather: _____

Well ID: GW04
Sample ID: ASTAS840-NW04
Well Condition: _____

Protective Casing Diameter (inch):	2
Inner Casing Diameter (inch):	
Inner Casing Material:	
Purge/Sample Method:	
PID/FID Reading of Well Headspace (ppm)	
Before Cap Removal:	
After Cap Removal:	
Depth to Product from TOC (feet):	
Initial Depth to Water from TOC (feet):	1.4
Product Thickness (feet):	
Depth to Top of Screen from TOC (feet):	
Total Depth from TOC (feet):	18.31

Water Column (feet): 12.16

Casing Volume (gal): 1.98

Pump Intake Setting from TOC (feet):

DTW After Pump Installed:

Start Purge Date/Time: 1/4/01

End Purge Date/Time:

Total Volume Purged (gal):

Depth to Water After Purge from TOC (feet):

Pre-Sample Depth to Water from TOC (feet):

Start Sample Date/Time:

End Sample Date/Time: 1/4/20

Sampler Name: JTS

[illegible]

Project Number: NV012
Project Name: ASS410
Date: 6/14/06
Weather: _____

Well ID: GW05
Sample ID: ASTAS840-GW05
Well Condition:

Protective Casing Diameter (inch): 2

Inner Casing Diameter (inch):

Inner Casing Material:

Purge/Sample Method:

PID/FID Reading of Well Headspace (ppm)

Before Cap Removal:

After Cap Removal:

Depth to Product from TOC (feet):

Initial Depth to Water from TOC (feet): 1.30

Product Thickness (feet):

Depth to Top of Screen from TOC (feet):

Total Depth from TOC (feet): 18.45

Water Column (feet): 12.13

Casing Volume (gal): 1.97

Pump Intake Setting from TOC (feet):

DTW After Pump Installed:

Start Purge Date/Time: 0843

End Purge Date/Time:

Total Volume Purged (gal):

Depth to Water After Purge from TOC (feet):

Pre-Sample Depth to Water from TOC (feet):

Start Sample Date/Time:

End Sample Date/Time: 0935

Sampler Name: TE

[illegible]

Project Number: NVO12
Project Name: ASS40
Date: 6/14/06
Weather: _____

ALL DEPTHS ARE TO BE COLLECTED FROM THE TOP OF THE CASING.

Water Column (feet):	12.42
Casing Volume (gal):	2.02
Pump Intake Setting from TOC (feet):	
DTW After Pump Installed:	
Start Purge Date/Time:	09/08
End Purge Date/Time:	
Total Volume Purged (gal):	
Depth to Water After Purge from TOC (feet):	
Pre-Sample Depth to Water from TOC (feet):	
Start Sample Date/Time:	
End Sample Date/Time:	1020
Sampler Name:	TK

[illegible]

Project Number: NVO12
Project Name: AGS40
Date: 6/14/06
Weather: _____

[illegible]

Project Number: NV012
Project Name: ASB-10
Date: 6/14/06
Weather: _____

Well ID: GW08
Sample ID: ASTAS840-GW08
Well Condition:

Protective Casing Diameter (inch):
Inner Casing Diameter (inch):
Inner Casing Material:
Purge/Sample Method:
PID/FID Reading of Well Headspace (ppm)
 Before Cap Removal:
 After Cap Removal:
Depth to Product from TOC (feet):
Initial Depth to Water from TOC (feet):
Product Thickness (feet):
Depth to Top of Screen from TOC (feet):
Total Depth from TOC (feet):

Water Column (feet): 6.80

Casing Volume (gal): 1.128

Pump Intake Setting from TOC (feet):

DTW After Pump Installed:

Start Purge Date/Time: 10/20

End Purge Date/Time:

Total Volume Purged (gal):

Depth to Water After Purge from TOC (feet):

Pre-Sample Depth to Water from TOC (feet):

Start Sample Date/Time:

End Sample Date/Time: 10/4/7

Sampler Name: TE

[illegible]

