FINAL
ANNUAL GROUNDWATER MONITORING REPORT 2008-2009
BUILDING 1613

NCDENR Incident Number: 20660
Marine Corps Base
Camp Lejeune, North Carolina

Prepared for:

Mr. David Borton
Naval Facilities Engineering Command Mid-Atlantic
6506 Hampton Blvd
Norfolk, VA 23508-1278

Mr. Thomas Burton, P.E.
I&E/EMD/EQB
Building 12, Post Lane
MCB Camp Lejeune, NC 28542

And in cooperation with

Osage of Virginia
2618A Colley Avenue
Norfolk, Virginia 23517-1132

Contract No. N40085-06-D-7006
Contract Task Order 0015

June 2009

Prepared by:

P. O. Box 10279
Wilmington, North Carolina 28404-0279
(910) 452-5861

NC Engineering License No.: C-0585

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

APPENDIX A **HISTORICAL DATA**

APPENDIX B **LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FROM JULY AND DECEMBER 2008 EVENTS**

LIST OF ACRONYMS

2LGWQS	NCAC T15A:02L Groundwater Quality Standards
AST	Aboveground Storage Tank
AS/SVE	Air Sparge/Soil Vapor Extraction
BLS	Below Land Surface
CSA	Comprehensive Site Assessment
CAP	Corrective Action Plan
DIPE	Di-isopropyl Ether
DO	Dissolved Oxygen
DTW	Depth to Water
EDB	Ethylene di-bromide
EMD	Environmental Management Division
EPA	Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbons
EQB	Environmental Quality Branch
FT	Feet
GCL	Gross Contaminant Level
I&E	Installations and Environment Department
iSOC	in-situ Submerged Oxygen Curtain
MADEP	Massachusetts Department of Environmental Protection
MCB	Marine Corps Base
MCCS	Marine Corps Base
MSCC	Marine Corps Community Service Station
NAVFAC	Naval Facilities Engineering Command Atlantic
NC	North Carolina
NCDENR	North Carolina Department of Environment and Natural Resources
NFA	No Further Action
NTU	Nephelometric Turbidity Units
O&M	Operation and Maintenance
QC	Quality Control
RAO	Remedial Action and Optimization
RBCA	Risk Based Corrective Action
RCAP	Revised Corrective Action Plan
SVOC	Semi Volatile Organic Compound
TIC	Tentatively Identified Compound
TOC	Top of Casing
TPH	Total Petroleum Hydrocarbons
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VPH	Volatile Petroleum Hydrocarbons

EXECUTIVE SUMMARY

Building 1613 is a Marine Corps Community Service Station (MCCS) located in the Hadnot Point Industrial Area of Marine Corps Base (MCB) Camp Lejeune, North Carolina. The facility is a located on the Northwest side of West Street between Gum and Fir Streets. The former underground storage tank (UST) system consisted of four gasoline tanks located on the Northeast side of Building 1613. These included two 30,000-gallon USTs, one 10,000-gallon UST, and one 9,000-gallon UST.

Several environmental investigations were completed at this site in the early 1990s, consequently identifying plumes of free phase and dissolved phase gasoline compounds. In 1995, the USTs were removed along with 2,128 tons of petroleum contaminated soil. Richard Catlin and Associates, now known as CATLIN Engineers and Scientists (CATLIN), conducted a Comprehensive Site Assessment (CSA) in 1996 to identify the extent of contamination at the site. Following their investigation, CATLIN submitted a Corrective Action Plan (CAP) dated April 6, 1998 identifying Air Sparge and Soil Vapor Extraction (AS/SVE) as the preferred technology to remediate soil and groundwater that had been adversely affected by petroleum releases at Building 1613.

CATLIN conducted an optimization and revised CAP (RAO & RCAP) report dated February 2004. In this report, reclassification of the site based on current Risk Based Corrective Action (RBCA) rules determined that the site met the criteria to be classified as a Low Risk and Residential Land Use site. This ranking revised the target cleanup goals for soil to Residential Maximum Soil Contaminant Concentrations (MSCCs) and groundwater to Gross Contaminant Levels (GCLs). Recommendations of the RAO & RCAP included deactivating the current groundwater system, collecting two soil samples from two locations at the site, and quarterly groundwater monitoring from 21 site monitoring wells.

Shaw Environmental, Inc. (Shaw) subsequently sampled the site in June and October of 2004 and provided information in an annual report dated July 2005. Recommendations based on this report included sustained shutdown of the existing AS/SVE system and continued post operational monitoring of the groundwater wells.

Sovereign Consulting Inc. (Sovereign) conducted an annual gauging and sampling event in 2006. The annual monitoring event was performed in June 2006 to analyze the site groundwater for petroleum constituents. Laboratory results showed Volatile Organic Compound (VOC), semi-VOC (SVOC), and Massachusetts Department of Environmental Protection (MADEP) concentrations exceeding the North Carolina Groundwater Quality Standards (2L GWQS) in monitoring wells UST1613-MW22 and IR78-GW06. No measurable free product was detected at the site, and no petroleum-related constituents were detected at or above established GCLs in any site well.

In a Site Optimization and Recommendation Letter prepared in August 2006, Sovereign recommended the use of in-situ Submerged Oxygen Curtain (iSOC®) technology to help reduce contaminant levels in monitoring wells UST1613-MW22 and IR78-GW06. The iSOC® system was installed shortly thereafter.

During the June 2007 to May 2008 monitoring period, Sovereign conducted semi-annual gauging and sampling events and operated iSOC technology in select wells. The monitoring events were performed in July 2007 and April 2008 to analyze the site groundwater for petroleum constituents. Laboratory results showed VOC concentrations exceeding the 2L GWQS in monitoring wells (each preceded by UST1613-) MW11, MW15, MW17, MW18, MW19, MW22 and (preceded by IR78-) GW06; SVOC concentrations exceeding the 2L GWQS in wells MW17, MW22, and GW06; and MADEP concentrations exceeding the 2L GWQS in wells MW17, MW18, MW22, and GW06. No measurable free product was detected at the site. SVOCs Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Chrysene were detected in monitoring wells at levels above their corresponding GCLs.

In a letter from North Carolina Department of Environment and Natural Resources (NCDENR) dated July 29, 2008, the Building 1613 site's risk ranking was changed from low risk to intermediate risk due to exceedance of GCLs during the June 2007 to May 2008 monitoring period.

During the June 2008 to May 2009 monitoring period, Osage of Virginia, Inc. (Osage) conducted semi-annual gauging and sampling events and operated iSOC® technology in wells MW22 and GW06. The monitoring events were performed in July 2008 and December 2008 to analyze the site groundwater for petroleum constituents.

No measurable free product was detected in any of the site wells during the groundwater gauging events. VOCs, SVOCs, and MADEP compounds were detected above 2L GWQSs in several wells during the July and December 2008 monitoring events. Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Chrysene, and Dibenzo(a,h)anthracene were detected at concentrations exceeding their applicable GCLs during the July 2008 monitoring event. No detected compounds exceeded the established GCLs, however, during the December 2008 event.

The iSOC® units continue to operate as designed and appear to have reduced contaminant concentrations in wells MW22 and GW06, which were two of the most impacted monitoring wells. Osage recommends the continued operation of these units in the current two monitoring wells – GW06 and MW22. The units may be rotated to other impacted wells, such as MW17, as needed.

Osage also recommends continuing gauging and sampling of site monitoring wells on a semi-annual basis to track contaminant concentrations. The project scope should include monitoring wells UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06. Groundwater samples should be analyzed for contaminants using EPA Methods 602, 610, and MADEP VPH, and data should be summarized and reported in an annual groundwater monitoring report for submittal to NCDENR.

1.0 TITLE PAGE

DATE OF REPORT: June 2009
Facility I.D.: Building 1613 UST Incident Number: 20660
Site Name: Marine Corps Community Service Station
Site Location: Marine Corps Base Camp Lejeune, North Carolina
Nearest City/Town: Camp Lejeune County: Onslow
Risk Classification: Intermediate Risk Land Use Classification: Residential

UST Owner: Commanding Officer – MCB Camp Lejeune
I&E/EMD/EQB
PSC Box 20004
Address: MCB Camp Lejeune, NC 28542-0004 Phone: (910) 451-5068

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

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

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

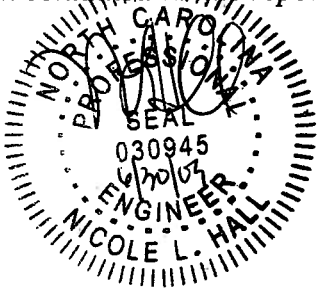
Consultant/Contractor: CALTIN Engineers and Scientists
Address: 220 Old Dairy Rd.
Wilmington, NC 28404
Phone: (910) 452-5861

Osage of Virginia
2618A Colley Ave
Norfolk, VA 23517
Phone: (757) 408-2349

Release Information

Date Discovered: Unknown
Latitude: 34° 40' 7.6475" N
Longitude: 77° 20' 26.0568" W
Estimated Quantity of Release: Unknown
Cause of Release: Unknown
Source of Release (Piping/UST): USTs and piping
Sizes and contents of UST system(s) from which the release occurred: The former system consisted of two 30,000-gallon USTs, one 10,000-gallon UST, and one 9,000-gallon UST, all containing gasoline.

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



2.0 INTRODUCTION

The purpose of this report is to summarize data from a recent groundwater monitoring events at Building 1613 aboard MCB Camp Lejeune, North Carolina.

The project's scope of work entailed semi-annual gauging and sampling thirteen groundwater monitoring wells (UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW15, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06) as shown on Figure 2-1. For ease of reading, the prefix UST1613 has been omitted in the rest of the report. In accordance with the program scope of work, samples were analyzed using EPA Methods 602, 625, and MADEP Method VPH. An iSOC® remediation system was operated and maintained monthly at the site. Data for Osage's 2008-2009 monitoring events are presented in this report.

3.0 SITE HISTORY

The Building 1613 project site consists of an active MCCS gas station, located on the northwest side of West Street between Gum and Fir streets. The site is located in the 1600 block of the Hadnot Point Industrial Area of MCB, Camp Lejeune, North Carolina (Figure 3-1).

Building 1613 is a single story building with three concrete pump islands located on the east and west sides of the building. The two concrete pump islands closest to either side of the building contain two petroleum dispensers per pump island. The dispensers that were located in the outer islands were reportedly removed prior to the mid-1980s.

Four gasoline USTs were reportedly installed in the 1950s and removed in January 1995. They were located northeast of Building 1613. The gasoline USTs consisted of two 30,000-gallon, one 10,000-gallon, and one 9,000-gallon tanks. The USTs were replaced by three aboveground storage tanks (ASTs), located northwest of the building.

Various site assessment activities were completed to delineate the presence and, if applicable, the extent of free phase product, soil contamination, and groundwater contamination. The reports from the various site assessments were utilized by CATLIN to develop a CAP dated April 6, 1998. The CAP identified Aggressive Fluid Vapor Recovery (AFVR) coupled with AS/SVE as the preferred remedial technology to remediate soil and groundwater at the site. OHM (now known as Shaw) installed the AS/SVE treatment system in accordance with the CAP in 1998.

Per the request of the NCDENR, OHM conducted an additional soil investigation in September 2000 to verify soil contamination was not present in the vicinity of the fuel dispensers and buried transfer piping at the site. Results from the additional soil assessment indicated two locations with gasoline and diesel range organics above action limits. However, OHM stated that the MADEP VPH and EPH concentrations of these samples were below the risk-based cleanup levels and active remediation of the soils was not required. This additional soil data report was submitted in January 2001 and recommended no additional soil remediation.

In addition to the soil investigation, OHM conducted a groundwater investigation to better define the extent of groundwater contamination at the site. Two areas were identified as not being treated by the original remedial system layout; therefore, OHM expanded the AS/SVE treatment

system to address these additional areas of groundwater contamination in March and April 2001. The expanded portion of the system was operational as of late April 2001.

Based on additional soil and groundwater investigations and consequent expansions to the remedial systems referenced in the CAP, CATLIN conducted a RAO & RCAP report to address and review the effectiveness of the remedial actions being conducted at the site up to 2004. Reclassification of the site based on RBCA rules determined that the site met the criteria to be classified as low risk with residential land use. This ranking revised the target cleanup goals for soil to Residential MSCCs and groundwater to GCLs. Recommendations of the RAO & RCAP included shutting down the groundwater remediation system, collecting two soil samples from the previously identified sample locations, and quarterly groundwater monitoring from 21 site monitoring wells.

Shaw sampled the site in June and October of 2004. Details explaining wells sampled and consequent analytical results can be referenced in Shaw's report titled "2004 Annual Monitoring Report, Building 1613, Marine Corps Base Camp Lejeune, North Carolina", dated July 2005. Recommendations based on this report included sustained shutdown of the existing AS/SVE system and continued post operational monitoring of the groundwater wells.

Sovereign conducted an annual gauging and sampling event as a follow on action to the July 2005 report. An annual event was performed to analyze the site groundwater for petroleum constituents using EPA Methods 601, 602, 625, and the MADEP Methods. Data from Sovereign's 2006 sampling event is included in Appendix A of this report.

During the 2007-2008 monitoring period, Sovereign conducted monitoring well gauging and sampling of 10 site monitoring wells and operated and maintained oxygen diffusion groundwater treatment (iSOC®) units in selected monitoring wells. Groundwater samples were analyzed for volatile and semi-volatile compounds via EPA Methods 601 (2007 only), 602, and 625 in accordance with the program scope of work, as well as volatile and extractable hydrocarbons using MADEP methods. No free product was identified during the monitoring period. Several volatile and semi-volatile compounds were detected at the site above the 2L GWQSs and above the GCL standards. MADEP compounds were also detected above their applicable groundwater standards. Data from Sovereign's 2007-2008 monitoring is also included in Appendix A of this report.

Osage took over monitoring of the site for the current monitoring period – from June 2008 to May 2009. Osage conducted semi-annual monitoring well gauging and sampling of 13 site monitoring wells and operated and maintained oxygen diffusion groundwater treatment (iSOC®) units in monitoring wells MW22 and GW06. Groundwater samples were analyzed for volatile and semi-volatile compounds via EPA Methods 602, and 625 in accordance with the program scope of work, as well as volatile hydrocarbons using MADEP methods. No free product was identified during the monitoring period. Several volatile and semi-volatile compounds were detected at the site above the North Carolina 2L GWQSs and above the GCL standards. MADEP VPH compounds were also detected above their applicable groundwater standards. Data from Osage's 2008-2009 monitoring events are presented in this report.

4.0 GAUGING AND SAMPLING RESULTS

Thirteen groundwater monitoring wells (UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW15, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06) were included in the post-operational gauging and sampling activities during the 2008-2009 monitoring period. Activities were conducted in accordance with NCDENR guidance, as well as the scope of work outlined as part of NAVFAC Contract No. N40085-06-D-7006, Task Order No. 0015.

4.1 WELL GAUGING

Wells were gauged in July and December 2008 using an interface probe capable of measuring the depth to water and depth to product (if present) to the nearest 0.01 foot. Gauging data for each well was recorded and referenced to each well's surveyed top of casing and is summarized in Table 4-1.

No measurable free product was detected at any well during the monitoring period. Based on the groundwater elevations, the groundwater at the site flows to the Northeast. Figure 4-1 shows the groundwater flow direction across the site for the July 2008 gauging event, and Figure 4-2 shows the groundwater flow direction across the site for the December 2008 gauging event.

4.2 GROUNDWATER SAMPLING

Semi-annual groundwater sampling was conducted in July and December 2008.

4.2.1 JULY 2008 RESULTS

During the July 2008 sampling event, groundwater was collected from 13 groundwater monitoring wells (UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW15, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06) using low-flow purging and sampling methods. Samples were collected after water quality indicator parameters (pH, temperature, conductivity, oxidation-reduction potential, dissolved oxygen and turbidity) were recorded and had stabilized. Groundwater was transferred from each well to the laboratory-prepared sample glassware via polyethylene discharge tubing. The samples were kept in an iced cooler and sent under chain of custody to SGS Environmental Services Inc. (SGS) in Wilmington, NC (NC Certification Number 481). The samples were analyzed for the following parameters:

- VOCs - EPA Method 602
- SVOCs - EPA Method 625
- VPH - MADEP Method

The laboratory report and chain of custody documentation for the July 2008 sampling event are included in Appendix B, and the analytical data for the July 2008 sampling event is summarized in Table 4-2 and shown on Figure 4-3.

Of the 13 groundwater monitoring wells sampled, 11 (MW06, MW11, MW15, MW16, MW17, MW18, MW19, MW20, MW21, MW22, and GW06) exhibited groundwater contaminant concentrations above the 2L GWQS. Monitoring well MW22 exhibited groundwater contaminant concentrations above the GCL. In several instances the laboratory method detection limit exceeded the 2L GWQS. In addition, the method detection limit for 1,2-Dibromoethane (EDB), Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Dibenzo(a,h)anthracene exceeded the GCL. MADEP EPH analysis was not requested as part of NAVFAC Contract No. N40085-06-D-7006, Task Order No. 0015; therefore, only VPH analyses results are reported on the table.

EPA Method 602

Benzene was detected at concentrations exceeding the 2L GWQS (1 µg/L) in groundwater from wells MW11 (2.12 µg/L), MW16 (2.6 µg/L), MW17 (26.9 µg/L), MW18 (292 µg/L), MW22 (10.2 µg/L), and GW06 (6.32 µg/L). 1,2-Dibromoethane (EDB) was not detected in any sample, but the laboratory method detection limits exceeded the 2L GWQS and the GCL. In addition, the EDB method detection limit from sample MW18 (<91.8) exceeded the GCL of 50 µg/L. Diisopropyl ether (DIPE) was detected in well MW18 (97.6 µg/L) at a concentration exceeding the 2L GWQS (70 µg/L). Ethylbenzene and MTBE were detected in several site monitoring wells; however the detections were below the 2L GWQS and GCL. Toluene was detected in monitoring well MW18 (6,990 µg/L) at a concentration above the 2L GWQS of 1,000 µg/L, but below GCL of 257,500 µg/L. Total Xylenes were detected above the 2L GWQS (530 µg/L), but below the GCL (87,500 µg/L) in monitoring well MW-18 (2,658 µg/L) and GW06 (685 µg/L).

There were no EPA Method 602 detections above the GCLs.

EPA Method 625

Nine EPA Method 625 compounds were detected in groundwater at the site above 2L GWQSs. Those compounds were Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Bis(2-ethylhexyl)phthalate, Chrysene, Dibenzo(a,h)anthracene, Indeno (1,2,3-c,d) pyrene, and Naphthalene. Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Chrysene, and Dibenzo(a,h)anthracene were detected at the site above their respective GCLs.

Monitoring well MW22 contained most of the noncompliant compounds. Benzo(a)anthracene was detected in monitoring well MW22 (9.70 µg/L) at a concentration exceeding the 2L GWQS (0.0479 µg/L) but below the GCL (22 µg/L). Benzo(b)fluoranthene was detected in well MW22 (16.7 µg/L) at a concentration exceeding the 2L GWQS (0.0479 µg/L) and GCL (0.6 µg/L). Benzo(k)fluoranthene was detected in well MW22 (7.90 µg/L) at a concentration exceeding the 2L GWQS (0.479) and the GCL (0.47 µg/L). Benzo(a)pyrene was detected in well MW22 (10.3 µg/L) at a concentration exceeding the 2L GWQS (0.00479 µg/L) and the GCL (1.5 µg/L). Bis(2-ethylhexyl)phthalate was detected in wells MW06 (304 µg/L), MW11 (40.6 µg/L), MW15 (32.9 µg/L), MW16 (30.1 µg/L), MW20 (15.6 µg/L), MW21 (40.2 µg/L), and MW22 (9.60 µg/L) at concentrations exceeding the 2L GWQS (2.5 µg/L) but below the GCL (2,500 µg/L). Chrysene was detected in well MW22 (14.9 µg/L) at a concentration exceeding the 2L GWQS (4.79 µg/L) and GCL (0.8 µg/L). Dibenzo(a,h)anthracene was also detected in MW22 at an estimated concentration of 0.477 µg/L, which is above both the 2L GWQS (0.0047 µg/L) and GCL (0.25 µg/L). Monitoring well MW22 exhibited Indeno (1,2,3-c,d) pyrene at a concentration of 8.48 µg/L, which is above the

2L GWQS of 0.047 µg/L, but less than the GCL of 31 µg/L. Naphthalene was detected in wells MW18 (241 µg/L), MW22 (27.9 µg/L), and GW06 (144 µg/L) at concentrations exceeding the 2L GWQS (21 µg/L), but below the GCL (15,500 µg/L).

The laboratory method detection limits for Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Indeno (1,2,3-c,d) pyrene exceeded the 2L GWQS in all samples. The laboratory method detection limit for Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Dibenzo(a,h)anthracene exceeded the GCL in all samples.

MADEP VPH

Only MADEP VPH was analyzed during the July 2008 semi-annual monitoring event. C_5-C_8 Aliphatics were detected in monitoring wells MW18 (14,800 µg/L), MW19 (663 µg/L), and GW06 (1,910 µg/L) at concentrations exceeding the 2L GWQS of 420 µg/L. C_9-C_{10} Aromatics were detected in wells MW10 (229 µg/L), MW18 (2,840 µg/L), MW19 (579 µg/L), MW22 (240 µg/L) and GW06 (2,490 µg/L) at concentrations exceeding the 2L GWQS for C_9-C_{22} Aromatics (210 µg/L). C_9-C_{12} Aliphatics were detected in well MW18 (8,000 µg/L) at a concentration exceeding the 2L GWQS for C_9-C_{18} Aliphatics (4,200 µg/L). No GCLs have been established for MADEP fractions. All other detections were either less than the applicable 2L GWQS or reported as BMDL.

A trip blank was analyzed as for quality control of the samples. The trip blanks were analyzed for VOCs and MADEP VPH compounds. No compounds were detected in the trip blanks. Other QC samples were run by the lab as required by the analytical methods. These QC samples include laboratory control spikes, method blanks, prep blanks, etc.

4.2.2 DECEMBER 2008 RESULTS

For the December 2008 sampling event, groundwater samples were again collected from 13 groundwater monitoring wells (UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW15, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06) using the same techniques as previously described. The samples were kept in an iced cooler and sent under chain of custody to SGS in Wilmington, NC (NC Certification Number 481). As per the project scope of work, the samples were analyzed via EPA Method 602, EPA Method 625, and MADEP VPH.

The laboratory report and chain of custody documentation for the December 2008 sampling event is included in Appendix B, and the analytical data for the December 2008 sampling event is summarized in Table 4-3 and shown on Figure 4-4.

Of the thirteen groundwater monitoring wells sampled, seven (MW10, MW11, MW17, MW18, MW19, MW22, and GW06) exhibited groundwater contaminant concentrations above the 2L GWQS. In several instances the laboratory method detection limit exceeded the 2L GWQS. In addition, the method detection limit for 1,2-Dibromoethane (EDB) exceeded the GCL in sample UST1613-MW17. MADEP EPH analysis was not requested as part of NAVFAC Contract No. N40085-06-D-7006, Task Order No. 0015; therefore, only VPH analyses results are reported in the table.

EPA Method 602

Benzene was detected at concentrations exceeding the 2L GWQS of 1 µg/L in groundwater from wells MW11 (12.8 µg/L), MW17 (114 µg/L), MW18 (1.43 µg/L), and MW19 (64.3 µg/L). 1,2-Dibromoethane (EDB) was not detected in any sample, but the laboratory method detection limits exceeded the 2L GWQS in all samples and exceeded the GCL in sample MW17. Diisopropyl ether (DIPE) was not detected in any samples, but the laboratory method detection limit exceeded the 2L GWQS in well MW17. Toluene was detected above the 2L GWQS of 1,000 µg/L, but below the GCL (257,500 µg/L) in monitoring well MW17 at a concentration of 6,130 µg/L. Total Xylenes were detected above the 2L GWQS (530 µg/L), but below the GCL of 87,500 µg/L in monitoring well MW17 (2,700 µg/L). All other EPA Method 602 detections were either below the applicable groundwater quality standard or BMDL.

EPA Method 625

The number of EPA Method 625 compounds detected decreased from the July 2008 sampling event. Bis(2-ethylhexyl)phthalate was detected in well MW18 (4.49 µg/L) at a concentration exceeding the 2L GWQS (2.5 µg/L) but below the GCL (2,500 µg/L). Naphthalene was detected in monitoring wells MW17, MW22, and GW06 at concentrations of 164 µg/L, 83.9 µg/L, and 44.4 µg/L, respectively. These concentrations exceed the 2L GWQS (21 µg/L), but are below the GCL (15,500 µg/L). All other EPA 625 compounds were either below the applicable groundwater quality standard or BMDL.

MADEP VPH

Only MADEP VPH was analyzed during the December 2008 semi-annual monitoring event. Non-compliant concentrations of C_5-C_8 Aliphatics were detected in monitoring wells MW17 (16,300 µg/L), MW18 (438 µg/L), MW19 (469 µg/L), and GW06 (777 µg/L) as compared to the 2L GWQS of 420 µg/L. C_9-C_{10} Aromatics were detected in wells MW10, MW17, MW22, and GW06 at 331 µg/L, 2,840 µg/L, 720 µg/L, and 1,180 µg/L, respectively. These concentrations exceed the C_9-C_{22} Aromatics standard of 210 µg/L. C_9-C_{12} Aliphatics were also detected in well MW17 at a concentration of 7,330 µg/L, which is greater than the C_9-C_{18} Aliphatics 2L GWQS of 4,200 µg/L. No GCLs have been established for MADEP fractions.

A field duplicate sample was collected and laboratory-prepared trip blanks were analyzed as QC samples. The trip blanks were analyzed for VOCs and MADEP VPH. No VOCs were detected in the trip blanks. The duplicate sample results were comparable to its counterpart.

Other QC samples were run by the lab as required by the analytical methods. These QC samples include laboratory control spikes, method blanks, prep blanks, etc.

5.0 iSOC® SYSTEM O&M

iSOC® units were operated and maintained in monitoring wells GW06 and MW22 based upon previous annual monitoring report recommendations. Upon inspection of the site at the start of the monitoring period, it was discovered the iSOC® units in monitoring wells GW06 and MW22 were not operating. The units were repaired, re-installed in the wells, and began operating on August 22, 2008. It is unknown how long the units were down.

iSOC® is an oxygen delivery technology called in-situ Submerged Oxygen Curtain. In this application, the units are utilized to enhance natural attenuation of hydrocarbon contaminated groundwater by infusing high levels of oxygen into groundwater through existing monitoring wells. Oxygen is infused into the water in such a way that creates large quantities of dissolved oxygen (DO) without sparging.

The systems were checked monthly to ensure that an adequate supply of oxygen was available to the system and to monitor dissolved oxygen concentrations in the two wells. Dissolved oxygen levels exceeded the YSI meter range of 20 mg/L during each monthly O&M event. The July 2008 groundwater samples were collected before the iSOC® units were correctly operating.

Comparison of the July 2008 and December 2008 groundwater sampling data indicates an overall decrease in both the number of compounds detected and the concentrations at which they were present. It appears the data supports the effectiveness of the iSOC® units in monitoring wells GW06 and MW22 after approximately four months of monitored operation.

6.0 RECEPTOR SURVEY

Osage reassessed site conditions and concluded that the receptor survey previously completed by CATLIN in the RAO & RCAP dated February 12, 2004 requires an update. There have been no changes to land use at the site or the surrounding areas; however, the site was classified as low risk. Contaminants were detected at concentrations above GCLs during this monitoring period; therefore, the risk classification for the site should be increased to Intermediate.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on fieldwork and laboratory analytical data gathered during the 2008-2009 monitoring period, the following conclusions are presented.

1. No measurable free product was detected in any of the site wells during the groundwater gauging events.

2. VOCs, SVOCs, and MADEP compounds were detected above 2L GWQSs in several wells during the July and December 2008 monitoring events.

3. Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Chrysene, and Dibenzo(a,h)anthracene were detected at concentrations exceeding their applicable GCLs during the July 2008 monitoring event. No detected compounds exceeded the established GCLs, however, during the December 2008 event. No GCLs have been established for MADEP compounds.

3. The iSOC® units continue to operate as designed and appear to have reduced contaminant concentrations in wells MW22 and GW06.

Groundwater contaminant concentrations at the site have shown some recent variation. SVOC compounds were detected in groundwater at the site at levels above the GCLs during the July 2008 sampling event. The most impacted well appeared to be MW22, which is where the GCL exceedences were observed.

Installation and operation of iSOC® units in the well appears to have reduced contaminant levels. Osage recommends the continued operation of these units in the current two monitoring wells – GW06 and MW22. The units may be rotated to other impacted wells, such as MW17, as needed.

