

FINAL
ANNUAL GROUNDWATER MONITORING REPORT 2006-2007
BUILDING 645

NCDENR Incident Number: 87556
Marine Corps Base
Camp Lejeune, North Carolina

June 15, 2007

Prepared for:



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LIST OF ACRONYMS

2000 Guidelines	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater
2001 Guidelines	Guidelines for Assessment and Corrective Action, North Carolina Underground Storage Tank Section (Effective July 1, 2001)
2L GWQS	NCAC T15A:02L Groundwater Quality Standards
AS	Air Sparge
AST	Aboveground Storage Tank
BDL	Below Detection Limit
BN	Base/Neutral (extractables)
BNA	Base/Neutral/Acid (extractables)
BQL	Below Quantitation Limit
BLS	Below Land Surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAP	Corrective Action Plan
CFR	Code of Federal Regulations
Cr	Chromium
CSA	Comprehensive Site Assessment
DIPE	Di-isopropyl Ether
DO	Dissolved Oxygen
DOD	Department of Defense
DPT	Direct Push Technology
DWQ	Division of Water Quality
DWM	Division of Waste Management
DTW	Depth to Water
EDB	Ethylene di-bromide
EMD	Environmental Management Division
EPA	Environmental Protection Agency
EPH	Extractable Petroleum Hydrocarbons
EQB	Environmental Quality Branch
Fe	Iron
FID	Flame Ionization Detector
FT	Feet
GCL	Gross Contaminant Level
GIS	Geographic Information System
GPS	Global Positioning System
Guidelines Vol. II	Groundwater Section Guidelines for Investigation and Remediation of Soil and Groundwater, Volume II, Petroleum Underground Storage Tanks (January 2, 1998)
HDPE	High Density Polyethylene
I/C	Industrial/Commercial
ID	Identification
I&E	Installations and Environment Department
IGWQS	Interim Groundwater Quality Standards
IPE	Isopropyl Ether
LSA	Limited Site Assessment
LUST	Leaking Underground Storage Tank
m	Meter
MADEP	Massachusetts Department of Environmental Protection
MCAS	Marine Corps Air Station

MCB	Marine Corps Base
MDL	Method Detection Limit
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
MSCC	Maximum Soil Contaminant Concentration
MSL	Mean Sea Level
MTBE	Methyl tertiary butyl ether
µg/Kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
NA	Not Analyzed
N/A	Not Applicable
NAVFAC	Naval Facilities Engineering Command Atlantic
NC	North Carolina
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environment and Natural Resources
NE	None Established
NM	Not Measured
NMT	No Measurable Thickness
NS	Not Sampled
OVA	Organic Vapor Analyzer
PAH	Polynuclear Aromatic Hydrocarbons
Pb	Lead
PPB	Parts Per Billion
PPM	Parts Per Million
PID	Photo Ionization Detector
PQL	Practical Quantitation Limit
PVC	Polyvinyl chloride
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
Res	Residential
SOW	Scope of Work
STGW	Soil-to-Groundwater
SVE	Soil Vapor Extraction
SVOC	Semi Volatile Organic Compound
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TOC	Top of Casing
TPH	Total Petroleum Hydrocarbons
US	United States
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons
WiRO	NCDENR Wilmington Regional Office

EXECUTIVE SUMMARY

The Building 645 site is located close to the main gate of Marine Corps Base (MCB) Camp Lejeune on Brewster Boulevard near its intersection with Holcomb Boulevard. The site is located across the street from Russell Elementary School. Former Building 645 served as a pump house for water supply well HP645, which was part of the Holcomb Boulevard water collection system. The 110-gallon aboveground storage tank (AST) was located adjacent to Bldg 645, and it supplied gasoline to the generator that powered the HP645 well pump. Well HP645 was taken off line and rendered inactive in 1985 due to petroleum contamination of the well water. The well was permanently abandoned in 1995, and both Building 645 and the AST were subsequently removed from the site.

Groundwater contamination was suspected when raw water well HP645 displayed petroleum contamination during a routine sampling of the well water. Subsequent site assessments were conducted from 1993 – 1996, which found petroleum contamination in both the shallow and deep aquifers at the site. A Corrective Action Plan (CAP) was completed by Richard Catlin and Associates, Inc. (now known as CATLIN Engineers and Scientists (CATLIN)) in 1996. The CAP recommended installation of an air sparge/soil vapor extraction (AS/SVE) remediation system to address groundwater contamination at the site. The system was installed in 1998 and has been in operation since that time.

Various remediation contractors have maintained and operated the site since 1998 including J.A. Jones Environmental Services, Inc. (J.A. Jones), Shaw Environmental and Infrastructure, Inc. (Shaw), and Engineering and Environment, Inc. (EEI). During this monitoring period, June 2006 – May 2007, Sovereign Consulting Inc. (Sovereign) operated and maintained the remediation system and conducted monitoring well gauging and sampling of site wells. Sovereign gauged and sampled monitoring wells in July 2006, January 2007, and March 2007. Monitoring wells included in the gauging and sampling events varied over the monitoring period due to the modification in the scope of work, which occurred mid-monitoring period (January 2007). Scope modification was based upon the recommendations made in CATLIN's August 2006 Remedial Action Optimization and Revised Corrective Action Plan Addendum report. Horizontal and vertical boundaries of the contaminant plume were identified during the investigation. Recommendations from the addendum included discontinuing the operation of the western portion of the remediation system, monitoring the deep zone monitoring wells quarterly, conducting an annual sampling event of all site monitoring wells, deactivation of water supply wells HP-644 and HP-646, and the reevaluation of site conditions and applicable standards with the appropriate modification of sampling and remedial efforts.

Monitoring wells MW01 through MW23 were gauged in July 2006; wells MW01, MW02, MW12, MW13, MW16, MW17, MW18, MW22 - MW32 were gauged in December 2006; and wells MW01 – MW32 were gauged in March 2007. Monitoring wells MW01, MW02, MW03, MW09, MW12, MW15, MW18, MW21, MW22, and MW23 were sampled in July 2006, and monitoring wells MW01, MW02, MW12, MW13, MW16, MW17, MW18, MW22 – MW30, and MW32 were sampled in January 2007. The March 2007 sampling event included only deep monitoring wells - MW18, MW26, MW27, MW29, MW30, and MW32. Samples were analyzed for volatiles and semi-volatile compounds, as well as lead via EPA Methods 601, Method 602 + Xylenes, Method 625 + 10 largest non-target peaks, and EPA Method 6010A with Standard Prep Method 3030C.

No measurable free product was identified during the 2006-2007 monitoring period. Four volatile compounds and one semi-volatile compound were detected at the site above North Carolina Groundwater Quality Standards (NCGWQSs). Those contaminants were benzene, diisopropyl ether (DIPE), toluene, total xylenes, and naphthalene. All other detections were below 2L standards. Exceedences were in shallow, intermediate and deep monitoring wells at the site.

Since groundwater contaminant concentrations are relatively low in the area of the remediation system, MCB Camp Lejeune will be shutting the system down beginning in June 2007. Data indicates that the system may not be contributing to the removal of contaminants at this point in the remediation phase. In addition, the monitoring wells having the highest concentrations are outside the system layout.

Once the system is shut down, Sovereign recommends monitoring all site monitoring wells for the recurrence of free product and rebound of groundwater contamination. This will occur over three groundwater gauging and sampling events - in July 2007, August 2007, and December 2007. Depth to free product (if present) and depth to groundwater from the top of each well casing should be measured and recorded in order to generate water table elevation information. In addition, groundwater samples should be analyzed using EPA Methods 601, 602 plus Xylenes, 625 plus the 10 largest non-target peaks, and EPA Method 6010A with Standard Prep Method 3030C (lead).

Sampling data will be reviewed as laboratory reports are received in order to evaluate remedial strategies that would address the deep zone contaminant levels. Findings and recommendations will be summarized and submitted in a monitoring report, which will include an evaluation of potential remedial alternatives to meet the 2L standards, if needed. If free product accumulates or contaminant concentrations rebound, appropriate remedial actions will be immediately implemented.

1.0 TITLE PAGE

Facility I.D.: N/A NCDENR Incident Number: 87556
Site Name: Building 645
Site Location: Marine Corps Base Camp Lejeune, North Carolina
Nearest City/Town: Camp Lejeune County: Onslow

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

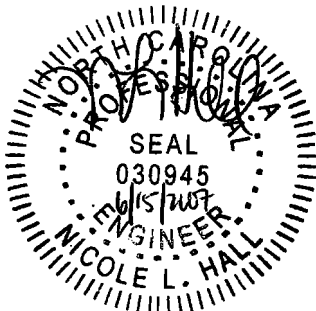
Tank Owner: Same as above
Address: Same as above Phone: Same as above

Property Occupant: Same as above
Address: MCB Camp Lejeune, NC Phone: None

Consultant/Contractor: Sovereign Consulting Inc.
Address: 405 Oakmears Crescent, Suite 1
Virginia Beach, VA 23462 Phone: (757) 456-5093

Release Information

Date Discovered: 1993
Estimated Quantity of Release: Unknown
Cause of Release: Leaking aboveground storage tank system
Source of Release (Piping/UST): AST
Sizes and contents of UST system(s) from which the release occurred: The former system was a 110-gallon gasoline aboveground storage tank.



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

2.0 INTRODUCTION

The purpose of this report is to summarize data from recent groundwater gauging and sampling events at the Building 645 site aboard MCB Camp Lejeune, North Carolina. This data was collected from June 2006 through May 2007. The project's scope of work was modified as of January 2007 based on the recommendations in the CATLIN RAO & RCAP Addendum. As such, there is additional data reported than is necessary per the revised CAP. The final scope of work entailed one round of gauging for 23 site monitoring wells (each are preceded with the prefix UST645) – MW01-MW23 and one round of gauging for eighteen monitoring wells (again each are preceded with the prefix UST645) – MW01, MW02, MW12, MW13, MW16-MW18 and MW22-MW32. Groundwater samples from site monitoring wells were also collected in July 2006, January 2007, and March 2007. Analyses run included EPA Methods 601, Method 602 + Xylenes, Method 625 + 10 largest non-target peaks, and total lead per EPA Method 6010A with Standard Prep Method 3030C. Results of Sovereign's 2006-2007 gauging and sampling events are presented in this report.

3.0 SITE HISTORY

Building 645 is located close to the main gate of Camp Lejeune on Brewster Boulevard near its intersection with Holcomb Boulevard. The site is located across the street from Russell Elementary School. Building 645 served as a pump house for water supply well HP645, which was part of the Holcomb Boulevard water collection system. The 110-gallon AST was located adjacent to Bldg 645, and it supplied gasoline to the generator that powered the HP645 well pump. Well HP645 was taken off line and rendered inactive in 1985 due to petroleum contamination of the well water. The well was permanently abandoned in 1995, and both Building 645 and the AST were subsequently removed from the site.

A Three Well Site check of the site was performed in 1993 by R.E. Wright Associates, Inc. Groundwater samples from the three wells and soil samples in the vicinity of the former AST contained evidence of petroleum impact exceeding North Carolina state standards. CATLIN conducted a comprehensive site assessment in 1995, as well as an assessment addendum in 1996 to delineate the extent of petroleum contamination at the site. Soil contaminants were not detected; however, groundwater contamination was identified in both the shallow and deep portions of the groundwater aquifer.

A subsequent CAP was prepared for the site in 1996 that proposed the installation of an air sparge/soil vapor extraction (AS/SVE) system. The treatment system was constructed by J.A. Jones and began remediation activities in September 1998. The groundwater treatment system has operated continuously since 1998, with the exception of occasional maintenance repairs and groundwater sampling events.

CATLIN conducted an optimization study at the site in 2004 with follow-on assessment work completed in 2006. The 2004 optimization report concluded that the remediation system has been effective in reducing petroleum constituent concentrations in the upper portion of the contaminant plume. The report recommended further refinement of the contaminant plume boundary, however, in both the horizontal and vertical directions. As a result, CATLIN

completed the August 2006 Remedial Action Optimization and Revised Corrective Action Plan Addendum. Horizontal and vertical boundaries of the contaminant plume were identified during the investigation. Recommendations from the addendum included discontinuing the operation of the western portion of the remediation system, monitoring the deep zone monitoring wells quarterly, conducting an annual sampling event of all site monitoring wells, deactivation of water supply wells HP-644 and HP-646, and the reevaluation of site conditions and applicable standards with the appropriate modification of sampling and remedial efforts.

Monitoring and maintenance of the groundwater treatment system at the Bldg 645 site has continued from installation in 1998 to the present. This report outlines and describes such activities as performed by Sovereign from June 2006- May 2007.

4.0 REMEDIATION SYSTEM OPERATION AND MAINTENANCE

The Building 645 remediation system includes 14 vertical air sparge wells, horizontal soil vapor extraction lines (SVE1 through SVW4), and soil vapor collection vent borings. Six of the 14 vertical air sparge wells were installed to a depth of 80 feet BLS, and the remaining eight air sparge wells were advanced to a depth of 50 feet BLS. The vapor collection vents were installed from 4.5 to 20 feet BLS below the SVE lines. The system has been operational since it was installed by J.A. Jones in 1998. Figure 2 shows the current system layout.

The system generally operated continuously except during equipment servicing/repair, power outages, and high level water alarms. The remediation system was temporarily deactivated prior to each groundwater gauging and sampling event and then re-started following field activities. There were no non-routine service calls made for the system during this monitoring period.

System monitoring and maintenance was performed regularly, with site visits conducted at a minimum of three times per week. Instrument readings conducted during the site visits included AS flow rates, AS/SVE pressures/vacuums, temperatures, tank liquid levels, electricity usage, and motor run times. Servicing (oil changes, belt re-tensioning or replacement, filter changes, etc.) was conducted as per manufacturer's instructions or as needed upon system inspection. Emptying of the polyethylene holding tank was also conducted as needed.

Photoionization detector (PID) readings were recorded weekly during the monitoring period. Vapor velocity readings, vapor temperature, and vapor vacuum/pressure were also documented at the time the PID readings were recorded. The exhaust stack (SVE) was not sampled for laboratory analysis via Modified EPA Method 18 after April 2006. The collection of air samples ceased after April 2006, by direction of the Navy Technical Representative.

Well purge water, development water, and equipment decontamination water generated during field events were contained in a portable holding tank. Water that accumulated in the SVE system polyethylene hold tank was removed and transported in the portable holding tank and processed through a groundwater treatment system located at Lot 203 on MCB Camp Lejeune.

5.0 GAUGING AND SAMPLING RESULTS

Sovereign gauged and sampled monitoring wells at the Building 645 site in July 2006, January 2007, and March 2007. Activities were conducted in accordance with NCDENR guidance. Monitoring wells included in the gauging and sampling events varied over the monitoring period due to the modification in the scope of work, which occurred mid-monitoring period.

5.1 WELL GAUGING

Monitoring wells MW01 through MW23 were gauged in July 2006; wells MW01, MW02, MW12, MW13, MW16, MW17, MW18, MW22 - MW32 were gauged in December 2006; and wells MW01 – MW32 were gauged in March 2007. Gauging data is summarized in Tables 2 and 3. Wells were gauged using an interface probe to measure the depth to water and depth to product (if present). Depth to water at the site ranged from 3.08 feet to 19.34 feet below TOC. No measurable free product was detected in any site well designated for gauging during the 2006-2007 monitoring program.

A southwesterly surficial groundwater flow can be seen in the July 2006 and March 2007 sampling events. Deep zone groundwater flow varied, however, over the three gauging and sampling events making it difficult to draw conclusions from the data. Figures 3-8 depict groundwater contours for the site.

5.2 GROUNDWATER SAMPLING

Groundwater sampling was also conducted at the site. Samples were collected during three sampling events – in July 2006, January 2007, and March 2007. Monitoring wells MW01, MW02, MW03, MW09, MW12, MW15, MW18, MW21, MW22, and MW23 were sampled in July 2006, and monitoring wells MW01, MW02, MW12, MW13, MW16, MW17, MW18, MW22 – MW30, and MW32 were sampled in January 2007. The March 2007 sampling event included MW18, MW26, MW27, MW29, MW30, and MW32.

One duplicate sample was collected during each field event. Prior to sampling, wells were purged of one well casing volume of water using a low-flow sampling pump with connected polyethylene discharge tubing. Water quality indicator parameters (pH, temperature, conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) were measured and recorded. If a well purged to dryness, the well was allowed to recharge before sampling. Samples were collected after purging using the laboratory-prepared sample bottles, placed on ice, and shipped under proper chain of custody to Paradigm Analytical Laboratories Inc. (Paradigm) in Wilmington, North Carolina (NC Certification Number 481). The lab tested the groundwater samples for volatiles via EPA Methods 601/602 and semivolatiles using EPA method 625. Lead analysis was also performed. Note that laboratory methods were not consistent through out the monitoring period as a modification to the project scope of work was implemented mid-program. Laboratory reports and chain of custody documentation are included in Appendix B. A discussion of laboratory results is presented below by test method.

EPA Method 601

This method was performed during the January 2007 event per the amended scope of work. Results are summarized in Table 4. The EPA Method 601 analysis was performed on monitoring wells MW01, MW02, MW12, MW13, MW16, MW17, MW18, MW22 – MW30, and MW32, and there were no target analytes detected above the laboratory quantitation limits.

EPA Method 602

Four volatile compounds were detected above groundwater standards – benzene, diisopropyl ether (DIPE), toluene, and total xylenes. Benzene was detected in both Type II and III monitoring wells MW01, MW03, MW18, MW26, MW27, MW28, and MW29 during the 2006-2007 sampling events. Monitoring well MW26 (Type III, deep zone) exhibited the highest detected benzene concentrations - 3,260 µg/L in January 2007 and 2,060 µg/L in March 2007. This well is located to the south of the former AST and remediation system, across Brewster Boulevard.

DIPE was detected in monitoring well MW32 (Type III, deep zone) at a concentration of 80.4 µg/L in March 2007, as compared to the NCGWQS for this compound is 70 µg/L. It was also detected in MW27 and MW30 at concentrations below the groundwater standard.

Toluene was also detected in site groundwater above the 2L standard of 1,000 µg/L. It was detected above the groundwater quality standard in only monitoring well MW26 at concentrations of 7,160 µg/L and 13,900 µg/L in January and March 2007, respectively. All other toluene detections were either below quantitation limits or below the NCGWQS.

Only monitoring well MW12 (Type III, intermediate zone) exhibited a noncompliant total xylenes concentration of 1,572 µg/L only in January 2007. The NCGWQS for this compound is 530 µg/L.

Ethylbenzene and methyl-tert butyl ether were also detected at the site, but at concentrations below their NCGWQSs. Most noncompliant compounds were detected in the newly installed deep zone monitoring wells, MW26-MW32, except for total xylenes as described above. The seven new Type III wells were installed by CATLIN in 2006 as part of their RAO & RCAP Addendum report. EPA Method 602 results are summarized in Table 5.

EPA Method 625 + 10 largest peaks

Only naphthalene was detected in groundwater at the site. Shallow and intermediate zone monitoring wells MW01, MW03, and MW12 exhibited naphthalene concentrations of 11.5 µg/L, 11.0 µg/L, and 26.6 µg/L, respectively. Only the MW12 concentration is noncompliant. EPA Method 625 was performed as part of the original scope of work during only the July 2006 event. Results are summarized in Table 6.

EPA Method 6010A with Standard Prep Method 3030C

Groundwater was analyzed for lead as part of the January 2007 sampling event. Results for lead were below laboratory quantitation limits for all site wells sampled. Table 7 summarizes lead results for the January sampling event.

Contaminant concentrations in the shallow aquifer are being effectively treated. Presently, shallow concentrations are just above applicable groundwater standards. Deeper contamination, however, is present at levels above 2L NCGWQSs down to the 80 feet depth. Additional delineation of the deeper contaminant plume was conducted by CATLIN and presented in their August 2006 RAO & RCAP Addendum. Sovereign's 2006-2007 monitoring period data compares well with the January 2006 CATLIN (deep zone) data, with the exception of the noncompliant benzene detection in MW28 in January 2007.

Field duplicate samples were collected and laboratory-prepared trip blanks were analyzed as Quality Control (QC) samples. The trip blanks were analyzed for VOCs only. Toluene was detected in the trip blank for the July 2006 and January 2007 sampling events. In addition, 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. The data was validated by reviewing sample holding times, analytical data, internal standards, calibrations, etc. The validation indicated that the data are usable for project purposes.

Historical Data Synopsis

Historical information, summarized in the 2006 CATLIN RAO & RCAP Addendum report, coupled with recent data shows that groundwater contamination has decreased compared to pre-remediation conditions. In the following tables, maximum contaminant concentrations detected at the site are compared over time for several compounds. An overall decrease in contaminant concentrations is observed in the Type II well data; however, concentrations in the deeper zones are noncompliant with the exception of ethylbenzene. Year 2006 and 2007 Type II data includes laboratory results from newly installed well points where contamination is relatively high. The new well points, however, are to the south of the remediation system and across Brewster Boulevard. Note that **BOLD** text indicates NCGWQS exceedences, and not all contaminants of concern are listed.

**Maximum Concentrations (µg/L)
 Type II Monitoring Wells**

Compound	NCGWQS (µg/L)	1993 Pre-remediation	2003	2004	2005	2006	2007
Benzene	1	3,550	2.4	3.0	2.0	1.98	1.29J
Ethylbenzene	550	2,320	110	107	53.8	25.1	45.0
Total Xylenes	530	131,000	716	481	240	54.5	92.7
Toluene	1,000	10,700	113	82.8	27.9	25.6	56.6

**Maximum Concentrations (µg/L)
 Type III Monitoring Wells**

	NCGWQS (µg/L)	July 1998 Pre-remediation	2003	2004	2005	2006¹	2007¹
Benzene	1	850	788	461	151	964	3,260
Ethylbenzene	550	220	838	609	549	173	330
Total Xylenes	530	1,610	2,490	1,440	989	78.2	1,572
Toluene	1,000	1,300	3,570	2,320	949	2,900	13,900

Historical data from 2006 CATLIN RAO & RCAP Addendum report.

2006 maximums taken from Sovereign and CATLIN data; 2007 data includes Sovereign Jan and Mar events only.

BQL = Below Quantitation Limit

ND = Not Detected

NE = Not Established

NR = Not Reported

E = Estimated concentration above the linear quantitation range

J = Estimated concentration less than reporting limit

¹ = Type III wells, MW26-MW32, installed by Catlin in 2006 giving new data points.

Figures 15-17 show total BTEX trend graphs for monitoring wells MW01, MW12, and MW18. The graphs provide a general representation and demonstrate the overall decline of total BTEX concentrations at the site over time, as well as leveling out of contaminant concentrations in the three monitoring wells. These monitoring wells have been at the site since 1996 or earlier. Historical groundwater sampling data from previous reports can be found in Appendix A.

6.0 RECEPTOR SURVEY

Sovereign reassessed site conditions and concluded that the receptor survey previously completed by CATLIN RAO & RCAP dated August 26, 2004 still applies. There has been no change in receptor impact, and there have been no changes to land use of the site or the surrounding areas.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on historical data and fieldwork and laboratory analytical data gathered during the 2006-2007 monitoring period, the following conclusions are presented:

1. Previous investigations indicate petroleum constituent concentrations in vadose zone soils at the site do not exceed regulatory standards. Therefore, no additional soil remediation is required.
2. Shallow surficial groundwater aquifer flow is generally to the southwest. Groundwater flow in deeper portions of the aquifer varied throughout the monitoring period.
3. No measurable free product was observed at any site well during the monitoring period.
4. VOCs and semi-VOCs are present in shallow, intermediate, and deep zone groundwater monitoring wells at concentrations above NCGWQSs.

Since groundwater contaminant concentrations are relatively low, MCB Camp Lejeune will be shutting the system down beginning in June 2007. The system may not be contributing to the removal of contaminants at this point in the remediation phase. In addition, the monitoring wells having the highest concentrations are outside the system layout.

Once the system is shut down, Sovereign recommends that all site monitoring wells are monitored for the recurrence of free product and rebound of groundwater contamination over three groundwater gauging and sampling events - in July 2007, August 2007, and December 2007. Depth to free product (if present) and depth to groundwater from the top of each well casing should be measured and recorded in order to generate water table elevation information. In addition, groundwater samples should be analyzed using EPA Methods 601, 602 plus Xylenes, 625 plus the 10 largest non-target peaks (to include the reporting of 1 and 2-methylnaphthalene), and EPA Method 6010A with Standard Prep Method 3030C (lead).

Sampling data should be reviewed as laboratory reports are received in order to evaluate remedial strategies that would address the deeper contaminant levels. Findings and recommendations should be summarized and submitted in a monitoring report, which will include an evaluation of potential remedial alternatives to meet the 2L standards, if needed. If free product accumulates or contaminant concentrations rebound, appropriate remedial actions should be immediately implemented.

8.0 REFERENCES

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

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Sovereign Consulting Inc., *FINAL Annual Groundwater Monitoring Report 2005-2006, Building 645, MCB Camp Lejeune, North Carolina*, June 2006.

TABLES

TABLE 1
WELL CONSTRUCTION INFORMATION
 Incident Number and Name: 87556 - Building 645

Monitoring Well	Date Installed	Measured Well Depth (feet below TOC)	Top of Casing Elevation (feet)	Hydrogeologic Zone
UST645-MW01	10/25/1993	24.22	28.56	Shallow
UST645-MW02	10/25/1993	24.33	29.53	Shallow
UST645-MW03	10/25/1993	25.15	29.79	Shallow
UST645-MW04	10/21/1994	15.98	25.33	Shallow
UST645-MW05	10/26/1994	23.68	30.07	Shallow
UST645-MW06	11/3/1994	25.20	31.27	Shallow
UST645-MW07	10/31/1994	23.80	27.82	Shallow
UST645-MW08	11/7/1994	26.02	29.60	Shallow
UST645-MW09	10/31/1994	52.96	29.79	Deep
UST645-MW10	11/2/1994	49.80	27.87	Deep
UST645-MW11	11/7/1994	44.10	29.73	Deep
UST645-MW12	11/3/1994	37.95	29.40	Intermediate
UST645-MW13	11/15/1994	36.77	29.82	Intermediate
UST645-MW14	11/15/1994	32.35	28.11	Shallow
UST645-MW15	3/11/1996	85.50	27.05	Deep
UST645-MW16	3/6/1996	81.19	28.27	Deep
UST645-MW17	2/29/1996	79.36	27.28	Deep
UST645-MW18	8/8/1996	77.19	31.46	Deep
UST645-MW19	>7/97,<7/98	34.65	28.35	Shallow
UST645-MW20	>7/97,<7/98	49.40	28.34	Deep
UST645-MW21	7/31/2001	81.81	23.09	Deep
UST645-MW22	8/3/2001	80.00	28.52	Deep
UST645-MW23	8/7/2001	29.35	28.58	Shallow
UST645-MW24	12/1/2005	18.75	25.52	Shallow
UST645-MW25	12/1/2005	23.40	24.60	Shallow
UST645-MW26	1/6/2006	80.37	29.31	Deep
UST645-MW27	1/4/2006	81.14	29.28	Deep
UST645-MW28	12/28/2005	79.60	26.80	Deep
UST645-MW29	12/28/2005	78.55	26.06	Deep
UST645-MW30	1/3/2006	78.28	29.14	Deep
UST645-MW31	12/30/2005	100.00	28.24	Deep
UST645-MW32	4/9/2006	78.26	29.27	Deep

TOC Elevations taken from Sovereign Well Survey Database January 2007.

TABLE 2
GROUNDWATER ELEVATION DATA
2006-2007

Incident Number and Name: 87556 - Building 645

Monitoring Well	Top of Casing Elevation (feet)	Groundwater Elevation (feet)		
		7/24/2006	1/8/2007	3/22/2007
UST645-MW01	28.56	16.36	21.39	20.73
UST645-MW02	29.53	16.36	21.36	20.67
UST645-MW03	29.79	16.75	Not Calculated	21.04
UST645-MW04	25.33	22.25	Not Calculated	21.75
UST645-MW05	30.07	17.77	Not Calculated	21.62
UST645-MW06	31.27	18.22	Not Calculated	22.27
UST645-MW07	27.82	11.95	Not Calculated	14.06
UST645-MW08	29.60	17.63	Not Calculated	21.17
UST645-MW09	29.79	12.34	Not Calculated	15.40
UST645-MW10	27.87	12.22	Not Calculated	14.92
UST645-MW11	29.73	12.76	Not Calculated	15.53
UST645-MW12	29.40	13.17	17.92	17.54
UST645-MW13	29.82	12.94	17.02	16.17
UST645-MW14	28.11	12.17	Not Calculated	14.94
UST645-MW15	27.05	12.46	Not Calculated	14.30
UST645-MW16	28.27	12.24	15.28	14.45
UST645-MW17	27.28	12.08	16.68	14.44
UST645-MW18	31.46	15.51	18.36	17.59
UST645-MW19	28.35	11.92	Not Calculated	14.92
UST645-MW20	28.34	12.33	Not Calculated	15.26
UST645-MW21	23.09	12.74	Not Calculated	15.72
UST645-MW22	28.52	12.79	15.80	14.81
UST645-MW23	28.58	18.13	23.26	22.08
UST645-MW24	25.52	Not Calculated	19.65	18.22
UST645-MW25	24.60	Not Calculated	16.43	16.66
UST645-MW26	29.31	Not Calculated	17.49	16.50
UST645-MW27	29.28	Not Calculated	14.76	14.10
UST645-MW28	26.80	Not Calculated	15.00	11.70
UST645-MW29	26.06	Not Calculated	14.66	13.14
UST645-MW30	29.14	Not Calculated	23.23	14.19
UST645-MW31	28.24	Not Calculated	13.09	11.18
UST645-MW32	29.27	Not Calculated	15.02	9.93

Not calculated due to insufficient data; well either not gauged or not part of monitoring program.
 TOC elevations taken from Sovereign Well Survey Database January 2007.

TABLE 3
PRODUCT THICKNESS DATA
2006-2007

Incident Number and Name: 87556 - Building 645

Monitoring Well	Top of Casing Elevation (feet)	Product Thickness (feet)		
		7/24/2006	1/8/2007	3/22/2007
UST645-MW01	28.56	--	--	--
UST645-MW02	29.53	--	--	--
UST645-MW03	29.79	--	NM	--
UST645-MW04	25.33	--	NM	--
UST645-MW05	30.07	--	NM	--
UST645-MW06	31.27	--	NM	--
UST645-MW07	27.82	--	NM	--
UST645-MW08	29.60	--	NM	--
UST645-MW09	29.79	--	NM	--
UST645-MW10	27.87	--	NM	--
UST645-MW11	29.73	--	NM	--
UST645-MW12	29.40	--	--	--
UST645-MW13	29.82	--	--	--
UST645-MW14	28.11	--	NM	--
UST645-MW15	27.05	--	NM	--
UST645-MW16	28.27	--	--	--
UST645-MW17	27.28	--	--	--
UST645-MW18	31.46	--	--	--
UST645-MW19	28.35	--	NM	--
UST645-MW20	28.34	--	NM	--
UST645-MW21	23.09	--	NM	--
UST645-MW22	28.52	--	--	--
UST645-MW23	28.58	--	--	--
UST645-MW24	25.52	NM	--	--
UST645-MW25	24.60	NM	--	--
UST645-MW26	29.31	NM	--	--
UST645-MW27	29.28	NM	--	--
UST645-MW28	26.80	NM	--	--
UST645-MW29	26.06	NM	--	--
UST645-MW30	29.14	NM	--	--
UST645-MW31	28.24	NM	--	--
UST645-MW32	29.27	NM	--	--

NM = Well not measured; either not accessible or not designated as part of gauging program.