APPENDIX F
SOIL DISPOSAL MANIFESTS

MCAS New River
Building AS-840
T&D Log

<u>Date</u>	<u>Manifest #</u>	<u>Tare Wt</u>	<u>GVW</u>	<u>NVW</u>	<u>Net Tonnage</u>
6/6/06	AS060007	32,680	82,380	49,700	24.85 T
6/6/06	AS060008	32,680	80,500	47,820	23.91 T
6/7/06	AS060009	32,680	82,160	49,480	24.74 T
6/7/06	AS060010	32,680	79,500	46,820	23.41 T
6/7/06	AS060011	32,680	81,640	48,960	24.48 T
6/7/06	AS060012	32,680	78,440	45,760	22.88 T
6/8/06	AS060013	32,680	80,220	47,540	23.77 T
6/8/06	AS060014	32,680	80,160	47,480	23.74 T
6/9/06	AS060015	32,680	78,640	45,960	22.98 T
6/9/06	AS060016	33,820	79,120	45,300	22.65 T
6/9/06	AS060017	32,680	79,020	46,340	23.17 T
6/8/06	AS060018	32,680	80,080	47,400	23.70 T
6/8/06	AS060019	32,680	79,160	46,480	23.24 T
6/9/06	AS060020	32,680	77,420	44,740	22.37 T
6/9/06	AS060021	32,680	77,260	44,580	22.29 T
6/10/06	AS060022	32,680	78,840	46,160	23.08 T
6/10/06	AS060023	33,820	74,440	41,620	20.81 T
6/10/06	AS060024	32,680	80,020	47,340	23.67 T
6/10/06	AS060026	33,820	78,580	44,760	22.38 T
6/10/06	AS060027	32,680	97,380	64,700	32.35 T

Total Tonnage = 474.47 Net
Total Weight = 948,940 Lbs.

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

A5060007
Document #:

Site: <u>A5-840</u>		Page 1 of		
Generator's Name & Mailing Address:		US EPA ID Number:		
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		<u>NC6170022580</u>		
Generator's Telephone #:				
(910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:		
<u>RES Environmental Corp.</u> <u>290 River Oaks Dr. Stella N.C 28582</u> <u>252-393-2048</u>				
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:		
<u>ES&J Enterprises Inc.</u> <u>ARMYVILLE, NC</u> <u>1555 Holland Rd 28718</u> <u>910-567-6138</u>				
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>Non-Hazardous Petroleum Contaminated Soil</u>	<u>001</u>	<u>DT</u>	<u>24.85</u>	<u>lbs.</u>
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:	Date:	
<u>LARRY LAWIER</u>		<u>Larry Lawier</u>	<u>6/6/06</u>	
Transporter's Name		Signature:	Date:	
<u>Jason Sanderson</u>		<u>Jason Sanderson</u>	<u>6/6/06</u>	
Accepting Facility		Signature:	Date:	
<u>ES&J</u>		<u>Rick White</u>	<u>6-6-06</u>	

Return Original form to Generator

10.85

08:58:09

06/06/2006

Axle 1: 27680 lb

Axle 2: 27660 lb

Axle 3: 27040 lb

Total Truck Weight :
82380 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

15060008
Document #: _____

Site: AS-840		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number: NC6170022580	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
Res Environmental 290 River Oaks Dr Stella NC 28582		(252) 393-2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____	
ES&J Enterprises Inc 1555 Holland Rd Avtryville NC 28318		(910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
NON Hazardous Petroleum Contaminated	001	DT	23.91
Soil			165
Container/Tag Number:		Profile #:	
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
LARRY LAWIER	<i>Larry Lawier</i>	6-6-06	
Transporter's Name	Signature:	Date:	
Sason Sanderson	<i>Sason Sanderson</i>	6-6-06	
Accepting Facility	Signature:	Date:	
ES&J	<i>Rick White</i>	6-6-06	

Return Original form to Generator

14:43:55

06/06/2006

Axle 1: 27480 lb

Axle 2: 27480 lb

Axle 3: 25540 lb

Total Truck Weight :

80500 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060009
Document #:

