

LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

CHRONOLOGICAL INDEX

Volume 6 of 25

2007

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Prepared for

**Department of the Army
Longhorn Army Ammunition Plant**

1976 – 2007

***LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX***

VOLUME 6 of 25

2007

- A. Title: Report - Final Natural Attenuation Evaluation LHAAP-12, LHAAP-35B(37) and LHAAP-67 (Report and Appendix A)
Author(s): Shaw
Recipient: All Stakeholders
Date: June 20, 2007
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June 20, 2007

Shaw/TERC 07-040

Mr. Cliff Murray
U.S. Army Corps of Engineers – Tulsa District
1645 South 101st - East Avenue
Tulsa, Oklahoma 74128-4629

RE: **Task Order No. 109**
Total Environmental Restoration Contract (TERC)
Contract No. DACA56-94-D-0020
Environmental Investigation and Remediation at
Longhorn Army Ammunition Plant, Karnack, Texas
***Final Natural Attenuation Evaluation LHAAP-12, LHAAP-35B(37) and
LHAAP-67, Longhorn Army Ammunition Plant, Karnack, Texas***

Dear Mr. Murray:

Shaw Environmental, Inc. is pleased to submit the attached *Final Natural Attenuation Evaluation LHAAP-12, LHAAP-35B(37) and LHAAP-67*. We are also sending copies of the document directly to individuals on the attached project document distribution list.

Please contact me if you have any questions or require additional information.

Sincerely,

Praveen Srivastav, Ph.D., P.G.
Project Manager

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Dr. Rose Zeiler	BRAC; Longhorn Site Manager	P.O. Box 220 Ratcliff, AR 72951 727 South Brooklyn Rd Ratcliff, AR 72951	Office: 479-635-0110 rose.zeiler@us.army.mil	1
Jeff Armstrong	Army Environmental Center	Commander USAEC SFIM-AEC-ERA (Attn: Jeff Armstrong) Beal Road Bldg E-4880 APG, MD 21010-5401	Office: 410-436-1516 jeffrey.armstrong@us.army.mil	1
Stephen Tzhone	US Environmental Protection Agency	US Environmental Protection Agency Superfund Division (6SF-AT) 1445 Ross Avenue Dallas, TX 75202-2733	Office: 214-665-8409 tzhone.stephen@epamail.epa.gov	2
Fay Duke	Texas Commission of Environmental Quality	Texas Commission on Environmental Quality TCEQ Environmental Cleanup Section II, Team 2 (MC-221) 12100 Park 35 Circle, Bldg D Austin, TX 78753	Office: 512-239-2443 fduke@tceq.state.tx.us	2 - most 4-eco
Dale Vodak	Texas Commission of Environmental Quality	Texas Commission on Environmental Quality 2916 Teague Drive Tyler, TX 75701	Office: 903-535-5147 dvodak@tceq.state.tx.us	1
Paul Bruckwicki	US Fish and Wildlife Service	US Fish and Wildlife Service PO Box 230 Karnack, TX 75661 (<i>mailing only</i>) Caddo Lake NWR Hwy 134 & Spur 449 Karnack, TX 75661	Office: 903-679-4536 Cell: 903-407-0852 paul_bruckwicki@fws.gov	1
Barry Forsythe	US Fish & Wildlife Service EPA Liaison (6SF-LT)	US Fish & Wildlife Service EPA Liaison (6SF-LT) 1445 Ross Avenue, Suite 1200 Dallas, TX 75202	Office: 214-665-8467 forsythe.barry@epa.gov	1-eco

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DEPARTMENT OF THE ARMY
LONGHORN ARMY AMMUNITION PLANT
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June 20, 2007

DAIM-BD-LO

Ms. Fay Duke
Texas Commission on Environmental Quality
Environmental Cleanup Section II (MC-221)
12100 Park 35 Circle
Austin, TX 78753

Re: Final Natural Attenuation Evaluation LHAAP-12, LHAAP-35B(37) and LHAAP-67,
Longhorn Army Ammunition Plant, Karnack, Texas, June 2007

Dear Ms. Duke,

The above-referenced document is transmitted to you for your files.

Point of contact for this action is the undersigned. I may be contacted at 479-635-0110, or by email at rose.zeiler@us.army.mil.

Sincerely,

A handwritten signature in black ink, reading "Rose M. Zeiler".

Rose M. Zeiler, Ph.D.
Longhorn AAP Site Manager

Copies furnished:

Stephen Tzhone, USEPA Region 6, Dallas, TX
Paul Bruckwicki, Caddo Lake NWR, TX
Cliff Murray, COE – Tulsa District, OK
John R. Lambert, COE – Tulsa District, OK
P. Srivastav, Shaw, Houston, TX (for project file)



DEPARTMENT OF THE ARMY
LONGHORN ARMY AMMUNITION PLANT
POST OFFICE BOX 220
RATCLIFF, AR 72951

June 20, 2007

DAIM-BD-LO

Mr. Steve Tzhone
US Environmental Protection Agency
Superfund Division (6SF-AT)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Final Natural Attenuation Evaluation LHAAP-12, LHAAP-35B(37) and LHAAP-67,
Longhorn Army Ammunition Plant, Karnack, Texas, June 2007

Dear Mr. Tzhone,

The above-referenced document is transmitted to you for your files.

Point of contact for this action is the undersigned. I may be contacted at 479-635-0110, or by email at rose.zeiler@us.army.mil.

Sincerely,

A handwritten signature in black ink, reading "Rose M. Zeiler".

Rose M. Zeiler, Ph.D.
Longhorn AAP Site Manager

Copies furnished:

Fay Duke, TCEQ, Austin, TX
Paul Bruckwicki, Caddo Lake NWR, TX
Cliff Murray, COE – Tulsa District, OK
John R. Lambert, COE – Tulsa District, OK
P. Srivastav, Shaw, Houston, TX (for project file)

FINAL
NATURAL ATTENUATION EVALUATION
LHAAP-12, LHAAP-35B(37), AND LHAAP-67
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS



Prepared for
U.S. Army Corps of Engineers
Tulsa District
1645 South 101st Avenue
Tulsa, Oklahoma

Prepared by
Shaw Environmental, Inc.
3010 Briarpark, Suite 400
Houston, Texas 77042

TERC No. DACA56-94-D-0020, Task Order No. 109
Shaw Project No. 845714

June 2007

Table of Contents

List of Tables	ii
List of Figures	ii
List of Appendices	ii
Acronyms and Abbreviations	iii
1.0 Introduction	1-1
2.0 Description of Natural Attenuation	2-1
2.1 Natural Attenuation Lines of Evidence.....	2-1
2.2 Biodegradation	2-2
2.3 Geomicrobiology.....	2-2
3.0 Natural Attenuation Evaluation Results for August 2006 Sampling.....	3-1
3.1 LHAAP-12	3-1
3.1.1 PLOE: Change in COC Concentrations Over Time and with Distance.....	3-1
3.1.2 SLOE: Geochemical Indicators	3-7
3.1.3 OLOE: Predictive Modeling and Microbial Analysis.....	3-9
3.2 LHAAP-35B(37).....	3-10
3.2.1 PLOE: Change in COC Concentrations Over Time and with Distance.....	3-10
3.2.2 SLOE: Geochemical Indicators	3-13
3.2.3 OLOE: Predictive Modeling and Microbial Analysis.....	3-15
3.3 LHAAP-67	3-16
3.3.1 PLOE: Change in COC Concentrations Over Time and with Distance.....	3-20
3.3.2 SLOE: Geochemical Indicators	3-21
3.3.3 OLOE: Predictive Modeling and Microbial Analysis.....	3-23
4.0 Summary of Results and Conclusions	4-1
5.0 Natural Attenuation Evaluation Results for December 2006 Sampling	5-1
5.1 LHAAP-12	5-1
5.1.1 PLOE.....	5-1
5.1.2 SLOE.....	5-7
5.2 LHAAP-35B(37).....	5-7
5.2.1 PLOE.....	5-14
5.2.2 SLOE.....	5-14
5.3 LHAAP-67	5-14
5.3.1 PLOE.....	5-17
5.3.2 SLOE.....	5-17
5.4 Conclusion.....	5-20
6.0 References	6-1

List of Tables

Table 3-1	VOC and Natural Attenuation Parameters at LHAAP-12, August 2006	3-3
Table 3-2	LHAAP-12 Historical COC Concentrations	3-4
Table 3-3	VOC and Natural Attenuation Parameters at LHAAP-35B(37), August 2006.....	3-12
Table 3-4	LHAAP-35B(37) Historical COC Concentrations.....	3-13
Table 3-5	VOC and Natural Attenuation Parameters at LHAAP-67, August 2006	3-18
Table 3-6	LHAAP-67 Historical COC Concentration	3-19
Table 5-1	LHAAP-12 Historical COC Concentrations	5-2
Table 5-2	Analytical Detections Summary for December 2006 Groundwater Samples LHAAP-12....	5-4
Table 5-3	LHAAP-35B(37) Historical COC Concentrations.....	5-8
Table 5-4	Analytical Detections Summary for December 2006 Groundwater Samples LHAAP-35B(37)	5-9
Table 5-5	LHAAP-67 Historical COC Concentration	5-15
Table 5-6	Analytical Detections Summary for December 2006 Groundwater Samples LHAAP-67..	5-16

List of Figures

Figure 1-1	Site Location Map	1-2
Figure 3-1	Monitoring Well Location Map, LHAAP-12	3-2
Figure 3-2	Monitoring Well Location Map, LHAAP-35B(37)	3-11
Figure 3-3	Monitoring Well Location Map, LHAAP-67	3-17
Figure 5-1	Monitoring Well Location Map, LHAAP-12	5-5
Figure 5-2	COCs in Shallow Groundwater December 2006 Sampling Event LHAAP-12	5-6
Figure 5-3	Geologic Cross Section and Location of New Shallow Wells, LHAAP-35B(37)	5-10
Figure 5-4	Cross Section A-A'	5-11
Figure 5-5	Cross Section B-B'	5-12
Figure 5-6	COCs in Upper Shallow Groundwater December 2006 Sampling Event LHAAP-35B(37)	5-13
Figure 5-7	Monitoring Well Location Map, LHAAP-67	5-18
Figure 5-8	COCs in Shallow Groundwater December 2006 Sampling Event LHAAP-67	5-19

List of Appendices

Appendix A	August 2006 Data Reports
Appendix B	December 2006 Data Reports

Acronyms and Abbreviations

$\mu\text{g/L}$	micrograms per liter
cells/mL	cells per milliliter
CO_2	carbon dioxide
COC	chemical of concern
DCA	dichloroethane
DCE	dichloroethene
DO	dissolved oxygen
Fe^{+3}	ferric iron
LHAAP	Longhorn Army Ammunition Plant
LOE	lines of evidence
MCL	maximum contaminant level
mg/L	milligrams per liter
MNA	monitored natural attenuation
mV	millivolts
NO_3^-	nitrate
O_2	oxygen
OLOE	other lines of evidence
ORP	oxidation-reduction potential
PCE	tetrachloroethene
PLOE	primary lines of evidence
Shaw	Shaw Environmental, Inc.
SLOE	secondary lines of evidence
SO_4^{-2}	sulfate
TCA	trichloroethane
TCE	trichloroethene
TCEQ	Texas Commission on Environmental Quality
TOC	total organic carbon
TRRP	Texas Risk Reduction Program
USEPA	U.S. Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

1.0 Introduction

The U.S. Army Corps of Engineers, Tulsa District, contracted Shaw Environmental, Inc. (Shaw), under Total Environmental Restoration Contract, No. DACA94-D-0020, Task Order No. 0109, to conduct environmental restoration at Longhorn Army Ammunition Plant (LHAAP). This report presents the evaluation for the occurrence of natural attenuation of groundwater contaminants at the following sites: LHAAP-12, LHAAP-35B(37), and LHAAP-67. The general locations of sites are shown on **Figure 1-1**.

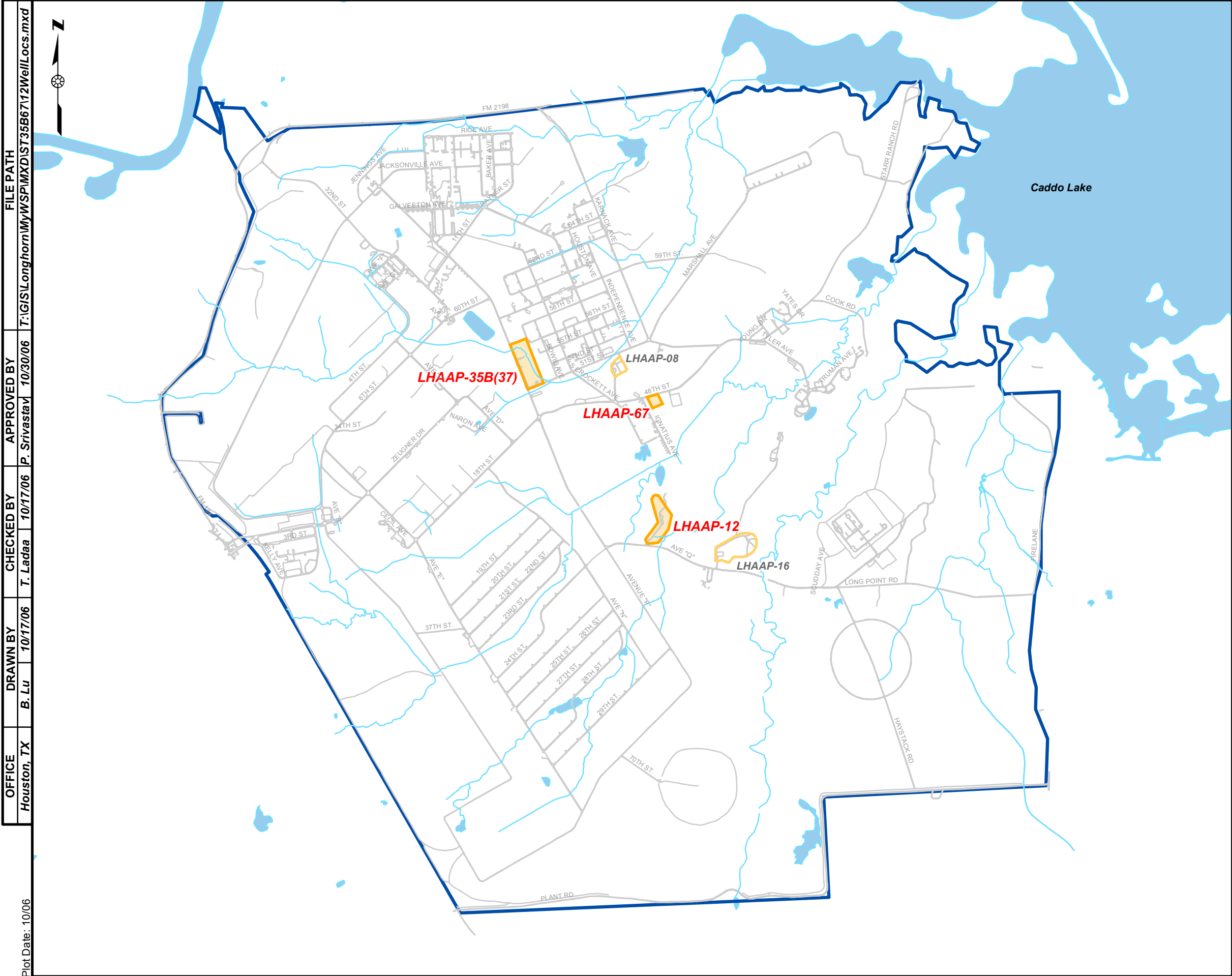
LHAAP-12 is an inactive landfill known as Landfill 12, which is located approximately at the center of LHAAP with LHAAP-67 to the north and LHAAP-16 to the southeast. The primary chemical of concern (COC) in groundwater at LHAAP-12 is trichloroethene (TCE). Maximum concentrations of TCE and its daughter products cis-1,2-dichloroethene (DCE) and vinyl chloride (VC) exceed the maximum contaminant levels (MCL).

LHAAP-35B(37) is located in the north-central portion of LHAAP. LHAAP-35B(37) was a chemical laboratory used to support production activities at the facility. The COCs in groundwater at LHAAP-35B(37) are tetrachloroethene (PCE), TCE, and 1,1-DCE.

LHAAP-67 is located approximately at the center of LHAAP, with LHAAP-12 to the south and LHAAP-8 to the northwest. The site was referred to as the aboveground storage tank area where seven aboveground tanks stored fuel oil, kerosene, and solvents. The COCs in groundwater at LHAAP-67 are TCE, 1,1-DCE, 1,2-dichloroethane (1,2-DCA), 1,1,1-trichloroethane (TCA), and 1,1,2-TCA.

Sampling was conducted in August 2006 to collect data to evaluate the occurrence of natural attenuation of the groundwater contaminants. The data reports from the August 2006 sampling event are included on a compact disk in **Appendix A**. This data along with historic data for these sites was used in the evaluation.

A second round of sampling occurred in December 2006 to continue to evaluate monitored natural attenuation as a remedy for the contaminated groundwater. A new **Section 5.0** was incorporated into this report to include the contents of the Memorandum: The Evaluation of Monitored Natural Attenuation Results for December 2006 Sampling Event at LHAAP-12, LHAAP-35B(37), and LHAAP-67 dated February 15, 2007. The data reports from the December 2006 sampling event are included on a compact disk in **Appendix B**.



2.0 Description of Natural Attenuation

Natural attenuation is the reduction of contaminant concentrations in groundwater resulting from the combined effect of intrinsic biodegradation, dispersion, dilution, volatilization, and sorption mechanisms. Generally, intrinsic biodegradation is the most important natural attenuation mechanism because it is the only process that results in significant contaminant destruction. Intrinsic biodegradation can occur in any environment that supports microbial activity. The rate of biodegradation may be limited by the lack of a suitable respiratory substrate (e.g., oxygen) or inorganic nutrients, extreme pH, or limited contaminant bioavailability. Accurate contamination delineation, identification of subsurface conditions and characteristics, and determination of contaminant migration rates and direction are critical for defining the contribution of intrinsic biodegradation to concentration reduction, for evaluating the success of natural attenuation, and for establishing regulatory support for use of natural attenuation at a site. Monitored natural attenuation (MNA) entails the use of natural attenuation within the context of a monitoring plan to demonstrate reductions in contaminant concentrations and achievement of remedial goal objectives.

2.1 Natural Attenuation Lines of Evidence

The Texas Commission on Environmental Quality (TCEQ) provides guidance for MNA as a remedial action in *Monitored Natural Attenuation Demonstrations (RG-366/TRRP-33, October 2001)*. Although LHAAP is being addressed under the Risk Reduction Rule rather than the Texas Risk Reduction Program (TRRP), the MNA guidance is comparable to U.S. Environmental Protection Agency (USEPA) guidance and will be used as a To Be Considered requirement during the natural attenuation evaluation. The TRRP guidance specifies a tiered approach of recommended lines of evidence (LOE) required for demonstrating that MNA is an effective remedy.

There are three tiers of LOE according to the TRRP guidance document, which are described as follows:

Primary lines of evidence (PLOE). Relies on use of historical groundwater data that demonstrate a clear trend of stable or decreasing COC concentrations over time and with distance away from the source at appropriate monitoring or sampling points.

Secondary lines of evidence (SLOE). Uses geochemical indicators to document certain geochemical signatures or “footprints” in the groundwater that demonstrate (indirectly) the type of natural attenuation process(es) occurring at the affected property and the destruction of COCs, or uses distance-based/time-based/biodegradation rate calculations to demonstrate attenuation.

Other lines of evidence (OLOE). Most often consists of predictive modeling studies and other laboratory/field studies that demonstrate an understanding of the natural attenuation process(es) occurring at the affected property and their effectiveness in controlling the migration of COCs within a zone where MCLs are exceeded and decreasing COC concentrations within this zone.

All three tiers of LOEs were evaluated for the three LHAAP sites to demonstrate the occurrence of natural attenuation of groundwater COCs.

2.2 *Biodegradation*

Biodegradation occurs when bacteria use contaminants as carbon sources or electron acceptors. The chlorinated solvents constituting the groundwater COCs at the three sites are classified as either parent compounds (PCE, TCE, 1,1,1-TCA, and 1,1,2-TCA) that biodegrade via multiple pathways or daughter products (cis-1,2-DCE, 1,1-DCE, 1,2-DCA, and VC) that are generated from biotic or abiotic degradation of those parent compounds. Trends indicating COC degradation and generation of daughter products are direct evidence for the occurrence of biodegradation supporting the PLOE.

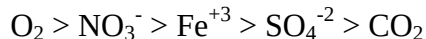
One of the most prevalent pathways for biodegradation of chlorinated solvents such as those identified at the three sites is via reductive dechlorination. During this process, a chlorinated hydrocarbon is used as an electron acceptor resulting in the replacement of a chlorine atom with a hydrogen atom. The degradation of PCE via this pathway produces TCE, which undergoes further reductive dechlorination producing primarily cis-1,2-DCE, with a trace amount of trans-1,2-DCE. DCE isomers undergo reductive dechlorination resulting in the formation of VC, and subsequently the innocuous product ethene. When the DCE isomers are created, the cis-isomer is produced 10 to 100 times more often than the trans-isomer (Bouwer, 1994 and USEPA, 1998). The microbiological preference for producing the cis-isomer may be due to steric hindrances or enzyme active site configurations that favor the removal of the chlorine atom in the trans position. The TCA compounds can also undergo reductive dechlorination, resulting in the formation of DCA isomers, followed by chloroethane, and then the harmless product ethane. The isomer 1,1-DCE is predominantly produced via abiotic hydrolysis of 1,1,1-TCA.

Alternately, the DCE isomers, DCA and VC can be utilized as carbon sources and undergo biodegradation to carbon dioxide (CO₂) and chloride ion via aerobic or anaerobic oxidation. Although the COCs can degrade via multiple biodegradation pathways, reductive dechlorination is typically the most common pathway observed.

2.3 *Geomicrobiology*

Biological monitoring parameters are indicators of microbiological activity in the subsurface and are evaluated in support of the SLOEs. Microbial respiration is the biochemical process that leads to the oxidation of reduced organic carbon. Actively respiring microorganisms alter their

environment. Frequently encountered respiratory substrates (or electron acceptors) include oxygen (O_2), nitrate (NO_3^-), ferric iron (Fe^{+3}), sulfate (SO_4^{-2}), and CO_2 . Respiratory substrates are used preferentially based on the amount of energy that can be derived from each of them. Respiratory substrates are used in the following order:



Reductive dechlorination of chlorinated solvents occurs under anaerobic (reducing) conditions such as sulfate-reducing and methanogenic conditions. SO_4^{-2} reduction and methanogenesis are inhibited until O_2 , NO_3^- , and Fe^{+3} have been depleted. Since SO_4^{-2} reduction provides more energy to microorganisms than methanogenesis, SO_4^{-2} reducers out-compete methanogens and dominate the microbial population as long as SO_4^{-2} is abundant. Reductive dechlorination of PCE, TCE, and TCA isomers may occur under SO_4^{-2} -reducing conditions; however, DCE isomers, 1,2-DCA, and VC require the more reducing methanogenic conditions to undergo reductive dechlorination, which typically commence once the SO_4^{-2} concentrations near depletion.

As discussed above, intrinsic biodegradation results in changes in the concentrations of microbial respiratory substrates and products. Expected changes include depressed concentrations of dissolved oxygen (DO) and negative oxidation-reduction potential (ORP) values within and downgradient of actively degrading contaminant plumes. The concentrations of anaerobic respiratory substrates such as NO_3^- and SO_4^{-2} should decrease in groundwater located within and downgradient of a contaminant plume that is actively undergoing intrinsic anaerobic biodegradation. Similarly, the concentrations of the products of anaerobic microbial respiration, specifically ferrous iron and methane, should increase under similar circumstances.