TABLE 4
SUMMARY OF GROUNDWATER SAMPLING RESULTS
2006-2007

Incident Number and Name: 87556 - Building 645

Analytical Method: EPA Method 601

Contaminant of Concern			All Target Analytes
Well ID	Sample ID	Date Collected	
UST645-MW01	UST645-MW01	1/9/2007	BQL
UST645-MW02	UST645-MW02	1/9/2007	BQL
UST645-MW12	UST645-MW12	1/8/2007	BQL
UST645-MW13	UST645-MW13	1/9/2007	BQL
UST645-MW16	UST645-MW16	1/11/2007	BQL
UST645-MW17	UST645-MW17	1/9/2007	BQL
UST645-MW18	UST645-MW18	1/10/2007	BQL
UST645-MW22	UST645-MW22	1/8/2007	BQL
UST645-MW23	UST645-MW23	1/9/2007	BQL
UST645-MW24	UST645-MW24	1/9/2007	BQL
UST645-MW25	UST645-MW25	1/10/2007	BQL
UST645-MW26	UST645-MW26	1/11/2007	BQL
UST645-MW27	UST645-MW27	1/11/2007	BQL
UST645-MW28	UST645-MW28	1/9/2007	BQL
UST645-MW29	UST645-MW29	1/11/2007	BQL
UST645-MW30	UST645-MW30	1/10/2007	BQL
UST645-MW31	UST645-MW31	1/10/2007	BQL
UST645-MW32	UST645-MW32	1/11/2007	BQL
Duplicate	Duplicate	1/10/2007	BQL
2L Standard (µg/l)			Varies

- Duplicate sample from MW30 in January 2007.
- All results reported in µg/l
- µg/L =micrograms per liter
- BQL = Below Quantitation Limits

TABLE 5
SUMMARY OF GROUNDWATER SAMPLING RESULTS
2006-2007

Incident Number and Name: 87556 - Building 645
 Analytical Method: EPA Method 602

Contaminant of Concern			Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl-tert butyl ether (MTBE)	Toluene	Total Xylenes
Well ID	Sample ID	Date Collected						
UST645-MW01	UST645-MW01	7/26/2006 1/9/2007	1.98 1.29J	BQL BQL	25.1 45.0	BQL BQL	25.6 56.6	50.2 92.7
UST645-MW02	UST645-MW02	7/26/2006 1/9/2007	BQL BQL	BQL BQL	0.600J BQL	BQL BQL	0.812J BQL	2.483J BQL
UST645-MW03	UST645-MW03	7/25/2006	0.668J	BQL	24.7	BQL	1.93	14.75
UST645-MW09	UST645-MW09	7/25/2006	BQL	BQL	BQL	BQL	1.20	1.30J
UST645-MW12	UST645-MW12	7/25/2006 1/8/2007	BQL BQL	BQL BQL	69.8 379	BQL BQL	15.1 57.1	329 1,572
UST645-MW13	UST645-MW13	1/9/2007	BQL	BQL	0.396J	BQL	1.88	0.629J
UST645-MW15	UST645-MW15	7/25/2006	BQL	BQL	BQL	0.829J	0.809J	0.966J
UST645-MW16	UST645-MW16	1/11/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW17	UST645-MW17	1/9/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW18	UST645-MW18	7/26/2006 1/10/2007 3/22/2007	18.1 14.8 3.97	BQL BQL BQL	96.8 86.7 16.8	BQL BQL BQL	6.88 3.94J 0.520J	20.54J 6.76J BQL
UST645-MW21	UST645-MW21	7/24/2006	BQL	BQL	BQL	BQL	0.930J	1.11J
UST645-MW22	UST645-MW22	7/26/2006 1/8/2007	BQL BQL	BQL BQL	BQL BQL	4.30 7.36	1.43 0.187J	1.32J BQL
UST645-MW23	UST645-MW23	7/25/2006 1/9/2007	BQL BQL	BQL BQL	BQL 0.241J	BQL BQL	0.851J 1.08	0.687J BQL
UST645-MW24	UST645-MW24	1/9/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW25	UST645-MW25	1/10/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW26	UST645-MW26	1/11/2007 3/22/2007	3,260 2,060	BQL BQL	330 325J	BQL BQL	7,160 13,900	515J 436J
UST645-MW27	UST645-MW27	1/11/2007 3/22/2007	12.9 BQL	0.386J BQL	0.435J BQL	39.1 BQL	2.99 BQL	0.560J BQL
UST645-MW28	UST645-MW28	1/9/2007	2.92	BQL	BQL	BQL	BQL	1.32
UST645-MW29	UST645-MW29	1/11/2007 3/22/2007	21.3 36.6	BQL BQL	0.873J BQL	0.828J BQL	3.80 0.600J	1.15J BQL
UST645-MW30	UST645-MW30	1/10/2007 3/22/2007	BQL BQL	BQL 0.493J	BQL BQL	BQL BQL	BQL BQL	BQL BQL
UST645-MW31	UST645-MW31	1/10/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW32	UST645-MW32	1/11/2007 3/22/2007	BQL BQL	BQL 80.4	BQL BQL	BQL BQL	BQL 0.634J	BQL BQL
Duplicate	Duplicate	7/25/2006 1/10/2007 3/22/2007	BQL BQL BQL	BQL BQL BQL	BQL BQL BQL	BQL BQL BQL	0.734J BQL BQL	BQL BQL BQL
2L Standard (µg/l)			1	70	550	200	1,000	530

- Duplicate sample from MW23 in July 2006, MW30 in January 2007, and MW27 in March 2007.
- All results reported in µg/l
- µg/L =micrograms per liter
- BQL = Below Quantitation Limits
- **BOLD** = Detected concentration.
- **BOLD** and shaded = detected concentration above applicable standard

TABLE 6
SUMMARY OF GROUNDWATER SAMPLING RESULTS
2006-2007

Incident Number and Name: 87556 - Building 645

Analytical Method: EPA Method 625

Contaminant of Concern			Naphthalene	Tentatively Identified Compounds (TICs)	All Other Compounds
Well ID	Sample ID	Date Collected			
UST645-MW01	UST645-MW01	7/26/2006	11.5	730	BQL
UST645-MW02	UST645-MW02	7/26/2006	BQL	22.74	BQL
UST645-MW03	UST645-MW03	7/25/2006	11.0	178.33	BQL
UST645-MW09	UST645-MW09	7/25/2006	BQL	20.39	BQL
UST645-MW12	UST645-MW12	7/25/2006	26.6	688.50	BQL
UST645-MW15	UST645-MW15	7/25/2006	BQL	27.16	BQL
UST645-MW18	UST645-MW18	7/26/2006	BQL	253.08	BQL
UST645-MW21	UST645-MW21	7/24/2006	BQL	11.8	BQL
UST645-MW22	UST645-MW22	7/26/2006	BQL	41.07	BQL
UST645-MW23	UST645-MW23	7/25/2006	BQL	20.47	BQL
Duplicate	Duplicate	7/25/2006	BQL	34.0	BQL
2L Standard (µg/l)			21	NE	Varies

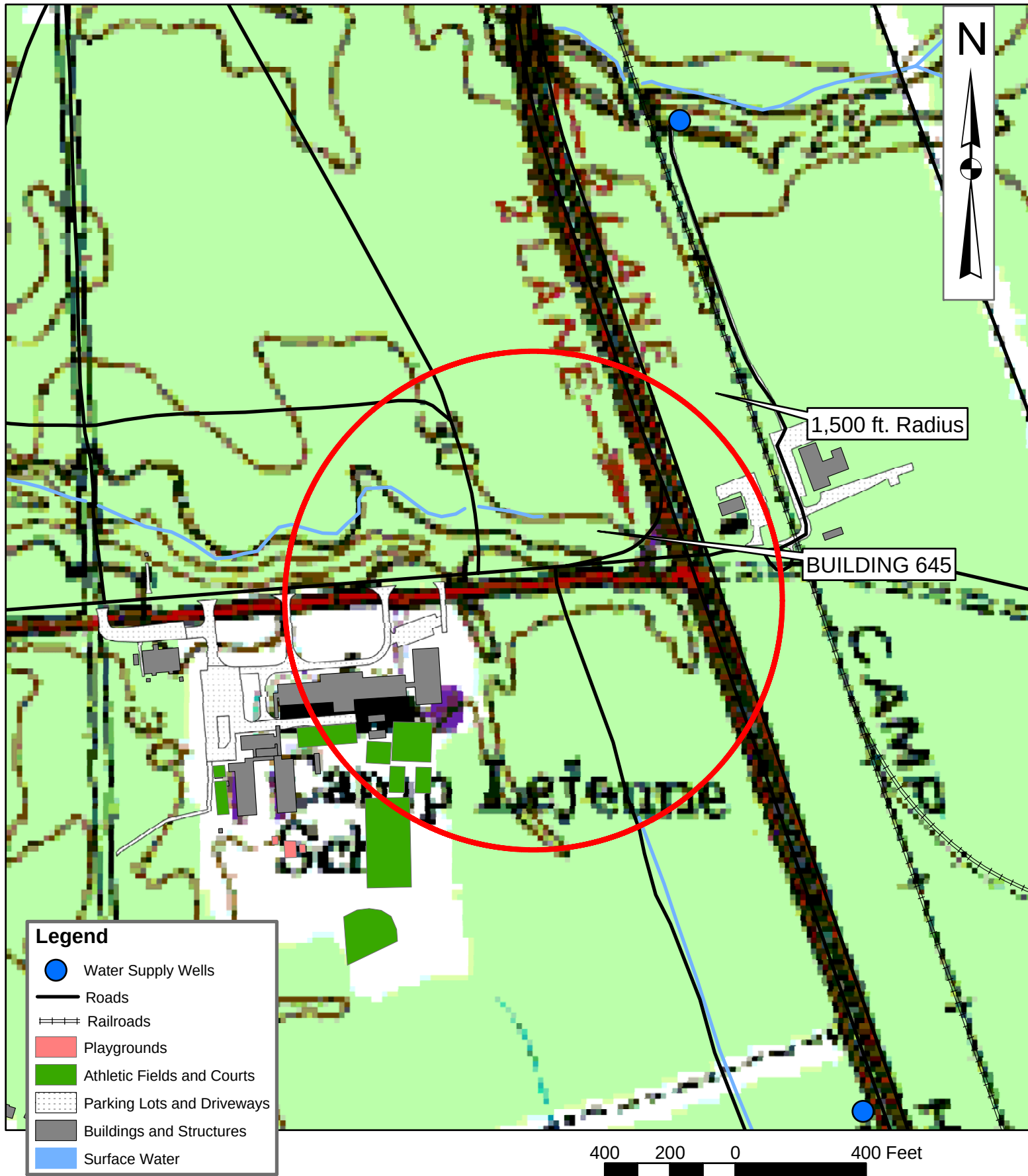
- Duplicate sample from MW23
- All results reported in µg/l
- µg/L =micrograms per liter
- BQL = Below Quantitation Limits
- **BOLD** = Detected concentration.

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
2006-2007
 Incident Number and Name: 87556 - Building 645
Analytical Method: EPA Method 3030C

Contaminant of Concern			Lead
Well ID	Sample ID	Date Collected	
UST645-MW01	UST645-MW01	1/9/2007	BQL
UST645-MW02	UST645-MW02	1/9/2007	BQL
UST645-MW12	UST645-MW12	1/8/2007	BQL
UST645-MW13	UST645-MW13	1/9/2007	BQL
UST645-MW16	UST645-MW16	1/11/2007	BQL
UST645-MW17	UST645-MW17	1/9/2007	BQL
UST645-MW18	UST645-MW18	1/10/2007	BQL
UST645-MW22	UST645-MW22	1/8/2007	BQL
UST645-MW23	UST645-MW23	1/9/2007	BQL
UST645-MW24	UST645-MW24	1/9/2007	BQL
UST645-MW25	UST645-MW25	1/10/2007	BQL
UST645-MW26	UST645-MW26	1/11/2007	BQL
UST645-MW27	UST645-MW27	1/11/2007	BQL
UST645-MW28	UST645-MW28	1/9/2007	BQL
UST645-MW29	UST645-MW29	1/11/2007	BQL
UST645-MW30	UST645-MW30	1/10/2007	BQL
UST645-MW31	UST645-MW31	1/10/2007	BQL
UST645-MW32	UST645-MW32	1/11/2007	BQL
Duplicate	Duplicate	1/10/2007	BQL
2L Standard (µg/l)			15

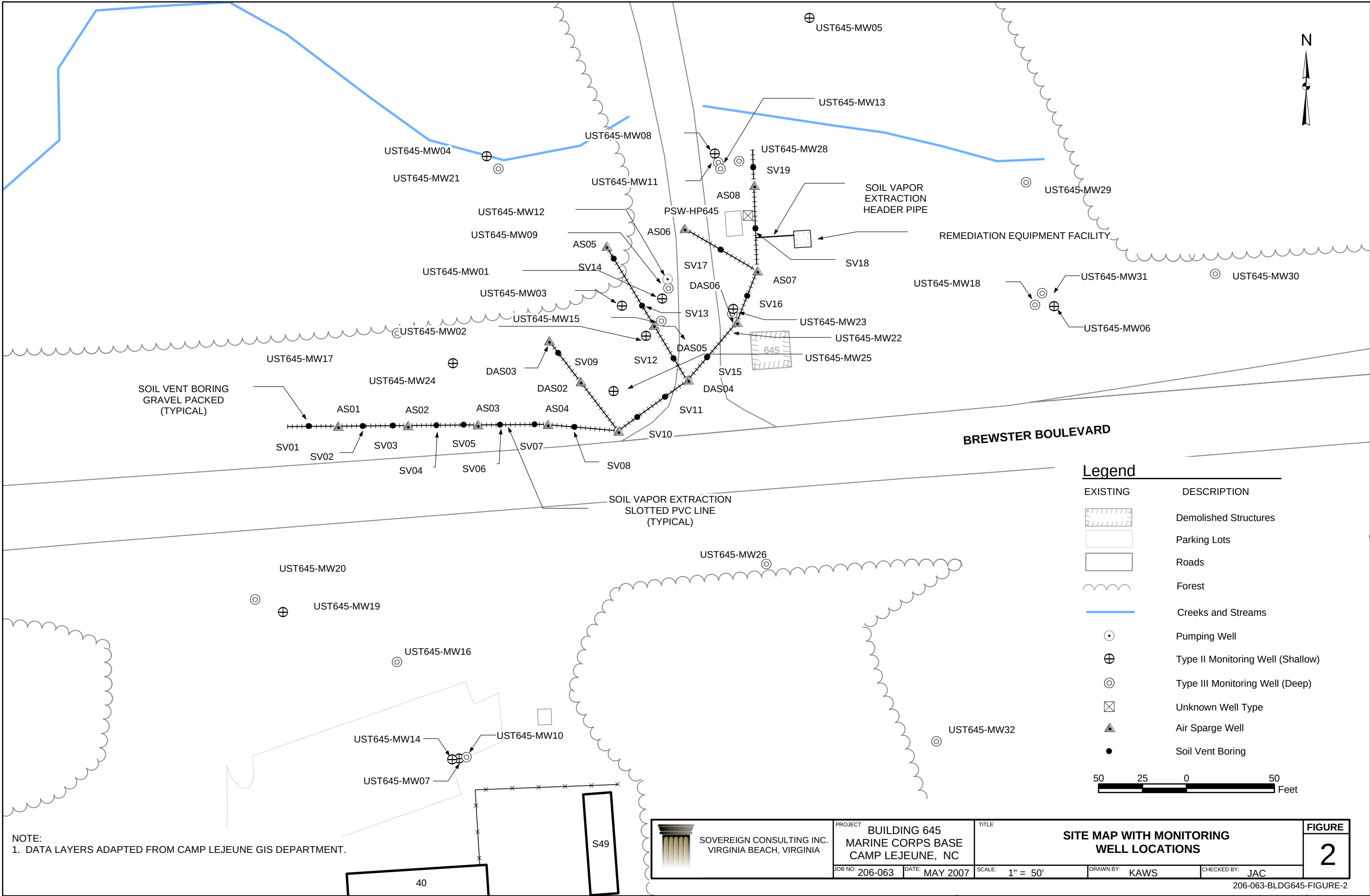
- Duplicate sample from MW30
- All results reported in µg/l
- µg/L =micrograms per liter
- BQL = Below Quantitation Limits

FIGURES



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

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING 645 MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE GENERAL VICINITY TOPOGRAPHIC SITE MAP			FIGURE
	JOB NO. 206-063	DATE MAY 2007	SCALE AS SHOWN	DRAWN BY KAWS	CHECKED BY JAC	1



SOVEREIGN CONSULTING INC.
VIRGINIA BEACH, VIRGINIA

PROJECT BUILDING 645
MARINE CORPS BASE
CAMP LEJEUNE, NC

JOB NO: 206-063 DATE: MAY 2007

TITLE

SITE MAP WITH MONITORING
WELL LOCATIONS

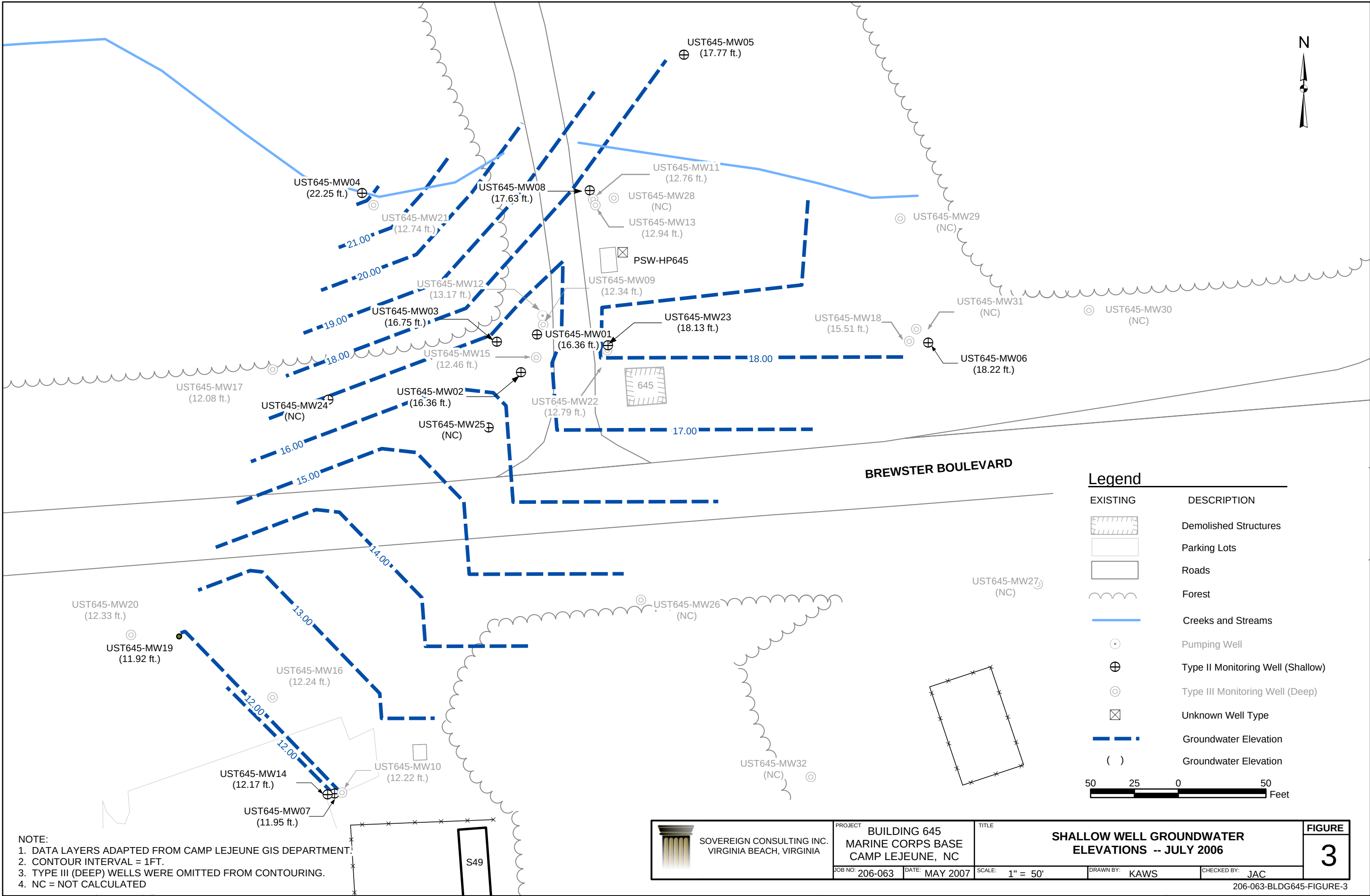
SCALE: 1" = 50'

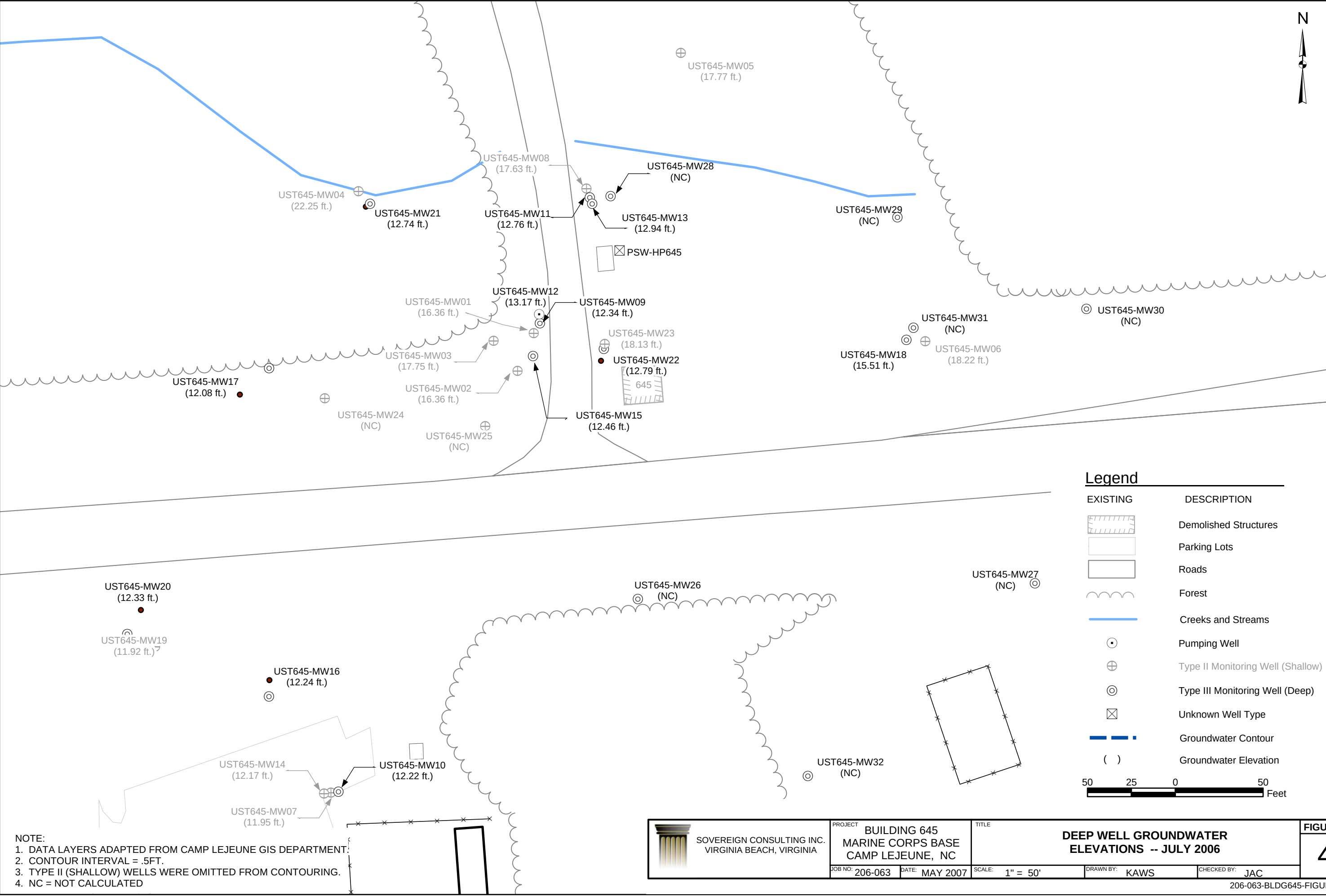
DRAWN BY: KAWS

CHECKED BY: JAC

FIGURE

2





SOVEREIGN CONSULTING INC.
VIRGINIA BEACH, VIRGINIA

PROJECT BUILDING 645
MARINE CORPS BASE
CAMP LEJEUNE, NC

JOB NO: 206-063 DATE: MAY 2007

TITLE

DEEP WELL GROUNDWATER
ELEVATIONS -- JULY 2006

SCALE: 1" = 50'

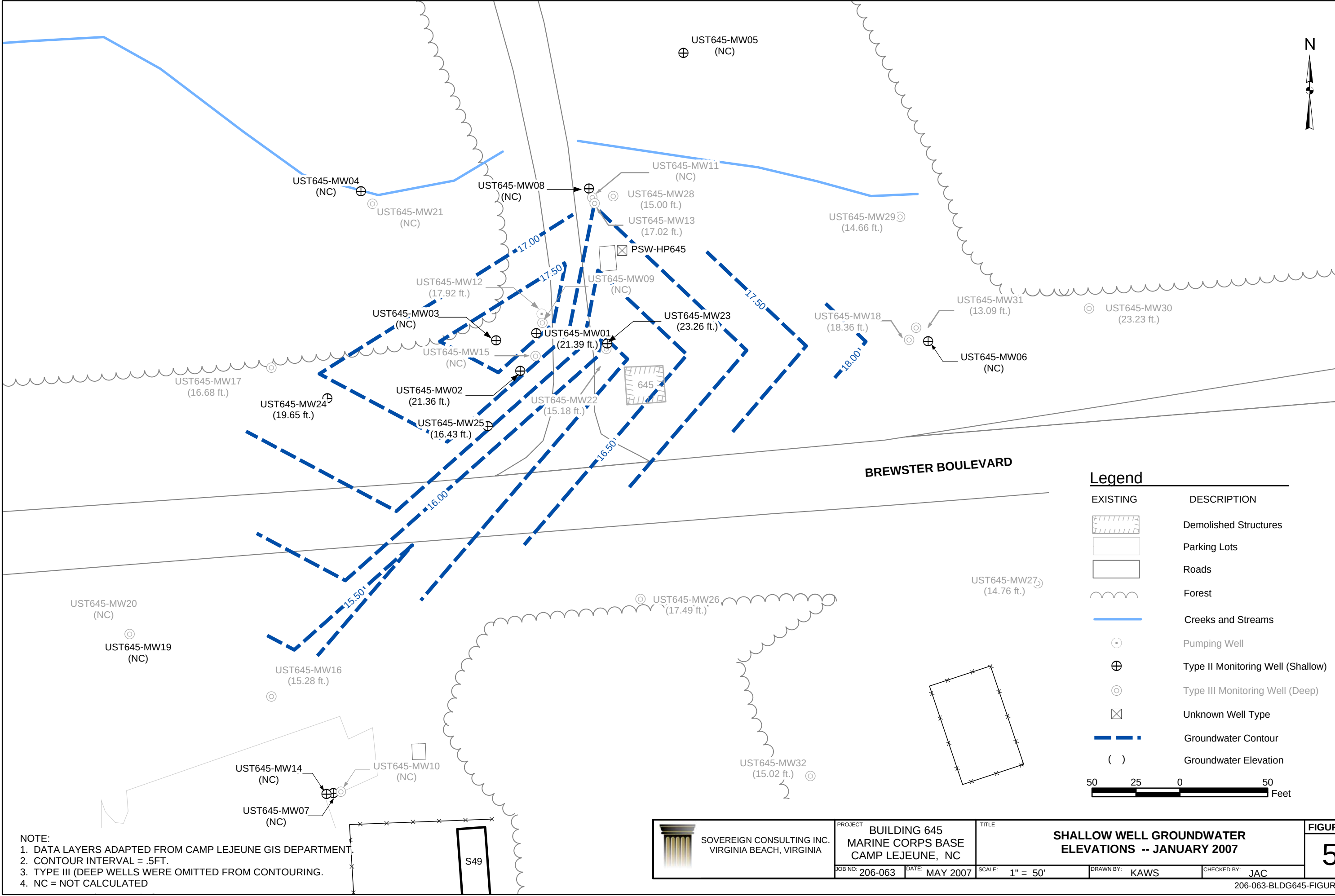
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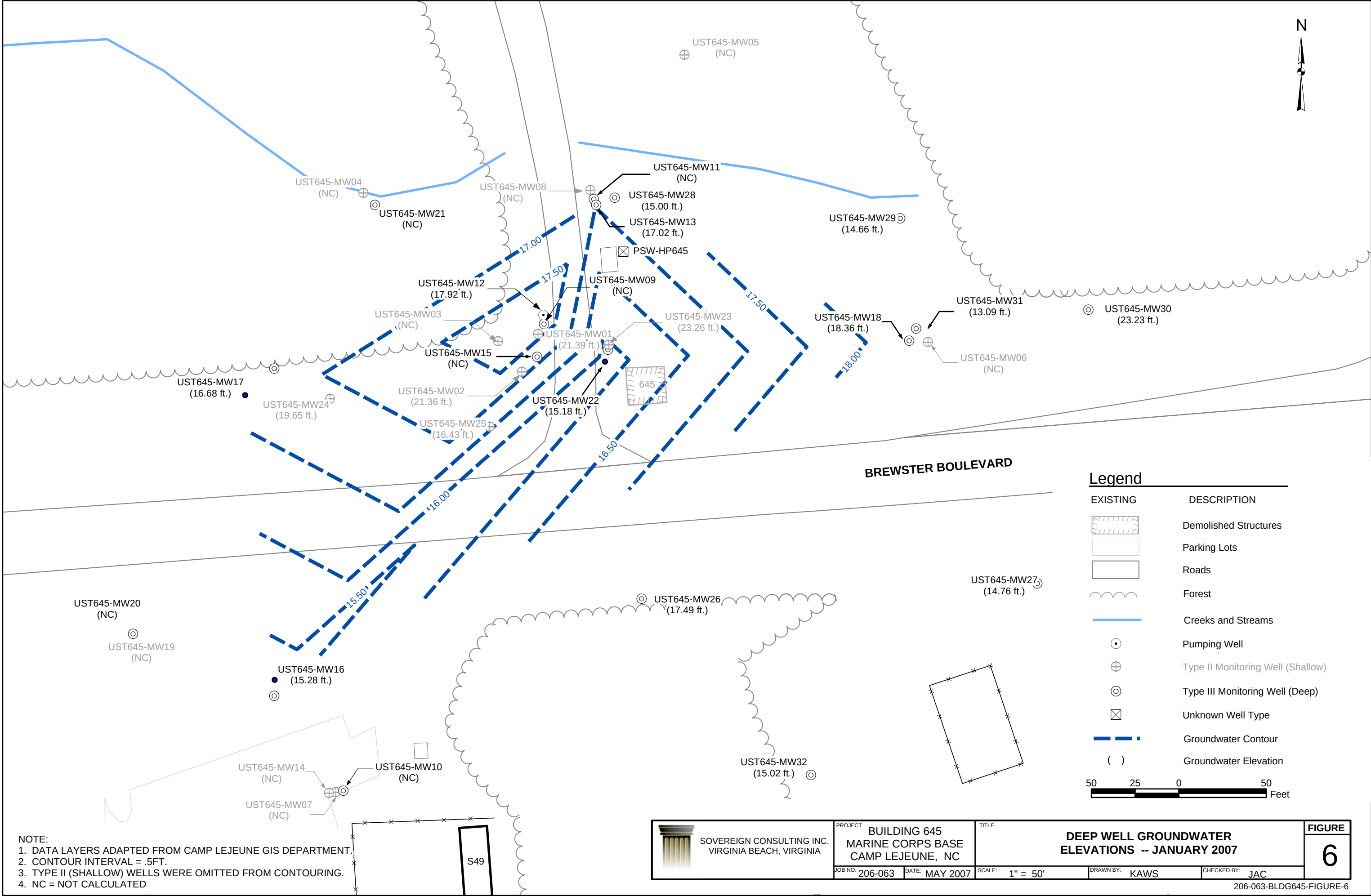
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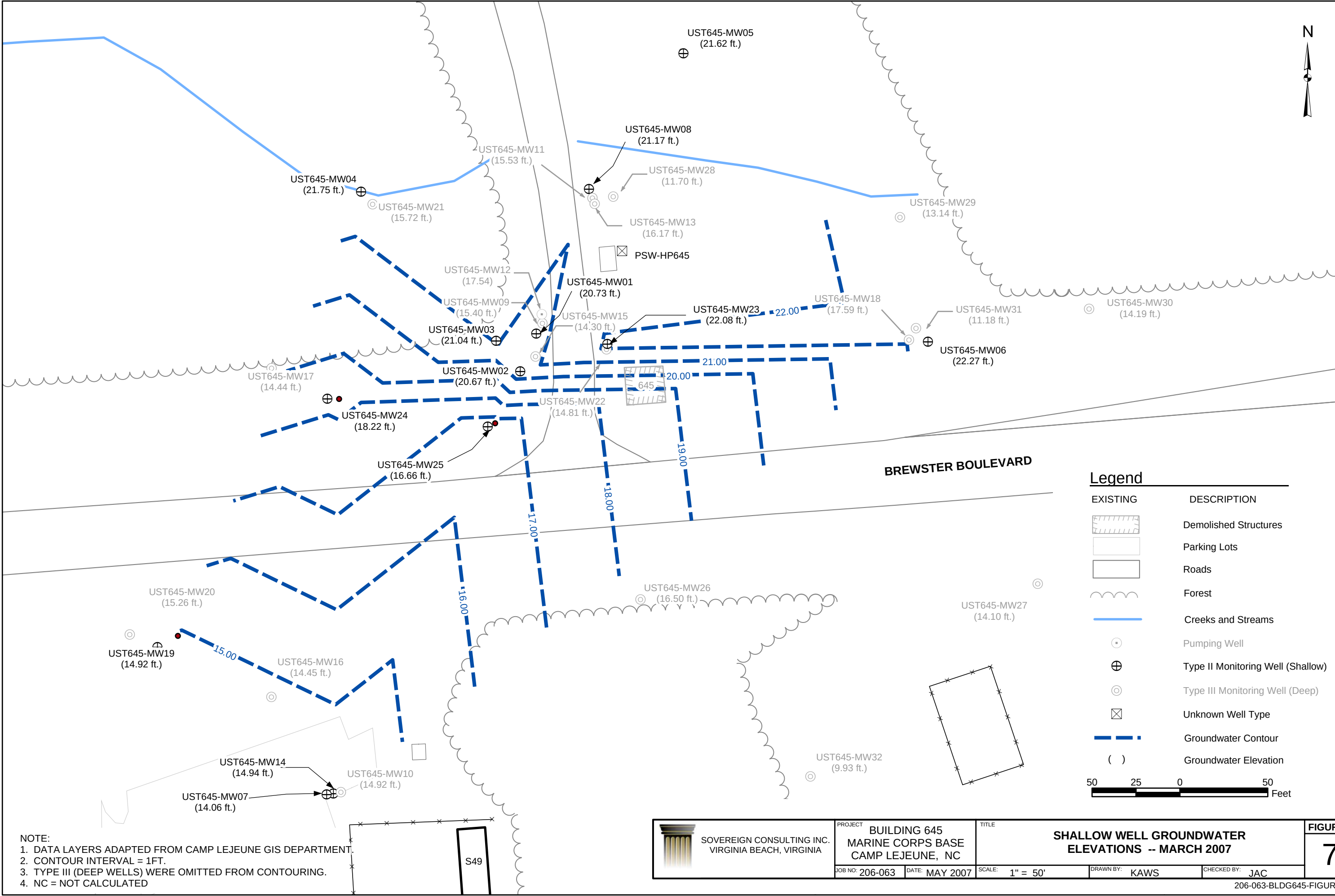
FIGURE

4

206-063-BLDG645-FIGURE-4

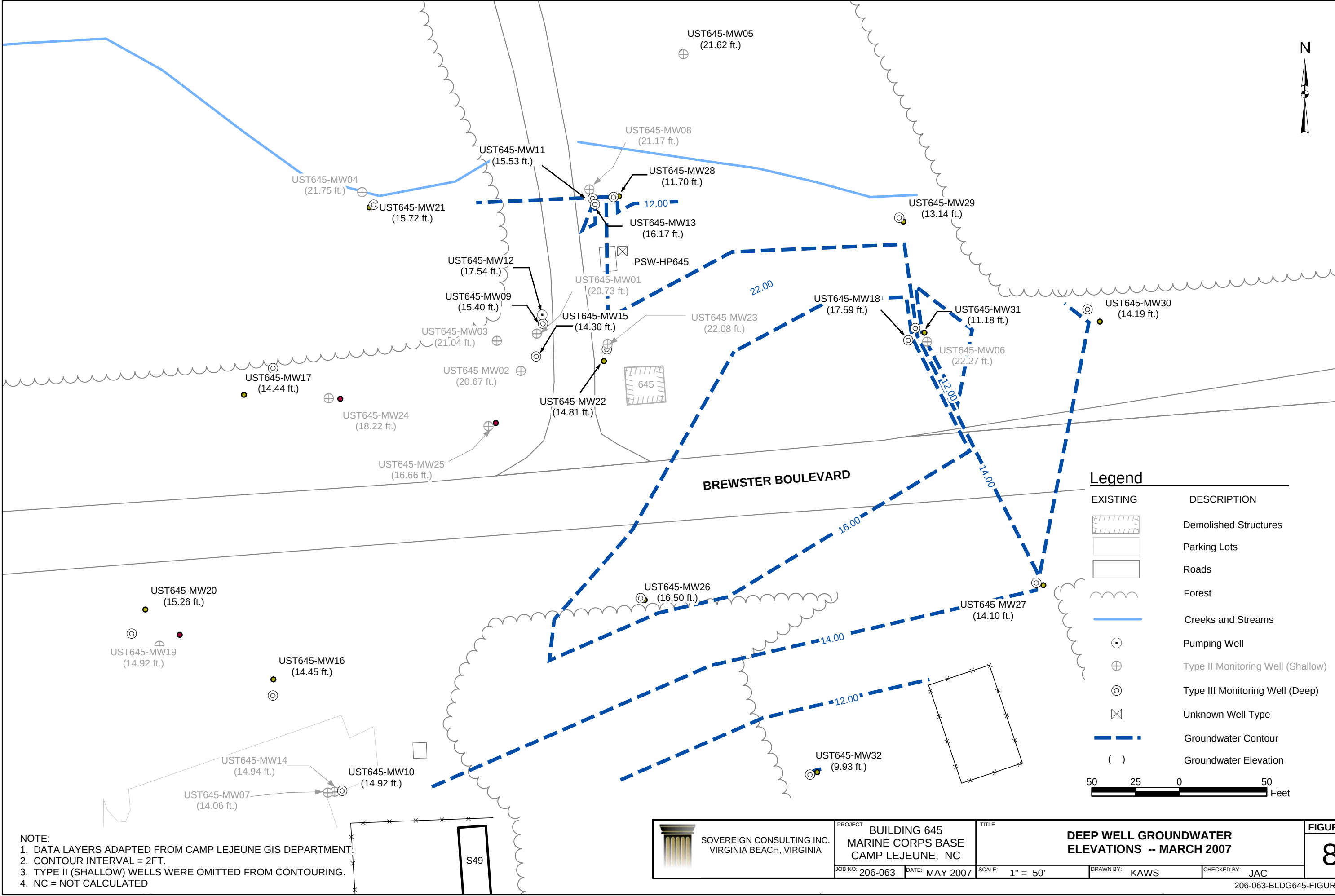






NOTE:
1. DATA LAYERS ADAPTED FROM CAMP LEJEUNE GIS DEPARTMENT.
2. CONTOUR INTERVAL = 1FT.
3. TYPE III (DEEP WELLS) WERE OMITTED FROM CONTOURING.
4. NC = NOT CALCULATED