Site: <u>A3 840</u>			Page 1 of	
Generator's Name & Mailing Address: <u>COMMANDING GENERAL</u> <u>AC/S, I&E (EMD)</u> <u>MARINE CORPS BASE</u> <u>PSC BOX 20004</u> <u>CAMP LEJEUNE, NC 28542-0004</u>			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>Res Environmental Corp</u> <u>290 Riveroaks Dr Stella NC 28582</u>			US EPA ID Number: <u>(252) 393-2048</u>	
Destination's Name, Mailing Address & Telephone Number: <u>ES&J Enterprises</u> <u>1555 Holland Rd Astryville NC 28318</u>			US EPA ID Number: <u>(910) 567-6138</u>	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>Non Hazardous Petroleum Contaminated Soil</u>	<u>001</u>	<u>DT</u>	<u>24.74</u>	<u>lbs</u>
Container/Tag Number: <u> </u>		Profile #: <u> </u>		
Lab: <u> </u>				
Additional Information and Discrepancy Indication: <u> </u>				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
<u>LARRY LAWLER</u>		<u>Larry Lawler</u>		<u>6-7-06</u>
Transporter's Name		Signature:		Date:
<u>Jason Sanderson</u>		<u>Jason Sanderson</u>		<u>6-7-06</u>
Accepting Facility		Signature:		Date:
<u>ES&J</u>		<u>Reik Williams</u>		<u>6-7-06</u>

Return Original form to Generator

06:58:48

06/07/2006

Axle 1: 30140 lb

Axle 2: 30120 lb

Axle 3: 21900 lb

Total Truck Weight :
82160 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS 060010
Document #: _____

Site: AS 840		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
RES Environmental Corp 290 River Oaks Dr Stella NC 28582 (252) 393 2048			
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
ESTJ Enterprises Inc 1555 Holland Rd Autryville NC 28318 (910) 567-6138			
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
Non Hazardous Petroleum Contaminated Soil	001	DT	23.41 lbs
Container/Tag Number:	Profile #:		
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
LARRY Lanier	<i>Larry Lanier</i>	6-7-06	
Transporter's Name	Signature:	Date:	
Jason Sanderson	<i>Jason Sanderson</i>	6-7-06	
Accepting Facility	Signature:	Date:	
CSNG Enterprises	<i>Jason Sanderson</i>	6-7-06	

Return Original form to Generator

11:54:50

06/07/2006

Axle 1: 27760 lb

Axle 2: 27740 lb

Axle 3: 24000 lb

Total Truck Weight :

79500 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060011
Document #:

Site: AS 840		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
RES Environmental Corp 290 River oaks Dr Stella NC 28582		(252) 393 2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
E&J Enterprises Inc 1555 Holland Rd Autryville NC 28318		(910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
Non-Hazardous Petroleum Contaminated Soil	001	DT	24.48 LBS
Container/Tag Number:	Profile #:		
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
LARRY LANIER	Larry Lanier	4/6/06	
Transporter's Name	Signature:	Date:	
Tim Spahr	[Signature]	06/07/06	
Accepting Facility	Signature:	Date:	
ESEI	Reed Wm	6-2-06	

Return Original form to Generator

17:38:23

06/07/2006

Axle 1: 28100 lb

Axle 2: 28100 lb

Axle 3: 25440 lb

Total Truck Weight :

81640 lb AS060011

81640

-78400

3240

2448

-106016T

22.88

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS0600 12
Document #:

Site: AS 840			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RES Environmental Corp 290 River Oaks Dr Stella NC 28522			US EPA ID Number: (252) 393 2048	
Destination's Name, Mailing Address & Telephone Number: EST J Enterprises Inc 1555 Holland Rd Autryville NC 28318			US EPA ID Number: (910) 567 6138	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
Non Hazardous Petroleum Contaminated Soil	001	DT	22.88	lbs
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
LARRY LANIER		Larry Lanier		6/8/06
Transporter's Name		Signature:		Date:
Tim Spahr		Tim Spahr		6/8/06
Accepting Facility		Signature:		Date:
ES & J		Rick Wynn		6-8-06

Return Original form to Generator

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060013
Document #:

Site: AS 840		Page 1 of		
Generator's Name & Mailing Address:		US EPA ID Number:		
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580		
Generator's Telephone #:				
(910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:		
RES Environmental Corp 290 River Oaks Dr Stella NC 28582		(252) 393-2048		
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:		
ES&J Enterprises Inc 1555 Holland Rd 28318 Autryville NC		(910) 567-6138		
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
NON-Hazardous Petroleum Contaminated Soil	1	DT	23.77	lbs
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
LARRY LANIER		Larry Lanier		6-8-06
Transporter's Name		Signature:		Date:
Jason Sanderson		Jason Sanderson		6-8-06
Accepting Facility		Signature:		Date:
ES&J		Rick White		6-8-06

Return Original form to Generator

80220 1b

????????????????????
06:09:01 06/08/2006

Axis 1: 26100 1b

Axis 2: 26100 1b

Axis 3: 26000 1b

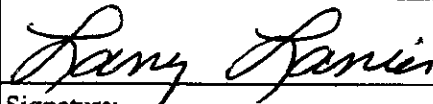
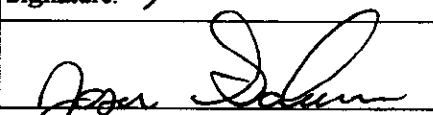
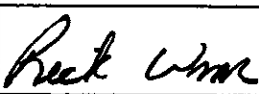
Total TRUCK WEIGHT :
80220 1b

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

ASG 6 0014

Document #: _____

Site: AS 840		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
REB Environmental Corp 290 River Oaks Dr Stella NC 28582		(252) 393-2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
ESTJ Enterprises Inc 1555 Holland Rd Astryville NC 28318		(910) 567-6138	
Waste Shipping Name and Description	Containers	Total Quantity	Units
	Number Type		
Non Hazardous Petroleum Contaminated Soil	001 DT	23.74	lbs
Container/Tag Number:	Profile #:		
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
LARRY LANIER		6-8-06	
Transporter's Name	Signature:	Date:	
JASON SANDERSON		6-8-06	
Accepting Facility	Signature:	Date:	
ES&J		6-8-06	

Return Original form to Generator

12:29:46

06/09/2006

Axle 1: 27440 lb

Axle 2: 27440 lb

Axle 3: 25280 lb

Total Truck Weight :

80160 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060015

Document #: _____

Site: <u>AS 840</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
RES Environmental Corp 290 River Oaks Dr Stella NC 28582		(252) 393-2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
ES+J Enterprises Inc 1555 Holland Rd Autryville NC 28318		(910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
Non Hazardous Petroleum Containing Soil	001	DT	22.96
Container/Tag Number:		Profile #:	
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name		Signature:	Date:
LARRY LAMIER		Larry Lanier	6-9-06
Transporter's Name		Signature:	Date:
Jason Sanderson		Jason Sanderson	6/9/06
Accepting Facility		Signature:	Date:
ES+J Enterprise		Janet Warner	6/9/06

Return Original form to Generator

14:15:38

06/09/2006

Axle 1: 26920 lb

Axle 2: 26960 lb

Axle 3: 24760 lb

Total Truck Weight :
78640 lb

2798

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060016

Document #: _____

Site: <u>AS 840</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>RES Environmental Corp</u> <u>290 River Oaks Dr Stella NC 28582</u>		(252) 323-2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>ES&J Enterprises</u> <u>1555 Holland Rd Astryville NC 28318</u>		(910) 567-6138	
Waste Shipping Name and Description	Containers	Total Quantity	Units
	Number Type		
<u>Non Hazardous Petroleum Contaminated Soil</u>	<u>001</u> <u>OT</u>	<u>22.65</u>	<u>TONS</u> <u>1650</u>
Container/Tag Number:	Profile #:		
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name	Signature:	Date:	
<u>LARRY LANIER</u>	<u>Larry Lanier</u>	<u>6-9-06</u>	
Transporter's Name	Signature:	Date:	
<u>Sara Sanderson</u>	<u>Sara Sanderson</u>	<u>6-8-06</u>	
Accepting Facility	Signature:	Date:	
<u>ES&J</u>	<u>Reck White</u>	<u>6-9-06</u>	

Return Original form to Generator

AXLE 1	10360
AXLE 2	36140
AXLE 3	31480
	77980

AS060016

22.65

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060017

Document #:

Site: <u>AS 840</u>			Page 1 of		
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>		
Generator's Telephone #: <u>(910) 451-1482</u>					
Transporter's Name, Mailing Address & Telephone Number: <u>RES Environmental Corp</u> <u>290 River Oaks Dr Ste 119 NC 28582</u>			US EPA ID Number: _____		
Destination's Name, Mailing Address & Telephone Number: <u>ES&J Enterprises Inc</u> <u>1555 Holland Rd Astryville NC 28318</u>			US EPA ID Number: _____		
Waste Shipping Name and Description			Containers	Total Quantity	Units
			Number	Type	
<u>Non Hazardous Petroleum Contaminated Soil</u>			<u>001</u>	<u>DT</u>	<u>23.17 Tons</u>
Container/Tag Number: _____			Profile #: _____		
Lab: _____					
Additional Information and Discrepancy Indication: _____					
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:					
Printed/Typed Name			Signature:		Date:
<u>LARRY LANIER</u>			<u>Larry Lanier</u>		<u>6/16/06</u>
Transporter's Name			Signature:		Date:
<u>Tim Spahr</u>			<u>[Signature]</u>		<u>6/16/06</u>
Accepting Facility			Signature:		Date:
<u>ES&J</u>			<u>[Signature]</u>		<u>6/16/06</u>

Return Original form to Generator

AS060017

03:11:16

06/10/2006

Axle 1: 26940 lb

Axle 2: 26940 lb

Axle 3: 25140 lb

017

Total Truck Weight :
79020 lb

79020

32680

23.17

46390

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AB060018
Document #: _____

Site: AS-840		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		NC6170022580	
Generator's Telephone #:			
(910) 451-1482			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
RES Environmental Corp 290 River Oaks Dr Stella NC 28582		(252) 393-2048	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
EST Enterprises Inc 1555 Holland Rd Astryville NC 28318		(910) 740-567-6138	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
Non Hazardous Petroleum Contaminated Soil	001	DT	23.70 TONS
Container/Tag Number:		Profile #:	
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name		Signature:	Date:
LARRY LANIER		Larry Lanier	6-8-06
Transporter's Name		Signature:	Date:
Jason Sanderson		Jason Sanderson	6/8/06
Accepting Facility		Signature:	Date:
EST Enterprises		EST Enterprises	6-8-06

Return Original form to Generator

2018

17:59:24

06/08/2006

Axle 1: 28540 lb

Axle 2: 28520 lb

Axle 3: 23020 lb

Total Truck Weight :

80080 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060019

Document #: _____

Site: AS 840			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RES Environmental Corp 290 River Oaks Dr Stella NC 28582			US EPA ID Number: _____	
Destination's Name, Mailing Address & Telephone Number: ES&J Enterprises Inc 1555 Holland Rd Autryville NC 28318			US EPA ID Number: _____	
Waste Shipping Name and Description			Containers	
			Number	Type
Non Hazardous Petroleum Contaminated Soil			001	DT
			Total Quantity	Units
			23.24	Tons 1650
Container/Tag Number:			Profile #:	
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
LARRY LANIER		<i>Larry Lanier</i>		6/8/06
Transporter's Name		Signature:		Date:
Tim Spahr		<i>Tim Spahr</i>		6/8/06
Accepting Facility		Signature:		Date:
ES&J Enterprises		<i>Janet Kinn</i>		6/10/06

Return Original form to Generator

00:19:00

06/09/2006

Axle 1: 28960 lb

Axle 2: 28980 lb

Axle 3: 21200 lb

Total Truck Weight :

79160 lb

79160
~~32680~~
46480

23,24
2) 46,480

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS 060020
Document #: _____

Site: AS - 840		Page 1 of		
Generator's Name & Mailing Address:		US EPA ID Number: NC6170022580		
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004				
Generator's Telephone #:				
(910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____		
RES Environmental Corp 290 Rivercocks Dr Stella NC 28582		(252) 393-2048		
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number: _____		
ES+J Enterprises Inc 1555 Holland Rd Aotryville NC 28318		(910) 567-6138		
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
Non Hazardous Petroleum Contaminated Soil	001	OT	22.37	TONS 165
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name	Signature:	Date:		
LARRY LANIER	<i>Larry Lanier</i>	6/9/06		
Transporter's Name	Signature:	Date:		
Tim Spahr	<i>Tim Spahr</i>	6/9/06		
Accepting Facility	Signature:	Date:		
ESJ Enterprises Inc	<i>Janet</i>	6/9/06		