Osage also recommends continuing gauging and sampling of site monitoring wells to track attenuation and rebound. Groundwater gauging and sampling should be conducted on a semi-annual basis and should include those monitoring wells in the vicinity of the historical contaminant plume. Those include monitoring wells UST1613-MW05, UST1613-MW06, UST1613-MW10, UST1613-MW11, UST1613-MW16, UST1613-MW17, UST1613-MW18, UST1613-MW19, UST1613-MW20, UST1613-MW21, UST1613-MW22, and IR78-GW06. Groundwater samples should be analyzed for contaminants using EPA Methods 602, 610, and MADEP VPH, and data should be summarized and reported in an annual groundwater monitoring report.

8.0 REFERENCES

Catlin Engineers and Scientists, *Leaking Underground Storage Tank Corrective Action Plan, Building 1613, USTs 1613-1-4, Marine Corps Base Camp Lejeune, North Carolina,* May 1998.

Catlin Engineers and Scientists, *Remedial Action Optimization & Revised Corrective Action Plan, Building 1613, Marine Corps Base Camp Lejeune, North Carolina,* February 2004.
.

GeoSciences, Inc., *UST Closure Consulting Services, Building 1613, Camp Lejeune, North Carolina*, March 8, 1995.

North Carolina Department of Environment and Natural Resources, Division of Waste Management, Underground Storage Tank Section, *Guidelines for Assessment and Corrective Action*, April 2001.

Shaw Environment and Infrastructure, *Annual Groundwater Monitoring Report 2004, Building 1613, Marine Corps Base Camp Lejeune, North Carolina,* July 2004.

Sovereign Consulting, Inc., *Final Annual Monitoring Report Building 1613, Marine Corps Base Camp Lejeune, North Carolina,* June 29, 2008.

TABLES

Table 4-1
Groundwater Elevation and Product Thickness Data
Building 1613
MCB Camp Lejeune
Jacksonville, North Carolina

Monitoring Well	Top Of Casing Elevation (ft msl)	Well Type	Depth to Product	Depth to Water	Groundwater Elevation	Depth to Product	Depth to Water	Groundwater Elevation
			7/9/2008			12/10/2008		
UST1613-MW05	24.41	II	NA	8.17	16.24	NA	7.26	17.15
UST1613-MW06	27.28	II	NA	15.56	11.72	NA	15.41	11.87
UST1613-MW10	28.21	II	NA	16.22	11.99	NA	16.01	12.2
UST1613-MW11	24.73	II	NA	12.39	12.34	NA	12.02	12.71
UST1613-MW15	28.72	III	NA	18.56	10.16	NA	18.13	10.59
UST1613-MW16	26.65	III	NA	14.8	11.85	NA	14.58	12.07
UST1613-MW17	25.13	II	NA	13.5	11.63	NA	13.17	11.96
UST1613-MW18	24.40	II	NA	12.64	11.76	NA	13.35	11.05
UST1613-MW19	24.29	II	NA	12.63	11.66	NA	12.36	11.93
UST1613-MW20	25.23	II	NA	13.3	11.93	NA	13.11	12.12
UST1613-MW21	25.77	II	NA	13.26	12.51	NA	12.99	12.78
UST1613-MW22	25.04	II	NA	13.02	12.02	NA	12.88	12.16
IR78-GW06	27.60	II	NA	15.84	11.76	NA	13.60	14

TOC = Top of Casing
msl = mean sea level
NA= Not Applicable
NM = not measured

TABLE 4-2
ANALYTICAL DATA FOR JULY 2008 SAMPLING EVENT

Incident Name and No.: 20660 Building 1613

Well ID	Contaminant of Concern →		EPA 602							EPA 625																		MADEP EPH/VPH*			
	Sample ID	Date Collected	Benzene	1,2-Dibromoethane (EDB)	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)flouranthene	Benzo (g,h,i) perylene	Benzo(k)flouranthene	Benzo(a)pyrene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	2,4 Dimethylphenol	Dibenzo (a,h)anthracene	Diethylphthalate	Flouranthene	Flourene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	All Other 625 Compounds	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics	C19-C36 Aliphatics
GCL (µg/L)			5,000	50	70,000	84,500	200,000	257,500	87,500	2,120	2,100	22	0.6	210	0.47	1.5	2,500	NE	0.8	140,000	0.25	NE	280	950	31	15,500	410	210	Varies	NE	NE	NE	NE
2L GWQS (µg/L)			1	0.0004	70	550	200	1,000	530	80	2,100	0.0479	0.0479	210	0.479	0.00479	2.5	100	4.79	140	0.0047	5,000	280	280	0.047	21	210	210	Varies	420	4,200	210	42,000
UST1613-MW05	UST1613-MW05	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.813	<0.955	<0.742	<0.781	<0.671	<0.600	<0.693	1.15J	<0.486	<0.606	<1.77	<0.480	<0.808	<0.770	<0.791	<2.49	<0.993	<0.486	<2.25	BMDL	<100	<100	<100	NA
UST1613-MW06	UST1613-MW06	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.806	<0.947	<0.736	<0.774	<0.666	<0.595	<0.687	**304E**	<0.482	<0.601	<1.75	<0.476	<0.801	<0.763	<0.785	<2.47	<0.985	<0.482	<2.23	BMDL	<100	<100	<100	NA
UST1613-MW10	UST1613-MW10	7/10/2008	<0.177	NA	<0.253	3.48	<0.306	1.75	24.11	<0.778	<0.925	<0.719	<0.756	<0.650	<0.581	<0.671	<0.443	0.740J	<0.587	<1.71	<0.465	1.22J	<0.745	<0.766	<2.42	4.02J	<0.470	<2.18	BMDL	<100	139	**229**	NA
UST1613-MW11	UST1613-MW11	7/10/2008	**2.12**	NA	<0.253	0.198J	<0.306	<0.313	<0.886	<0.804	<0.944	<0.734	<0.771	<0.663	<0.593	<0.685	**40.6**	<0.480	<0.599	<1.75	<0.475	<0.798	<0.761	<0.782	<2.46	2.86J	<0.480	<2.23	BMDL	<100	<100	<100	NA
UST1613-MW15	UST1613-MW15	7/9/2008	<0.177	<0.287	0.761J	<0.19	84.7	<0.313	<0.886	<0.805	<0.945	<0.734	<0.772	<0.664	<0.594	<0.686	**32.9**	<0.481	<0.599	<1.75	<0.475	<0.799	<0.761	<0.783	<2.47	<0.983	<0.481	<2.23	BMDL	142	<100	<100	NA
UST1613-MW16	UST1613-MW16	7/10/2008	**2.60**	NA	<0.253	<0.19	8.72	<0.313	<0.886	<0.820	<0.964	<0.749	<0.787	<0.667	<0.606	<0.699	**30.1**	<0.490	<0.611	<1.78	<0.485	<0.815	<0.776	<0.798	<2.52	<1.00	<4.90	<2.27	BMDL	<100	<100	<100	NA
UST1613-MW17	UST1613-MW17	7/9/2008	**26.9**	<0.287	<0.253	4.82	1.55J	6.29	26.5	<0.893	<1.05	<0.815	<0.857	<0.737	<0.659	<0.761	<0.492	<0.534	<0.665	<1.94	<0.528	<0.887	<0.845	<0.869	<2.74	4.86J	<0.534	<2.48	BMDL	237	<100	<100	NA
UST1613-MW18	UST1613-MW18	7/9/2008	**292J**	<91.8	**97.6J**	229J	<97.9	**6,990**	**2,658**	<0.865	<1.02	<0.790	<0.830	<0.714	<0.639	<0.738	<0.476	<0.517	<0.645	<1.88	<0.511	<0.859	<0.819	<0.842	<2.65	**241E**	<0.517	<2.40	BMDL	**14,800**	**8,000**	**2,840**	NA
UST1613-MW19	UST1613-MW19	7/9/2008	0.836J	<0.287	<0.253	1.30	<0.306	10.1	27.5	<0.820	<0.963	<0.748	<0.787	<0.677	<0.605	<0.699	<0.451	<0.490	<0.611	<1.78	<0.484	<0.814	<0.776	<0.798	<2.51	10.6	<0.490	<2.27	BMDL	**663**	238	**579**	NA
UST1613-MW20	UST1613-MW20	7/9/2008	<0.177	NA	<0.253	<0.19	<0.306	<0.313	<0.886	<0.793	<0.931	<0.723	<0.761	<0.654	<0.585	<0.676	**15.6**	<0.473	<0.590	<1.72	<0.468	<0.787	<0.750	<0.771	<2.43	<0.968	<0.473	<2.20	BMDL	<100	<100	<100	NA
UST1613-MW21	UST1613-MW21	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.815	<0.957	<0.744	<0.782	<0.673	<0.602	<0.695	**40.2**	<0.487	<0.607	<1.77	<0.481	<0.810	<0.771	<0.793	<2.50	<0.996	<0.487	<2.26	BMDL	<100	<100	<100	NA
UST1613-MW22	UST1613-MW22	7/9/2008	**10.2**	<2.3	<2.02	57.4	<2.45	9.76	144.6	1.91J	1.80J	**9.70**	**16.7**	8.96	**7.90**	**10.3**	**9.60**	<0.472	**14.9**	<1.72	**0.477J**	<0.785	33.2	1.54J	**8.48**	**27.9**	24.2	26.2	BMDL	268	446	**240**	NA
IR78-GW06	IR78-GW06	7/9/2008	**6.32J**	<4.05	<4.59	123	<4.9	106	**685**	<0.851	<1.0	<0.777	<0.817	<0.703	<0.629	<0.726	0.629J	<0.509	<0.634	25.8	<0.503	<0.846	<0.806	<0.829	<2.61	**144E**	<0.509	<2.36	BMDL	**1,910**	1,980	**2,490**	NA
TRIP BLANK	TRIP BLANK	7/16/2008	<0.177	<0.253	<0.253	<0.19	<0.306	<0.313	<0.886	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	<100	<100	NA

All results in micrograms per liter (µg/L).
Bold results indicate detected concentration above 2L GWQS or GCL.
BMDL = Below Method Detection Limits
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
* Samples only analyzed per MADEP VPH.
NA = Not Analyzed
NE = Not Established
E= Estimated concentration, exceeds the calibration range.
J = Estimated concentration, below the calibration range and above the MDL.

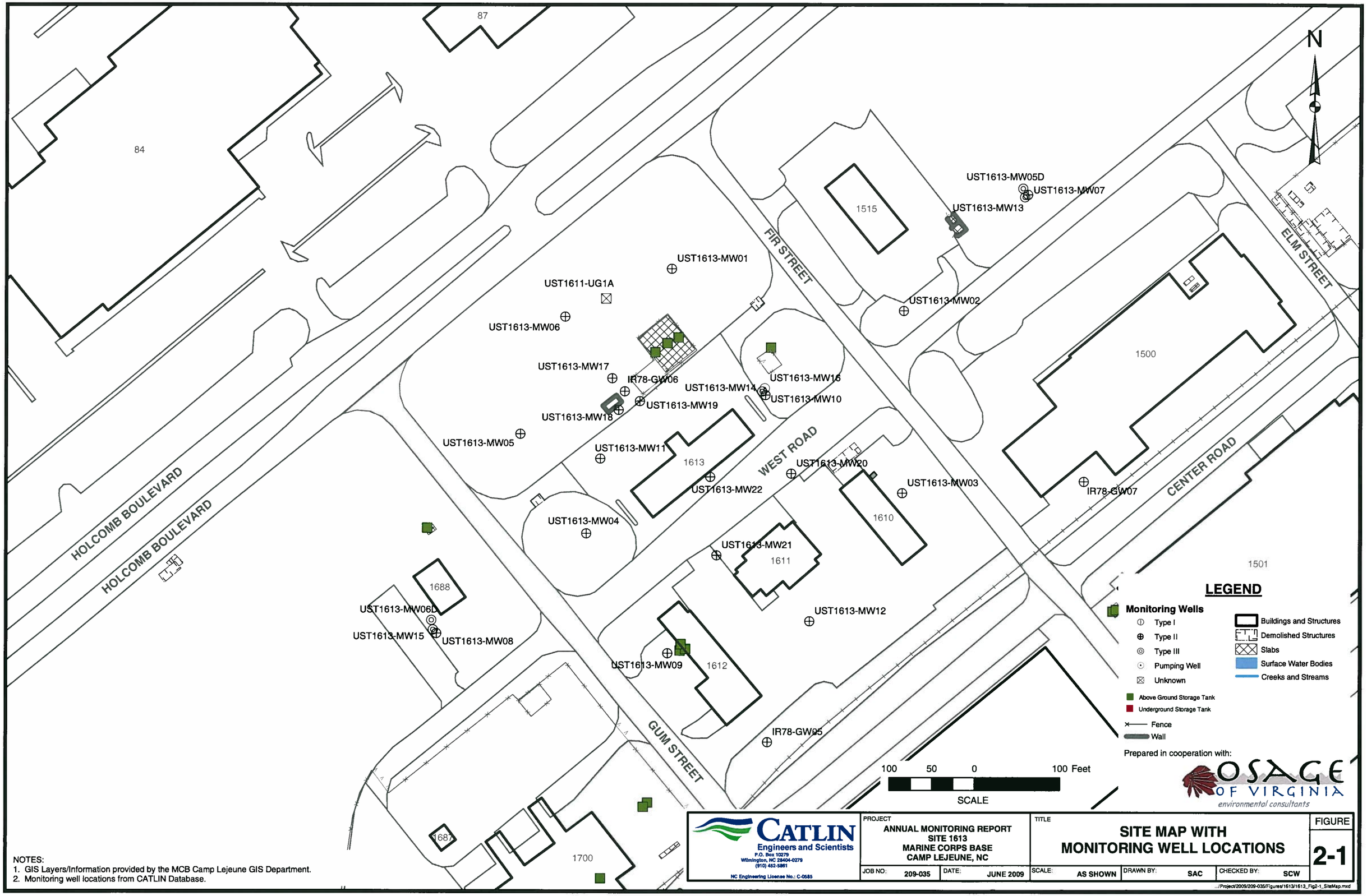
TABLE 4-3
ANALYTICAL DATA FOR DECEMBER 2008 SAMPLING EVENT

Incident Name and No.: 20660 Building 1613

Well ID	Contaminant of Concern →		EPA 602							EPA 625				MADEP EPH/VPH*			
	Sample ID	Date Collected	Benzene	1,2-Dibromoethane (EDB)	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes	Bis(2-ethylhexyl)phthalate	2,4 Dimethylphenol	Naphthalene	All Other 625 Compounds	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics	C19-C36 Aliphatics
GCL (µg/L)			5,000	50	70,000	84,500	200,000	257,500	87,500	2,500	140,000	15,500	Varies	NE	NE	NE	NE
2L GWQS (µg/L)			1	0.0004	70	550	200	1,000	530	2.5	140	21	Varies	420	4,200	210	42,000
UST1613-MW05	USTBldg1613-MW05	12/10/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	0.906J	<1.63	<0.916	BMDL	<100	<100	<100	NA
UST1613-MW06	USTBldg1613-MW06	12/11/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.425	<1.68	<0.944	BMDL	<100	<100	<100	NA
UST1613-MW10	USTBldg1613-MW10	12/12/2008	<0.708	<1.15	<1.01	6.6	<1.22	2.08J	62.4	<0.478	<1.89	12.2	BMDL	158	215	**331**	NA
UST1613-MW11	USTBldg1613-MW11	12/11/2008	**12.8**	<0.287	<0.253	13.6	<0.306	8.23	20.37	<0.419	<1.65	7.25	BMDL	235	<100	<100	NA
UST1613-MW15	USTBldg1613-MW15	12/12/2008	<1.77	<2.87	<2.53	<1.9	57.7	<3.13	<8.86	<0.431	<1.70	<0.956	BMDL	174	<100	<100	NA
UST1613-MW16	USTBldg1613-MW16	12/12/2008	0.708J	<0.287	<0.253	<0.19	11.1	<0.313	<0.886	<0.416	<1.64	<0.924	BMDL	<100	<100	<100	NA
UST1613-MW17	USTBldg1613-MW17	12/11/2008	**114J**	<115	<101	<76	<122	**6,130**	**2,700**	<0.424	<1.68	**164E**	BMDL	**16,300**	**7,330**	**2,840**	NA
UST1613-MW18	USTBldg1613-MW18	12/11/2008	**1.43**	<0.287	<0.253	<0.19	<0.306	<0.313	5.98	**4.49J**	<1.65	2.14J	BMDL	**438**	<100	196	NA
UST1613-MW19	USTBldg1613-MW19	12/11/2008	**64.3**	<1.15	<1.01	1.40J	<1.22	<1.25	<3.54	<0.480	<1.89	4.15J	BMDL	**469**	<100	<100	NA
UST1613-MW20	USTBldg1613-MW20	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.416	<1.64	<0.924	BMDL	<100	<100	<100	NA
UST1613-MW21	USTBldg1613-MW21	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.420	<1.66	<0.931	BMDL	<100	<100	<100	NA
UST1613-MW22	USTBldg1613-MW22	12/12/2008	<4.43	<7.18	<6.33	136	<7.65	11.3J	295	0.968J	39.9	**83.9**	BMDL	302	929	**720**	NA
IR78-GW06	IRGW06	12/12/2008	<2.83	<4.59	<4.05	23.5	<4.9	<5.01	167.8	2.09J	<1.69	**44.4**	BMDL	**777**	609	**1,180**	NA
UST1613-DUPLICATE	USTBldg1613-DUPLICATE	12/12/2008	<2.83	<4.59	<4.05	141	<4.9	18.8	322	0.511	36.8	**82.1**	BMDL	347	1,010	**776**	NA
TRIP BLANK	TRIP BLANK	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	NA	NA	NA	NA	<100	<100	<100	NA

All results in micrograms per liter (µg/L).
Bold results indicate detected concentration above 2L GWQS or GCL.
* Samples only analyzed per MADEP VPH.
BMDL = Below Method Detection Limits
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
NA = Not Analyzed
NE = Not Established
E= Estimated concentration, exceeds the calibration range.
J = Estimated concentration, below the calibration range and above the method detection limit
UST1613-MW19 was resampled on 12/17/08 and analyzed per EPA 625, the original 625 sample jar was broken during shipment.

FIGURES



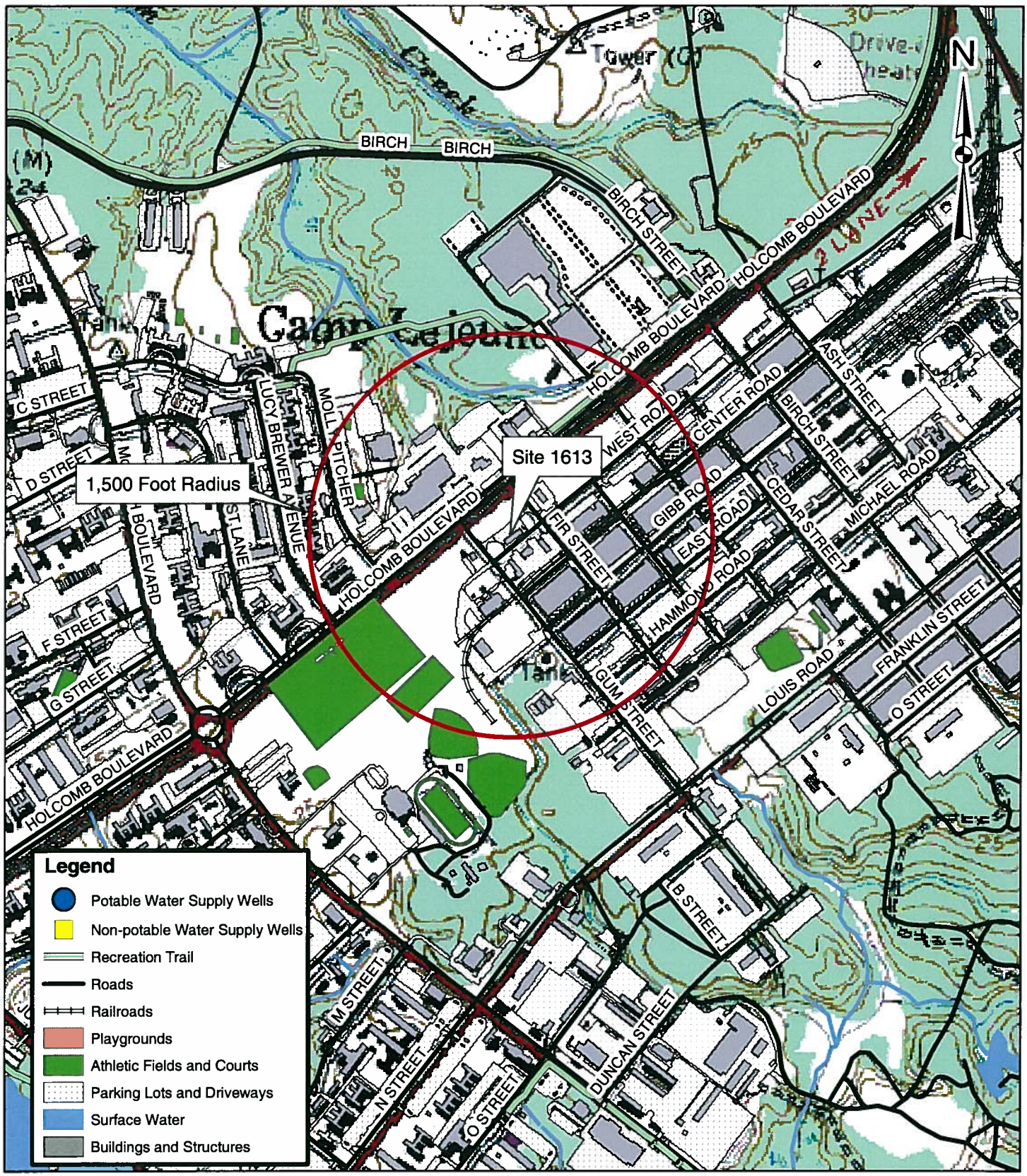
NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.

CATLIN
Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

PROJECT	TITLE	FIGURE
ANNUAL MONITORING REPORT SITE 1613 MARINE CORPS BASE CAMP LEJEUNE, NC	SITE MAP WITH MONITORING WELL LOCATIONS	2-1

JOB NO:	DATE:	SCALE:	DRAWN BY:	CHECKED BY:
209-035	JUNE 2009	AS SHOWN	SAC	SCW

.../Project/2009/209-035/Figures/1613/1613_Fig2-1_SiteMap.mxd



Prepared in cooperation with:

OSAGE OF VIRGINIA
environmental consultants

1,000 500 0 1,000 Feet

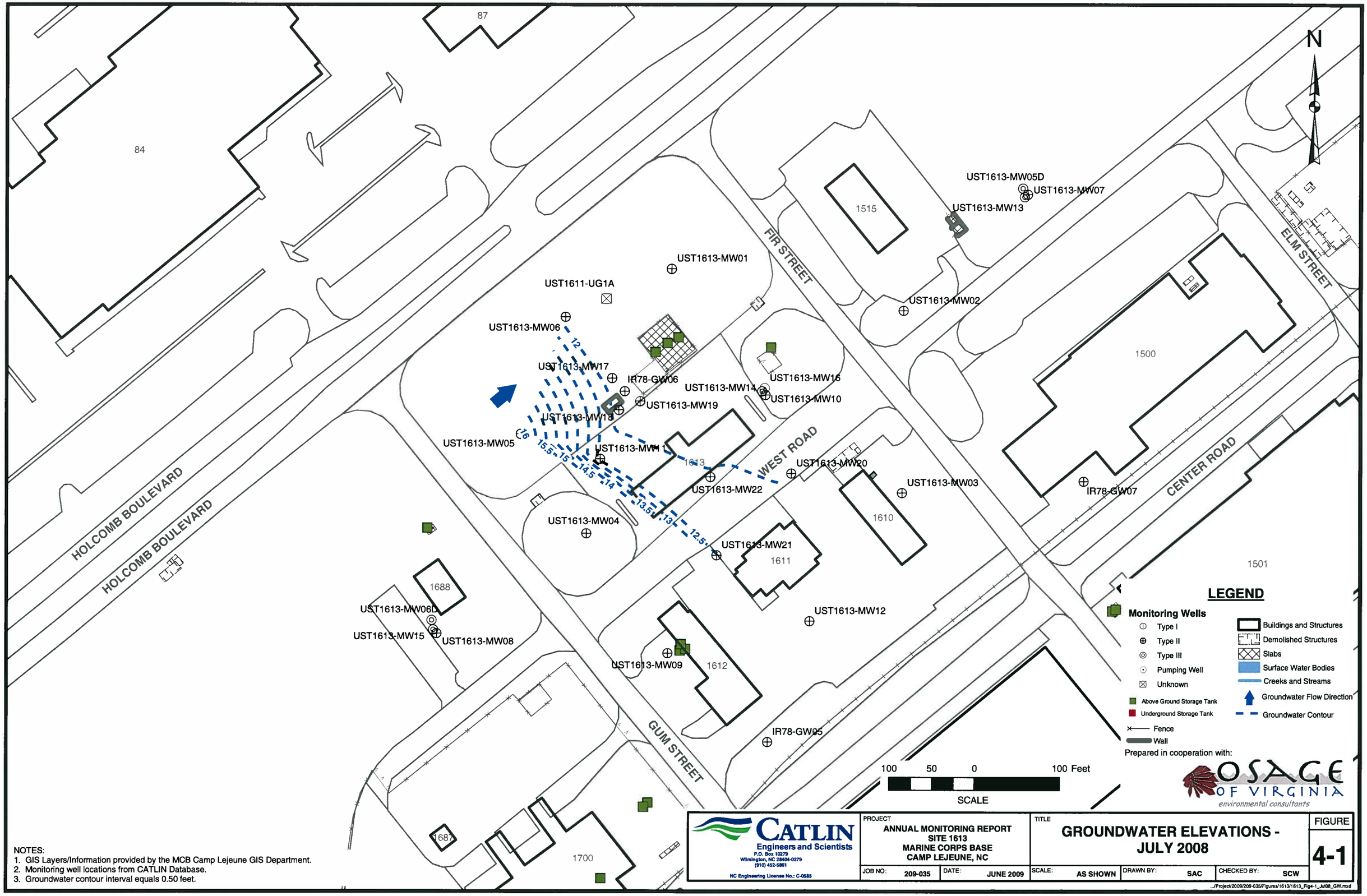
SCALE

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

CATLIN
Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

PROJECT	TITLE	FIGURE
ANNUAL MONITORING REPORT SITE 1613 MARINE CORPS BASE CAMP LEJEUNE, NC	SITE LOCATION MAP	3-1

JOB NO.	DATE	SCALE	DRAWN BY	CHECKED BY
209-035	JUNE 2009	AS SHOWN	SAC	NH



NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.
3. Groundwater contour interval equals 0.50 feet.

CATLIN
Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

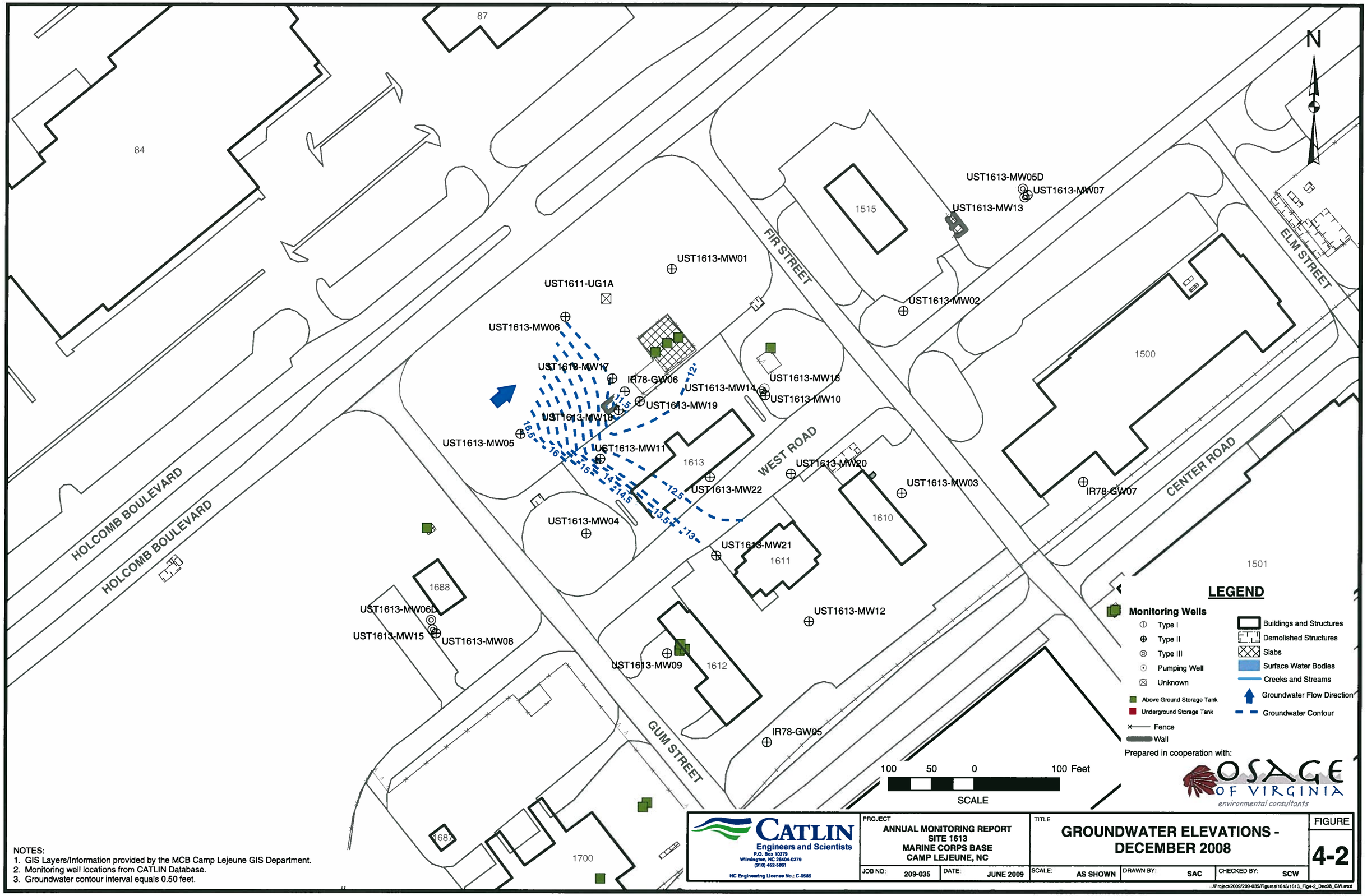
PROJECT: ANNUAL MONITORING REPORT
SITE 1613
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE: GROUNDWATER ELEVATIONS - JULY 2008

FIGURE 4-1

JOB NO:	DATE:	SCALE:	DRAWN BY:	CHECKED BY:
209-035	JUNE 2009	AS SHOWN	SAC	SCW

.../Project/2009/209-035/Figures/1613/1613_Fig4-1_Jul08_GW.mxd



NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.
3. Groundwater contour interval equals 0.50 feet.