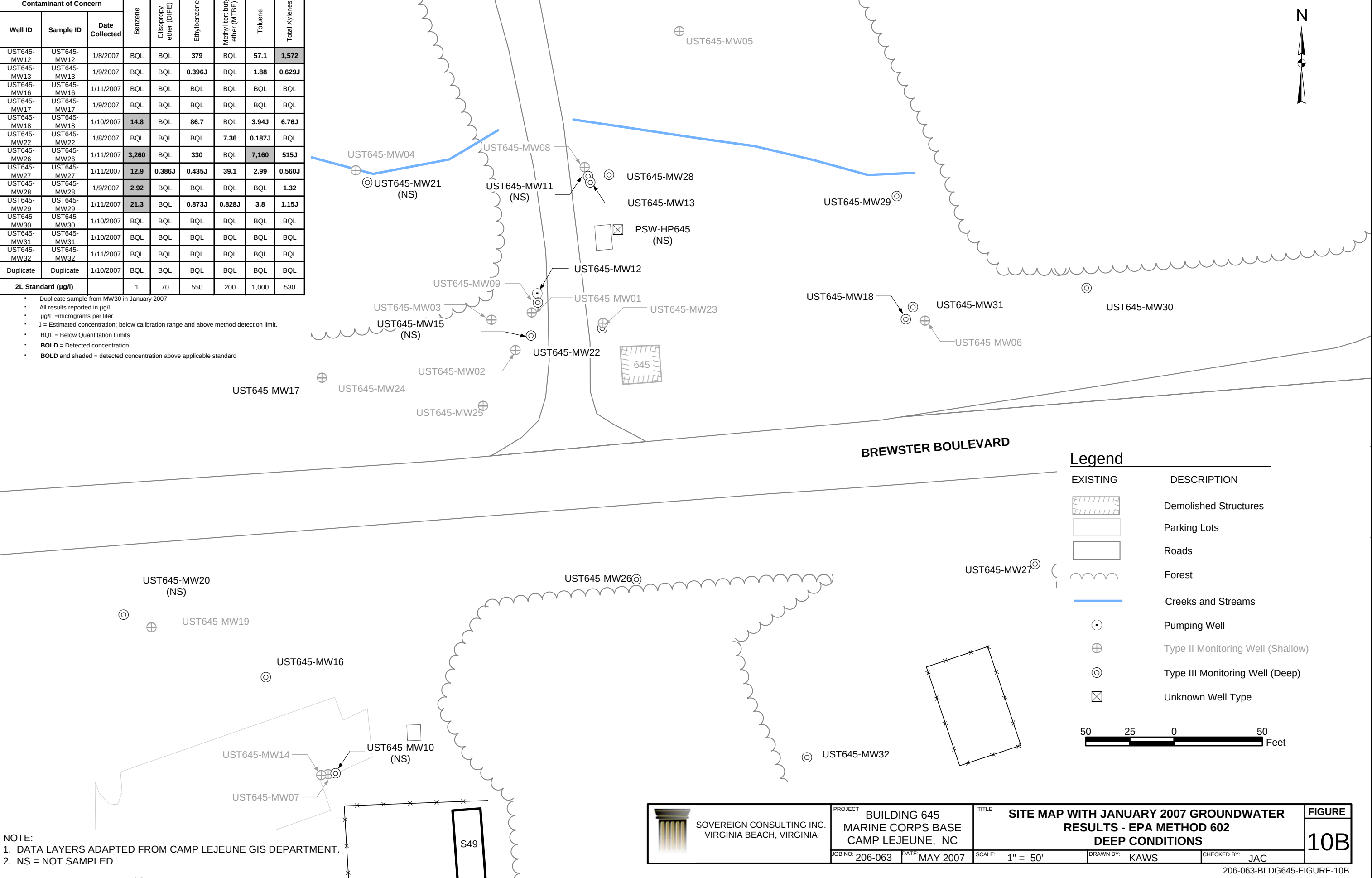
 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT	BUILDING 645 MARINE CORPS BASE CAMP LEJEUNE, NC		TITLE	SHALLOW WELL GROUNDWATER ELEVATIONS -- MARCH 2007		FIGURE 7		
	JOB NO:	206-063	DATE:	MAY 2007	SCALE:	1" = 50'		DRAWN BY:	KAWS



Analytical Method: EPA Method 602

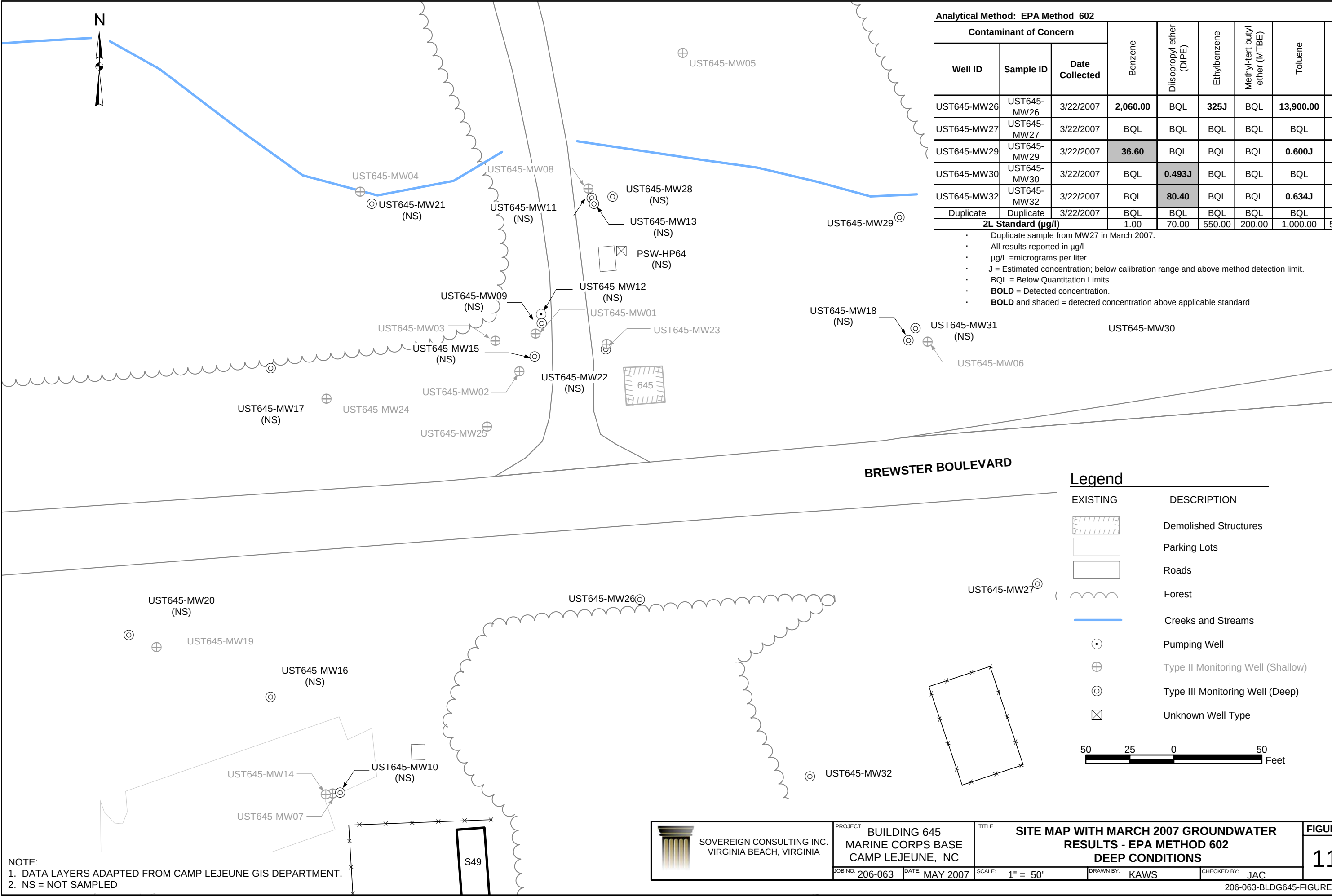
Contaminant of Concern			Benzene	Disopropyl ether (DIPE)	Ethylbenzene	Methyl-Tert butyl ether (MTBE)	Toluene	Total Xylenes
Well ID	Sample ID	Date Collected						
UST645-MW12	UST645-MW12	1/8/2007	BQL	BQL	379	BQL	57.1	1,572
UST645-MW13	UST645-MW13	1/9/2007	BQL	BQL	0.396J	BQL	1.88	0.629J
UST645-MW16	UST645-MW16	1/11/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW17	UST645-MW17	1/9/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW18	UST645-MW18	1/10/2007	14.8	BQL	86.7	BQL	3.94J	6.76J
UST645-MW22	UST645-MW22	1/8/2007	BQL	BQL	BQL	7.36	0.187J	BQL
UST645-MW26	UST645-MW26	1/11/2007	3,260	BQL	330	BQL	7,160	515J
UST645-MW27	UST645-MW27	1/11/2007	12.9	0.386J	0.435J	39.1	2.99	0.560J
UST645-MW28	UST645-MW28	1/9/2007	2.92	BQL	BQL	BQL	BQL	1.32
UST645-MW29	UST645-MW29	1/11/2007	21.3	BQL	0.873J	0.828J	3.8	1.15J
UST645-MW30	UST645-MW30	1/10/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW31	UST645-MW31	1/10/2007	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW32	UST645-MW32	1/11/2007	BQL	BQL	BQL	BQL	BQL	BQL
Duplicate	Duplicate	1/10/2007	BQL	BQL	BQL	BQL	BQL	BQL
2L Standard (µg/l)			1	70	550	200	1,000	530

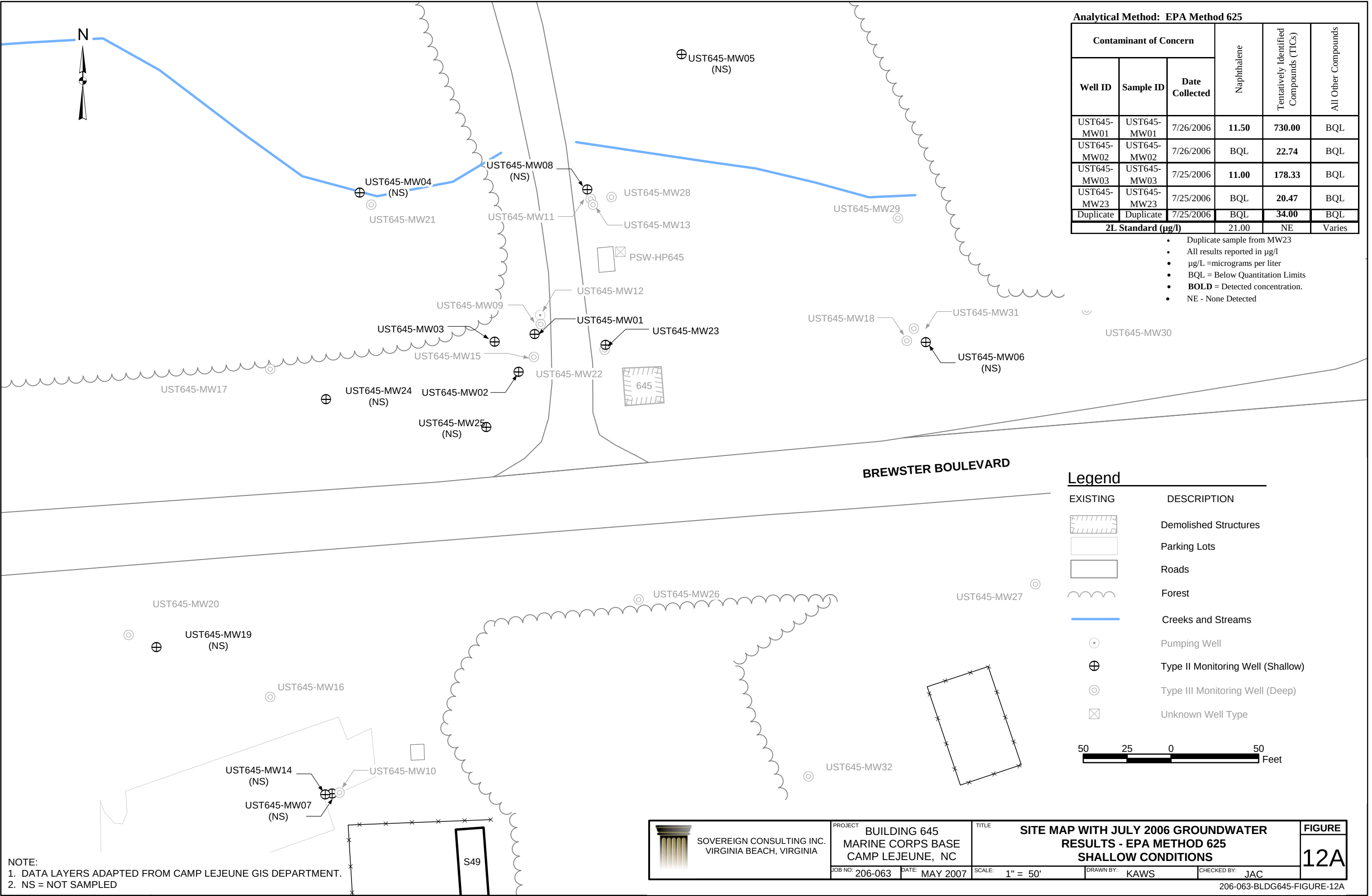
- Duplicate sample from MW30 in January 2007.
- All results reported in µg/l
- µg/L =micrograms per liter
- J = Estimated concentration; below calibration range and above method detection limit.
- BQL = Below Quantitation Limits
- **BOLD** = Detected concentration.
- **BOLD** and shaded = detected concentration above applicable standard

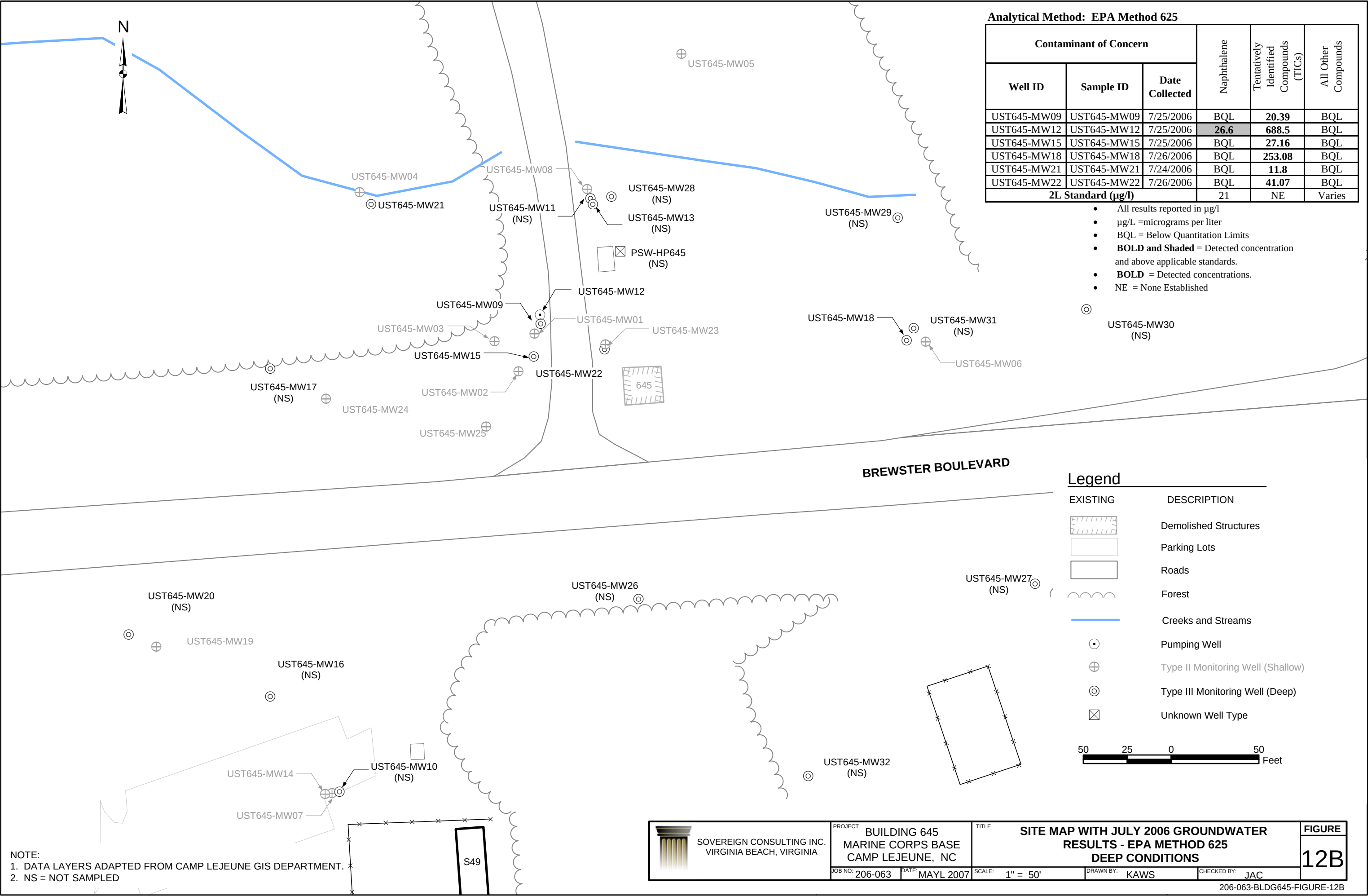


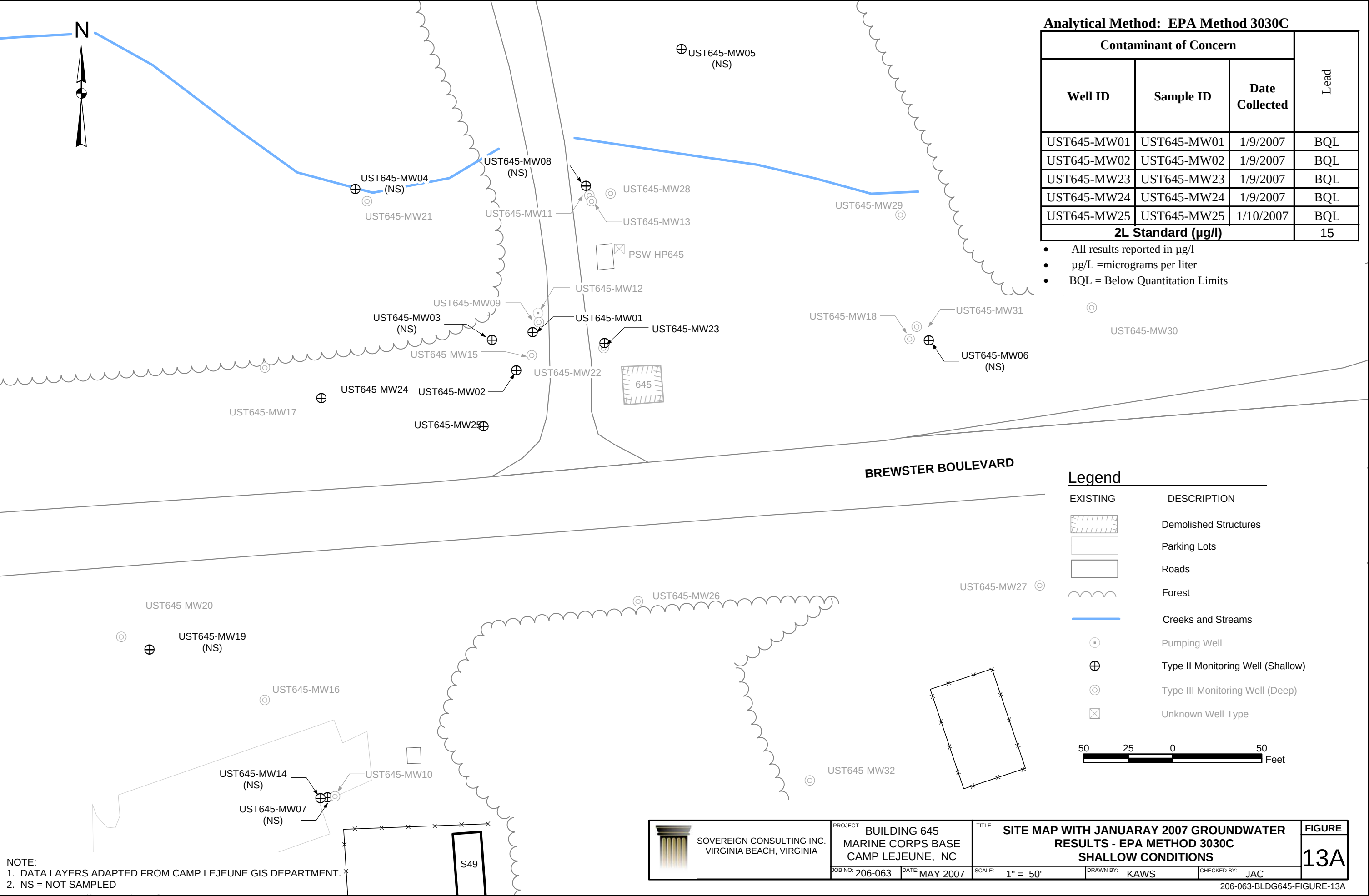
NOTE:
1. DATA LAYERS ADAPTED FROM CAMP LEJEUNE GIS DEPARTMENT.
2. NS = NOT SAMPLED

 SOVEREIGN CONSULTING INC. VIRGINIA BEACH, VIRGINIA	PROJECT BUILDING 645 MARINE CORPS BASE CAMP LEJEUNE, NC	TITLE SITE MAP WITH JANUARY 2007 GROUNDWATER RESULTS - EPA METHOD 602 DEEP CONDITIONS	FIGURE 10B
JOB NO: 206-063	DATE: MAY 2007	SCALE: 1" = 50'	DRAWN BY: KAWS CHECKED BY: JAC









Contaminant of Concern			Lead
Well ID	Sample ID	Date Collected	
UST645-MW12	UST645-MW12	1/8/2007	BQL
UST645-MW13	UST645-MW13	1/9/2007	BQL
UST645-MW16	UST645-MW16	1/11/2007	BQL
UST645-MW17	UST645-MW17	1/9/2007	BQL
UST645-MW18	UST645-MW18	1/10/2007	BQL
UST645-MW22	UST645-MW22	1/8/2007	BQL
UST645-MW26	UST645-MW26	1/11/2007	BQL
UST645-MW27	UST645-MW27	1/11/2007	BQL
UST645-MW28	UST645-MW28	1/9/2007	BQL
UST645-MW29	UST645-MW29	1/11/2007	BQL
UST645-MW30	UST645-MW30	1/10/2007	BQL
UST645-MW31	UST645-MW31	1/10/2007	BQL
UST645-MW32	UST645-MW32	1/11/2007	BQL
Duplicate	Duplicate	1/10/2007	BQL
2L Standard (µg/l)			15

- NOTE:
1. DATA LAYERS ADAPTED FROM CAMP LEJEUNE GIS DEPARTMENT.
2. NS = NOT SAMPLED

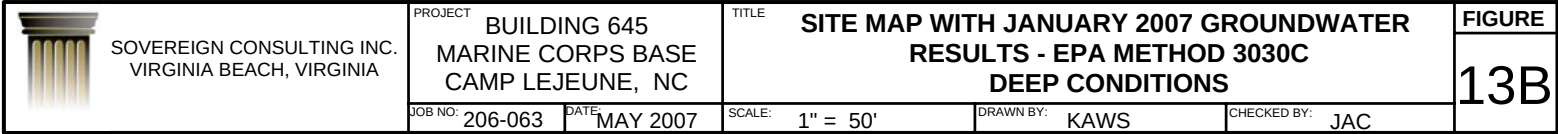


FIGURE 14
Total BTEX Trend at MW01
645

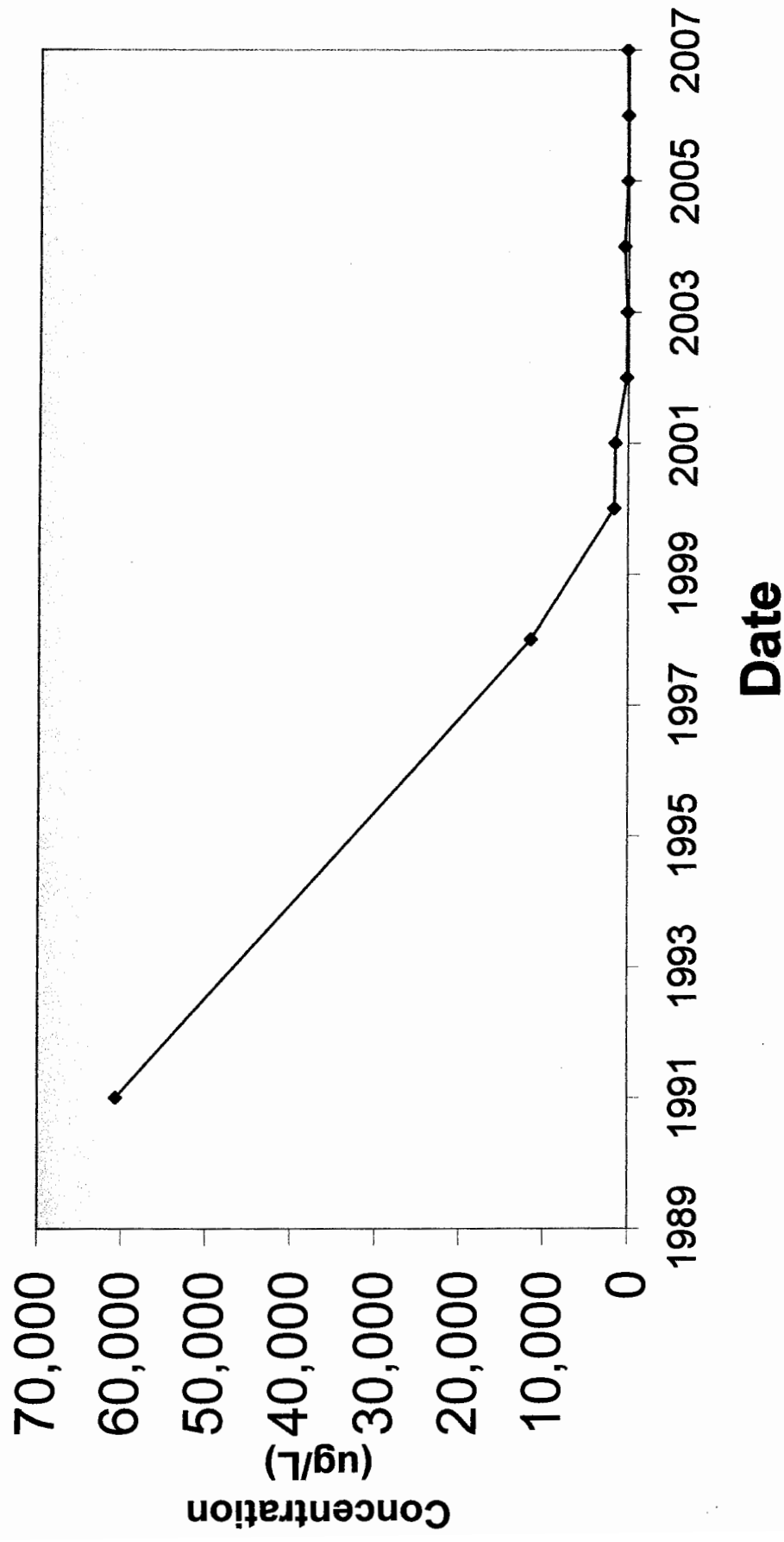


FIGURE 15
Total BTEX Trend at MW12
645

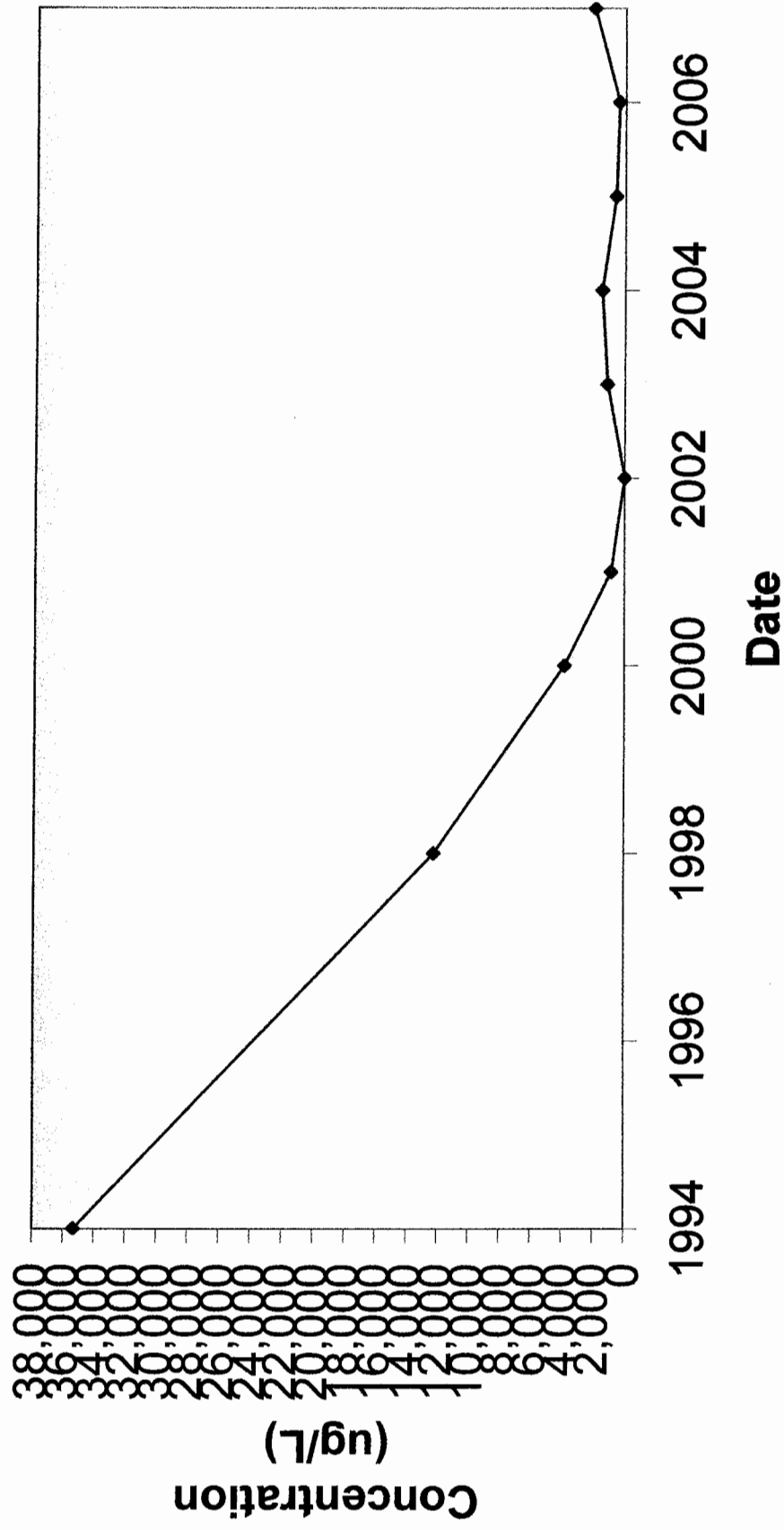
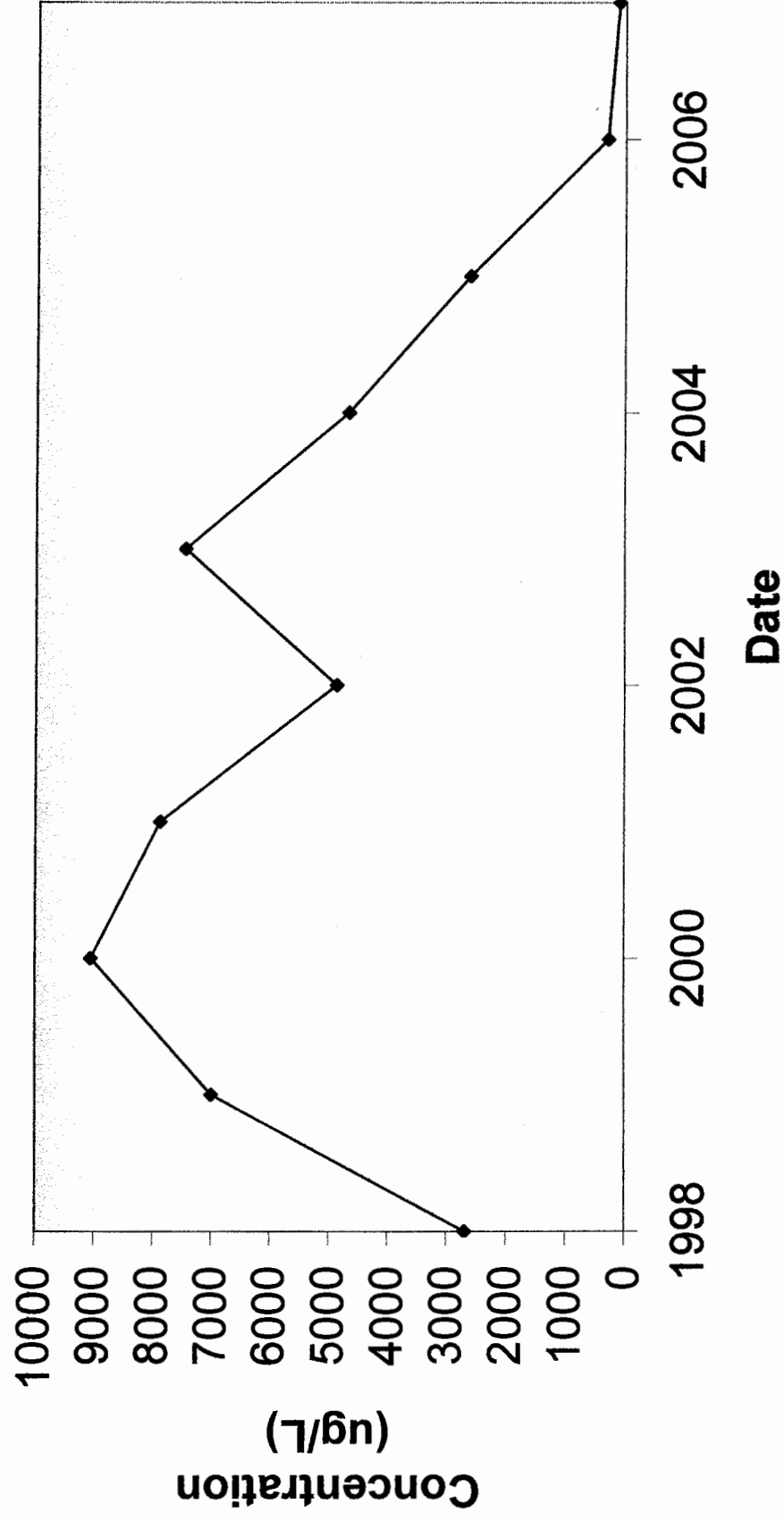


FIGURE 16
Total BETX Trend at MW18
645



APPENDIX A

HISTORICAL DATA

Historical Groundwater Data Table
Analytical Data for March 2007 Sampling Event
Building 645

Parameter	NCGWQS	GCL	MW-18	MW-26	MW-27	MW-29	MW-30	MW-32
VOCs by EPA Method 601/602 (µg/L)								
All Compounds	Varies	Varies	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Benzene	1	5,000	3.97	2,060.0	<1.00	36.6	<1.00	<1.00
Diisopropyl ether (DIPE)	70	70,000	<1.00	<1.00	<1.00	<1.00	0.493J	80.4
Ethylbenzene	550	84,500	16.8	325J	<1.00	<1.00	<1.00	<1.00
Methyl-tert butyl ether (MTBE)	200	200,000	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	1,000	257,500	0.520 J	13,900.0	<1.00	0.600J	<1.00	0.634J
Xylenes (total)	530	87,500	<2.00	436J	<2.00	<2.00	<2.00	<2.00
SVOCs by EPA Method 625 (µg/L)								
Bis(2-ethylhexyl)phthalate	2.5	2,500	NA	NA	NA	NA	NA	NA
Flourene	280	950	NA	NA	NA	NA	NA	NA
Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA
Phenol	300	300,000	NA	NA	NA	NA	NA	NA
TICs (total)			NA	NA	NA	NA	NA	NA
All other Compounds	Varies	Varies	NA	NA	NA	NA	NA	NA
EPA 200.7 / SM 3030C (ug/L)								
Lead (EPA 6010B / SM 3030C) (ug/L)	15	15,000	NA	NA	NA	NA	NA	NA

Bold type indicates detectable concentrations

Bold and highlighted indicates detectable concentrations above the GCL

NCGWQS - North Carolina Groundwater Quality Standard

GCL - Gross Contaminant Level

<# - not detected at the indicated reporting limit

mg/L - milligrams per liter

ug/L - micrograms per liter

NE - Not established

RL - the NCGWQS for the constituent is the reporting limit

ND - None detected (no summed constituents were detected)

J - estimated concentration between minimum detection limit and reporting limit

NA - Not analyzed; laboratory quantitation for the indicated analyte was not conducted

NS - Not sampled; the indicted location was not designated for sampling during the event