Return Original form to Generator

23:54:24

06/07/2006

Axle 1: 25020 lb

Axle 2: 25020 lb

Axle 3: 28360 lb

Total Truck Weight :

78400 lb - AS06012

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060021

Document #: _____

Site: <u>AS 840</u>			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: <u>NC6170022580</u>	
Generator's Telephone #: <u>(910) 451-1482</u>				
Transporter's Name, Mailing Address & Telephone Number: <u>RES Environmental Corp</u> <u>290 River Oaks Dr Stella NC 28582</u>			US EPA ID Number: <u>(252) 393-2048</u>	
Destination's Name, Mailing Address & Telephone Number: <u>ESTJ Enterprises Inc</u> <u>1555 Holland Rd Astryville NC 28318</u>			US EPA ID Number: <u>(910) 567-6138</u>	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
<u>Non Hazardous Petroleum Contaminated Soil</u>	<u>001</u>	<u>DT</u>	<u>2229</u>	<u>TONS</u> ~~<u>1650</u>~~
Container/Tag Number: Lab:		Profile #:		
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name	Signature:		Date:	
<u>LARRY LANIEN</u>	<u>Larry Lanien</u>		<u>4/14/06</u>	
Transporter's Name	Signature:		Date:	
<u>Tim Spahr</u>	<u>[Signature]</u>		<u>4/19/06</u>	
Accepting Facility	Signature:		Date:	
<u>ES&J</u>	<u>Rick Wm</u>		<u>6-10-06</u>	

Return Original form to Generator

AS060021

07:52:08

06/10/2006

Axle 1: 27140 lb
Axle 2: 27140 lb
Axle 3: 22980 lb

Total Truck Weight :
77260 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS 060022
Document #:

Site: <u>AS 840</u>		Page 1 of	
Generator's Name & Mailing Address:		US EPA ID Number:	
COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004		<u>NC6170022580</u>	
Generator's Telephone #:			
<u>(910) 451-1482</u>			
Transporter's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>RES Environmental Corp</u> <u>290 River Oaks Dr Stella NC 28582</u>		<u>(252) 393-2048</u>	
Destination's Name, Mailing Address & Telephone Number:		US EPA ID Number:	
<u>ES&J Enterprises Inc</u> <u>1555 Holland Rd Astryville NC 28318</u>		<u>(910) 567-6138</u>	
Waste Shipping Name and Description	Containers		Total Quantity
	Number	Type	
<u>Non Hazardous Petroleum Contaminated Soil</u>	<u>001</u>	<u>DT</u>	<u>23.08</u>
Container/Tag Number:		Profile #:	
Lab:			
Additional Information and Discrepancy Indication:			
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:			
Printed/Typed Name		Signature:	Date:
<u>LARRY LANIER</u>		<u>Larry Lanier</u>	<u>6-10-06</u>
Transporter's Name		Signature:	Date:
<u>Rennie Koonce</u>		<u>Rennie Koonce</u>	<u>6-10-06</u>
Accepting Facility		Signature:	Date:
<u>ES&J</u>		<u>Rick Wm</u>	<u>6-10-06</u>

Return Original form to Generator

AS060022

rel
1) 10460
2) 35060
3) 33320

Total 78840

23.08

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060023
Document #: _____

Site: AS 840			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RTS Environmental Corp 290 River Oaks Dr Stelling NC 28382			US EPA ID Number: (252) 393-2048	
Destination's Name, Mailing Address & Telephone Number: ES&J Enterprises Inc 1555 Holland Rd Axtoville NC 28318			US EPA ID Number: (910) 567-6138	
Waste Shipping Name and Description	Containers	Total Quantity	Units	
	Number	Type		
Non-Hazardous Petroleum Contaminated Soil	001	DT	20.81	TONS
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name	Signature:	Date:		
LARRY Lanier	<i>Larry Lanier</i>	6 9 0 6		
Transporter's Name	Signature:	Date:		
Jason Sanderson	<i>Jason Sanderson</i>	6 9 0 6		
Accepting Facility	Signature:	Date:		
ES&J	<i>Rick White</i>	6.9.06		