CATLIN
Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

PROJECT	TITLE	FIGURE
ANNUAL MONITORING REPORT SITE 1613 MARINE CORPS BASE CAMP LEJEUNE, NC	GROUNDWATER ELEVATIONS - DECEMBER 2008	4-2

JOB NO:	DATE:	SCALE:	DRAWN BY:	CHECKED BY:
209-035	JUNE 2009	AS SHOWN	SAC	SCW

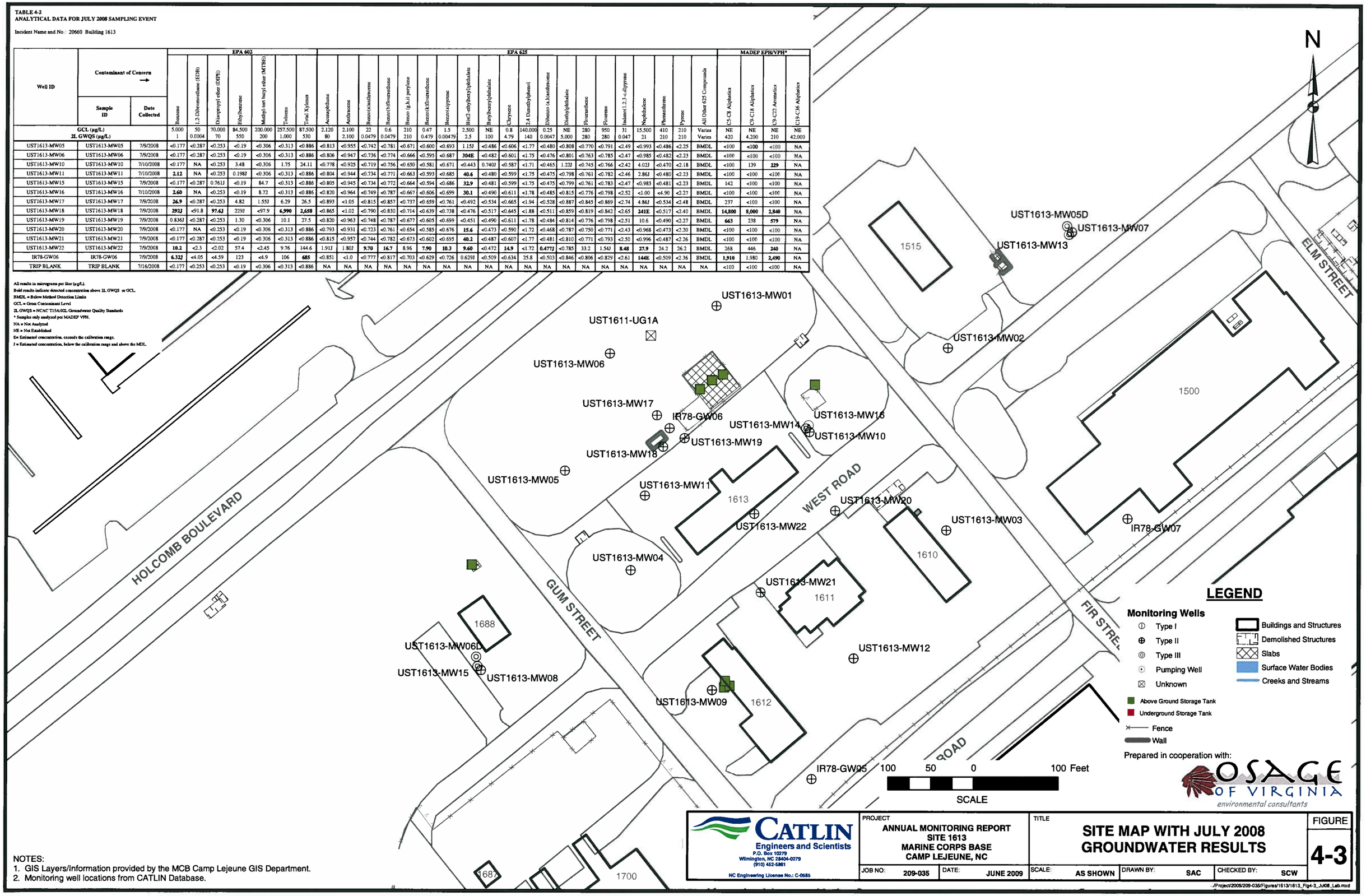
../Project/2009/209-035/Figures/1613/1613_Fig4-2_Dec08_GW.mxd

TABLE 4-2
ANALYTICAL DATA FOR JULY 2008 SAMPLING EVENT

Incident Name and No.: 20660 Building 1613

Well ID	Contaminant of Concern →		EPA 602							EPA 625																					MADEP EPH/VPH*			
	Sample ID	Date Collected	Benzene	1,2-Dibromoethane (EDB)	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes	Acenaphthene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo (g,h,i) perylene	Benzo(k)fluoranthene	Benzo(a)pyrene	Bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	2,4 Dimethylphenol	Dibenzo (a,h)anthracene	Diethylphthalate	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	All Other 625 Compounds	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics	C19-C36 Aliphatics
GCL (µg/L) / 2L GWQS (µg/L)			5.000 1	50 0.0004	70.000 70	84.500 550	200.000 200	257.500 1.000	87.500 530	2.120 80	2.100 2.100	22 0.0479	0.6 0.0479	210 210	0.47 0.479	1.5 0.00479	2.500 2.5	NE 100	0.8 4.79	140.000 140	0.25 0.0047	NE 5.000	280 280	950 280	31 0.047	15.500 21	410 210	210 210	Varies Varies	NE 420	NE 4.200	NE 210	NE 42.000
UST1613-MW05	UST1613-MW05	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.813	<0.955	<0.742	<0.781	<0.671	<0.600	<0.693	1.15J	<0.486	<0.606	<1.77	<0.480	<0.808	<0.770	<0.791	<2.49	<0.993	<0.486	<2.25	BMDL	<100	**<100**	<100	NA
UST1613-MW06	UST1613-MW06	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.806	<0.947	<0.736	<0.774	<0.666	<0.595	<0.687	**304E**	<0.482	<0.601	<1.75	<0.476	<0.801	<0.763	<0.785	<2.47	<0.985	<0.482	<2.23	BMDL	<100	<100	<100	NA
UST1613-MW10	UST1613-MW10	7/10/2008	<0.177	NA	<0.253	3.48	<0.306	1.75	24.11	<0.778	<0.925	<0.719	<0.756	<0.650	<0.581	<0.671	<0.443	0.740J	<0.587	<1.71	<0.465	1.22J	<0.745	<0.766	<2.42	4.02J	<0.470	<2.18	BMDL	<100	139	**229**	NA
UST1613-MW11	UST1613-MW11	7/10/2008	**2.12**	NA	<0.253	0.198J	<0.306	<0.313	<0.886	<0.804	<0.944	<0.734	<0.771	<0.663	<0.593	<0.685	**40.6**	<0.480	<0.599	<1.75	<0.475	<0.798	<0.761	<0.782	<2.46	2.86J	<0.480	<2.23	BMDL	<100	<100	<100	NA
UST1613-MW15	UST1613-MW15	7/9/2008	<0.177	<0.287	0.761J	<0.19	84.7	<0.313	<0.886	<0.805	<0.945	<0.734	<0.772	<0.664	<0.594	<0.686	**32.9**	<0.481	<0.599	<1.75	<0.475	<0.799	<0.761	<0.783	<2.47	<0.983	<0.481	<2.23	BMDL	142	<100	<100	NA
UST1613-MW16	UST1613-MW16	7/10/2008	**2.60**	NA	<0.253	<0.19	8.72	<0.313	<0.886	<0.820	<0.964	<0.749	<0.787	<0.667	<0.606	<0.699	**30.1**	<0.490	<0.611	<1.78	<0.485	<0.815	<0.776	<0.798	<2.52	<1.00	<4.90	<2.27	BMDL	<100	<100	<100	NA
UST1613-MW17	UST1613-MW17	7/9/2008	**26.9**	<0.287	<0.253	4.82	1.55J	6.29	26.5	<0.893	<1.05	<0.815	<0.857	<0.737	<0.659	<0.761	<0.492	<0.534	<0.665	<1.94	<0.528	<0.887	<0.845	<0.869	<2.74	4.86J	<0.534	<2.48	BMDL	237	<100	<100	NA
UST1613-MW18	UST1613-MW18	7/9/2008	**292J**	<91.8	**97.6J**	229J	<97.9	**6,990**	**2,658**	<0.865	<1.02	<0.790	<0.830	<0.714	<0.639	<0.738	<0.476	<0.517	<0.645	<1.88	<0.511	<0.859	<0.819	<0.842	<2.65	**241E**	<0.517	<2.40	BMDL	**14,800**	**8,000**	**2,840**	NA
UST1613-MW19	UST1613-MW19	7/9/2008	0.836J	<0.287	<0.253	1.30	<0.306	10.1	27.5	<0.820	<0.963	<0.748	<0.787	<0.677	<0.605	<0.699	<0.451	<0.490	<0.611	<1.78	<0.484	<0.814	<0.776	<0.798	<2.51	10.6	<0.490	<2.27	BMDL	**663**	238	**579**	NA
UST1613-MW20	UST1613-MW20	7/9/2008	<0.177	NA	<0.253	<0.19	<0.306	<0.313	<0.886	<0.793	<0.931	<0.723	<0.761	<0.654	<0.585	<0.676	**15.6**	<0.473	<0.590	<1.72	<0.468	<0.787	<0.750	<0.771	<2.43	<0.968	<0.473	<2.20	BMDL	<100	<100	<100	NA
UST1613-MW21	UST1613-MW21	7/9/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.815	<0.957	<0.744	<0.782	<0.673	<0.602	<0.695	**40.2**	<0.487	<0.607	<1.77	<0.481	<0.810	<0.771	<0.793	<2.50	<0.996	<0.487	<2.26	BMDL	<100	<100	<100	NA
UST1613-MW22	UST1613-MW22	7/9/2008	**10.2**	<2.3	<2.02	57.4	<2.45	9.76	144.6	1.91J	1.80J	**9.70**	**16.7**	8.96	**7.90**	**10.3**	**9.60**	<0.472	**14.9**	<1.72	**0.477J**	<0.785	33.2	1.54J	**8.48**	**27.9**	24.2	26.2	BMDL	268	446	**240**	NA
IR78-GW06	IR78-GW06	7/9/2008	**6.32J**	<4.05	<4.59	123	<4.9	106	**685**	<0.851	<1.0	<0.777	<0.817	<0.703	<0.629	<0.726	0.629J	<0.509	<0.634	25.8	<0.503	<0.846	<0.806	<0.829	<2.61	**144E**	<0.509	<2.36	BMDL	**1,910**	1,980	**2,490**	NA
TRIP BLANK	TRIP BLANK	7/16/2008	<0.177	<0.253	<0.253	<0.19	<0.306	<0.313	<0.886	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<100	<100	<100	NA

All results in micrograms per liter (µg/L).
Bold results indicate detected concentration above 2L GWQS or GCL.
BMDL = Below Method Detection Limits
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
* Samples only analyzed per MADEP VPH.
NA = Not Analyzed
NE = Not Established
E= Estimated concentration, exceeds the calibration range.
J = Estimated concentration, below the calibration range and above the MDL.



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown

- Above Ground Storage Tank
- Underground Storage Tank
- Fence
- Wall

- Buildings and Structures
- Demolished Structures
- Slabs
- Surface Water Bodies
- Creeks and Streams

Prepared in cooperation with:
OSAGE OF VIRGINIA environmental consultants

NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.

CATLIN Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

PROJECT: ANNUAL MONITORING REPORT
SITE 1613
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE: SITE MAP WITH JULY 2008 GROUNDWATER RESULTS

FIGURE 4-3

JOB NO: 209-035 | DATE: JUNE 2009 | SCALE: AS SHOWN | DRAWN BY: SAC | CHECKED BY: SCW

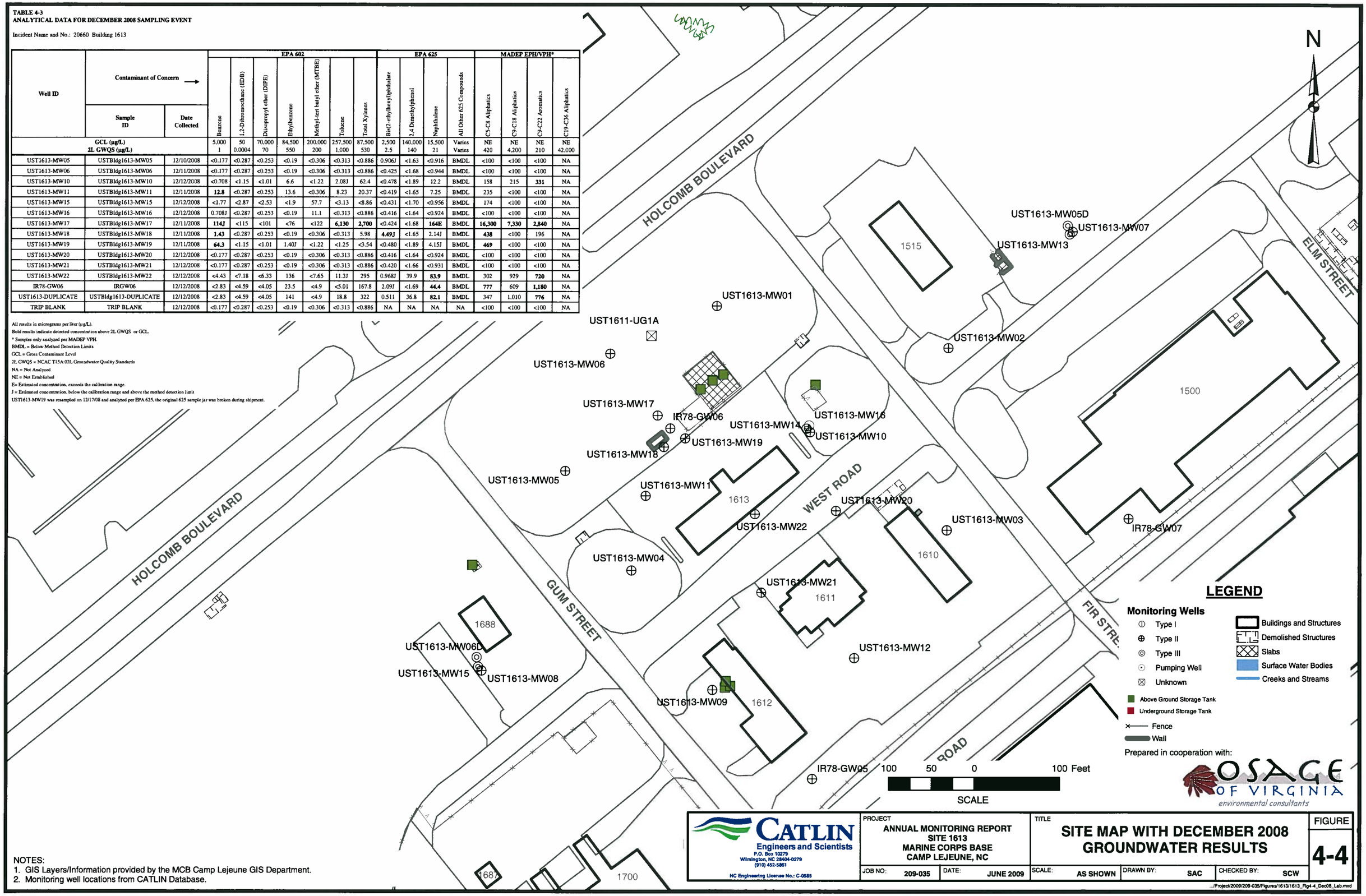
J:\Project\2009\209-035\Figures\1613\1613_Fig4-3_Jul08_Lab.mxd

TABLE 4-3
ANALYTICAL DATA FOR DECEMBER 2008 SAMPLING EVENT

Incident Name and No.: 20660 Building 1613

Well ID	Contaminant of Concern →		EPA 602							EPA 625				MADEP EPH/VPH*			
	Sample ID	Date Collected	Benzene	1,2-Dibromoethane (EDB)	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes	Bis(2-ethylhexyl)phthalate	2,4 Dimethylphenol	Naphthalene	All Other 625 Compounds	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics	C19-C36 Aliphatics
GCL (µg/L) 2L GWQS (µg/L)			5,000 1	50 0.0004	70,000 70	84,500 550	200,000 200	257,500 1,000	87,500 530	2,500 2.5	140,000 140	15,500 21	Varies Varies	NE 420	NE 4,200	NE 210	NE 42,000
UST1613-MW05	USTBldg1613-MW05	12/10/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	0.906J	<1.63	<0.916	BMDL	<100	<100	<100	NA
UST1613-MW06	USTBldg1613-MW06	12/11/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.425	<1.68	<0.944	BMDL	<100	<100	<100	NA
UST1613-MW10	USTBldg1613-MW10	12/12/2008	<0.708	<1.15	<1.01	6.6	<1.22	2.08J	62.4	<0.478	<1.89	12.2	BMDL	158	215	**331**	NA
UST1613-MW11	USTBldg1613-MW11	12/11/2008	**12.8**	<0.287	<0.253	13.6	<0.306	8.23	20.37	<0.419	<1.65	7.25	BMDL	235	<100	<100	NA
UST1613-MW15	USTBldg1613-MW15	12/12/2008	<1.77	<2.87	<2.53	<1.9	57.7	<3.13	<8.86	<0.431	<1.70	<0.956	BMDL	174	<100	<100	NA
UST1613-MW16	USTBldg1613-MW16	12/12/2008	0.708J	<0.287	<0.253	<0.19	11.1	<0.313	<0.886	<0.416	<1.64	<0.924	BMDL	<100	<100	<100	NA
UST1613-MW17	USTBldg1613-MW17	12/11/2008	**114J**	<115	<101	<76	<122	**6,130**	**2,700**	<0.424	<1.68	**164E**	BMDL	**16,300**	**7,330**	**2,840**	NA
UST1613-MW18	USTBldg1613-MW18	12/11/2008	**1.43**	<0.287	<0.253	<0.19	<0.306	<0.313	5.98	**4.49J**	<1.65	2.14J	BMDL	**438**	<100	196	NA
UST1613-MW19	USTBldg1613-MW19	12/11/2008	**64.3**	<1.15	<1.01	1.40J	<1.22	<1.25	<3.54	<0.480	<1.89	4.15J	BMDL	**469**	<100	<100	NA
UST1613-MW20	USTBldg1613-MW20	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.416	<1.64	<0.924	BMDL	<100	<100	<100	NA
UST1613-MW21	USTBldg1613-MW21	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	<0.420	<1.66	<0.931	BMDL	<100	<100	<100	NA
UST1613-MW22	USTBldg1613-MW22	12/12/2008	<4.43	<7.18	<6.33	136	<7.65	11.3J	295	0.968J	39.9	**83.9**	BMDL	302	929	**720**	NA
IR78-GW06	IRGW06	12/12/2008	<2.83	<4.59	<4.05	23.5	<4.9	<5.01	167.8	2.09J	<1.69	**44.4**	BMDL	**777**	609	**1,180**	NA
UST1613-DUPLICATE	USTBldg1613-DUPLICATE	12/12/2008	<2.83	<4.59	<4.05	141	<4.9	18.8	322	0.511	36.8	**82.1**	BMDL	347	1,010	**776**	NA
TRIP BLANK	TRIP BLANK	12/12/2008	<0.177	<0.287	<0.253	<0.19	<0.306	<0.313	<0.886	NA	NA	NA	NA	<100	<100	<100	NA

All results in micrograms per liter (µg/L).
Bold results indicate detected concentration above 2L GWQS or GCL.
* Samples only analyzed per MADEP VPH.
BMDL = Below Method Detection Limits
GCL = Gross Contaminant Level
2L GWQS = NCAC T15A:02L Groundwater Quality Standards
NA = Not Analyzed
NE = Not Established
E= Estimated concentration, exceeds the calibration range.
J = Estimated concentration, below the calibration range and above the method detection limit
UST1613-MW19 was resampled on 12/17/08 and analyzed per EPA 625, the original 625 sample jar was broken during shipment.



NOTES:
1. GIS Layers/Information provided by the MCB Camp Lejeune GIS Department.
2. Monitoring well locations from CATLIN Database.

CATLIN
Engineers and Scientists
P.O. Box 10279
Wilmington, NC 28404-0279
(910) 452-5861
NC Engineering License No.: C-0585

PROJECT: ANNUAL MONITORING REPORT
SITE 1613
MARINE CORPS BASE
CAMP LEJEUNE, NC

TITLE: SITE MAP WITH DECEMBER 2008 GROUNDWATER RESULTS

FIGURE 4-4

JOB NO: 209-035 | DATE: JUNE 2009 | SCALE: AS SHOWN | DRAWN BY: SAC | CHECKED BY: SCW

.../Project/2009/209-035/Figures/1613/1613_Fig4-4_Dec08_Lab.mxd

APPENDIX A

HISTORICAL DATA

TABLE 1

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 601

Contaminant of Concern →		1,3-Dichlorobenzene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Trichlorofluoromethane
Well ID	**Date**						
2L GWQS		170	70	0.7	100	2.8	2100
GCL		61500	70000	700	100000	2800	0
IR78-GW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW06	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	7/26/2007	BQL	19.90	BQL	0.19	**3.98**	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 1

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 601

Contaminant of Concern →		1,3-Dichlorobenzene	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Trichlorofluoromethane
Well ID	Date						
2L GWQS		170	70	0.7	100	2.8	2100
GCL		61500	70000	700	100000	2800	0
UST1613-MW17	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW18	7/26/2007	BQL	BQL	BQL	BQL	BQL	0.78
UST1613-MW19	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/26/2007	BQL	BQL	0.23	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW22	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW22	7/26/2007	0.10	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
2L GWQS		0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
GCL		380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
IR78-GW06	4/7/2006	BQL	BQL	BQL	BQL	48.80	BQL	BQL	BQL	105.00	BQL	BQL	BQL	**991.00**
IR78-GW06	7/26/2007	BQL	**7.55**	BQL	BQL	119.00	BQL	BQL	BQL	179.00	**2370.00**	BQL	BQL	BQL
IR78-GW06	4/8/2008	BQL	**13.60**	BQL	BQL	110.00	BQL	BQL	BQL	97.30	**853.00**	BQL	BQL	BQL
IR78-GW06	7/9/2008	BQL	BQL	BQL	BQL	123.00	BQL	BQL	BQL	106.00	**685.00**	BQL	BQL	BQL
IR78-GW06	12/12/2008	BQL	BQL	BQL	BQL	23.50	BQL	BQL	BQL	BQL	167.80	BQL	BQL	BQL
UST1613-HPGW6	8/3/2005	BQL	**35.20**	BQL	BQL	243.00	BQL	BQL	BQL	199.00	BQL	BQL	BQL	**3080.00**
UST1613-MW01	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW02	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW03	8/5/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
2L GWQS		0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
GCL		380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW04	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	12/10/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW07	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
	2L GWQS	0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
	GCL	380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW08	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW09	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW09	12/19/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	8/4/2005	BQL	BQL	BQL	BQL	BQL	1.50	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/9/2008	BQL	0.73	BQL	BQL	2.30	BQL	BQL	BQL	2.64	8.07	BQL	BQL	BQL
UST1613-MW10	7/10/2008	BQL	BQL	BQL	BQL	3.48	BQL	BQL	BQL	1.75	24.11	BQL	BQL	BQL
UST1613-MW10	12/12/2008	BQL	BQL	BQL	BQL	6.60	BQL	BQL	BQL	BQL	62.40	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
	2L GWQS	0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
	GCL	380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW11	8/5/2005	BQL	0.71	BQL	BQL	BQL	0.99	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/8/2008	BQL	**9.78**	BQL	BQL	11.60	BQL	BQL	BQL	4.39	11.75	BQL	BQL	BQL
UST1613-MW11	7/10/2008	BQL	**2.12**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	12/11/2008	BQL	**12.80**	BQL	BQL	13.60	BQL	BQL	BQL	8.23	20.37	BQL	BQL	BQL
UST1613-MW12	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW13	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**6.40**	BQL
UST1613-MW14	8/4/2005	BQL	BQL	8.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.84	**25.20**	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
	2L GWQS	0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
	GCL	380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW15	8/4/2005	**0.67**	BQL	25.90	BQL	BQL	**289.00**	BQL	BQL	BQL	BQL	0.57	**10.80**	BQL
UST1613-MW15	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	74.60	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	4/9/2008	BQL	**2.18**	BQL	2.18	1.40	BQL	143.00	BQL	4.20	7.46	BQL	BQL	BQL
UST1613-MW15	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	84.70	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	57.70	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	8/4/2005	BQL	BQL	BQL	BQL	BQL	13.80	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	7.18	BQL	1.85	BQL	BQL	BQL	BQL
UST1613-MW16	7/10/2008	BQL	**2.60**	BQL	BQL	BQL	BQL	8.72	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	11.10	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
2L GWQS		0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
GCL		380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW17	8/3/2005	BQL	**328.00**	BQL	BQL	**560.00**	BQL	BQL	BQL	**4060.00**	BQL	BQL	BQL	**4140.00**
UST1613-MW17	7/26/2007	BQL	BQL	BQL	BQL	245.00	BQL	BQL	BQL	**2850.00**	**2189.00**	BQL	BQL	BQL
UST1613-MW17	4/8/2008	BQL	**204.00**	BQL	BQL	383.00	BQL	BQL	BQL	**3700.00**	**2655.00**	BQL	BQL	BQL
UST1613-MW17	7/9/2008	BQL	**26.90**	BQL	BQL	4.82	BQL	BQL	BQL	6.29	26.50	BQL	BQL	BQL
UST1613-MW17	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**6130.00**	**2700.00**	BQL	BQL	BQL
UST1613-MW18	8/3/2005	BQL	**1.20**	BQL	BQL	4.00	BQL	BQL	BQL	0.78	BQL	BQL	BQL	103.00
UST1613-MW18	7/26/2007	BQL	**2.00**	BQL	5.73	0.86	BQL	1.38	BQL	BQL	28.30	BQL	BQL	BQL
UST1613-MW18	4/8/2008	BQL	0.72	BQL	BQL	0.73	BQL	BQL	BQL	1.95	10.53	BQL	BQL	BQL
UST1613-MW18	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**6990.00**	**2658.00**	BQL	BQL	BQL
UST1613-MW18	12/11/2008	BQL	**1.43**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5.98	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
2L GWQS		0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
GCL		380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW19	8/3/2005	BQL	**2.50**	BQL	BQL	BQL	0.98	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW19	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW19	4/9/2008	BQL	**4.69**	BQL	BQL	2.48	BQL	BQL	BQL	3.02	17.98	BQL	BQL	BQL
UST1613-MW19	7/9/2008	BQL	BQL	BQL	BQL	1.30	BQL	BQL	BQL	10.10	27.50	BQL	BQL	BQL
UST1613-MW19	12/11/2008	BQL	**64.30**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
2L GWQS		0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
GCL		380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW20	8/4/2005	BQL	BQL	BQL	BQL	BQL	6.00	BQL	**0.82**	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	4.00	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	4/9/2008	BQL	0.83	BQL	BQL	0.58	BQL	0.77	BQL	3.33	1.94	BQL	BQL	BQL
UST1613-MW20	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
	2L GWQS	0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
	GCL	380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW21	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/9/2008	BQL	0.99	BQL	BQL	0.35	BQL	BQL	BQL	3.08	1.07	BQL	BQL	BQL
UST1613-MW21	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 2