E - estimated concentration above the linear quantitation range

**Historical Groundwater Data Table
Analytical Data for January 2007 Sampling Event
Building 645**

Parameter	NCGWQS	GCL	MW-01	MW-02	MW-12	MW-13	MW-16	MW-17	MW-18	MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28	MW-29	MW-30	MW-31	MW-32
VOCs by EPA Method 601/602 (µg/L)																				
All Compounds	Varies	Varies	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Benzene	1	5,000	1.29 J	<1.00	<1.00	<1.00	<1.00	<1.00	14.8	<1.00	<1.00	<1.00	<1.00	3,260	12.9	2.92	21.3	<1.00	<1.00	<1.00
Diisopropyl ether (DIPE)	70	70,000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.386	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	550	84,500	45.0	<1.00	379.00	0.396 J	<1.00	<1.00	86.7	<1.00	0.241 J	<1.00	<1.00	330	0.435	<1.00	0.873	<1.00	<1.00	<1.00
Methyl-tert butyl ether (MTBE)	200	200,000	56.6	<5.0	57.1	1.88	<5.0	<5.0	<5.0	7.36	<5.0	<5.0	<5.0	BQL	39.1	<5.0	0.828	<5.0	<5.0	<5.0
Toluene	1,000	257,500	92.7	<1.00	57.1	1.88	<1.00	<2.00	3.94 J	0.187 J	0.187 J	<2.00	<2.00	7160	2.99	<2.00	3.80	<2.00	<2.00	<2.00
Xylenes (total)	530	87,500	92.7	<1.00	1,572.0	0.629 J	<2.00	<2.00	6.76 J	<2.00	<2.00	<2.00	<2.00	436J	0.560J	1.32	1.15J	<2.00	<2.00	<2.00
SVOCs by EPA Method 625 (µg/L)																				
Bis(2-ethylhexyl)phthalate	2.5	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flourene	280	950	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	300	300,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TICs (total)			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All other Compounds	Varies	Varies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
EPA 200.7 / SM 3030C (ug/L)																				
Lead (EPA 6010B / SM 3030C) (ug/L)	15	15,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Bold type indicates detectable concentrations

Bold and highlighted indicates detectable concentrations above the GCL

NCGWQS - North Carolina Groundwater Quality Standard

GCL - Gross Contaminant Level

<# - not detected at the indicated reporting limit

mg/L - milligrams per liter

ug/L - micrograms per liter

NE - Not established

RL - the NCGWQS for the constituent is the reporting limit

ND - None detected (no summed constituents were detected)

J - estimated concentration between minimum detection limit and reporting limit

NA - Not analyzed; laboratory quantitation for the indicated analyte was not conducted

NS - Not sampled; the indicated location was not designated for sampling during the event

E - estimated concentration above the linear quantitation range

Historical Groundwater Data Table
Analytical Data for July 2006 Sampling Event
Building 645

Parameter	NCGWQS	GCL	MW-01	MW-02	MW-03	MW-09	MW-12	MW-15	MW-18	MW-21	MW-22	MW-23	Duplicate
VOCs by EPA Method 601/602 (µg/L)													
All Compounds	Varies	Varies	<2.00	<2.00	<2.00	<2.00	<20.0	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
Benzene	1	5,000	1.98	<1.00	0.668	<1.00	<10.0	<1.00	18.1	<1.00	<1.00	<1.00	<1.00
Diisopropyl ether (DIPE)	70	70,000	<1.00	<1.00	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	550	84,500	25.1	0.600	24.7	<1.00	69.8	<1.00	96.8	<1.00	<1.00	<1.00	<1.00
Methyl-tert butyl ether (MTBE)	200	200,000	<2.00	<2.00	<2.00	<2.00	<20.0	0.829	<2.00	<2.00	4.30	<2.00	<2.00
Toluene	1,000	257,500	25.6	0.812	1.93	1.20	15.1	0.809	6.88	0.930	1.43	0.851	0.734
m/p-Xylene			31.0	1.66	2.35	1.30	92.0	0.966	11.0	1.11	1.32	0.687	<2.00
o-Xylene			19.2	0.823	12.4	<2.00	237	<2.00	9.54	<2.00	<2.00	<2.00	<2.00
Xylenes (total)	530	87,500	50.2	2.483	14.75	1.30	329.0	0.966	20.54	1.11	1.32	<4.00	<4.00
SVOCs by EPA Method 625 (µg/L)													
Bis(2-ethylhexyl)phthalate	2.5	2,500	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Flourene	280	950	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	21	15,500	11.5	<10.0	11	<10.0	26.6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Phenol	300	300,000	< 10.0	< 10.0	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
TICs (total)			730.0	22.74	178.33	20.39	688.5	27.16	253.08	11.8	41.07	20.47	34.0
All other Compounds	Varies	Varies	< 10.0	< 10.0	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
EPA 200.7 / SM 3030C (ug/L)													
Lead (EPA 6010B / SM 3030C) (ug/L)	15	15,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Bold type indicates detectable concentrations

Bold and highlighted indicates detectable concentrations above the GCL

NCGWQS - North Carolina Groundwater Quality Standard

GCL - Gross Contaminant Level

<# - not detected at the indicated reporting limit

mg/L - milligrams per liter

ug/L - micrograms per liter

NE - Not established

RL - the NCGWQS for the constituent is the reporting limit

ND - None detected (no summed constituents were detected)

J - estimated concentration between minimum detection limit and reporting limit

NA - Not analyzed; laboratory quantitation for the indicated analyte was not conducted

NS - Not sampled; the indicted location was not designated for sampling during the event

E - estimated concentration above the linear quantitation range

Historical Groundwater Data Table
Analytical Data for April 2006 Sampling Event
Building 645

Parameter	NCGWQS	GCL	MW-01	MW-02	MW-03	MW-09	MW-12	MW-15	MW-18	MW-21	MW-22	MW-23	Duplicate
VOCs by EPA Method 6210D (µg/L)													
All Compounds	Varies	Varies	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500
Benzene	1	5,000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Diisopropyl ether (DIPE)	70	70,000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	550	84,500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Methyl-tert butyl ether (MTBE)	200	200,000	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Toluene	1,000	257,500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
m/p-Xylene			<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
o-Xylene			<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
Xylenes (total)	530	87,500	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00
SVOCs by EPA Method 625 (µg/L)													
Bis(2-ethylhexyl)phthalate	2.5	2,500	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Flourene	280	950	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	21	15,500	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Phenol	300	300,000	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
TICs (total)			<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
All other Compounds	Varies	Varies	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Bold type indicates detectable concentrations

Bold and highlighted indicates detectable concentrations above the GCL

NCGWQS - North Carolina Groundwater Quality Standard

GCL - Gross Contaminant Level

<# - not detected at the indicated reporting limit

mg/L - milligrams per liter

ug/L - micrograms per liter

NE - Not established

RL - the NCGWQS for the constituent is the reporting limit

ND - None detected (no summed constituents were detected)

J - estimated concentration between minimum detection limit and reporting limit

NA - Not analyzed; laboratory quantitation for the indicated analyte was not conducted

NS - Not sampled; the indicted location was not designated for sampling during the event

E - estimated concentration above the linear quantitation range

Historical Groundwater Data Table
Analytical Data for January 2006 Sampling Event
Building 645

Parameter	NCGWQS	GCL	MW-01	MW-02	MW-03	MW-09	MW-12	MW-15	MW-18	Duplicate	MW-21	MW-22	MW-23
VOCs by EPA Method 6210D (µg/L)													
All Compounds	Varies	Varies	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<0.500	<2.00	<2.00	<2.00
Benzene	1	5,000	<1.00	<1.00	<1.00	<1.00	7.84	<1.00	0.815	0.816	<1.00	<1.00	<1.00
Diisopropyl ether (DIPE)	70	70,000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Ethylbenzene	550	84,500	<1.00	0.366	16.1	<1.00	212	<1.00	1.90	1.93	<1.00	<1.00	<1.00
Methyl-tert butyl ether (MTBE)	200	200,000	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	2.32	<2.00
Toluene	1,000	257,500	<1.00	<1.00	1.82	<1.00	123	<1.00	3.10	2.99	<1.00	<1.00	<1.00
m/p-Xylene			<2.00	<2.00	2.67	<2.00	296	<2.00	3.39	3.38	<2.00	<2.00	<2.00
o-Xylene			<2.00	<2.00	11.2	<2.00	642	<2.00	1.18	1.19	<2.00	<2.00	<2.00
Xylenes (total)	530	87,500	<4.00	<4.00	13.87	<4.00	938	<4.00	4.56	4.57	<4.00	<4.00	<4.00
SVOCs by EPA Method 625 (µg/L)													
Bis(2-ethylhexyl)phthalate	2.5	2,500	<10.0	2.70	<10.0	<10.0	3.90	<10.0	1.90	<10.0	<10.0	<10.0	<10.0
Flourene	280	950	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	21	15,500	<10.0	<10.0	6.1	<10.0	101	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Phenol	300	300,000	< 10.0	< 10.0	< 10.0	<10.0	4.70	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
TICs (total)			<10.0	<10.0	126.53	<10.0	1983.5	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
All other Compounds	Varies	Varies	< 10.0	< 10.0	< 10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Bold type indicates detectable concentrations

Bold and highlighted indicates detectable concentrations above the GCL

NCGWQS - North Carolina Groundwater Quality Standard

GCL - Gross Contaminant Level

<# - not detected at the indicated reporting limit

mg/L - milligrams per liter

ug/L - micrograms per liter

NE - Not established

RL - the NCGWQS for the constituent is the reporting limit

ND - None detected (no summed constituents were detected)

J - estimated concentration between minimum detection limit and reporting limit

NA - Not analyzed; laboratory quantitation for the indicated analyte was not conducted

NS - Not sampled; the indicted location was not designated for sampling during the event

E - estimated concentration above the linear quantitation range

APPENDIX B

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION FROM 2006-2007 SAMPLING EVENTS



Mr. Chris Murray
Sovereign Consulting
405 Oakmeads Crescent
Suite 1
Virginia Beach VA 23462
Report Number: G650-69
Client Project: NV016

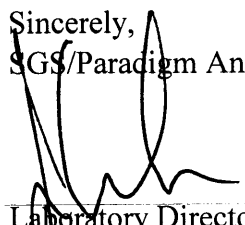
Dear Mr. Murray:

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

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

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

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

8/15/2006
Date



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW01

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/26/2006 14:50

Lab Sample ID: G650-69-1A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	1.98	1.00	0.316	1	8/3/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/3/2006	
Ethylbenzene	25.1	1.00	0.299	1	8/3/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/3/2006	
Toluene	25.6	1.00	0.302	1	8/3/2006	
m/p-Xylene	31.0	2.00	0.608	1	8/3/2006	
o-Xylene	19.2	2.00	0.596	1	8/3/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.1	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW02

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/26/2006 13:00

Lab Sample ID: G650-69-2A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	0.600	1.00	0.299	1	8/2/2006	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	0.812	1.00	0.302	1	8/2/2006	J
m/p-Xylene	1.66	2.00	0.608	1	8/2/2006	J
o-Xylene	0.823	2.00	0.596	1	8/2/2006	J

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.4	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_EIMS_v2.0



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW03

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/25/2006 14:50

Lab Sample ID: G650-69-3A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	0.668	1.00	0.316	1	8/2/2006	J
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	24.7	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	1.93	1.00	0.302	1	8/2/2006	
m/p-Xylene	2.35	2.00	0.608	1	8/2/2006	
o-Xylene	12.4	2.00	0.596	1	8/2/2006	

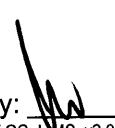
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.2	97.9

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

 Reviewed By: 
 Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW09

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/25/2006 10:15

Lab Sample ID: G650-69-4A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	1.20	1.00	0.302	1	8/2/2006	
m/p-Xylene	1.30	2.00	0.608	1	8/2/2006	J
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

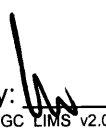
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.7	94.2

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW12

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/25/2006 13:55

Lab Sample ID: G650-69-5A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	10.0	3.16	10	8/2/2006	
Diisopropyl ether (DIPE)	BQL	10.0	2.94	10	8/2/2006	
Ethylbenzene	69.8	10.0	2.99	10	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	20.0	5.88	10	8/2/2006	
Toluene	15.1	10.0	3.02	10	8/2/2006	
m/p-Xylene	92.0	20.0	6.08	10	8/2/2006	
o-Xylene	237	20.0	5.96	10	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.6	94

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW15

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/25/2006 15:45

Lab Sample ID: G650-69-6A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	0.829	2.00	0.588	1	8/2/2006	J
Toluene	0.809	1.00	0.302	1	8/2/2006	J
m/p-Xylene	0.966	2.00	0.608	1	8/2/2006	J
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

Trifluorotoluene

40

38.8

97

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW18

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/26/2006 11:05

Lab Sample ID: G650-69-7A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	18.1	5.00	1.58	5	8/3/2006	
Diisopropyl ether (DIPE)	BQL	5.00	1.47	5	8/3/2006	
Ethylbenzene	96.8	5.00	1.5	5	8/3/2006	
Methyl-tert butyl ether (MTBE)	BQL	10.0	2.94	5	8/3/2006	
Toluene	6.88	5.00	1.51	5	8/3/2006	
m/p-Xylene	11.0	10.0	3.04	5	8/3/2006	
o-Xylene	9.54	10.0	2.98	5	8/3/2006	J

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.5	96.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW21

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/24/2006 16:50

Lab Sample ID: G650-69-8A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	0.930	1.00	0.302	1	8/2/2006	J
m/p-Xylene	1.11	2.00	0.608	1	8/2/2006	J
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

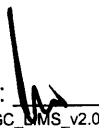
Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.3	95.8

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

 Reviewed By: 
 Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW22

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/26/2006 10:35

Lab Sample ID: G650-69-9A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	4.30	2.00	0.588	1	8/2/2006	
Toluene	1.43	1.00	0.302	1	8/2/2006	
m/p-Xylene	1.32	2.00	0.608	1	8/2/2006	J
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.6	96.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW23

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 7/25/2006 15:15

Lab Sample ID: G650-69-10A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	0.851	1.00	0.302	1	8/2/2006	J
m/p-Xylene	0.687	2.00	0.608	1	8/2/2006	J
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.7	94.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0



Results for Volatiles

by GC 602

Client Sample ID: UST645-Duplicate

Analyzed By: CLP

Client Project ID: NV016

Date Collected: 1/0/1900 0:00

Lab Sample ID: G650-69-11A

Date Received: 7/26/2006

Lab Project ID: G650-69

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	0.734	1.00	0.302	1	8/2/2006	J
m/p-Xylene	BQL	2.00	0.608	1	8/2/2006	
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.2	95.5

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0

**Results for Volatiles**

by GC 602

Client Sample ID: Trip Blank

Client Project ID: NV016

Lab Sample ID: G650-69-12A

Lab Project ID: G650-69

Analyzed By: CLP

Date Collected: 7/26/2006 0:00

Date Received: 7/26/2006

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	0.747	1.00	0.302	1	8/2/2006	J
m/p-Xylene	BQL	2.00	0.608	1	8/2/2006	
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.1	97.8

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

 Reviewed By: 
 Copy of GC_LIMS_v2.0



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: CLP

Client Project ID:

Date Collected:

Lab Sample ID: VBLK1080206A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	BQL	1.00	0.302	1	8/2/2006	
m/p-Xylene	BQL	2.00	0.608	1	8/2/2006	
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.9	94.7

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Control Limits for QC Check / Laboratory Control Spike

Method: 602 Spike[ppb]: 10
 Instrument : gc1
 Filename : 080206\005r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	9.2	91.8	77.0	123.0	92	39	150
Chlorobenzene	9.1	90.9	80.5	119.5	91	55	135
1,2-Dichlorobenzene	9.1	90.7	68.0	132.0	91	37	154
1,3-Dichlorobenzene	9.2	92.2	72.5	127.5	92	50	141
1,4-Dichlorobenzene	9.0	90.5	69.5	130.5	90	42	143
• Diisopropyl ether	9.4	94.3	43.1	156.9	94	30	170
Ethylbenzene	9.4	94.2	63.0	137.0	94	32	160
• MTBE	9.3	92.9	46.8	153.2	93	35	165
Toluene	9.2	92.0	77.5	127.0	92	46	148
• m,p-Xylene	18.7	93.6	11.2	188.8	94	D	239
• o-Xylene	9.4	94.3	47.6	152.4	94	36	164

Flags :

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

 Reviewed by: 



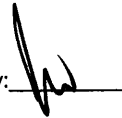
Control Limits for MS-MSD

Method: 602 Spike[ppb]: 10
 Instrument : gc1
 Sample : 080206\018r0101.txt
 MS : 080206\020r0101.txt
 MSD : 080206\021r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	ND	8.7	7.9	85	77	39	150
Chlorobenzene	ND	8.3	7.4	82	73	55	135
1,2-Dichlorobenzene	ND	8.5	7.8	79	72	37	154
1,3-Dichlorobenzene	ND	8.3	7.5	82	74	50	141
1,4-Dichlorobenzene	4.0	7.8	7.0	38 +	31 +	42	143
• Diisopropyl ether	ND	8.5	7.5	85	75	30	170
Ethylbenzene	7.0	14.8	14.3	78	73	32	160
• MTBE	ND	8.4	7.5	84	75	35	165
Toluene	1.5	9.7	8.9	82	74	46	148
• m,p-Xylene	9.2	25.0	23.8	79	73	D	239
• o-Xylene	11.9	18.7	18.6	68	68	36	164

Flags :

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

Reviewed by: 

**Results for Volatiles**

by GC 602

Client Sample ID: Method Blank

Analyzed By: CLP

Client Project ID:

Date Collected:

Lab Sample ID: VBLK1080206B

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.316	1	8/2/2006	
Diisopropyl ether (DIPE)	BQL	1.00	0.294	1	8/2/2006	
Ethylbenzene	BQL	1.00	0.299	1	8/2/2006	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.588	1	8/2/2006	
Toluene	BQL	1.00	0.302	1	8/2/2006	
m/p-Xylene	BQL	2.00	0.608	1	8/2/2006	
o-Xylene	BQL	2.00	0.596	1	8/2/2006	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.5	96.2

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

Copy of GC_LIMS_v2.0



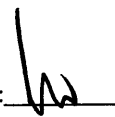
Control Limits for QC Check / Laboratory Control Spike

Method: 602 Spike[ppb] : 10
 Instrument : gc1
 Filename : 080206\024r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	9.6	96.0	77.0	123.0	96	39	150
Chlorobenzene	9.3	92.6	80.5	119.5	93	55	135
1,2-Dichlorobenzene	9.3	92.7	68.0	132.0	93	37	154
1,3-Dichlorobenzene	9.4	93.8	72.5	127.5	94	50	141
1,4-Dichlorobenzene	9.3	93.4	69.5	130.5	93	42	143
• Diisopropyl ether	9.7	96.9	43.1	156.9	97	30	170
Ethylbenzene	9.6	95.7	63.0	137.0	96	32	160
• MTBE	9.5	95.1	46.8	153.2	95	35	165
Toluene	9.4	93.5	77.5	127.0	94	46	148
• m,p-Xylene	19.0	94.9	11.2	188.8	95	D	239
• o-Xylene	9.6	95.7	47.6	152.4	96	36	164

Flags :

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

 Reviewed by: 



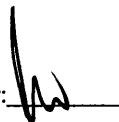
Control Limits for MS-MSD

Method: 602 Spike[ppb]: 10
 Instrument : gc1
 Sample : 080206\036r0101.txt
 MS : 080206\038r0101.txt
 MSD : 080206\039r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	4.5	13.7	13.8	92	93	39	150
Chlorobenzene	ND	8.8	8.9	88	89	55	135
1,2-Dichlorobenzene	ND	8.4	8.4	82	83	37	154
1,3-Dichlorobenzene	ND	8.6	8.7	86	87	50	141
1,4-Dichlorobenzene	ND	8.8	8.9	87	88	42	143
• Diisopropyl ether	ND	9.3	9.5	91	93	30	170
Ethylbenzene	1.3	10.5	10.6	92	93	32	160
• MTBE	ND	9.4	9.6	90	92	35	165
Toluene	15.8	24.9	24.8	91	90	46	148
• m,p-Xylene	5.0	23.1	23.2	91	91	D	239
• o-Xylene	1.4	10.5	10.6	90	91	36	164

Flags :

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW01

Client Project ID: NV016

Lab Sample ID: G650-69-1F

Lab Project ID: G650-69

Analyzed By: MRC

Date Collected: 7/26/2006 14:50

Date Received: 7/26/2006

Date Extracted: 7/31/2006

Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	11.5	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW01
 Client Project ID: NV016
 Lab Sample ID: G650-69-1F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 14:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

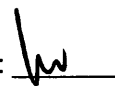
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.4	84
2-Fluorophenol	10	7.8	78
Nitrobenzene-d5	10	8.9	89
Phenol-d6	10	7.7	78
2,4,6-Tribromophenol	10	9.1	91
4-Terphenyl-d14	10	11	110

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW01
 Client Project ID: NV016
 Lab Sample ID: G650-69-1F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

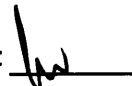
Analyzed By: MRC
 Date Collected: 7/26/2006 14:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	1,2,4-Trimethylbenzene	6.69	000095-36-3	95	239
2	Benzene, 1,2,3-trimethyl-	6.38	000526-73-8	97	88.7
3	Benzene, 1-methyl-3-propyl-	7.35	001074-43-7	93	77.4
4	Benzene, 1-ethyl-2-methyl-	6.30	000611-14-3	94	71.2
5	Methylpropenylbenzene, Isomer of	8.47			69.5
6	Benzene, 1-methyl-2-(1-methylethyl)-	8.13	000527-84-4	96	45.5
7	Benzene, (1-methylethyl)-	7.04	000098-82-8	90	39.9
8	Benzene, 1-methyl-4-(1-methylethyl)-	7.65	000099-87-6	95	36.5
9	Aromatic, Unknown	7.20			31.7
10	Benzene, 2-ethenyl-1,4-dimethyl-	8.35	002039-89-6	91	30.6

Comment:

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW02
 Client Project ID: NV016
 Lab Sample ID: G650-69-2F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 13:00
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW02
 Client Project ID: NV016
 Lab Sample ID: G650-69-2F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 13:00
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

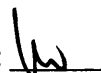
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.2	82
2-Fluorophenol	10	7.6	76
Nitrobenzene-d5	10	8.9	89
Phenol-d6	10	7.6	76
2,4,6-Tribromophenol	10	9.1	91
4-Terphenyl-d14	10	11.5	115

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW02
 Client Project ID: NV016
 Lab Sample ID: G650-69-2F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

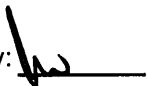
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 Date Collected: 7/26/2006 13:00
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.25			15.4
2	Benzene, 1,2,3-trimethyl-	6.69	000526-73-8	91	7.34
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW03
 Client Project ID: NV016
 Lab Sample ID: G650-69-3F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 14:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	11.0	10.0	1	8/2/2006



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW03
 Client Project ID: NV016
 Lab Sample ID: G650-69-3F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 14:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

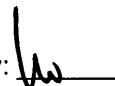
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.3	83
2-Fluorophenol	10	8	80
Nitrobenzene-d5	10	8.7	87
Phenol-d6	10	8	80
2,4,6-Tribromophenol	10	8.9	89
4-Terphenyl-d14	10	10.7	107

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW03
 Client Project ID: NV016
 Lab Sample ID: G650-69-3F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

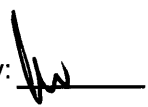
Analyzed By: MRC
 Date Collected: 7/25/2006 14:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Benzene, 1,2,3-trimethyl-	6.69	000526-73-8	94	37.2
2	Propenylbenzene, Isomer of	7.20			31
3	Indan, 1-methyl-	8.47	000767-58-8	93	27.9
4	Ethylbenzene	5.04	000100-41-4	90	16.4
5	Unknown	12.25			14.3
6	Benzene, 1,2,4,5-tetramethyl-	8.13	000095-93-2	95	12.2
7	Unknown	7.35			11.8
8	Benzene, (1-methyl-1-propenyl)-, (E)-	8.35	000768-00-3	91	9.99
9	Benzene, 4-ethyl-1,2-dimethyl-	7.65	000934-80-5	90	9.18
10	Ethylidimethylbenzene, Isomer of	7.33			8.36

Comment:

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW09
 Client Project ID: NV016
 Lab Sample ID: G650-69-4F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 10:15
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW09
 Client Project ID: NV016
 Lab Sample ID: G650-69-4F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 10:15
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

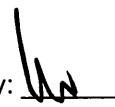
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.5	85
2-Fluorophenol	10	6.7	67
Nitrobenzene-d5	10	9.2	92
Phenol-d6	10	7.5	75
2,4,6-Tribromophenol	10	8.4	84
4-Terphenyl-d14	10	11.6	116

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW09
 Client Project ID: NV016
 Lab Sample ID: G650-69-4F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

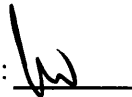
Analyzed By: MRC
 Date Collected: 7/25/2006 10:15
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.25			12.4
2	Unknown	5.00			7.99
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW12
Client Project ID: NV016
Lab Sample ID: G650-69-5F
Lab Project ID: G650-69

Analyzed By: MRC
Date Collected: 7/25/2006 13:55
Date Received: 7/26/2006
Date Extracted: 7/31/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	26.6	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW12
 Client Project ID: NV016
 Lab Sample ID: G650-69-5F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 13:55
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

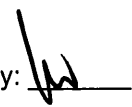
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.5	75
2-Fluorophenol	10	7.1	71
Nitrobenzene-d5	10	8	80
Phenol-d6	10	7	70
2,4,6-Tribromophenol	10	8.1	81
4-Terphenyl-d14	10	10.9	109

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW12

Client Project ID: NV016

Lab Sample ID: G650-69-5F

Lab Project ID: G650-69

Sample Wt/Vol: 500 ML

Dilution: 1

Analyzed By: MRC

Date Collected: 7/25/2006 13:55

Date Received: 7/26/2006

Date Extracted: 7/31/2006

Date Analyzed: 8/2/2006

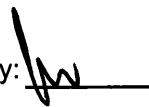
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Benzene, 1,3-dimethyl-	5.45	000108-38-3	97	190
2	Benzene, 1,2,3-trimethyl-	6.69	000526-73-8	93	127
3	Indane	7.20	000496-11-7	91	74.4
4	Benzene, 1,3-dimethyl-	5.14	000108-38-3	97	70.3
5	Benzene, 1,2,3-trimethyl-	7.04	000526-73-8	97	60.3
6	Ethylbenzene	5.03	000100-41-4	91	41.2
7	Unknown	4.77			37
8	1,2,4-Trimethylbenzene	6.38	000095-36-3	94	30.5
9	Alcohol, Unknown	3.66			30.2
10	2,3-Dihydro-1-methylindene	8.47	027133-93-3	90	27.6

Comment:

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

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW15
Client Project ID: NV016
Lab Sample ID: G650-69-6F
Lab Project ID: G650-69

Analyzed By: MRC
Date Collected: 7/25/2006 15:45
Date Received: 7/26/2006
Date Extracted: 7/31/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW15
 Client Project ID: NV016
 Lab Sample ID: G650-69-6F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 15:45
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

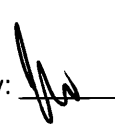
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.2	82
2-Fluorophenol	10	7.9	79
Nitrobenzene-d5	10	8.7	87
Phenol-d6	10	7.3	73
2,4,6-Tribromophenol	10	8.1	81
4-Terphenyl-d14	10	11.6	116

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW15
 Client Project ID: NV016
 Lab Sample ID: G650-69-6F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 7/25/2006 15:45
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.24			12.1
2	Diethyltoluamide	12.35	000134-62-3	91	9.72
3	Unknown	5.00			5.34
4					
5					
6					
7					
8					
9					
10					

Comment:

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

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW18
 Client Project ID: NV016
 Lab Sample ID: G650-69-7F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 11:05
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW18
 Client Project ID: NV016
 Lab Sample ID: G650-69-7F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 11:05
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.6	76
2-Fluorophenol	10	7.2	72
Nitrobenzene-d5	10	8.6	86
Phenol-d6	10	7.5	75
2,4,6-Tribromophenol	10	7.5	75
4-Terphenyl-d14	10	11	110

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW18
 Client Project ID: NV016
 Lab Sample ID: G650-69-7F
 Lab Project ID: G650-69
 Sample Wt/Vol: 500 ML
 Dilution: 1

Analyzed By: MRC
 Date Collected: 7/26/2006 11:05
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Date Analyzed: 8/2/2006
 Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Ethylbenzene	5.03	000100-41-4	94	95.1
2	Aromatic, Unknown	7.20			35.7
3	Alcohol, Unknown	3.65			22.8
4	Unknown	4.76			21
5	Alcohol, Unknown	3.43			20.5
6	Dimethylbenzene, Isomer of	5.14			16.5
7	Unknown	12.24			13.4
8	Alcohol, Unknown	4.13			11
9	Unknown	5.45			10.4
10	Alcohol, Unknown	4.64			6.68

Comment:

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

Reviewed by: lw



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW21
Client Project ID: NV016
Lab Sample ID: G650-69-8F
Lab Project ID: G650-69

Analyzed By: MRC
Date Collected: 7/24/2006 16:50
Date Received: 7/26/2006
Date Extracted: 7/31/2006
Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW21
 Client Project ID: NV016
 Lab Sample ID: G650-69-8F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/24/2006 16:50
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

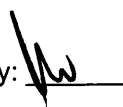
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.8	78
2-Fluorophenol	10	7.2	72
Nitrobenzene-d5	10	8.5	85
Phenol-d6	10	6.8	68
2,4,6-Tribromophenol	10	7.3	73
4-Terphenyl-d14	10	11.4	114

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW21

Client Project ID: NV016

Lab Sample ID: G650-69-8F

Lab Project ID: G650-69

Sample Wt/Vol: 500 ML

Dilution: 1

Analyzed By: MRC

Date Collected: 7/24/2006 16:50

Date Received: 7/26/2006

Date Extracted: 7/31/2006

Date Analyzed: 8/2/2006

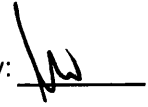
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.25			11.8
2					
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW22
 Client Project ID: NV016
 Lab Sample ID: G650-69-9F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 10:35
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW22
 Client Project ID: NV016
 Lab Sample ID: G650-69-9F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/26/2006 10:35
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

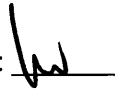
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.7	77
2-Fluorophenol	10	5.1	51
Nitrobenzene-d5	10	9	90
Phenol-d6	10	7.2	72
2,4,6-Tribromophenol	10	7.9	79
4-Terphenyl-d14	10	10.7	107

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW22

Client Project ID: NV016

Lab Sample ID: G650-69-9F

Lab Project ID: G650-69

Sample Wt/Vol: 500 ML

Dilution: 1

Analyzed By: MRC

Date Collected: 7/26/2006 10:35

Date Received: 7/26/2006

Date Extracted: 7/31/2006

Date Analyzed: 8/2/2006

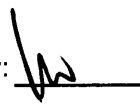
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.25			13.2
2	Alcohol, Unknown	3.65			8.74
3	Alcohol, Unknown	3.42			7.56
4	Unknown	4.77			7.13
5	Unknown	5.01			4.44
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



Results for Semivolatiles by GCMS 625

Client Sample ID: UST645-MW23
 Client Project ID: NV016
 Lab Sample ID: G650-69-10F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 15:15
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-MW23
 Client Project ID: NV016
 Lab Sample ID: G650-69-10F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 7/25/2006 15:15
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.8	88
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	9.6	96
Phenol-d6	10	8	80
2,4,6-Tribromophenol	10	9.3	93
4-Terphenyl-d14	10	10.9	109

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



Results of Library Search for Semivolatile Compounds

by GCMS

Client Sample ID: UST645-MW23

Client Project ID: NV016

Lab Sample ID: G650-69-10F

Lab Project ID: G650-69

Sample Wt/Vol: 500 ML

Dilution: 1

Analyzed By: MRC

Date Collected: 7/25/2006 15:15

Date Received: 7/26/2006

Date Extracted: 7/31/2006

Date Analyzed: 8/2/2006

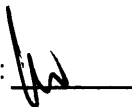
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.20			14.4
2	Unknown	4.97			6.07
3					
4					
5					
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-Duplicate
 Client Project ID: NV016
 Lab Sample ID: G650-69-11F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 1/0/1900 0:00
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/2/2006
Acenaphthylene	BQL	10.0	1	8/2/2006
Anthracene	BQL	10.0	1	8/2/2006
Benzo[a]anthracene	BQL	10.0	1	8/2/2006
Benzo[a]pyrene	BQL	10.0	1	8/2/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/2/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/2/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/2/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/2/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/2/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/2/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/2/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/2/2006
Butylbenzylphthalate	BQL	10.0	1	8/2/2006
2-Chloronaphthalene	BQL	10.0	1	8/2/2006
2-Chlorophenol	BQL	10.0	1	8/2/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/2/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/2/2006
Chrysene	BQL	10.0	1	8/2/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/2/2006
Di-n-Butylphthalate	BQL	10.0	1	8/2/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/2/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/2/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/2/2006
2,4-Dichlorophenol	BQL	10.0	1	8/2/2006
Diethylphthalate	BQL	10.0	1	8/2/2006
Dimethylphthalate	BQL	10.0	1	8/2/2006
2,4-Dimethylphenol	BQL	10.0	1	8/2/2006
Di-n-octylphthalate	BQL	10.0	1	8/2/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/2/2006
2,4-Dinitrophenol	BQL	50.0	1	8/2/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/2/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/2/2006
Diphenylamine *	BQL	10.0	1	8/2/2006
Fluoranthene	BQL	10.0	1	8/2/2006
Fluorene	BQL	10.0	1	8/2/2006
Hexachlorobenzene	BQL	10.0	1	8/2/2006
Hexachlorobutadiene	BQL	10.0	1	8/2/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/2/2006
Hexachloroethane	BQL	10.0	1	8/2/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/2/2006
Isophorone	BQL	10.0	1	8/2/2006
Naphthalene	BQL	10.0	1	8/2/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: UST645-Duplicate
 Client Project ID: NV016
 Lab Sample ID: G650-69-11F
 Lab Project ID: G650-69

Analyzed By: MRC
 Date Collected: 1/0/1900 0:00
 Date Received: 7/26/2006
 Date Extracted: 7/31/2006
 Matrix: Water

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/2/2006
2-Nitrophenol	BQL	10.0	1	8/2/2006
4-Nitrophenol	BQL	50.0	1	8/2/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/2/2006
Pentachlorophenol	BQL	50.0	1	8/2/2006
Phenanthrene	BQL	10.0	1	8/2/2006
Phenol	BQL	10.0	1	8/2/2006
Pyrene	BQL	10.0	1	8/2/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/2/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/2/2006

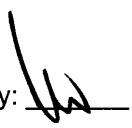
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9.1	91
2-Fluorophenol	10	8.6	86
Nitrobenzene-d5	10	10.1	101
Phenol-d6	10	8.4	84
2,4,6-Tribromophenol	10	9.8	98
4-Terphenyl-d14	10	11.7	117

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 

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

Client Sample ID: UST645-Duplicate
Client Project ID: NV016
Lab Sample ID: G650-69-11F
Lab Project ID: G650-69
Sample Wt/Vol: 500 ML
Dilution: 1

Analyzed By: MRC
Date Collected: 1/0/1900 0:00
Date Received: 7/26/2006
Date Extracted: 7/31/2006
Date Analyzed: 8/2/2006
Matrix: Water

No.	Compound	Retention Time	CAS#	Match Probability	Result (ug/L)
1	Unknown	12.20			12.6
2	Unknown	6.08			10.9
3	Unknown	4.97			10.5
4					
5					
6					
7					
8					
9					
10					

Comment:

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

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

Reviewed by: 



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5856
 Lab Project ID:

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 7/31/2006
 Matrix: WATER

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Acenaphthene	BQL	10.0	1	8/9/2006
Acenaphthylene	BQL	10.0	1	8/9/2006
Anthracene	BQL	10.0	1	8/9/2006
Benzo[a]anthracene	BQL	10.0	1	8/9/2006
Benzo[a]pyrene	BQL	10.0	1	8/9/2006
Benzo[b]fluoranthene	BQL	10.0	1	8/9/2006
Benzo[g,h,i]perylene	BQL	10.0	1	8/9/2006
Benzo[k]fluoranthene	BQL	10.0	1	8/9/2006
Bis(2-chloroethoxy)methane	BQL	10.0	1	8/9/2006
Bis(2-chloroethyl)ether	BQL	10.0	1	8/9/2006
Bis(2-chloroisopropyl)ether	BQL	10.0	1	8/9/2006
Bis(2-ethylhexyl)phthalate	BQL	10.0	1	8/9/2006
4-bromophenyl phenyl ether	BQL	10.0	1	8/9/2006
Butylbenzylphthalate	BQL	10.0	1	8/9/2006
2-Chloronaphthalene	BQL	10.0	1	8/9/2006
2-Chlorophenol	BQL	10.0	1	8/9/2006
4-Chloro-3-methylphenol	BQL	10.0	1	8/9/2006
4-Chlorophenyl phenyl ether	BQL	10.0	1	8/9/2006
Chrysene	BQL	10.0	1	8/9/2006
Dibenzo[a,h]anthracene	BQL	10.0	1	8/9/2006
Di-n-Butylphthalate	BQL	10.0	1	8/9/2006
1,2-Dichlorobenzene	BQL	10.0	1	8/9/2006
1,3-Dichlorobenzene	BQL	10.0	1	8/9/2006
1,4-Dichlorobenzene	BQL	10.0	1	8/9/2006
3,3'-Dichlorobenzidine	BQL	20.0	1	8/9/2006
2,4-Dichlorophenol	BQL	10.0	1	8/9/2006
Diethylphthalate	BQL	10.0	1	8/9/2006
Dimethylphthalate	BQL	10.0	1	8/9/2006
2,4-Dimethylphenol	BQL	10.0	1	8/9/2006
Di-n-octylphthalate	BQL	10.0	1	8/9/2006
4,6-Dinitro-2-methylphenol	BQL	50.0	1	8/9/2006
2,4-Dinitrophenol	BQL	50.0	1	8/9/2006
2,4-Dinitrotoluene	BQL	10.0	1	8/9/2006
2,6-Dinitrotoluene	BQL	10.0	1	8/9/2006
Diphenylamine *	BQL	10.0	1	8/9/2006
Fluoranthene	BQL	10.0	1	8/9/2006
Fluorene	BQL	10.0	1	8/9/2006
Hexachlorobenzene	BQL	10.0	1	8/9/2006
Hexachlorobutadiene	BQL	10.0	1	8/9/2006
Hexachlorocyclopentadiene	BQL	20.0	1	8/9/2006
Hexachloroethane	BQL	10.0	1	8/9/2006
Indeno(1,2,3-c,d)pyrene	BQL	10.0	1	8/9/2006
Isophorone	BQL	10.0	1	8/9/2006
Naphthalene	BQL	10.0	1	8/9/2006



**Results for Semivolatiles
by GCMS 625**

Client Sample ID: Method Blank
 Client Project ID:
 Lab Sample ID: PB5856
 Lab Project ID:

Analyzed By: MRC
 Date Collected:
 Date Received:
 Date Extracted: 7/31/2006
 Matrix: WATER

Compound	Result ug/L	RL ug/L	Dilution Factor	Date Analyzed
Nitrobenzene	BQL	10.0	1	8/9/2006
2-Nitrophenol	BQL	10.0	1	8/9/2006
4-Nitrophenol	BQL	50.0	1	8/9/2006
N-Nitrosodi-n-propylamine	BQL	10.0	1	8/9/2006
Pentachlorophenol	BQL	50.0	1	8/9/2006
Phenanthrene	BQL	10.0	1	8/9/2006
Phenol	BQL	10.0	1	8/9/2006
Pyrene	BQL	10.0	1	8/9/2006
1,2,4-Trichlorobenzene	BQL	10.0	1	8/9/2006
2,4,6-Trichlorophenol	BQL	10.0	1	8/9/2006

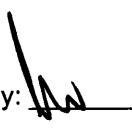
	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	7.3	73
2-Fluorophenol	10	8.2	82
Nitrobenzene-d5	10	7.8	78
Phenol-d6	10	7.3	73
2,4,6-Tribromophenol	10	8	80
4-Terphenyl-d14	10	10.1	101

Comments:

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

Flags:

BQL = Below Quantitation Limits.