The biodegradation of chlorinated solvents, whether via reductive dechlorination, dichloroelimination, or anaerobic oxidation, releases chloride ions into groundwater. In areas where the groundwater has a very low background chloride concentration, an elevation in chloride concentration may be observed as a result of biodegradation of chlorinated solvents. However, in most cases the slight contribution of chloride to groundwater through biodegradation is not quantifiable.

3.0 *Natural Attenuation Evaluation Results for August 2006 Sampling*

The following sections present the results of the natural attenuation evaluation as they pertain to demonstrating MNA in accordance with the three tiers of LOEs. A separate discussion is provided for each of the three sites.

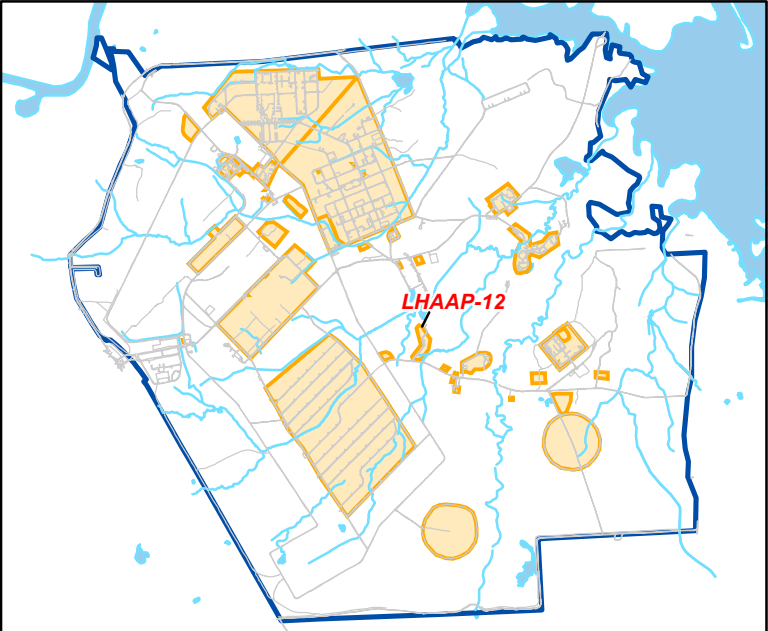
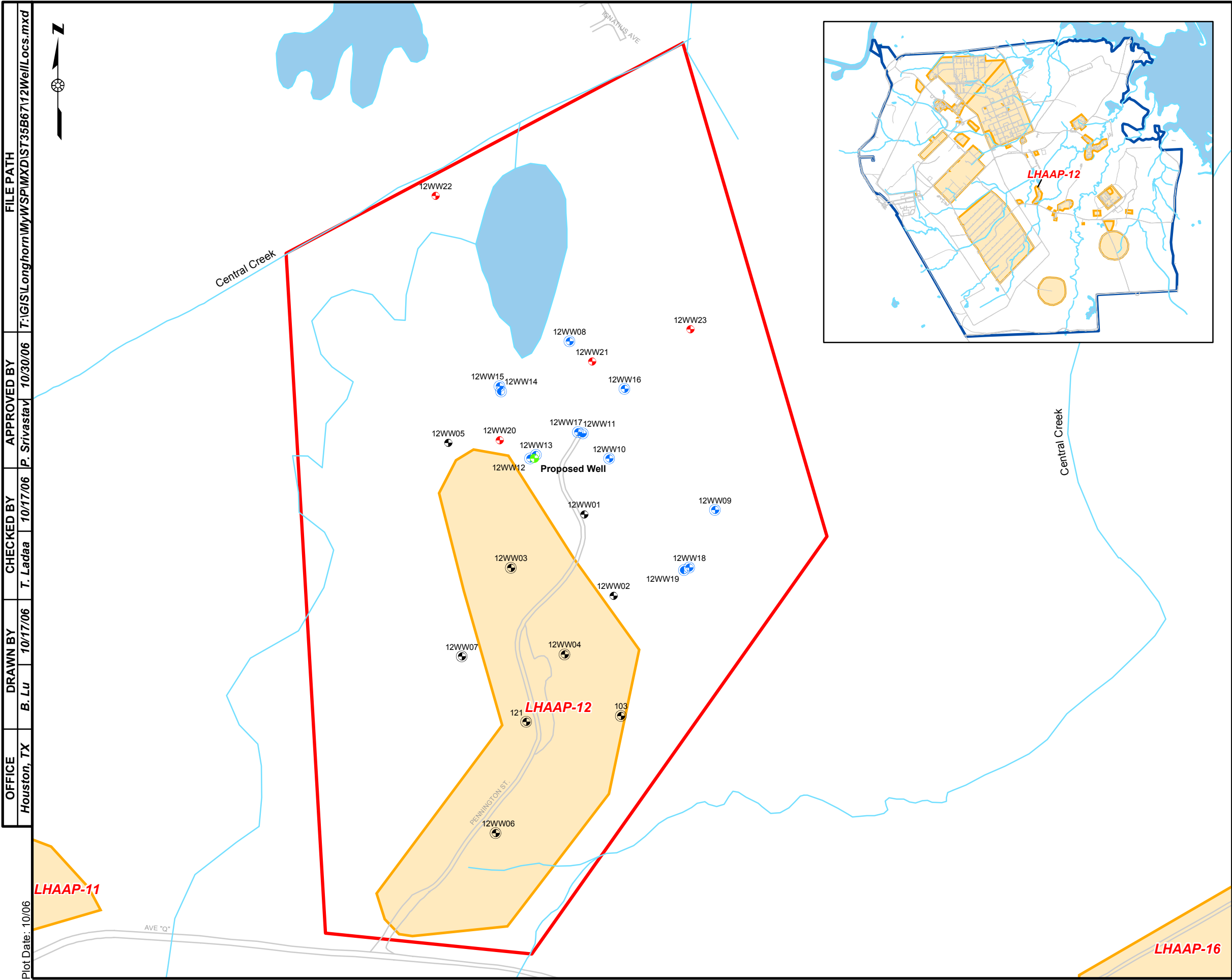
3.1 *LHAAP-12*

Twelve monitoring wells previously installed at LHAAP-12 were constructed with stainless steel well casing and screen. Evaluation of available analytical data indicated that corrosion of the wells was leaching metals, specifically chromium, into the groundwater. Sampling results showed an increase in chromium concentrations in the groundwater in some of these wells over time (Shaw, 2007). Therefore, these twelve monitoring wells were abandoned, as depicted on **Figure 3-1**. In order to continue groundwater monitoring, two replacement wells were installed in the vicinity of the abandoned wells (12WW20 near 12WW12 and 12WW13; 12WW21 between 12WW08 and 112WW16), as depicted on **Figure 3-1**. An additional replacement monitoring well is also planned in the vicinity of 12WW12 and 12WW13. In addition, two compliance monitoring wells were installed to the north (12WW22) and to the east (12WW23) of the site (**Figure 3-1**), between the site and nearest surface water bodies, to confirm that surface water is not being affected by migration of contaminants from Landfill 12. Once installed, the four new monitoring wells (12WW20 through 12WW23) were sampled for volatile organic compounds (VOCs) in January 2006.

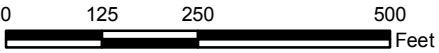
During a subsequent monitoring event in August 2006, the wells at LHAAP-12 were sampled for VOCs and natural attenuation parameters. Specifically, the following wells were sampled: 12WW01, 12WW02, 12WW05, 12WW20, and 12WW21. Results of the August sampling event are summarized in **Table 3-1**. Historical COC concentrations detected at LHAAP-12 for existing and abandoned wells are presented in **Table 3-2**. The tiered evaluation of MNA LOE is presented below with respect to the natural attenuation of the three site COCs; TCE, cis-1,2-DCE, and VC.

3.1.1 *PLOE: Change in COC Concentrations Over Time and with Distance*

The change in groundwater COC concentrations over time and with distance was evaluated at LHAAP-12. The intermediate and deep groundwater zones are not impacted with COCs, and all the monitoring wells in those zones were abandoned. Therefore, the MNA evaluation was conducted for the shallow zone only.



- Legend**
- Proposed Shallow Monitoring Well
 - Newly Installed Shallow Monitoring Well
 - Existing Shallow Monitoring Well
 - Abandoned Shallow Monitoring Well
 - Abandoned Intermediate Monitoring Well
 - Abandoned Deep Monitoring Well
 - Previously Abandoned Monitoring Well
 - Stream
 - Road
 - Site
 - Parcel Boundary
 - Pond
 - Approximate LHAAP Boundary



U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE 3-1
MONITORING WELL LOCATION MAP
LHAAP-12
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	T. Ladaa	P. Srivastay	T:\GIS\Longhorn\MyWSP\MXD\IST35B6712WellLocs.mxd

Plot Date: 10/06

Table 3-1
VOC and Natural Attenuation Parameters at LHAAP-12, August 2006

LOCATION CODE		12WW01			12WW02			12WW05			12WW20			12WW20			12WW21		
Sample No:		12WW01-081106			12WW02-081106			12WW05-081106			12WW20-081006			12WW20-081006-DUP			12WW21-081006		
Sample Date:		11-Aug-06			11-Aug-06			11-Aug-06			10-Aug-06			10-Aug-06			10-Aug-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
FIELD TESTS																			
Temperature	Degree C	20.87			21.32			21.7			23.86			NA			20.21		
Conductivity	ms/cm	3.392			1.037			2.808			1.376			NA			5.162		
pH	STD UNIT	5.26			5.77			5.17			6.27			NA			5.84		
ORP	MILLIVOLTS	9.4			126.9			230.4			247.1			NA			167.7		
Dissolved Oxygen	mg/L	-0.47			0.03			0.12			0.12			NA			0.15		
Turbidity	NTU	6			0.1			0.0			24			NA			-2.2		
GASES																			
Ethane	µg/L	0.5	U	U	0.342	J	J	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Ethene	µg/L	0.5	U	U	0.819			0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Methane	µg/L	499			515			2.38			4.52			4.28			190		
GENERAL CHEMISTRY																			
Chloride	mg/L	850.0			146.0			739.0			290.0			294.0			1460.0		
Nitrate	mg/L	3.0	U	U	0.6	U	U	2.4	U	U	0.6	U	U	0.6	U	U	3.0	U	U
Nitrite	mg/L	10.0	U	U	1.6	U	U	8.0	U	U	1.6	U	U	1.6	U	U	10.0	U	U
Sulfate (as SO ₄)	mg/L	378.0			47.2			239.0			173.0			172.0			364.0		
Total Inorganic Carbon	mg/L	15.6			64.7			9.7			9.3			11.2			9.5		
Total Organic Carbon	mg/L	9.8			16.5			4.9			3.5			3.7			2.9		
VOLATILES																			
1,1,1-Trichloroethane	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethane	µg/L	5	U	U	5.21			5	U	U	5	U	U	5	U	U	5	U	U
1,4-Dichlorobenzene	µg/L	5	U	U	0.473	J	J	5	U	U	5	U	U	5	U	U	5	U	U
Acetone	µg/L	52.6			10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
Benzene	µg/L	5	U	U	0.292	J	J	5	U	U	5	U	U	5	U	U	5	U	U
Chlorobenzene	µg/L	5	U	U	0.27	J	J	5	U	U	5	U	U	5	U	U	5	U	U
Chloroethane	µg/L	10	U	U	1.08	J	J	10	U	U	10	U	U	10	U	U	10	U	U
cis-1,2-Dichloroethene	µg/L	10	U	U	1.77	J	J	10	U	U	0.615	J	J	0.641	J	J	10	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Trichloroethene	µg/L	5	U	U	5	U	U	5	U	U	0.704	J	J	0.715	J	J	5	U	U
Vinyl chloride	µg/L	0.575	J	J	6.88	J	J	10	U	U	10	U	U	10	U	U	10	U	U
Microbiology																			
Dehalococcoides	cells/mL	8.2 x 10 ³			1.5 x 10 ³			8.9 x 10 ¹			1.0 x 10 ¹	U		NA			1.6 x 10 ²		

Notes and Abbreviations:

B sample blank contained analyte

C Celsius

cells/mL cells per milliliter

J Estimated result detected above the method detected limit but below the reporting limit.

mg/L milligrams per liter

mL milliliter

ms/cm millisiemens per centimeter

NA not analyzed

NTU nephelometric turbidity units

ORP oxidation-reduction potential

Qual laboratory qualifier

U Not detected. The reporting limit is shown

VOC volatile organic compounds

VQ validation qualifier

µg/L micrograms per liter

Table 3-2
LHAAP-12 Historical COC Concentrations

				COC Concentrations in µg/L								
				TCE MCL = 5			cis-1,2-DCE MCL = 70			VC MCL = 2		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
103	Shallow	Abandoned	28-May-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR	U	U	10	U	U
121	Shallow	Abandoned	30-May-93	5	U	U	5	U	U	10	U	U
			18-Apr-95	5	U	U	NR	U	U	10	U	U
12WW01	Shallow	Active	13-Jun-93	27			5	U	U	10	U	U
			20-Apr-95	5	U	U	NR	U	U	10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			8-Dec-04	1	U	U	1	U	U	1	U	U
			11-Aug-06	5	U	U	10	U	U	0.575	J	J
12WW02	Shallow	Active	14-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	0.65	J	J	2.1		
			27-Feb-03	1	U	U	3.33			7.24		
			19-Feb-04	1	U	U	2.86			5.34		
			8-Dec-04	1	U	U	2.57			3.75		
			11-Aug-06	5	U	U	1.77	J	J	6.88	J	J
12WW03	Shallow	Abandoned	14-Jun-93	16			5	U	U	10	U	U
			19-Apr-95	5	U	U	NR	U	U	10	U	U
12WW04	Shallow	Abandoned	12-Jun-93	5	U	U	5	U	U	10	U	U
			18-Apr-95	5	U	U	NR	U	U	10	U	U
12WW05	Shallow	Active	12-Jun-93	5	U	U	5	U	U	10	U	U
			20-Apr-95	5	U	U	NR	U	U	10	U	U
			15-Jul-98	5	U	U	5	U	U	5	U	U
			12-Mar-99	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW06	Shallow	Abandoned	12-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR	U	U	10	U	U
12WW07	Shallow	Abandoned	13-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR	U	U	10	U	U
12WW08	Shallow	Abandoned	20-Apr-95	5	U	U	NR	U	U	10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW09	Shallow	Abandoned	19-Apr-95	5	U	U	NR			10	U	U
12WW10	Shallow	Abandoned	19-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	14.5			2.91			2.46		
			19-Feb-04	1.84			0.311	J	J	1	U	U
			8-Dec-04	6.96			0.812	J	J	1	U	U
12WW11	Deep	Abandoned	19-Apr-95	5	U	U	NR	U	U	10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			10-Dec-04	1	U	U	1	U	U	1	U	U

Table 3-2 (continued)
LHAAP-12 Historical COC Concentrations

				COC Concentrations in µg/L								
				TCE MCL = 5			cis-1,2-DCE MCL = 70			VC MCL = 2		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
12WW12	Shallow	Abandoned	20-Apr-95	495			NR			10	U	U
			15-Jul-98	420			110			8	U	U
			26-Feb-03	385			144			5.65		
			20-Feb-04	427			137			4.03		
			8-Dec-04	508	D		136	D		2.22		
12WW13	Intermediate	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	0.829	J	J	0.478	J	J	1	U	U
			20-Feb-04	0.481	J	J	1	U	U	1	U	U
			9-Dec-04	0.643	J	J	1	U	U	1	U	U
12WW14	Intermediate	Abandoned	15-Jul-98	4	U	U	4	U	U	4	U	U
			12-Mar-99	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW15	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW16	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	Dry			Dry			Dry		
			9-Dec-04	Dry			Dry			Dry		
12WW17	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	Dry			Dry			Dry		
			9-Dec-04	Dry			Dry			Dry		
12WW18	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			8-Dec-04	1	U	U	1	U	U	1	U	U
12WW19	Intermediate	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			10-Dec-04	1	U	U	1	U	U	1	U	U
12WW20	Shallow	Active	13-Jan-06	0.645	J	J	0.499	J	J	1	U	U
			10-Aug-06	0.704	J	J	0.615	J	J	10	U	U
12WW21	Shallow	Active	12-Jan-06	1	U	U	1	U	U	1	U	U
			10-Aug-06	5	U	U	10	U	U	10	U	U
12WW22	Shallow	Active	13-Jan-06	1	U	U	1	U	U	1	U	U
12WW23	Shallow	Active	13-Jan-06	1	U	U	1	U	U	1	U	U

Notes and Abbreviations:**Shaded and bold values exceeded their MCLs**

1,1-DCE 1,1-dichloroethene

COC Chemical of Concern

D Dilution

J Estimated result detected above the method detected limit but below the reporting limit.

MCL Maximum contaminant level

NR Not reported by laboratory

PCE Tetrachloroethene

Qual Laboratory qualifier

TCE Trichloroethene

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

2004 sampling event data from USACE and ALL Consulting, 2006, Final Groundwater Monitoring Report, Site 12 and 16, Spring 2003, April 2004, and Winter 2004.

A review of historical COC data at LHAAP-12 shows no net increase in concentrations over time. Most notably, TCE concentrations in former 12WW12 were relatively stable prior to well abandonment. Historical concentrations of TCE in 12WW12 were 495 micrograms per liter ($\mu\text{g/L}$) in 1995, 420 $\mu\text{g/L}$ in 1998, and 385 $\mu\text{g/L}$ in 2003, 427 $\mu\text{g/L}$ in February 2004, and 508 $\mu\text{g/L}$ in December 2004 (**Table 3-2**). Similarly, the concentrations of cis-1,2-DCE, the reductive dechlorination daughter product of TCE, fluctuated around 140 $\mu\text{g/L}$ in the same well over the same time period, with no indication of an increasing or decreasing trend (**Table 3-2**). The lack of an increase (or decrease) in concentrations suggests that the plume hot spot was at steady-state. Following abandonment of 12WW12 and replacement with 12WW20, concentrations of TCE in the replacement well were measured at 0.65 J $\mu\text{g/L}$ in January 2006 and 0.70 J $\mu\text{g/L}$ in August 2006 (**Table 3-2**), which are below the MCL of 5 $\mu\text{g/L}$. The concentration of cis-1,2-DCE in replacement well 12WW20 measured in August 2006 was only 0.6 J $\mu\text{g/L}$, which is two orders of magnitude below its MCL of 70 $\mu\text{g/L}$. Currently, there are no exceedances of the MCL for TCE or cis-1,2-DCE in shallow groundwater at LHAAP-12, indicating that natural attenuation processes have prevented the spread of contamination from the former hot spot at 12WW12. However, in response to TCEQ comments, an additional replacement monitoring well will be installed a few feet east of former monitoring well 12WW12 to monitor groundwater COC concentrations in that vicinity. It is likely that the new well will exhibit MCL exceedances.

VC, the reductive dechlorination product of cis-1,2-DCE, exceeded its MCL of 2 $\mu\text{g/L}$ in one well (12WW02) during the August 2006 sampling event, with a concentration of 6.88 J $\mu\text{g/L}$ (**Table 3-1**). Historical concentrations of VC in 12WW02 were nondetect in 1993 and 1995, 2.1 $\mu\text{g/L}$ in 1998, 7.24 $\mu\text{g/L}$ in 2003, 5.34 $\mu\text{g/L}$ in February 2004, and 3.75 $\mu\text{g/L}$ in December 2004. The increase in VC concentrations is evidence of cis-1,2-DCE biodegradation via reductive dechlorination. In addition, the lack of accumulating VC concentrations and the detection of ethene in 12WW02 at 0.8 $\mu\text{g/L}$ in August 2006 indicates that VC is being further degraded to the desired innocuous end product. The trends in VC concentrations and the production of ethene are strong indicators supporting the occurrence of natural attenuation under the PLOE.

Even though the evaluation of changes in COC concentrations with time indicates the occurrence of natural attenuation, the evaluation of changes in COC concentrations with respect to distance further elucidates that natural attenuation mechanisms have controlled plume migration. The historical and current VOC data indicate a clear decreasing trend in COC concentrations with distance away from former 12WW12. Monitoring well 12WW17, located downgradient of 12WW12 in the shallow zone, has exhibited nondetect concentrations of the COCs (**Table 3-2**), or was dry during sampling events. Similarly, monitoring well 12WW16, which is downgradient of 12WW17, exhibited nondetect concentrations of the COCs (**Table 3-2**) or was dry during

sampling events. Following abandonment of 12WW16 and 12WW17, the replacement wells 12WW21 and 12WW23 have indicated nondetect concentrations of the COCs during the 2006 sampling events. In addition, a newly installed cross-gradient monitoring well, 12WW22, has also indicated nondetect concentrations following installation in 2006. The lack of detections in downgradient monitoring wells indicates that the plume is not migrating, most likely due to the influence of natural attenuation mechanisms including biological reductive dechlorination to innocuous end products.

3.1.2 SLOE: Geochemical Indicators

Groundwater field parameters, including DO, ORP, pH, temperature, and conductivity, were analyzed in the field during the August 2006 sampling event. In addition, laboratory analysis for the following natural attenuation parameters was performed during the same sampling event: gases (methane, ethane, and ethene), anions (sulfate, nitrate, nitrite, and chloride), total organic carbon (TOC), and total inorganic carbon. The results of the August 2006 sampling event at LHAAP-12 are presented in **Table 3-1**.

The preferred terminal electron acceptor during microbial respiration is O_2 . The DO concentrations have to be below 1.0 milligram per liter (mg/L) to allow for the anaerobic microbial degradation of the COCs. The DO concentrations observed within the shallow groundwater zone were all below 1 mg/L during the August 2006 sampling event (**Table 3-1**). The DO measurements indicate that anaerobic conditions ideal for the occurrence of reductive dechlorination prevail in the shallow groundwater zone at LHAAP-12.

The groundwater ORP indicates whether conditions exist to anaerobically reduce the COCs. These conditions normally require ORP values below zero millivolts (mV). The ORP measurements at LHAAP-12 indicate positive values across the site (**Table 3-1**). These measurements contradict the observed DO readings which indicated the abundance of anaerobic conditions. ORP measurements are often not as reliable as DO measurements.

Following O_2 , microorganisms preferentially use NO_3^- as a terminal electron acceptor. **Table 3-1** indicates that NO_3^- concentrations were nondetect across LHAAP-12 with a detection limit ranging from 0.6 to 3 mg/L. Concentrations of NO_3^- less than 1 mg/L are not expected to interfere with anaerobic reductive dechlorination (USEPA, 1998). Therefore, NO_3^- reduction is not a likely mode of microbial respiration at the site, and the lack of NO_3^- is favorable for achieving the highly reducing conditions ideal for anaerobic reductive dechlorination.

Reductive dechlorination of highly chlorinated compounds such as TCE occurs under sulfate-reducing conditions, but the reductive dechlorination of cis-1,2-DCE and VC is unlikely to occur under the same conditions. Sulfate-reducing conditions are favored when other electron acceptors such as O_2 , NO_3^- , and bioavailable Fe^{+3} are depleted, leaving SO_4^{-2} as the primary

acceptor. Active SO_4^{-2} reduction is often indicated by a depletion of SO_4^{-2} in groundwater and a possible increase in sulfide. Concentrations of SO_4^{-2} greater than 20 mg/L may cause competitive exclusion of reductive dechlorination (USEPA, 1998). **Table 3-1** indicates that the SO_4^{-2} concentrations at LHAAP-12 ranged from 47.2 mg/L in 12WW02 to 378 mg/L in 12WW01. Even though the SO_4^{-2} concentrations are greater than the USEPA threshold of 20 mg/L, there is evidence of cis-1,2-DCE dechlorination as indicated by the production of VC, which underwent further reductive dechlorination to ethene. It is worthwhile noting that the only monitoring well that exhibited COC concentrations above the MCL during the August 2006 sampling event, VC at 6.88 $\mu\text{g/L}$ in 12WW02, also has the lowest SO_4^{-2} concentration at LHAAP-12. This indicates that SO_4^{-2} reduction has occurred at 12WW02. In addition, this well has the highest methane concentration at 515 $\mu\text{g/L}$ and the only ethene detection at 0.8 $\mu\text{g/L}$ (**Table 3-1**). Since methanogenesis is favored following SO_4^{-2} reduction, it is plausible that there are methanogenic pockets within the subsurface with conditions conducive for the complete dechlorination of VC to ethene.