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	Total Xylenes	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**													
	2L GWQS	0.38	1	70	70	550	200	200	0.7	1000	530	100	2.8	530
	GCL	380	5000	70000	70000	550000	200000	200000	700	257500	87500	100000	2800	87500
UST1613-MW22	8/4/2005	BQL	**119.00**	BQL	BQL	**908.00**	BQL	BQL	BQL	**1070.00**	BQL	BQL	BQL	**3240.00**
UST1613-MW22	4/10/2006	BQL	**120.00**	BQL	BQL	**983.00**	BQL	BQL	BQL	**1950.00**	BQL	BQL	BQL	**4010.00**
UST1613-MW22	7/26/2007	BQL	**18.70**	BQL	BQL	**655.00**	BQL	BQL	BQL	**1260.00**	**3010.00**	BQL	BQL	BQL
UST1613-MW22	4/8/2008	BQL	**6.05**	BQL	BQL	13.40	BQL	BQL	BQL	5.37	16.24	BQL	BQL	BQL
UST1613-MW22	7/9/2008	BQL	**10.20**	BQL	BQL	57.40	BQL	BQL	BQL	9.76	144.60	BQL	BQL	BQL
UST1613-MW22	12/12/2008	BQL	BQL	BQL	BQL	136.00	BQL	BQL	BQL	BQL	295.00	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
IR78-GW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**34.00**	BQL	BQL	BQL
IR78-GW06	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**82.10**	BQL	BQL	BQL
IR78-GW06	4/8/2008	BQL	**3.98**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**124.00**	BQL	BQL	BQL
IR78-GW06	7/9/2008	25.80	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**144.00**	BQL	BQL	BQL
IR78-GW06	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**44.40**	BQL	BQL	BQL
UST1613-MW05	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	12/10/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**304.00**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW09	12/19/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.01	BQL	BQL	BQL
UST1613-MW10	7/10/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	12.20	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/8/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.80	BQL	BQL	BQL	3.97	BQL	BQL	BQL
UST1613-MW11	7/10/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	40.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.25	BQL	BQL	BQL
UST1613-MW15	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	32.90	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW15	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	7/10/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**30.10**	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW17	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**120.00**	BQL	BQL	BQL
UST1613-MW17	4/8/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**151.00**	BQL	BQL	BQL
UST1613-MW17	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW17	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**164.00**	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW18	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5.70	BQL	BQL	BQL
UST1613-MW18	4/8/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW18	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**241.00**	BQL	BQL	BQL
UST1613-MW18	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW19	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW19	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.71	BQL	BQL	BQL
UST1613-MW19	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	10.60	BQL	BQL	BQL
UST1613-MW19	12/17/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	Date															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	5.10	BQL	BQL	BQL
UST1613-MW20	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.48	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	15.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	40.20	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 3

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	4-Chloro-3-methylphenol	Benzo_a_anthracene	Benzo_a_pyrene	Benzo_b_fluoranthene	Benzo_g,h,i_perylene	Benzo_k_fluoranthene	Bis(2-ethylhexyl)phthalate	Chrysene	Fluoranthene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Phenol	Pyrene
Well ID	**Date**															
	2L GWQS	140	0	0.0479	0.00479	0.0479	210	0.479	2.5	4.79	280	0.0479	21	210	300	210
	GCL	140000	0	22	1.5	0.6	210	0.4	2500	5	280	31	15500	410	335000	210
UST1613-MW22	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**471.00**	BQL	BQL	BQL
UST1613-MW22	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**360.00**	BQL	BQL	BQL
UST1613-MW22	4/8/2008	BQL	BQL	**4.28**	**3.89**	**6.93**	BQL	**2.03**	**6.06**	**5.24**	10.90	BQL	2.36	5.57	8.90	8.73
UST1613-MW22	7/9/2008	BQL	BQL	**9.70**	**10.30**	**16.70**	8.96	**7.90**	**9.60**	**14.90**	33.20	**8.48**	**27.90**	24.20	BQL	26.20
UST1613-MW22	12/12/2008	39.90	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**83.90**	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		42000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
IR78-GW06	4/7/2006	BQL	720.00	BQL	BQL	2100.00	1910.00
IR78-GW06	7/26/2007	BQL	2530.00	BQL	BQL	5450.00	3690.00
IR78-GW06	4/8/2008	BQL	2120.00	2440.00	2450.00	BQL	BQL
IR78-GW06	7/9/2008	BQL	1910.00	2490.00	1980.00	BQL	BQL
IR78-GW06	12/12/2008	BQL	777.00	1180.00	609.00	BQL	BQL
UST1613-MW05	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	12/10/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	12/11/2008	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		12000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW09	12/19/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	7/26/2007	BQL	BQL	BQL	BQL	69.10	43.20
UST1613-MW10	4/9/2008	BQL	109.00	157.00	123.00	BQL	BQL
UST1613-MW10	7/10/2008	BQL	BQL	**229.00**	139.00	BQL	BQL
UST1613-MW10	12/12/2008	BQL	158.00	**331.00**	215.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		42000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	7/26/2007	BQL	54.80	BQL	BQL	43.10	BQL
UST1613-MW11	4/8/2008	BQL	246.00	BQL	BQL	BQL	BQL
UST1613-MW11	7/10/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	12/11/2008	BQL	235.00	BQL	BQL	BQL	BQL
UST1613-MW15	7/26/2007	BQL	112.00	BQL	BQL	BQL	BQL
UST1613-MW15	4/9/2008	BQL	185.00	BQL	BQL	BQL	BQL
UST1613-MW15	7/9/2008	BQL	142.00	BQL	BQL	BQL	BQL
UST1613-MW15	12/12/2008	BQL	174.00	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		42000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	7/10/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW17	7/26/2007	BQL	**7950.00**	BQL	BQL	**6220.00**	**2590.00**
UST1613-MW17	4/8/2008	BQL	**9760.00**	**2330.00**	**7340.00**	BQL	BQL
UST1613-MW17	7/9/2008	BQL	237.00	BQL	BQL	BQL	BQL
UST1613-MW17	12/11/2008	BQL	**16300.00**	**2840.00**	**7330.00**	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		42000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW18	7/26/2007	BQL	**430.00**	BQL	BQL	288.00	**552.00**
UST1613-MW18	4/8/2008	BQL	158.00	125.00	100.00	BQL	BQL
UST1613-MW18	7/9/2008	BQL	**14800.00**	**2840.00**	**8000.00**	BQL	BQL
UST1613-MW18	12/11/2008	BQL	**438.00**	196.00	BQL	BQL	BQL
UST1613-MW19	7/26/2007	BQL	BQL	BQL	BQL	38.30	BQL
UST1613-MW19	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW19	7/9/2008	BQL	**663.00**	**579.00**	238.00	BQL	BQL
UST1613-MW19	12/11/2008	BQL	**469.00**	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		42000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/26/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	7/9/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	12/12/2008	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

TABLE 4

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - JULY 2005 TO APRIL 2009

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C10 Aromatics	C9-C12 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**						
2L GWQS		12000	420	210	4200	4200	210
GCL		0	0	0	0	0	0
UST1613-MW22	4/10/2006	410.00	**3900.00**	BQL	BQL	**8500.00**	**4100.00**
UST1613-MW22	7/26/2007	BQL	**2650.00**	BQL	BQL	**7530.00**	**3720.00**
UST1613-MW22	4/8/2008	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW22	7/9/2008	BQL	268.00	**240.00**	446.00	BQL	BQL
UST1613-MW22	12/12/2008	BQL	302.00	**720.00**	929.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Guidelines for Assessment and Corrective Action" North Carolina Underground Storage Tank Section, effective July 15, 2008
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS row indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL row indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL
9. Please note, compounds reported in duplicate columns are the result of multiple laboratories submitting EDD data with different nomenclature. Unless BQL appears in both duplicate columns, a detection is present and that concentration is reported numerically.

APPENDIX B

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FROM JULY AND DECEMBER 2008 EVENTS

Mike Cree
Osage of Virginia
2618 A Colley Ave
Norfolk, VA 23517

Report Number: G649-45

Client Project: CTO 015

Dear Mike Cree,

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

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Ashley Nifong 5/18/09 Revised

Project Manager Date
Ashley Nifong

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/CL = Reporting Limit / Control 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

% soilds = 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.

MI34.021208.4

Case Narrative
Osage of Virginia
SGS Project: **G649-45**
Project Name: **CTO 015 BLDG 1613**

For Methods: 625

- Samples originally analyzed and reported for benzo(a)anthracene per chain of custody. On August 6, 2008 the client requested that data be re-reported to include the full 625 list.
- The base neutral sample results may be biased low since the basic portion of the extraction was not performed.
- Some compounds are "E" flagged without dilution runs since the original analytical request did not include these compounds.
- Data meet all other QA/QC requirements.

Jeannie Milholland 8-7-2007

Jeannie Milholland — Date
Data Reviewer

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-1D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 9:10
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/17/2008	
Ethylbenzene	BQL	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/17/2008	
Toluene	BQL	1.00	0.313	1	7/17/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/17/2008	
o-Xylene	BQL	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.1	100
1,4-Dichlorobutane	40	40.1	100

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-45-2B
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 11:10
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/17/2008	
Ethylbenzene	BQL	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/17/2008	
Toluene	BQL	1.00	0.313	1	7/17/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/17/2008	
o-Xylene	BQL	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.3	101
1,4-Dichlorobutane	40	40.4	101

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-45-3D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 12:15
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	**0.761**	1.00	0.253	1	7/17/2008	J
Ethylbenzene	BQL	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	**84.7**	2.00	0.306	1	7/17/2008	
Toluene	BQL	1.00	0.313	1	7/17/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/17/2008	
o-Xylene	BQL	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.4	101
1,4-Dichlorobutane	40	41.2	103

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-45-4D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 13:00
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/17/2008	
Ethylbenzene	BQL	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/17/2008	
Toluene	BQL	1.00	0.313	1	7/17/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/17/2008	
o-Xylene	BQL	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.0	99.9
1,4-Dichlorobutane	40	41.6	104

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: GC-VOA WA XLS

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-45-5D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 14:10
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**10.2**	8.00	1.42	8	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	8.00	2.3	8	7/17/2008	
Diisopropyl ether (DIPE)	BQL	8.00	2.02	8	7/17/2008	
Ethylbenzene	**57.4**	8.00	1.52	8	7/17/2008	
Methyl-tert butyl ether (MTBE)	BQL	16.0	2.45	8	7/17/2008	
Toluene	**9.76**	8.00	2.5	8	7/17/2008	
m/p-Xylene	**78.1**	16.0	3.85	8	7/17/2008	
o-Xylene	**66.5**	16.0	3.24	8	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.3	101
1,4-Dichlorobutane	40	43.0	108

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: IR78-GW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-6B
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 10:45
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**6.32**	16.0	2.83	16	7/16/2008	J
1,2-Dibromoethane (EDB)	BQL	16.0	4.59	16	7/16/2008	
Diisopropyl ether (DIPE)	BQL	16.0	4.05	16	7/16/2008	
Ethylbenzene	**123**	16.0	3.04	16	7/16/2008	
Methyl-tert butyl ether (MTBE)	BQL	32.0	4.9	16	7/16/2008	
Toluene	**106**	16.0	5.01	16	7/16/2008	
m/p-Xylene	**310**	32.0	7.7	16	7/16/2008	
o-Xylene	**375**	32.0	6.48	16	7/16/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.9	102
1,4-Dichlorobutane	40	39.1	97.9

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: _____
GC-VOA-WA\XLS

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-45-7D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 14:30
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**26.9**	1.00	0.177	1	7/17/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/17/2008	
Ethylbenzene	**4.82**	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	**1.55**	2.00	0.306	1	7/17/2008	J
Toluene	**6.29**	1.00	0.313	1	7/17/2008	
m/p-Xylene	**13.3**	2.00	0.481	1	7/17/2008	
o-Xylene	**13.2**	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.9	105
1,4-Dichlorobutane	40	41.4	104

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: GC-VOA WA/LS

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-45-8D
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 13:35
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**0.836**	1.00	0.177	1	7/17/2008	J
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	7/17/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/17/2008	
Ethylbenzene	**1.30**	1.00	0.19	1	7/17/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/17/2008	
Toluene	**10.1**	1.00	0.313	1	7/17/2008	
m/p-Xylene	**15.0**	2.00	0.481	1	7/17/2008	
o-Xylene	**12.5**	2.00	0.405	1	7/17/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.6	96.5
1,4-Dichlorobutane	40	41.5	104

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-45-9B
Lab Project ID: G649-45

Analyzed By: RSB
Date Collected: 7/9/2008 11:55
Date Received: 7/10/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**292**	320	56.6	320	7/16/2008	J
1,2-Dibromoethane (EDB)	BQL	320	91.8	320	7/16/2008	
Diisopropyl ether (DIPE)	**97.6**	320	81	320	7/16/2008	J
Ethylbenzene	**229**	320	60.8	320	7/16/2008	J
Methyl-tert butyl ether (MTBE)	BQL	640	97.9	320	7/16/2008	
Toluene	**6990**	320	100	320	7/16/2008	
m/p-Xylene	**1860**	640	154	320	7/16/2008	
o-Xylene	**798**	640	130	320	7/16/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.5	98.7
1,4-Dichlorobutane	40	39.8	99.6

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-1H
Lab Project ID: G649-45

Initial/Final Amt: 924 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 9:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.41	0.806	1	7/14/2008	
Acenaphthylene	BQL	5.41	0.806	1	7/14/2008	
Anthracene	BQL	5.41	0.947	1	7/14/2008	
Benzo[a]anthracene	BQL	5.41	0.736	1	7/14/2008	
Benzo[a]pyrene	BQL	5.41	0.687	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.41	0.774	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.41	0.666	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.41	0.595	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.41	1.11	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.41	1.13	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.41	1.06	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	304	5.41	0.444	1	7/14/2008	E
4-bromophenyl phenyl ether	BQL	5.41	0.844	1	7/14/2008	
Butylbenzylphthalate	BQL	5.41	0.482	1	7/14/2008	
2-Chloronaphthalene	BQL	5.41	0.936	1	7/14/2008	
2-Chlorophenol	BQL	5.41	1.27	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.41	0.860	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.41	3.52	1	7/14/2008	
Chrysene	BQL	5.41	0.601	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.41	0.476	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.41	0.893	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	10.8	1.32	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.41	1.21	1	7/14/2008	
Diethylphthalate	BQL	5.41	0.801	1	7/14/2008	
Dimethylphthalate	BQL	5.41	0.601	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.41	1.75	1	7/14/2008	
Di-n-octylphthalate	BQL	5.41	0.628	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	27.1	0.595	1	7/14/2008	
2,4-Dinitrophenol	BQL	27.1	0.693	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.41	0.579	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.41	0.703	1	7/14/2008	
Diphenylamine *	BQL	5.41	0.617	1	7/14/2008	
Fluoranthene	BQL	5.41	0.763	1	7/14/2008	
Fluorene	BQL	5.41	0.785	1	7/14/2008	
Hexachlorobenzene	BQL	5.41	0.547	1	7/14/2008	
Hexachlorobutadiene	BQL	5.41	0.823	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	10.8	10.8	1	7/14/2008	
Hexachloroethane	BQL	5.41	0.806	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.41	2.47	1	7/14/2008	
Isophorone	BQL	5.41	0.958	1	7/14/2008	
Naphthalene	BQL	5.41	0.985	1	7/14/2008	
Nitrobenzene	BQL	5.41	1.14	1	7/14/2008	
2-Nitrophenol	BQL	5.41	1.33	1	7/14/2008	
4-Nitrophenol	BQL	27.1	1.17	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.41	1.62	1	7/14/2008	
Pentachlorophenol	BQL	27.1	1.53	1	7/14/2008	
Phenanthrene	BQL	5.41	0.482	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-1H
Lab Project ID: G649-45

Initial/Final Amt: 924 mL / 5.0 mL

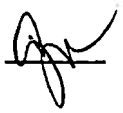
Analyzed By: DES
Date Collected: 7/9/2008 9:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.41	1.15	1	7/14/2008	
Pyrene	BQL	5.41	2.23	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.41	0.779	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.41	1.00	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	7.9	79
4-Terphenyl-d14	10	9.3	93

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-45-2H
Lab Project ID: G649-45

Initial/Final Amt: 916 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 11:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.46	0.813	1	7/14/2008	
Acenaphthylene	BQL	5.46	0.813	1	7/14/2008	
Anthracene	BQL	5.46	0.955	1	7/14/2008	
Benzo[a]anthracene	BQL	5.46	0.742	1	7/14/2008	
Benzo[a]pyrene	BQL	5.46	0.693	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.46	0.781	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.46	0.671	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.46	0.600	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.46	1.12	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.46	1.14	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.46	1.06	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	1.15	5.46	0.448	1	7/14/2008	J
4-bromophenyl phenyl ether	BQL	5.46	0.852	1	7/14/2008	
Butylbenzylphthalate	BQL	5.46	0.486	1	7/14/2008	
2-Chloronaphthalene	BQL	5.46	0.944	1	7/14/2008	
2-Chlorophenol	BQL	5.46	1.28	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.46	0.868	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.46	3.55	1	7/14/2008	
Chrysene	BQL	5.46	0.606	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.46	0.480	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.46	0.901	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	10.9	1.33	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.46	1.22	1	7/14/2008	
Diethylphthalate	BQL	5.46	0.808	1	7/14/2008	
Dimethylphthalate	BQL	5.46	0.606	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.46	1.77	1	7/14/2008	
Di-n-octylphthalate	BQL	5.46	0.633	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	27.3	0.600	1	7/14/2008	
2,4-Dinitrophenol	BQL	27.3	0.699	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.46	0.584	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.46	0.710	1	7/14/2008	
Diphenylamine *	BQL	5.46	0.622	1	7/14/2008	
Fluoranthene	BQL	5.46	0.770	1	7/14/2008	
Fluorene	BQL	5.46	0.791	1	7/14/2008	
Hexachlorobenzene	BQL	5.46	0.551	1	7/14/2008	
Hexachlorobutadiene	BQL	5.46	0.830	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	10.9	10.9	1	7/14/2008	
Hexachloroethane	BQL	5.46	0.813	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.46	2.49	1	7/14/2008	
Isophorone	BQL	5.46	0.966	1	7/14/2008	
Naphthalene	BQL	5.46	0.993	1	7/14/2008	
Nitrobenzene	BQL	5.46	1.15	1	7/14/2008	
2-Nitrophenol	BQL	5.46	1.34	1	7/14/2008	
4-Nitrophenol	BQL	27.3	1.18	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.46	1.64	1	7/14/2008	
Pentachlorophenol	BQL	27.3	1.54	1	7/14/2008	
Phenanthrene	BQL	5.46	0.486	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-45-2H
Lab Project ID: G649-45

Initial/Final Amt: 916 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 11:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.46	1.16	1	7/14/2008	
Pyrene	BQL	5.46	2.25	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.46	0.786	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.46	1.01	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.8	88
2-Fluorophenol	10	7.6	76
Nitrobenzene-d5	10	9	90
Phenol-d6	10	8.3	83
2,4,6-Tribromophenol	10	8.5	85
4-Terphenyl-d14	10	9.1	91

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-45-3H
Lab Project ID: G649-45

Initial/Final Amt: 926 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 12:15
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.40	0.805	1	7/14/2008	
Acenaphthylene	BQL	5.40	0.805	1	7/14/2008	
Anthracene	BQL	5.40	0.945	1	7/14/2008	
Benzo[a]anthracene	BQL	5.40	0.734	1	7/14/2008	
Benzo[a]pyrene	BQL	5.40	0.686	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.40	0.772	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.40	0.664	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.40	0.594	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.40	1.11	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.40	1.12	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.40	1.05	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	32.9	5.40	0.443	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	5.40	0.842	1	7/14/2008	
Butylbenzylphthalate	BQL	5.40	0.481	1	7/14/2008	
2-Chloronaphthalene	BQL	5.40	0.934	1	7/14/2008	
2-Chlorophenol	BQL	5.40	1.26	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.40	0.859	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.40	3.52	1	7/14/2008	
Chrysene	BQL	5.40	0.599	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.40	0.475	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.40	0.891	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	10.8	1.32	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.40	1.21	1	7/14/2008	
Diethylphthalate	BQL	5.40	0.799	1	7/14/2008	
Dimethylphthalate	BQL	5.40	0.599	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.40	1.75	1	7/14/2008	
Di-n-octylphthalate	BQL	5.40	0.626	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	27.0	0.594	1	7/14/2008	
2,4-Dinitrophenol	BQL	27.0	0.691	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.40	0.578	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.40	0.702	1	7/14/2008	
Diphenylamine *	BQL	5.40	0.616	1	7/14/2008	
Fluoranthene	BQL	5.40	0.761	1	7/14/2008	
Fluorene	BQL	5.40	0.783	1	7/14/2008	
Hexachlorobenzene	BQL	5.40	0.545	1	7/14/2008	
Hexachlorobutadiene	BQL	5.40	0.821	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	10.8	10.8	1	7/14/2008	
Hexachloroethane	BQL	5.40	0.805	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.40	2.47	1	7/14/2008	
Isophorone	BQL	5.40	0.956	1	7/14/2008	
Naphthalene	BQL	5.40	0.983	1	7/14/2008	
Nitrobenzene	BQL	5.40	1.13	1	7/14/2008	
2-Nitrophenol	BQL	5.40	1.33	1	7/14/2008	
4-Nitrophenol	BQL	27.0	1.17	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.40	1.62	1	7/14/2008	
Pentachlorophenol	BQL	27.0	1.53	1	7/14/2008	
Phenanthrene	BQL	5.40	0.481	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-45-3H
Lab Project ID: G649-45

Initial/Final Amt: 926 mL / 5.0 mL

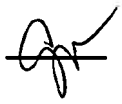
Analyzed By: DES
Date Collected: 7/9/2008 12:15
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.40	1.14	1	7/14/2008	
Pyrene	BQL	5.40	2.23	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.40	0.778	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.40	0.999	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9.2	92
2,4,6-Tribromophenol	10	8.6	86
4-Terphenyl-d14	10	9.5	95

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-45-4H
Lab Project ID: G649-45

Initial/Final Amt: 914 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 13:00
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.47	0.815	1	7/14/2008	
Acenaphthylene	BQL	5.47	0.815	1	7/14/2008	
Anthracene	BQL	5.47	0.957	1	7/14/2008	
Benzo[a]anthracene	BQL	5.47	0.744	1	7/14/2008	
Benzo[a]pyrene	BQL	5.47	0.695	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.47	0.782	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.47	0.673	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.47	0.602	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.47	1.13	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.47	1.14	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.47	1.07	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	40.2	5.47	0.449	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	5.47	0.853	1	7/14/2008	
Butylbenzylphthalate	BQL	5.47	0.487	1	7/14/2008	
2-Chloronaphthalene	BQL	5.47	0.946	1	7/14/2008	
2-Chlorophenol	BQL	5.47	1.28	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.47	0.870	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.47	3.56	1	7/14/2008	
Chrysene	BQL	5.47	0.607	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.47	0.481	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.47	0.903	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	10.9	1.33	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.47	1.23	1	7/14/2008	
Diethylphthalate	BQL	5.47	0.810	1	7/14/2008	
Dimethylphthalate	BQL	5.47	0.607	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.47	1.77	1	7/14/2008	
Di-n-octylphthalate	BQL	5.47	0.635	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	27.4	0.602	1	7/14/2008	
2,4-Dinitrophenol	BQL	27.4	0.700	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.47	0.585	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.47	0.711	1	7/14/2008	
Diphenylamine *	BQL	5.47	0.624	1	7/14/2008	
Fluoranthene	BQL	5.47	0.771	1	7/14/2008	
Fluorene	BQL	5.47	0.793	1	7/14/2008	
Hexachlorobenzene	BQL	5.47	0.553	1	7/14/2008	
Hexachlorobutadiene	BQL	5.47	0.832	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	10.9	10.9	1	7/14/2008	
Hexachloroethane	BQL	5.47	0.815	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.47	2.50	1	7/14/2008	
Isophorone	BQL	5.47	0.968	1	7/14/2008	
Naphthalene	BQL	5.47	0.996	1	7/14/2008	
Nitrobenzene	BQL	5.47	1.15	1	7/14/2008	
2-Nitrophenol	BQL	5.47	1.35	1	7/14/2008	
4-Nitrophenol	BQL	27.4	1.18	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.47	1.64	1	7/14/2008	
Pentachlorophenol	BQL	27.4	1.55	1	7/14/2008	
Phenanthrene	BQL	5.47	0.487	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-45-4H
Lab Project ID: G649-45

Initial/Final Amt: 914 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 13:00
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.47	1.16	1	7/14/2008	
Pyrene	BQL	5.47	2.26	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.47	0.788	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.47	1.01	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	8.7	87
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	9	90
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	9.8	98

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

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

Reviewed By: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-45-5H
Lab Project ID: G649-45

Initial/Final Amt: 943 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 14:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	**1.91**	5.30	0.790	1	7/14/2008	J
Acenaphthylene	BQL	5.30	0.790	1	7/14/2008	
Anthracene	**1.80**	5.30	0.928	1	7/14/2008	J
Benzo[a]anthracene	**9.70**	5.30	0.721	1	7/14/2008	
Benzo[a]pyrene	**10.3**	5.30	0.673	1	7/14/2008	
Benzo[b]fluoranthene	**16.7**	5.30	0.758	1	7/14/2008	
Benzo[g,h,i]perylene	**8.96**	5.30	0.652	1	7/14/2008	
Benzo[k]fluoranthene	**7.90**	5.30	0.583	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.30	1.09	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.30	1.10	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.30	1.03	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	**9.60**	5.30	0.435	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	5.30	0.827	1	7/14/2008	
Butylbenzylphthalate	BQL	5.30	0.472	1	7/14/2008	
2-Chloronaphthalene	BQL	5.30	0.917	1	7/14/2008	
2-Chlorophenol	BQL	5.30	1.24	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.30	0.843	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.30	3.45	1	7/14/2008	
Chrysene	**14.9**	5.30	0.589	1	7/14/2008	
Dibenzo[a,h]anthracene	**0.477**	5.30	0.467	1	7/14/2008	J
Di-n-Butylphthalate	BQL	5.30	0.875	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	10.6	1.29	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.30	1.19	1	7/14/2008	
Diethylphthalate	BQL	5.30	0.785	1	7/14/2008	
Dimethylphthalate	BQL	5.30	0.589	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.30	1.72	1	7/14/2008	
Di-n-octylphthalate	BQL	5.30	0.615	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	26.5	0.583	1	7/14/2008	
2,4-Dinitrophenol	BQL	26.5	0.679	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.30	0.567	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.30	0.689	1	7/14/2008	
Diphenylamine *	BQL	5.30	0.604	1	7/14/2008	
Fluoranthene	**33.2**	5.30	0.748	1	7/14/2008	
Fluorene	**1.54**	5.30	0.769	1	7/14/2008	J
Hexachlorobenzene	BQL	5.30	0.536	1	7/14/2008	
Hexachlorobutadiene	BQL	5.30	0.806	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	10.6	10.6	1	7/14/2008	
Hexachloroethane	BQL	5.30	0.790	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	**8.48**	5.30	2.42	1	7/14/2008	
Isophorone	BQL	5.30	0.938	1	7/14/2008	
Naphthalene	**27.9**	5.30	0.965	1	7/14/2008	
Nitrobenzene	BQL	5.30	1.11	1	7/14/2008	
2-Nitrophenol	BQL	5.30	1.30	1	7/14/2008	
4-Nitrophenol	BQL	26.5	1.15	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.30	1.59	1	7/14/2008	
Pentachlorophenol	BQL	26.5	1.50	1	7/14/2008	
Phenanthrene	**24.2**	5.30	0.472	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-45-5H
Lab Project ID: G649-45

Initial/Final Amt: 943 mL / 5.0 mL

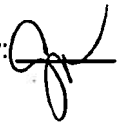
Analyzed By: DES
Date Collected: 7/9/2008 14:10
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.30	1.12	1	7/14/2008	
Pyrene	26.2	5.30	2.19	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.30	0.764	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.30	0.981	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	7.9	79
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	8.4	84
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	9	90