Reviewed By: 



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

Client Sample ID: Batch QC

Date Collected:

Client Project ID:

Date Received:

Lab Sample ID: Batch-5856-MS/MSD/LCS

Date Extracted: 07/31/06

Lab Project ID:

Date Analyzed: 08/02/06

Matrix: WATER

Analyzed By: MRC

Prep Method: 3520

Dilution: 1

	Sample Amount (µg/L)	MS Spike (µg/L)	MS Conc. (µg/L)	MS Spike % Rec.	MSD Spike (µg/L)	MSD Conc. (µg/L)	MSD Conc. % Rec.	RPD	QC Limits	
									RPD	% Rec.
Acenaphthylene	BQL	200	188	94.0	200	156	77.8	18.9	30	62.0-119
4-Chloro-3-methylphenol	BQL	200	172	85.8	200	148	74.1	14.6	30	67.0-109
2-Chlorophenol	BQL	200	170	84.8	200	136	67.8	22.3	30	59.0-95.0
1,4-Dichlorobenzene	BQL	200	117	58.7	200	104	52.0	12.1	30	29.0-86.0
2,4-Dinitrotoluene	BQL	200	179	89.4	200	150	74.9	17.7	30	63.0-103
N-Nitrosodi-n-propylamine	BQL	200	190	94.9	200	155	77.4	20.3	30	67.0-107
4-Nitrophenol	BQL	200	141	70.5	200	131	65.5	7.35	30	49.0-146
Pentachlorophenol	BQL	200	141	70.7	200	132	66.1	6.73	30	43.0-106
Phenol	BQL	200	164	82.0	200	135	67.4	19.5	30	61.0-100
Pyrene	BQL	200	180	89.9	200	159	79.4	12.4	30	41.0-123
1,2,4-Trichlorobenzene	BQL	200	160	79.9	200	130	64.9	20.7	30	41.0-96.0

	Spiked Amount (µg/L)	LCS Conc. (µg/L)	LCS Spike %	QC Limits
				% Rec.
Acenaphthylene	100	96.6	96.6	72.9-127
4-Chloro-3-methylphenol	100	91.2	91.2	61.6-113
2-Chlorophenol	100	86.5	86.5	52.3-104
1,4-Dichlorobenzene	100	55.5	55.5	27.3-85.0
2,4-Dinitrotoluene	100	88.1	88.1	66.5-117
N-Nitrosodi-n-propylamine	100	100	100	54.4-119
4-Nitrophenol	100	72.7	72.7	32.4-150
Pentachlorophenol	100	78.2	78.2	23.9-115
Phenol	100	84.2	84.2	54.5-106
Pyrene	100	90.3	90.3	63.5-126
1,2,4-Trichlorobenzene	100	77.6	77.6	49.1-98.5

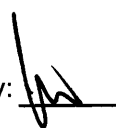
Comments:

Concentrations reflect the spiked sample amounts.

Flags:

* = Out of limits.

NA = Not applicable.

Reviewed By: 



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

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

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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



053915

053915

6650-691

PAGE 1 OF 2

SGS Reference: G650-691						PAGE <u>1</u> OF <u>2</u>			
CLIENT: Sovereign Consulting CONTACT: Thomas Ehemay PHONE NO: (90) 546-3941 PROJECT: NVOIC SITE/PWSID#: Bldg 445 REPORTS TO: Chris Murray FAX NO.: 757 454-5045 INVOICE TO: AKMEPS Crescent QUOTE # 5051 PO NUMBER: Virginia Beach VA 23062									
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used HCl HNO₃ H₂O₂	Analysis Required (3) + xylenes Pb (3030C) CdS + TICs	REMARKS
	UST645-MW01	7/26/06	1450	N	5		X	X	
	UST645-MW02	7/26/06	1330	N	5		X	X	
	UST645-MW03	7/26/06	1450	N	5		X	X	
	UST645-MW09	7/26/06	1015	N	5		X	X	
	UST645-AWWA MW12	7/26/06	1355	N	5		X	X	
	UST645-MW15	7/26/06	1545	N	5		X	X	
	UST645-MW18	7/26/06	1105	N	5		X	X	
	UST645-MW21	7/26/06	1650	N	5		X	X	
	UST645-MW22	7/26/06	1035	N	5		X	X	
	UST645-MW23	7/26/06	1515	N	5		X	X	
Collected/Relinquished By: (1) <u>Thomas Murray</u>		Date	Time	Received By:					
<u>Thomas Murray</u>		7/26/06	1645	<u>Juel Plana</u>					
Relinquished By: (2)		Date	Time	Received By:					
Relinquished By: (3)		Date	Time	Received By:					
Relinquished By: (4)		Date	Time	Received By:					
Shipping Carrier: <u>DEWEED BY SOV.</u>					Samples Received Cold? (Circle) YES NO				
Shipping Ticket No:					Temperature (C): <u>4.2 / 12.3</u> <u>3.6</u> °C				
Special Deliverable Requirements:					Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT				
Requested Turnaround Time and Special Instructions: Standard Turnaround Email Results in EDD Format To: NHALL@SOVCON.COM & cmurray@sovcon.com									

N.C. CERTIFICATION #481

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

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

White - Retained by Lab
Yellow - Returned with Report



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

30302/16
Cancelled per
Marion Elham
7/12/16

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

www.us.sgs.com

053914

1 CLIENT: Sovereign Consulting

CONTACT: Marion Elham PHONE NO: (910) 526-5941

PROJECT: NV016 SITE/PWSID #: Bdy 645

REPORTS TO: Chris Murray FAX NO: 757, 456-5945

INVOICE TO: Chris Murray QUOTE # NV016

SGS Reference:

PAGE 2 OF 2

2 LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

USTL45-DUPLETS
TRIP BLANKS
7/24/16
LAB W W 2

No CONTAINERS
SAMPLE TYPE
G-GRAB
Analysis Required

Preservatives Used
HCl H2S NaOH
CO2 + Xylenes
Pb (30302)
625 + TICs

REMARKS

5 Collected/Relinquished By: (1) Marion Elham Date 7/24/16 Time 1645 Received By: Paul J. Hume

Relinquished By: (2) Date Time Received By:

Relinquished By: (3) Date Time Received By:

Relinquished By: (4) Date Time Received By:

4 Shipping Carrier: UPS

Shipping Ticket No:

Special Deliverable Requirements:

Requested Turnaround Time and Special Instructions:

Samples Received Cold? (Circle) YES NO

Temperature (C): 4.2, 12.3, 6.2

Chain of Custody Seal: (Circle)

INTACT BROKEN

ABSENT



Mr. Chris Murray
Sovereign Consulting
405 Oakmeads Crescent
Suite 1
Virginia Beach VA 23462
Report Number: G650-97
Client Project: NV016

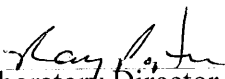
Dear Mr. Murray:

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

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

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

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

1/19/2007
Date



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW01

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 16:27

Lab Sample ID: G650-97-1A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	1.29	4.00	0.792	4	1/13/2007	J
Diisopropyl ether (DIPE)	BQL	4.00	0.628	4	1/13/2007	
Ethylbenzene	45.0	4.00	0.688	4	1/13/2007	
Methyl-tert butyl ether (MTBE)	BQL	8.00	1.62	4	1/13/2007	
Toluene	56.6	4.00	0.636	4	1/13/2007	
m/p-Xylene	68.5	8.00	1.3	4	1/13/2007	
o-Xylene	24.2	8.00	1.14	4	1/13/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.6	106

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: UST645-MW02

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 15:53

Lab Sample ID: G650-97-2A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/12/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/12/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/12/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/12/2007	
Toluene	BQL	1.00	0.159	1	1/12/2007	
m/p-Xylene	BQL	2.00	0.326	1	1/12/2007	
o-Xylene	BQL	2.00	0.285	1	1/12/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.4	106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW12

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/8/2007 15:30

Lab Sample ID: G650-97-3A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	32.0	6.34	32	1/13/2007	
Diisopropyl ether (DIPE)	BQL	32.0	5.02	32	1/13/2007	
Ethylbenzene	379	32.0	5.5	32	1/13/2007	
Methyl-tert butyl ether (MTBE)	BQL	64.0	13	32	1/13/2007	
Toluene	57.1	32.0	5.09	32	1/13/2007	
m/p-Xylene	552	64.0	10.4	32	1/13/2007	
o-Xylene	1020	64.0	9.12	32	1/13/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.2	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW13

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 9:15

Lab Sample ID: G650-97-4A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/12/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/12/2007	
Ethylbenzene	0.396	1.00	0.172	1	1/12/2007	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/12/2007	
Toluene	1.88	1.00	0.159	1	1/12/2007	
m/p-Xylene	0.629	2.00	0.326	1	1/12/2007	J
o-Xylene	BQL	2.00	0.285	1	1/12/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.5	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW17

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 13:05

Lab Sample ID: G650-97-5A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/12/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/12/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/12/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/12/2007	
Toluene	BQL	1.00	0.159	1	1/12/2007	
m/p-Xylene	BQL	2.00	0.326	1	1/12/2007	
o-Xylene	BQL	2.00	0.285	1	1/12/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.5	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW22

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/8/2007 13:50

Lab Sample ID: G650-97-6A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/13/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/13/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/13/2007	
Methyl-tert butyl ether (MTBE)	7.36	2.00	0.405	1	1/13/2007	
Toluene	0.187	1.00	0.159	1	1/13/2007	J
m/p-Xylene	BQL	2.00	0.326	1	1/13/2007	
o-Xylene	BQL	2.00	0.285	1	1/13/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

Trifluorotoluene

40

41.4

104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW23

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 14:10

Lab Sample ID: G650-97-7A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/13/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/13/2007	
Ethylbenzene	0.241	1.00	0.172	1	1/13/2007	J
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/13/2007	
Toluene	1.08	1.00	0.159	1	1/13/2007	
m/p-Xylene	BQL	2.00	0.326	1	1/13/2007	
o-Xylene	BQL	2.00	0.285	1	1/13/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.3	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW24

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 11:35

Lab Sample ID: G650-97-8A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/13/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/13/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/13/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/13/2007	
Toluene	BQL	1.00	0.159	1	1/13/2007	
m/p-Xylene	BQL	2.00	0.326	1	1/13/2007	
o-Xylene	BQL	2.00	0.285	1	1/13/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.4	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW28

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 10:25

Lab Sample ID: G650-97-9A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	2.92	1.00	0.198	1	1/13/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/13/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/13/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/13/2007	
Toluene	BQL	1.00	0.159	1	1/13/2007	
m/p-Xylene	1.32	2.00	0.326	1	1/13/2007	J
o-Xylene	BQL	2.00	0.285	1	1/13/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.4	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: Trip Blank

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 0:00

Lab Sample ID: G650-97-10A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.198	1	1/12/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.157	1	1/12/2007	
Ethylbenzene	BQL	1.00	0.172	1	1/12/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.405	1	1/12/2007	
Toluene	BQL	1.00	0.159	1	1/12/2007	
m/p-Xylene	BQL	2.00	0.326	1	1/12/2007	
o-Xylene	BQL	2.00	0.285	1	1/12/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.3	103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 601

Client Sample ID: UST645-MW01

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 16:27

Lab Sample ID: G650-97-1B

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/18/2007	
Bromoform	BQL	2.00	0.353	1	1/18/2007	
Bromomethane	BQL	1.00	0.395	1	1/18/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/18/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/18/2007	
Chloroethane	BQL	1.00	0.271	1	1/18/2007	
Chloroform	BQL	1.00	0.133	1	1/18/2007	
Chloromethane	BQL	1.00	0.278	1	1/18/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/18/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/18/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/18/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/18/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/18/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/18/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/18/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/18/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/18/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/18/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/18/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/18/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/18/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/18/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/18/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/18/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
Trichloroethene	BQL	1.00	0.115	1	1/18/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/18/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/18/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

1,4-Dichlorobutane

40

44.4

111

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW02

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 15:53

Lab Sample ID: G650-97-2A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/12/2007	
Bromoform	BQL	2.00	0.353	1	1/12/2007	
Bromomethane	BQL	1.00	0.395	1	1/12/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/12/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/12/2007	
Chloroethane	BQL	1.00	0.271	1	1/12/2007	
Chloroform	BQL	1.00	0.133	1	1/12/2007	
Chloromethane	BQL	1.00	0.278	1	1/12/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/12/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/12/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/12/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/12/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/12/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/12/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/12/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/12/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/12/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/12/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/12/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/12/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/12/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/12/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/12/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/12/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
Trichloroethene	BQL	1.00	0.115	1	1/12/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/12/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/12/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

37.2

92.9

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW12

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/8/2007 15:30

Lab Sample ID: G650-97-3B

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/16/2007	
Bromoform	BQL	2.00	0.353	1	1/16/2007	
Bromomethane	BQL	1.00	0.395	1	1/16/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/16/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/16/2007	
Chloroethane	BQL	1.00	0.271	1	1/16/2007	
Chloroform	BQL	1.00	0.133	1	1/16/2007	
Chloromethane	BQL	1.00	0.278	1	1/16/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/16/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/16/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/16/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/16/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/16/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/16/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/16/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/16/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/16/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/16/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/16/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/16/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/16/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/16/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/16/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/16/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/16/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/16/2007	
Trichloroethene	BQL	1.00	0.115	1	1/16/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/16/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/16/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

45.4

114

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: *zml*
GC-VOA_WA.XLS



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW13

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 9:15

Lab Sample ID: G650-97-4A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/12/2007	
Bromoform	BQL	2.00	0.353	1	1/12/2007	
Bromomethane	BQL	1.00	0.395	1	1/12/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/12/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/12/2007	
Chloroethane	BQL	1.00	0.271	1	1/12/2007	
Chloroform	BQL	1.00	0.133	1	1/12/2007	
Chloromethane	BQL	1.00	0.278	1	1/12/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/12/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/12/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/12/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/12/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/12/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/12/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/12/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/12/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/12/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/12/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/12/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/12/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/12/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/12/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/12/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/12/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
Trichloroethene	BQL	1.00	0.115	1	1/12/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/12/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/12/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

35.8

89.5

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW17

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 13:05

Lab Sample ID: G650-97-5A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/12/2007	
Bromoform	BQL	2.00	0.353	1	1/12/2007	
Bromomethane	BQL	1.00	0.395	1	1/12/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/12/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/12/2007	
Chloroethane	BQL	1.00	0.271	1	1/12/2007	
Chloroform	BQL	1.00	0.133	1	1/12/2007	
Chloromethane	BQL	1.00	0.278	1	1/12/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/12/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/12/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/12/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/12/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/12/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/12/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/12/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/12/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/12/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/12/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/12/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/12/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/12/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/12/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/12/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/12/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
Trichloroethene	BQL	1.00	0.115	1	1/12/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/12/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/12/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

37.2

93.1

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: msl
GC-VOA_WA.XLS



Results for Volatiles
by GC 601

Client Sample ID: UST645-MW22

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/8/2007 13:50

Lab Sample ID: G650-97-6A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/13/2007	
Bromoform	BQL	2.00	0.353	1	1/13/2007	
Bromomethane	BQL	1.00	0.395	1	1/13/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/13/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/13/2007	
Chloroethane	BQL	1.00	0.271	1	1/13/2007	
Chloroform	BQL	1.00	0.133	1	1/13/2007	
Chloromethane	BQL	1.00	0.278	1	1/13/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/13/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/13/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/13/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/13/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/13/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/13/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/13/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/13/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/13/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/13/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/13/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/13/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/13/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/13/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/13/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/13/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
Trichloroethene	BQL	1.00	0.115	1	1/13/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/13/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/13/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

1,4-Dichlorobutane

40

36.3

90.8

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

 Reviewed By: ful
 GC-VOA_WA.XLS



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW23

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 14:10

Lab Sample ID: G650-97-7A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/13/2007	
Bromoform	BQL	2.00	0.353	1	1/13/2007	
Bromomethane	BQL	1.00	0.395	1	1/13/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/13/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/13/2007	
Chloroethane	BQL	1.00	0.271	1	1/13/2007	
Chloroform	BQL	1.00	0.133	1	1/13/2007	
Chloromethane	BQL	1.00	0.278	1	1/13/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/13/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/13/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/13/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/13/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/13/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/13/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/13/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/13/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/13/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/13/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/13/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/13/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/13/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/13/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/13/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/13/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
Trichloroethene	BQL	1.00	0.115	1	1/13/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/13/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/13/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

36.6

91.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA.XLS



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW24

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 11:35

Lab Sample ID: G650-97-8A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/13/2007	
Bromoform	BQL	2.00	0.353	1	1/13/2007	
Bromomethane	BQL	1.00	0.395	1	1/13/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/13/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/13/2007	
Chloroethane	BQL	1.00	0.271	1	1/13/2007	
Chloroform	BQL	1.00	0.133	1	1/13/2007	
Chloromethane	BQL	1.00	0.278	1	1/13/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/13/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/13/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/13/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/13/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/13/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/13/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/13/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/13/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/13/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/13/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/13/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/13/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/13/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/13/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/13/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/13/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
Trichloroethene	BQL	1.00	0.115	1	1/13/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/13/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/13/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

36.2

90.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: me
GC-VOA_WA.XLS



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW28

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 10:25

Lab Sample ID: G650-97-9A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/13/2007	
Bromoform	BQL	2.00	0.353	1	1/13/2007	
Bromomethane	BQL	1.00	0.395	1	1/13/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/13/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/13/2007	
Chloroethane	BQL	1.00	0.271	1	1/13/2007	
Chloroform	BQL	1.00	0.133	1	1/13/2007	
Chloromethane	BQL	1.00	0.278	1	1/13/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/13/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/13/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/13/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/13/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/13/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/13/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/13/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/13/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/13/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/13/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/13/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/13/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/13/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/13/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/13/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/13/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/13/2007	
Trichloroethene	BQL	1.00	0.115	1	1/13/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/13/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/13/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

36.5

91.2

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: *fml*
GC-VOA_WA.XLS



Results for Volatiles

by GC 601

Client Sample ID: Trip Blank

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/9/2007 0:00

Lab Sample ID: G650-97-10A

Date Received: 1/10/2007

Lab Project ID: G650-97

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/12/2007	
Bromoform	BQL	2.00	0.353	1	1/12/2007	
Bromomethane	BQL	1.00	0.395	1	1/12/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/12/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/12/2007	
Chloroethane	BQL	1.00	0.271	1	1/12/2007	
Chloroform	BQL	1.00	0.133	1	1/12/2007	
Chloromethane	BQL	1.00	0.278	1	1/12/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/12/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/12/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/12/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/12/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/12/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/12/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/12/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/12/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/12/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/12/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/12/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/12/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/12/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/12/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/12/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/12/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
Trichloroethene	BQL	1.00	0.115	1	1/12/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/12/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/12/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

36.8

92

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: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011207A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/12/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/12/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/12/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/12/2007	
Toluene	BQL	1.00	0.157	1	1/12/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/12/2007	
o-Xylene	BQL	2.00	0.584	1	1/12/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	41.5	104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011607A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/16/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/16/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/16/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/16/2007	
Toluene	BQL	1.00	0.157	1	1/16/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/16/2007	
o-Xylene	BQL	2.00	0.584	1	1/16/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

Trifluorotoluene

40

42.2

105

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: AML
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011707A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.3	106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

 Reviewed By:
 GC-VOA_WVA



Results for Volatiles
by GC 601

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3011207A
Lab Project ID:

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/12/2007	
Bromoform	BQL	2.00	0.353	1	1/12/2007	
Bromomethane	BQL	1.00	0.395	1	1/12/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/12/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/12/2007	
Chloroethane	BQL	1.00	0.271	1	1/12/2007	
Chloroform	BQL	1.00	0.133	1	1/12/2007	
Chloromethane	BQL	1.00	0.278	1	1/12/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/12/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/12/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/12/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/12/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/12/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/12/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/12/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/12/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/12/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/12/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/12/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/12/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/12/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/12/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/12/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/12/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/12/2007	
Trichloroethene	BQL	1.00	0.115	1	1/12/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/12/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/12/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

1,4-Dichlorobutane

40

36.9

92.4

Comments:

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

Reviewed By: AME
GC-VOA_WA



Results for Volatiles
by GC 601

Client Sample ID: Method Blank
Client Project ID:
Lab Sample ID: VBLK3011607A
Lab Project ID:

Analyzed By: RSB
Date Collected:
Date Received:
Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/16/2007	
Bromoform	BQL	2.00	0.353	1	1/16/2007	
Bromomethane	BQL	1.00	0.395	1	1/16/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/16/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/16/2007	
Chloroethane	BQL	1.00	0.271	1	1/16/2007	
Chloroform	BQL	1.00	0.133	1	1/16/2007	
Chloromethane	BQL	1.00	0.278	1	1/16/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/16/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/16/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/16/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/16/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/16/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/16/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/16/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/16/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/16/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/16/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/16/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/16/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/16/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/16/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/16/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/16/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/16/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/16/2007	
Trichloroethene	BQL	1.00	0.115	1	1/16/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/16/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/16/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

1,4-Dichlorobutane

40

45.0

112

Comments:

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

Reviewed By: RSB
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011707A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

42.5

106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: Am
GC-VOA_WA



Control Limits for QC Check / Laboratory Control Spike

Method: 602 Spike[ppb]: 10
 Instrument : gc3
 Filename : 011207\003r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.1	100.6	77.0	123.0	101	39	150
Chlorobenzene	9.9	99.3	80.5	119.5	99	55	135
1,2-Dichlorobenzene	10.3	102.8	68.0	132.0	103	37	154
1,3-Dichlorobenzene	10.1	100.6	72.5	127.5	101	50	141
1,4-Dichlorobenzene	10.1	101.4	69.5	130.5	101	42	143
• Diisopropyl ether	9.5	94.8	43.1	156.9	95	30	170
Ethylbenzene	10.1	101.3	63.0	137.0	101	32	160
• MTBE	10.1	100.9	46.8	153.2	101	35	165
Toluene	10.0	100.4	77.5	127.0	100	46	148
• m,p-Xylene	20.2	101.2	11.2	188.8	101	D	239
• o-Xylene	10.1	100.8	47.6	152.4	101	36	164

Flags :

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

Reviewed by: hm



Control Limits for QC Check / Laboratory Control Spike

Method: 602 Spike[ppb]: 10
 Instrument : gc3
 Filename : 011207\005r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	9.0	89.9	77.0	123.0	90	39	160
Chlorobenzene	8.8	88.3	80.5	119.5	88	55	135
1,2-Dichlorobenzene	9.1	91.1	68.0	132.0	91	37	154
1,3-Dichlorobenzene	8.9	88.8	72.5	127.5	89	50	141
1,4-Dichlorobenzene	8.9	89.2	69.5	130.5	89	42	143
• Diisopropyl ether	8.4	84.0	43.1	156.9	84	30	170
Ethylbenzene	9.0	90.2	63.0	137.0	90	32	160
• MTBE	9.0	89.8	46.8	153.2	90	35	165
Toluene	9.0	89.7	77.5	127.0	90	46	148
• m,p-Xylene	18.1	90.4	11.2	188.8	90	D	239
• o-Xylene	9.0	90.0	47.6	152.4	90	36	164

Flags :

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

Reviewed by: sm



Control Limits for MS-MSD

Method: **602** Spike[ppb]: **10**
 Instrument : gc3
 Sample : 011207\017r0101.txt
 MS : 011207\019r0101.txt
 MSD : 011207\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	31.3	42.1	37.9	109	66	39	150
Chlorobenzene	ND	10.2	8.2	102	82	55	135
1,2-Dichlorobenzene	ND	10.1	8.3	100	81	37	154
1,3-Dichlorobenzene	ND	10.0	8.1	100	81	50	141
1,4-Dichlorobenzene	ND	9.8	7.9	89	71	42	143
• Diisopropyl ether	ND	10.7	8.6	100	80	30	170
Ethylbenzene	5.0	15.8	13.3	108	83	32	160
• MTBE	ND	11.3	9.3	105	85	35	165
Toluene	69.4	80.6	74.0	112	46	46	148
• m,p-Xylene	18.5	40.3	34.6	109	80	D	239
• o-Xylene	4.2	14.8	12.3	106	82	36	164

Flags :

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

Reviewed by: ami



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011607\004f0101.txt
 011607\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	10.4	104.1	60.0	140.0
Bromobenzene	21.6	71.9	60.0	140.0
Bromochloromethane	10.3	103.2	60.0	140.0
Bromodichloromethane	10.3	103.0	60.0	140.0
Bromoform	11.1	110.5	60.0	140.0
Bromomethane	6.9	69.2	60.0	140.0
n-Butylbenzene	21.2	105.9	60.0	140.0
sec-Butylbenzene	10.4	103.5	60.0	140.0
tert-Butylbenzene	10.2	102.2	60.0	140.0
Carbon tetrachloride	22.1	110.3	60.0	140.0
Chlorobenzene	10.3	103.0	60.0	140.0
Chloroethane	7.4	74.1	60.0	140.0
Chloroform	10.8	107.9	60.0	140.0
Chloromethane	8.2	82.4	60.0	140.0
2-Chlorotoluene	10.3	103.3	60.0	140.0
4-Chlorotoluene	10.4	103.8	60.0	140.0
Dibromochloromethane	10.4	103.7	60.0	140.0
1,2-Dibromo-3-chloropropane	10.5	105.3	60.0	140.0
1,2-Dibromoethane (EDB)	9.7	97.4	60.0	140.0
Dibromomethane	10.1	101.0	60.0	140.0
1,2-Dichlorobenzene	10.4	103.9	60.0	140.0
1,3-Dichlorobenzene	10.4	104.3	60.0	140.0
1,4-Dichlorobenzene	10.6	105.7	60.0	140.0
Dichlorodifluoromethane	7.5	75.0	60.0	140.0
1,1-Dichloroethane	10.2	102.0	60.0	140.0
1,2-Dichloroethane	11.1	110.6	60.0	140.0
1,1-Dichloroethene	10.1	101.2	60.0	140.0
cis-1,2-Dichloroethene	23.4	117.1	60.0	140.0
trans-1,2-Dichloroethene	10.5	105.0	60.0	140.0
1,2-Dichloropropane	10.7	107.0	60.0	140.0
2,2-Dichloropropane	23.4	117.1	60.0	140.0
cis-1,3-Dichloropropene	10.4	104.1	60.0	140.0
trans-1,3-Dichloropropene	10.5	105.5	60.0	140.0
Diisopropyl ether	9.7	97.2	60.0	140.0
Ethylbenzene	10.4	104.2	60.0	140.0
Hexachlorobutadiene	11.2	112.3	60.0	140.0
Isopropylbenzene	10.4	104.1	60.0	140.0
p-Isopropyltoluene	20.7	103.4	60.0	140.0
Methyl-tert butyl ether	20.8	103.9	60.0	140.0
Methylene Chloride	10.4	103.6	60.0	140.0
Naphthalene	12.0	119.7	60.0	140.0
n-Propylbenzene	10.4	104.1	60.0	140.0
Styrene	20.8	104.1	60.0	140.0
1,1,1,2-Tetrachloroethane	11.0	109.6	60.0	140.0
1,1,2,2-Tetrachloroethane	21.6	71.9	60.0	140.0
Tetrachloroethene	21.4	107.2	60.0	140.0
Toluene	10.4	103.6	60.0	140.0
1,2,3-Trichlorobenzene	11.2	112.2	60.0	140.0
1,2,4-Trichlorobenzene	10.9	108.8	60.0	140.0
1,1,1-Trichloroethane	10.6	105.8	60.0	140.0

Reviewed by: fr



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011607\004f0101.txt
 011607\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.1	111.4	60.0	140.0
Trichloroethene	10.4	104.3	60.0	140.0
Trichlorofluoromethane	7.4	74.4	60.0	140.0
1,2,3-Trichloropropane	21.6	71.9	60.0	140.0
1,2,4-Trimethylbenzene	10.4	104.5	60.0	140.0
1,3,5-Trimethylbenzene	21.0	105.1	60.0	140.0
Vinyl Chloride	7.4	73.7	60.0	140.0
m/p-Xylene	20.9	104.5	60.0	140.0
o-Xylene	20.8	104.1	60.0	140.0

Flags :

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

Reviewed by: ful



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011607\005f0101.txt
 011607\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	10.8	107.6	60.0	140.0
Bromobenzene	21.3	70.9	60.0	140.0
Bromochloromethane	10.1	101.1	60.0	140.0
Bromodichloromethane	10.7	106.6	60.0	140.0
Bromoform	10.9	109.0	60.0	140.0
Bromomethane	7.6	75.5	60.0	140.0
n-Butylbenzene	21.9	109.6	60.0	140.0
sec-Butylbenzene	10.8	108.1	60.0	140.0
tert-Butylbenzene	10.7	106.7	60.0	140.0
Carbon tetrachloride	21.9	109.5	60.0	140.0
Chlorobenzene	10.2	102.0	60.0	140.0
Chloroethane	8.6	86.0	60.0	140.0
Chloroform	10.7	106.7	60.0	140.0
Chloromethane	9.1	91.0	60.0	140.0
2-Chlorotoluene	10.3	103.0	60.0	140.0
4-Chlorotoluene	10.4	103.7	60.0	140.0
Dibromochloromethane	10.6	106.4	60.0	140.0
1,2-Dibromo-3-chloropropane	10.5	105.3	60.0	140.0
1,2-Dibromoethane (EDB)	10.0	99.9	60.0	140.0
Dibromomethane	10.4	103.5	60.0	140.0
1,2-Dichlorobenzene	10.6	105.8	60.0	140.0
1,3-Dichlorobenzene	10.6	106.1	60.0	140.0
1,4-Dichlorobenzene	10.7	107.3	60.0	140.0
Dichlorodifluoromethane	8.7	86.9	60.0	140.0
1,1-Dichloroethane	10.4	103.8	60.0	140.0
1,2-Dichloroethane	10.8	108.2	60.0	140.0
1,1-Dichloroethene	10.2	102.0	60.0	140.0
cis-1,2-Dichloroethene	23.1	115.3	60.0	140.0
trans-1,2-Dichloroethene	10.5	104.8	60.0	140.0
1,2-Dichloropropane	10.7	107.2	60.0	140.0
2,2-Dichloropropane	23.1	115.3	60.0	140.0
cis-1,3-Dichloropropene	10.8	107.6	60.0	140.0
trans-1,3-Dichloropropene	10.8	108.1	60.0	140.0
Diisopropyl ether	10.2	102.4	60.0	140.0
Ethylbenzene	10.9	108.9	60.0	140.0
Hexachlorobutadiene	11.2	111.6	60.0	140.0
Isopropylbenzene	10.9	109.0	60.0	140.0
p-Isopropyltoluene	21.6	107.9	60.0	140.0
Methyl-tert butyl ether	21.6	108.0	60.0	140.0
Methylene Chloride	10.4	103.7	60.0	140.0
Naphthalene	12.2	121.5	60.0	140.0
n-Propylbenzene	10.8	108.3	60.0	140.0
Styrene	21.7	108.4	60.0	140.0
1,1,1,2-Tetrachloroethane	10.9	109.0	60.0	140.0
1,1,2,2-Tetrachloroethane	21.3	70.9	60.0	140.0
Tetrachloroethene	22.0	109.8	60.0	140.0
Toluene	10.7	107.1	60.0	140.0
1,2,3-Trichlorobenzene	11.1	111.4	60.0	140.0
1,2,4-Trichlorobenzene	11.1	110.6	60.0	140.0
1,1,1-Trichloroethane	10.6	105.7	60.0	140.0

Reviewed by: hmc



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011607\005f0101.txt
 011607\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.4	113.6	60.0	140.0
Trichloroethene	10.5	104.6	60.0	140.0
Trichlorofluoromethane	8.7	86.9	60.0	140.0
1,2,3-Trichloropropane	21.3	70.9	60.0	140.0
1,2,4-Trimethylbenzene	10.9	108.7	60.0	140.0
1,3,5-Trimethylbenzene	21.8	109.2	60.0	140.0
Vinyl Chloride	8.6	86.2	60.0	140.0
m/p-Xylene	21.9	109.4	60.0	140.0
o-Xylene	21.7	108.4	60.0	140.0

Flags :