Regardless of the electron acceptor being used, organic carbon is a required source of reduced carbon and energy to sustain microbial activity. The TOC is utilized as a carbon and energy source to support the reductive dechlorination of the chlorinated COCs. TOC concentrations greater than 20 mg/L are considered adequate to support microbial activity (USEPA, 1998). In the wells sampled during the August 2006 event, the concentration of TOC ranged from 2.9 mg/L in 12WW21 to 16.5 mg/L in 12WW02. Although the TOC concentration in 12WW02 is below the adequate level, it is sufficient to stimulate reductive dechlorination in the shallow groundwater zone in the same area with the VC MCL exceedance. **Table 3-1** also presents the total inorganic carbon concentrations, with an elevated concentration in 12WW02 of 64.7 mg/L, compared to concentrations around 10 mg/L in the unimpacted wells. Increases in inorganic carbon are an indirect indicator of the generation of CO_2 as final breakdown product of biological metabolism.

An optimum pH level is important for microbial populations to sustain life. Most living organisms live within a pH range of 6 to 8. The pH within the shallow groundwater zone ranged from 5.26 to 6.27, with a pH of 5.77 in 12WW02. Even though the values are slightly outside the optimal range for microbial activity, microbial activity is unlikely to be inhibited at such levels.

The qualitative assessment of the geochemical indicators in the shallow groundwater zone at LHAAP-12 presents evidence that geochemical conditions are adequate for the complete reductive dechlorination of TCE, cis-1,2-DCE, and VC. The low DO and NO_3^- concentrations indicate that the aquifer is anaerobic, which favors reductive dechlorination. The reduced SO_4^{-2} levels, elevated methane concentrations, elevated TOC and inorganic carbon concentrations, and the detection of ethene in 12WW02 indicate that adequate conditions exist in the vicinity of that

well to sustain complete reductive dechlorination of the VC to innocuous ethene. Therefore, evaluation of the SLOE demonstrates that MNA is a feasible alternative as the sole remedy for the remaining COCs in the shallow zone at LHAAP-12.

3.1.3 OLOE: Predictive Modeling and Microbial Analysis

Predictive modeling and microbial analysis were evaluated as part of OLOE for demonstrating MNA at LHAAP-12. Modeling was performed to calculate the time required for the maximum TCE concentration of 508 µg/L detected at the “source” (monitoring well 12WW12) during the December 2004 sampling event to naturally attenuate to the MCL level of 5 µg/L. The computer program, AT123D (an acronym for Analytical One-, Two-, Three-Dimensional Summation of Waste Transport in Aquifer System) (Yeh, 1987), was utilized to calculate the time for the natural attenuation of TCE. The type of the contaminant source (instantaneous or continuous) and the degradation rate of TCE are the major factors that influence the time for TCE to attenuate to the MCL at the source. Without degradation, the time for TCE to attenuate to the MCL for the instantaneous source is 486 years, whereas, it takes 2651 years for the continuous source option. The time for TCE to attenuate to the MCL is reduced dramatically (if both cases are simulated with a half-life of 4.5 years obtained from the literature) to 23 years for the instantaneous source and 40 years for the continuous source. The complete results of the groundwater modeling are presented in “Results of Modeling for Natural Attenuation of Trichloroethene at LHAAP-12”, (Shaw, 2007). As evidenced by the presence of TCE daughter products, cis-1,2-DCE and VC, and the end product ethene, coupled with the adequate geochemical conditions, the accelerated cleanup times estimated during the modeling effort are plausible. In addition, the presence of a landfill cap at LHAAP-12 indicates that the instantaneous source is the more likely scenario, thereby requiring a shorter cleanup time.

Representative samples from selected wells were collected at LHAAP-12 for microbial analysis of the dechlorinating microorganisms *Dehalococcoides* sp., which are the only known bacterial species capable of complete dechlorination of TCE and its daughter products to innocuous ethene via reductive dechlorination and are an important indicator for the dechlorination of TCE to cis-1,2-DCE. *Dehalococcoides* sp. are not ubiquitous at sites contaminated with chlorinated ethenes. Several sites lacking this dechlorinating microorganism exhibit incomplete dechlorination of TCE to cis-1,2-DCE. The results of the analysis conducted at LHAAP-12 are provided on **Table 3-1**, and indicate that *Dehalococcoides* sp. concentrations in the range of 10^3 cells per milliliter (cells/mL) of groundwater were detected in 12WW01 and 12WW02. The remainder of the wells had lower concentrations on the order of 10^1 to 10^2 cells/mL. The elevated levels of the dechlorinating microorganisms in 12WW02 coupled with the production of ethene in that well is further corroborating evidence that site conditions are conducive for the complete dechlorination of site COCs via natural attenuation as the sole remedy.

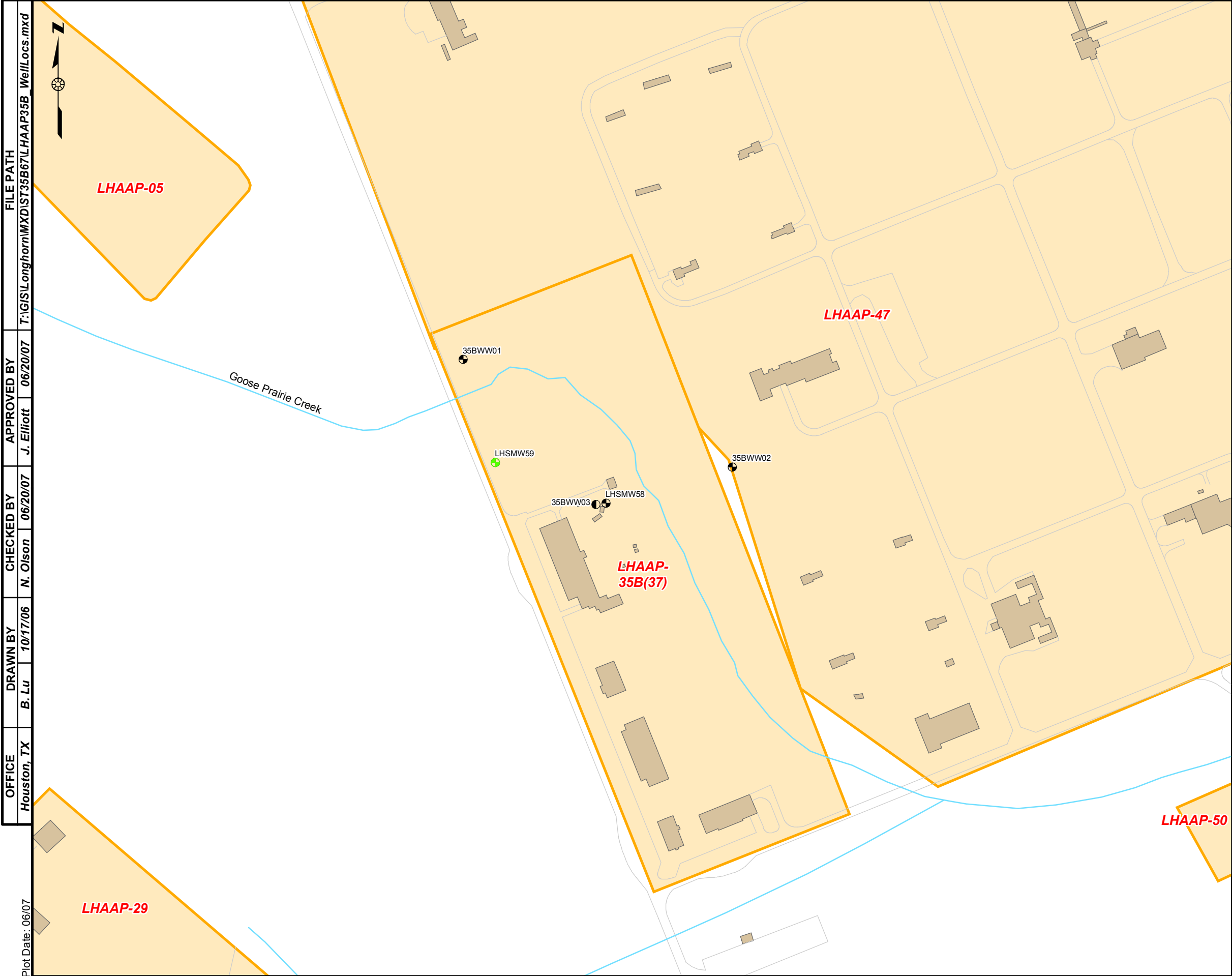
3.2 LHAAP-35B(37)

Five monitoring wells at LHAAP-35B(37) were evaluated for evidence of natural attenuation of groundwater COCs, PCE, TCE, and 1,1-DCE. Three of the five wells, 35BWW01, 35BWW02, and LHSMW58, are screened in the shallow groundwater zone at depths ranging from 9 feet to 32 feet. Well 35BWW03 is screened in the intermediate groundwater zone at a depth of 80 feet. Well LHSMW59 was installed at a depth of 49.3 feet between the shallow zone and intermediate zone, and is significantly shallower than the intermediate well 35BWW03 (80 feet). LHSMW59 is a composite well with a 20-foot screen that appears to monitor both the shallow zone and another zone with a bottom depth of approximately 49 feet. For purposes of discussion of MNA in this section, the data from LHSMW59 was evaluated separately. The monitoring wells at LHAAP-35B(37) are depicted on **Figure 3-2**. Since 35BWW02 was dry, only four of the five wells were sampled for VOCs and MNA parameters during the August 2006 sampling event, and the results are presented in **Table 3-3**. Historical COC concentrations at LHAAP-35B(37) are presented in **Table 3-4**.

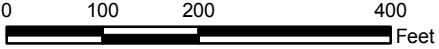
3.2.1 PLOE: Change in COC Concentrations Over Time and with Distance

The change in groundwater COC concentrations over time and with distance was evaluated for the shallow and intermediate groundwater zones at LHAAP-35B(37). Historical COC concentrations in the shallow zone do not indicate a decrease in concentrations as evidenced by a lack of PCE and TCE reductions in LHSMW58 (**Table 3-4**). Concentrations of PCE have ranged from 7.9 to 21.8 µg/L, with the most recent detection measured at 21.8 µg/L. Similarly, TCE concentrations have not exhibited a decrease, even though the most recent result of 21.8 µg/L is lower than the historical high of 33 µg/L measured in September 2004. The most recently measured concentrations of PCE and TCE exceed their MCLs. Unlike the PCE and TCE concentrations, the levels of 1,1-DCE have exhibited a declining trend, with a concentration reduction from 58 µg/L in 1994 to 25.4 µg/L in 1996, followed by a reduction below the 1,1-DCE MCL in the subsequent monitoring event in 1998 (**Table 3-4**). The most recent result for 1,1-DCE in LHSMW58 measured in August 2006, 2.11 µg/L, indicates that the concentration remains below the MCL. The remaining two shallow groundwater wells, 35BWW01 and 35BWW02 never exhibited COC concentrations, either during historical or more recent sampling events. Monitoring well 35BWW02 was dry during recent sampling event.

Groundwater data collected from well LHSMW59 indicates a decreasing trend in PCE and TCE concentrations. The concentration of PCE has steadily decreased from a historical high of 16.9 µg/L in 1996 to 1.19 µg/L in 2006, with concentrations below the MCL since 2004 (**Table 3-4**). Similarly, concentrations of TCE have decreased from 330 µg/L in 1998 to 180 µg/L in 2004, followed by a reduction to 135 µg/L in 2006. Although the reductions in PCE and TCE concentrations did not result in the production of cis-1,2-DCE, VC, or ethene (i.e., no



- Legend**
- Shallow Monitoring Well
 - Intermediate Monitoring Well
 - Composite Upper And Lower Shallow Monitoring Well
 - Stream
 - Road
 - Former Building or Concrete Slab
 - Site



U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE 3-2
MONITORING WELL LOCATION MAP
LHAAP-35B(37)
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

Table 3-3
VOC and Natural Attenuation Parameters at LHAAP-35B(37), August 2006

LOCATION CODE		35BWW01			35BWW03			35BWW03			LHSMW58			LHSMW59		
Sample No:		35BWW01			35BWW03			35BWW03DUP			LHSMW58			LHSMW59		
Sample Date:		10-Aug-06			9-Aug-06			9-Aug-06			9-Aug-06			10-Aug-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
FIELD TESTS																
Temperature	Degrees C	20.79			24.88			24.88			21			20.45		
Conductivity	ms/cm	0.094			1.196			1.196			0.285			1.021		
pH	STD UNIT	5.61			11			11			4.61			7.06		
ORP	MILLIVOLTS	194.1			50.3			50.3			560			209.3		
Dissolved Oxygen	mg/L	1.48			0.13			0.13			0.63			0.29		
Turbidity	NTU	1784			3.2			3.2			3.3			33.3		
GASES																
Ethane	µg/L	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Ethene	µg/L	0.5	U	U	1.9			1.82			0.5	U	U	0.5	U	U
Methane	µg/L	2.57			117			110			1.19		B	0.53		B
GENERAL CHEMISTRY																
Chloride	mg/L	5.3			78.8			77.6			11.8			107.0		
Nitrate	mg/L	6.0	U	U	0.6	U	U	0.6	U	U	0.6	U	U	2.4	U	U
Nitrite	mg/L	4.0	U	U	0.4	U	U	0.4	U	U	0.4	U	U	1.6	U	U
Sulfate (as SO4)	mg/L	14.6			4.8			8.2			76.5			143.0		
Total Inorganic Carbon	mg/L	10.0	U	U	12.5			13.1			18.7			28.6		
Total Organic Carbon	mg/L	11.6			9.1			8.3			3.9			6.0		
VOLATILES																
1,1,1-Trichloroethane	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethene	µg/L	5	U	U	5	U	U	5	U	U	2.11	J	JH	5	U	U
Acetone	µg/L	10	U	UJ	8.98	J	B	9.77	J	B	10	U	U	10	U	UJ
cis-1,2-Dichloroethene	µg/L	10	U	U	10	U	U	10	U	U	0.716	J	JH	0.521	J	J
Tetrachloroethene	µg/L	5	U	U	5	U	U	5	U	U	21.8			1.19	J	J
trans-1,2-Dichloroethene	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Trichloroethene	µg/L	5	U	U	5	U	U	5	U	U	21.8		JH	135		
Vinyl chloride	µg/L	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
Microbiology																
Dehalococcoides	Cells/mL	3.3 X 10 ¹	U		NA			NA			1.8 X 10 ¹	U		4.2 X 10 ¹		

Notes and Abbreviations:

B Sample blank contained analyte.
 C Celsius
 J Estimated result detected above the method detected limit but below the reporting limit.
 mg/L milligrams per liter
 mL milliliter
 ms/cm millisiemens per centimeter
 NA Not analyzed

NTU Nephelometric Turbidity Units
 ORP oxidation-reduction potential
 Qual Laboratory qualifier
 U Not detected. The reporting limit is shown
 VQ Validation qualifier
 µg/L micrograms per liter

Table 3-4
LHAAP-35B(37) Historical COC Concentrations

				COC Concentrations in µg/L								
				PCE MCL = 5			TCE MCL = 5			1,1-DCE MCL = 7		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
35BWW01	Shallow	Active	8-Nov-98	1	U	U	1	U	U	1	U	U
			10-Sep-04	5	U	U	5	U	U	5	U	U
			10-Aug-06	5	U	U	5	U	U	5	U	U
35BWW02	Shallow	Active	8-Nov-98	1	U	U	1	U	U	1	U	U
			10-Sep-04	Dry			Dry			Dry		
			9-Aug-06	Dry			Dry			Dry		
35BWW03	Intermediate	Active	10-Sep-04	5	U	U	5	U	U	5	U	U
			9-Aug-06	5	U	U	5	U	U	5	U	U
LHSMW58	Shallow	Active	11-Dec-94	21			NR			58		
			21-Aug-96	7.9			11.5			25.4		
			20-May-98	9.5			9.4			4.2		
			10-Sep-04	20			33			4	J	J
			9-Aug-06	21.8		J	21.8		J	2.11	J	JH
LHSMW59	Intermediate	Active	11-Dec-94	11			NR			5	U	U
			21-Aug-96	16.9			327			2.2		
			20-May-98	7			330			1	U	U
			10-Sep-04	3	J	J	180	D		5	U	U
			10-Aug-06	1.19	J	J	135			5	U	U

Notes and Abbreviations:

Shaded and bold values exceeded their MCLs

1,1-DCE 1,1-dichloroethene

COC Chemical of Concern

D Dilution

J Estimated result detected above the method detected limit but below the reporting limit.

MCL Maximum contaminant level

NR not reported by laboratory

PCE tetrachloroethene

Qual laboratory qualifier

TCE trichloroethene

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

evidence of reductive dechlorination), the decreasing trend supports the PLOE for the occurrence of natural attenuation in the intermediate groundwater zone at LHAAP-35B(37). Concentrations of the remaining COC, 1,1-DCE, were never detected above the MCL in the intermediate groundwater zone.

3.2.2 SLOE: Geochemical Indicators

Groundwater field parameters including DO, ORP, pH, temperature, and conductivity were analyzed in the field from four LHAAP-35B(37) monitoring wells during the August 2006 sampling event. In addition, laboratory analysis for the following natural attenuation parameters was performed during the same sampling event: gases (methane, ethane, and ethene), anions

(sulfate, nitrate, nitrite, and chloride), TOC, and total inorganic carbon. The results of the August 2006 sampling event at LHAAP-35B(37) are presented in **Table 3-3**.

The preferred terminal electron acceptor during microbial respiration is O_2 . The DO concentrations have to be below 1.0 mg/L to allow for the anaerobic microbial degradation of the COCs. The DO concentration in the impacted shallow well, LHSMW58, was 0.63 mg/L, indicating anaerobic conditions. Similarly, the DO concentration in the impacted intermediate well, LHSMW59, was measured at 0.29 mg/L (**Table 3-3**). The DO measurements indicate that conditions ideal for the occurrence of anaerobic biodegradation prevail in the impacted shallow and intermediate groundwater zones at LHAAP-35B(37).

The groundwater ORP indicates whether conditions exist to anaerobically reduce the COCs. These conditions normally require ORP values below zero mV. The ORP measurements at LHAAP-35B(37) indicate positive values in the impacted shallow (560 mV) and intermediate (209 mV) monitoring wells (**Table 3-3**). These measurements contradict the observed DO readings which indicated the presence of anaerobic conditions. ORP measurements are often not as reliable as DO measurements.

Following O_2 , microorganisms preferentially use NO_3^- as a terminal electron acceptor. **Table 3-3** indicates that NO_3^- concentrations were nondetect across both impacted groundwater zones at LHAAP-35B(37). Concentrations of NO_3^- less than 1 mg/L are not expected to interfere with anaerobic reductive dechlorination (USEPA, 1998). Therefore, NO_3^- reduction is not a likely mode of microbial respiration at the site, and the lack of NO_3^- is favorable for achieving the highly reducing conditions ideal for anaerobic reductive dechlorination.

Reductive dechlorination of PCE and TCE can occur under sulfate-reducing conditions. **Table 3-3** indicates that the SO_4^{-2} concentrations in the impacted wells at the site were 76.5 mg/L in LHSMW58 and 143 mg/L in LHSMW59. While the elevated SO_4^{-2} levels may not inhibit potential reductive dechlorination of PCE and TCE, they would inhibit the reductive dechlorination of the daughter products. Future monitoring of SO_4^{-2} is required to establish whether active SO_4^{-2} degradation is occurring in site groundwater.

Following SO_4^{-2} consumption, methanogenesis is the predominant microbial process. There was no methane detected in the impacted monitoring wells during the August 2006 sampling event (**Table 3-3**). This indicates that methanogenic conditions have not been established, as expected, since SO_4^{-2} levels are elevated in shallow and intermediate site groundwater.

TOC is utilized as a carbon and energy source to support the biodegradation of the chlorinated COCs. TOC concentrations greater than 20 mg/L are considered adequate to support microbial activity (USEPA, 1998). The concentration of TOC in the impacted wells at the site was 3.9 mg/L in LHSMW58 and 6.0 mg/L in LHSMW59 (**Table 3-3**). The low levels of TOC

concentrations indicate that there is not a sufficient source of carbon in the impacted groundwater zones to sustain anaerobic biological activity. Levels of inorganic carbon are elevated in the impacted intermediate zone well providing indirect evidence of historical biological activity.

An optimum pH level is important for microbial populations to sustain life. Most living organisms live within a pH range of 6 to 8. The pH in the impacted wells was measured at 4.61 in shallow well LHSMW58 and 7.06 in well LHSMW59 (**Table 3-3**). The pH value in well LHSMW59 is within the optimum range for microbial activity. However, the pH value in the shallow well is well outside the optimal range, which may explain the lack of biodegradation in the shallow zone.

Whether biodegradation of chlorinated solvents occurs via reductive dechlorination or alternate processes, chloride ion is released to groundwater during the process. The chloride concentration in the impacted shallow well LHSMW58 was measured at 11.8 mg/L, which exceeds the concentration of chloride measured in unimpacted shallow monitoring well 35BWW01, at 5.3 mg/L (**Table 3-3**). Similarly, the concentration of chloride in the impacted well LHSMW59 was measured at 107 mg/L, which exceeds the concentration of chloride measured in the unimpacted intermediate monitoring well 35BWW03, at 78.8 mg/L (**Table 3-3**). The elevated chloride concentrations, in particular in the impacted monitoring well, LHSMW59, suggest that chloride ion has been released to the groundwater as a result of contaminant breakdown.

The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-35B(37) presents evidence that conditions are not adequate for the biodegradation of groundwater COCs, primarily due to the low pH measured in LHSMW58. In contrast, the evaluation of the groundwater monitored by LHSMW59 indicates suitable conditions for anaerobic biodegradation of the COCs, as indicated by low DO, the lack of NO_3^- , elevated inorganic carbon, neutral pH, and elevated chloride concentrations. Despite the suitable conditions for anaerobic biodegradation in the LHSMW59, there is no evidence for biodegradation via reductive dechlorination. This suggests that natural attenuation mechanisms other than biodegradation, such as dilution, dispersion, sorption, and volatilization, are likely the primary contributors to reductions in COC concentrations at LHAAP-35B(37).