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

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

Reviewed By: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: IR78-GW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-6H
Lab Project ID: G649-45

Initial/Final Amt: 875 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 10:45
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.71	0.851	1	7/14/2008	
Acenaphthylene	BQL	5.71	0.851	1	7/14/2008	
Anthracene	BQL	5.71	1.00	1	7/14/2008	
Benzo[a]anthracene	BQL	5.71	0.777	1	7/14/2008	
Benzo[a]pyrene	BQL	5.71	0.726	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.71	0.817	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.71	0.703	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.71	0.629	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.71	1.18	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.71	1.19	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.71	1.11	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	**0.629**	5.71	0.469	1	7/14/2008	J
4-bromophenyl phenyl ether	BQL	5.71	0.891	1	7/14/2008	
Butylbenzylphthalate	BQL	5.71	0.509	1	7/14/2008	
2-Chloronaphthalene	BQL	5.71	0.989	1	7/14/2008	
2-Chlorophenol	BQL	5.71	1.34	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.71	0.909	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.71	3.72	1	7/14/2008	
Chrysene	BQL	5.71	0.634	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.71	0.503	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.71	0.943	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	11.4	1.39	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.71	1.28	1	7/14/2008	
Diethylphthalate	BQL	5.71	0.846	1	7/14/2008	
Dimethylphthalate	BQL	5.71	0.634	1	7/14/2008	
2,4-Dimethylphenol	**25.8**	5.71	1.85	1	7/14/2008	
Di-n-octylphthalate	BQL	5.71	0.663	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	28.6	0.629	1	7/14/2008	
2,4-Dinitrophenol	BQL	28.6	0.731	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.71	0.611	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.71	0.743	1	7/14/2008	
Diphenylamine *	BQL	5.71	0.651	1	7/14/2008	
Fluoranthene	BQL	5.71	0.806	1	7/14/2008	
Fluorene	BQL	5.71	0.829	1	7/14/2008	
Hexachlorobenzene	BQL	5.71	0.577	1	7/14/2008	
Hexachlorobutadiene	BQL	5.71	0.869	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	11.4	11.4	1	7/14/2008	
Hexachloroethane	BQL	5.71	0.851	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.71	2.61	1	7/14/2008	
Isophorone	BQL	5.71	1.01	1	7/14/2008	
Naphthalene	**144**	5.71	1.04	1	7/14/2008	E
Nitrobenzene	BQL	5.71	1.20	1	7/14/2008	
2-Nitrophenol	BQL	5.71	1.41	1	7/14/2008	
4-Nitrophenol	BQL	28.6	1.23	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.71	1.71	1	7/14/2008	
Pentachlorophenol	BQL	28.6	1.62	1	7/14/2008	
Phenanthrene	BQL	5.71	0.509	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: IR78-GW06
Client Project ID: CTO 015
Lab Sample ID: G649-45-6H
Lab Project ID: G649-45

Initial/Final Amt: 875 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 10:45
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.71	1.21	1	7/14/2008	
Pyrene	BQL	5.71	2.36	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.71	0.823	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.71	1.06	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	88
2-Fluorophenol	10	8.1	81
Nitrobenzene-d5	10	9.8	98
Phenol-d6	10	8.3	83
2,4,6-Tribromophenol	10	9.6	96
4-Terphenyl-d14	10	8.8	88

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

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

Reviewed By: 

SGS North America, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-45-7H
Lab Project ID: G649-45

Initial/Final Amt: 834 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 14:30
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	6.00	0.893	1	7/14/2008	
Acenaphthylene	BQL	6.00	0.893	1	7/14/2008	
Anthracene	BQL	6.00	1.05	1	7/14/2008	
Benzo[a]anthracene	BQL	6.00	0.815	1	7/14/2008	
Benzo[a]pyrene	BQL	6.00	0.761	1	7/14/2008	
Benzo[b]fluoranthene	BQL	6.00	0.857	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	6.00	0.737	1	7/14/2008	
Benzo[k]fluoranthene	BQL	6.00	0.659	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	6.00	1.24	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	6.00	1.25	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	6.00	1.17	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	BQL	6.00	0.492	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	6.00	0.935	1	7/14/2008	
Butylbenzylphthalate	BQL	6.00	0.534	1	7/14/2008	
2-Chloronaphthalene	BQL	6.00	1.04	1	7/14/2008	
2-Chlorophenol	BQL	6.00	1.40	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	6.00	0.953	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	6.00	3.90	1	7/14/2008	
Chrysene	BQL	6.00	0.665	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	6.00	0.528	1	7/14/2008	
Di-n-Butylphthalate	BQL	6.00	0.989	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	12.0	1.46	1	7/14/2008	
2,4-Dichlorophenol	BQL	6.00	1.34	1	7/14/2008	
Diethylphthalate	BQL	6.00	0.887	1	7/14/2008	
Dimethylphthalate	BQL	6.00	0.665	1	7/14/2008	
2,4-Dimethylphenol	BQL	6.00	1.94	1	7/14/2008	
Di-n-octylphthalate	BQL	6.00	0.695	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	30.0	0.659	1	7/14/2008	
2,4-Dinitrophenol	BQL	30.0	0.767	1	7/14/2008	
2,4-Dinitrotoluene	BQL	6.00	0.641	1	7/14/2008	
2,6-Dinitrotoluene	BQL	6.00	0.779	1	7/14/2008	
Diphenylamine *	BQL	6.00	0.683	1	7/14/2008	
Fluoranthene	BQL	6.00	0.845	1	7/14/2008	
Fluorene	BQL	6.00	0.869	1	7/14/2008	
Hexachlorobenzene	BQL	6.00	0.606	1	7/14/2008	
Hexachlorobutadiene	BQL	6.00	0.911	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	12.0	12.0	1	7/14/2008	
Hexachloroethane	BQL	6.00	0.893	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	6.00	2.74	1	7/14/2008	
Isophorone	BQL	6.00	1.06	1	7/14/2008	
Naphthalene	4.86	6.00	1.09	1	7/14/2008	J
Nitrobenzene	BQL	6.00	1.26	1	7/14/2008	
2-Nitrophenol	BQL	6.00	1.47	1	7/14/2008	
4-Nitrophenol	BQL	30.0	1.29	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	6.00	1.80	1	7/14/2008	
Pentachlorophenol	BQL	30.0	1.70	1	7/14/2008	
Phenanthrene	BQL	6.00	0.534	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-45-7H
Lab Project ID: G649-45

Initial/Final Amt: 834 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 14:30
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	6.00	1.27	1	7/14/2008	
Pyrene	BQL	6.00	2.48	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	6.00	0.863	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	6.00	1.11	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.6	86
2-Fluorophenol	10	7.5	75
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	8.4	84
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	9.6	96

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-45-8H
Lab Project ID: G649-45

Initial/Final Amt: 909 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 13:35
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.50	0.820	1	7/14/2008	
Acenaphthylene	BQL	5.50	0.820	1	7/14/2008	
Anthracene	BQL	5.50	0.963	1	7/14/2008	
Benzo[a]anthracene	BQL	5.50	0.748	1	7/14/2008	
Benzo[a]pyrene	BQL	5.50	0.699	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.50	0.787	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.50	0.677	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.50	0.605	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.50	1.13	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.50	1.14	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.50	1.07	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.50	0.451	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	5.50	0.858	1	7/14/2008	
Butylbenzylphthalate	BQL	5.50	0.490	1	7/14/2008	
2-Chloronaphthalene	BQL	5.50	0.952	1	7/14/2008	
2-Chlorophenol	BQL	5.50	1.29	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.50	0.875	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.50	3.58	1	7/14/2008	
Chrysene	BQL	5.50	0.611	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.50	0.484	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.50	0.908	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	11.0	1.34	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.50	1.23	1	7/14/2008	
Diethylphthalate	BQL	5.50	0.814	1	7/14/2008	
Dimethylphthalate	BQL	5.50	0.611	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.50	1.78	1	7/14/2008	
Di-n-octylphthalate	BQL	5.50	0.638	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	27.5	0.605	1	7/14/2008	
2,4-Dinitrophenol	BQL	27.5	0.704	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.50	0.589	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.50	0.715	1	7/14/2008	
Diphenylamine *	BQL	5.50	0.627	1	7/14/2008	
Fluoranthene	BQL	5.50	0.776	1	7/14/2008	
Fluorene	BQL	5.50	0.798	1	7/14/2008	
Hexachlorobenzene	BQL	5.50	0.556	1	7/14/2008	
Hexachlorobutadiene	BQL	5.50	0.836	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	11.0	11.0	1	7/14/2008	
Hexachloroethane	BQL	5.50	0.820	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.50	2.51	1	7/14/2008	
Isophorone	BQL	5.50	0.974	1	7/14/2008	
Naphthalene	10.6	5.50	1.00	1	7/14/2008	
Nitrobenzene	BQL	5.50	1.16	1	7/14/2008	
2-Nitrophenol	BQL	5.50	1.35	1	7/14/2008	
4-Nitrophenol	BQL	27.5	1.19	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.50	1.65	1	7/14/2008	
Pentachlorophenol	BQL	27.5	1.56	1	7/14/2008	
Phenanthrene	BQL	5.50	0.490	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-45-8H
Lab Project ID: G649-45

Initial/Final Amt: 909 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 13:35
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.50	1.17	1	7/14/2008	
Pyrene	BQL	5.50	2.27	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.50	0.792	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.50	1.02	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.4	84
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	9	90
Phenol-d6	10	8.4	84
2,4,6-Tribromophenol	10	8.8	88
4-Terphenyl-d14	10	9.2	92

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-45-9H
Lab Project ID: G649-45

Initial/Final Amt: 861 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 11:55
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.81	0.865	1	7/14/2008	
Acenaphthylene	BQL	5.81	0.865	1	7/14/2008	
Anthracene	BQL	5.81	1.02	1	7/14/2008	
Benzo[a]anthracene	BQL	5.81	0.790	1	7/14/2008	
Benzo[a]pyrene	BQL	5.81	0.738	1	7/14/2008	
Benzo[b]fluoranthene	BQL	5.81	0.830	1	7/14/2008	
Benzo[g,h,i]perylene	BQL	5.81	0.714	1	7/14/2008	
Benzo[k]fluoranthene	BQL	5.81	0.639	1	7/14/2008	
Bis(2-chloroethoxy)methane	BQL	5.81	1.20	1	7/14/2008	
Bis(2-chloroethyl)ether	BQL	5.81	1.21	1	7/14/2008	
Bis(2-chloroisopropyl)ether	BQL	5.81	1.13	1	7/14/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.81	0.476	1	7/14/2008	
4-bromophenyl phenyl ether	BQL	5.81	0.906	1	7/14/2008	
Butylbenzylphthalate	BQL	5.81	0.517	1	7/14/2008	
2-Chloronaphthalene	BQL	5.81	1.00	1	7/14/2008	
2-Chlorophenol	BQL	5.81	1.36	1	7/14/2008	
4-Chloro-3-methylphenol	BQL	5.81	0.923	1	7/14/2008	
4-Chlorophenyl phenyl ether	BQL	5.81	3.78	1	7/14/2008	
Chrysene	BQL	5.81	0.645	1	7/14/2008	
Dibenzo[a,h]anthracene	BQL	5.81	0.511	1	7/14/2008	
Di-n-Butylphthalate	BQL	5.81	0.958	1	7/14/2008	
3,3'-Dichlorobenzidine	BQL	11.6	1.42	1	7/14/2008	
2,4-Dichlorophenol	BQL	5.81	1.30	1	7/14/2008	
Diethylphthalate	BQL	5.81	0.859	1	7/14/2008	
Dimethylphthalate	BQL	5.81	0.645	1	7/14/2008	
2,4-Dimethylphenol	BQL	5.81	1.88	1	7/14/2008	
Di-n-octylphthalate	BQL	5.81	0.674	1	7/14/2008	
4,6-Dinitro-2-methylphenol	BQL	29.0	0.639	1	7/14/2008	
2,4-Dinitrophenol	BQL	29.0	0.743	1	7/14/2008	
2,4-Dinitrotoluene	BQL	5.81	0.621	1	7/14/2008	
2,6-Dinitrotoluene	BQL	5.81	0.755	1	7/14/2008	
Diphenylamine *	BQL	5.81	0.662	1	7/14/2008	
Fluoranthene	BQL	5.81	0.819	1	7/14/2008	
Fluorene	BQL	5.81	0.842	1	7/14/2008	
Hexachlorobenzene	BQL	5.81	0.587	1	7/14/2008	
Hexachlorobutadiene	BQL	5.81	0.883	1	7/14/2008	
Hexachlorocyclopentadiene	BQL	11.6	11.6	1	7/14/2008	
Hexachloroethane	BQL	5.81	0.865	1	7/14/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.81	2.65	1	7/14/2008	
Isophorone	BQL	5.81	1.03	1	7/14/2008	
Naphthalene	241	5.81	1.06	1	7/14/2008	E
Nitrobenzene	BQL	5.81	1.22	1	7/14/2008	
2-Nitrophenol	BQL	5.81	1.43	1	7/14/2008	
4-Nitrophenol	BQL	29.0	1.25	1	7/14/2008	
N-Nitrosodi-n-propylamine	BQL	5.81	1.74	1	7/14/2008	
Pentachlorophenol	BQL	29.0	1.64	1	7/14/2008	
Phenanthrene	BQL	5.81	0.517	1	7/14/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-45-9H
Lab Project ID: G649-45

Initial/Final Amt: 861 mL / 5.0 mL

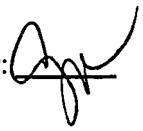
Analyzed By: DES
Date Collected: 7/9/2008 11:55
Date Received: 7/10/2008
Date Extracted: 7/10/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.81	1.23	1	7/14/2008	
Pyrene	BQL	5.81	2.40	1	7/14/2008	
1,2,4-Trichlorobenzene	BQL	5.81	0.836	1	7/14/2008	
2,4,6-Trichlorophenol	BQL	5.81	1.07	1	7/14/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8	80
2-Fluorophenol	10	7.7	77
Nitrobenzene-d5	10	9	90
Phenol-d6	10	7.9	79
2,4,6-Tribromophenol	10	8.5	85
4-Terphenyl-d14	10	8.6	86

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

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

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW06
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 17:30 - 07/15/08 17:30
Date Analyzed	07/15/08 17:30 - 07/15/08 17:30
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	86.7		70	130
Surrogate % Recovery - FID	90.2		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-1a	Lab Info: g649-45-1a
FID Info: VP071508/019F0101.D	PID Info: VP071508/019R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW05
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/11/08 19:20 - 07/11/08 19:20
Date Analyzed	07/11/08 19:20 - 07/11/08 19:20
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	96.6		70	130
Surrogate % Recovery - FID	96.7		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-45-2e	Lab Info:	g649-45-2e
FID Info:	VP071108/025F0101.D	PID Info:	VP071108/025R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW15
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/11/08 19:47 - 07/11/08 19:47
Date Analyzed	07/11/08 19:47 - 07/11/08 19:47
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	142	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	98.2		70	130
Surrogate % Recovery - FID	97.7		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-45-3e	Lab Info:	g649-45-3e
FID Info:	VP071108/026F0101.D	PID Info:	VP071108/026R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW21
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 17:56 - 07/15/08 17:56
Date Analyzed	07/15/08 17:56 - 07/15/08 17:56
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	86.2		70	130
Surrogate % Recovery - FID	89.3		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-45-4a	Lab Info:	g649-45-4a
FID Info:	VP071508/020F0101.D	PID Info:	VP071508/020R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW22
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 18:23 - 07/15/08 18:23
Date Analyzed	07/15/08 18:23 - 07/15/08 18:23
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	268	100	
C_9-C_{12} Aliphatics**	446	100	
C_9-C_{10} Aromatics**	240	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	89.6		70	130
Surrogate % Recovery - FID	92.3		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-5a	Lab Info: g649-45-5a
FID Info: VP071508/021F0101.D	PID Info: VP071508/021R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	IR78-GW06
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 19:44 - 07/15/08 19:44
Date Analyzed	07/15/08 19:44 - 07/15/08 19:44
Dry Weight	NA
Dilution Factor	5 - 5

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	1910	100	
C_9-C_{12} Aliphatics**	1980	100	
C_9-C_{10} Aromatics**	2490	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.5		70	130
Surrogate % Recovery - FID	94.9		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-6a	Lab Info: g649-45-6a
FID Info: VP071508/024F0101.D	PID Info: VP071508/024R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW17
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 18:50 - 07/15/08 18:50
Date Analyzed	07/15/08 18:50 - 07/15/08 18:50
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	237	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	88.4		70	130
Surrogate % Recovery - FID	90.8		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-7a	Lab Info: g649-45-7a
FID Info: VP071508/022F0101.D	PID Info: VP071508/022R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW19
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 19:17 - 07/15/08 19:17
Date Analyzed	07/15/08 19:17 - 07/15/08 19:17
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	663	100	
C_9-C_{12} Aliphatics**	238	100	
C_9-C_{10} Aromatics**	579	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.6		70	130
Surrogate % Recovery - FID	97.3		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-8a	Lab Info: g649-45-8a
FID Info: VP071508/023F0101.D	PID Info: VP071508/023R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW18
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/15/08 20:10 - 07/15/08 20:10
Date Analyzed	07/15/08 20:10 - 07/15/08 20:10
Dry Weight	NA
Dilution Factor	40 - 40

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	14800	202	
C_9-C_{12} Aliphatics**	8000	151	
C_9-C_{10} Aromatics**	2840	90.2	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	89.9		70	130
Surrogate % Recovery - FID	92.0		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-9a	Lab Info: g649-45-9a
FID Info: VP071508/025F0101.D	PID Info: VP071508/025R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	Trip Blank
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/10/08
Date Extracted	07/11/08 17:33 - 07/11/08 17:33
Date Analyzed	07/11/08 17:33 - 07/11/08 17:33
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	92.6		70	130
Surrogate % Recovery - FID	94.1		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-45-10a	Lab Info: g649-45-10a
FID Info: VP071108/021F0101.D	PID Info: VP071108/021R0101.D

Reviewed By:

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/10/08 PID Initial Calibration Date: 07/10/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	5.85	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	9.25	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/11/08 Filename: VP071108/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-7.1	±25%
C_9-C_{12} Aliphatics	200	16	-22.9	±25%
C_9-C_{10} Aromatics	200	16	-9.7	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/10/08 PID Initial Calibration Date: 07/10/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	5.85	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	9.25	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/11/08 Filename: VP071108/029F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-1.6	±25%
C_9-C_{12} Aliphatics	200	16	-17.8	±25%
C_9-C_{10} Aromatics	200	16	-0.9	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/14/08 PID Initial Calibration Date: 07/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	3.21	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	11.22	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/15/08 Filename: VP071508/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-6.8	±25%
C_9-C_{12} Aliphatics	200	16	-16.3	±25%
C_9-C_{10} Aromatics	200	16	-3.7	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/14/08 PID Initial Calibration Date: 07/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	3.21	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	11.22	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/15/08 Filename: VP071508/033F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-22.6	±25%
C_9-C_{12} Aliphatics	200	16	-23.2	±25%
C_9-C_{10} Aromatics	200	16	-10.2	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Ohio
- New Jersey
- West Virginia
- Hawaii
- Maryland
- North Carolina

www.us.sgs.com

089158

1 CLIENT: OSAGE OF VA

CONTACT: MIKE CREE PHONE NO: (757) 440-0400

PROJECT: CTO 015 SITE/PWSID#: BLDG 1613

REPORTS TO: MIKE CREE E-MAIL: mcree@osageva.com

FAX NO.: (757) 440-0411

INVOICE TO: MIKE CREE QUOTE #

P.O. NUMBER

SGS Reference: G649-45

PAGE 1 OF 1

Preservatives Used: HCL, N/A, HCL

3 Analysis Required: 602*, 625**, VPH

2

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	602*	625**	VPH	REMARKS
	UST1613-MW06	7-9-08	0910	H_2O	7	G	3	2	2	*602 w/ IPE,
	UST1613-MW05	7-9-08	1110	H_2O	7	G	3	2	2	MTBE, EDB +
	UST1613-MW15	7-9-08	1215	H_2O	7	G	3	2	2	Xylenes
	UST1613-MW21	7-9-08	1300	H_2O	7	G	3	2	2	
	UST1613-MW22	7-9-08	1410	H_2O	7	G	3	2	2	**625
	IR78-GW06	7-9-08	1045	H_2O	7	G	3	2	2	(Benzo(a)athracene
	UST1613-MW17	9-9-08	1430	H_2O	7	G	3	2	2	ONLY)
	UST1613-MW19	7-9-08	1335	H_2O	7	G	3	2	2	
	UST1613-MW18	7-9-08	1155	H_2O	7	G	3	2	2	Trip Blank ran
	TRIP BLANK			H_2O	1		[illegible]			for VPH [illegible]

5

Collected/Relinquished By: (1)	Date	Time	Received By:	Date	Time
[signature]	7-9-08		[signature]	7/9/08	17:00
Relinquished By: (2)	**Date**	**Time**	**Received By:**	**Date**	**Time**
[signature]	7/9/08	0350	[signature]	7/10/08	0800
Relinquished By: (3)	**Date**	**Time**	**Received By:**	**Date**	**Time**
Relinquished By: (4)	**Date**	**Time**	**Received By:**	**Date**	**Time**

4 Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO (YES circled)

Temperature °C: on ice

Special Deliverable Requirements: EDD FORMAT

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT (ABSENT circled)

Special Instructions: EMAIL RESULTS TO SWHITWORTH@OSAGEVA.COM nhall@catlinusa.com

Requested Turnaround Time:

☐ RUSH ______ Date Needed ☐ STD

N.C. Certification #481

☐ 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
☐ 1270 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

Mike Cree
Osage of Virginia
2618 A Colley Ave
Norfolk, VA 23517

Report Number: G649-47

Client Project: CTO 015

Dear Mike Cree,

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

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Revised

Ashley Nifong 5/7/05

Project Manager / Date
Ashley Nifong

List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification 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/CL = Reporting Limit / Control 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

% soilds = 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.

MI34.021808.4

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-47-1B
Lab Project ID: G649-47

Analyzed By: RSB
Date Collected: 7/10/2008 6:15
Date Received: 7/11/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/21/2008	
Ethylbenzene	**3.48**	1.00	0.19	1	7/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/21/2008	
Toluene	**1.75**	1.00	0.313	1	7/21/2008	
m/p-Xylene	**14.6**	2.00	0.481	1	7/21/2008	
o-Xylene	**9.51**	2.00	0.405	1	7/21/2008	

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

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-47-2B
Lab Project ID: G649-47

Analyzed By: RSB
Date Collected: 7/10/2008 10:15
Date Received: 7/11/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**2.60**	1.00	0.177	1	7/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	7/21/2008	
Methyl-tert butyl ether (MTBE)	**8.72**	2.00	0.306	1	7/21/2008	
Toluene	BQL	1.00	0.313	1	7/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/21/2008	
o-Xylene	BQL	2.00	0.405	1	7/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.8	94.5

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-47-3B
Lab Project ID: G649-47

Analyzed By: RSB
Date Collected: 7/9/2008 16:30
Date Received: 7/11/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	7/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	7/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/21/2008	
Toluene	BQL	1.00	0.313	1	7/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/21/2008	
o-Xylene	BQL	2.00	0.405	1	7/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.9	94.6

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: UST1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-47-4A
Lab Project ID: G649-47

Analyzed By: RSB
Date Collected: 7/10/2008 10:50
Date Received: 7/11/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**2.12**	1.00	0.177	1	7/22/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	7/22/2008	
Ethylbenzene	**0.198**	1.00	0.19	1	7/22/2008	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	7/22/2008	
Toluene	BQL	1.00	0.313	1	7/22/2008	
m/p-Xylene	BQL	2.00	0.481	1	7/22/2008	
o-Xylene	BQL	2.00	0.405	1	7/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.8	94.5

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-47-1H
Lab Project ID: G649-47

Initial/Final Amt: 946 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/10/2008 6:15
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.29	0.788	1	7/18/2008	
Acenaphthylene	BQL	5.29	0.788	1	7/18/2008	
Anthracene	BQL	5.29	0.925	1	7/18/2008	
Benzo[a]anthracene	BQL	5.29	0.719	1	7/18/2008	
Benzo[a]pyrene	BQL	5.29	0.671	1	7/18/2008	
Benzo[b]fluoranthene	BQL	5.29	0.756	1	7/18/2008	
Benzo[g,h,i]perylene	BQL	5.29	0.650	1	7/18/2008	
Benzo[k]fluoranthene	BQL	5.29	0.581	1	7/18/2008	
Bis(2-chloroethoxy)methane	BQL	5.29	1.09	1	7/18/2008	
Bis(2-chloroethyl)ether	BQL	5.29	1.10	1	7/18/2008	
Bis(2-chloroisopropyl)ether	BQL	5.29	1.03	1	7/18/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.29	0.433	1	7/18/2008	
4-bromophenyl phenyl ether	BQL	5.29	0.825	1	7/18/2008	
Butylbenzylphthalate	**0.740**	5.29	0.470	1	7/18/2008	J
2-Chloronaphthalene	BQL	5.29	0.914	1	7/18/2008	
2-Chlorophenol	BQL	5.29	1.24	1	7/18/2008	
4-Chloro-3-methylphenol	BQL	5.29	0.840	1	7/18/2008	
4-Chlorophenyl phenyl ether	BQL	5.29	3.44	1	7/18/2008	
Chrysene	BQL	5.29	0.587	1	7/18/2008	
Dibenzo[a,h]anthracene	BQL	5.29	0.465	1	7/18/2008	
Di-n-Butylphthalate	BQL	5.29	0.872	1	7/18/2008	
3,3'-Dichlorobenzidine	BQL	10.6	1.29	1	7/18/2008	
2,4-Dichlorophenol	BQL	5.29	1.18	1	7/18/2008	
Diethylphthalate	**1.22**	5.29	0.782	1	7/18/2008	J
Dimethylphthalate	BQL	5.29	0.587	1	7/18/2008	
2,4-Dimethylphenol	BQL	5.29	1.71	1	7/18/2008	
Di-n-octylphthalate	BQL	5.29	0.613	1	7/18/2008	
4,6-Dinitro-2-methylphenol	BQL	26.4	0.581	1	7/18/2008	
2,4-Dinitrophenol	BQL	26.4	0.677	1	7/18/2008	
2,4-Dinitrotoluene	BQL	5.29	0.566	1	7/18/2008	
2,6-Dinitrotoluene	BQL	5.29	0.687	1	7/18/2008	
Diphenylamine *	BQL	5.29	0.603	1	7/18/2008	
Fluoranthene	BQL	5.29	0.745	1	7/18/2008	
Fluorene	BQL	5.29	0.766	1	7/18/2008	
Hexachlorobenzene	BQL	5.29	0.534	1	7/18/2008	
Hexachlorobutadiene	BQL	5.29	0.803	1	7/18/2008	
Hexachlorocyclopentadiene	BQL	10.6	10.6	1	7/18/2008	
Hexachloroethane	BQL	5.29	0.788	1	7/18/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.29	2.42	1	7/18/2008	
Isophorone	BQL	5.29	0.936	1	7/18/2008	
Naphthalene	**4.02**	5.29	0.962	1	7/18/2008	J
Nitrobenzene	BQL	5.29	1.11	1	7/18/2008	
2-Nitrophenol	BQL	5.29	1.30	1	7/18/2008	
4-Nitrophenol	BQL	26.4	1.14	1	7/18/2008	
N-Nitrosodi-n-propylamine	BQL	5.29	1.59	1	7/18/2008	
Pentachlorophenol	BQL	26.4	1.50	1	7/18/2008	
Phenanthrene	BQL	5.29	0.470	1	7/18/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-47-1H
Lab Project ID: G649-47

Initial/Final Amt: 946 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/10/2008 6:15
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.29	1.12	1	7/18/2008	
Pyrene	BQL	5.29	2.18	1	7/18/2008	
1,2,4-Trichlorobenzene	BQL	5.29	0.761	1	7/18/2008	
2,4,6-Trichlorophenol	BQL	5.29	0.978	1	7/18/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	8.4	84
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	9	90
2,4,6-Tribromophenol	10	9.6	96
4-Terphenyl-d14	10	8.8	88

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-47-2H
Lab Project ID: G649-47