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

Reviewed by: hmr



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011607\017f0101.txt

011607\017r0101.txt

MS : 011607\019f0101.txt

011607\019r0101.txt

MSD : 011607\020f0101.txt

011607\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	10.97	22.5	22.0	115	110	51	132
Bromobenzene	ND	22.5	21.5	75	72	51	132
Bromochloromethane	ND	10.9	10.4	109	104	51	132
Bromodichloromethane	ND	10.7	10.2	107	102	42	172
Bromoform	ND	10.4	9.8	104	98	13	159
Bromomethane	ND	7.6	7.7	76	77	1	144
n-Butylbenzene	ND	22.2	21.6	110	107	51	132
sec-Butylbenzene	ND	11.0	10.7	110	107	51	132
tert-Butylbenzene	1.12	10.8	10.4	97	93	51	132
Carbon tetrachloride	ND	23.3	22.3	117	112	43	143
Chlorobenzene	ND	10.6	10.3	106	103	38	150
Chloroethane	ND	8.4	9.0	84	90	46	137
Chloroform	ND	11.2	10.9	112	109	49	133
Chloromethane	ND	9.8	10.4	98	104	1	193
2-Chlorotoluene	ND	11.2	10.6	112	106	51	132
4-Chlorotoluene	ND	11.2	10.5	112	105	51	132
Dibromochloromethane	ND	10.5	10.0	105	100	24	191
1,2-Dibromo-3-chloropropane	ND	10.5	10.6	105	106	51	132
1,2-Dibromomethane (EDB)	ND	10.3	9.9	103	99	51	132
Dibromomethane	ND	10.6	10.1	102	97	51	132
1,2-Dichlorobenzene	ND	11.0	10.8	110	108	1	208
1,3-Dichlorobenzene	ND	11.1	10.7	111	107	7	187
1,4-Dichlorobenzene	ND	11.3	10.9	113	109	42	143
Dichlorodifluoromethane	ND	8.1	8.9	81	89	51	132
1,1-Dichloroethane	ND	11.0	10.6	110	106	47	132
1,2-Dichloroethane	ND	11.5	11.0	115	110	51	147
1,1-Dichloroethene	ND	10.8	10.5	108	105	28	167
cis-1,2-Dichloroethene	ND	24.4	23.5	122	118	51	132
trans-1,2-Dichloroethene	ND	11.2	10.7	112	107	38	155
1,2-Dichloropropane	ND	11.3	10.7	113	107	44	156
2,2-Dichloropropane	ND	24.4	23.5	122	118	51	132
cis-1,3-Dichloropropene	ND	10.8	10.3	108	103	22	178
trans-1,3-Dichloropropene	ND	10.9	10.6	109	106	22	178
Diisopropyl ether	ND	10.6	10.3	103	101	51	132
Ethylbenzene	ND	10.6	10.2	106	102	51	132
Hexachlorobutadiene	ND	10.7	10.9	107	109	51	132
Isopropylbenzene	ND	11.2	10.8	111	107	51	132
p-Isopropyltoluene	1.38	21.3	20.7	100	96	51	132
Methyl-tert butyl ether	ND	22.9	22.2	112	108	51	132
Methylene Chloride	ND	11.2	10.7	112	107	25	162
Naphthalene	1.19	12.4	13.2	112	120	51	132
n-Propylbenzene	ND	11.4	11.0	111	107	51	132
Styrene	5.95	28.6	27.7	113	109	51	132
1,1,1,2-Tetrachloroethane	ND	11.5	10.8	115	108	51	132
1,1,2,2-Tetrachloroethane	ND	22.5	21.5	75	72	8	184
Tetrachloroethene	ND	22.8	21.8	114	109	26	162
Toluene	30.49	42.3	41.5	118	110	51	132
1,2,3-Trichlorobenzene	ND	22.5	21.5	75	72	51	132
1,2,4-Trichlorobenzene	ND	11.0	10.9	110	109	51	132

Reviewed by: AME



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011607\017f0101.txt 011607\017r0101.txt

MS : 011607\019f0101.txt 011607\019r0101.txt

MSD : 011607\020f0101.txt 011607\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
1,1,1-Trichloroethane	ND	11.2	10.7	112	107	41	138
1,1,2-Trichloroethane	ND	11.6	11.4	116	114	39	136
Trichloroethene	ND	11.2	10.6	112	106	35	146
Trichlorofluoromethane	ND	8.3	8.9	83	89	21	156
1,2,3-Trichloropropane	ND	22.5	21.5	75	72	51	132
1,2,4-Trimethylbenzene	3.06	14.5	14.1	115	111	51	132
1,3,5-Trimethylbenzene	ND	23.2	22.3	113	109	51	132
Vinyl Chloride	ND	7.9	8.8	79	88	28	163
m/p-Xylene	11.98	35.1	34.1	115	111	51	132
o-Xylene	5.95	28.6	27.7	113	109	51	132

Flags :

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

Reviewed by:



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\004f0101.txt
 011707\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	11.1	110.8	60.0	140.0
Bromobenzene	22.1	73.6	60.0	140.0
Bromochloromethane	10.3	103.1	60.0	140.0
Bromodichloromethane	10.4	104.2	60.0	140.0
Bromoform	11.0	110.4	60.0	140.0
Bromomethane	7.3	73.3	60.0	140.0
n-Butylbenzene	22.2	111.1	60.0	140.0
sec-Butylbenzene	11.0	110.3	60.0	140.0
tert-Butylbenzene	10.9	108.8	60.0	140.0
Carbon tetrachloride	22.3	111.7	60.0	140.0
Chlorobenzene	10.5	104.8	60.0	140.0
Chloroethane	7.6	76.0	60.0	140.0
Chloroform	10.8	108.0	60.0	140.0
Chloromethane	6.4	63.7	60.0	140.0
2-Chlorotoluene	10.7	106.9	60.0	140.0
4-Chlorotoluene	10.6	106.3	60.0	140.0
Dibromochloromethane	10.7	107.0	60.0	140.0
1,2-Dibromo-3-chloropropane	10.3	103.3	60.0	140.0
1,2-Dibromoethane (EDB)	10.1	101.2	60.0	140.0
Dibromomethane	10.0	100.3	60.0	140.0
1,2-Dichlorobenzene	10.7	107.1	60.0	140.0
1,3-Dichlorobenzene	10.6	106.3	60.0	140.0
1,4-Dichlorobenzene	10.9	109.5	60.0	140.0
Dichlorodifluoromethane	3.7	36.7 +	60.0	140.0
1,1-Dichloroethane	10.6	106.4	60.0	140.0
1,2-Dichloroethane	10.9	108.9	60.0	140.0
1,1-Dichloroethene	10.8	108.0	60.0	140.0
cis-1,2-Dichloroethene	24.0	119.9	60.0	140.0
trans-1,2-Dichloroethene	10.7	107.3	60.0	140.0
1,2-Dichloropropane	10.8	108.0	60.0	140.0
2,2-Dichloropropane	24.0	119.9	60.0	140.0
cis-1,3-Dichloropropene	10.5	105.0	60.0	140.0
trans-1,3-Dichloropropene	10.8	107.9	60.0	140.0
Diisopropyl ether	10.4	103.9	60.0	140.0
Ethylbenzene	11.1	110.8	60.0	140.0
Hexachlorobutadiene	11.3	113.2	60.0	140.0
Isopropylbenzene	11.1	111.1	60.0	140.0
p-Isopropyltoluene	21.9	109.5	60.0	140.0
Methyl-tert butyl ether	22.0	110.0	60.0	140.0
Methylene Chloride	10.7	107.1	60.0	140.0
Naphthalene	11.6	115.9	60.0	140.0
n-Propylbenzene	11.0	110.5	60.0	140.0
Styrene	22.0	110.2	60.0	140.0
1,1,1,2-Tetrachloroethane	11.2	111.6	60.0	140.0
1,1,2,2-Tetrachloroethane	22.1	73.6	60.0	140.0
Tetrachloroethene	21.9	109.7	60.0	140.0
Toluene	11.0	110.1	60.0	140.0
1,2,3-Trichlorobenzene	11.0	109.9	60.0	140.0
1,2,4-Trichlorobenzene	10.9	109.4	60.0	140.0
1,1,1-Trichloroethane	10.7	107.1	60.0	140.0

Reviewed by: ky



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\004f0101.txt
 011707\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.1	110.9	60.0	140.0
Trichloroethene	10.7	106.7	60.0	140.0
Trichlorofluoromethane	8.0	80.0	60.0	140.0
1,2,3-Trichloropropane	22.1	73.6	60.0	140.0
1,2,4-Trimethylbenzene	11.1	110.8	60.0	140.0
1,3,5-Trimethylbenzene	22.2	111.0	60.0	140.0
Vinyl Chloride	6.9	68.6	60.0	140.0
m/p-Xylene	22.3	111.4	60.0	140.0
o-Xylene	22.0	110.2	60.0	140.0

Flags :

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

Reviewed by: PM



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\005f0101.txt
 011707\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	11.1	110.7	60.0	140.0
Bromobenzene	21.8	72.5	60.0	140.0
Bromochloromethane	10.6	106.4	60.0	140.0
Bromodichloromethane	10.8	107.8	60.0	140.0
Bromoform	11.1	110.8	60.0	140.0
Bromomethane	7.3	73.1	60.0	140.0
n-Butylbenzene	22.5	112.6	60.0	140.0
sec-Butylbenzene	11.2	111.8	60.0	140.0
tert-Butylbenzene	11.0	110.5	60.0	140.0
Carbon tetrachloride	22.8	114.0	60.0	140.0
Chlorobenzene	10.9	108.9	60.0	140.0
Chloroethane	7.8	77.7	60.0	140.0
Chloroform	11.2	112.1	60.0	140.0
Chloromethane	6.6	66.4	60.0	140.0
2-Chlorotoluene	11.1	110.6	60.0	140.0
4-Chlorotoluene	11.2	111.8	60.0	140.0
Dibromochloromethane	10.8	108.1	60.0	140.0
1,2-Dibromo-3-chloropropane	11.1	110.5	60.0	140.0
1,2-Dibromoethane (EDB)	10.3	102.6	60.0	140.0
Dibromomethane	10.4	104.4	60.0	140.0
1,2-Dichlorobenzene	10.9	109.4	60.0	140.0
1,3-Dichlorobenzene	10.9	108.8	60.0	140.0
1,4-Dichlorobenzene	11.1	110.6	60.0	140.0
Dichlorodifluoromethane	3.8	38.3 +	60.0	140.0
1,1-Dichloroethane	10.9	109.2	60.0	140.0
1,2-Dichloroethane	11.4	113.8	60.0	140.0
1,1-Dichloroethene	11.0	109.9	60.0	140.0
cis-1,2-Dichloroethene	24.4	122.0	60.0	140.0
trans-1,2-Dichloroethene	11.1	111.5	60.0	140.0
1,2-Dichloropropane	11.3	113.4	60.0	140.0
2,2-Dichloropropane	24.4	122.0	60.0	140.0
cis-1,3-Dichloropropene	10.8	108.3	60.0	140.0
trans-1,3-Dichloropropene	10.9	109.3	60.0	140.0
Diisopropyl ether	10.4	104.1	60.0	140.0
Ethylbenzene	11.2	111.9	60.0	140.0
Hexachlorobutadiene	11.8	118.3	60.0	140.0
Isopropylbenzene	11.2	111.9	60.0	140.0
p-Isopropyltoluene	22.2	110.9	60.0	140.0
Methyl-tert butyl ether	22.0	110.2	60.0	140.0
Methylene Chloride	11.1	111.1	60.0	140.0
Naphthalene	11.8	117.7	60.0	140.0
n-Propylbenzene	11.2	111.9	60.0	140.0
Styrene	22.3	111.3	60.0	140.0
1,1,1,2-Tetrachloroethane	11.7	116.9	60.0	140.0
1,1,2,2-Tetrachloroethane	21.8	72.5	60.0	140.0
Tetrachloroethene	22.9	114.4	60.0	140.0
Toluene	11.1	111.1	60.0	140.0
1,2,3-Trichlorobenzene	11.6	115.9	60.0	140.0
1,2,4-Trichlorobenzene	11.3	113.0	60.0	140.0
1,1,1-Trichloroethane	11.0	110.4	60.0	140.0

Reviewed by: me



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\005f0101.txt
 011707\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.6	115.6	60.0	140.0
Trichloroethene	11.0	109.5	60.0	140.0
Trichlorofluoromethane	8.2	82.2	60.0	140.0
1,2,3-Trichloropropane	21.8	72.5	60.0	140.0
1,2,4-Trimethylbenzene	11.3	112.6	60.0	140.0
1,3,5-Trimethylbenzene	22.6	112.9	60.0	140.0
Vinyl Chloride	7.1	71.5	60.0	140.0
m/p-Xylene	22.4	112.2	60.0	140.0
o-Xylene	22.3	111.3	60.0	140.0

Flags :

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

Reviewed by: fm



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011707\017f0101.txt

011707\017r0101.txt

MS : 011707\019f0101.txt

011707\019r0101.txt

MSD : 011707\020f0101.txt

011707\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	1.45	12.9	13.2	115	117	51	132
Bromobenzene	ND	21.5	21.5	72	72	51	132
Bromochloromethane	ND	10.7	10.7	107	107	51	132
Bromodichloromethane	ND	10.8	10.6	108	106	42	172
Bromoform	ND	9.3	9.4	93	94	13	159
Bromomethane	ND	6.0	6.5	60	65	1	144
n-Butylbenzene	1.64	23.8	24.4	111	114	51	132
sec-Butylbenzene	ND	11.5	11.8	113	115	51	132
tert-Butylbenzene	3.14	10.7	10.9	75	78	51	132
• Carbon tetrachloride	ND	23.0	23.1	115	115	43	143
Chlorobenzene	ND	10.6	10.8	106	108	38	150
Chloroethane	ND	7.5	7.9	75	79	46	137
Chloroform	ND	11.3	11.3	113	113	49	133
Chloromethane	ND	6.3	6.8	63	68	1	193
2-Chlorotoluene	ND	10.8	11.0	108	110	51	132
4-Chlorotoluene	ND	10.8	11.3	108	113	51	132
• Dibromochloromethane	ND	10.0	10.3	100	103	24	191
1,2-Dibromo-3-chloropropane	ND	9.7	10.1	97	101	51	132
1,2-Dibromomethane (EDB)	ND	10.1	10.2	101	102	51	132
Dibromomethane	ND	10.6	10.4	102	100	51	132
1,2-Dichlorobenzene	ND	10.7	11.3	107	113	1	208
1,3-Dichlorobenzene	ND	10.6	11.3	106	113	7	187
1,4-Dichlorobenzene	ND	10.7	11.3	107	113	42	143
Dichlorodifluoromethane	ND	3.4	3.7	34 +	37 +	51	132
1,1-Dichloroethane	ND	10.9	11.0	109	110	47	132
1,2-Dichloroethane	ND	11.4	11.6	114	116	51	147
1,1-Dichloroethene	ND	11.0	11.1	110	111	28	167
cis-1,2-Dichloroethene	ND	24.3	24.7	122	124	51	132
trans-1,2-Dichloroethene	ND	11.0	11.2	110	112	38	155
1,2-Dichloropropane	ND	11.4	11.3	114	113	44	156
2,2-Dichloropropane	ND	24.3	24.7	122	124	51	132
cis-1,3-Dichloropropene	ND	10.6	10.8	106	108	22	178
trans-1,3-Dichloropropene	ND	10.7	10.8	107	108	22	178
Diisopropyl ether	ND	10.6	10.7	106	107	51	132
Ethylbenzene	ND	10.5	10.8	105	108	51	132
Hexachlorobutadiene	ND	10.1	11.2	101	112	51	132
Isopropylbenzene	ND	11.5	11.6	113	114	51	132
p-Isopropyltoluene	ND	21.4	21.9	107	110	51	132
Methyl-tert butyl ether	ND	22.3	22.6	111	113	51	132
Methylene Chloride	ND	11.1	11.2	111	112	25	162
Naphthalene	2.33	13.3	14.3	109	119	51	132
n-Propylbenzene	ND	11.9	12.0	113	114	51	132
• Styrene	9.00	32.0	32.3	115	116	51	132
1,1,1,2-Tetrachloroethane	ND	11.3	11.6	113	116	51	132
• 1,1,2,2-Tetrachloroethane	ND	21.5	21.5	72	72	8	184
Tetrachloroethene	ND	22.6	22.8	113	114	26	162
• Toluene	37.69	49.7	49.2	120	116	51	132
• 1,2,3-Trichlorobenzene	ND	21.5	21.5	72	72	51	132
1,2,4-Trichlorobenzene	ND	10.4	11.1	104	111	51	132

Reviewed by: hml



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011707\017f0101.txt 011707\017r0101.txt

MS : 011707\019f0101.txt 011707\019r0101.txt

MSD : 011707\020f0101.txt 011707\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
1,1,1-Trichloroethane	ND	11.0	11.2	110	112	41	138
1,1,2-Trichloroethane	ND	11.4	11.7	114	117	39	136
Trichloroethene	ND	11.2	11.1	112	111	35	146
Trichlorofluoromethane	ND	7.7	8.2	77	82	21	156
1,2,3-Trichloropropane	ND	21.5	21.5	72	72	51	132
1,2,4-Trimethylbenzene	8.98	20.8	21.0	119	120	51	132
1,3,5-Trimethylbenzene	2.38	25.2	25.6	114	116	51	132
Vinyl Chloride	ND	6.3	6.8	63	68	28	163
m/p-Xylene	17.08	40.5	40.3	117	116	51	132
o-Xylene	9.00	32.0	32.3	115	116	51	132

Flags :

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

Reviewed by: fm

**Results for Metals**

Client Sample ID: UST645-MW01
Client Project ID: NV016
Lab Sample ID: G650-97-1
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/9/2007 16:27
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Samples Prepared by 3030C

Reviewed By: mm
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW02
Client Project ID: NV016
Lab Sample ID: G650-97-2
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/9/2007 15:53
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW12
Client Project ID: NV016
Lab Sample ID: G650-97-3
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/8/2007 15:30
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW13
Client Project ID: NV016
Lab Sample ID: G650-97-4
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/9/2007 9:15
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By:
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW17
Client Project ID: NV016
Lab Sample ID: G650-97-5
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/9/2007 13:05
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: Jim
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW22
Client Project ID: NV016
Lab Sample ID: G650-97-6
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/8/2007 13:50
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: me
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW23
Client Project ID: NV016
Lab Sample ID: G650-97-7
Lab Project ID: G650-97
Batch ID: 7075

Analyzed By: AEC
Date Collected: 1/9/2007 14:10
Date Received: 1/10/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: imu
MET_LIMS_4.1.XLS



Results for Metals

Client Sample ID: UST645-MW24
 Client Project ID: NV016
 Lab Sample ID: G650-97-8
 Lab Project ID: G650-97
 Batch ID: 7075

Analyzed By: AEC
 Date Collected: 1/9/2007 11:35
 Date Received: 1/10/2007
 Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL
 Samples Prepared by 3030C

Reviewed By: *[Signature]*
 MET_LIMS_4.1.XLS



Results for Metals

Client Sample ID: UST645-MW28
 Client Project ID: NV016
 Lab Sample ID: G650-97-9
 Lab Project ID: G650-97
 Batch ID: 7075

Analyzed By: AEC
 Date Collected: 1/9/2007 10:25
 Date Received: 1/10/2007
 Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL
 Samples Prepared by 3030C

Reviewed By: fw
 MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: Lab Blank
Client Project ID:
Lab Sample ID: pb7075
Lab Project ID:
Batch ID: 7075

Analyzed By: AEC
Date Collected:
Date Received:
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/11/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS



METALS Results for LCS/LCD

ICP Batch: 7075

HG Batch:

Other:

Matrix: WATER

Units: MG/L

Analyte	TRUE Value	LCS	LCS %REC	LCD	LCD %REC	Limit		RPD	RPD Limit
						Lower	Upper		
Lead	0.400	0.384	96.0	0.383	95.8	80	120	0.261	20

Reviewed By: hml



MS/MSD Results for METALS

Lab ID: G122-2886-7
 MS Lab ID: G122-2886-7
 MSD Lab ID: G122-2886-7
 ICP Batch: 7075
 HG Batch:
 Other:

Analyzed By: AEC
 Matrix: Water
 Units: MG/L

Analyte	Sample Result	SA MS	MS Result	MS %REC	SA MSD	MSD Result	MSD %REC	Limit		RPD	RPD Limit
								Lower	Upper		
Lead	0.0051	0.400	0.385	95.0	0.400	0.391	96.5	75	125	1.55	20

Comments

*=Out of Limits

NA = Not applicable, due to sample concentration greater than three times spike concentration

Reviewed By: SMV



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

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

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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



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SGS Reference: CLIENT: Sovereign Consulting Inc CONTACT: Theresa Blumenthal PHONE NO.: (918) 526-3944 PROJECT: NV016 SITE/PWSID#: Bldg 645 REPORTS TO: Chris Murray E-MAIL: cmurray@sovereign.com INVOICE TO: Chris Murray QUOTE # 405 OAK MEADOWS CRES APT STE 1 VICKSBURG BRACH VA 23442 P.O. NUMBER 2				PAGE 1 OF 1				
				6650-97				
				PRESERVATIVES USED: HU/HNB ANALYSIS REQUIRED: CO/LOZ (WATER) COBOL (LEAD) ③				
LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	PRESERVATIVES USED ANALYSIS REQUIRED	REMARKS
	UST645 - MW01	1/9/07	1627	W	+		X	
	UST645 - MW02	1/9/07	1553	W	+		X	
	UST645 - MW12	1/8/07	1530	W	+		X	
	UST645 - MW13	1/9/07	0915	W	+		X	
	UST645 - MW17	1/9/07	1305	W	+		X	
	UST645 - MW22	1/8/07	1350	W	+		X	
	UST645 - MW23	1/9/07	1410	W	+		X	
	UST645 - MW24	1/9/07	1135	W	+		X	
	UST645 - MW28	1/9/07	1025	W	+		X	
	TEIP BLANK	1/9/07	LAB	W	1		X	
Collected/Relinquished By: (1) <i>[Signature]</i> Date: 1/7/07				Shipping Carrier: FEDEX 8043 49167 Shipping Ticket No: 5439				Samples Received Cold? (Circle) YES ☒ NO ☐
Relinquished By: (2) <i>[Signature]</i> Date: 1/10/07				Special Deliverable Requirements: EDD Format				Temperature [C]: 1.3
Relinquished By: (3)				Chain of Custody Seal: (Circle) INTACT ☒ BROKEN ☐				Requested Turnaround Time and Special Instructions: Standard Turnaround "Email results to nhall@sovereign.com" "EDD Format" "Murray ASOBon.com"
Relinquished By: (4)				Received By: <i>Amy Dudarey</i>				Requested Turnaround Time and Special Instructions:

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

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. Chris Murray
Sovereign Consulting
405 Oakmeads Crescent
Suite 1
Virginia Beach VA 23462
Report Number: G650-98
Client Project: NV016

Dear Mr. Murray:

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

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

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

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

Fov 1/24/07
Date



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW16

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 9:35

Lab Sample ID: G650-98-1A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/18/2007	
Bromoform	BQL	2.00	0.353	1	1/18/2007	
Bromomethane	BQL	1.00	0.395	1	1/18/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/18/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/18/2007	
Chloroethane	BQL	1.00	0.271	1	1/18/2007	
Chloroform	BQL	1.00	0.133	1	1/18/2007	
Chloromethane	BQL	1.00	0.278	1	1/18/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/18/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/18/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/18/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/18/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/18/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/18/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/18/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/18/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/18/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/18/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/18/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/18/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/18/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/18/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/18/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/18/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
Trichloroethene	BQL	1.00	0.115	1	1/18/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/18/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/18/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

41.8

105

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: RSB
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW18

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 11:45

Lab Sample ID: G650-98-2A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/18/2007	
Bromoform	BQL	2.00	0.353	1	1/18/2007	
Bromomethane	BQL	1.00	0.395	1	1/18/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/18/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/18/2007	
Chloroethane	BQL	1.00	0.271	1	1/18/2007	
Chloroform	BQL	1.00	0.133	1	1/18/2007	
Chloromethane	BQL	1.00	0.278	1	1/18/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/18/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/18/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/18/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/18/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/18/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/18/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/18/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/18/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/18/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/18/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/18/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/18/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/18/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/18/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/18/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/18/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/18/2007	
Trichloroethene	BQL	1.00	0.115	1	1/18/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/18/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/18/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

42.3

106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: lme
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW25

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 15:53

Lab Sample ID: G650-98-3B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
1,4-Dichlorobutane	40	42.7	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: me
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW26

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 10:10

Lab Sample ID: G650-98-4D

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/19/2007	
Bromoform	BQL	2.00	0.353	1	1/19/2007	
Bromomethane	BQL	1.00	0.395	1	1/19/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/19/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/19/2007	
Chloroethane	BQL	1.00	0.271	1	1/19/2007	
Chloroform	BQL	1.00	0.133	1	1/19/2007	
Chloromethane	BQL	1.00	0.278	1	1/19/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/19/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/19/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/19/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/19/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/19/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/19/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/19/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/19/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/19/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/19/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/19/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/19/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/19/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/19/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/19/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/19/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
Trichloroethene	BQL	1.00	0.115	1	1/19/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/19/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/19/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

42.6

106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: hmc
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW27

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 15:15

Lab Sample ID: G650-98-5A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/19/2007	
Bromoform	BQL	2.00	0.353	1	1/19/2007	
Bromomethane	BQL	1.00	0.395	1	1/19/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/19/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/19/2007	
Chloroethane	BQL	1.00	0.271	1	1/19/2007	
Chloroform	BQL	1.00	0.133	1	1/19/2007	
Chloromethane	BQL	1.00	0.278	1	1/19/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/19/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/19/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/19/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/19/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/19/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/19/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/19/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/19/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/19/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/19/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/19/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/19/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/19/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/19/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/19/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/19/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
Trichloroethene	BQL	1.00	0.115	1	1/19/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/19/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/19/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

41.4

103

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: km

GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW29

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 16:00

Lab Sample ID: G650-98-6A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/19/2007	
Bromoform	BQL	2.00	0.353	1	1/19/2007	
Bromomethane	BQL	1.00	0.395	1	1/19/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/19/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/19/2007	
Chloroethane	BQL	1.00	0.271	1	1/19/2007	
Chloroform	BQL	1.00	0.133	1	1/19/2007	
Chloromethane	BQL	1.00	0.278	1	1/19/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/19/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/19/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/19/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/19/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/19/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/19/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/19/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/19/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/19/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/19/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/19/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/19/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/19/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/19/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/19/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/19/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
Trichloroethene	BQL	1.00	0.115	1	1/19/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/19/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/19/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

42.4

106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: mm

GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW30

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 14:50

Lab Sample ID: G650-98-7B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

43.0

107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: LM
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-MW31

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 10:30

Lab Sample ID: G650-98-8B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
1,4-Dichlorobutane	40	43.4	109

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA



Results for Volatiles
by GC 601

Client Sample ID: UST645-MW32

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 12:50

Lab Sample ID: G650-98-9B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/19/2007	
Bromoform	BQL	2.00	0.353	1	1/19/2007	
Bromomethane	BQL	1.00	0.395	1	1/19/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/19/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/19/2007	
Chloroethane	BQL	1.00	0.271	1	1/19/2007	
Chloroform	BQL	1.00	0.133	1	1/19/2007	
Chloromethane	BQL	1.00	0.278	1	1/19/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/19/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/19/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/19/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/19/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/19/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/19/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/19/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/19/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/19/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/19/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/19/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/19/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/19/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/19/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/19/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/19/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
Trichloroethene	BQL	1.00	0.115	1	1/19/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/19/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/19/2007	

Surrogate Spike Recoveries**Spike
Added****Spike
Result****Percent
Recovery**

1,4-Dichlorobutane

40

41.6

104

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: hwa
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: UST645-Duplicate

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 0:00

Lab Sample ID: G650-98-10B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
1,4-Dichlorobutane	40	43.4	108

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: hmc
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: Trip Blank

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 0:00

Lab Sample ID: G650-98-11B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/22/2007	
Bromoform	BQL	2.00	0.353	1	1/22/2007	
Bromomethane	BQL	1.00	0.395	1	1/22/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/22/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/22/2007	
Chloroethane	BQL	1.00	0.271	1	1/22/2007	
Chloroform	BQL	1.00	0.133	1	1/22/2007	
Chloromethane	BQL	1.00	0.278	1	1/22/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/22/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/22/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/22/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/22/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/22/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/22/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/22/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/22/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/22/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/22/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/22/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/22/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/22/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/22/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/22/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/22/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/22/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/22/2007	
Trichloroethene	BQL	1.00	0.115	1	1/22/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/22/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/22/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

40.8

102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: hmc
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011707A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/17/2007	
Bromoform	BQL	2.00	0.353	1	1/17/2007	
Bromomethane	BQL	1.00	0.395	1	1/17/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/17/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/17/2007	
Chloroethane	BQL	1.00	0.271	1	1/17/2007	
Chloroform	BQL	1.00	0.133	1	1/17/2007	
Chloromethane	BQL	1.00	0.278	1	1/17/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/17/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/17/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/17/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/17/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/17/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/17/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/17/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/17/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/17/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/17/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/17/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/17/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/17/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/17/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/17/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/17/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/17/2007	
Trichloroethene	BQL	1.00	0.115	1	1/17/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/17/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/17/2007	

Surrogate Spike Recoveries

Spike
AddedSpike
ResultPercent
Recovery

1,4-Dichlorobutane

40

42.5

106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: WML
GC-VOA_WA



Results for Volatiles

by GC 601

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011907A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Bromodichloromethane	BQL	1.00	0.207	1	1/19/2007	
Bromoform	BQL	2.00	0.353	1	1/19/2007	
Bromomethane	BQL	1.00	0.395	1	1/19/2007	
Carbon tetrachloride	BQL	2.00	0.182	1	1/19/2007	
Chlorobenzene	BQL	1.00	0.115	1	1/19/2007	
Chloroethane	BQL	1.00	0.271	1	1/19/2007	
Chloroform	BQL	1.00	0.133	1	1/19/2007	
Chloromethane	BQL	1.00	0.278	1	1/19/2007	
Dibromochloromethane	BQL	1.00	0.119	1	1/19/2007	
1,2-Dibromoethane (EDB)	BQL	1.00	0.0994	1	1/19/2007	
1,2-Dichlorobenzene	BQL	1.00	0.136	1	1/19/2007	
1,3-Dichlorobenzene	BQL	1.00	0.104	1	1/19/2007	
1,4-Dichlorobenzene	BQL	1.00	0.116	1	1/19/2007	
1,1-Dichloroethane	BQL	1.00	0.122	1	1/19/2007	
1,2-Dichloroethane	BQL	1.00	0.104	1	1/19/2007	
1,1-Dichloroethene	BQL	1.00	0.125	1	1/19/2007	
cis-1,2-Dichloroethene	BQL	2.00	0.21	1	1/19/2007	
trans-1,2-Dichloroethene	BQL	1.00	0.117	1	1/19/2007	
1,2-Dichloropropane	BQL	1.00	0.111	1	1/19/2007	
cis-1,3-Dichloropropene	BQL	1.00	0.141	1	1/19/2007	
trans-1,3-Dichloropropene	BQL	1.00	0.108	1	1/19/2007	
Methylene Chloride	BQL	5.00	0.0988	1	1/19/2007	
1,1,2,2-Tetrachloroethane	BQL	2.00	0.274	1	1/19/2007	
Tetrachloroethene	BQL	2.00	0.167	1	1/19/2007	
1,1,1-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
1,1,2-Trichloroethane	BQL	1.00	0.143	1	1/19/2007	
Trichloroethene	BQL	1.00	0.115	1	1/19/2007	
Trichlorofluoromethane	BQL	1.00	0.415	1	1/19/2007	
Vinyl Chloride	BQL	1.00	0.116	1	1/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
1,4-Dichlorobutane	40	40.5	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: hmr
GC-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW16

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 9:35

Lab Sample ID: G650-98-1A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/18/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/18/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/18/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/18/2007	
Toluene	BQL	1.00	0.157	1	1/18/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/18/2007	
o-Xylene	BQL	2.00	0.584	1	1/18/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.9	97.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW18

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 11:45

Lab Sample ID: G650-98-2A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	14.8	4.00	0.732	4	1/19/2007	
Diisopropyl ether (DIPE)	BQL	4.00	0.916	4	1/19/2007	
Ethylbenzene	86.7	4.00	0.724	4	1/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	8.00	1.44	4	1/19/2007	
Toluene	3.94	4.00	0.628	4	1/19/2007	J
m/p-Xylene	4.34	8.00	1.92	4	1/19/2007	J
o-Xylene	2.42	8.00	2.34	4	1/19/2007	J

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.9	97.1

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 

GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW25

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 15:53

Lab Sample ID: G650-98-3B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.5	106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: lm
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW26

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 10:10

Lab Sample ID: G650-98-4B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	3260	200	36.6	200	1/19/2007	
Diisopropyl ether (DIPE)	BQL	200	45.8	200	1/19/2007	
Ethylbenzene	330	200	36.2	200	1/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	400	71.8	200	1/19/2007	
Toluene	7160	200	31.4	200	1/19/2007	
m/p-Xylene	287	400	96.2	200	1/19/2007	J
o-Xylene	228	400	117	200	1/19/2007	J

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.6	93.9

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW27

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 15:15

Lab Sample ID: G650-98-5A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	12.9	1.00	0.183	1	1/19/2007	
Diisopropyl ether (DIPE)	0.386	1.00	0.229	1	1/19/2007	J
Ethylbenzene	0.435	1.00	0.181	1	1/19/2007	J
Methyl-tert butyl ether (MTBE)	39.1	2.00	0.359	1	1/19/2007	
Toluene	2.99	1.00	0.157	1	1/19/2007	
m/p-Xylene	0.560	2.00	0.481	1	1/19/2007	J
o-Xylene	BQL	2.00	0.584	1	1/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.0	95

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW29

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 16:00

Lab Sample ID: G650-98-6A

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	21.3	1.00	0.183	1	1/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/19/2007	
Ethylbenzene	0.873	1.00	0.181	1	1/19/2007	J
Methyl-tert butyl ether (MTBE)	0.828	2.00	0.359	1	1/19/2007	J
Toluene	3.80	1.00	0.157	1	1/19/2007	
m/p-Xylene	1.15	2.00	0.481	1	1/19/2007	J
o-Xylene	BQL	2.00	0.584	1	1/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.8	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: fm
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW30

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 14:50

Lab Sample ID: G650-98-7B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.7	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW31

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 10:30

Lab Sample ID: G650-98-8B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.5	106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: RSB

GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: UST645-MW32

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 12:50

Lab Sample ID: G650-98-9B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/19/2007	
Toluene	BQL	1.00	0.157	1	1/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/19/2007	
o-Xylene	BQL	2.00	0.584	1	1/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.0	97.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: UST645-Duplicate

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/10/2007 0:00

Lab Sample ID: G650-98-10B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.7	107

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: 
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: Trip Blank

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 1/11/2007 0:00

Lab Sample ID: G650-98-11B

Date Received: 1/12/2007

Lab Project ID: G650-98

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/22/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/22/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/22/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/22/2007	
Toluene	0.265	1.00	0.157	1	1/22/2007	J
m/p-Xylene	BQL	2.00	0.481	1	1/22/2007	
o-Xylene	BQL	2.00	0.584	1	1/22/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.3	98.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Reviewed By: mm
GC-VOA_WA



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011707A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/17/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/17/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/17/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/17/2007	
Toluene	BQL	1.00	0.157	1	1/17/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/17/2007	
o-Xylene	BQL	2.00	0.584	1	1/17/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	42.3	106