3.2.3 OLOE: Predictive Modeling and Microbial Analysis

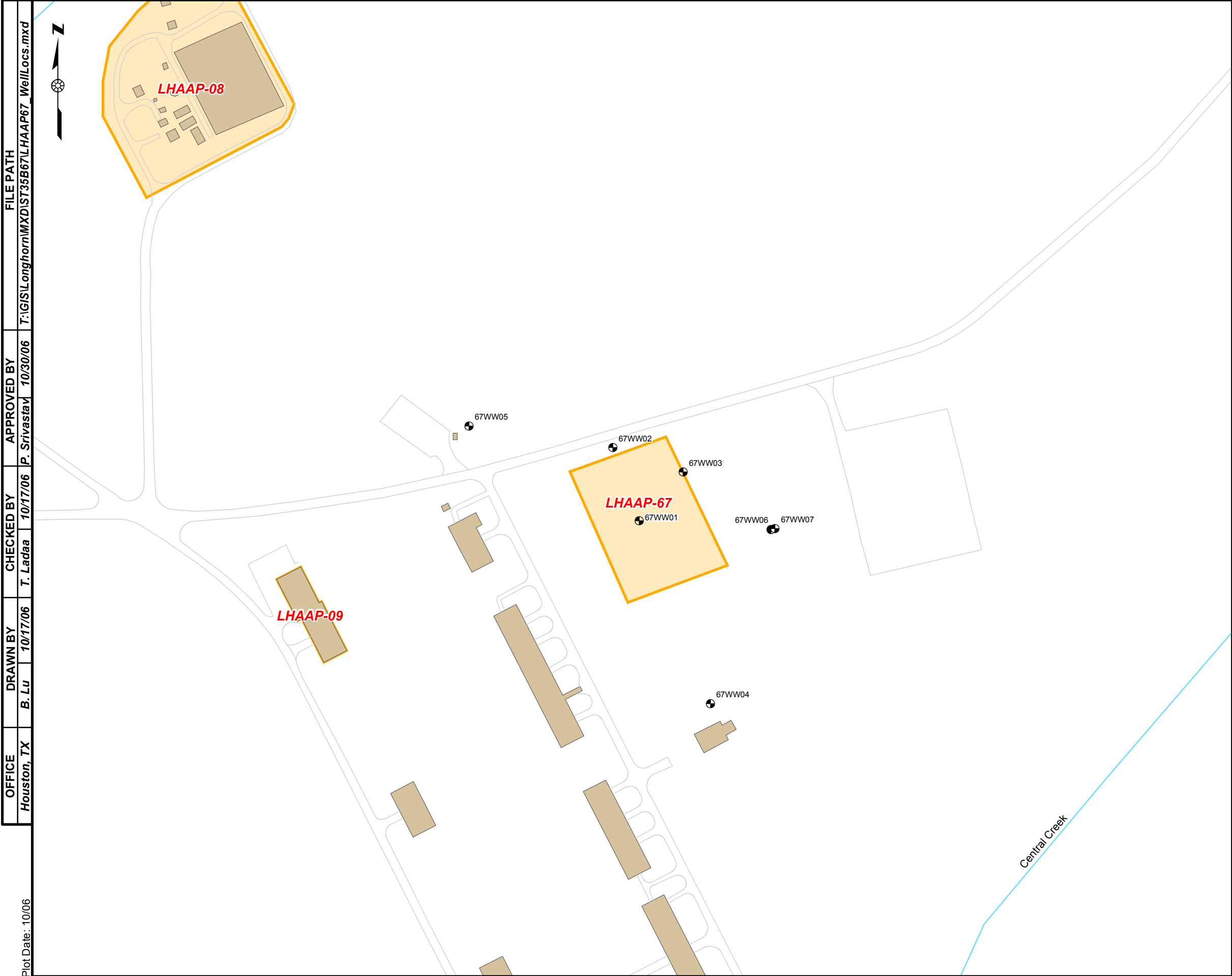
Predictive modeling and microbial analysis were evaluated as part of OLOE for demonstrating MNA at LHAAP-35B(37). Modeling was performed using AT123D to estimate the time required for the maximum COC concentrations in site groundwater to naturally attenuate to their respective MCLs. Even though the modeling was conducted for the shallow zone, the maximum concentration of TCE observed at LHSMW59 was utilized for conservativeness. The model,

therefore, applies to both the shallow zone as well as the zone monitored by LHSMW59 because all other parameters are unchanged. The type of the contaminant source (instantaneous or continuous) and the degradation rate of the COCs are the major factors that influence the cleanup time. Without consideration of degradation rate, the time for PCE, TCE, and 1,1-DCE to attenuate to their MCL assuming an instantaneous source is 26.4, 32.6, and 20.4 years, respectively, whereas, it takes 32, 39, and 27 years assuming a continuous source. The time it takes for each COC at LHAAP-35B(37) to attenuate to its MCL is reduced by 41 percent to 90 percent assuming an instantaneous source, and 34 percent to 62 percent assuming a continuous source when both cases are simulated using literature-based half-lives. The complete results of the groundwater modeling are presented in *Draft Final Results of Modeling for Natural Attenuation of Chlorinated Solvents in Groundwater at LHAAP-35B(37) and LHAAP-67* (Shaw, 2006). As evidenced by the decreasing trends in PCE and TCE concentrations in the intermediate zone, the accelerated cleanup times estimated during the modeling effort are plausible for the intermediate zone, but not the shallow zone.

Representative samples from selected wells were collected at LHAAP-35B(37) for microbial analysis of the dechlorinating microorganisms *Dehalococcoides sp.*, which are the only known bacterial species capable of complete dechlorination of PCE, TCE, and their daughter products to innocuous ethene via reductive dechlorination. The results of the analysis are provided in **Table 3-3**, and indicate that *Dehalococcoides sp.* concentrations were only detected in one well, LHSMW59, at a relatively low concentration of 4.2×10^1 cells/mL. The low to nondetect levels of the dechlorinating microorganisms coupled with the lack of production of cis-1,2-DCE, VC, and ethene is further corroborating evidence that reductive dechlorination is not a primary pathway for contaminant degradation in the shallow and intermediate groundwater.

3.3 LHAAP-67

Seven monitoring wells at LHAAP-67 were evaluated for evidence of natural attenuation of groundwater COCs; TCE, 1,1-DCE, 1,2-DCA, 1,1,1-TCA, and 1,1,2-TCA. Six of the seven wells are screened in the shallow groundwater zone; 67WW01 through 67WW05, and 67WW07. The remaining well, 67WW06, is screened in the intermediate zone. The monitoring wells at LHAAP-67 are depicted on **Figure 3-3**. All of the wells with the exception of 67WW04 were sampled for VOCs and MNA parameters during the August 2006 sampling event, and the results are presented in **Table 3-5**. Historical COC concentrations at LHAAP-67 are presented in **Table 3-6**.

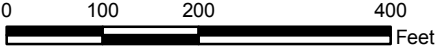


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Plot Date: 10/06

Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Stream
- Road
- Former Building or Concrete Slab
- Site



U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE 3-3
MONITORING WELL LOCATION MAP
LHAAP-67
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

Table 3-5
VOC and Natural Attenuation Parameters at LHAAP-67, August 2006

LOCATION CODE		67WW01			67WW02			67WW03			67WW05			67WW06			67WW07		
Sample No:		67WW01/G4WW01			67WW02			67WW03			67WW05			67WW06			67WW07		
Sample Date:		6-Aug-06			6-Aug-06			9-Aug-06			8-Aug-06			8-Aug-06			8-Aug-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
FIELD TESTS																			
Temperature	Degrees C	21.5			27			21.4			23.95			21.92			21.97		
Conductivity	ms/cm	3.473			3.794			7.274			3.719			732			1.797		
pH	STD UNIT	6.1			6.25			5.92			6.67			5.62			5.69		
ORP	MILLIVOLTS	26.8			92.2			67			46.9			18.2			416.3		
Dissolved Oxygen	mg/L	2.25			2.43			3.95			2.32			0.02			1.58		
Turbidity	NTU	6.3			13.7			2942.8			20.1			52			-1.5		
GASES																			
Ethane	µg/L	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Ethene	µg/L	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Methane	µg/L	42.9			0.801		B	0.561		B	8.88			340			3.18		
GENERAL CHEMISTRY																			
Chloride	mg/L	891.0			1020.0			2360.0			909.0			2050.0			889.0		
Nitrate	mg/L	0.6	U	U	0.6	U	U	3.0	U	U	0.6	U	U	3.0	U	U	0.6	U	U
Nitrite	mg/L	10.0	U	U	10.0	U	U	10.0	U	U	8.0	U	U	10.0	U	U	4.0	U	U
Sulfate (as SO ₄)	mg/L	180.0			134.0			291.0			67.9			271.0			12.3		
Total Inorganic Carbon	mg/L	9.38			21.1			42.7			77.4			67.7			42.3		
Total Organic Carbon	mg/L	3.49			5.6			13.7			10.4			23.3			7.4		
VOLATILES																			
1,1,1-Trichloroethane	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1,2-Trichloroethane	µg/L	0.305	J	JH	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethane	µg/L	5.61		JH	0.365	J	JH	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethene	µg/L	153			5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,2-Dichloroethane	µg/L	5.57	Q	JH	5	U	U	5	U	U	5	U	U	3.02	J	J	5	U	U
Acetone	µg/L	10	U	U	2.84	J	B	10	U	U	2.82	J	B	10	U	U	10	U	U
cis-1,2-Dichloroethene	µg/L	0.954	J	JH	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
trans-1,2-Dichloroethene	µg/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Trichloroethene	µg/L	5.38		JH	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Vinyl chloride	µg/L	1.46	J	JH	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
Microbiology																			
Dehalococcoides	cells/mL	1.0 X 10 ¹	U		1.0 X 10 ²			3.3 X 10 ³	U		NA			6.3 X 10 ²			1.0 X 10 ¹	U	

Notes and Abbreviations:

B Sample blank contained analyte.

C Celsius

J Estimated result detected above the method detected limit but below the reporting limit.

JH Sample hold time exceeded. Result shown is estimated.

mg/L milligrams per liter

mL milliliter

ms/cm millisiemens per centimeter

NA Not analyzed

NTU Nephelometric Turbidity Units

ORP oxidation-reduction potential

Q One or more quality control failure.

Qual Laboratory qualifier

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

Table 3-6
LHAAP-67 Historical COC Concentration

				COC Concentrations in µg/L														
				TCE MCL = 5			1,1-DCE MCL = 7			1,2-DCA MCL = 5			1,1,1-TCA MCL = 200			1,1,2-TCA MCL = 5		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
67WW01	Shallow	Active	8-Dec-98	6.3			380			27			560			33		
			12-Sep-04	6			280	D		13			5	U	U	1	J	J
			6-Aug-06	5.38		JH	153			5.57	Q	JH	5	U	U	0.305	J	JH
67WW02	Shallow	Active	8-Dec-98	1	U	U	2.4			1	U	U	100			6.4		
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			6-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW03	Shallow	Active	8-Dec-98	20	U	U	36			20	U	U	1800			24		
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			9-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW04	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	0.1	U	U	0.1	U	U	0.1	U	U
			12-Sep-04	1	J	J	5	U	U	5	U	U	5	U	U	5	U	U
67WW05	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	0.1	U	U	0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW06	Intermediate	Active	19-Dec-00	0.14		J	0.2	U	U	3.51			0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	3.02	J	J	5	U	U	5	U	U
67WW07	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	2.28			0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U

Notes and Abbreviations:**Shaded and bold values exceeded their MCLs**

1,1-DCE 1,1-dichloroethene

COC Chemical of Concern

D Dilution

J Estimated result detected above the method detection limit but below the reporting limit.

JH Sample hold time exceeded. Result shown is estimated.

MCL Maximum contaminant level

NR Not reported by laboratory

PCE Tetrachloroethene

Q One or more quality control fail

Qual Laboratory qualifier

TCE Trichloroethene

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

3.3.1 PLOE: Change in COC Concentrations Over Time and with Distance

The change in groundwater COC concentrations over time and with distance was evaluated for the shallow and intermediate groundwater zones at LHAAP-67. Historical COC concentrations in the shallow zone indicate a significant decrease in all the COCs when comparing the 1998 data to 2004 and 2006 groundwater data (**Table 3-6**). No COCs were detected in the intermediate groundwater zone above MCLs, and therefore that zone was not evaluated any further for evidence of natural attenuation.

TCE was detected in one monitoring well, 67WW01, at concentrations slightly exceeding the MCL during recent and historical sampling events (**Table 3-6**). Nevertheless, the TCE concentrations exhibit a decreasing trend with a reduction from 6.3 µg/L in 1998 to 5.38 µg/L in 2006. The decreasing trend in TCE concentrations in 67WW01, and the lack of TCE in downgradient monitoring well 67WW03, suggests that natural attenuation processes have contributed to TCE degradation and prevented plume migration.

The COC 1,1-DCE was detected above the MCL of 7 µg/L in one monitoring well, 67WW01, during the most recent sampling event completed in August 2006, at a concentration of 153 µg/L (**Table 3-6**). An evaluation of the historical trends indicates a reduction in 1,1-DCE concentrations in that well from 380 µg/L in 1998 to 280 µg/L in 2004, followed by a reduction to 153 µg/L in 2006. Concurrent with that reduction, was a decrease in 1,1-DCE concentrations in downgradient monitoring well 67WW03, with levels decreasing from 36 µg/L in 1998 to nondetect in 2004 and 2006. The decreasing trend in 1,1-DCE concentrations in 67WW01, and the reduction of 1,1-DCE to below the MCL in downgradient well 67WW03, strongly suggest that natural attenuation processes have contributed to 1,1-DCE plume concentrations and size reductions in the shallow groundwater at LHAAP-67.

1,2-DCA was detected slightly above the MCL of 5 µg/L in one monitoring well, 67WW01, during the most recent sampling event completed in August 2006, at a concentration of 5.57 µg/L (**Table 3-6**). An evaluation of the historical data indicates a decreasing trend with a concentration of 27 µg/L measured in 1998, followed by a reduction to 13 µg/L measured in 2004, and subsequently a decrease to 5.57 µg/L measured in 2006. 1,2-DCA was not detected above the MCL in downgradient or cross gradient wells at the site. The decreasing trend in concentrations and the lack of detections in the downgradient well indicate that natural attenuation processes have contributed to 1,2-DCA reductions and prevented contaminant migration.

The fourth COC, 1,1,1-TCA, was not detected in any of the monitoring wells during the most recent sampling event completed in August 2006 (**Table 3-6**). An evaluation of the historical data indicates that 1,1,1-TCA was detected above the MCL of 200 µg/L during the 1998

sampling event in 67WW01 at 560 µg/L, and in downgradient monitoring well 67WW03 at 1,800 µg/L (**Table 3-6**). Subsequent monitoring events indicate a decrease in the 1,1,1-TCA concentrations to nondetect in 2004 and 2006 in all site monitoring wells. A potential pathway for 1,1,1-TCA degradation is via abiotic hydrolysis to 1,1-DCE. However, since the reductions in 1,1,1-TCA were not accompanied by increases in 1,1-DCE, it is unlikely that this pathway occurred. Nevertheless, the sharp drop in 1,1,1-TCA concentrations across the site to nondetect levels indicates that natural attenuation processes have contributed to contaminant degradation and prevented plume migration.

The final COC, 1,1,2-TCA, was not detected above the MCL of 5 µg/L in any of the monitoring wells during the most recent sampling event completed in August 2006 (**Table 3-6**). An evaluation of the historical data indicates that 1,1,2-TCA was detected above the MCL during the 1998 sampling event in 67WW01 at 33 µg/L, 67WW02 at 6.4 µg/L, and 67WW03 at 24 µg/L (**Table 3-6**). Subsequent monitoring events indicate a decrease in the 1,1,2-TCA concentrations to nondetect in 2004 and 2006 in all site monitoring wells. The decrease in 1,1,2-TCA concentrations is direct evidence for the occurrence of natural attenuation at LHAAP-67.

Overall, the evaluation of the PLOE at LHAAP-67 provides strong evidence that natural attenuation processes have contributed to significant reductions in COC concentrations and prevented plume migration, with concentrations of 1,1,1-TCA and 1,1,2-TCA having been reduced to below their MCLs. The remaining COCs, TCE, 1,1-DCE, and 1,2-DCA, exhibit decreasing trends, with the concentrations of TCE and 1,2-DCA only slightly exceeding their respective MCLs during the most recent sampling event in 2006.

3.3.2 SLOE: Geochemical Indicators

Groundwater field parameters including DO, ORP, pH, temperature, and conductivity were analyzed in the field from six LHAAP-67 monitoring wells during the August 2006 sampling event. In addition, laboratory analysis for the following natural attenuation parameters was performed during the same sampling event: gases (methane, ethane, and ethene), anions (sulfate, nitrate, nitrite, and chloride), TOC, and total inorganic carbon. The results of the August 2006 sampling event at LHAAP-67 are presented in **Table 3-5**.

DO concentrations have to be below 1.0 mg/L to allow for the anaerobic microbial degradation of the COCs. The DO concentration in the well with COCs exceeding the MCLs, 67WW01, was 2.25 mg/L, indicating aerobic conditions. Similarly, the DO concentration in the remainder of the shallow wells was above 1 mg/L, indicating that the shallow groundwater zone is under aerobic conditions (**Table 3-5**). The DO measurements indicate that conditions are not ideal for the occurrence of anaerobic biodegradation at LHAAP-67. The ORP measurements at LHAAP-67 indicate positive values across the site, which also indicates oxidizing conditions (**Table 3-5**).

Following O_2 , microorganisms preferentially use NO_3^- as a terminal electron acceptor. **Table 3-5** indicates that NO_3^- concentrations were nondetect across the site. Therefore, NO_3^- reduction is not a likely mode of microbial respiration at the site.

Reductive dechlorination of the COCs can occur under sulfate-reducing conditions. **Table 3-5** indicates that the SO_4^{2-} concentrations in the impacted well at the site was 180 mg/L in 67WW01. While the elevated SO_4^{2-} levels may not inhibit potential reductive dechlorination of TCE or TCA isomers, they would inhibit the reductive dechlorination of the daughter products DCE and DCA. Future monitoring of SO_4^{2-} is required to establish whether active SO_4^{2-} degradation is occurring in site groundwater.

Following SO_4^{2-} consumption, methanogenesis is the predominant microbial process. Elevated levels of methane were detected in impacted well 67WW01 (42.9 $\mu\text{g/L}$), indicating that methanogenic conditions exist in the subsurface, despite the elevated SO_4^{2-} concentrations. The occurrence of methanogenesis is favorable for the biodegradation of all site COCs.

TOC is utilized as a carbon and energy source to support the biodegradation of the chlorinated COCs. TOC concentrations greater than 20 mg/L are considered adequate to support microbial activity (USEPA, 1998). The concentration of TOC in the impacted well at the site, 67WW01, was 3.49, indicating an insufficient source of carbon in the shallow groundwater zone to support anaerobic microbial processes.

An optimum pH level is important for microbial populations to sustain life. Most living organisms live within a pH range of 6 to 8. The pH in the impacted well was measured at 6.1, which is within the optimum range for microbial activity.

Whether biodegradation of chlorinated solvents occurs via reductive dechlorination or alternate processes, chloride ion is released to the groundwater. The chloride concentration in the impacted shallow well 67WW01 was measured at 891 mg/L, which does not exceed the concentration of chloride measured in unimpacted shallow monitoring wells (**Table 3-5**). It appears that the background concentration of chloride at LHAAP-67 is too elevated to notice any measurable differences in chloride concentration from the biodegradation of chlorinated solvents.

The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-67 presents evidence that conditions are not adequate for the biodegradation of groundwater COCs, primarily due to elevated DO and ORP, high SO_4^{2-} , and low TOC concentrations. The elevated methane concentrations were likely produced during historical periods when the shallow groundwater may have been under anaerobic reducing conditions. Therefore, evaluation of the SLOE does not provide supporting evidence for biodegradation at

LHAAP-67. This suggests that natural attenuation mechanisms other than biodegradation, such as dilution, dispersion, sorption, and volatilization, are likely the primary contributors to reductions in COC concentrations at LHAAP-67.

3.3.3 OLOE: Predictive Modeling and Microbial Analysis

Predictive modeling and microbial analysis were evaluated as part of OLOE for demonstrating MNA at LHAAP-67. Modeling was performed using AT123D to estimate the time required for the maximum COC concentrations in shallow site groundwater to naturally attenuate to their respective MCLs. The type of the contaminant source (instantaneous or continuous) and the degradation rate of the COCs are the major factors that influence the cleanup time. The required time for the reduction in the maximum TCE concentration from 6.3 µg/L to its MCL was estimated to range from 1.6 to 2.1 years (no degradation) assuming an instantaneous source. Assuming a continuous source, the time it takes for TCE to attenuate to its MCL ranges from 11.4 to 13.8 years. Assuming an instantaneous source and no degradation, the time it takes for the other COCs to be reduced to their MCL is 15 years for 1,1-DCE, 5.3 years for 1,2-DCA, 8.4 years for 1,1,1-TCA, and 6.4 years for 1,1,2-TCA. Assuming an instantaneous source with literature-based degradation values, the time it takes for each COC to attenuate to the MCL is reduced by 50 percent for 1,1,2-TCA and 87 percent 1,1-DCE. Assuming a continuous source with no degradation, the time needed to reduce these COCs (excluding TCE) to the MCL ranges from 19 years (1,2-DCA) to 34 years (1,1-DCE). Since there is evidence of decreasing trends in contaminant concentrations at LHAAP-67, the accelerated cleanup times estimated during the modeling effort are plausible. The complete results of the groundwater modeling are presented in *Draft Final Results of Modeling for Natural Attenuation of Chlorinated Solvents in Groundwater at LHAAP-35B(37) and LHAAP-67* (Shaw, 2006).

Representative samples from selected wells were collected at LHAAP-67 for microbial analysis of the dechlorinating microorganisms *Dehalococcoides sp.*, which are the only known bacterial species capable of complete dechlorination of TCE and its daughter products to innocuous ethene via reductive dechlorination. However, these species will not necessarily degrade chlorinated ethanes. The results of the analysis are provided in **Table 3-5**, and indicate that *Dehalococcoides sp.* concentrations were not detected in the impacted well, 67WW01. The lack of these microorganisms in shallow groundwater coupled with the lack of production of cis-1,2-DCE, VC, and ethene is further corroborating evidence that reductive dechlorination is not a primary pathway for contaminant degradation at LHAAP-67.

4.0 Summary of Results and Conclusions

Historical VOC data and geochemical indicators were evaluated at LHAAP-12, LHAAP-35B(37), and LHAAP-67 to demonstrate the occurrence of natural attenuation process of groundwater COCs, in support of using MNA as site remedies. A tiered approach investigating three LOE was used to demonstrate the occurrence of natural attenuation in site groundwater. The PLOE evaluated reductions in COC concentrations over time and with distance, the SLOE evaluated geochemical indicators, while OLOE entailed predictive modeling and microbial analysis. The results of the tiered evaluation and the conclusions are summarized below for each of the three sites.

LHAAP-12: The COCs at LHAAP-12 are TCE, cis-1,2-DCE, and VC in the shallow groundwater zone. Based on the August 2006 sampling event, VC in one shallow well (12WW02), is the only COC that currently exceeds its MCL at LHAAP-12. However, a planned replacement monitoring well in the vicinity of former 12WW12 will likely contain COC concentrations in excess of MCLs.

- **PLOE:** Historical VOC trends indicate the occurrence of biodegradation via anaerobic reductive dechlorination, as evidenced by the production of TCE daughter products cis-1,2-DCE and VC, and the production of the harmless end product ethene. The lack of detections in downgradient monitoring wells also supports the PLOE indicating that natural attenuation processes have limited plume migration.
- **SLOE:** The qualitative assessment of the geochemical indicators in the shallow groundwater zone at LHAAP-12 presents evidence that geochemical conditions are adequate for the complete reductive dechlorination of TCE, cis-1,2-DCE, and VC. The low DO and NO_3^- concentrations indicate that the aquifer is anaerobic, which favors reductive dechlorination. The reduced SO_4^{2-} levels, elevated methane concentrations, elevated TOC and inorganic carbon concentrations, and the detection of ethene in 12WW02 indicate that adequate conditions exist in the vicinity of that well to sustain complete reductive dechlorination of the VC to innocuous ethene.
- **OLOE:** The relatively accelerated cleanup time of 23 years estimated using the predictive modeling is plausible given the site evidence for the occurrence of reductive dechlorination, and the presence of a landfill cap which would render the existing groundwater contamination an instantaneous source. The elevated levels of dechlorinating microorganisms in 12WW02 coupled with the production of ethane in 12WW02 is further corroborating evidence that site conditions are conducive for the complete dechlorination of site COCs via natural attenuation as the sole remedy.
- **Conclusion:** The natural attenuation evaluation demonstrates that MNA is a feasible alternative as the sole remedy for the remaining COCs in shallow groundwater at LHAAP-12.

LHAAP-35B(37): The COCs at LHAAP-35B(37) are PCE, TCE, and 1,1-DCE. Based on the August 2006 sampling event, current MCL exceedances include PCE and TCE in the shallow zone, and TCE in a zone that includes the shallow zone and a somewhat deeper zone. There are currently no exceedances of the 1,1-DCE MCL.