Initial/Final Amt: 908 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/10/2008 10:15
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.51	0.820	1	7/18/2008	
Acenaphthylene	BQL	5.51	0.820	1	7/18/2008	
Anthracene	BQL	5.51	0.964	1	7/18/2008	
Benzo[a]anthracene	BQL	5.51	0.749	1	7/18/2008	
Benzo[a]pyrene	BQL	5.51	0.699	1	7/18/2008	
Benzo[b]fluoranthene	BQL	5.51	0.787	1	7/18/2008	
Benzo[g,h,i]perylene	BQL	5.51	0.677	1	7/18/2008	
Benzo[k]fluoranthene	BQL	5.51	0.606	1	7/18/2008	
Bis(2-chloroethoxy)methane	BQL	5.51	1.13	1	7/18/2008	
Bis(2-chloroethyl)ether	BQL	5.51	1.15	1	7/18/2008	
Bis(2-chloroisopropyl)ether	BQL	5.51	1.07	1	7/18/2008	
Bis(2-ethylhexyl)phthalate	30.1	5.51	0.452	1	7/18/2008	
4-bromophenyl phenyl ether	BQL	5.51	0.859	1	7/18/2008	
Butylbenzylphthalate	BQL	5.51	0.490	1	7/18/2008	
2-Chloronaphthalene	BQL	5.51	0.953	1	7/18/2008	
2-Chlorophenol	BQL	5.51	1.29	1	7/18/2008	
4-Chloro-3-methylphenol	BQL	5.51	0.876	1	7/18/2008	
4-Chlorophenyl phenyl ether	BQL	5.51	3.58	1	7/18/2008	
Chrysene	BQL	5.51	0.611	1	7/18/2008	
Dibenzo[a,h]anthracene	BQL	5.51	0.485	1	7/18/2008	
Di-n-Butylphthalate	BQL	5.51	0.909	1	7/18/2008	
3,3'-Dichlorobenzidine	BQL	11.0	1.34	1	7/18/2008	
2,4-Dichlorophenol	BQL	5.51	1.23	1	7/18/2008	
Diethylphthalate	BQL	5.51	0.815	1	7/18/2008	
Dimethylphthalate	BQL	5.51	0.611	1	7/18/2008	
2,4-Dimethylphenol	BQL	5.51	1.78	1	7/18/2008	
Di-n-octylphthalate	BQL	5.51	0.639	1	7/18/2008	
4,6-Dinitro-2-methylphenol	BQL	27.5	0.606	1	7/18/2008	
2,4-Dinitrophenol	BQL	27.5	0.705	1	7/18/2008	
2,4-Dinitrotoluene	BQL	5.51	0.589	1	7/18/2008	
2,6-Dinitrotoluene	BQL	5.51	0.716	1	7/18/2008	
Diphenylamine *	BQL	5.51	0.628	1	7/18/2008	
Fluoranthene	BQL	5.51	0.776	1	7/18/2008	
Fluorene	BQL	5.51	0.798	1	7/18/2008	
Hexachlorobenzene	BQL	5.51	0.556	1	7/18/2008	
Hexachlorobutadiene	BQL	5.51	0.837	1	7/18/2008	
Hexachlorocyclopentadiene	BQL	11.0	11.0	1	7/18/2008	
Hexachloroethane	BQL	5.51	0.820	1	7/18/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.51	2.52	1	7/18/2008	
Isophorone	BQL	5.51	0.975	1	7/18/2008	
Naphthalene	BQL	5.51	1.00	1	7/18/2008	
Nitrobenzene	BQL	5.51	1.16	1	7/18/2008	
2-Nitrophenol	BQL	5.51	1.35	1	7/18/2008	
4-Nitrophenol	BQL	27.5	1.19	1	7/18/2008	
N-Nitrosodi-n-propylamine	BQL	5.51	1.65	1	7/18/2008	
Pentachlorophenol	BQL	27.5	1.56	1	7/18/2008	
Phenanthrene	BQL	5.51	0.490	1	7/18/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-47-2H
Lab Project ID: G649-47

Initial/Final Amt: 908 mL / 5.0 mL

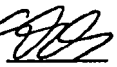
Analyzed By: DES
Date Collected: 7/10/2008 10:15
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.51	1.17	1	7/18/2008	
Pyrene	BQL	5.51	2.27	1	7/18/2008	
1,2,4-Trichlorobenzene	BQL	5.51	0.793	1	7/18/2008	
2,4,6-Trichlorophenol	BQL	5.51	1.02	1	7/18/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	8.4	84
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	8.8	88
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	8.7	87

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 Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-47-3H
Lab Project ID: G649-47

Initial/Final Amt: 940 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/9/2008 16:30
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.32	0.793	1	7/18/2008	
Acenaphthylene	BQL	5.32	0.793	1	7/18/2008	
Anthracene	BQL	5.32	0.931	1	7/18/2008	
Benzo[a]anthracene	BQL	5.32	0.723	1	7/18/2008	
Benzo[a]pyrene	BQL	5.32	0.676	1	7/18/2008	
Benzo[b]fluoranthene	BQL	5.32	0.761	1	7/18/2008	
Benzo[g,h,i]perylene	BQL	5.32	0.654	1	7/18/2008	
Benzo[k]fluoranthene	BQL	5.32	0.585	1	7/18/2008	
Bis(2-chloroethoxy)methane	BQL	5.32	1.10	1	7/18/2008	
Bis(2-chloroethyl)ether	BQL	5.32	1.11	1	7/18/2008	
Bis(2-chloroisopropyl)ether	BQL	5.32	1.04	1	7/18/2008	
Bis(2-ethylhexyl)phthalate	**15.6**	5.32	0.436	1	7/18/2008	
4-bromophenyl phenyl ether	BQL	5.32	0.830	1	7/18/2008	
Butylbenzylphthalate	BQL	5.32	0.473	1	7/18/2008	
2-Chloronaphthalene	BQL	5.32	0.920	1	7/18/2008	
2-Chlorophenol	BQL	5.32	1.24	1	7/18/2008	
4-Chloro-3-methylphenol	BQL	5.32	0.846	1	7/18/2008	
4-Chlorophenyl phenyl ether	BQL	5.32	3.46	1	7/18/2008	
Chrysene	BQL	5.32	0.590	1	7/18/2008	
Dibenzo[a,h]anthracene	BQL	5.32	0.468	1	7/18/2008	
Di-n-Butylphthalate	BQL	5.32	0.878	1	7/18/2008	
3,3'-Dichlorobenzidine	BQL	10.6	1.30	1	7/18/2008	
2,4-Dichlorophenol	BQL	5.32	1.19	1	7/18/2008	
Diethylphthalate	BQL	5.32	0.787	1	7/18/2008	
Dimethylphthalate	BQL	5.32	0.590	1	7/18/2008	
2,4-Dimethylphenol	BQL	5.32	1.72	1	7/18/2008	
Di-n-octylphthalate	BQL	5.32	0.617	1	7/18/2008	
4,6-Dinitro-2-methylphenol	BQL	26.6	0.585	1	7/18/2008	
2,4-Dinitrophenol	BQL	26.6	0.681	1	7/18/2008	
2,4-Dinitrotoluene	BQL	5.32	0.569	1	7/18/2008	
2,6-Dinitrotoluene	BQL	5.32	0.691	1	7/18/2008	
Diphenylamine *	BQL	5.32	0.606	1	7/18/2008	
Fluoranthene	BQL	5.32	0.750	1	7/18/2008	
Fluorene	BQL	5.32	0.771	1	7/18/2008	
Hexachlorobenzene	BQL	5.32	0.537	1	7/18/2008	
Hexachlorobutadiene	BQL	5.32	0.809	1	7/18/2008	
Hexachlorocyclopentadiene	BQL	10.6	10.6	1	7/18/2008	
Hexachloroethane	BQL	5.32	0.793	1	7/18/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.32	2.43	1	7/18/2008	
Isophorone	BQL	5.32	0.941	1	7/18/2008	
Naphthalene	BQL	5.32	0.968	1	7/18/2008	
Nitrobenzene	BQL	5.32	1.12	1	7/18/2008	
2-Nitrophenol	BQL	5.32	1.31	1	7/18/2008	
4-Nitrophenol	BQL	26.6	1.15	1	7/18/2008	
N-Nitrosodi-n-propylamine	BQL	5.32	1.60	1	7/18/2008	
Pentachlorophenol	BQL	26.6	1.51	1	7/18/2008	
Phenanthrene	BQL	5.32	0.473	1	7/18/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-47-3H
Lab Project ID: G649-47

Initial/Final Amt: 940 mL / 5.0 mL

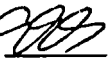
Analyzed By: DES
Date Collected: 7/9/2008 16:30
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.32	1.13	1	7/18/2008	
Pyrene	BQL	5.32	2.20	1	7/18/2008	
1,2,4-Trichlorobenzene	BQL	5.32	0.766	1	7/18/2008	
2,4,6-Trichlorophenol	BQL	5.32	0.984	1	7/18/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	9.3	93
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	8.5	85
4-Terphenyl-d14	10	8.7	87

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-47-4H
Lab Project ID: G649-47

Initial/Final Amt: 927 mL / 5.0 mL

Analyzed By: DES
Date Collected: 7/10/2008 10:50
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.39	0.804	1	7/20/2008	
Acenaphthylene	BQL	5.39	0.804	1	7/20/2008	
Anthracene	BQL	5.39	0.944	1	7/20/2008	
Benzo[a]anthracene	BQL	5.39	0.734	1	7/20/2008	
Benzo[a]pyrene	BQL	5.39	0.685	1	7/20/2008	
Benzo[b]fluoranthene	BQL	5.39	0.771	1	7/20/2008	
Benzo[g,h,i]perylene	BQL	5.39	0.663	1	7/20/2008	
Benzo[k]fluoranthene	BQL	5.39	0.593	1	7/20/2008	
Bis(2-chloroethoxy)methane	BQL	5.39	1.11	1	7/20/2008	
Bis(2-chloroethyl)ether	BQL	5.39	1.12	1	7/20/2008	
Bis(2-chloroisopropyl)ether	BQL	5.39	1.05	1	7/20/2008	
Bis(2-ethylhexyl)phthalate	**40.6**	5.39	0.442	1	7/20/2008	
4-bromophenyl phenyl ether	BQL	5.39	0.841	1	7/20/2008	
Butylbenzylphthalate	BQL	5.39	0.480	1	7/20/2008	
2-Chloronaphthalene	BQL	5.39	0.933	1	7/20/2008	
2-Chlorophenol	BQL	5.39	1.26	1	7/20/2008	
4-Chloro-3-methylphenol	BQL	5.39	0.858	1	7/20/2008	
4-Chlorophenyl phenyl ether	BQL	5.39	3.51	1	7/20/2008	
Chrysene	BQL	5.39	0.599	1	7/20/2008	
Dibenzo[a,h]anthracene	BQL	5.39	0.475	1	7/20/2008	
Di-n-Butylphthalate	BQL	5.39	0.890	1	7/20/2008	
3,3'-Dichlorobenzidine	BQL	10.8	1.32	1	7/20/2008	
2,4-Dichlorophenol	BQL	5.39	1.21	1	7/20/2008	
Diethylphthalate	BQL	5.39	0.798	1	7/20/2008	
Dimethylphthalate	BQL	5.39	0.599	1	7/20/2008	
2,4-Dimethylphenol	BQL	5.39	1.75	1	7/20/2008	
Di-n-octylphthalate	BQL	5.39	0.626	1	7/20/2008	
4,6-Dinitro-2-methylphenol	BQL	27.0	0.593	1	7/20/2008	
2,4-Dinitrophenol	BQL	27.0	0.690	1	7/20/2008	
2,4-Dinitrotoluene	BQL	5.39	0.577	1	7/20/2008	
2,6-Dinitrotoluene	BQL	5.39	0.701	1	7/20/2008	
Diphenylamine *	BQL	5.39	0.615	1	7/20/2008	
Fluoranthene	BQL	5.39	0.761	1	7/20/2008	
Fluorene	BQL	5.39	0.782	1	7/20/2008	
Hexachlorobenzene	BQL	5.39	0.545	1	7/20/2008	
Hexachlorobutadiene	BQL	5.39	0.820	1	7/20/2008	
Hexachlorocyclopentadiene	BQL	10.8	10.8	1	7/20/2008	
Hexachloroethane	BQL	5.39	0.804	1	7/20/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.39	2.46	1	7/20/2008	
Isophorone	BQL	5.39	0.955	1	7/20/2008	
Naphthalene	**2.86**	5.39	0.982	1	7/20/2008	J
Nitrobenzene	BQL	5.39	1.13	1	7/20/2008	
2-Nitrophenol	BQL	5.39	1.33	1	7/20/2008	
4-Nitrophenol	BQL	27.0	1.17	1	7/20/2008	
N-Nitrosodi-n-propylamine	BQL	5.39	1.62	1	7/20/2008	
Pentachlorophenol	BQL	27.0	1.53	1	7/20/2008	
Phenanthrene	BQL	5.39	0.480	1	7/20/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: UST1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-47-4H
Lab Project ID: G649-47

Initial/Final Amt: 927 mL / 5.0 mL

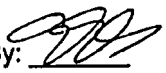
Analyzed By: DES
Date Collected: 7/10/2008 10:50
Date Received: 7/11/2008
Date Extracted: 7/15/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.39	1.14	1	7/20/2008	
Pyrene	BQL	5.39	2.23	1	7/20/2008	
1,2,4-Trichlorobenzene	BQL	5.39	0.777	1	7/20/2008	
2,4,6-Trichlorophenol	BQL	5.39	0.998	1	7/20/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.3	93
2-Fluorophenol	10	8.8	88
Nitrobenzene-d5	10	9.9	99
Phenol-d6	10	9.1	91
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	9.2	92

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

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

Reviewed By: 

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW10
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/10/08
Date Received	07/11/08
Date Extracted	07/16/08 03:19 - 07/16/08 03:19
Date Analyzed	07/16/08 03:19 - 07/16/08 03:19
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	139	100	
C_9-C_{10} Aromatics**	229	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	92.8		70	130
Surrogate % Recovery - FID	96.2		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-47-1a	Lab Info: g649-47-1a
FID Info: VP071508/041F0101.D	PID Info: VP071508/041R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW16
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/10/08
Date Received	07/11/08
Date Extracted	07/16/08 03:46 - 07/16/08 03:46
Date Analyzed	07/16/08 03:46 - 07/16/08 03:46
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.9		70	130
Surrogate % Recovery - FID	96.8		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-47-2a	Lab Info: g649-47-2a
FID Info: VP071508/042F0101.D	PID Info: VP071508/042R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW20
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/09/08
Date Received	07/11/08
Date Extracted	07/16/08 04:13 - 07/16/08 04:13
Date Analyzed	07/16/08 04:13 - 07/16/08 04:13
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	89.9		70	130
Surrogate % Recovery - FID	93.0		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-47-3a	Lab Info: g649-47-3a
FID Info: VP071508/043F0101.D	PID Info: VP071508/043R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	UST1613-MW11
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	07/10/08
Date Received	07/11/08
Date Extracted	07/16/08 04:40 - 07/16/08 04:40
Date Analyzed	07/16/08 04:40 - 07/16/08 04:40
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	87.7		70	130
Surrogate % Recovery - FID	90.4		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-47-4a	Lab Info: g649-47-4a
FID Info: VP071508/044F0101.D	PID Info: VP071508/044R0101.D

Reviewed By:

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/14/08 PID Initial Calibration Date: 07/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	3.21	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	11.22	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/15/08 Filename: VP071508/033F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-22.6	±25%
C_9-C_{12} Aliphatics	200	16	-23.2	±25%
C_9-C_{10} Aromatics	200	16	-10.2	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 07/14/08 PID Initial Calibration Date: 07/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	3.21	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	11.22	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 07/15/08 Filename: VP071508/047F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-8.1	±25%
C_9-C_{12} Aliphatics	200	16	-20.5	±25%
C_9-C_{10} Aromatics	200	16	0.8	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Ohio
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

089083

(1)

CLIENT: OSAGE OF VA

CONTACT: MIKE CREE PHONE NO:(757)440-0400

PROJECT: CTO 015 SITE/PWSID#: 13LDG 1613

REPORTS TO: MIKE CREE E-MAIL: MCREE@OSAGEVA.COM

FAX NO.:(757)440-0411

INVOICE TO: MIKE CREE QUOTE #

P.O. NUMBER

SGS Reference: G649-47

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	HCL	NA	HCL							REMARKS
							Analysis Required (3)	602	625	VPH							
	UST1613-MW10	7-10-08	0615	H_2O	7	G		3	2	2							
	UST1613-MW16	7-10-08	1015	H_2O	7	G		3	2	2							
	UST1613-MW20	7-9-08	1630	H_2O	7	G		3	2	2							
	UST1613-MW11	7-10-08	1050	H_2O	7	G		3	2	2							

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
	7-11-08	15:55	Willard Hunt	7/11/08	8:55
Relinquished By: (2) Willard Hunt	7/11/08	17:20		7/11/08	1720
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier: COURIER

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C:_____ °F_____

Special Deliverable Requirements: EDD

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions: EMAIL RESULTS SWHITWORTH@OSAGEVA.COM NHALL@CATLINUSA.COM

Requested Turnaround Time:

☐ RUSH _____ (Date Needed) ☐ STD

☐ 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
☐ 1270 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. Shaun Whitworth
Osage of Virginia
2618 A Colley Ave
Norfolk VA 23517

Report Number: G649-93

Client Project: CTO 015
Project Addendum: February 12, 2009

Dear Mr. Whitworth:

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

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Revised

Project Manager
Ashley Nifong

5/7/09
Date

Case Narrative
Osage of Virginia
SGS Project: **G649-93**
Project Name: **CTO 055**

SGS Environmental Services Inc.

February 11, 2009

- The samples were accepted into the laboratory on December 13, 2008 at 1030 for analyses as indicated on the chain of custody. The samples were received in good condition, with a temperature range of 3.2-3.6°C. Sample USTBldg1613-MW19 was re-sampled due to broken containers during shipment and was received on December 17, 2008 at 1630 with a temperature of 3.2°C.
- This addendum contains the 625 data with the full compound list reported as per client request.
- All extractions and analyses were completed within holding time limits, with the following quality control exceptions.

625 Analysis

- The samples were extracted for 625 Acids only due to the original COC request for Benzo(a)anthracene. However, all surrogates and associated QA/QC passed acceptance criteria without the Base extraction.

Data Review _____ Date 12FEB09

List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification 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/CL = Reporting Limit / Control 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

% soilds = 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.

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-93-1H
Lab Project ID: G649-93

Initial/Final Amt: 993 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/10/2008 15:40
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.04	0.750	1	12/17/2008	
Acenaphthylene	BQL	5.04	0.750	1	12/17/2008	
Anthracene	BQL	5.04	0.881	1	12/17/2008	
Benzo[a]anthracene	BQL	5.04	0.685	1	12/17/2008	
Benzo[a]pyrene	BQL	5.04	0.639	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.04	0.720	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.04	0.619	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.04	0.554	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.04	1.04	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.04	1.05	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.04	0.982	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	**0.906**	5.04	0.413	1	12/17/2008	J
4-bromophenyl phenyl ether	BQL	5.04	0.785	1	12/17/2008	
Butylbenzylphthalate	BQL	5.04	0.448	1	12/17/2008	
2-Chloronaphthalene	BQL	5.04	0.871	1	12/17/2008	
2-Chlorophenol	BQL	5.04	1.18	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.04	0.801	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.04	3.28	1	12/17/2008	
Chrysene	BQL	5.04	0.559	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.04	0.443	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.04	0.831	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.1	1.23	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.04	1.13	1	12/17/2008	
Diethylphthalate	BQL	5.04	0.745	1	12/17/2008	
Dimethylphthalate	BQL	5.04	0.559	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.04	1.63	1	12/17/2008	
Di-n-octylphthalate	BQL	5.04	0.584	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.2	0.554	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.2	0.645	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.04	0.539	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.04	0.655	1	12/17/2008	
Diphenylamine *	BQL	5.04	0.574	1	12/17/2008	
Fluoranthene	BQL	5.04	0.710	1	12/17/2008	
Fluorene	BQL	5.04	0.730	1	12/17/2008	
Hexachlorobenzene	BQL	5.04	0.509	1	12/17/2008	
Hexachlorobutadiene	BQL	5.04	0.765	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.1	10.1	1	12/17/2008	
Hexachloroethane	BQL	5.04	0.750	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.04	2.30	1	12/17/2008	
Isophorone	BQL	5.04	0.891	1	12/17/2008	
Naphthalene	BQL	5.04	0.916	1	12/17/2008	
Nitrobenzene	BQL	5.04	1.06	1	12/17/2008	
2-Nitrophenol	BQL	5.04	1.24	1	12/17/2008	
4-Nitrophenol	BQL	25.2	1.09	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.04	1.51	1	12/17/2008	
Pentachlorophenol	BQL	25.2	1.42	1	12/17/2008	
Phenanthrene	BQL	5.04	0.448	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-93-1H
Lab Project ID: G649-93

Initial/Final Amt: 993 mL / 5.0 mL

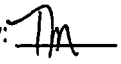
Analyzed By: DES
Date Collected: 12/10/2008 15:40
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.04	1.07	1	12/17/2008	
Pyrene	BQL	5.04	2.08	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.04	0.725	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.04	0.932	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.4	94
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	8.5	85
2,4,6-Tribromophenol	10	10.3	103
4-Terphenyl-d14	10	7.8	78

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-2H
Lab Project ID: G649-93

Initial/Final Amt: 964 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 10:45
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.19	0.773	1	12/17/2008	
Acenaphthylene	BQL	5.19	0.773	1	12/17/2008	
Anthracene	BQL	5.19	0.908	1	12/17/2008	
Benzo[a]anthracene	BQL	5.19	0.705	1	12/17/2008	
Benzo[a]pyrene	BQL	5.19	0.659	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.19	0.742	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.19	0.638	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.19	0.571	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.19	1.07	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.19	1.08	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.19	1.01	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.19	0.425	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.19	0.809	1	12/17/2008	
Butylbenzylphthalate	BQL	5.19	0.462	1	12/17/2008	
2-Chloronaphthalene	BQL	5.19	0.897	1	12/17/2008	
2-Chlorophenol	BQL	5.19	1.21	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.19	0.825	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.19	3.38	1	12/17/2008	
Chrysene	BQL	5.19	0.576	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.19	0.456	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.19	0.856	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.4	1.27	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.19	1.16	1	12/17/2008	
Diethylphthalate	BQL	5.19	0.768	1	12/17/2008	
Dimethylphthalate	BQL	5.19	0.576	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.19	1.68	1	12/17/2008	
Di-n-octylphthalate	BQL	5.19	0.602	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.9	0.571	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.9	0.664	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.19	0.555	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.19	0.674	1	12/17/2008	
Diphenylamine *	BQL	5.19	0.591	1	12/17/2008	
Fluoranthene	BQL	5.19	0.731	1	12/17/2008	
Fluorene	BQL	5.19	0.752	1	12/17/2008	
Hexachlorobenzene	BQL	5.19	0.524	1	12/17/2008	
Hexachlorobutadiene	BQL	5.19	0.788	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.4	10.4	1	12/17/2008	
Hexachloroethane	BQL	5.19	0.773	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.19	2.37	1	12/17/2008	
Isophorone	BQL	5.19	0.918	1	12/17/2008	
Naphthalene	BQL	5.19	0.944	1	12/17/2008	
Nitrobenzene	BQL	5.19	1.09	1	12/17/2008	
2-Nitrophenol	BQL	5.19	1.28	1	12/17/2008	
4-Nitrophenol	BQL	25.9	1.12	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.19	1.56	1	12/17/2008	
Pentachlorophenol	BQL	25.9	1.47	1	12/17/2008	
Phenanthrene	BQL	5.19	0.462	1	12/17/2008	

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-2H
Lab Project ID: G649-93

Initial/Final Amt: 964 mL / 5.0 mL

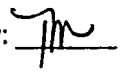
Analyzed By: DES
Date Collected: 12/11/2008 10:45
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.19	1.10	1	12/17/2008	
Pyrene	BQL	5.19	2.14	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.19	0.747	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.19	0.960	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	7.2	72
Nitrobenzene-d5	10	8.8	88
Phenol-d6	10	8.3	83
2,4,6-Tribromophenol	10	7.8	78
4-Terphenyl-d14	10	7.6	76

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-93-3H
Lab Project ID: G649-93

Initial/Final Amt: 857 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 9:45
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.83	0.869	1	12/17/2008	
Acenaphthylene	BQL	5.83	0.869	1	12/17/2008	
Anthracene	BQL	5.83	1.02	1	12/17/2008	
Benzo[a]anthracene	BQL	5.83	0.793	1	12/17/2008	
Benzo[a]pyrene	BQL	5.83	0.741	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.83	0.834	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.83	0.718	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.83	0.642	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.83	1.20	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.83	1.21	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.83	1.14	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.83	0.478	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.83	0.910	1	12/17/2008	
Butylbenzylphthalate	BQL	5.83	0.519	1	12/17/2008	
2-Chloronaphthalene	BQL	5.83	1.01	1	12/17/2008	
2-Chlorophenol	BQL	5.83	1.37	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.83	0.928	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.83	3.80	1	12/17/2008	
Chrysene	BQL	5.83	0.648	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.83	0.513	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.83	0.963	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	11.7	1.42	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.83	1.31	1	12/17/2008	
Diethylphthalate	BQL	5.83	0.863	1	12/17/2008	
Dimethylphthalate	BQL	5.83	0.648	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.83	1.89	1	12/17/2008	
Di-n-octylphthalate	BQL	5.83	0.677	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	29.2	0.642	1	12/17/2008	
2,4-Dinitrophenol	BQL	29.2	0.747	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.83	0.624	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.83	0.758	1	12/17/2008	
Diphenylamine *	BQL	5.83	0.665	1	12/17/2008	
Fluoranthene	BQL	5.83	0.823	1	12/17/2008	
Fluorene	BQL	5.83	0.846	1	12/17/2008	
Hexachlorobenzene	BQL	5.83	0.589	1	12/17/2008	
Hexachlorobutadiene	BQL	5.83	0.887	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	11.7	11.7	1	12/17/2008	
Hexachloroethane	BQL	5.83	0.869	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.83	2.67	1	12/17/2008	
Isophorone	BQL	5.83	1.03	1	12/17/2008	
Naphthalene	**12.2**	5.83	1.06	1	12/17/2008	
Nitrobenzene	BQL	5.83	1.23	1	12/17/2008	
2-Nitrophenol	BQL	5.83	1.44	1	12/17/2008	
4-Nitrophenol	BQL	29.2	1.26	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.83	1.75	1	12/17/2008	
Pentachlorophenol	BQL	29.2	1.65	1	12/17/2008	
Phenanthrene	BQL	5.83	0.519	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-93-3H
Lab Project ID: G649-93

Initial/Final Amt: 857 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 9:45
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.83	1.24	1	12/17/2008	
Pyrene	BQL	5.83	2.41	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.83	0.840	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.83	1.08	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.2	82
2-Fluorophenol	10	6.6	66
Nitrobenzene-d5	10	8.1	81
Phenol-d6	10	7.8	78
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	8.8	88

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-93-4H
Lab Project ID: G649-93

Initial/Final Amt: 979 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 13:42
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.11	0.761	1	12/17/2008	
Acenaphthylene	BQL	5.11	0.761	1	12/17/2008	
Anthracene	BQL	5.11	0.894	1	12/17/2008	
Benzo[a]anthracene	BQL	5.11	0.695	1	12/17/2008	
Benzo[a]pyrene	BQL	5.11	0.649	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.11	0.730	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.11	0.628	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.11	0.562	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.11	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.11	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.11	0.996	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.11	0.419	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.11	0.797	1	12/17/2008	
Butylbenzylphthalate	BQL	5.11	0.455	1	12/17/2008	
2-Chloronaphthalene	BQL	5.11	0.884	1	12/17/2008	
2-Chlorophenol	BQL	5.11	1.20	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.11	0.812	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.11	3.32	1	12/17/2008	
Chrysene	BQL	5.11	0.567	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.11	0.449	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.11	0.843	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.25	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.11	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.11	0.756	1	12/17/2008	
Dimethylphthalate	BQL	5.11	0.567	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.11	1.65	1	12/17/2008	
Di-n-octylphthalate	BQL	5.11	0.592	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.5	0.562	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.5	0.654	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.11	0.546	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.11	0.664	1	12/17/2008	
Diphenylamine *	BQL	5.11	0.582	1	12/17/2008	
Fluoranthene	BQL	5.11	0.720	1	12/17/2008	
Fluorene	BQL	5.11	0.741	1	12/17/2008	
Hexachlorobenzene	BQL	5.11	0.516	1	12/17/2008	
Hexachlorobutadiene	BQL	5.11	0.776	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.11	0.761	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.11	2.33	1	12/17/2008	
Isophorone	BQL	5.11	0.904	1	12/17/2008	
Naphthalene	**7.25**	5.11	0.930	1	12/17/2008	
Nitrobenzene	BQL	5.11	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.11	1.26	1	12/17/2008	
4-Nitrophenol	BQL	25.5	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.11	1.53	1	12/17/2008	
Pentachlorophenol	BQL	25.5	1.45	1	12/17/2008	
Phenanthrene	BQL	5.11	0.455	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-93-4H
Lab Project ID: G649-93