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Results for Volatiles

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3011907A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	1/19/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	1/19/2007	
Ethylbenzene	BQL	1.00	0.181	1	1/19/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	1/19/2007	
Toluene	BQL	1.00	0.157	1	1/19/2007	
m/p-Xylene	BQL	2.00	0.481	1	1/19/2007	
o-Xylene	BQL	2.00	0.584	1	1/19/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.9	97.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\005f0101.txt
 011707\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	11.1	110.7	60.0	140.0
Bromobenzene	21.8	72.5	60.0	140.0
Bromochloromethane	10.6	106.4	60.0	140.0
Bromodichloromethane	10.8	107.8	60.0	140.0
Bromoform	11.1	110.8	60.0	140.0
Bromomethane	7.3	73.1	60.0	140.0
n-Butylbenzene	22.5	112.6	60.0	140.0
sec-Butylbenzene	11.2	111.8	60.0	140.0
tert-Butylbenzene	11.0	110.5	60.0	140.0
Carbon tetrachloride	22.8	114.0	60.0	140.0
Chlorobenzene	10.9	108.9	60.0	140.0
Chloroethane	7.8	77.7	60.0	140.0
Chloroform	11.2	112.1	60.0	140.0
Chloromethane	6.6	66.4	60.0	140.0
2-Chlorotoluene	11.1	110.6	60.0	140.0
4-Chlorotoluene	11.2	111.8	60.0	140.0
Dibromochloromethane	10.8	108.1	60.0	140.0
1,2-Dibromo-3-chloropropane	11.1	110.5	60.0	140.0
1,2-Dibromoethane (EDB)	10.3	102.6	60.0	140.0
Dibromomethane	10.4	104.4	60.0	140.0
1,2-Dichlorobenzene	10.9	109.4	60.0	140.0
1,3-Dichlorobenzene	10.9	108.8	60.0	140.0
1,4-Dichlorobenzene	11.1	110.6	60.0	140.0
Dichlorodifluoromethane	3.8	38.3 +	60.0	140.0
1,1-Dichloroethane	10.9	109.2	60.0	140.0
1,2-Dichloroethane	11.4	113.8	60.0	140.0
1,1-Dichloroethene	11.0	109.9	60.0	140.0
cis-1,2-Dichloroethene	24.4	122.0	60.0	140.0
trans-1,2-Dichloroethene	11.1	111.5	60.0	140.0
1,2-Dichloropropane	11.3	113.4	60.0	140.0
2,2-Dichloropropane	24.4	122.0	60.0	140.0
cis-1,3-Dichloropropene	10.8	108.3	60.0	140.0
trans-1,3-Dichloropropene	10.9	109.3	60.0	140.0
Diisopropyl ether	10.4	104.1	60.0	140.0
Ethylbenzene	11.2	111.9	60.0	140.0
Hexachlorobutadiene	11.8	118.3	60.0	140.0
Isopropylbenzene	11.2	111.9	60.0	140.0
p-Isopropyltoluene	22.2	110.9	60.0	140.0
Methyl-tert butyl ether	22.0	110.2	60.0	140.0
Methylene Chloride	11.1	111.1	60.0	140.0
Naphthalene	11.8	117.7	60.0	140.0
n-Propylbenzene	11.2	111.9	60.0	140.0
Styrene	22.3	111.3	60.0	140.0
1,1,1,2-Tetrachloroethane	11.7	116.9	60.0	140.0
1,1,2,2-Tetrachloroethane	21.8	72.5	60.0	140.0
Tetrachloroethene	22.9	114.4	60.0	140.0
Toluene	11.1	111.1	60.0	140.0
1,2,3-Trichlorobenzene	11.6	115.9	60.0	140.0
1,2,4-Trichlorobenzene	11.3	113.0	60.0	140.0
1,1,1-Trichloroethane	11.0	110.4	60.0	140.0

Reviewed by: RM



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\005f0101.txt
 011707\005r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.6	115.6	60.0	140.0
Trichloroethene	11.0	109.5	60.0	140.0
Trichlorofluoromethane	8.2	82.2	60.0	140.0
1,2,3-Trichloropropane	21.8	72.5	60.0	140.0
1,2,4-Trimethylbenzene	11.3	112.6	60.0	140.0
1,3,5-Trimethylbenzene	22.6	112.9	60.0	140.0
Vinyl Chloride	7.1	71.5	60.0	140.0
m/p-Xylene	22.4	112.2	60.0	140.0
o-Xylene	22.3	111.3	60.0	140.0

Flags :

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

Reviewed by: hmc



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\004f0101.txt
 011707\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
Benzene	11.1	110.8	60.0	140.0
Bromobenzene	22.1	73.6	60.0	140.0
Bromochloromethane	10.3	103.1	60.0	140.0
Bromodichloromethane	10.4	104.2	60.0	140.0
Bromoform	11.0	110.4	60.0	140.0
Bromomethane	7.3	73.3	60.0	140.0
n-Butylbenzene	22.2	111.1	60.0	140.0
sec-Butylbenzene	11.0	110.3	60.0	140.0
tert-Butylbenzene	10.9	108.8	60.0	140.0
Carbon tetrachloride	22.3	111.7	60.0	140.0
Chlorobenzene	10.5	104.8	60.0	140.0
Chloroethane	7.6	76.0	60.0	140.0
Chloroform	10.8	108.0	60.0	140.0
Chloromethane	6.4	63.7	60.0	140.0
2-Chlorotoluene	10.7	106.9	60.0	140.0
4-Chlorotoluene	10.6	106.3	60.0	140.0
Dibromochloromethane	10.7	107.0	60.0	140.0
1,2-Dibromo-3-chloropropane	10.3	103.3	60.0	140.0
1,2-Dibromoethane (EDB)	10.1	101.2	60.0	140.0
Dibromomethane	10.0	100.3	60.0	140.0
1,2-Dichlorobenzene	10.7	107.1	60.0	140.0
1,3-Dichlorobenzene	10.6	106.3	60.0	140.0
1,4-Dichlorobenzene	10.9	109.5	60.0	140.0
Dichlorodifluoromethane	3.7	36.7 +	60.0	140.0
1,1-Dichloroethane	10.6	106.4	60.0	140.0
1,2-Dichloroethane	10.9	108.9	60.0	140.0
1,1-Dichloroethene	10.8	108.0	60.0	140.0
cis-1,2-Dichloroethene	24.0	119.9	60.0	140.0
trans-1,2-Dichloroethene	10.7	107.3	60.0	140.0
1,2-Dichloropropane	10.8	108.0	60.0	140.0
2,2-Dichloropropane	24.0	119.9	60.0	140.0
cis-1,3-Dichloropropene	10.5	105.0	60.0	140.0
trans-1,3-Dichloropropene	10.8	107.9	60.0	140.0
Diisopropyl ether	10.4	103.9	60.0	140.0
Ethylbenzene	11.1	110.8	60.0	140.0
Hexachlorobutadiene	11.3	113.2	60.0	140.0
Isopropylbenzene	11.1	111.1	60.0	140.0
p-Isopropyltoluene	21.9	109.5	60.0	140.0
Methyl-tert butyl ether	22.0	110.0	60.0	140.0
Methylene Chloride	10.7	107.1	60.0	140.0
Naphthalene	11.6	115.9	60.0	140.0
n-Propylbenzene	11.0	110.5	60.0	140.0
Styrene	22.0	110.2	60.0	140.0
1,1,1,2-Tetrachloroethane	11.2	111.6	60.0	140.0
1,1,2,2-Tetrachloroethane	22.1	73.6	60.0	140.0
Tetrachloroethene	21.9	109.7	60.0	140.0
Toluene	11.0	110.1	60.0	140.0
1,2,3-Trichlorobenzene	11.0	109.9	60.0	140.0
1,2,4-Trichlorobenzene	10.9	109.4	60.0	140.0
1,1,1-Trichloroethane	10.7	107.1	60.0	140.0

Reviewed by: Am



Control Limits for QC Check / Laboratory Control Spike

Method : 6230D Spike[ppb] : 10
 Instrument : gc3
 Filename : 011707\004f0101.txt
 011707\004r0101.txt

Compound	ppb	Q / L (%)	Limits	
			Lower	Upper
1,1,2-Trichloroethane	11.1	110.9	60.0	140.0
Trichloroethene	10.7	106.7	60.0	140.0
Trichlorofluoromethane	8.0	80.0	60.0	140.0
1,2,3-Trichloropropane	22.1	73.6	60.0	140.0
1,2,4-Trimethylbenzene	11.1	110.8	60.0	140.0
1,3,5-Trimethylbenzene	22.2	111.0	60.0	140.0
Vinyl Chloride	6.9	68.6	60.0	140.0
m/p-Xylene	22.3	111.4	60.0	140.0
o-Xylene	22.0	110.2	60.0	140.0

Flags :

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

Reviewed by: *me*



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011707\017f0101.txt

011707\017r0101.txt

MS : 011707\019f0101.txt

011707\019r0101.txt

MSD : 011707\020f0101.txt

011707\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	1.45	12.9	13.2	115	117	51	132
Bromobenzene	ND	21.5	21.5	72	72	51	132
Bromochloromethane	ND	10.7	10.7	107	107	51	132
Bromodichloromethane	ND	10.8	10.6	108	106	42	172
Bromoform	ND	9.3	9.4	93	94	13	159
Bromomethane	ND	6.0	6.5	60	65	1	144
n-Butylbenzene	1.64	23.8	24.4	111	114	51	132
sec-Butylbenzene	ND	11.5	11.8	113	115	51	132
tert-Butylbenzene	3.14	10.7	10.9	75	78	51	132
Carbon tetrachloride	ND	23.0	23.1	115	115	43	143
Chlorobenzene	ND	10.6	10.8	106	108	38	150
Chloroethane	ND	7.5	7.9	75	79	46	137
Chloroform	ND	11.3	11.3	113	113	49	133
Chloromethane	ND	6.3	6.8	63	68	1	193
2-Chlorotoluene	ND	10.8	11.0	108	110	51	132
4-Chlorotoluene	ND	10.8	11.3	108	113	51	132
Dibromochloromethane	ND	10.0	10.3	100	103	24	191
1,2-Dibromo-3-chloropropane	ND	9.7	10.1	97	101	51	132
1,2-Dibromomethane (EDB)	ND	10.1	10.2	101	102	51	132
Dibromomethane	ND	10.6	10.4	102	100	51	132
1,2-Dichlorobenzene	ND	10.7	11.3	107	113	1	208
1,3-Dichlorobenzene	ND	10.6	11.3	106	113	7	187
1,4-Dichlorobenzene	ND	10.7	11.3	107	113	42	143
Dichlorodifluoromethane	ND	3.4	3.7	34 +	37 +	51	132
1,1-Dichloroethane	ND	10.9	11.0	109	110	47	132
1,2-Dichloroethane	ND	11.4	11.6	114	116	51	147
1,1-Dichloroethene	ND	11.0	11.1	110	111	28	167
cis-1,2-Dichloroethene	ND	24.3	24.7	122	124	51	132
trans-1,2-Dichloroethene	ND	11.0	11.2	110	112	38	155
1,2-Dichloropropane	ND	11.4	11.3	114	113	44	156
2,2-Dichloropropane	ND	24.3	24.7	122	124	51	132
cis-1,3-Dichloropropene	ND	10.6	10.8	106	108	22	178
trans-1,3-Dichloropropene	ND	10.7	10.8	107	108	22	178
Diisopropyl ether	ND	10.6	10.7	105	107	51	132
Ethylbenzene	ND	10.5	10.8	105	108	51	132
Hexachlorobutadiene	ND	10.1	11.2	101	112	51	132
Isopropylbenzene	ND	11.5	11.6	113	114	51	132
p-Isopropyltoluene	ND	21.4	21.9	107	110	51	132
Methyl-tert butyl ether	ND	22.3	22.6	111	113	51	132
Methylene Chloride	ND	11.1	11.2	111	112	25	162
Naphthalene	2.33	13.3	14.3	109	119	51	132
n-Propylbenzene	ND	11.9	12.0	113	114	51	132
Styrene	9.00	32.0	32.3	115	116	51	132
1,1,1,2-Tetrachloroethane	ND	11.3	11.6	113	116	51	132
1,1,1,2,2-Tetrachloroethane	ND	21.5	21.5	72	72	8	184
Tetrachloroethene	ND	22.6	22.8	113	114	26	162
Toluene	37.69	49.7	49.2	120	116	51	132
1,2,3-Trichlorobenzene	ND	21.5	21.5	72	72	51	132
1,2,4-Trichlorobenzene	ND	10.4	11.1	104	111	51	132

Reviewed by: sm



Control Limits for MS-MSD

Method : 6230D Spike[ppb] : 10

Instrument : gc3

Sample : 011707\017f0101.txt 011707\017r0101.txt

MS : 011707\019f0101.txt 011707\019r0101.txt

MSD : 011707\020f0101.txt 011707\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
1,1,1-Trichloroethane	ND	11.0	11.2	110	112	41	138
1,1,2-Trichloroethane	ND	11.4	11.7	114	117	39	136
Trichloroethene	ND	11.2	11.1	112	111	35	146
Trichlorofluoromethane	ND	7.7	8.2	77	82	21	156
1,2,3-Trichloropropane	ND	21.5	21.5	72	72	51	132
1,2,4-Trimethylbenzene	8.98	20.8	21.0	119	120	51	132
1,3,5-Trimethylbenzene	2.38	25.2	25.6	114	116	51	132
Vinyl Chloride	ND	6.3	6.8	63	68	28	163
m/p-Xylene	17.08	40.5	40.3	117	116	51	132
o-Xylene	9.00	32.0	32.3	115	116	51	132

Flags :

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

Reviewed by: lme



Control Limits for MS-MSD

Method : 601 Spike[ppb] : 10
 Instrument : gc3
 Sample : 011807\035f0101.txt
 MS : 011807\037f0101.txt
 MSD : 011807\038f0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Bromodichloromethane	ND	12.0	12.0	120	120	42	172
Bromoform	ND	10.8	10.8	108	108	13	159
Bromomethane	ND	7.2	7.4	72	74	D	144
Carbon tetrachloride	ND	12.8	12.5	128	125	43	143
Chlorobenzene	ND	11.7	11.6	117	116	38	150
Chloroethane	ND	8.0	8.4	80	84	46	137
Chloroform	ND	12.5	12.4	125	124	49	133
Chloromethane	ND	5.7	5.9	57	59	D	193
Dibromochloromethane	ND	11.3	11.3	113	113	24	191
• 1,2-Dibromoethane	ND	11.4	11.3	114	113	D	206
1,2-Dichlorobenzene	ND	11.7	12.0	117	120	D	208
1,3-Dichlorobenzene	ND	11.7	11.9	117	119	7	187
1,4-Dichlorobenzene	ND	11.9	12.1	119	121	42	143
1,1-Dichloroethane	ND	12.2	12.3	122	123	47	132
1,2-Dichloroethane	ND	12.7	12.6	127	126	51	147
1,1-Dichloroethene	ND	12.2	12.2	122	122	28	167
• cis-1,2-Dichloroethene	ND	13.2	12.9	132	129	19	181
trans-1,2-Dichloroethene	ND	12.3	12.2	123	122	38	155
1,2-Dichloropropane	ND	12.5	12.6	125	126	44	156
cis-1,3-Dichloropropene	ND	11.9	11.8	119	118	22	178
trans-1,3-Dichloropropene	ND	11.8	11.7	118	117	22	178
Methylene Chloride	ND	12.3	12.3	123	123	25	162
1,1,2,2-Tetrachloroethane	ND	7.9	7.9	79	79	8	184
Tetrachloroethane	ND	12.4	12.2	124	122	26	162
1,1,1-Trichloroethane	ND	12.6	12.3	126	123	41	138
1,1,2-Trichloroethane	ND	12.6	12.5	126	125	39	136
Trichloroethene	ND	12.2	12.3	122	123	35	146
Trichlorofluoromethane	ND	8.5	9.0	85	90	21	156
Vinyl Chloride	ND	6.2	6.8	62	68	28	163

Method: 602 Spike[ppb] : 10
 Instrument : gc3
 Sample : 011807\035r0101.txt
 MS : 011807\037r0101.txt
 MSD : 011807\038r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	23.9	36.3	35.7	124	118	39	150
Chlorobenzene	ND	10.9	10.7	108	107	55	135
1,2-Dichlorobenzene	ND	10.5	10.6	104	106	37	154
1,3-Dichlorobenzene	ND	10.5	10.4	105	104	50	141
1,4-Dichlorobenzene	ND	10.6	10.5	106	105	42	143
• Diisopropyl ether	ND	10.4	10.1	104	101	30	170
Ethylbenzene	1.5	12.9	12.6	114	111	32	160
• MTBE	ND	11.3	11.1	111	109	35	165
Toluene	50.1	64.8	63.8	147	136	46	148
• m,p-Xylene	1.6	24.2	23.9	113	112	D	239
• o-Xylene	ND	11.8	11.6	111	110	36	164

Flags :

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

Reviewed by: hmr



Control Limits for QC Check / Laboratory Control Spike

Method : 601 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011807\022f0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Bromodichloromethane	10.1	100.9	76.0	124.0	101	42	172
Bromoform	9.1	91.0	73.5	126.5	91	13	159
Bromomethane	6.4	63.8	58.5	141.5	64	D	144
Carbon tetrachloride	11.1	110.8	68.5	131.5	111	43	143
Chlorobenzene	9.9	98.8	72.0	128.0	99	38	150
Chloroethane	6.3	62.6 +	77.0	123.0	63	46	137
Chloroform	10.5	104.7	75.0	125.0	105	49	133
Chloromethane	4.7	46.7 +	59.5	140.5	47	D	193
Dibromochloromethane	9.5	95.2	65.5	134.5	95	24	191
• 1,2-Dibromoethane	9.4	93.6	13.6	186.4	94	D	206
1,2-Dichlorobenzene	10.2	102.2	70.0	130.0	102	D	208
1,3-Dichlorobenzene	10.1	101.1	49.5	150.5	101	7	187
1,4-Dichlorobenzene	10.2	102.3	69.5	130.5	102	42	143
1,1-Dichloroethane	10.6	105.6	84.0	116.0	106	47	132
1,2-Dichloroethane	10.6	105.7	71.5	128.5	106	51	147
1,1-Dichloroethene	10.4	103.9	63.0	137.0	104	28	167
• cis-1,2-Dichloroethene	11.7	116.9	34.4	180.6	117	19	181
trans-1,2-Dichloroethene	10.7	106.9	64.0	136.0	107	38	155
1,2-Dichloropropane	10.6	105.8	74.0	126.0	106	44	156
cis-1,3-Dichloropropene	10.1	100.6	64.0	136.0	101	22	178
trans-1,3-Dichloropropene	10.0	100.2	64.0	136.0	100	22	178
Methylene Chloride	10.6	105.8	77.5	122.5	106	25	162
1,1,2,2-Tetrachloroethane	6.7	67.4	49.0	151.0	67	8	184
Tetrachloroethane	10.7	106.9	70.0	130.0	107	26	162
1,1,1-Trichloroethane	10.3	102.8	71.0	129.0	103	41	138
1,1,2-Trichloroethane	10.7	107.0	78.5	121.5	107	39	136
Trichloroethene	10.3	103.4	77.0	123.0	103	35	146
Trichlorofluoromethane	6.6	65.8 +	66.5	133.5	66	21	156
Vinyl Chloride	5.0	49.6 +	68.5	131.5	50	28	163

Method: 602 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011807\022r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	9.5	94.9	77.0	123.0	95	39	150
Chlorobenzene	9.3	93.0	80.5	119.5	93	55	135
1,2-Dichlorobenzene	9.5	95.4	68.0	132.0	95	37	154
1,3-Dichlorobenzene	9.3	92.9	72.5	127.5	93	50	141
1,4-Dichlorobenzene	9.4	93.9	69.5	130.5	94	42	143
• Diisopropyl ether	8.9	89.3	43.1	156.9	89	30	170
Ethylbenzene	9.5	94.9	63.0	137.0	95	32	160
• MTBE	9.4	94.2	46.8	153.2	94	35	165
Toluene	9.5	94.8	77.5	127.0	95	46	148
• m,p-Xylene	19.1	95.4	11.2	188.8	95	D	239
• o-Xylene	9.4	94.3	47.6	152.4	94	36	164

Flags :

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

Reviewed by: mu



Control Limits for QC Check / Laboratory Control Spike

Method : 601 Spike[ppb] : 10

Instrument : gc3

Filename : 011807\023f0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Bromodichloromethane	10.2	101.8	76.0	124.0	102	42	172
Bromoform	9.3	92.7	73.5	126.5	93	13	159
Bromomethane	6.4	63.7	58.5	141.5	64	D	144
Carbon tetrachloride	11.1	111.3	68.5	131.5	111	43	143
Chlorobenzene	10.5	105.0	72.0	128.0	105	38	150
Chloroethane	7.0	70.3 +	77.0	123.0	70	46	137
Chloroform	10.9	108.8	75.0	125.0	109	49	133
Chloromethane	5.0	50.4 +	59.5	140.5	50	D	193
Dibromochloromethane	9.8	98.3	65.5	134.5	98	24	191
• 1,2-Dibromoethane	9.9	99.1	13.6	186.4	99	D	206
1,2-Dichlorobenzene	10.4	104.1	70.0	130.0	104	D	208
1,3-Dichlorobenzene	10.4	103.7	49.5	150.5	104	7	187
1,4-Dichlorobenzene	10.6	106.3	69.5	130.5	106	42	143
1,1-Dichloroethane	10.7	106.5	84.0	116.0	107	47	132
1,2-Dichloroethane	10.9	109.3	71.5	128.5	109	51	147
1,1-Dichloroethene	10.7	107.2	63.0	137.0	107	28	167
• cis-1,2-Dichloroethene	11.8	118.3	34.4	180.6	118	19	181
trans-1,2-Dichloroethene	10.8	108.2	64.0	136.0	108	38	155
1,2-Dichloropropane	10.8	108.1	74.0	126.0	108	44	156
cis-1,3-Dichloropropene	10.5	104.7	64.0	136.0	105	22	178
trans-1,3-Dichloropropene	10.6	106.1	64.0	136.0	106	22	178
Methylene Chloride	10.8	107.9	77.5	122.5	108	25	162
1,1,2,2-Tetrachloroethane	7.0	69.9	49.0	151.0	70	8	184
Tetrachloroethane	11.2	112.0	70.0	130.0	112	26	162
1,1,1-Trichloroethane	10.7	107.4	71.0	129.0	107	41	138
1,1,2-Trichloroethane	11.2	112.4	78.5	121.5	112	39	136
Trichloroethene	10.8	107.9	77.0	123.0	108	35	146
Trichlorofluoromethane	7.5	75.1	66.5	133.5	75	21	156
Vinyl Chloride	5.9	58.6 +	68.5	131.5	59	28	163

Method: 602 Spike[ppb] : 10

Instrument : gc3

Filename : 011807\023r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	9.7	97.4	77.0	123.0	97	39	150
Chlorobenzene	9.4	94.4	80.5	119.5	94	55	135
1,2-Dichlorobenzene	9.4	94.1	68.0	132.0	94	37	154
1,3-Dichlorobenzene	9.3	93.1	72.5	127.5	93	50	141
1,4-Dichlorobenzene	9.4	93.5	69.5	130.5	94	42	143
• Diisopropyl ether	9.2	92.0	43.1	156.9	92	30	170
Ethylbenzene	9.6	96.3	63.0	137.0	96	32	160
• MTBE	9.7	96.5	46.8	153.2	97	35	165
Toluene	9.6	96.4	77.5	127.0	96	46	148
• m,p-Xylene	19.3	96.4	11.2	188.8	96	D	239
• o-Xylene	9.5	95.2	47.6	152.4	95	36	164

Flags :

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

Reviewed by: me



Control Limits for MS-MSD

Method : 601 Spike[ppb] : 10

Instrument : gc3

Sample : 011907\010f0101.txt

MS : 011907\019f0101.txt

MSD : 011907\020f0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Bromodichloromethane	ND	10.3	11.2	103	112	42	172
Bromofom	ND	10.9	12.1	109	121	13	159
Bromomethane	ND	5.0	5.9	50	59	D	144
Carbon tetrachloride	ND	10.9	12.2	109	122	43	143
Chlorobenzene	ND	10.2	11.4	102	114	38	150
Chloroethane	ND	6.9	8.8	69	88	46	137
Chloroform	ND	10.5	11.6	105	116	49	133
Chloromethane	ND	6.4	8.1	64	81	D	193
Dibromochloromethane	ND	10.4	11.6	104	116	24	191
• 1,2-Dibromoethane	ND	9.9	10.9	99	109	D	206
1,2-Dichlorobenzene	ND	10.9	12.1	109	121	D	208
1,3-Dichlorobenzene	ND	10.5	11.9	105	119	7	187
1,4-Dichlorobenzene	ND	10.9	12.0	109	120	42	143
1,1-Dichloroethane	ND	10.6	11.4	106	114	47	132
1,2-Dichloroethane	ND	11.1	12.1	111	121	51	147
1,1-Dichloroethene	ND	10.7	11.8	107	118	28	167
• cis-1,2-Dichloroethene	ND	11.8	13.0	118	130	19	181
trans-1,2-Dichloroethene	ND	10.8	11.7	108	117	38	155
1,2-Dichloropropane	ND	10.6	11.7	106	117	44	156
cis-1,3-Dichloropropene	ND	10.1	11.2	101	112	22	178
trans-1,3-Dichloropropene	ND	10.5	11.4	105	114	22	178
Methylene Chloride	ND	10.8	12.0	108	120	25	162
1,1,2,2-Tetrachloroethane	ND	7.4	8.3	74	83	8	184
Tetrachloroethane	ND	10.9	12.0	109	120	26	162
1,1,1-Trichloroethane	ND	10.5	11.5	105	115	41	138
1,1,2-Trichloroethane	ND	10.9	12.0	109	120	39	136
Trichloroethene	ND	10.4	11.8	104	118	35	146
Trichlorofluoromethane	ND	6.0	8.0	60	80	21	156
Vinyl Chloride	ND	4.4	5.9	44	59	28	163

Method: 602 Spike[ppb] : 10

Instrument : gc3

Sample : 011907\010r0101.txt

MS : 011907\019r0101.txt

MSD : 011907\020r0101.txt

Compound	µg/L			P(%)		P Limits	
	Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	ND	9.9	10.7	99	107	39	150
Chlorobenzene	ND	9.4	10.3	94	103	55	135
1,2-Dichlorobenzene	ND	9.7	10.7	97	106	37	154
1,3-Dichlorobenzene	ND	9.5	10.4	94	103	50	141
1,4-Dichlorobenzene	ND	9.5	10.4	92	101	42	143
• Diisopropyl ether	ND	8.7	9.7	87	97	30	170
Ethylbenzene	ND	9.6	10.5	96	105	32	160
• MTBE	ND	9.5	10.4	95	104	35	165
Toluene	ND	10.2	10.8	102	108	46	148
• m,p-Xylene	ND	19.4	21.2	97	106	D	239
• o-Xylene	ND	9.3	10.2	92	101	36	164

Flags :

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

Reviewed by: mm



Control Limits for QC Check / Laboratory Control Spike

Method : 601 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011907\005f0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Bromodichloromethane	11.4	113.7	76.0	124.0	114	42	172
Bromoform	10.9	108.6	73.5	126.5	109	13	159
Bromomethane	6.9	68.8	58.5	141.5	69	D	144
Carbon tetrachloride	12.0	119.9	68.5	131.5	120	43	143
Chlorobenzene	11.2	111.6	72.0	128.0	112	38	150
Chloroethane	7.1	70.7 +	77.0	123.0	71	46	137
Chloroform	11.8	118.0	75.0	125.0	118	49	133
Chloromethane	4.8	48.5 +	59.5	140.5	48	D	193
Dibromochloromethane	11.2	112.4	65.5	134.5	112	24	191
• 1,2-Dibromoethane	10.5	104.5	13.6	186.4	105	D	206
1,2-Dichlorobenzene	11.1	111.4	70.0	130.0	111	D	208
1,3-Dichlorobenzene	11.4	114.0	49.5	150.5	114	7	187
1,4-Dichlorobenzene	11.4	113.6	69.5	130.5	114	42	143
1,1-Dichloroethane	11.5	114.7	84.0	116.0	115	47	132
1,2-Dichloroethane	11.7	117.2	71.5	128.5	117	51	147
1,1-Dichloroethene	11.6	116.0	63.0	137.0	116	28	167
• cis-1,2-Dichloroethene	12.9	129.5	34.4	180.6	129	19	181
trans-1,2-Dichloroethene	11.8	117.7	64.0	136.0	118	38	155
1,2-Dichloropropane	12.0	119.5	74.0	126.0	120	44	156
cis-1,3-Dichloropropene	11.2	112.3	64.0	136.0	112	22	178
trans-1,3-Dichloropropene	11.4	113.6	64.0	136.0	114	22	178
Methylene Chloride	11.7	116.5	77.5	122.5	117	25	162
1,1,2,2-Tetrachloroethane	7.5	75.4	49.0	151.0	75	8	184
Tetrachloroethane	12.0	119.9	70.0	130.0	120	26	162
1,1,1-Trichloroethane	11.6	115.9	71.0	129.0	116	41	138
1,1,2-Trichloroethane	11.7	117.0	78.5	121.5	117	39	136
Trichloroethene	11.5	115.2	77.0	123.0	115	35	146
Trichlorofluoromethane	7.7	76.8	66.5	133.5	77	21	156
Vinyl Chloride	5.9	58.6 +	68.5	131.5	59	28	163

Method: 602 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011907\005r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.5	104.9	77.0	123.0	105	39	150
Chlorobenzene	10.3	103.2	80.5	119.5	103	55	135
1,2-Dichlorobenzene	10.5	105.5	68.0	132.0	105	37	154
1,3-Dichlorobenzene	10.3	102.8	72.5	127.5	103	50	141
1,4-Dichlorobenzene	10.3	102.9	69.5	130.5	103	42	143
• Diisopropyl ether	9.9	98.8	43.1	156.9	99	30	170
Ethylbenzene	10.5	105.4	63.0	137.0	105	32	160
• MTBE	10.4	104.1	46.8	153.2	104	35	165
Toluene	10.5	105.0	77.5	127.0	105	46	148
• m,p-Xylene	21.2	105.8	11.2	188.8	106	D	239
• o-Xylene	10.4	104.5	47.6	152.4	104	36	164

Flags :

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

Reviewed by: Am



Control Limits for QC Check / Laboratory Control Spike

Method : 601 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011907\004f0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Bromodichloromethane	11.1	111.2	76.0	124.0	111	42	172
Bromoform	11.6	115.6	73.5	126.5	116	13	159
Bromomethane	7.1	70.8	58.5	141.5	71	D	144
Carbon tetrachloride	11.8	118.5	68.5	131.5	118	43	143
Chlorobenzene	11.3	112.7	72.0	128.0	113	38	150
Chloroethane	7.4	73.9 +	77.0	123.0	74	46	137
Chloroform	11.5	114.9	75.0	125.0	115	49	133
Chloromethane	5.0	50.0 +	59.5	140.5	50	D	193
Dibromochloromethane	11.2	111.9	65.5	134.5	112	24	191
• 1,2-Dibromoethane	10.5	105.5	13.6	186.4	105	D	206
1,2-Dichlorobenzene	11.1	110.7	70.0	130.0	111	D	208
1,3-Dichlorobenzene	11.1	111.2	49.5	150.5	111	7	187
1,4-Dichlorobenzene	11.3	113.0	69.5	130.5	113	42	143
1,1-Dichloroethane	11.3	113.4	84.0	116.0	113	47	132
1,2-Dichloroethane	11.6	115.8	71.5	128.5	116	51	147
1,1-Dichloroethene	11.4	113.7	63.0	137.0	114	28	167
• cis-1,2-Dichloroethene	12.7	127.4	34.4	180.6	127	19	181
trans-1,2-Dichloroethene	11.4	114.0	64.0	136.0	114	38	155
1,2-Dichloropropane	11.6	115.6	74.0	126.0	116	44	156
cis-1,3-Dichloropropene	11.2	112.1	64.0	136.0	112	22	178
trans-1,3-Dichloropropene	11.2	112.0	64.0	136.0	112	22	178
Methylene Chloride	11.3	112.8	77.5	122.5	113	25	162
1,1,2,2-Tetrachloroethane	7.4	74.4	49.0	151.0	74	8	184
Tetrachloroethane	11.7	116.9	70.0	130.0	117	26	162
1,1,1-Trichloroethane	11.3	113.2	71.0	129.0	113	41	138
1,1,2-Trichloroethane	11.6	115.6	78.5	121.5	116	39	136
Trichloroethene	11.3	112.8	77.0	123.0	113	35	146
Trichlorofluoromethane	8.0	80.3	66.5	133.5	80	21	156
Vinyl Chloride	6.3	62.6 +	68.5	131.5	63	28	163

Method: 602 Spike[ppb] : 10
 Instrument : gc3
 Filename : 011907\004r0101.txt

Compound	ppb	Q(%)	QC Limits		P _s (%)	LCS Limits	
			Lower	Upper		Lower	Upper
Benzene	10.2	102.4	77.0	123.0	102	39	150
Chlorobenzene	10.0	100.3	80.5	119.5	100	55	135
1,2-Dichlorobenzene	10.3	103.4	68.0	132.0	103	37	154
1,3-Dichlorobenzene	10.0	100.3	72.5	127.5	100	50	141
1,4-Dichlorobenzene	10.1	101.4	69.5	130.5	101	42	143
• Diisopropyl ether	9.6	95.9	43.1	156.9	96	30	170
Ethylbenzene	10.3	102.5	63.0	137.0	103	32	160
• MTBE	10.1	101.2	46.8	153.2	101	35	165
Toluene	10.2	102.1	77.5	127.0	102	46	148
• m,p-Xylene	20.5	102.7	11.2	188.8	103	D	239
• o-Xylene	10.2	101.7	47.6	152.4	102	36	164

Flags :

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

Reviewed by:

**Results for Metals**

Client Sample ID: UST645-MW16
Client Project ID: NV016
Lab Sample ID: G650-98-1
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/11/2007 9:35
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: lm
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW18
Client Project ID: NV016
Lab Sample ID: G650-98-2
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/10/2007 11:45
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW25
Client Project ID: NV016
Lab Sample ID: G650-98-3
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/10/2007 15:53
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Samples Prepared by 3030C

Reviewed By: fm
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW26
Client Project ID: NV016
Lab Sample ID: G650-98-4
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/11/2007 10:10
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: hml
MET_LIMS_4.1.XLS



Results for Metals

Client Sample ID: UST645-MW27
 Client Project ID: NV016
 Lab Sample ID: G650-98-5
 Lab Project ID: G650-98
 Batch ID: 7093

Analyzed By: AEC
 Date Collected: 1/11/2007 15:15
 Date Received: 1/12/2007
 Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL
 Samples Prepared by 3030C

Reviewed By: *Am*
 MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW29
Client Project ID: NV016
Lab Sample ID: G650-98-6
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/11/2007 16:00
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: hm
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW30
Client Project ID: NV016
Lab Sample ID: G650-98-7
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/10/2007 14:50
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: lu
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW31
Client Project ID: NV016
Lab Sample ID: G650-98-8
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/10/2007 10:30
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: fm
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-MW32
Client Project ID: NV016
Lab Sample ID: G650-98-9
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/11/2007 12:50
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL
Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS

**Results for Metals**

Client Sample ID: UST645-Duplicate
Client Project ID: NV016
Lab Sample ID: G650-98-10
Lab Project ID: G650-98
Batch ID: 7093

Analyzed By: AEC
Date Collected: 1/10/2007 0:00
Date Received: 1/12/2007
Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits

DF = Dilution Factor

J = Between MDL and RL

B= Amount in Prep Blank > MDL

Samples Prepared by 3030C

Reviewed By: 
MET_LIMS_4.1.XLS



Results for Metals

Client Sample ID: Lab Blank
 Client Project ID:
 Lab Sample ID: pb7093
 Lab Project ID:
 Batch ID: 7093

Analyzed By: AEC
 Date Collected:
 Date Received:
 Matrix: WATER

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Lead	BQL	5.00	0.470	25	UG/L	6020	1/18/2007	

Comments

BQL = Below Quantitation Limits
 DF = Dilution Factor
 J = Between MDL and RL
 B= Amount in Prep Blank > MDL
 Samples Prepared by 3030C

Reviewed By: fm
 MET_LIMS_4.1.XLS



METALS Results for LCS/LCD

ICP Batch: 7093

HG Batch:

Other:

Matrix: WATER

Units: MG/L

Analyte	TRUE Value	LCS	LCS %REC		LCD	LCD %REC	Limit		RPD		RPD Limit
							Lower	Upper			
Lead	0.400	0.39	97.5		0.391	97.7	80	120	0.256		20

Reviewed By: mm



MS/MSD Results for METALS

Lab ID: G650-98-5
 MS Lab ID: G650-98-5
 MSD Lab ID: G650-98-5
 ICP Batch: 7093
 HG Batch:
 Other:

Analyzed By: AEC
 Matrix: Water
 Units: MG/L

Analyte	Sample Result	SA MS	MS Result	MS %REC	SA MSD	MSD Result	MSD %REC	Limit		RPD	RPD Limit
								Lower	Upper		
Lead	BQL	0.400	0.419	105	0.400	0.420	105	75	125	0.238	20

Comments

*=Out of Limits

NA = Not applicable, due to sample concentration greater than three times spike concentration

Reviewed By: me



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

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

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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

1		SGS Reference:		6050-98		PAGE 1 OF 2	
CLIENT: Sargeen Consulting Inc		PHONE NO: (910) 526-8941		PROJECT: NVO10		REPORTS TO: Chris Murray	
CONTACT: Theresa Elbertson		SITE/PWSID#: Bldg 645		E-MAIL: cmurray@secon.com		FAX NO: (757) 456-5855	
INVOICE TO: 405 OAK MEANS CROSSING STE 1 VIRGINIA BEACH VA 23462		QUOTE # 28402		LAB NO.		SAMPLE IDENTIFICATION	
DATE		TIME		DATE		TIME	
1/11/07		0935		1/11/07		0935	
1/10/07		1145		1/10/07		1145	
1/10/07		1553		1/10/07		1553	
1/11/07		1010		1/11/07		1010	
1/11/07		1515		1/11/07		1515	
1/11/07		1600		1/11/07		1600	
1/10/07		1450		1/10/07		1450	
1/10/07		1030		1/10/07		1030	
1/11/07		1250		1/11/07		1250	
1/10/07		---		1/10/07		---	
5		Collected/Relinquished By: (1)		Date		Time	
Murray		1/10/07		1/10/07		0935	
Relinquished By: (2)		Date		Time		Time	
1/12/07		1015		1/12/07		1015	
Relinquished By: (3)		Date		Time		Time	
1/12/07		1015		1/12/07		1015	
Relinquished By: (4)		Date		Time		Time	
1/12/07		1015		1/12/07		1015	
6		Shipping Carrier: FEDEX		Shipping Ticket No: 5711		Special Deliverable Requirements: EDD READY	
800 1563		Temperature [C: 1-2		Chain of Custody Seal: (Circle) YES NO		INTACT BROKEN	
Requested Turnaround Time and Special Instructions: Standard Turnaround Email results in "EDD Format" to: nhall@secon.com / cmurray@secon.com		Requested Turnaround Time and Special Instructions: Standard Turnaround Email results in "EDD Format" to: nhall@secon.com / cmurray@secon.com		Requested Turnaround Time and Special Instructions: Standard Turnaround Email results in "EDD Format" to: nhall@secon.com / cmurray@secon.com		Requested Turnaround Time and Special Instructions: Standard Turnaround Email results in "EDD Format" to: nhall@secon.com / cmurray@secon.com	



Mr. Chris Murray
Sovereign Consulting
405 Oakmeads Crescent
Suite 1
Virginia Beach VA 23462
Report Number: G650-112
Client Project: NV016

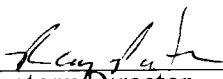
Dear Mr. Murray:

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

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

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

Sincerely,
SGS/Paradigm Analytical Laboratories, Inc.