- **PLOE:** Historical COC concentrations in the shallow zone monitored by LHSMW58 do not indicate a decrease in concentrations as evidenced by a lack of PCE and TCE reductions in LHSMW58. The groundwater data collected from well LHSMW59 indicate a decreasing trend in PCE and TCE concentrations, supporting the PLOE for the occurrence of natural attenuation processes in the groundwater zone at LHSMW59.
- **SLOE:** The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-35B(37) presents evidence that conditions are not adequate for the biodegradation of groundwater COCs, primarily due to the low pH measured in LHSMW58. In contrast, the evaluation of the composite groundwater zone at LHSMW59 indicates suitable conditions for anaerobic biodegradation of the COCs, as indicated by low DO, the lack of NO_3^- , elevated inorganic carbon, neutral pH, and elevated chloride concentrations. Despite the suitable conditions for anaerobic biodegradation in this zone, there is no evidence for biodegradation via reductive dechlorination. This suggests that natural attenuation mechanisms other than biodegradation, such as dilution, dispersion, sorption, and volatilization, are likely the primary contributors to reductions in COC concentrations at LHAAP-35B(37).
- **OLOE:** As evidenced by the decreasing trends in PCE and TCE concentrations in the composite zone at LHSMW59, the accelerated cleanup times estimated during the modeling effort are plausible. The low to nondetect levels of the dechlorinating microorganisms coupled with the lack of production of cis-1,2-DCE, VC, and ethene is further corroborating evidence that reductive dechlorination is not a primary pathway for contaminant degradation in the groundwater at LHAAP-35B(37).
- **Conclusion:** The natural attenuation evaluation demonstrates that MNA is a feasible alternative as the sole remedy for the remaining COCs in the composite groundwater zone monitored by LHSMW59. Considering that LHSMW59 monitors the shallow zone as well as a somewhat deeper zone, and COC concentrations have remained relatively stable over the past 12 years (1994-2006) indicating that alternative processes are at work, MNA may also be a feasible alternative for the shallow groundwater.

LHAAP-67: The COCs at LHAAP-67 are TCE, 1,1-DCE, 1,2-DCA, 1,1,1-TCA, and 1,1,2-TCA. Based on the August 2006 sampling event, current MCL exceedances are limited to TCE, 1,1-DCE, and 1,2-DCA in one monitoring well, 67WW01. There are currently no exceedances of the 1,1,1-TCA or the 1,1,2-TCA MCLs, nor are there any exceedances in the intermediate groundwater zone.

- **PLOE:** The evaluation of the PLOE at LHAAP-67 provides strong evidence that natural attenuation processes have contributed to significant reductions in COC concentrations and prevented plume migration, with concentrations of 1,1,1-TCA and 1,1,2-TCA having been reduced to below their MCLs. The remaining COCs, TCE, 1,1-DCE, and 1,2-DCA, exhibit decreasing trends, with the concentrations of TCE and 1,2-DCA only slightly exceeding their respective MCLs during the most recent sampling event in 2006.
- **SLOE:** The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-67 presents evidence that conditions are not adequate for the biodegradation of groundwater COCs, primarily due to elevated DO and ORP, high SO_4^{2-} , and low TOC concentrations. The elevated methane concentrations were likely produced during historical periods when the shallow groundwater may have been under anaerobic reducing conditions. Therefore, evaluation of the SLOE does not provide supporting evidence for the occurrence of biodegradation at LHAAP-67. This suggests that natural attenuation mechanisms other than biodegradation, such as dilution, dispersion, sorption, and volatilization, are likely the primary contributors to reductions in COC concentrations at LHAAP-67.
- **OLOE:** As evidenced by the decreasing trends in COC concentrations in the shallow zone, the accelerated cleanup times estimated during the modeling effort are plausible. The nondetect levels of the dechlorinating microorganisms coupled with the lack of production of cis-1,2-DCE, VC, and ethene is further corroborating evidence that reductive dechlorination is not a primary pathway for contaminant degradation in the shallow groundwater at LHAAP-67.
- **Conclusion:** The natural attenuation evaluation demonstrates that MNA is a feasible alternative as the sole remedy for the remaining COCs in the shallow groundwater at LHAAP-67.

5.0 *Natural Attenuation Evaluation Results for December 2006 Sampling*

A second round of MNA sampling was completed in December 2006. This section presents an updated evaluation of MNA as a remedy for the contaminated groundwater at sites LHAAP-12, LHAAP-35B(37), and LHAAP-67, based on December 2006 data. The PLOE evaluated the reduction in COCs over time and distance. The SLOE evaluated geochemical indicators. The OLOE, which entails predictive modeling and microbial analysis, is not evaluated for the December 2006 data. The results of the tiered evaluation and conclusions are summarized below for each of the three sites.

5.1 *LHAAP-12*

The COCs at LHAAP-12 are TCE, cis-1,2-DCE, and VC, in the shallow groundwater zone. **Table 5-1** summarizes the historical COCs data at LHAAP-12. **Table 5-2** lists the analytical results of the COCs and the geochemical parameters for December 2006 samples. **Figure 5-1** depicts the current monitoring well locations at LHAAP-12. During the December 2006 sampling event, the newly installed well 12WW24 exhibited TCE (396 µg/L), cis-1,2-DCE (113 µg/L), and VC (5.35 µg/L) exceeding MCLs of 5, 70, and 2 µg/L, respectively. VC was detected in 12WW02 at a concentration of 4.3 µg/L, exceeding the MCL. **Figure 5-2** presents COCs in the shallow groundwater at LHAAP-12.

5.1.1 *PLOE*

The historical VOC trends indicate the occurrence of biodegradation via anaerobic reductive dechlorination, as evidenced by the production of TCE daughter products cis-1,2-DCE, VC, and ethene in the impacted area. Monitoring well 12WW24 was installed within 10 feet of the abandoned well 12WW12; therefore, the data from these two wells are comparable. Decreasing trends of TCE and cis-1,2-DCE were observed between the last sampling round at 12WW12 in December 2004 and the first sampling round at 12WW24 in December 2006 (**Table 5-1**). A slight increase of VC concentration was observed over the same time period from the two wells, suggesting dechlorination of cis-1,2-DCE to VC (**Table 5-1**). In well 12WW02, elevated VC levels above the MCL, a lack of VC accumulation and production of ethene at 0.77 µg/L are strong indicators that support the occurrence of natural attenuation under PLOE (**Table 5-2**). The downgradient well 12WW21 exhibited non-detect COC concentrations indicating that natural attenuation processes have limited plume migration.

Table 5-1
LHAAP-12 Historical COC Concentrations

Well ID	Zone	Status	Date	COC Concentrations in µg/L								
				TCE MCL = 5			cis-1,2-DCE MCL = 70			VC MCL = 2		
				Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
103	Shallow	Abandoned	28-May-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
121	Shallow	Abandoned	30-May-93	5	U	U	5	U	U	10	U	U
			18-Apr-95	5	U	U	NR			10	U	U
12WWW01	Shallow	Active	13-Jun-93	27			5	U	U	10	U	U
			20-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			8-Dec-04	1	U	U	1	U	U	1	U	U
			11-Aug-06	5	U	U	10	U	U	0.575	J	J
			19-Dec-06	5	U	U	10	U	U	10	U	U
12WWW02	Shallow	Active	14-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	0.65	J	J	2.1		
			27-Feb-03	1	U	U	3.33			7.24		
			19-Feb-04	1	U	U	2.86			5.34		
			8-Dec-04	1	U	U	2.57			3.75		
			11-Aug-06	5	U	U	1.77	J	J	6.88	J	J
			19-Dec-06	5	U	U	1.39	J	J	4.3	J	J
12WWW03	Shallow	Abandoned	14-Jun-93	16			5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
12WWW04	Shallow	Abandoned	12-Jun-93	5	U	U	5	U	U	10	U	U
			18-Apr-95	5	U	U	NR			10	U	U
12WWW05	Shallow	Active	12-Jun-93	5	U	U	5	U	U	10	U	U
			20-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	5	U	U	5	U	U	5	U	U
			12-Mar-99	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
			11-Aug-06	5	U	U	10	U	U	10	U	U
12WWW06	Shallow	Abandoned	12-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
12WWW07	Shallow	Abandoned	13-Jun-93	5	U	U	5	U	U	10	U	U
			19-Apr-95	5	U	U	NR			10	U	U
12WWW08	Shallow	Abandoned	20-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WWW09	Shallow	Abandoned	19-Apr-95	5	U	U	NR			10	U	U
12WWW10	Shallow	Abandoned	19-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	14.5			2.91			2.46		
			19-Feb-04	1.84			0.311	J	J	1	U	U
			8-Dec-04	6.96			0.812	J	J	1	U	U
12WWW11	Deep	Abandoned	19-Apr-95	5	U	U	NR			10	U	U
			15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			10-Dec-04	1	U	U	1	U	U	1	U	U

Table 5-1 (continued)
LHAAP-12 Historical COC Concentrations

Well ID	Zone	Status	Date	COC Concentrations in µg/L								
				TCE MCL = 5			cis-1,2-DCE MCL = 70			VC MCL = 2		
				Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
12WW12	Shallow	Abandoned	20-Apr-95	495			NR			10	U	U
			15-Jul-98	420			110			8	U	U
			26-Feb-03	385			144			5.65		
			20-Feb-04	427			137			4.03		
			8-Dec-04	508	D		136	D		2.22		
12WW13	Intermediate	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	0.829	J	J	0.478	J	J	1	U	U
			20-Feb-04	0.481	J	J	1	U	U	1	U	U
			9-Dec-04	0.643	J	J	1	U	U	1	U	U
12WW14	Intermediate	Abandoned	15-Jul-98	4	U	U	4	U	U	4	U	U
			12-Mar-99	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW15	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	1	U	U	1	U	U	1	U	U
			9-Dec-04	1	U	U	1	U	U	1	U	U
12WW16	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			26-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	Dry			Dry			Dry		
			9-Dec-04	Dry			Dry			Dry		
12WW17	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			20-Feb-04	Dry			Dry			Dry		
			9-Dec-04	Dry			Dry			Dry		
12WW18	Shallow	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			8-Dec-04	1	U	U	1	U	U	1	U	U
12WW19	Intermediate	Abandoned	15-Jul-98	1	U	U	1	U	U	1	U	U
			27-Feb-03	1	U	U	1	U	U	1	U	U
			19-Feb-04	1	U	U	1	U	U	1	U	U
			10-Dec-04	1	U	U	1	U	U	1	U	U
12WW20	Shallow	Active	13-Jan-06	0.645	J	J	0.499	J	J	1	U	U
			10-Aug-06	0.704	J	J	0.615	J	J	10	U	U
			19-Dec-06	0.713	J	J	0.594	J	J	10	U	U
12WW21	Shallow	Active	12-Jan-06	1	U	U	1	U	U	1	U	U
			10-Aug-06	5	U	U	10	U	U	10	U	U
			19-Dec-06	5	U	U	10	U	U	10	U	U
12WW22	Shallow	Active	13-Jan-06	1	U	U	1	U	U	1	U	U
12WW23	Shallow	Active	13-Jan-06	1	U	U	1	U	U	1	U	U
12MW24	Shallow	Active	19-Dec-06	396			113			5.35		

Notes and Abbreviations:**Shaded and bold values exceeded their MCLs**

1,1-DCE 1,1-dichloroethene

COC Chemical of Concern

D Dilution

J Estimated result detected above the method detected limit but below the reporting limit.

MCL Maximum contaminant level

NR Not reported by laboratory

PCE Tetrachloroethene

Qual Laboratory qualifier

TCE Trichloroethene

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

2004 sampling event data from USACE and ALL Consulting, 2006, Final Groundwater Monitoring Report, Site 12 and 16, Spring 2003, April 2004, and Winter 2004.

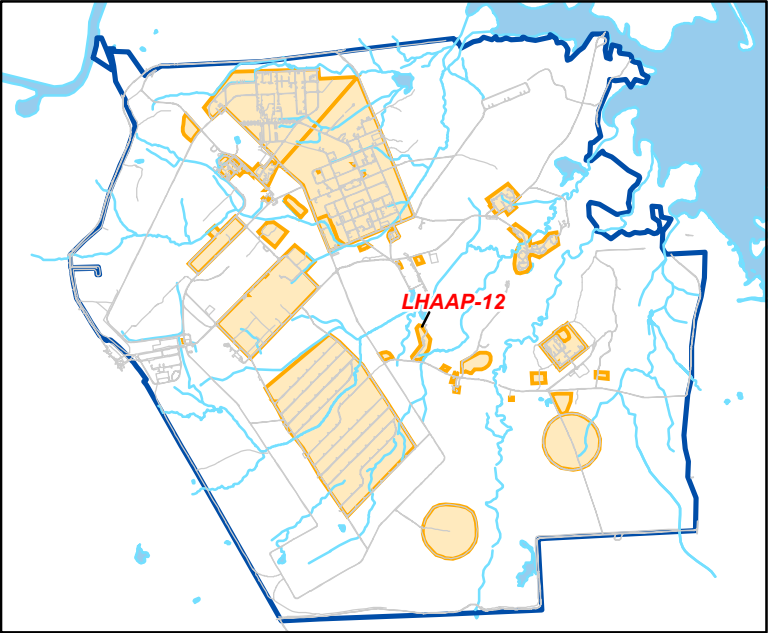
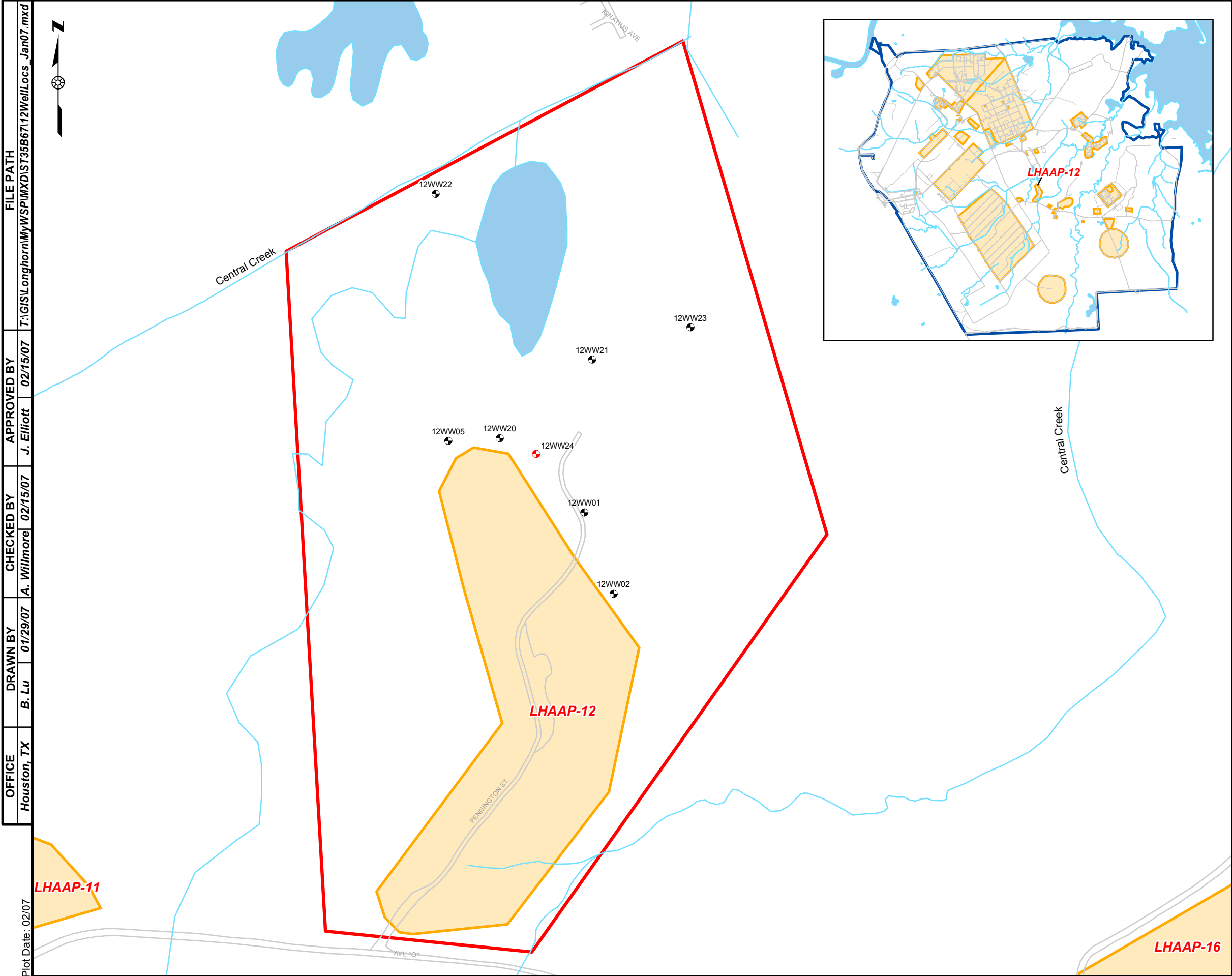
Table 5-2
Analytical Detections Summary for December 2006 Groundwater Samples
LHAAP-12

LOCATION CODE:		12WW01			12WW02			12WW05			12WW20			12WW21			12WW24			12WW24		
Sample Number:		12WW01-121906			12WW02-121906			12WW05-121906			12WW20-121906			12WW21-121806			12WW24-121906			12WW24-121906-FD		
Sample Date:		19-Dec-06			19-Dec-06			19-Dec-06			19-Dec-06			18-Dec-06			19-Dec-06			19-Dec-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
Field Test																						
Temperature	Degree C	17.69			20.59			18.59			19.41			18.5			19.21			NA		
Conductivity	ms/cm	4.724			1.52			4.185			1.942			7.693			2.18			NA		
pH	STD UNIT	5.68			5.98			5.43			5.52			6.03			6.54			NA		
ORP	MILLIVOLTS	118.3			117.7			210			169.7			92.8			219.4			NA		
Dissolved Oxygen	mg/L	2.5			0.33			0.42			0.33			0.57			2.56			NA		
Turbidity	NTU	34.5			0			0			6.5			6.3			0			NA		
Gases																						
Ethane	ug/L	0.5	U	U	0.335	J	J	0.5	U	U	0.5	U	U	0.5	U	U	0.394	J	J	0.4	J	J
Ethene	ug/L	0.5	U	U	0.771			0.5	U	U	0.476	J	J	0.5	U	U	0.382	J	J	0.482	J	J
Methane	ug/L	0.295	J	B	478			1.95		B	76			496	B		14			15.9		
General Chemistry																						
Chloride	mg/L	742			152			747			289			1560			310			301		
Nitrate	mg/L	2.4	U	U	0.6	U	U	2.4	U	U	1.2	U	U	0.6	U	U	0.386	U	U	0.364	J	J
Nitrite	mg/L	1.6	U	U	0.4	U	U	1.6	U	U	0.8	U	U	4	U	U	0.8	U	U	0.8	U	U
Sulfate	mg/L	386			46.9			281			178			415			207			179		
Total Inorganic Carbon	mg/L	33.6			98.4			22.1			16.2			8.61			71.3			64		
Total Organic Carbon	mg/L	8.44			17.7			4.67			4.52			3.14			18.8			22.5		
Volatiles																						
1,1,1-Trichloroethane	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethane	ug/L	5	U	U	4.11	J	J	5	U	U	5	U	U	5	U	U	1.31	J	J	1.33	J	J
1,4-Dichlorobenzene	ug/L	5	U	U	0.254	J	J	5	U	U	5	U	U	5	U	U	5.1			5.15		
Acetone	ug/L	111			10	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
Benzene	ug/L	5	U	U	0.23	J	J	5	U	U	5	U	U	5	U	U	1.11	J	J	1.12	J	J
Chlorobenzene	ug/L	5	U	U	0.177	J	J	5	U	U	5	U	U	5	U	U	15.2			15.5		
Chloroethane	ug/L	10	U	U	0.685	J	J	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
cis-1,2-Dichloroethene	ug/L	10	U	U	1.39	J	J	10	U	U	0.594	J	J	10	U	U	113			115		
trans-1,2-Dichloroethene	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	0.425	J	J	0.457	J	J
Trichloroethene	ug/L	5	U	U	5	U	U	5	U	U	0.713	J	J	5	U	U	396			404		
Vinyl chloride	ug/L	10	U	U	4.3	J	J	10	U	U	10	U	U	10	U	U	5.35	J	J	5.54	J	J

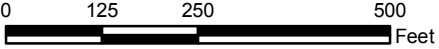
Notes and Abbreviation:

C Celsius
J Estimated result detected above the method detected limit but below the reporting limit
mg/L milligrams per liter
mL milliliter
ms/cm millisiemens per centimeter
NA Not Analyzed
NTU nephelometric turbidity unites

ORP oxidation-reduction potential
Qual laboratory qualifier
STD UNIT standard unit
U Not detected. The reporting limit is shown
VOC volatile organic compound
VQ validation qualifier
µg/L micrograms per liter



- Legend**
- New Shallow Monitoring Well
 - Existing Shallow Monitoring Well
 - Stream
 - Road
 - Site
 - Parcel Boundary
 - Pond
 - Approximate LHAAP Boundary

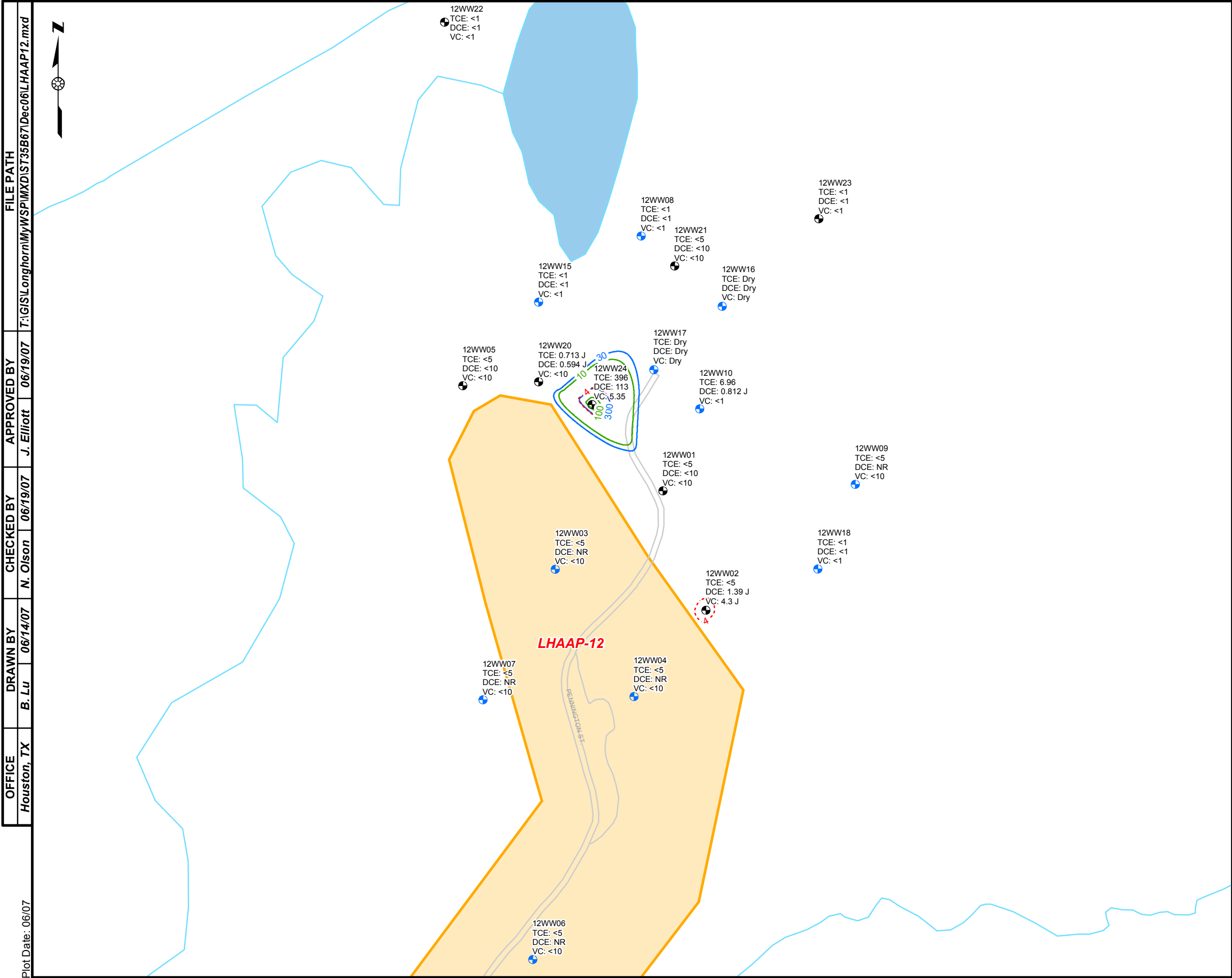


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FIGURE 5-1
MONITORING WELL LOCATION MAP
LHAAP-12
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	A. Willmore	J. Elliott	T:\GIS\Longhorn\MyWSP\MXD\IST35B67\12WellLocs_Jan07.mxd

Plot Date: 02/07



5.1.2 SLOE

The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-12 presents evidence that geochemical conditions are adequate for complete dechlorination. The DO levels are mostly below 1.0 mg/L, and the non-detect NO_3^- concentrations indicate that the aquifer is primarily anaerobic. However, there is a slight shift towards less reducing conditions evidenced by relative higher levels of DO and SO_4^{2-} when compared to the sampling event of August 2006 (**Table 5-2**). Nevertheless, the elevated methane, TOC, inorganic carbon concentrations, and the detection of ethene in 12WW02 and 12WW24 suggest that methanogenic conditions capable of complete dechlorination exist at this site (**Table 5-2**). Evaluation of the PLOE and SLOE demonstrate that MNA is a feasible alternative as the sole remedy for the remaining COCs in shallow groundwater at LHAAP-12.