Initial/Final Amt: 979 mL / 5.0 mL

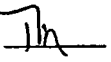
Analyzed By: DES
Date Collected: 12/11/2008 13:42
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.11	1.08	1	12/17/2008	
Pyrene	BQL	5.11	2.11	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.11	0.735	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.11	0.945	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	7.2	72
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	8.1	81
2,4,6-Tribromophenol	10	9	90
4-Terphenyl-d14	10	5.9	59

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 Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-93-5H
Lab Project ID: G649-93

Initial/Final Amt: 952 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 16:32
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.25	0.783	1	12/17/2008	
Acenaphthylene	BQL	5.25	0.783	1	12/17/2008	
Anthracene	BQL	5.25	0.919	1	12/17/2008	
Benzo[a]anthracene	BQL	5.25	0.714	1	12/17/2008	
Benzo[a]pyrene	BQL	5.25	0.667	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.25	0.751	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.25	0.646	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.25	0.578	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.25	1.08	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.25	1.09	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.25	1.02	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.25	0.431	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.25	0.819	1	12/17/2008	
Butylbenzylphthalate	BQL	5.25	0.467	1	12/17/2008	
2-Chloronaphthalene	BQL	5.25	0.909	1	12/17/2008	
2-Chlorophenol	BQL	5.25	1.23	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.25	0.835	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.25	3.42	1	12/17/2008	
Chrysene	BQL	5.25	0.583	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.25	0.462	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.25	0.867	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.5	1.28	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.25	1.18	1	12/17/2008	
Diethylphthalate	BQL	5.25	0.777	1	12/17/2008	
Dimethylphthalate	BQL	5.25	0.583	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.25	1.70	1	12/17/2008	
Di-n-octylphthalate	BQL	5.25	0.609	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	26.3	0.578	1	12/17/2008	
2,4-Dinitrophenol	BQL	26.3	0.672	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.25	0.562	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.25	0.683	1	12/17/2008	
Diphenylamine *	BQL	5.25	0.599	1	12/17/2008	
Fluoranthene	BQL	5.25	0.741	1	12/17/2008	
Fluorene	BQL	5.25	0.762	1	12/17/2008	
Hexachlorobenzene	BQL	5.25	0.530	1	12/17/2008	
Hexachlorobutadiene	BQL	5.25	0.798	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.5	10.5	1	12/17/2008	
Hexachloroethane	BQL	5.25	0.783	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.25	2.40	1	12/17/2008	
Isophorone	BQL	5.25	0.930	1	12/17/2008	
Naphthalene	BQL	5.25	0.956	1	12/17/2008	
Nitrobenzene	BQL	5.25	1.10	1	12/17/2008	
2-Nitrophenol	BQL	5.25	1.29	1	12/17/2008	
4-Nitrophenol	BQL	26.3	1.13	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.25	1.58	1	12/17/2008	
Pentachlorophenol	BQL	26.3	1.49	1	12/17/2008	
Phenanthrene	BQL	5.25	0.467	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-93-5H
Lab Project ID: G649-93

Initial/Final Amt: 952 mL / 5.0 mL

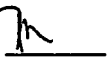
Analyzed By: DES
Date Collected: 12/12/2008 16:32
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.25	1.11	1	12/17/2008	
Pyrene	BQL	5.25	2.17	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.25	0.756	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.25	0.972	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	7.6	76
Nitrobenzene-d5	10	9	90
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	8.5	85
4-Terphenyl-d14	10	8.5	85

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-93-6H
Lab Project ID: G649-93

Initial/Final Amt: 985 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 10:20
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.08	0.756	1	12/17/2008	
Acenaphthylene	BQL	5.08	0.756	1	12/17/2008	
Anthracene	BQL	5.08	0.888	1	12/17/2008	
Benzo[a]anthracene	BQL	5.08	0.690	1	12/17/2008	
Benzo[a]pyrene	BQL	5.08	0.645	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.08	0.726	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.08	0.624	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.08	0.558	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.08	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.08	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.08	0.990	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.08	0.416	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.08	0.792	1	12/17/2008	
Butylbenzylphthalate	BQL	5.08	0.452	1	12/17/2008	
2-Chloronaphthalene	BQL	5.08	0.878	1	12/17/2008	
2-Chlorophenol	BQL	5.08	1.19	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.08	0.807	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.08	3.30	1	12/17/2008	
Chrysene	BQL	5.08	0.563	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.08	0.447	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.08	0.838	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.24	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.08	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.08	0.751	1	12/17/2008	
Dimethylphthalate	BQL	5.08	0.563	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.08	1.64	1	12/17/2008	
Di-n-octylphthalate	BQL	5.08	0.589	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.4	0.558	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.4	0.650	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.08	0.543	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.08	0.660	1	12/17/2008	
Diphenylamine *	BQL	5.08	0.579	1	12/17/2008	
Fluoranthene	BQL	5.08	0.716	1	12/17/2008	
Fluorene	BQL	5.08	0.736	1	12/17/2008	
Hexachlorobenzene	BQL	5.08	0.513	1	12/17/2008	
Hexachlorobutadiene	BQL	5.08	0.772	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.08	0.756	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.08	2.32	1	12/17/2008	
Isophorone	BQL	5.08	0.898	1	12/17/2008	
Naphthalene	BQL	5.08	0.924	1	12/17/2008	
Nitrobenzene	BQL	5.08	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.08	1.25	1	12/17/2008	
4-Nitrophenol	BQL	25.4	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.08	1.52	1	12/17/2008	
Pentachlorophenol	BQL	25.4	1.44	1	12/17/2008	
Phenanthrene	BQL	5.08	0.452	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-93-6H
Lab Project ID: G649-93

Initial/Final Amt: 985 mL / 5.0 mL

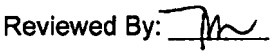
Analyzed By: DES
Date Collected: 12/12/2008 10:20
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.08	1.08	1	12/17/2008	
Pyrene	BQL	5.08	2.10	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.08	0.731	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.08	0.939	1	12/17/2008	

	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	6	60
2,4,6-Tribromophenol	10	6.1	61
4-Terphenyl-d14	10	6.5	65

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-93-7H
Lab Project ID: G649-93

Initial/Final Amt: 967 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 11:28
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.17	0.770	1	12/17/2008	
Acenaphthylene	BQL	5.17	0.770	1	12/17/2008	
Anthracene	BQL	5.17	0.905	1	12/17/2008	
Benzo[a]anthracene	BQL	5.17	0.703	1	12/17/2008	
Benzo[a]pyrene	BQL	5.17	0.657	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.17	0.739	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.17	0.636	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.17	0.569	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.17	1.07	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.17	1.08	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.17	1.01	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.17	0.424	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.17	0.807	1	12/17/2008	
Butylbenzylphthalate	BQL	5.17	0.460	1	12/17/2008	
2-Chloronaphthalene	BQL	5.17	0.895	1	12/17/2008	
2-Chlorophenol	BQL	5.17	1.21	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.17	0.822	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.17	3.37	1	12/17/2008	
Chrysene	BQL	5.17	0.574	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.17	0.455	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.17	0.853	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.3	1.26	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.17	1.16	1	12/17/2008	
Diethylphthalate	BQL	5.17	0.765	1	12/17/2008	
Dimethylphthalate	BQL	5.17	0.574	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.17	1.68	1	12/17/2008	
Di-n-octylphthalate	BQL	5.17	0.600	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.9	0.569	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.9	0.662	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.17	0.553	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.17	0.672	1	12/17/2008	
Diphenylamine *	BQL	5.17	0.589	1	12/17/2008	
Fluoranthene	BQL	5.17	0.729	1	12/17/2008	
Fluorene	BQL	5.17	0.750	1	12/17/2008	
Hexachlorobenzene	BQL	5.17	0.522	1	12/17/2008	
Hexachlorobutadiene	BQL	5.17	0.786	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.3	10.3	1	12/17/2008	
Hexachloroethane	BQL	5.17	0.770	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.17	2.36	1	12/17/2008	
Isophorone	BQL	5.17	0.915	1	12/17/2008	
Naphthalene	164	5.17	0.941	1	12/17/2008	E
Nitrobenzene	BQL	5.17	1.09	1	12/17/2008	
2-Nitrophenol	BQL	5.17	1.27	1	12/17/2008	
4-Nitrophenol	BQL	25.9	1.12	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.17	1.55	1	12/17/2008	
Pentachlorophenol	BQL	25.9	1.46	1	12/17/2008	
Phenanthrene	BQL	5.17	0.460	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-93-7H
Lab Project ID: G649-93

Initial/Final Amt: 967 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 11:28
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.17	1.10	1	12/17/2008	
Pyrene	BQL	5.17	2.14	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.17	0.745	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.17	0.957	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.7	87
2-Fluorophenol	10	3.4	34
Nitrobenzene-d5	10	8.3	83
Phenol-d6	10	6.1	61
2,4,6-Tribromophenol	10	9.8	98
4-Terphenyl-d14	10	8.4	84

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 Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-93-8H
Lab Project ID: G649-93

Initial/Final Amt: 980 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 12:31
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.10	0.760	1	12/17/2008	
Acenaphthylene	BQL	5.10	0.760	1	12/17/2008	
Anthracene	BQL	5.10	0.893	1	12/17/2008	
Benzo[a]anthracene	BQL	5.10	0.694	1	12/17/2008	
Benzo[a]pyrene	BQL	5.10	0.648	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.10	0.730	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.10	0.628	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.10	0.561	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.10	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.10	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.10	0.995	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	**4.49**	5.10	0.418	1	12/17/2008	J
4-bromophenyl phenyl ether	BQL	5.10	0.796	1	12/17/2008	
Butylbenzylphthalate	BQL	5.10	0.454	1	12/17/2008	
2-Chloronaphthalene	BQL	5.10	0.883	1	12/17/2008	
2-Chlorophenol	BQL	5.10	1.19	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.10	0.811	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.10	3.32	1	12/17/2008	
Chrysene	BQL	5.10	0.566	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.10	0.449	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.10	0.842	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.24	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.10	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.10	0.755	1	12/17/2008	
Dimethylphthalate	BQL	5.10	0.566	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.10	1.65	1	12/17/2008	
Di-n-octylphthalate	BQL	5.10	0.592	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.5	0.561	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.5	0.653	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.10	0.546	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.10	0.663	1	12/17/2008	
Diphenylamine *	BQL	5.10	0.582	1	12/17/2008	
Fluoranthene	BQL	5.10	0.719	1	12/17/2008	
Fluorene	BQL	5.10	0.740	1	12/17/2008	
Hexachlorobenzene	BQL	5.10	0.515	1	12/17/2008	
Hexachlorobutadiene	BQL	5.10	0.776	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.10	0.760	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.10	2.33	1	12/17/2008	
Isophorone	BQL	5.10	0.903	1	12/17/2008	
Naphthalene	**2.14**	5.10	0.929	1	12/17/2008	J
Nitrobenzene	BQL	5.10	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.10	1.26	1	12/17/2008	
4-Nitrophenol	BQL	25.5	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.10	1.53	1	12/17/2008	
Pentachlorophenol	BQL	25.5	1.44	1	12/17/2008	
Phenanthrene	BQL	5.10	0.454	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-93-8H
Lab Project ID: G649-93

Initial/Final Amt: 980 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/11/2008 12:31
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.10	1.08	1	12/17/2008	
Pyrene	BQL	5.10	2.11	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.10	0.735	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.10	0.944	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	7.9	79
Nitrobenzene-d5	10	9.3	93
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	9.2	92
4-Terphenyl-d14	10	7.5	75

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-93-10H
Lab Project ID: G649-93

Initial/Final Amt: 985 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 15:26
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.08	0.756	1	12/17/2008	
Acenaphthylene	BQL	5.08	0.756	1	12/17/2008	
Anthracene	BQL	5.08	0.888	1	12/17/2008	
Benzo[a]anthracene	BQL	5.08	0.690	1	12/17/2008	
Benzo[a]pyrene	BQL	5.08	0.645	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.08	0.726	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.08	0.624	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.08	0.558	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.08	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.08	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.08	0.990	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.08	0.416	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.08	0.792	1	12/17/2008	
Butylbenzylphthalate	BQL	5.08	0.452	1	12/17/2008	
2-Chloronaphthalene	BQL	5.08	0.878	1	12/17/2008	
2-Chlorophenol	BQL	5.08	1.19	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.08	0.807	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.08	3.30	1	12/17/2008	
Chrysene	BQL	5.08	0.563	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.08	0.447	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.08	0.838	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.24	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.08	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.08	0.751	1	12/17/2008	
Dimethylphthalate	BQL	5.08	0.563	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.08	1.64	1	12/17/2008	
Di-n-octylphthalate	BQL	5.08	0.589	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.4	0.558	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.4	0.650	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.08	0.543	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.08	0.660	1	12/17/2008	
Diphenylamine *	BQL	5.08	0.579	1	12/17/2008	
Fluoranthene	BQL	5.08	0.716	1	12/17/2008	
Fluorene	BQL	5.08	0.736	1	12/17/2008	
Hexachlorobenzene	BQL	5.08	0.513	1	12/17/2008	
Hexachlorobutadiene	BQL	5.08	0.772	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.08	0.756	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.08	2.32	1	12/17/2008	
Isophorone	BQL	5.08	0.898	1	12/17/2008	
Naphthalene	BQL	5.08	0.924	1	12/17/2008	
Nitrobenzene	BQL	5.08	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.08	1.25	1	12/17/2008	
4-Nitrophenol	BQL	25.4	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.08	1.52	1	12/17/2008	
Pentachlorophenol	BQL	25.4	1.44	1	12/17/2008	
Phenanthrene	BQL	5.08	0.452	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-93-10H
Lab Project ID: G649-93

Initial/Final Amt: 985 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 15:26
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.08	1.08	1	12/17/2008	
Pyrene	BQL	5.08	2.10	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.08	0.731	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.08	0.939	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.9	89
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	9	90
Phenol-d6	10	8.6	86
2,4,6-Tribromophenol	10	8.7	87
4-Terphenyl-d14	10	7.7	77

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

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

Reviewed By:

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-93-11H
Lab Project ID: G649-93

Initial/Final Amt: 977 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 12:22
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.12	0.763	1	12/17/2008	
Acenaphthylene	BQL	5.12	0.763	1	12/17/2008	
Anthracene	BQL	5.12	0.896	1	12/17/2008	
Benzo[a]anthracene	BQL	5.12	0.696	1	12/17/2008	
Benzo[a]pyrene	BQL	5.12	0.650	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.12	0.732	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.12	0.629	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.12	0.563	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.12	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.12	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.12	0.998	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.12	0.420	1	12/17/2008	
4-bromophenyl phenyl ether	BQL	5.12	0.798	1	12/17/2008	
Butylbenzylphthalate	BQL	5.12	0.455	1	12/17/2008	
2-Chloronaphthalene	BQL	5.12	0.885	1	12/17/2008	
2-Chlorophenol	BQL	5.12	1.20	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.12	0.814	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.12	3.33	1	12/17/2008	
Chrysene	BQL	5.12	0.568	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.12	0.450	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.12	0.844	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.25	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.12	1.15	1	12/17/2008	
Diethylphthalate	BQL	5.12	0.757	1	12/17/2008	
Dimethylphthalate	BQL	5.12	0.568	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.12	1.66	1	12/17/2008	
Di-n-octylphthalate	BQL	5.12	0.594	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.6	0.563	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.6	0.655	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.12	0.548	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.12	0.665	1	12/17/2008	
Diphenylamine *	BQL	5.12	0.583	1	12/17/2008	
Fluoranthene	BQL	5.12	0.722	1	12/17/2008	
Fluorene	BQL	5.12	0.742	1	12/17/2008	
Hexachlorobenzene	BQL	5.12	0.517	1	12/17/2008	
Hexachlorobutadiene	BQL	5.12	0.778	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.12	0.763	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.12	2.34	1	12/17/2008	
Isophorone	BQL	5.12	0.906	1	12/17/2008	
Naphthalene	BQL	5.12	0.931	1	12/17/2008	
Nitrobenzene	BQL	5.12	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.12	1.26	1	12/17/2008	
4-Nitrophenol	BQL	25.6	1.11	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.12	1.54	1	12/17/2008	
Pentachlorophenol	BQL	25.6	1.45	1	12/17/2008	
Phenanthrene	BQL	5.12	0.455	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-93-11H
Lab Project ID: G649-93

Initial/Final Amt: 977 mL / 5.0 mL

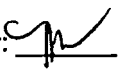
Analyzed By: DES
Date Collected: 12/12/2008 12:22
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.12	1.08	1	12/17/2008	
Pyrene	BQL	5.12	2.11	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.12	0.737	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.12	0.947	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.2	82
2-Fluorophenol	10	6.5	65
Nitrobenzene-d5	10	8	80
Phenol-d6	10	7.5	75
2,4,6-Tribromophenol	10	8.2	82
4-Terphenyl-d14	10	7.6	76

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 Semivolatiles by GCMS 625

Client Sample ID: USTBldg1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-93-12H
Lab Project ID: G649-93

Initial/Final Amt: 981 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 11:12
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.10	0.759	1	12/17/2008	
Acenaphthylene	BQL	5.10	0.759	1	12/17/2008	
Anthracene	BQL	5.10	0.892	1	12/17/2008	
Benzo[a]anthracene	BQL	5.10	0.693	1	12/17/2008	
Benzo[a]pyrene	BQL	5.10	0.647	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.10	0.729	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.10	0.627	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.10	0.561	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.10	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.10	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.10	0.994	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	**0.968**	5.10	0.418	1	12/17/2008	J
4-bromophenyl phenyl ether	BQL	5.10	0.795	1	12/17/2008	
Butylbenzylphthalate	BQL	5.10	0.454	1	12/17/2008	
2-Chloronaphthalene	BQL	5.10	0.882	1	12/17/2008	
2-Chlorophenol	BQL	5.10	1.19	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.10	0.810	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.10	3.32	1	12/17/2008	
Chrysene	BQL	5.10	0.566	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.10	0.449	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.10	0.841	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.24	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.10	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.10	0.754	1	12/17/2008	
Dimethylphthalate	BQL	5.10	0.566	1	12/17/2008	
2,4-Dimethylphenol	**39.9**	5.10	1.65	1	12/17/2008	
Di-n-octylphthalate	BQL	5.10	0.591	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.5	0.561	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.5	0.652	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.10	0.545	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.10	0.663	1	12/17/2008	
Diphenylamine *	BQL	5.10	0.581	1	12/17/2008	
Fluoranthene	BQL	5.10	0.719	1	12/17/2008	
Fluorene	BQL	5.10	0.739	1	12/17/2008	
Hexachlorobenzene	BQL	5.10	0.515	1	12/17/2008	
Hexachlorobutadiene	BQL	5.10	0.775	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.10	0.759	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.10	2.33	1	12/17/2008	
Isophorone	BQL	5.10	0.902	1	12/17/2008	
Naphthalene	**83.9**	5.10	0.928	1	12/17/2008	
Nitrobenzene	BQL	5.10	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.10	1.25	1	12/17/2008	
4-Nitrophenol	BQL	25.5	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.10	1.53	1	12/17/2008	
Pentachlorophenol	BQL	25.5	1.44	1	12/17/2008	
Phenanthrene	BQL	5.10	0.454	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-93-12H
Lab Project ID: G649-93

Initial/Final Amt: 981 mL / 5.0 mL

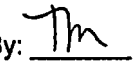
Analyzed By: DES
Date Collected: 12/12/2008 11:12
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.10	1.08	1	12/17/2008	
Pyrene	BQL	5.10	2.10	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.10	0.734	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.10	0.943	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.5	95
2-Fluorophenol	10	7.5	75
Nitrobenzene-d5	10	9.5	95
Phenol-d6	10	8.2	82
2,4,6-Tribromophenol	10	12.3	123
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: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-Duplicate
Client Project ID: CTO 015
Lab Sample ID: G649-93-13H
Lab Project ID: G649-93

Initial/Final Amt: 979 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 0:00
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.11	0.761	1	12/17/2008	
Acenaphthylene	BQL	5.11	0.761	1	12/17/2008	
Anthracene	BQL	5.11	0.894	1	12/17/2008	
Benzo[a]anthracene	BQL	5.11	0.695	1	12/17/2008	
Benzo[a]pyrene	BQL	5.11	0.649	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.11	0.730	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.11	0.628	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.11	0.562	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.11	1.05	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.11	1.06	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.11	0.996	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	**0.511**	5.11	0.419	1	12/17/2008	J
4-bromophenyl phenyl ether	BQL	5.11	0.797	1	12/17/2008	
Butylbenzylphthalate	BQL	5.11	0.455	1	12/17/2008	
2-Chloronaphthalene	BQL	5.11	0.884	1	12/17/2008	
2-Chlorophenol	BQL	5.11	1.20	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.11	0.812	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.11	3.32	1	12/17/2008	
Chrysene	BQL	5.11	0.567	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.11	0.449	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.11	0.843	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.2	1.25	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.11	1.14	1	12/17/2008	
Diethylphthalate	BQL	5.11	0.756	1	12/17/2008	
Dimethylphthalate	BQL	5.11	0.567	1	12/17/2008	
2,4-Dimethylphenol	**36.8**	5.11	1.65	1	12/17/2008	
Di-n-octylphthalate	BQL	5.11	0.592	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	25.5	0.562	1	12/17/2008	
2,4-Dinitrophenol	BQL	25.5	0.654	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.11	0.546	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.11	0.664	1	12/17/2008	
Diphenylamine *	BQL	5.11	0.582	1	12/17/2008	
Fluoranthene	BQL	5.11	0.720	1	12/17/2008	
Fluorene	BQL	5.11	0.741	1	12/17/2008	
Hexachlorobenzene	BQL	5.11	0.516	1	12/17/2008	
Hexachlorobutadiene	BQL	5.11	0.776	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.2	10.2	1	12/17/2008	
Hexachloroethane	BQL	5.11	0.761	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.11	2.33	1	12/17/2008	
Isophorone	BQL	5.11	0.904	1	12/17/2008	
Naphthalene	**82.1**	5.11	0.930	1	12/17/2008	
Nitrobenzene	BQL	5.11	1.07	1	12/17/2008	
2-Nitrophenol	BQL	5.11	1.26	1	12/17/2008	
4-Nitrophenol	BQL	25.5	1.10	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.11	1.53	1	12/17/2008	
Pentachlorophenol	BQL	25.5	1.45	1	12/17/2008	
Phenanthrene	BQL	5.11	0.455	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-Duplicate
Client Project ID: CTO 015
Lab Sample ID: G649-93-13H
Lab Project ID: G649-93

Initial/Final Amt: 979 mL / 5.0 mL

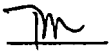
Analyzed By: DES
Date Collected: 12/12/2008 0:00
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.11	1.08	1	12/17/2008	
Pyrene	BQL	5.11	2.11	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.11	0.735	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.11	0.945	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.4	94
2-Fluorophenol	10	7.5	75
Nitrobenzene-d5	10	9.5	95
Phenol-d6	10	8	80
2,4,6-Tribromophenol	10	12.9	129
4-Terphenyl-d14	10	6.3	63

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 Semivolatiles by GCMS 625

Client Sample ID: IRGW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-14H
Lab Project ID: G649-93

Initial/Final Amt: 956 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/12/2008 13:31
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.23	0.779	1	12/17/2008	
Acenaphthylene	BQL	5.23	0.779	1	12/17/2008	
Anthracene	BQL	5.23	0.915	1	12/17/2008	
Benzo[a]anthracene	BQL	5.23	0.711	1	12/17/2008	
Benzo[a]pyrene	BQL	5.23	0.664	1	12/17/2008	
Benzo[b]fluoranthene	BQL	5.23	0.748	1	12/17/2008	
Benzo[g,h,i]perylene	BQL	5.23	0.643	1	12/17/2008	
Benzo[k]fluoranthene	BQL	5.23	0.575	1	12/17/2008	
Bis(2-chloroethoxy)methane	BQL	5.23	1.08	1	12/17/2008	
Bis(2-chloroethyl)ether	BQL	5.23	1.09	1	12/17/2008	
Bis(2-chloroisopropyl)ether	BQL	5.23	1.02	1	12/17/2008	
Bis(2-ethylhexyl)phthalate	**2.09**	5.23	0.429	1	12/17/2008	J
4-bromophenyl phenyl ether	BQL	5.23	0.816	1	12/17/2008	
Butylbenzylphthalate	BQL	5.23	0.465	1	12/17/2008	
2-Chloronaphthalene	BQL	5.23	0.905	1	12/17/2008	
2-Chlorophenol	BQL	5.23	1.22	1	12/17/2008	
4-Chloro-3-methylphenol	BQL	5.23	0.832	1	12/17/2008	
4-Chlorophenyl phenyl ether	BQL	5.23	3.40	1	12/17/2008	
Chrysene	BQL	5.23	0.581	1	12/17/2008	
Dibenzo[a,h]anthracene	BQL	5.23	0.460	1	12/17/2008	
Di-n-Butylphthalate	BQL	5.23	0.863	1	12/17/2008	
3,3'-Dichlorobenzidine	BQL	10.5	1.28	1	12/17/2008	
2,4-Dichlorophenol	BQL	5.23	1.17	1	12/17/2008	
Diethylphthalate	BQL	5.23	0.774	1	12/17/2008	
Dimethylphthalate	BQL	5.23	0.581	1	12/17/2008	
2,4-Dimethylphenol	BQL	5.23	1.69	1	12/17/2008	
Di-n-octylphthalate	BQL	5.23	0.607	1	12/17/2008	
4,6-Dinitro-2-methylphenol	BQL	26.2	0.575	1	12/17/2008	
2,4-Dinitrophenol	BQL	26.2	0.669	1	12/17/2008	
2,4-Dinitrotoluene	BQL	5.23	0.560	1	12/17/2008	
2,6-Dinitrotoluene	BQL	5.23	0.680	1	12/17/2008	
Diphenylamine *	BQL	5.23	0.596	1	12/17/2008	
Fluoranthene	BQL	5.23	0.737	1	12/17/2008	
Fluorene	BQL	5.23	0.758	1	12/17/2008	
Hexachlorobenzene	BQL	5.23	0.528	1	12/17/2008	
Hexachlorobutadiene	BQL	5.23	0.795	1	12/17/2008	
Hexachlorocyclopentadiene	BQL	10.5	10.5	1	12/17/2008	
Hexachloroethane	BQL	5.23	0.779	1	12/17/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.23	2.39	1	12/17/2008	
Isophorone	BQL	5.23	0.926	1	12/17/2008	
Naphthalene	**44.4**	5.23	0.952	1	12/17/2008	
Nitrobenzene	BQL	5.23	1.10	1	12/17/2008	
2-Nitrophenol	BQL	5.23	1.29	1	12/17/2008	
4-Nitrophenol	BQL	26.2	1.13	1	12/17/2008	
N-Nitrosodi-n-propylamine	BQL	5.23	1.57	1	12/17/2008	
Pentachlorophenol	BQL	26.2	1.48	1	12/17/2008	
Phenanthrene	BQL	5.23	0.465	1	12/17/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: IRGW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-14H
Lab Project ID: G649-93

Analyzed By: DES
Date Collected: 12/12/2008 13:31
Date Received: 12/13/2008
Date Extracted: 12/17/2008
Matrix: Water

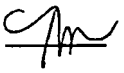
Initial/Final Amt: 956 mL / 5.0 mL

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.23	1.11	1	12/17/2008	
Pyrene	BQL	5.23	2.16	1	12/17/2008	
1,2,4-Trichlorobenzene	BQL	5.23	0.753	1	12/17/2008	
2,4,6-Trichlorophenol	BQL	5.23	0.968	1	12/17/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.9	79
2-Fluorophenol	10	6.2	62
Nitrobenzene-d5	10	8	80
Phenol-d6	10	6.8	68
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	7.5	75

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

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

Reviewed By: 

SGS Environmental Services, Inc.