Laboratory Director
J. Patrick Weaver

3/30/2007
Date

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW18

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 10:17

Lab Sample ID: G650-112-1A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	3.97	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	16.8	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	0.520	1.00	0.157	1	3/27/2007	J
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	37.8	94.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW26

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 15:02

Lab Sample ID: G650-112-2A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	2060	500	91.5	500	3/29/2007	
Diisopropyl ether (DIPE)	BQL	500	115	500	3/29/2007	
Ethylbenzene	325	500	90.5	500	3/29/2007	J
Methyl-tert butyl ether (MTBE)	BQL	1000	180	500	3/29/2007	
Toluene	13900	500	78.5	500	3/29/2007	
m/p-Xylene	436	1000	241	500	3/29/2007	J
o-Xylene	BQL	1000	292	500	3/29/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.3	101

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW27

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 13:07

Lab Sample ID: G650-112-3A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	BQL	1.00	0.157	1	3/27/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.1	95.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW29

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 11:05

Lab Sample ID: G650-112-4A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	36.6	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	0.600	1.00	0.157	1	3/27/2007	J
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	39.7	99.3

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW30

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 12:21

Lab Sample ID: G650-112-5A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	0.493	1.00	0.229	1	3/27/2007	J
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	BQL	1.00	0.157	1	3/27/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.0	94.9

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: UST645-MW32

Analyzed By: RSB

Client Project ID: NV016

Date Collected: 3/22/2007 14:28

Lab Sample ID: G650-112-6A

Date Received: 3/23/2007

Lab Project ID: G650-112

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	80.4	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	0.634	1.00	0.157	1	3/27/2007	J
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.0	95

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: DUPLICATE

Client Project ID: NV016

Lab Sample ID: G650-112-7A

Lab Project ID: G650-112

Analyzed By: RSB

Date Collected: 3/22/2007 0:00

Date Received: 3/23/2007

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	BQL	1.00	0.157	1	3/27/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.2	95.5

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

**Results for Volatiles**

by GC 602

Client Sample ID: Trip Blank

Client Project ID: NV016

Lab Sample ID: G650-112-8A

Lab Project ID: G650-112

Analyzed By: RSB

Date Collected: 3/22/2007 0:00

Date Received: 3/23/2007

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	BQL	1.00	0.157	1	3/27/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

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.

**Results for Volatiles**

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK3032707A

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/27/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/27/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/27/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/27/2007	
Toluene	BQL	1.00	0.157	1	3/27/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/27/2007	
o-Xylene	BQL	2.00	0.584	1	3/27/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	38.6	96.4

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.

Summary Results for MS-MSD

Sample : 032707/017F::032707/017R

MS : 032707/019F::032707/019R

MSD : 032707/020F::032707/020R

Compound	SA	µg/L			REC(%)		REC Limits	
		Sam.	MS	MSD	MS	MSD	Lower	Upper
Bromodichloromethane	10.0	ND	12.0	9.3	120	93	42	172
Bromoform	10.0	ND	9.4	7.0	94	70	13	159
Bromomethane	10.0	ND	8.8	7.1	88	71	D	144
Carbon tetrachloride	20.0	ND	26.1	20.6	131	103	43	143
Chlorobenzene	10.0	ND	11.9	9.0	119	90	38	150
Chloroethane	10.0	ND	10.7	8.0	107	80	46	137
Chloroform	10.0	ND	13.0	10.2	130	102	49	133
Chloromethane	10.0	ND	11.7	8.9	121	93	D	193
Dibromochloromethane	10.0	ND	11.1	8.5	111	85	24	191
1,2-Dibromoethane	10.0	ND	11.2	8.6	121	94	D	206
1,2-Dichlorobenzene	10.0	ND	12.4	9.6	124	96	D	208
1,3-Dichlorobenzene	10.0	ND	12.1	9.4	121	94	7	187
1,4-Dichlorobenzene	10.0	ND	12.3	9.7	123	97	42	143
1,1-Dichloroethane	10.0	ND	12.6	9.8	126	98	47	132
1,2-Dichloroethane	20.0	ND	12.9	10.0	65	50 +	51	147
1,1-Dichloroethene	10.0	ND	11.8	9.1	118	91	28	167
cis-1,2-Dichloroethene	20.0	ND	26.0	20.4	130	102	19	181
trans-1,2-Dichloroethene	10.0	ND	12.2	9.5	122	95	38	155
1,2-Dichloropropane	10.0	ND	12.8	10.3	145	119	44	156
cis-1,3-Dichloropropene	10.0	ND	11.6	8.9	116	89	22	178
trans-1,3-Dichloropropene	10.0	ND	11.7	9.1	124	97	22	178
Methylene Chloride	10.0	ND	10.7	7.8	140	111	25	162
1,1,2,2-Tetrachloroethane	20.0	ND	22.2	16.2	111	81	8	184
Tetrachloroethane	20.0	7.88	33.2	28.0	126	101	26	162
1,1,1-Trichloroethane	10.0	ND	12.8	10.0	128	100	41	138
1,1,2-Trichloroethane	10.0	ND	13.0	10.2	130	102	39	136
Trichloroethene	10.0	ND	12.5	9.7	125	97	35	146
Trichlorofluoromethane	10.0	ND	10.8	7.8	108	78	21	156
Vinyl Chloride	10.0	ND	10.8	8.2	117	91	28	163

Method: 602

Compound	SA	µg/L			P(%)		P Limits	
		Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	10.0	ND	11.2	8.3	113	84	39	150
Chlorobenzene	10.0	ND	10.8	8.2	112	85	55	135
1,2-Dichlorobenzene	10.0	ND	21.8	16.7	224 +	172 +	37	154
1,3-Dichlorobenzene	10.0	ND	10.7	8.2	107	82	50	141
1,4-Dichlorobenzene	20.0	ND	21.4	16.2	110	84	42	143
Diisopropyl ether	10.0	ND	11.2	8.5	112	85	30	170
Ethylbenzene	10.0	ND	11.2	8.4	114	87	32	160
MTBE	20.0	ND	21.7	16.5	109	82	35	165
Toluene	10.0	1.2	12.8	8.5	116	73	46	148
m,p-Xylene	20.0	ND	22.1	16.7	114	87	D	239
o-Xylene	20.0	ND	22.0	16.6	114	87	36	164

Flags :

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

Summary Results for Laboratory Control Spike

Method : 601

Filename : 032707/004F

Compound	SA	Result	Rec	F	LCS Limits	
	ug/L	ug/L	(%)		Lower	Upper
Bromodichloromethane	10.0	8.2	82.1		42	172
Bromoform	10.0	6.7	66.6		13	159
Bromomethane	10.0	6.1	61.4		0	144
Carbon tetrachloride	20.0	18.4	91.9		43	143
Chlorobenzene	10.0	8.1	81.1		38	150
Chloroethane	10.0	6.9	68.5		46	137
Chloroform	10.0	9.0	90.1		49	133
Chloromethane	10.0	7.5	75.4		0	193
Dibromochloromethane	10.0	7.6	75.6		24	191
1,2-Dibromoethane	10.0	7.6	75.7		0	206
1,2-Dichlorobenzene	10.0	8.6	86.0		0	208
1,3-Dichlorobenzene	10.0	8.4	84.4		7	187
1,4-Dichlorobenzene	10.0	8.7	87.3		42	143
1,1-Dichloroethane	10.0	8.7	87.5		47	132
1,2-Dichloroethane	10.0	9.0	90.1		51	147
1,1-Dichloroethene	10.0	8.1	81.3		28	167
cis-1,2-Dichloroethene	20.0	18.6	93.1		19	181
trans-1,2-Dichloroethene	10.0	8.5	84.5		38	155
1,2-Dichloropropane	10.0	9.2	91.9		44	156
cis-1,3-Dichloropropene	10.0	8.1	81.2		22	178
trans-1,3-Dichloropropene	10.0	8.3	83.3		22	178
Methylene Chloride	10.0	6.7	67.3		25	162
1,1,2,2-Tetrachloroethane	20.0	14.2	71.0		8	184
Tetrachloroethane	10.0	9.0	89.9		26	162
1,1,1-Trichloroethane	10.0	8.9	89.4		41	138
1,1,2-Trichloroethane	10.0	9.1	91.2		39	136
Trichloroethene	10.0	8.7	87.4		35	146
Trichlorofluoromethane	10.0	6.7	66.7		21	156
Vinyl Chloride	10.0	7.0	70.4		28	163

Method: 602

Filename : 032707/004R

Compound	SA	Result	Rec	LCS Limits	
	ug/L	ug/L	(%)	Lower	Upper
Benzene	10.0	7.3	73.3	39	150
Chlorobenzene	10.0	7.2	72.4	55	135
1,2-Dichlorobenzene	20.0	15.0	74.8	37	154
1,3-Dichlorobenzene	10.0	7.4	73.6	50	141
1,4-Dichlorobenzene	20.0	14.7	73.6	42	143
Diisopropyl ether	10.0	7.4	74.3	30	170
Ethylbenzene	10.0	7.4	73.8	32	160
MTBE	20.0	14.6	73.0	35	165
Toluene	10.0	7.3	73.0	46	148
m,p-Xylene	20.0	14.7	73.4	0	239
o-Xylene	20.0	14.7	73.5	36	164

Flags :

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

Summary Results for Laboratory Control Spike

Method : 601

Filename : 032707/005F

Compound	SA	Result	Rec	F	LCS Limits	
	ug/L	ug/L	(%)		Lower	Upper
Bromodichloromethane	10.0	9.2	92.5		42	172
Bromoform	10.0	6.8	68.4		13	159
Bromomethane	10.0	7.3	72.8		0	144
Carbon tetrachloride	20.0	20.6	103.2		43	143
Chlorobenzene	10.0	9.2	91.7		38	150
Chloroethane	10.0	8.5	85.3		46	137
Chloroform	10.0	10.3	102.5		49	133
Chloromethane	10.0	9.1	90.8		0	193
Dibromochloromethane	10.0	8.3	83.0		24	191
• 1,2-Dibromoethane	10.0	8.6	85.6		0	206
1,2-Dichlorobenzene	10.0	9.7	96.9		0	208
1,3-Dichlorobenzene	10.0	9.6	96.2		7	187
1,4-Dichlorobenzene	10.0	9.8	98.4		42	143
1,1-Dichloroethane	10.0	10.0	99.5		47	132
1,2-Dichloroethane	10.0	10.1	100.7		51	147
1,1-Dichloroethene	10.0	9.3	93.0		28	167
• cis-1,2-Dichloroethene	20.0	21.0	104.9		19	181
trans-1,2-Dichloroethene	10.0	9.7	96.6		38	155
1,2-Dichloropropane	10.0	10.5	104.9		44	156
cis-1,3-Dichloropropene	10.0	9.1	91.4		22	178
trans-1,3-Dichloropropene	10.0	9.4	94.2		22	178
Methylene Chloride	10.0	7.8	78.2		25	162
1,1,2,2-Tetrachloroethane	20.0	15.9	79.3		8	184
Tetrachloroethane	10.0	10.3	102.7		26	162
1,1,1-Trichloroethane	10.0	10.1	101.2		41	138
1,1,2-Trichloroethane	10.0	10.1	101.2		39	136
Trichloroethene	10.0	9.8	98.1		35	146
Trichlorofluoromethane	10.0	8.4	84.3		21	156
Vinyl Chloride	10.0	8.7	87.4		28	163

Method: 602

Filename : 032707/005R

Compound	SA	Result	Rec	LCS Limits	
	ug/L	ug/L	(%)	Lower	Upper
Benzene	10.0	8.3	83.4	39	150
Chlorobenzene	10.0	8.2	82.2	55	135
1,2-Dichlorobenzene	20.0	17.0	84.8	37	154
1,3-Dichlorobenzene	10.0	8.3	82.8	50	141
1,4-Dichlorobenzene	20.0	16.8	83.8	42	143
• Diisopropyl ether	10.0	8.5	84.8	30	170
Ethylbenzene	10.0	8.4	83.7	32	160
• MTBE	20.0	16.6	82.8	35	165
Toluene	10.0	8.3	83.0	46	148
• m,p-Xylene	20.0	16.7	83.4	0	239
• o-Xylene	20.0	16.7	83.7	36	164

Flags :

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

**Results for Volatiles**

by GC 602

Client Sample ID: Method Blank

Analyzed By: RSB

Client Project ID:

Date Collected:

Lab Sample ID: VBLK5032807B

Date Received:

Lab Project ID:

Matrix: Water

Analyte	Result ug/L	RL ug/L	MDL ug/L	Dilution Factor	Date Analyzed	Flags
Benzene	BQL	1.00	0.183	1	3/28/2007	
Diisopropyl ether (DIPE)	BQL	1.00	0.229	1	3/28/2007	
Ethylbenzene	BQL	1.00	0.181	1	3/28/2007	
Methyl-tert butyl ether (MTBE)	BQL	2.00	0.359	1	3/28/2007	
Toluene	BQL	1.00	0.157	1	3/28/2007	
m/p-Xylene	BQL	2.00	0.481	1	3/28/2007	
o-Xylene	BQL	2.00	0.584	1	3/28/2007	

Surrogate Spike Recoveries

	Spike Added	Spike Result	Percent Recovery
Trifluorotoluene	40	40.7	102

Comments:

All values corrected for dilution.

BQL = Below quantitation limit.



Summary Results for Laboratory Control Spike

Method: 602

Filename : 032807/023f

Compound	SA	Result	Rec	LCS Limits	
	ug/L	ug/L	(%)	Lower	Upper
Benzene	10.0	10.6	105.9	39	150
Chlorobenzene	10.0	10.2	101.9	55	135
1,2-Dichlorobenzene	20.0	20.7	103.7	37	154
1,3-Dichlorobenzene	10.0	10.1	101.5	50	141
1,4-Dichlorobenzene	20.0	20.3	101.7	42	143
• Diisopropyl ether	10.0	11.0	110.2	30	170
Ethylbenzene	10.0	10.8	108.4	32	160
• MTBE	20.0	21.2	105.8	35	165
Toluene	10.0	10.7	106.9	46	148
• m,p-Xylene	20.0	20.8	104.0	0	239
• o-Xylene	20.0	21.7	108.5	36	164

Flags :

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



Summary Results for Laboratory Control Spike

Method: 602

Filename : 032807/023f

Compound	SA	Result	Rec	LCS Limits	
	ug/L	ug/L	(%)	Lower	Upper
Benzene	10.0	10.6	105.9	39	150
Chlorobenzene	10.0	10.2	101.9	55	135
1,2-Dichlorobenzene	20.0	20.7	103.7	37	154
1,3-Dichlorobenzene	10.0	10.1	101.5	50	141
1,4-Dichlorobenzene	20.0	20.3	101.7	42	143
• Diisopropyl ether	10.0	11.0	110.2	30	170
Ethylbenzene	10.0	10.8	108.4	32	160
• MTBE	20.0	21.2	105.8	35	165
Toluene	10.0	10.7	106.9	46	148
• m,p-Xylene	20.0	20.8	104.0	0	239
• o-Xylene	20.0	21.7	108.5	36	164

Flags :

- + = out of QC limits.
- = Lab generated limits.
- D = Detected
- SA = Spike Amount

Summary Results for MS-MSD

Sample : 032807/135b::032807/035f

MS : 032807/137b::032807/037f

MSD : 032807/138b::032807/038f

Compound	SA	µg/L			REC(%)		REC Limits	
		Sam.	MS	MSD	MS	MSD	Lower	Upper
Benzene	10.0	4.1	9.1	8.6	91	91	39	150
Chlorobenzene	10.0	ND	7.4	8.9	74	74	55	135
1,2-Dichlorobenzene	10.0	1.7	14.6	17.9	146	146	37	154
1,3-Dichlorobenzene	10.0	ND	7.3	8.9	73	73	50	141
1,4-Dichlorobenzene	10.0	2.5	11.8	14.9	118	118	42	143
• Diisopropyl ether	10.0	ND	9.5	8.7	95	95	30	170
Ethylbenzene	10.0	ND	9.7	9.0	97	97	32	160
• MTBE	20.0	ND	18.3	17.0	91	91	35	165
Toluene	10.0	27.8	8.4	8.6	84	84	46	148
• m,p-Xylene	20.0	15.4	14.5	17.7	73	73	D	239
• o-Xylene	20.0	ND	18.2	16.8	91	91	36	164

Flags :

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



List of Reporting Abbreviations and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

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

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

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

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

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

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

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

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



CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

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• West Virginia
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1 CLIENT: Sovereign Consulting Inc.
CONTACT: Scarlett Fielding PHONE NO: 910539-0003
PROJECT: NV010 SITE/PSID#: Bldg 645
REPORTS TO: CHRIS MURRAY E-MAIL: (MURRAY@SOVCON.COM)
INVOICE TO: 6: MURRAY QUOTE #
405 Oak Meadows Crestent Ste 1
VA Beach, VA 23462 P.O. NUMBER
FAX NO.: (757) 456-5095

SGS Reference: G450-112 PAGE 1 OF 1

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE C= COMP G= GRAB	Preservatives Used HCl Analysis Required ③ 602+Xylenes	REMARKS
	UST645-MW18	03/22/07	1017	W	3	G	X	
	UST645-MW26	03/22/07	1502	W	1	G		
	UST645-MW27	03/22/07	1307	W	1	G		
	UST645-MW29	03/22/07	1105	W	1	G		
	UST645-MW30	03/22/07	1221	W	1	G		
	UST645-MW32	03/22/07	1428	W	1	G		
	Duplicate	03/22/07	—	W	3	G	X	
	Trip Blank	03/22/07	1500	W	2	G	X	

5 Collected/Relinquished By: (1) [Signature] Date 3/23/07 Time 0815
Relinquished By: (2) _____ Date _____ Time _____
Relinquished By: (3) _____ Date _____ Time _____
Relinquished By: (4) _____ Date _____ Time _____

4 Shipping Carrier: _____
Shipping Ticket No: _____
Special Deliverable Requirements: _____
Requested Turnaround Time and Special Instructions: Standard TA
Email results to: (murray@sovcon.com)
EDD format
nha@sovcon.com

Samples Received Cold? (Circle) YES NO
Temperature (C): 5.20 c
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

APPENDIX C

FIELD DATA

Date: 7/24/06
SITE: Bldg 645

21

WELL NUMBER	DEPTH TO BOTTOM MEASURED FROM TOC		TIME OF GAUGING	DEPTH TO WATER FROM TOP OF CASING	DEPTH TO LNAPL FROM TOP OF CASING	LNAPL THICKNESS	COMMENTS
	Installed	Measured					
UST645-MW01		24.22	0916	12.20			Sample *
UST645-MW02		24.33	0917	13.17			
UST645-MW03		25.15	0915	13.04			*
UST645-MW04			0920	3.28			
UST645-MW05			0946	12.30			
UST645-MW06			0943	13.05			
UST645-MW07			0929	15.87			
UST645-MW08			0947	11.97			
UST645-MW09		52.96	0914	17.45			*
UST645-MW10			0928	15.65			
UST645-MW11			0948	14.97			*
UST645-MW12		37.95	0912	16.23			
UST645-MW13			0950	16.88			
UST645-MW14			0930	15.94			
UST645-MW15		85.50	0933	14.59			*
UST645-MW16			0926	16.03			
UST645-MW17			0922	15.20			
UST645-MW18		77.19	0935	15.95			*

Case 11 Jan
Bureau - 451-2878
Delmar
NO Motion 451-2790

WELL NUMBER	DEPTH TO BOTTOM MEASURED FROM TOC		TIME OF GAUGING	DEPTH TO WATER FROM TOP OF CASING	DEPTH TO LNAPL FROM TOP OF CASING	LNAPL THICKNESS	COMMENTS
	Installed	Measured					
UST645- MW19			0924	16.43			
UST645- MW20			0923	16.01			
UST645- MW21		81.81	0919	10.35		*	
UST645- MW22		82.00	0902	15.73		*	
UST645- MW23		29.35	0920	10.45		*	

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 7/25/06

Weather: 80's

Well ID: NW09
Sample ID: UST 645-MW09
Well Condition: good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	17.45
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	52.96

Water Column (feet):	35.51
Casing Volume (gal):	5.73
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	0830
Total Volume Purged (gal):	7
Sample Time/Date	1015
Sampler Name:	TE

[illegible]

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 7/25/06
Weather: 80's

Well ID: MW23
Sample ID: UST645-2 MW23
Well Condition: Good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	10.45
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	29.35

Water Column (feet):	18.90
Casing Volume (gal):	3.08
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1409
Total Volume Purged (gal):	5
Sample Time/Date	1515
Sampler Name:	TE

[illegible]

* Duplicate sample on
MW23

Project Number: NV016

Project Name: Bldg 645

Date: 7/26/05

Weather: 50's

Well ID: MW18
Sample ID: UST645-MW18
Well Condition: Good

Protective Casing Diameter (inch):	<u>N/A</u>
Inner Casing Diameter (inch):	<u>2" (0.163)</u>
Depth to Product from TOC (feet):	<u>N/A</u>
Initial Depth to Water from TOC (feet):	<u>15.95</u>
Product Thickness (feet):	<u>N/A</u>
Total Depth from TOC (feet):	<u>77.19</u>

Water Column (feet):	61.24
Casing Volume (gal):	9.98
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	0733
Total Volume Purged (gal):	12
Sample Time/Date	1105
Sampler Name:	JP

[illegible]

Temp not stable.
Dp, meter in op

GROUNDWATER MONITORING WELL GAUGING DATA
MCB Camp LeJeune and New River MCAS

Date: 1/8/07
Site: BLDG 645
Gauged By: TE

Well ID	DTB From TOC Installed	DTB From TOC Measured	Time of Gauging	DTW From TOC	Depth to LNAPL	LNAPL THICKNESS	COMMENTS
UST645-MW01		24.22	0803	7.17			
UST645-MW02		24.33	0804	8.17			
UST645-MW03							
UST645-MW04							
UST645-MW05							
UST645-MW06							
UST645-MW07							
UST645-MW08							
UST645-MW09							
UST645-MW10							
UST645-MW11							
UST645-MW12		37.95	0802	11.48			
UST645-MW13		36.84	0827	12.80			
UST645-MW14							
UST645-MW15							
UST645-MW16		80.78	0820	12.99			
UST645-MW17		79.36	0818	10.60			
UST645-MW18		76.70	0824	13.10			
UST645-MW19							
UST645-MW20							

GROUNDWATER MONITORING WELL GAUGING DATA
MCB Camp LeJeune and New River MCAS

Date: 1/8/07
Site: BLDG 645
Gauged By: 

Well ID	DTB From TOC		Time of Gauging	DTW From TOC	Depth to LNAPL	LNAPL THICKNESS	COMMENTS
	Installed	Measured					
UST645-MW21							
UST645-MW22		80.00	0806	12.72			
UST645-MW23		29.35	0805	5.32			
UST645-MW24		18.75	0816	5.87			
UST645-MW25		23.40	0814	8.17			
UST645-MW26		80.90	0822	11.82			
UST645-MW27		81.40	0833	14.52			
UST645-MW28		79.60	0839	11.80			
UST645-MW29		79.90	0837	17.40			
UST645-MW30		79.40	0835	5.91			
UST645-MW31		100.00	0834	15.15			
UST645-MW32		79.50	0830	14.25			

Project Number: NV016
Project Name: Bldg 645
Date: 1/8/07
Weather: Rain 10's

Well ID: MW12
Sample ID: UST645-MW12
Well Condition: good

Protective Casing Diameter (inch): 6

Inner Casing Diameter (inch): 5.1646

Depth to Product from TOC (feet): 0

Initial Depth to Water from TOC (feet): 11.48

Product Thickness (feet): 2

Total Depth from TOC (feet): 39.95

Water Column (feet):	26.4'
Casing Volume (gal):	38.88
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	6840
Total Volume Purged (gal):	41 gal
Sample Time/Date	1530
Sampler Name:	TE

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 1/9/07
Weather: 50's

Well ID: MW01
Sample ID: UST 645 - MW01
Well Condition: good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	4 ~~(0.163)~~
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	7.17
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	24.22

Water Column (feet):	<u>17.05</u>
Casing Volume (gal):	<u>11.33</u>
Purge/Sample Method:	<u>Low Flow Method</u>
Start Purge Date/Time:	<u>1440</u>
Total Volume Purged (gal):	<u>13</u>
Sample Time/Date	<u>1627</u>
Sampler Name:	TE

[illegible]

Project Number: NV016
Project Name: Bldg 845
Date: 1/9/87
Weather: 52's

Well ID: MW02
Sample ID: UST645 - MW02
Well Condition: good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	4 (0.453)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	8.17
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	24.33

Water Column (feet):	16.16
Casing Volume (gal):	10.55
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1419
Total Volume Purged (gal):	12
Sample Time/Date	1553
Sampler Name:	TE

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 1/9/07
Weather: 30's upw/sk

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	12.80
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	36.84

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 11/9/07
Weather: 40°/3

Well ID: MW17
Sample ID: UST 645- MW17
Well Condition: GOOD

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	10.60
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	79.36

Water Column (feet):	68.76
Casing Volume (gal):	11.20
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1045
Total Volume Purged (gal):	13
Sample Time/Date	1305
Sampler Name:	TE

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/9/07

Weather: 50's

Well ID: MW23
Sample ID: UST645-MW23
Well Condition: Good

Protective Casing Diameter (inch):	N/A	
Inner Casing Diameter (inch):	2"	(0.163)

Water Column (feet): 24.03
Casing Volume (gal): 3.91

Depth to Product from TOC (feet): N/A

Initial Depth to Water from TOC (feet): 12.72 5.32

Product Thickness (feet): N/A

Total Depth from TOC (feet): 80.00 29.35

Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1315
Total Volume Purged (gal):	1410
Sample Time/Date	5
Sampler Name:	TE

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/9/07

Weather: 40's

Well ID: MW24
Sample ID: UST 045- MW24
Well Condition: good

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

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	5.87
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	18.75

Water Column (feet):	12.88
Casing Volume (gal):	2.09
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	10/22
Total Volume Purged (gal):	3
Sample Time/Date	11/85
Sampler Name:	TE

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 1/10/09
Weather: 30's

Well ID: MW18
Sample ID: UST645-MW18
Well Condition: Good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	13.10
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	76.70

Water Column (feet):	<u>63.60</u>
Casing Volume (gal):	<u>10.36</u>
Purge/Sample Method:	<u>Low Flow Method</u>
Start Purge Date/Time:	<u>1038</u>
Total Volume Purged (gal):	<u>~~1145~~ 12</u>
Sample Time/Date	<u>1145</u>
Sampler Name:	TE

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/10/07

Weather: 50's

Well ID: MW25
Sample ID: UST645-MW25
Well Condition: GOOD

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	8.17
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	23.40

Water Column (feet):	15.23
Casing Volume (gal):	2.48
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1510
Total Volume Purged (gal):	~~1853~~ 4
Sample Time/Date	1553
Sampler Name:	TE

[illegible]

Project Number: NV016
Project Name: Bldg 645
Date: 1/10/07
Weather: 80's

Well ID: MW30
Sample ID: UST645-MW30
Well Condition: Good

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	5.91
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	79.40

Water Column (feet):	<u>73.44</u>
Casing Volume (gal):	<u>11.97</u>
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	<u>0814/1208</u>
Total Volume Purged (gal):	<u>13</u>
Sample Time/Date	<u>1450</u>
Sampler Name:	TE

[illegible]

10 Duplicate sample on MW30

Project Number: NV016

Project Name: Bldg 645

Date: 1/11/07

Weather: ↑ 20's

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/11/07

Weather: 30's

Well ID: MW26
Sample ID: UST645-MW26
Well Condition: GOOD

Protective Casing Diameter (inch):	N/A
Inner Casing Diameter (inch):	2" (0.163)
Depth to Product from TOC (feet):	N/A
Initial Depth to Water from TOC (feet):	11.82
Product Thickness (feet):	N/A
Total Depth from TOC (feet):	80.90

Water Column (feet):	69.08
Casing Volume (gal):	11.26
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	0752
Total Volume Purged (gal):	13
Sample Time/Date	1010
Sampler Name:	TE

[illegible]

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/11/07

Weather: 50's

Well ID: MW29
Sample ID: UST645-MW29
Well Condition: GOOD

Protective Casing Diameter (inch):	<u>N/A</u>
Inner Casing Diameter (inch):	<u>2" (0.163)</u>
Depth to Product from TOC (feet):	<u>N/A</u>
Initial Depth to Water from TOC (feet):	<u>11.40</u>
Product Thickness (feet):	<u>N/A</u>
Total Depth from TOC (feet):	<u>79.90</u>

Water Column (feet):	68.50
Casing Volume (gal):	11.16
Purge/Sample Method:	Low Flow Method
Start Purge Date/Time:	1530
Total Volume Purged (gal):	13
Sample Time/Date	1600
Sampler Name:	TE

[illegible]

Project Number: NV016

Project Name: Bldg 645

Date: 1/11/07

Weather: 30's

* Pump stopped -
low voltage @
2 gal (1101)
1103 - start purging
again

GROUNDWATER MONITORING WELL GAUGING DATA
MCB Camp Lejeune and New River MCAS

Date: 03/22/07

SITE: BLDG 645

Gauged By: SF

Well Number	DTW from TOC		Time of		Depth to LNAPL	LNAPL	Comments
	Installed	Measured	Gauging	DTW from TOC			
UST645-MW01		24.22	1431	7.93		4"	
UST645-MW02		24.33	1430	8.86		4"	
UST645-MW03		25.15	1428	8.75		4"	
UST645-MW04		15.98	1439	3.58			
UST645-MW05		23.68	1528	8.45			
UST645-MW06		25.20	1525	9.00			
UST645-MW07		23.80	1544	13.76			
UST645-MW08		26.02	1502	8.43			
UST645-MW09		52.96	1427	14.39			
UST645-MW10		49.80	1543	12.95			
UST645-MW11		44.10	1359	14.20			
UST645-MW12		37.95	1426	11.90		6"	
UST645-MW13		36.77	1457	13.65			
UST645-MW14		32.35	1547	13.17			
UST645-MW15		85.50	1433	12.75			
UST645-MW16		81.19	1540	13.82			
UST645-MW17		79.36	1451	12.84			
UST645-MW18		77.19	0913	13.87			
UST645-MW19		34.65	1537	13.43			
UST645-MW20		49.40	1535	13.08			
UST645-MW21		81.81	1438	7.37			
UST645-MW22		80.00	1519	13.71			
UST645-MW23		29.35	1515	6.50			
UST645-MW24		18.75	1448	7.30			
UST645-MW25		23.40	1446	7.94			
UST645-MW26		80.37-80.90	1312	12.81			
UST645-MW27		81.14 81.40	1108	15.18			
UST645-MW28		79.60	1505	15.10			
UST645-MW29		18.55-79.90	0915	12.92			
UST645-MW30		78.28-79.40	1115	14.95			
UST645-MW31		100.00	1523	17.06			
UST645-MW32		78.26-79.50	1278	14.34			

total for tubing

1663.61

4 - 50mm

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

NV016
Bldg 645
03/22/07
SUNNY, 50's

Well ID:
Sample ID:
Well Condition:

MW 18
UST645 MW 18
good

Protective Casing Diameter (inch):
Inner Casing Diameter (inch):

10" manhole
2" (0.163)

Water Column (feet)

63.32

Casing Volume (gal):

10.32

Purge/Sample Method:

Low Flow Method

Start Purge Date/Time:

0900

Total Volume Purged (gal)

11.25

Sample Time/Date

1017

Sampler Name:

SF

Depth to Product from TOC (feet):

Initial Depth to Water from TOC (feet):

Product Thickness (feet):

Total Depth from TOC (feet):

[illegible]

[illegible]

Project Number	NV016	Well ID:	MW27
Project Name	Bldg 645	Sample ID:	UST645-MW27
Date:	03/22/07	Well Condition:	good
Weather:	Sunny, 60°s		

Protective Casing Diameter (inch):	<u>12" manhole</u>	Water Column (feet):	<u>65.96</u>
Inner Casing Diameter (inch):	<u>2" (0.163)</u>	Casing Volume (gal):	<u>10.75</u>
		Purge/Sample Method:	<u>Low Flow Method</u>
Depth to Product from TOC (feet):	<u>—</u>	Start Purge Date/Time:	<u>1115</u>
Initial Depth to Water from TOC (feet):	<u>15.18</u>	Total Volume Purged (gal):	<u>11.25</u>
Product Thickness (feet):	<u>—</u>	Sample Time/Date	<u>1307</u>
Total Depth from TOC (feet):	<u>81.14</u>	Sampler Name:	<u>SF</u>

[illegible]

*Duplicate

[illegible]

Project Number	NV016	Well ID:	MW32
Project Name	Bldg 645	Sample ID:	VST645-MW32
Date	03/22/07	Well Condition:	good
Weather	Sunny, 60°s		

Protective Casing Diameter (inch):	<u>12" manhole</u>	Water Column (feet):	<u>58.92</u>
Inner Casing Diameter (inch):	<u>2" (0.163)</u>	Casing Volume (gal):	<u>9.60</u>
Depth to Product from TOC (feet):	<u>—</u>	Purge/Sample Method:	<u>Low Flow Method</u>
Initial Depth to Water from TOC (feet):	<u>19.34</u>	Start Purge Date/Time:	<u>1230</u>
Product Thickness (feet):	<u>—</u>	Total Volume Purged (gal):	<u>10.0</u>
Total Depth from TOC (feet):	<u>78.26</u>	Sample Time/Date:	<u>1428</u>
		Sampler Name:	<u>SF</u>

[illegible]