5.2 LHAAP-35B(37)

The COCs at LHAAP-35B(37) are PCE, TCE, and 1,1-DCE in the shallow groundwater zone. **Table 5-3** summarizes the historical COCs data. **Table 5-4** lists analytical results and geochemical parameters for the December 2006 samples. **Figure 5-3** presents the well locations at LHAAP-35B(37). The historical data indicate that shallow well LHSMW58 and intermediate well LHSMW59 had COC detections above their respective MCLs. LHSMW59 screens a composite zone encompassing the shallow zone and another zone that is deeper than the shallow zone but significantly shallower than intermediate well 35BWW03 which exhibits non-detected levels of COCs. For the purpose of this report, these zones are referred to as upper shallow zone and lower shallow zone. To delineate the plume vertically and horizontally, three new monitor wells were installed in 2006 downgradient of LHSMW58 and LHSMW59. Directly downgradient from LHSMW59, 35BWW05 and 35BWW06 correspond to the same upper shallow and lower shallow groundwater zones screened at LHSMW59, respectively (**Figure 5-3**). COCs were not detected at 35BWW06, suggesting that PCE and TCE are only present in the upper shallow groundwater zone. In wells LHSMW59 and 35BWW05, only TCE exceeded the MCL at 166 $\mu\text{g/L}$ and 12.9 $\mu\text{g/L}$, respectively. 1,1-DCE was either nondetect or was below the MCL in all monitor wells. **Figures 5-4** and **5-5** present geological cross sections for site LHAAP-35B(37).

In December 2006, PCE and TCE concentrations exceeding their MCLs were detected in LHSMW58 (9.01 $\mu\text{g/L}$ and 13.7 $\mu\text{g/L}$, respectively) and in the newly installed well 35BWW04 (30.1 $\mu\text{g/L}$ and 10.8 $\mu\text{g/L}$, respectively). **Figure 5-6** presents COCs in the upper shallow groundwater at LHAAP-35B(37).

Table 5-3
LHAAP-35B(37) Historical COC Concentrations

				COC Concentrations in µg/L								
				PCE MCL = 5			TCE MCL = 5			1,1-DCE MCL = 7		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
35BWW01	Shallow	Active	8-Nov-98	1	U	U	1	U	U	1	U	U
			10-Sep-04	5	U	U	5	U	U	5	U	U
			10-Aug-06	5	U	U	5	U	U	5	U	U
			17-Dec-06	5	U	U	5	U	U	5	U	U
35BWW02	Shallow	Active	8-Nov-98	1	U	U	1	U	U	1	U	U
			10-Sep-04	Dry			Dry			Dry		
			9-Aug-06	Dry			Dry			Dry		
35BWW03	Intermediate	Active	10-Sep-04	5	U	U	5	U	U	5	U	U
			9-Aug-06	5	U	U	5	U	U	5	U	U
			16-Dec-06	5	U	U	5	U	U	5	U	U
35BWW04	Shallow	Active	16-Dec-06	30.1			10.8			3.34	J	J
35BWW05	Upper Shallow	Active	14-Dec-06	1	J	J	12.9			5	U	U
35BWW06	Lower Shallow	Active	14-Dec-06	5	U	U	5	U	U	5	U	U
LHSMW58	Shallow	Active	11-Dec-94	21			NR			58		
			21-Aug-96	7.9			11.5			25.4		
			20-May-98	9.5			9.4			4.2		
			10-Sep-04	20			33			4	J	J
			9-Aug-06	21.8		J	21.8		J	2.11	J	JH
			16-Dec-06	9.01			13.7			3.17	J	J
LHSMW59	Shallow Composite	Active	11-Dec-94	11			NR			5	U	U
			21-Aug-96	16.9			327			2.2		
			20-May-98	7			330			1	U	U
			10-Sep-04	3	J	J	180	D		5	U	U
			10-Aug-06	1.19	J	J	135			5	U	U
			13-Dec-06	1.15	J	J	166			5	U	U

Notes and Abbreviations:

Shaded and bold values exceeded their MCLs

1,1-DCE 1,1-dichloroethene

COC Chemical of Concern

D Dilution

J Estimated result detected above the method detected limit but below the reporting limit.

MCL Maximum contaminant level

NR not reported by laboratory

PCE tetrachloroethene

Qual laboratory qualifier

TCE trichloroethene

U Not detected. The reporting limit is :

VQ Validation qualifier

µg/L micrograms per liter

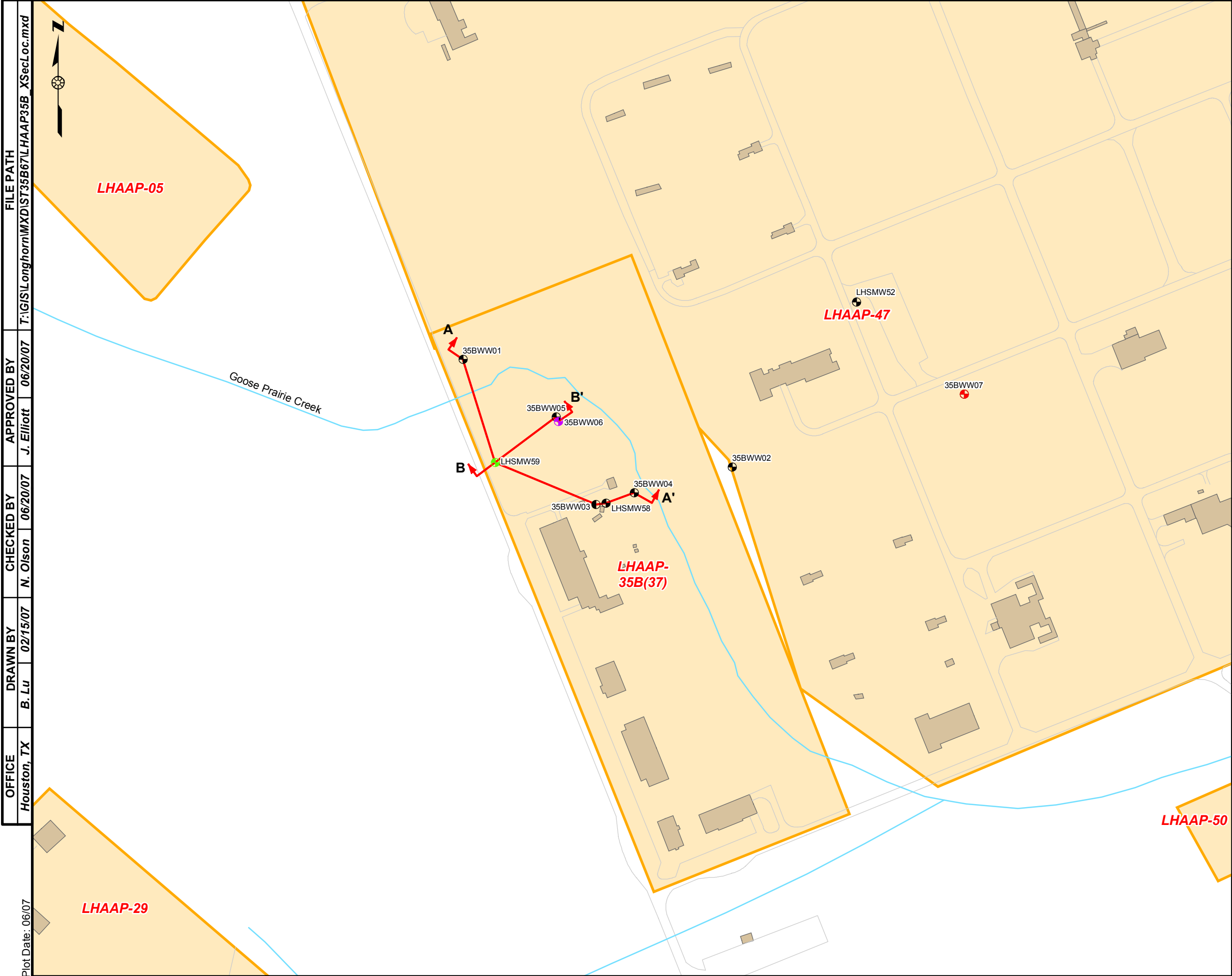
Table 5-4
Analytical Detections Summary for December 2006 Groundwater Samples
LHAAP-35B(37)

LOCATION CODE:		35BWW01			35BWW03			35BWW04			35BWW05			35BWW06			LHSMW58			LHSMW59		
Sample Number:		35BWW01-121706			35BWW03-121406			35BWW04-121606			35BWW05-121406			35BWW06-121406			LHSMW58-121606			LHSMW59-121306		
Sample Date:		17-Dec-06			16-Dec-06			16-Dec-06			14-Dec-06			14-Dec-06			16-Dec-06			13-Dec-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
Field Test																						
Temperature	Degree C	15.54			21.08			19.24			17.18			18.34			19.5			19.31		
Conductivity	ms/cm	0.149			1.432			0.548			0.637			1.834			0.314			1.492		
pH	STD UNIT	5.92			11.24			6.84			7.45			8.83			5.61			7.16		
ORP	MILLIVOLTS	181.2			6.6			209.7			-46.2			-213.8			231.8			154.1		
Dissolved Oxygen	mg/L	3.15			2.41			1.85			0.33			0.84			0.96			2.12		
Turbidity	NTU	1559.4			0			16.5			32.4			3.3			0			0		
Gases																						
Ethane	ug/L	0.5	U	U	0.347	J	J	0.486	J	J	1.66			1.04			0.976			0.5	U	U
Ethylene	ug/L	0.5	U	U	3.44			0.571			1.51			0.617			0.5	U	U	0.5	U	U
Methane	ug/L	0.459	J	B	95.4	B		4.15	B		6.43	B		7.93	B		2.97	B	B	1.41	B	B
General Chemistry																						
Chloride	mg/L	7.25	J	J	76.3			11.8			25.7			137			9.82			96.7		
Nitrate	mg/L	30	U	U	0.6	U	U	0.6	U	U	0.6	U	U	0.386	J	J	0.6	U	U	0.218	J	J
Nitrite	mg/L	20	U	U	0.4	U	U	0.4	U	U	0.4	U	U	0.4	U	U	0.4	U	U	0.4	U	U
Sulfate	mg/L	50	U	U	5.28			41.7			47.3			235			48.6			144		
Total Inorganic Carbon	mg/L	5	U	U	3.59			8.24			7.21			6.65			12.8			13.5		
Total Organic Carbon	mg/L	7.12			6.76			2.28			2.4			3.11			3.95			3.66		
Volatiles																						
1,1,1-Trichloroethane	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethene	ug/L	5	U	U	5	U	U	3.34	J	J	5	U	U	5	U	U	3.17	J	J	5	U	U
Acetone	ug/L	10	U	U	10	U	U	10	U	U	10	U	U	8.31	J	J	10	U	U	10	U	U
cis-1,2-Dichloroethene	ug/L	10	U	U	10	U	U	0.846	J	J	10	U	U	10	U	U	0.629	J	J	0.463	J	J
Tetrachloroethene	ug/L	5	U	U	5	U	U	30.1			1	J	J	5	U	U	9.01			1.15	J	J
trans-1,2-Dichloroethene	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Trichloroethene	ug/L	5	U	U	5	U	U	10.8			12.9			5	U	U	13.7			166		
Vinyl chloride	ug/L	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U

Notes and Abbreviation:

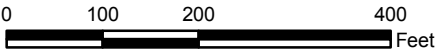
C Celsius
J Estimated result detected above the method detected limit but below the reporting limit
mg/L milligrams per liter
mL milliliter
ms/cm millisiemens per centimeter
NA Not Analyzed
NTU nephelometric turbidity unites

ORP oxidation-reduction potential
Qual laboratory qualifier
STD UNIT standard unit
U Not detected. The reporting limit is shown
VOC volatile organic compound
VQ validation qualifier
ug/L micrograms per liter



Legend

- Upper Shallow Zone Monitoring Well
- Lower Shallow Zone Monitoring Well
- Composite Upper And Lower Shallow Monitoring Well
- Intermediate Zone Monitoring Well
- Proposed Upper Shallow Zone Monitoring Well
- Geologic Cross Section
- Stream
- Road
- Former Building or Concrete Slab
- Site



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FIGURE 5-3
GEOLOGIC CROSS SECTION AND
LOCATION OF NEW SHALLOW WELLS
LHAAP-35B(37)
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	N. Olson	J. Elliott	T:\GIS\Longhorn\MXD\IST35B67\LHAAP35B_XSecLoc.mxd

Plot Date: 06/07

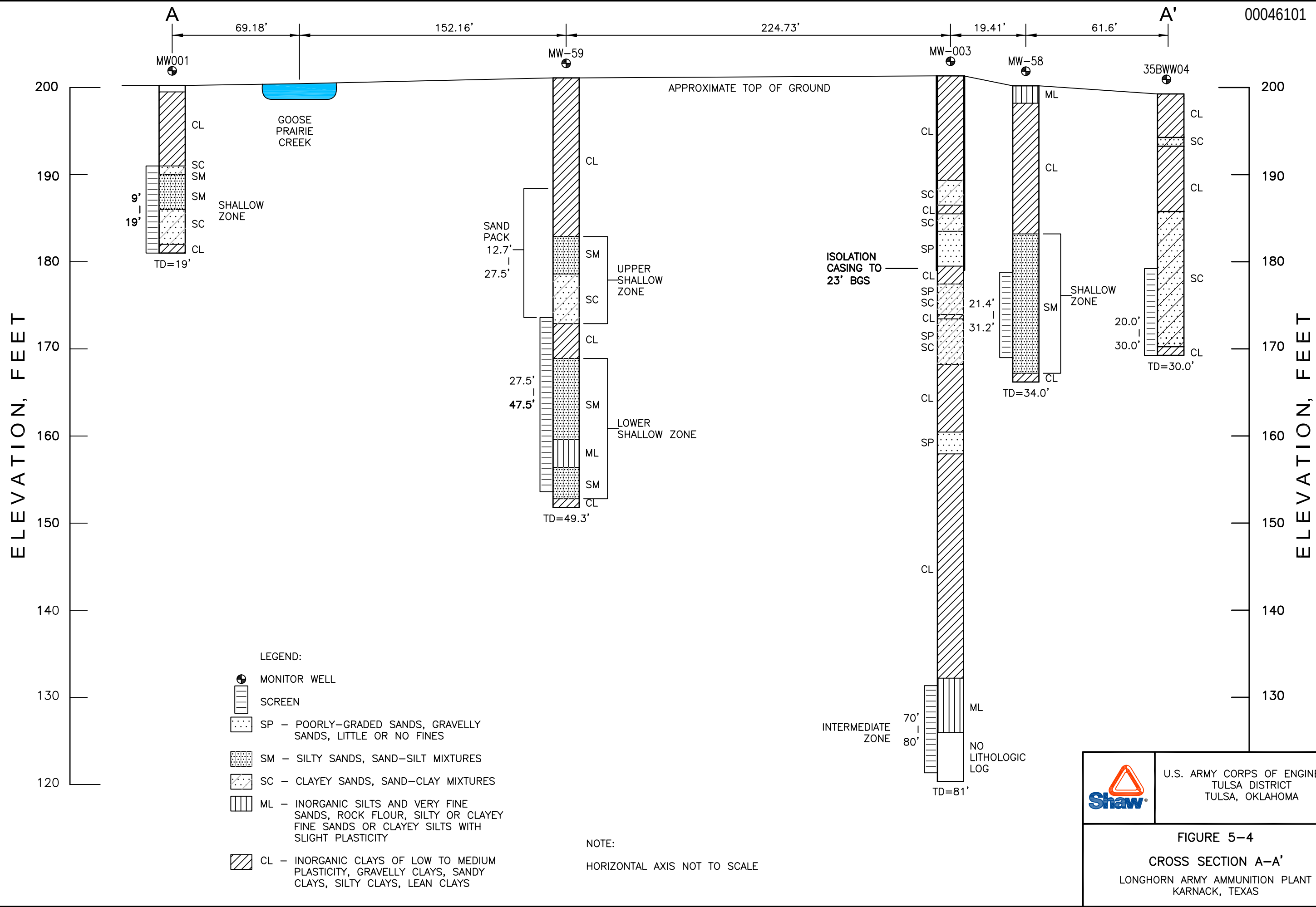
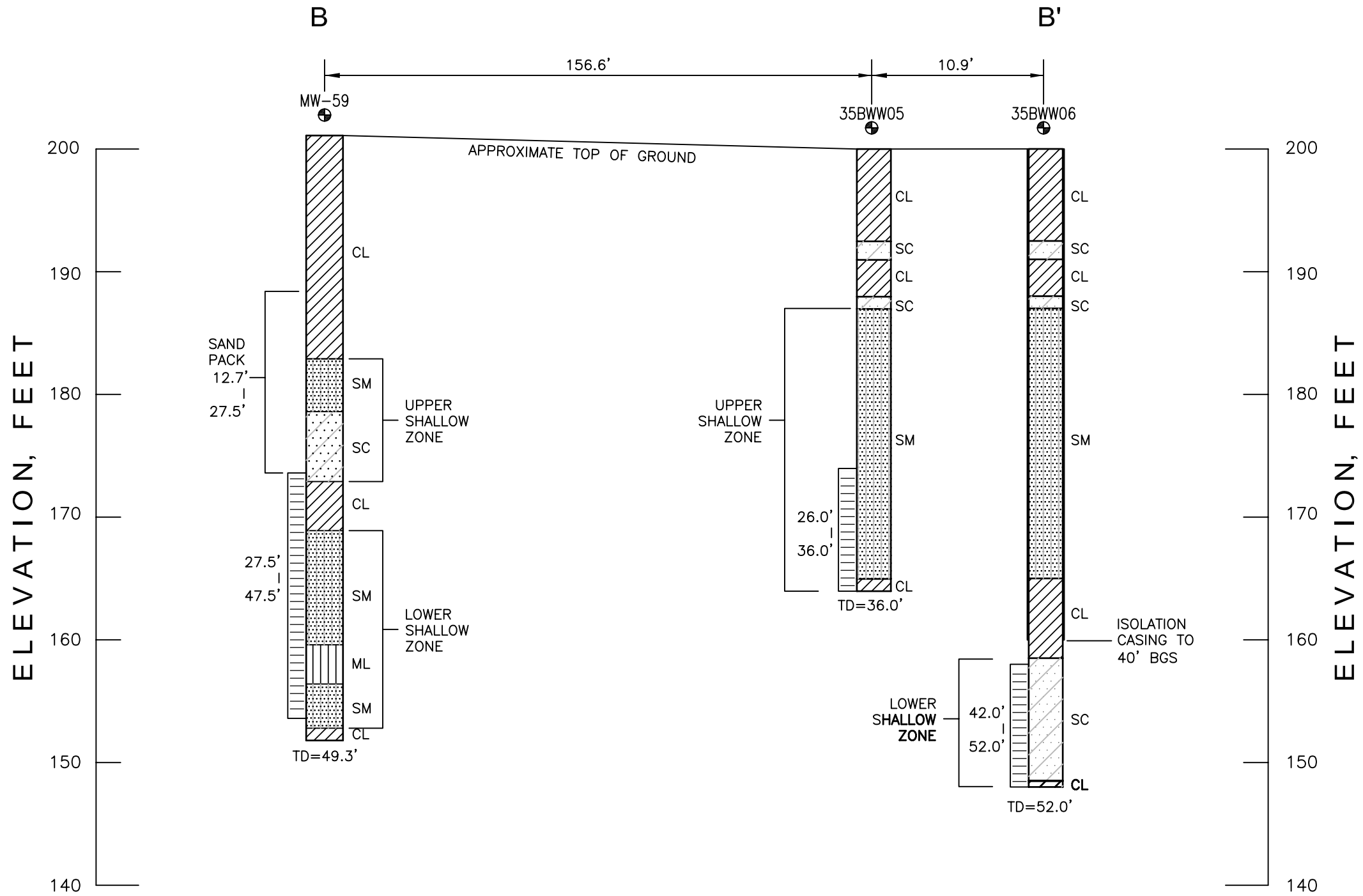


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	HOUSTON, TX	J. RDZ	S. WATSON	P. SRIVASTAV	845714-B66
PLOT DATE: 06/11/07 FORMAT REVISION 7/15/03						



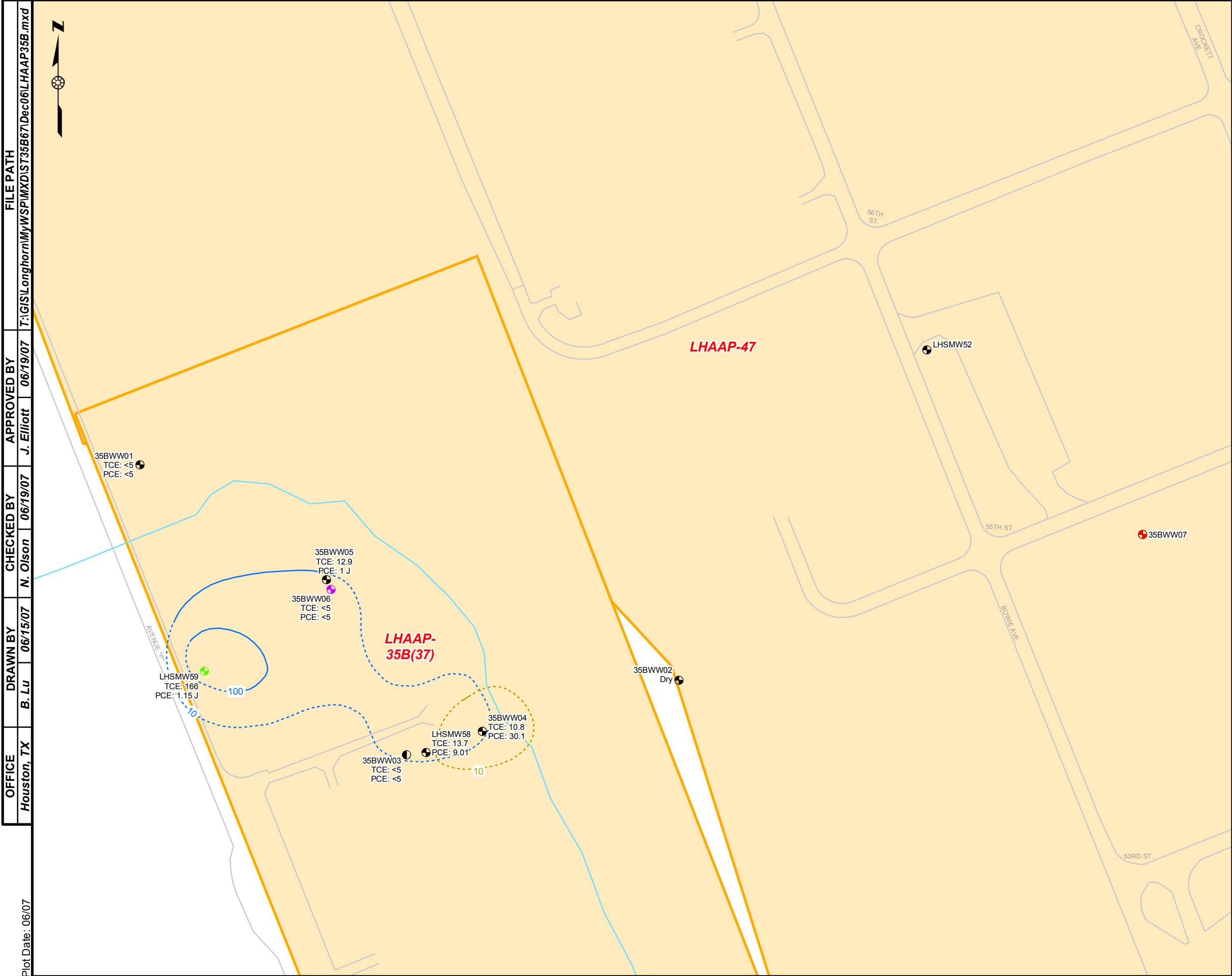
- LEGEND:
- MONITOR WELL
 - SCREEN
 - SP - POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
 - SM - SILTY SANDS, SAND-SILT MIXTURES
 - SC - CLAYEY SANDS, SAND-CLAY MIXTURES
 - ML - INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
 - CL - INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS

NOTE:
HORIZONTAL AXIS NOT TO SCALE



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TULSA, OKLAHOMA

FIGURE 5-5
CROSS SECTION B-B'
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS



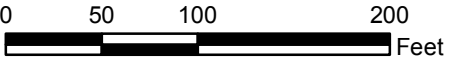
OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	N. Olson	J. Elliott	T:\GIS\Longhorn\MyWSP\IMXD\IST35B67\Dec06\LHAAP35B.mxd

Plot Date: 06/07

Legend

- Upper Shallow Zone Monitoring Well
- Lower Shallow Zone Monitoring Well
- Composite Upper And Lower Shallow Zone Monitoring Well
- Intermediate Zone Monitoring Well
- Proposed Upper Shallow Zone Monitoring Well
- PCE Concentration Contour
- Inferred PCE Contour
- TCE Concentration Contour
- Inferred TCE Contour
- Stream
- Road
- Site

- Notes:
- Reporting limit (<5) results were considered not detected during contouring.
 - Concentrations reported in µg/L.