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-93-16D
Lab Project ID: G649-93

Initial/Final Amt: 855 mL / 5.0 mL

Analyzed By: DES
Date Collected: 12/17/2008 14:10
Date Received: 12/16/2008
Date Extracted: 12/18/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	5.85	0.871	1	12/23/2008	
Acenaphthylene	BQL	5.85	0.871	1	12/23/2008	
Anthracene	BQL	5.85	1.02	1	12/23/2008	
Benzo[a]anthracene	BQL	5.85	0.795	1	12/23/2008	
Benzo[a]pyrene	BQL	5.85	0.743	1	12/23/2008	
Benzo[b]fluoranthene	BQL	5.85	0.836	1	12/23/2008	
Benzo[g,h,i]perylene	BQL	5.85	0.719	1	12/23/2008	
Benzo[k]fluoranthene	BQL	5.85	0.643	1	12/23/2008	
Bis(2-chloroethoxy)methane	BQL	5.85	1.20	1	12/23/2008	
Bis(2-chloroethyl)ether	BQL	5.85	1.22	1	12/23/2008	
Bis(2-chloroisopropyl)ether	BQL	5.85	1.14	1	12/23/2008	
Bis(2-ethylhexyl)phthalate	BQL	5.85	0.480	1	12/23/2008	
4-bromophenyl phenyl ether	BQL	5.85	0.912	1	12/23/2008	
Butylbenzylphthalate	BQL	5.85	0.520	1	12/23/2008	
2-Chloronaphthalene	BQL	5.85	1.01	1	12/23/2008	
2-Chlorophenol	BQL	5.85	1.37	1	12/23/2008	
4-Chloro-3-methylphenol	BQL	5.85	0.930	1	12/23/2008	
4-Chlorophenyl phenyl ether	BQL	5.85	3.81	1	12/23/2008	
Chrysene	BQL	5.85	0.649	1	12/23/2008	
Dibenzo[a,h]anthracene	BQL	5.85	0.515	1	12/23/2008	
Di-n-Butylphthalate	BQL	5.85	0.965	1	12/23/2008	
3,3'-Dichlorobenzidine	BQL	11.7	1.43	1	12/23/2008	
2,4-Dichlorophenol	BQL	5.85	1.31	1	12/23/2008	
Diethylphthalate	BQL	5.85	0.865	1	12/23/2008	
Dimethylphthalate	BQL	5.85	0.649	1	12/23/2008	
2,4-Dimethylphenol	BQL	5.85	1.89	1	12/23/2008	
Di-n-octylphthalate	BQL	5.85	0.678	1	12/23/2008	
4,6-Dinitro-2-methylphenol	BQL	29.2	0.643	1	12/23/2008	
2,4-Dinitrophenol	BQL	29.2	0.749	1	12/23/2008	
2,4-Dinitrotoluene	BQL	5.85	0.626	1	12/23/2008	
2,6-Dinitrotoluene	BQL	5.85	0.760	1	12/23/2008	
Diphenylamine *	BQL	5.85	0.667	1	12/23/2008	
Fluoranthene	BQL	5.85	0.825	1	12/23/2008	
Fluorene	BQL	5.85	0.848	1	12/23/2008	
Hexachlorobenzene	BQL	5.85	0.591	1	12/23/2008	
Hexachlorobutadiene	BQL	5.85	0.889	1	12/23/2008	
Hexachlorocyclopentadiene	BQL	11.7	11.7	1	12/23/2008	
Hexachloroethane	BQL	5.85	0.871	1	12/23/2008	
Indeno(1,2,3-c,d)pyrene	BQL	5.85	2.67	1	12/23/2008	
Isophorone	BQL	5.85	1.04	1	12/23/2008	
Naphthalene	**4.15**	5.85	1.06	1	12/23/2008	J
Nitrobenzene	BQL	5.85	1.23	1	12/23/2008	
2-Nitrophenol	BQL	5.85	1.44	1	12/23/2008	
4-Nitrophenol	BQL	29.2	1.26	1	12/23/2008	
N-Nitrosodi-n-propylamine	BQL	5.85	1.75	1	12/23/2008	
Pentachlorophenol	BQL	29.2	1.65	1	12/23/2008	
Phenanthrene	BQL	5.85	0.520	1	12/23/2008	

Results for Semivolatiles
by GCMS 625

Client Sample ID: USTBldg1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-93-16D
Lab Project ID: G649-93

Initial/Final Amt: 855 mL / 5.0 mL

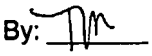
Analyzed By: DES
Date Collected: 12/17/2008 14:10
Date Received: 12/16/2008
Date Extracted: 12/18/2008
Matrix: Water

Compound	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flag
Phenol	BQL	5.85	1.24	1	12/23/2008	
Pyrene	BQL	5.85	2.42	1	12/23/2008	
1,2,4-Trichlorobenzene	BQL	5.85	0.842	1	12/23/2008	
2,4,6-Trichlorophenol	BQL	5.85	1.08	1	12/23/2008	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.6	96
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	10	100
Phenol-d6	10	9.5	95
2,4,6-Tribromophenol	10	6	60
4-Terphenyl-d14	10	10.2	102

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 Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW05
Client Project ID: CTO 015
Lab Sample ID: G649-93-1A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/10/2008 15:40
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	12/20/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/20/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/20/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/20/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/20/2008	
Toluene	BQL	1.00	0.313	1	12/20/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/20/2008	
o-Xylene	BQL	2.00	0.405	1	12/20/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.5	98.7
1,4-Dichlorobutane	40	41.0	102

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: _____

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-2A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/11/2008 10:45
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	12/20/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/20/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/20/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/20/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/20/2008	
Toluene	BQL	1.00	0.313	1	12/20/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/20/2008	
o-Xylene	BQL	2.00	0.405	1	12/20/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.2	101
1,4-Dichlorobutane	40	41.3	103

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW10
Client Project ID: CTO 015
Lab Sample ID: G649-93-3A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 9:45
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	4.00	0.708	4	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	4.00	1.15	4	12/21/2008	
Diisopropyl ether (DIPE)	BQL	4.00	1.01	4	12/21/2008	
Ethylbenzene	**6.60**	4.00	0.76	4	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	8.00	1.22	4	12/21/2008	
Toluene	**2.08**	4.00	1.25	4	12/21/2008	J
m/p-Xylene	**32.8**	8.00	1.92	4	12/21/2008	
o-Xylene	**29.6**	8.00	1.62	4	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.5	104
1,4-Dichlorobutane	40	41.3	103

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW11
Client Project ID: CTO 015
Lab Sample ID: G649-93-4B
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/11/2008 13:42
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**12.8**	1.00	0.177	1	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	**13.6**	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/21/2008	
Toluene	**8.23**	1.00	0.313	1	12/21/2008	
m/p-Xylene	**16.3**	2.00	0.481	1	12/21/2008	
o-Xylene	**4.07**	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.2	103
1,4-Dichlorobutane	40	40.3	101

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW15
Client Project ID: CTO 015
Lab Sample ID: G649-93-5A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 16:32
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	10.0	1.77	10	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	10.0	2.87	10	12/21/2008	
Diisopropyl ether (DIPE)	BQL	10.0	2.53	10	12/21/2008	
Ethylbenzene	BQL	10.0	1.9	10	12/21/2008	
Methyl-tert butyl ether (MTBE)	**57.7**	20.0	3.06	10	12/21/2008	
Toluene	BQL	10.0	3.13	10	12/21/2008	
m/p-Xylene	BQL	20.0	4.81	10	12/21/2008	
o-Xylene	BQL	20.0	4.05	10	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.0	100
1,4-Dichlorobutane	40	40.3	101

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW16
Client Project ID: CTO 015
Lab Sample ID: G649-93-6A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 10:20
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**0.708**	1.00	0.177	1	12/21/2008	J
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	**11.1**	2.00	0.306	1	12/21/2008	
Toluene	BQL	1.00	0.313	1	12/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/21/2008	
o-Xylene	BQL	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.6	102
1,4-Dichlorobutane	40	41.7	104

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW17
Client Project ID: CTO 015
Lab Sample ID: G649-93-7E
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/11/2008 11:28
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**114**	400	70.8	400	12/22/2008	J
1,2-Dibromoethane (EDB)	BQL	400	115	400	12/22/2008	
Diisopropyl ether (DIPE)	BQL	400	101	400	12/22/2008	
Ethylbenzene	BQL	400	76	400	12/22/2008	
Methyl-tert butyl ether (MTBE)	BQL	800	122	400	12/22/2008	
Toluene	**6130**	400	125	400	12/22/2008	
m/p-Xylene	**1450**	800	192	400	12/22/2008	
o-Xylene	**1250**	800	162	400	12/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.0	100
1,4-Dichlorobutane	40	40.3	101

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW18
Client Project ID: CTO 015
Lab Sample ID: G649-93-8A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/11/2008 12:31
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**1.43**	1.00	0.177	1	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/21/2008	
Toluene	BQL	1.00	0.313	1	12/21/2008	
m/p-Xylene	**3.23**	2.00	0.481	1	12/21/2008	
o-Xylene	**2.75**	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.9	102
1,4-Dichlorobutane	40	40.9	102

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW19
Client Project ID: CTO 015
Lab Sample ID: G649-93-9A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/11/2008 14:36
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	**64.3**	4.00	0.708	4	12/22/2008	
1,2-Dibromoethane (EDB)	BQL	4.00	1.15	4	12/22/2008	
Diisopropyl ether (DIPE)	BQL	4.00	1.01	4	12/22/2008	
Ethylbenzene	**1.40**	4.00	0.76	4	12/22/2008	J
Methyl-tert butyl ether (MTBE)	BQL	8.00	1.22	4	12/22/2008	
Toluene	BQL	4.00	1.25	4	12/22/2008	
m/p-Xylene	BQL	8.00	1.92	4	12/22/2008	
o-Xylene	BQL	8.00	1.62	4	12/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.2	103
1,4-Dichlorobutane	40	40.1	100

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW20
Client Project ID: CTO 015
Lab Sample ID: G649-93-10A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 15:26
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/21/2008	
Toluene	BQL	1.00	0.313	1	12/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/21/2008	
o-Xylene	BQL	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.0	100
1,4-Dichlorobutane	40	40.7	102

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW21
Client Project ID: CTO 015
Lab Sample ID: G649-93-11A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 12:22
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/21/2008	
Toluene	BQL	1.00	0.313	1	12/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/21/2008	
o-Xylene	BQL	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.7	99.2
1,4-Dichlorobutane	40	39.8	99.4

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-MW22
Client Project ID: CTO 015
Lab Sample ID: G649-93-12A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 11:12
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	25.0	4.43	25	12/22/2008	
1,2-Dibromoethane (EDB)	BQL	25.0	7.18	25	12/22/2008	
Diisopropyl ether (DIPE)	BQL	25.0	6.33	25	12/22/2008	
Ethylbenzene	**136**	25.0	4.75	25	12/22/2008	
Methyl-tert butyl ether (MTBE)	BQL	50.0	7.65	25	12/22/2008	
Toluene	**11.3**	25.0	7.83	25	12/22/2008	J
m/p-Xylene	**109**	50.0	12	25	12/22/2008	
o-Xylene	**186**	50.0	10.1	25	12/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.5	101
1,4-Dichlorobutane	40	39.8	99.5

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By: GC-VOA WA-KLS

Results for Volatiles
by GC 602

Client Sample ID: USTBldg1613-Duplicate
Client Project ID: CTO 015
Lab Sample ID: G649-93-13A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 0:00
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	16.0	2.83	16	12/22/2008	
1,2-Dibromoethane (EDB)	BQL	16.0	4.59	16	12/22/2008	
Diisopropyl ether (DIPE)	BQL	16.0	4.05	16	12/22/2008	
Ethylbenzene	**141**	16.0	3.04	16	12/22/2008	
Methyl-tert butyl ether (MTBE)	BQL	32.0	4.9	16	12/22/2008	
Toluene	**18.8**	16.0	5.01	16	12/22/2008	
m/p-Xylene	**131**	32.0	7.7	16	12/22/2008	
o-Xylene	**191**	32.0	6.48	16	12/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.7	102
1,4-Dichlorobutane	40	40.0	100

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: IRGW06
Client Project ID: CTO 015
Lab Sample ID: G649-93-14A
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 13:31
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	16.0	2.83	16	12/22/2008	
1,2-Dibromoethane (EDB)	BQL	16.0	4.59	16	12/22/2008	
Diisopropyl ether (DIPE)	BQL	16.0	4.05	16	12/22/2008	
Ethylbenzene	**23.5**	16.0	3.04	16	12/22/2008	
Methyl-tert butyl ether (MTBE)	BQL	32.0	4.9	16	12/22/2008	
Toluene	BQL	16.0	5.01	16	12/22/2008	
m/p-Xylene	**78.4**	32.0	7.7	16	12/22/2008	
o-Xylene	**89.4**	32.0	6.48	16	12/22/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.0	103
1,4-Dichlorobutane	40	39.8	99.4

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

Results for Volatiles
by GC 602

Client Sample ID: Trip Blank
Client Project ID: CTO 015
Lab Sample ID: G649-93-15C
Lab Project ID: G649-93

Analyzed By: RSB
Date Collected: 12/12/2008 17:00
Date Received: 12/13/2008
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.177	1	12/21/2008	
1,2-Dibromoethane (EDB)	BQL	1.00	0.287	1	12/21/2008	
Diisopropyl ether (DIPE)	BQL	1.00	0.253	1	12/21/2008	
Ethylbenzene	BQL	1.00	0.19	1	12/21/2008	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.306	1	12/21/2008	
Toluene	BQL	1.00	0.313	1	12/21/2008	
m/p-Xylene	BQL	2.00	0.481	1	12/21/2008	
o-Xylene	BQL	2.00	0.405	1	12/21/2008	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.4	101
1,4-Dichlorobutane	40	40.3	101

Comments:
All values corrected for dilution.
BQL = Below quantitation limit.

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW05
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/10/08
Date Received	12/13/08
Date Extracted	12/17/08 21:11 - 12/17/08 21:11
Date Analyzed	12/17/08 21:11 - 12/17/08 21:11
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	96.0		70	130
Surrogate % Recovery - FID	98.3		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-93-1a	Lab Info:	g649-93-1a
FID Info:	VP121708/040F0101.D	PID Info:	VP121708/040R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW06
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/11/08
Date Received	12/13/08
Date Extracted	12/17/08 21:38 - 12/17/08 21:38
Date Analyzed	12/17/08 21:38 - 12/17/08 21:38
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.3		70	130
Surrogate % Recovery - FID	97.1		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-2a	Lab Info: g649-93-2a
FID Info: VP121708/041F0101.D	PID Info: VP121708/041R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW10
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 18:56 - 12/19/08 18:56
Date Analyzed	12/19/08 18:56 - 12/19/08 18:56
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	158	100	
C_9-C_{12} Aliphatics**	215	100	
C_9-C_{10} Aromatics**	331	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	92.6		70	130
Surrogate % Recovery - FID	97.5		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-3d	Lab Info: g649-93-3d
FID Info: VP121908/035F0101.D	PID Info: VP121908/035R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW11
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/11/08
Date Received	12/13/08
Date Extracted	12/17/08 22:05 - 12/17/08 22:05
Date Analyzed	12/17/08 22:05 - 12/17/08 22:05
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	235	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	93.0		70	130
Surrogate % Recovery - FID	96.9		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-4a	Lab Info: g649-93-4a
FID Info: VP121708/042F0101.D	PID Info: VP121708/042R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW15
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 19:22 - 12/19/08 19:22
Date Analyzed	12/19/08 19:22 - 12/19/08 19:22
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	174	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.5		70	130
Surrogate % Recovery - FID	99.4		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-5d	Lab Info: g649-93-5d
FID Info: VP121908/036F0101.D	PID Info: VP121908/036R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW16
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 19:49 - 12/19/08 19:49
Date Analyzed	12/19/08 19:49 - 12/19/08 19:49
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	93.6		70	130
Surrogate % Recovery - FID	98.9		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-6d	Lab Info: g649-93-6d
FID Info: VP121908/037F0101.D	PID Info: VP121908/037R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW17
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/11/08
Date Received	12/13/08
Date Extracted	12/20/08 18:26 - 12/20/08 18:26
Date Analyzed	12/20/08 18:26 - 12/20/08 18:26
Dry Weight	NA
Dilution Factor	50 - 50

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	16300	253	
C_9-C_{12} Aliphatics**	7330	189	
C_9-C_{10} Aromatics**	2840	113	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	87.9		70	130
Surrogate % Recovery - FID	92.0		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-7b	Lab Info: g649-93-7b
FID Info: VP122008/035F0101.D	PID Info: VP122008/035R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW18
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/11/08
Date Received	12/13/08
Date Extracted	12/20/08 18:00 - 12/20/08 18:00
Date Analyzed	12/20/08 18:00 - 12/20/08 18:00
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	438	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	196	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	83.2		70	130
Surrogate % Recovery - FID	90.5		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-93-8b	Lab Info:	g649-93-8b
FID Info:	VP122008/034F0101.D	PID Info:	VP122008/034R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW19
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/11/08
Date Received	12/13/08
Date Extracted	12/19/08 16:42 - 12/19/08 16:42
Date Analyzed	12/19/08 16:42 - 12/19/08 16:42
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	469	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.1		70	130
Surrogate % Recovery - FID	99.1		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info:	g649-93-9d	Lab Info:	g649-93-9d
FID Info:	VP121908/030F0101.D	PID Info:	VP121908/030R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW20
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 20:16 - 12/19/08 20:16
Date Analyzed	12/19/08 20:16 - 12/19/08 20:16
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	94.6		70	130
Surrogate % Recovery - FID	99.1		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-10d	Lab Info: g649-93-10d
FID Info: VP121908/038F0101.D	PID Info: VP121908/038R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW21
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 20:42 - 12/19/08 20:42
Date Analyzed	12/19/08 20:42 - 12/19/08 20:42
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	92.5		70	130
Surrogate % Recovery - FID	97.1		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-11d	Lab Info: g649-93-11d
FID Info: VP121908/039F0101.D	PID Info: VP121908/039R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-MW22
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 21:09 - 12/19/08 21:09
Date Analyzed	12/19/08 21:09 - 12/19/08 21:09
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	302	100	
C_9-C_{12} Aliphatics**	929	100	
C_9-C_{10} Aromatics**	720	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	98.0		70	130
Surrogate % Recovery - FID	102		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-12d	Lab Info: g649-93-12d
FID Info: VP121908/040F0101.D	PID Info: VP121908/040R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	USTBldg1613-Duplicate
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/19/08 21:36 - 12/19/08 21:36
Date Analyzed	12/19/08 21:36 - 12/19/08 21:36
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	347	100	
C_9-C_{12} Aliphatics**	1010	100	
C_9-C_{10} Aromatics**	776	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	106		70	130
Surrogate % Recovery - FID	108		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-13d	Lab Info: g649-93-13d
FID Info: VP121908/041F0101.D	PID Info: VP121908/041R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	IRGW06
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/20/08 19:46 - 12/20/08 19:46
Date Analyzed	12/20/08 19:46 - 12/20/08 19:46
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	777	100	
C_9-C_{12} Aliphatics**	609	100	
C_9-C_{10} Aromatics**	1180	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	85.7		70	130
Surrogate % Recovery - FID	89.9		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-14b	Lab Info: g649-93-14b
FID Info: VP122008/038F0101.D	PID Info: VP122008/038R0101.D

Reviewed By:

VPH (Aliphatics/Aromatics) Laboratory Reporting Form

Client Name: Osage of Virginia

Project Name: CTO 015

Sample Information	
Sample Identification	Trip Blank
Sample Matrix	Water
Collection Option (for Soil)*	NA
Date Collected	12/12/08
Date Received	12/13/08
Date Extracted	12/20/08 16:40 - 12/20/08 16:40
Date Analyzed	12/20/08 16:40 - 12/20/08 16:40
Dry Weight	NA
Dilution Factor	1 - 1

Analytical Results			
Analyte	Result µg/L	Report Limit µg/L	Flags
C_5-C_8 Aliphatics**	BQL	100	
C_9-C_{12} Aliphatics**	BQL	100	
C_9-C_{10} Aromatics**	BQL	100	

	Percent Recovery	Flags	Limits Lower	Limits Upper
Surrogate % Recovery - PID	76.9		70	130
Surrogate % Recovery - FID	82.7		70	130

* = 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 and are unadjusted for individual analytes.

Lab Info: g649-93-15b	Lab Info: g649-93-15b
FID Info: VP122008/031F0101.D	PID Info: VP122008/031R0101.D

Reviewed By:

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/17/08 Filename: VP121708/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	1.4	±25%
C_9-C_{12} Aliphatics	200	16	-6.8	±25%
C_9-C_{10} Aromatics	200	16	0.8	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/17/08 Filename: VP121708/044F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-2.6	±25%
C_9-C_{12} Aliphatics	200	16	-17.6	±25%
C_9-C_{10} Aromatics	200	16	-0.6	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/19/08 Filename: VP121908/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	1.7	±25%
C_9-C_{12} Aliphatics	200	16	-1.6	±25%
C_9-C_{10} Aromatics	200	16	3.7	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/19/08 Filename: VP121908/016F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-6.0	±25%
C_9-C_{12} Aliphatics	200	16	-7.1	±25%
C_9-C_{10} Aromatics	200	16	2.7	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/19/08 Filename: VP121908/032F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-13.1	±25%
C_9-C_{12} Aliphatics	200	16	-11.7	±25%
C_9-C_{10} Aromatics	200	16	-2.8	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/19/08 Filename: VP121908/043F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-16.3	±25%
C_9-C_{12} Aliphatics	200	16	-14.4	±25%
C_9-C_{10} Aromatics	200	16	0.9	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/20/08 Filename: VP122008/002F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-9.7	±25%
C_9-C_{12} Aliphatics	200	16	-8.4	±25%
C_9-C_{10} Aromatics	200	16	-3.8	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

Attachment 2

VPH Laboratory Reporting Form

Calibration and QA/QC Information

FID Initial Calibration Date: 12/14/08 PID Initial Calibration Date: 12/14/08

Calibration Ranges and Limits

Range	MDL (µg/L)	MDL (mg/Kg)	ML (µg/L)	ML (mg/Kg)	RL (µg/L)	RL (mg/Kg)
C_5-C_8 Aliphatics	2.02	0.175	6.42	0.557	100	10
C_9-C_{12} Aliphatics	1.51	0.118	4.80	0.375	100	10
C_9-C_{10} Aromatics	0.902	0.132	2.87	0.420	100	10

Calibration Concentration Levels

Range	Levels (µg/L)	Levels (mg/Kg)	%RSD if CF r if LR	Method of Quantitation
C_5-C_8 Aliphatics	10	0.8	10.67	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{12} Aliphatics	10	0.8	1.00	Linear Regression
	50	4		
	100	8		
	200	16		
	500	40		
C_9-C_{10} Aromatics	10	0.8	14.88	Calibration Factor
	50	4		
	100	8		
	200	16		
	500	40		

Calibration Check Date: 12/20/08 Filename: VP122008/042F0101.d

Calibration Check

Range	Levels (µg/L)	Levels (mg/Kg)	%Difference if CF %Drift if LR	Limits
C_5-C_8 Aliphatics	200	16	-14.9	±25%
C_9-C_{12} Aliphatics	200	16	-13.0	±25%
C_9-C_{10} Aromatics	200	16	-3.4	±25%

MDL = Method Detection Limit
ML = Minimum Limit
RL = Reportable Limit
RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
CCC = Correlation Coefficient of Curve

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Ohio
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

089615

(1) CLIENT: OSAGE of VIRGINIA

CONTACT: Theresa Ellerman PHONE NO: 757 274-4949

PROJECT: CTO 015 SITE/PWSID#: Bldg 1613

REPORTS TO: Shaun Whitworth E-MAIL: swhitworth@osageva.com

FAX NO.: (757) 440-0411

INVOICE TO: Mike Cree QUOTE #

P.O. NUMBER CTO 015

SGS Reference: 6649-93

PAGE 1 OF 2

(2) (3)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	Preservatives Used	HCl	NONE	HCl	REMARKS
							Analysis Required	602 (TPE, MTBE, EDB)	* 625 (see remarks)	MNDEP VPH	
	UST Bldg 1613-MW05	12/10/08	1540	W	7			3	2	2	*625 - Benzo(a) anthracene only
	UST Bldg 1613-MW06	12/11/08	1045	W	7			x	x	x	
	UST Bldg 1613-MW10	12/12/08	0945	W	7			x	x	x	
	UST Bldg 1613-MW11	12/11/08	1342	W	7			x	x	x	
	UST Bldg 1613-MW15	12/12/08	1632	W	7			x	x	x	
	UST Bldg 1613-MW16	12/12/08	1020	W	7			x	x	x	
	UST Bldg 1613-MW17	12/11/08	1128	W	7			x	x	x	
	UST Bldg 1613-MW18	12/11/08	1231	W	7			x	x	x	
2 Liters Broken	UST Bldg 1613-MW19	12/11/08	1436	W	7			x	x	x	
	UST Bldg 1613-MW20	12/12/08	1526	W	7			x	x	x	

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
	12/12/08	1700		12/13/08	1030
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier: FED EX 8652 2184-5329, 5331, 6502

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature IC: 3.2, 3.6, 3.6°C

Special Deliverable Requirements: EDD Format

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions: Email results to: swhitworth@osageva.com tellerman@osageva.com

Received 2 liters MW-19 broken 12/13/08

Requested Turnaround Time:

☐ RUSH _____ Date Needed ☒ STD

SGS Environmental Services, Inc.

☐ 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
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 348-0725 Fax: (304) 348-0761

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

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
• Alaska • Hawaii
• Ohio • Maryland
• New Jersey • North Carolina
• West Virginia
www.us.sgs.com

092938

CLIENT: Osage of Virginia
CONTACT: Theresa Elterman PHONE NO: (757 274-4949
PROJECT: CTO 015 SITE/PWSID#: Bldg 1613
REPORTS TO: Pg 1 E-MAIL:
FAX NO.: ( ) Pg 1
INVOICE TO: Pg 1 QUOTE #
P.O. NUMBER CTO 015

SGS Reference: G649-93
PAGE 2 OF 2

Preservatives Used: HCl | None | HCl
Analysis Required: 602 MTBE, EDB (TPE, Xylenes) | *625 (Remarks) | MADEP VPH

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C=COMP G=GRAB	602 MTBE, EDB (TPE, Xylenes)	*625 (Remarks)	MADEP VPH	REMARKS
	UST Bldg 1613 - MW21	12/12/08	1222	W	7		x	x	x	*625 - Benzo (a)
	UST Bldg 1613 - MW22	12/12/08	1112	W	7		x	x	x	athracene only
	UST Bldg 1613 DUPLICATE	N/A	N/A	W	7		x	x	x	
	~~UST Bldg 1613~~			~~W~~						
	IR GW06	12/12/08	1331	W	7		x	x	x	
	TRIP BLANK	12/12/08	1700	W	2		x		x	

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
[signature]	12/12/08	1700			
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

Shipping Carrier: FED EX pg 1
Shipping Ticket No:
Samples Received Cold? (Circle) (YES) NO
Temperature °C: 3.2, 3.6, 3.6 °C
Special Deliverable Requirements: EDD
Chain of Custody Seal: (Circle) (INTACT) BROKEN ABSENT
Special Instructions: SEE pg 1
Requested Turnaround Time:
☐ RUSH ____ Date Needed ☒ STD

☐ 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
☐ 1270 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

SGS Environmental Services, Inc.

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Ohio
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

12/18/08

090813

(1)

CLIENT: OSAGE OF VIRGINIA

CONTACT: THERESA ELLERMAN PHONE NO:(757 274-4949

PROJECT: CTO 015 SITE/PWSID#: BLDG 1613

REPORTS TO: E-MAIL: swhitworth@osageva.com
Shaun Whitworth FAX NO.:(757-420-0411)

INVOICE TO: QUOTE #
Mike Coffee P.O. NUMBER CTO 015

SGS Reference: 6649-16 93

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C=COMP G=GRAB)	Preservatives Used	Analysis Required (3)	REMARKS
	UST BLDG 1613-MW19	12/17/08	1410	W	2		None	625*	*625 - Benzo (a) anthracene only
									RESAMPLE WELL 1ST SAMPLE BROKE IN FEDEX SHIPMENT

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
	12/17/08	1501		12/18/08	15:00
Relinquished By: (2)	Date	Time	Received By:	Date	Time
				12/19/08	1630
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier: COURIER
Shipping Ticket No:

Samples Received Cold? (Circle) YES NO
Temperature °C: 3.2°C

Special Deliverable Requirements: EDD

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions: Email RESULTS to: swhitworth@osageva.com
tellerman@osageva.com

Requested Turnaround Time:
☐ RUSH _____ Date Needed ☒ STD

☐ 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
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Ohio
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

090919

(1)

CLIENT: OSAGE of VIRGINIA

SGS Reference:

PAGE 1 OF 1

CONTACT: Theresa Ellerman PHONE NO: (757) 274-4949

PROJECT: CTO 015 SITE/PWSID#: Bldg 1613

REPORTS TO: Shawn Whitworth E-MAIL: swhitworth@osageva.com

FAX NO: ~~(757) 274~~

INVOICE TO: Mike Cree QUOTE #

P.O. NUMBER CTO 015

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C=COMP, G=GRAB)	Preservatives Used: Non	Analysis Required (3): 625*	REMARKS
	UST Bldg 1613-MW17	12/15/08	1520	W	2			X	*625-BENZO(a) anthracene only / **Resubmit sample - Broke in shipment

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
	12/16/08	1424		12/16/08	1424
Relinquished By: (2)	Date	Time	Received By:	Date	Time
				12/16/08	1530
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier: Hand Delivered

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: 2.3°C

Special Deliverable Requirements: "EDD"

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions: swhitworth@osageva.com Email results to: tellerman@osageva.com

Requested Turnaround Time:

☐ RUSH _____ Date Needed ☒ STD

☐ 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
☐ 1270 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