Return Original form to Generator

Truck # 01

11,820

31,640

33,160

76,620

AS060023

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS 060024
Document #:

Site: AS 040			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RES Environmental Corp 290 River Oaks Dr Stella NC 28582			US EPA ID Number: (252) 393-2048	
Destination's Name, Mailing Address & Telephone Number: ESTJ Enterprises Inc 1555 Holland Rd Autryville NC 28318			US EPA ID Number: (910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
Non Hazardous Petroleum Contaminated Soil	001	OT	23.67	Tons ~~16.8~~
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
Larry Lawler		Larry Lawler		6/9/06
Transporter's Name		Signature:		Date:
Jason Sanderson		Jason Sanderson		6/9/06
Accepting Facility		Signature:		Date:
ES & J		Rick Wm		6-9-06

Return Original form to Generator

AS060024

19:31:36

06/09/2006

Axle 1: 27220 lb

Axle 2: 27380 lb

Axle 3: 27740 lb

Total Truck Weight :

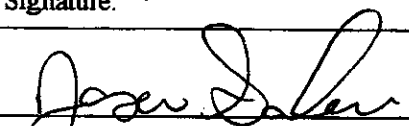
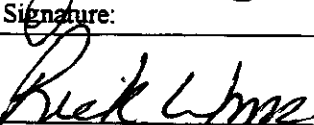
82340 lb

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060026

Document #: _____

Site: AS-840			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RES Environmental Corp 290 River Oaks Dr Stella NC 28582			US EPA ID Number: (252) 393 2048	
Destination's Name, Mailing Address & Telephone Number: ES&J Enterprises Inc 1555 Holland Rd Aultryville NC 28318			US EPA ID Number: (910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
Non Hazardous Petroleum Contaminated Soil	001	DT	22.38	Tons 1680
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
Larry Lanier				6-10-06
Transporter's Name		Signature:		Date:
Jason Sodersten				6-10-06
Accepting Facility		Signature:		Date:
ES&J				6-10-06

Return Original form to Generator

AS060026

the!

1) 11960

2) 34780

3) 32720

④

total 79760

Marine Corps Base, Camp Lejeune

Non-Hazardous Waste Shipping Document

AS060027
Document #: _____

Site: AS 840			Page 1 of	
Generator's Name & Mailing Address: COMMANDING GENERAL AC/S, I&E (EMD) MARINE CORPS BASE PSC BOX 20004 CAMP LEJEUNE, NC 28542-0004			US EPA ID Number: NC6170022580	
Generator's Telephone #: (910) 451-1482				
Transporter's Name, Mailing Address & Telephone Number: RES Environmental Corp 290 River Oaks Dr Stella NC 28582			US EPA ID Number: (252) 393-2048	
Destination's Name, Mailing Address & Telephone Number: ES&J Enterprises Inc 1555 Holland Rd Autryville NC 28318			US EPA ID Number: (910) 567-6138	
Waste Shipping Name and Description	Containers		Total Quantity	Units
	Number	Type		
Non Hazardous Petroleum Contaminated Soil	001	DT	32.35	Tons
Container/Tag Number:		Profile #:		
Lab:				
Additional Information and Discrepancy Indication:				
GENERATOR'S STATEMENT: The materials described above on this shipping document are not subject to federal regulations for proper disposal of hazardous waste. The determination of non-hazardous waste and the information on this form are based on the analysis provided by:				
Printed/Typed Name		Signature:		Date:
Larry Lanier		<i>Larry Lanier</i>		6-10-06
Transporter's Name		Signature:		Date:
Ronnie Koonce		<i>Ronnie Koonce</i>		6-10-06
Accepting Facility		Signature:		Date:
ES&J		<i>Rick White</i>		6-10-06

Return Original form to Generator

11740

41220

99700

35000

64700

32.35 Tons