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TULSA, OKLAHOMA

FIGURE 5-6
COCs IN UPPER SHALLOW GROUNDWATER
DECEMBER 2006 SAMPLING EVENT
LHAAP-35B(37)
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

5.2.1 PLOE

The historical VOC trends indicate the occurrence of biodegradation via anaerobic reductive dechlorination as evidenced by the presence of two of the three daughter products of TCE, including low levels (J qualified values) of 1,1-DCE and cis-1,2-DCE (**Table 5-4**). Although there is no evidence of VC production via the reductive dechlorination of cis-1,2-DCE, the VC reporting limit is elevated (10 µg/L) and exceeds VC concentrations that may be produced by reductive dechlorination based on the current concentrations of TCE and cis-1,2-DCE. Nevertheless, ethene, the product of VC reductive dechlorination, was detected during the December 2006 sampling event in wells 35BWW03, 35BWW04, 35BWW05, and 35BWW06 (**Table 5-4**), indicating that complete reductive dechlorination is occurring. The groundwater data collected from well LHSMW58 (shallow) and LHSMW59 (composite shallow) indicate a decrease in PCE and TCE concentrations from their historical high values over the entire monitoring period (**Table 5-3**). Among the three wells newly installed to delineate the plume, wells 35BWW04 and 35BWW05 demonstrated TCE exceeding the MCL, with a J qualified detection of cis-1,2-DCE in well 35BWW04, and the detection of ethene in all three wells, suggesting the occurrence of complete reductive dechlorination (**Table 5-4**). The evaluation of the PLOE indicates that reductive dechlorination is occurring at the site. Furthermore, other alternative biodegradation pathways such as cometabolic or oxidative dechlorination may also contribute to the reduction of COCs. Future natural attenuation monitoring at LHAAP-35B(37) will include monitoring wells LHSMW52 and 35BWW07 (**Figure 5-6**).

5.2.2 SLOE

The qualitative assessment of geochemical indicators in the shallow groundwater zone at LHAAP-35B(37) presents evidence that current geochemical conditions are not favorable for complete dechlorination in some of the wells. The elevated DO, ORP, and SO_4^{2-} concentrations indicate that the aquifer is primarily under aerobic oxidative conditions (**Table 5-4**) with the exception of 35BWW05 and 35BWW06, where anaerobic reducing conditions were observed, and there is evidence of complete dechlorination.

Evaluation of the PLOE and SLOE demonstrates that natural attenuation mechanisms including reductive biodegradation, dilution, dispersion, sorption, and volatilization, may all be contributing to the observed reduction in COC concentrations at LHAAP-35B(37).

5.3 LHAAP-67

The COCs at LHAAP-67 are TCE, 1,1-DCE, 1,2-DCA, 1,1,1-TCA, and 1,1,2-TCA in the shallow groundwater zone. **Table 5-5** summarizes the historical COCs data at the LHAAP-67 site. **Table 5-6** lists all the analytical results of COCs and geochemical parameters from December 2006.

Table 5-5
LHAAP-67 Historical COC Concentration

				COC Concentrations in µg/L														
				TCE MCL = 5			1,1-DCE MCL = 7			1,2-DCA MCL = 5			1,1,1-TCA MCL = 200			1,1,2-TCA MCL = 5		
Well ID	Zone	Status	Date	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
67WW01	Shallow	Active	8-Dec-98	6.3			380			27			560			33		
			12-Sep-04	6			280	D		13			5	U	U	1	J	J
			6-Aug-06	5.38		JH	153			5.57	Q	JH	5	U	U	0.305	J	JH
			18-Dec-06	5.99			179			6.37			5	U	U	0.28	J	J
67WW02	Shallow	Active	8-Dec-98	1	U	U	2.4			1	U	U	100			6.4		
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			6-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			18-Dec-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW03	Shallow	Active	8-Dec-98	20	U	U	36			20	U	U	1800			24		
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			9-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			17-Dec-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW04	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	0.1	U	U	0.1	U	U	0.1	U	U
			12-Sep-04	1	J	J	5	U	U	5	U	U	5	U	U	5	U	U
67WW05	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	0.1	U	U	0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			17-Dec-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
67WW06	Intermediate	Active	19-Dec-00	0.14		J	0.2	U	U	3.51			0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	3.02	J	J	5	U	U	5	U	U
			18-Dec-06	5	U	U	5	U	U	1.62	J	J	5	U	U	5	U	U
67WW07	Shallow	Active	19-Dec-00	0.1	U	U	0.2	U	U	2.28			0.1	U	U	0.1	U	U
			12-Sep-04	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			8-Aug-06	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
			18-Dec-06	5	U	U	5	U	U	1.65	J	J	5	U	U	5	U	U

Notes and Abbreviations:**Shaded and bold values exceeded their MCLs**

1,1-DCE 1,1-dichloroethene
COC Chemical of Concern

D Dilution

J Estimated result detected above the method detection limit but below the reporting limit.

JH Sample hold time exceeded. Result shown is estimated.

MCL Maximum contaminant level

NR Not reported by laboratory

PCE Tetrachloroethene

Q One or more quality control fail

Qual Laboratory qualifier

TCE Trichloroethene

U Not detected. The reporting limit is shown.

VQ Validation qualifier

µg/L micrograms per liter

Table 5-6
Analytical Detections Summary for December 2006 Groundwater Samples
LHAAP-67

LOCATION CODE:		67WW01			67WW02			67WW03			67WW05			67WW06			67WW07		
Sample Number:		67WW01-121806			67WW02-121806			67WW03-121806			67WW05-121706			67WW06-121806			67WW07-121806		
Sample Date:		18-Dec-06			18-Dec-06			18-Dec-06			17-Dec-06			18-Dec-06			18-Dec-06		
Parameter	Units	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ	Result	Qual	VQ
Field Test																			
Temperature	Degree C	19.45			20.75			20.2			20.1			18.16			NA		
Conductivity	ms/cm	5.059			5.545			5.651			5.104			7.309			NA		
pH	STD UNIT	6.55			0.97			5.99			6.7			5.74			NA		
ORP	MILLIVOLTS	14.4			102.2			15.28			72.4			30.1			NA		
Dissolved Oxygen	mg/L	0.47			0.91			0.18			1.28			0.18			NA		
Turbidity	NTU	154			13.1			775.1			8			6.5			NA		
Gases																			
Ethane	ug/L	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.42	J	J
Ethylene	ug/L	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U	0.5	U	U
Methane	ug/L	100	B		1.2	B	B	1.41	B	B	0.436	J	B	335	B		983		
General Chemistry																			
Chloride	mg/L	951			1060			2400			898			1280			1640		
Nitrate	mg/L	0.112	J	J	0.11	J	J	0.6	U	U	0.6	U	U	0.6	U	U	0.6	U	U
Nitrite	mg/L	2	U	U	2	U	U	4	U	U	2	U	U	2	U	U	2	U	U
Sulfate	mg/L	197			148			297			68.3			23.2			19.9		
Total Inorganic Carbon	mg/L	12.2			34.1			9.08			23.1			8.36			6.96		
Total Organic Carbon	mg/L	5.28			8.22			4.68			5.22			3.84			6.01		
Volatiles																			
1,1,1-Trichloroethane	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1,2-Trichloroethane	ug/L	0.28	J	J	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethane	ug/L	6.1			0.236	J	J	5	U	U	5	U	U	5	U	U	5	U	U
1,1-Dichloroethene	ug/L	179			5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
1,2-Dichloroethane	ug/L	6.37			5	U	U	5	U	U	5	U	U	1.62	J	J	1.65	J	J
Acetone	ug/L	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
cis-1,2-Dichloroethene	ug/L	0.872	J	J	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U
trans-1,2-Dichloroethene	ug/L	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Trichloroethene	ug/L	5.99			5	U	U	5	U	U	5	U	U	5	U	U	5	U	U
Vinyl chloride	ug/L	2.34	J	J	10	U	U	10	U	U	10	U	U	10	U	U	10	U	U

Notes and Abbreviation:

C Celsius

J Estimated result detected above the method detected limit but below the reporting limit

mg/L milligrams per liter

mL milliliter

ms/cm millisiemens per centimeter

NA Not Analyzed

NTU nephelometric turbidity unites

ORP oxidation-reduction potential

Qual laboratory qualifier

STD UNIT standard unit

U Not detected. The reporting limit is shown

VOC volatile organic compound

VQ validation qualifier

ug/L micrograms per liter

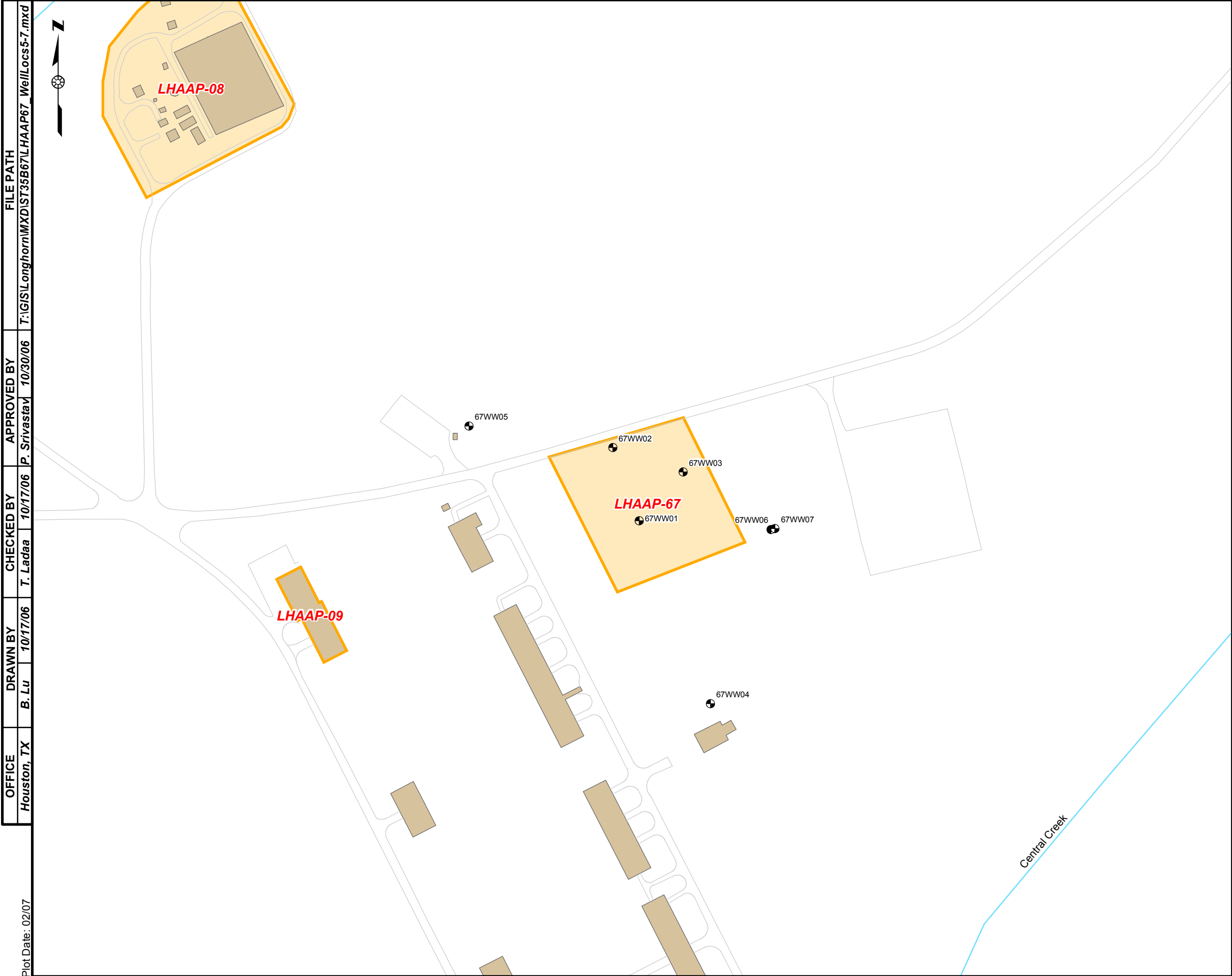
Figure 5-7 presents the well locations at LHAAP-67. Based on the December 2006 sampling event, 67WW01 is the only well exhibiting TCE (5.99 µg/L), 1,1-DCE (179 µg/L), and 1,2-DCA (6.37 µg/L) and exceeding the respective MCLs. 1,1,1-TCA and 1,1,2-TCA are currently not exceeding the MCLs, nor are there any exceedances in the intermediate groundwater zone (67WW06). **Figure 5-8** presents COCs in the shallow groundwater at LHAAP-67.

5.3.1 PLOE

The evaluation of historical VOC trends provides strong evidence that natural attenuation processes have contributed to a significant reduction in COC concentrations and prevented plume migration. Both 1,1,1-TCA and 1,1,2-TCA have been reduced to below their MCLs (**Table 5-5**). The remaining COCs (TCE and 1,2-DCA) have been reduced close to their respective MCLs. Abiotic degradation of 1,1,1-TCA occurs by hydrolysis to acetic acid and 1,1-DCE; meanwhile 1,1-DCE can be degraded to VC via reductive dechlorination (USEPA, 2004). 1,1-DCE has decreased from its historical high level of 380 µg/L at 67WW01 in December 1998 to 179 µg/L in December 2006 (**Table 5-5**). Although VC was detected at 2.34 µg/L, the level is not proportional to the loss of 1,1-DCE (**Table 5-6**).

5.3.2 SLOE

The qualitative assessment of the geochemical indicators in the shallow groundwater zone at LHAAP-67 presents evidence that geochemical conditions are not adequate for the degradation of groundwater COCs via anaerobic reductive dechlorination. DO levels are primarily below 1.0 mg/L, indicating the formation of more favorable anaerobic conditions when compared to results from August 2006. ORP levels also slightly decreased between August 2006 and December 2006. DO and ORP data suggest a slight shift to more anaerobic reductive conditions; however, the high SO_4^{2-} levels at 197 mg/L in well 67WW01 and decreased TOC prohibit reductive dechlorination (**Table 5-6**). Therefore, evaluation of SLOE does not provide supporting evidence for the occurrence of reductive dechlorination at LHAAP-67 at this time. This data suggest that natural attenuation mechanisms other than reductive biodegradation such as dilution, dispersion, sorption, and volatilization are likely the primary contributors to the reduction in COC concentrations at LHAAP-67. Other biodegradation pathways such as cometabolic or oxidative dechlorination may contribute to the reduction of COCs. However, if a shift to more reducing conditions continues, reductive biodegradation may become a more prominent process.

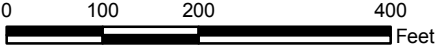


OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	T. Ladaa	P. Srivastav	T:\GIS\Longhorn\MXD\IST35B67\LHAAP67_WellLocs5-7.mxd

Plot Date: 02/07

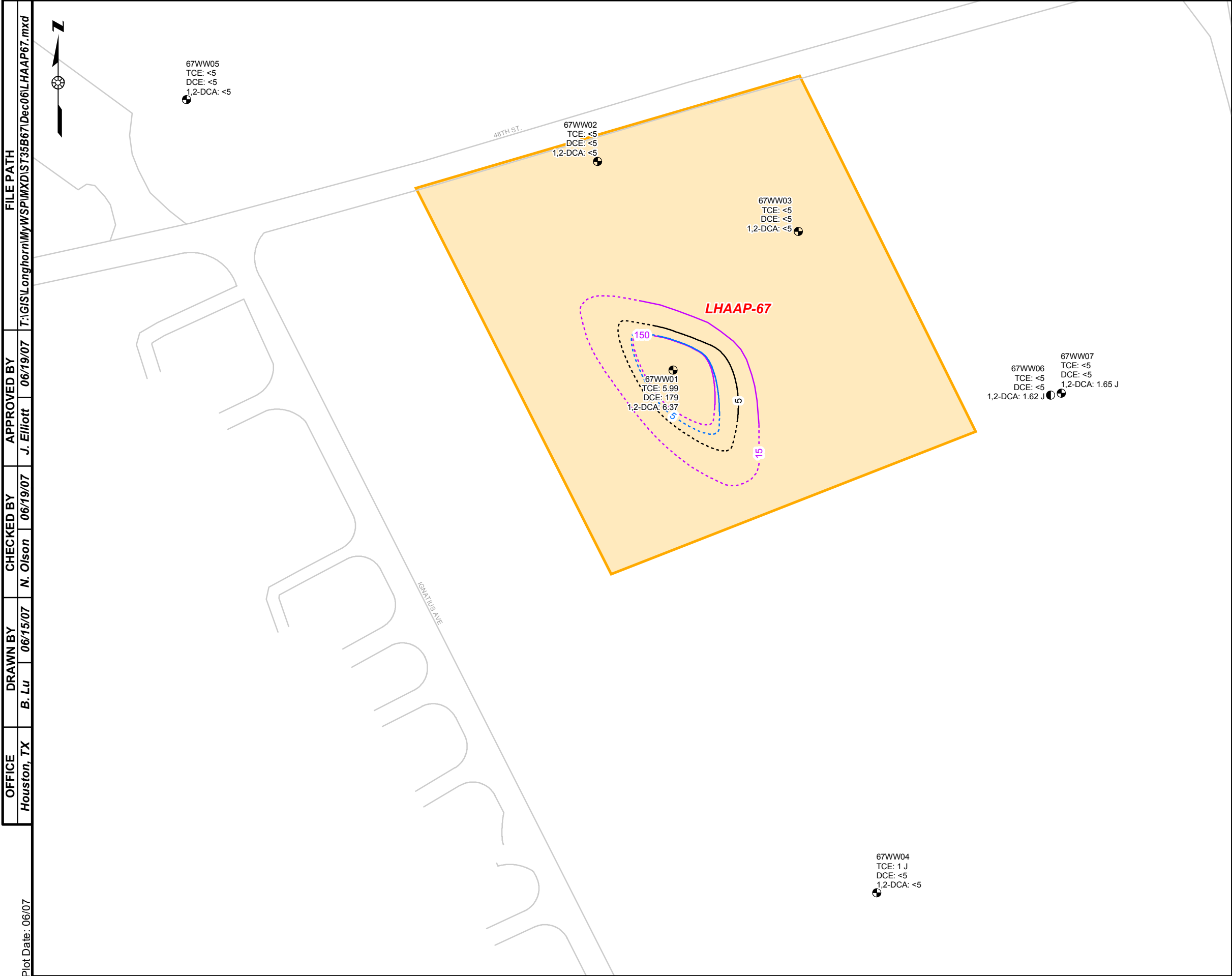
Legend

- Shallow Monitoring Well
- Intermediate Monitoring Well
- Stream
- Road
- Former Building or Concrete Slab
- Site



U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE 5-7
MONITORING WELL LOCATION MAP
LHAAP-67
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS



U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE 5-8
COCs IN SHALLOW GROUNDWATER
DECEMBER 2006 SAMPLING EVENT
LHAAP-67
NATURAL ATTENUATION EVALUATION
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

5.4 Conclusion

The natural attenuation evaluation utilizing the data through December 2006 demonstrates that MNA is a feasible remedy for the remaining COCs in the shallow groundwater at LHAAP-12, LHAAP-35B(37), and LHAAP-67. Contaminants are restrained in the shallow groundwater zone and have not migrated into the intermediate zone. Although different mechanisms are prevailing at these sites, natural attenuation effectively controls plume migration and diminishes the size of area exhibiting COC concentrations exceeding MCL values.

6.0 References

Bouwer, E. J., 1994, "Bioremediation of Chlorinated Solvents using Alternative Electron Acceptors," *Handbook of Bioremediation*, Norris, R. D., R. E. Hinchey, R. Brown, P. L. McCarty, L. Semprini, J. T. Wilson, D. H. Kampbell, M. Reinhard, E. J. Bouwer, R. C. Borden, T. M. Vogel, J. M. Thomas, and C. H. Ward, eds., Lewis Publishers, Boca Raton.

Shaw Environmental, Inc. (Shaw), 2006, *Draft Final Results of Modeling for Natural Attenuation of Chlorinated Solvents in Groundwater at LHAAP-35B(37) and LHAAP-67, Longhorn Army Ammunition Plant, Karnack, Texas*, November.

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USEPA, 2004, *Principles and Practices of Enhanced Anaerobic Bioremediation of chlorinated Solvents*.

Yeh, G.T., 1987, *Analytical Transient One-, Two-, Three-Dimensional Simulation of Waste Transport in the Aquifer System*, Pennsylvania State University.

Appendix A
August 2006 Data Reports

The attached compact disk includes the following files:

- Shaw Data Evaluation Report of Kemron Report Numbers L0608183, L0608204, L0608240, L0608289, and L0608330 dated September 6, 2006
- Shaw Environmental & Infrastructure, Inc., Knoxville Laboratory Statement of Analysis, dated September 14, 2006
- Kemron Analytical Services Laboratory Report L0608183
- Kemron Analytical Services Laboratory Report L0608204
- Kemron Analytical Services Laboratory Report L0608240
- Kemron Analytical Services Laboratory Report L0608289
- Kemron Analytical Services Laboratory Report L0608330



156 Starlite Drive, Marietta, OH 45750 • TEL 740-373-4071 • FAX 740-373-4835 • <http://www.kemron.com>

Laboratory Report Number: L0608183

Please find enclosed the analytical results for the samples you submitted to KEMRON Environmental Services.

Review and compilation of your report was completed by KEMRON's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Debra Elliott - Team Leader
delliott@kemron-lab.com

Amanda Fickiesen - Client Services Specialist
afickiesen@kemron-lab.com

Cheryl Koelsch - Team Chemist/Data Specialist
ckoelsch@kemron-lab.com

Annie Bock - Client Services Specialist
abock@kemron-lab.com

Stephanie Mossburg - Team Chemist/Data Specialist
smossburg@kemron-lab.com

Kathy Albertson - Team Chemist/Data Specialist
kalbertson@kemron-lab.com

This report was reviewed on August 17, 2006.

A handwritten signature in cursive script that reads "Stephanie Mossburg".

STEPHANIE MOSSBURG - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the NELAP standards and other applicable contract terms and conditions. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services.

This report was certified on August 17, 2006.

A handwritten signature in cursive script that reads "David E. Vandenberg".

David Vandenberg - Vice President

FL DOH NELAP ID: E8755
This report contains a total of 99 pages.

Protecting Our Environmental Future

LABORATORY REPORT

L0608183

00046115

08/17/06 09:45

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Mever

Account Number: 2773

Work ID: LHAAP

P.O. Number: 200328

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
G7WW01/G4WW01	L0608183-01	07-AUG-06	08-AUG-06
G7WW02	L0608183-02	07-AUG-06	08-AUG-06

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0608183

CHAIN OF CUSTODY: The chain of custody number was 62298.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 3 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Approved: 10-AUG-06

<i>Stephanie Mossburg</i>

Laboratory Data Package Cover Page

00046117

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608183
 Project Name: 798-LONGHORN
 Method: TOC
 Prep Batch Number(s): WG219597
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 10, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓				00046119
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046120
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	<u>KEMRON</u>
Laboratory Log Number:	<u>L0608183</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>TOC</u>
Prep Batch Number(s):	<u>WG219597</u>
Reviewer Name:	<u>DEANNA I. HESSON</u>
LRC Date:	<u>August 10, 2006</u>

EXCEPTIONS REPORT**ER# - Description**

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046122

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

✓R1 Field chain-of-custody documentation;

✓R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10

b) dilution factors,

c) preparation methods,

d) Cleanup methods, and

e) If required for the project, tentatively identified compounds (TICs)

✓R4 Surrogate recovery data including:

a) Calculated recovery (%R) for each analyte, and

b) The laboratory's surrogate QC limits.

✓R5 Test reports/summary forms for blank samples;

✓R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amount,

b) Calculated %R for each analyte, and

c) The laboratory's LCS QC limits.

✓R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,

b) MS/MSD spiking amounts,

c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d) Calculated %R and relative percent differences (RPDs), and

e) The laboratory's MS/MSD QC limits

✓R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,

b) the calculated RPD, and

c) the laboratory's QC limits for analytical duplicates.

✓R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

✓R10 Other problems or anomalies.

✓The exception Report for every "No" or "Not Reviewed (NR)" item IN laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [✓] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

August 11, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608183
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 219565
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: August 11, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?		✓			1
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			2
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046124	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?			✓		
Were analytical duplicates analyzed at the appropriate frequency?			✓		
Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?			✓		
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?	✓				
Were ion abundance data within the method-required QC limits?	✓				
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?	✓				
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046125
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

EXCEPTIONS REPORT

ER# - Description

#1: 1,2-Dichloroethane-d4 exceeded the upper control limit in the analyses of samples 01 and 02.

#2: 1,1,2-Trichloro-1,2,2-trifluoroethane was below the lower advisory limit and 1,2-dichloroethane, bromodichloromethane, chloromethane, and methyl acetate exceeded the upper advisory limits.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046126

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608183
 Project Name: 798-LONGHORN
 Method: 9056-300
 Prep Batch Number(s): WG219499
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 15, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓			00046128	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046129
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608183
Project Name:	798-LONGHORN
Method:	9056-300
Prep Batch Number(s):	WG219499
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 15, 2006

EXCEPTIONS REPORT**ER# - Description**

Samples were analyzed at a dilution for nitrite due to the amount of chloride present in the sample which covers up any nitrite at the reporting limit. The reporting limit is elevated accordingly.

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Report Number: **L0608183**Report Date : **August 17, 2006**

00046131

Sample Number: L0608183-01	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: G7WW01/G4WW01	Prep Method: 415.1	Prep Date: 08/09/2006 19:30
Matrix: Water	Analytical Method: 415.1	Cal Date: _____
Workgroup Number: WG219597	Analyst: DIH	Run Date: 08/09/2006 19:30
Collect Date: 08/07/2006 15:25	Dilution: 1	File ID: TC08-09-2006.54
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		9.38		1.00	0.500

Sample Number: L0608183-01	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: G7WW01/G4WW01	Prep Method: 415.1	Prep Date: 08/09/2006 19:30
Matrix: Water	Analytical Method: 415.1	Cal Date: _____
Workgroup Number: WG219597	Analyst: DIH	Run Date: 08/09/2006 19:30
Collect Date: 08/07/2006 15:25	Dilution: 1	File ID: TC08-09-2006.54
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		3.49		1.00	0.500

Sample Number: L0608183-01	PrePrep Method: NONE	Instrument: HPMS10
Client ID: G7WW01/G4WW01	Prep Method: 5030B	Prep Date: 08/10/2006 18:12
Matrix: Water	Analytical Method: 8260B	Cal Date: 07/15/2006 16:37
Workgroup Number: WG219565	Analyst: MES	Run Date: 08/10/2006 18:12
Collect Date: 08/07/2006 15:25	Dilution: 1	File ID: 10M47988
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5	0.305	J	5.00	0.250
1,1-Dichloroethane	75-34-3	5.61		5.00	0.125
1,1-Dichloroethene	75-35-4	153		5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2	5.57	Q	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	0.954	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125

Report Number: **L0608183**Report Date : **August 17, 2006**

00046132

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **W6219565**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/10/2006 18:12**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/10/2006 18:12**
 File ID: **10M47988**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6	5.38		5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4	1.46	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	126	80	120		*
Dibromofluoromethane	108	86	118		
p-Bromofluorobenzene	106	86	115		
Toluene-d8	106	88	110		

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

Q One or more quality control criteria fail. See narrative.

U Not detected at or above adjusted sample detection limit

Report Number: **L0608183**Report Date : **August 17, 2006**

00046133

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **WG219499**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **DL03**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **100**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/08/2006 16:28**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/08/2006 16:28**
 File ID: **I2080806.17**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	891		20.0	10.0
Nitrate	14797-55-8		U	60.0	10.0
Nitrite	14797-65-0		U	40.0	10.0
Sulfate	14808-79-8	179		100	50.0

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **WG219499**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/08/2006 15:36**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/08/2006 15:36**
 File ID: **I2080806.14**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	368	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	172	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **WG219499**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **5**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/08/2006 15:53**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/08/2006 15:53**
 File ID: **I2080806.15**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	812	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	180		5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **WG219499**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **25**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/08/2006 16:11**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/08/2006 16:11**
 File ID: **I2080806.16**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	962	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	165		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608183**Report Date : **August 17, 2006**

00046134

Sample Number: **L0608183-01**
 Client ID: **G7WW01/G4WW01**
 Matrix: **Water**
 Workgroup Number: **WG219875**
 Collect Date: **08/07/2006 15:25**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **08/14/2006 17:59**
 Cal Date: **03/27/2006 14:30**
 Run Date: **08/14/2006 17:59**
 File ID: **16G3695**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	42.9		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608183-02**
 Client ID: **G7WW02**
 Matrix: **Water**
 Workgroup Number: **WG219597**
 Collect Date: **08/07/2006 11:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/09/2006 19:16**
 Cal Date:
 Run Date: **08/09/2006 19:16**
 File ID: **TC08-09-2006.53**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		21.1		1.00	0.500

Sample Number: **L0608183-02**
 Client ID: **G7WW02**
 Matrix: **Water**
 Workgroup Number: **WG219597**
 Collect Date: **08/07/2006 11:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/09/2006 19:16**
 Cal Date:
 Run Date: **08/09/2006 19:16**
 File ID: **TC08-09-2006.53**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		5.64		1.00	0.500

Sample Number: **L0608183-02**
 Client ID: **G7WW02**
 Matrix: **Water**
 Workgroup Number: **WG219565**
 Collect Date: **08/07/2006 11:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/10/2006 18:43**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/10/2006 18:43**
 File ID: **10M47989**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3	0.365	J	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00

4 of 7

Report Number: L0608183

Report Date : August 17, 2006

00046135

Sample Number: L0608183-02
 Client ID: G7WW02
 Matrix: Water
 Workgroup Number: W6219565
 Collect Date: 08/07/2006 11:40
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/10/2006 18:43
 Cal Date: 07/15/2006 16:37
 Run Date: 08/10/2006 18:43
 File ID: 10M47989

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	2.84	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	128	80	120	*	
Dibromofluoromethane	110	86	118		
p-Bromofluorobenzene	106	86	115		
Toluene-d8	105	88	110		

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: **L0608183**Report Date : **August 17, 2006**

00046136

Sample Number: L0608183-02	PrePrep Method: NONE	Instrument: IC2
Client ID: G7WW02	Prep Method: 300.0	Prep Date: 08/08/2006 16:46
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219499	Analyst: JWR	Run Date: 08/08/2006 16:46
Collect Date: 08/07/2006 11:40	Dilution: 1	File ID: I2080806.18
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	411	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	131	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608183-02	PrePrep Method: NONE	Instrument: IC2
Client ID: G7WW02	Prep Method: 300.0	Prep Date: 08/08/2006 17:03
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219499	Analyst: JWR	Run Date: 08/08/2006 17:03
Collect Date: 08/07/2006 11:40	Dilution: 5	File ID: I2080806.19
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	900	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	134		5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608183-02	PrePrep Method: NONE	Instrument: IC2
Client ID: G7WW02	Prep Method: 300.0	Prep Date: 08/08/2006 17:38
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219499	Analyst: JWR	Run Date: 08/08/2006 17:38
Collect Date: 08/07/2006 11:40	Dilution: 100	File ID: I2080806.21
Sample Tag: DL03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1020		20.0	10.0
Nitrate	14797-55-8		U	60.0	10.0
Nitrite	14797-65-0		U	40.0	10.0
Sulfate	14808-79-8	143		100	50.0

U Not detected at or above adjusted sample detection limit

Sample Number: L0608183-02	PrePrep Method: NONE	Instrument: IC2
Client ID: G7WW02	Prep Method: 300.0	Prep Date: 08/08/2006 17:20
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219499	Analyst: JWR	Run Date: 08/08/2006 17:20
Collect Date: 08/07/2006 11:40	Dilution: 25	File ID: I2080806.20
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1090	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	130		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608183**Report Date : **August 17, 2006**

00046137

Sample Number: **L0608183-02**
Client ID: **G7WW02**
Matrix: **Water**
Workgroup Number: **WG219875**
Collect Date: **08/07/2006 11:40**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/14/2006 18:13**
Cal Date: **03/27/2006 14:30**
Run Date: **08/14/2006 18:13**
File ID: **16G3696**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.801		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

00046139

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG219499

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01			08/08/06 15:36	01	IC2	JWR
L0608183-01	G7WW01/G4WW01			08/08/06 15:53	DL01	IC2	JWR
L0608183-01	G7WW01/G4WW01			08/08/06 16:11	DL02	IC2	JWR
L0608183-01	G7WW01/G4WW01			08/08/06 16:28	DL03	IC2	JWR
L0608183-02	G7WW02			08/08/06 16:46	01	IC2	JWR
L0608183-02	G7WW02			08/08/06 17:03	DL01	IC2	JWR
L0608183-02	G7WW02			08/08/06 17:20	DL02	IC2	JWR
L0608183-02	G7WW02			08/08/06 17:38	DL03	IC2	JWR

Analysis:Common Anions

Extraction Method:METHOD

Workgroup:WG219499

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01		08/08/06 14:44			FILTER	JWR
L0608183-02	G7WW02		08/08/06 14:44			FILTER	JWR

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG219565

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01			08/10/06 18:12	01	HPMS10	MES
L0608183-02	G7WW02			08/10/06 18:43	01	HPMS10	MES

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG219565

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01				219565	HPMS10	MES
L0608183-02	G7WW02				219565	HPMS10	MES

WORKGROUP SUMMARY BY METHOD

00046140

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG219597

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01			08/09/06 19:30	01	TOC-VWP	DIH
L0608183-01	G7WW01/G4WW01			08/09/06 19:30	01	TOC-VWP	DIH
L0608183-02	G7WW02			08/09/06 19:16	01	TOC-VWP	DIH
L0608183-02	G7WW02			08/09/06 19:16	01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG219597

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01			08/09/06 19:30	01	TOC-VWP	DIH
L0608183-02	G7WW02			08/09/06 19:16	01	TOC-VWP	DIH

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG219875

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01			08/14/06 17:59	01	HP16	JLS
L0608183-02	G7WW02			08/14/06 18:13	01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG219875

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608183-01	G7WW01/G4WW01				219875	HP16	JLS
L0608183-02	G7WW02				219875	HP16	JLS

Kemron Environmental Services
Analyst Listing
August 17, 2006

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH	CEB - CHAD E. BARNES
CFB - CHAD F. BOOK	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS
CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN	CSA - LUCINDA S. ARNOLD
CSH - CHRIS S. HILL	DAS - DALLAS A. SULLIVAN	DD - DIANE M. DENNIS
DDE - DEBRA D. ELLIOTT	DEL - DON E. LIGHTFRITZ	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DR - DEANNA ROBERTS
DRP - DAVE R. PITZER	DSM - DAVID S. MOSSOR	DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JKT - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL	JNB - JOSHUA N. BOOTH	JS - JENNIFER L. SOUTHALL
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES	JYH - JI Y. HU
KCZ - KEVIN C. ZUMBRO	KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO	MLR - MARY L. ROCHOTTE	MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
PAS - PATRICK A. STREET	PJM - PAUL J. MILLER	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SCM - SUSAN C. MOELLENDICK	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	SRM - SAMUEL R. MCFEE
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WFM - WALTER F. MARTIN		

Qualkey: STD

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
FL	Free Liquid
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	ESTIMATE & COLUMNS DON'T AGREE TO WITHIN 40%
L	Sample reporting limits elevated due to matrix interference
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria fail. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Undetected; the concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

Organic QA/QC

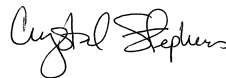
KEMRON Environmental Services Data Checklist

00046144

Date: 15-JUL-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B/624
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11244
 Analytical Workgroups: WG217397;WG217415

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
17-JUL-2006



Secondary Reviewer:
17-JUL-2006



Generated: JUL-17-2006 14:39:37

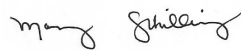
KEMRON Environmental Services Data Checklist

00046145

Date: 10 - AUG - 2006
Analyst: MES
Analyst: NA
Method: 8260
Instrument: HPMS10
Curve Workgroup: NA
Runlog ID: 11706
Analytical Workgroups: WG219565

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	X
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
11 - AUG - 2006



Secondary Reviewer:
11 - AUG - 2006



Generated: AUG -11 -2006 13:00:22

KEMRON Environmental Services

Instrument Run Log

00046146

Instrument: HPMS10 Dataset: 071506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B/5035 SOP: PAT01 Rev: 10
 Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
 CCV: STD13787 LCS: STD13712 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG217397;WG217415

Comments: Files 10M47238-10M47244: Retuned instrument.Troubleshooting purposes only. All tunes passed.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M47238	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 08:15
2	10M47239	BFB 50ng STD CHECK 8260-PURGED	NA	1	1	STD13589	07/15/06 08:55
3	10M47240	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 09:09
4	10M47241	IS/SS SYSTEM BLANK CHECK	NA	1	1		07/15/06 09:45
5	10M47242	IS/SS SYSTEM BLANK CHECK 1800	NA	1	1		07/15/06 10:28
6	10M47243	IS/SS SYSTEM BLANK CHECK 1859	NA	1	1		07/15/06 11:00
7	10M47244	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 11:27
8	10M47245	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 11:48
9	10M47246	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 12:02
10	10M47247	WG217397-02 0.30ug/L STD 8260	NA	1	1	STD13787	07/15/06 12:33
11	10M47248	WG217397-03 0.40ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:03
12	10M47249	WG217397-04 1ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:34
13	10M47250	WG217397-05 2ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:05
14	10M47251	WG217397-06 5ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:35
15	10M47252	WG217397-07 20ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:06
16	10M47253	WG217397-08 50ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:37
17	10M47254	WG217397-09 100ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:07
18	10M47255	WG217397-10 200ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:37
19	10M47256	SYSTEM BLANK	NA	1	1		07/15/06 17:08
20	10M47257	SYSTEM BLANK	NA	1	1		07/15/06 17:39
21	10M47258	WG217397-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD13712	07/15/06 18:09
22	10M47259	WG217415-01 VBLK0715 BLANK 8260	NA	1	1		07/15/06 18:40
23	10M47260	L0606678-01 A 826-REF-BLK	NA	1	1		07/15/06 19:11
24	10M47261	L0606678-02 A 826-REF-BLK	NA	1	1		07/15/06 19:41
25	10M47262	L0606678-03 A 826-REF-BLK	NA	1	1		07/15/06 20:11
26	10M47263	L0606678-04 A 826-REF-BLK	NA	1	1		07/15/06 20:42
27	10M47264	L0606678-05 A 826-REF-BLK	NA	1	1		07/15/06 21:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8	X			

Approved: July 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046147

Instrument: HPMS10 Dataset: 071506
Analyst1: CMS Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 10
Method: 624 SOP: MSV10 Rev: 9
Method: 5030B/5035 SOP: PAT01 Rev: 10
Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
CCV: STD13787 LCS: STD13712 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG217397;WG217415

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M47245				
Tune failed/DNR				

Approved: July 17, 2006



KEMRON Environmental Services

Instrument Run Log

00046148

Instrument: HPMS10 Dataset: 081006
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15129

Internal Standard: STD13898 Surrogate Standard: STD14290
 CCV: STD14330 LCS: STD14341 MS/MSD: STD14341
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219565

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M47969	WG219564-01 50NG BFB STD 8260	NA	1	1	STD14237	08/10/06 08:32
2	10M47970	WG219564-02 50ug/L WATER STD 8260	NA	1	1	STD14330	08/10/06 08:54
3	10M47971	WG219565-01 VBLK0810 BLANK 8260	NA	1	1		08/10/06 09:25
4	10M47972	WG219565-02 20ug/L LCS 8260	NA	1	1	STD14341	08/10/06 09:56
5	10M47973	L0608203-01 A 826-SPE	<2	1	1		08/10/06 10:27
6	10M47974	L0608010-11 A 826-LOW	<2	1	1		08/10/06 10:59
7	10M47975	L0608010-05 B D1 10X 826-LOW	6	1	10		08/10/06 11:30
8	10M47976	L0608044-01 B D1 10X 826-SPE	<2	1	10		08/10/06 12:00
9	10M47977	L0608010-10 B D1 10X 826-LOW	<2	1	10		08/10/06 12:31
10	10M47978	L0608027-01 A 826-LOW	<2	1	1		08/10/06 13:02
11	10M47979	L0608062-02 A 826-LOW	<2	1	1		08/10/06 13:33
12	10M47980	L0608172-03 A 826-SPE	<2	1	1		08/10/06 14:04
13	10M47981	L0608027-02 A 826-LOW	<2	1	1		08/10/06 14:35
14	10M47982	L0608027-03 MS A 826-LOW	<2	1	1	STD14341	08/10/06 15:08
15	10M47983	L0608027-04 MSD A 826-LOW	<2	1	1	STD14341	08/10/06 15:38
16	10M47984	L0608010-09 B D1 50X 826-LOW	<2	1	50		08/10/06 16:09
17	10M47985	L0608160-06 A 8260	<2	1	1		08/10/06 16:40
18	10M47986	L0608062-01 A 826-LOW	<2	1	1		08/10/06 17:11
19	10M47987	L0608172-01 A 826-SPE	<2	1	1		08/10/06 17:41
20	10M47988	L0608183-01 A 826-SPE	<2	1	1		08/10/06 18:12
21	10M47989	L0608183-02 A 826-SPE	<2	1	1		08/10/06 18:43
22	10M47990	L0608160-04 A 8260	<2	1	1		08/10/06 19:14
23	10M47991	L0608160-05 A 8260	<2	1	1		08/10/06 19:45
24	10M47992	L0608188-13 A 10X 826-TC	NA	17	10		08/10/06 20:15
25	10M47993	SYSTEM BLANK	NA	1	1		08/10/06 20:47
26	10M47994	SYSTEM CHECK	NA	1	1		08/10/06 21:18
27	10M47995	SYSTEM CHECK	NA	1	1		08/10/06 21:49
28	10M47996	SYSTEM BLANK	NA	1	1		08/10/06 22:19

Comments

Seq.	Rerun	Dil.	Reason	Analytes

Approved: August 11, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046149

Instrument: HPMS10 Dataset: 081006
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15129

Internal Standard: STD13898 Surrogate Standard: STD14290
 CCV: STD14330 LCS: STD14341 MS/MSD: STD14341
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219565

Comments

Seq.	Rerun	Dil.	Reason	Analytes
6	X	100	Over Calibration Range	TCE
File ID:10M47974				
19	X	10	Over Calibration Range	acetone
File ID:10M47987				

Approved: August 11, 2006



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046150

Analytical Method: 8260B
Login Number: L0608183

AAB#: WG219565

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
G7WW01/G4WW01	08/07/06	08/08/06	08/10/06	14	3.12	08/10/06	14	3.12	
G7WW02	08/07/06	08/08/06	08/10/06	14	3.29	08/10/06	14	3.29	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00046151

Login Number: L0608183
 Instrument Id: HPMS10
 Workgroup (AAB#): WG219565

Method: 8260
 CAL ID: HPMS10 - 15-JUL-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608183-01	1.00	01	<u>126</u>	108	106	106
L0608183-02	1.00	01	<u>128</u>	110	106	105
WG219565-01	1.00	01	111	106	102	105
WG219565-02	1.00	01	117	110	102	102

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

METHOD BLANK SUMMARY

00046152

Login Number: L0608183	Work Group: WG219565
Blank File ID: 10M47971	Blank Sample ID: WG219565-01
Date Analyzed: 08/10/06	Instrument ID: HPMS10
Time Analyzed: 09:25	Method: 8260B
Analyst: MES	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219565-02	10M47972	08/10/06 09:56	01
G7WW01/G4WW01	L0608183-01	10M47988	08/10/06 18:12	01
G7WW02	L0608183-02	10M47989	08/10/06 18:43	01

METHOD BLANK REPORT

00046153

Login Number: L0608183 Run Date: 08/10/2006 Sample ID: WG219565-01
 Instrument ID: HPMS10 Run Time: 09:25 Prep Method: 5030B
 File ID: 10M47971 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219565 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.200	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 540029
 Report generated 08/11/2006 14:52

METHOD BLANK REPORT

00046154

Login Number: L0608183 Run Date: 08/10/2006 Sample ID: WG219565-01
 Instrument ID: HPMS10 Run Time: 09:25 Prep Method: 5030B
 File ID: 10M47971 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219565 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	111	80 - 120	PASS
Dibromofluoromethane	106	86 - 118	PASS
p-Bromofluorobenzene	102	86 - 115	PASS
Toluene-d8	105	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046155

Login Number: L0608183	Run Date: 08/10/2006	Sample ID: WG219565-02
Instrument ID: HPMS10	Run Time: 09:56	Prep Method: 5030B
File ID: 10M47972	Analyst: MES	Method: 8260B
Workgroup (AAB#): WG219565	Matrix: Water	Units: ug/L
Contract #: DACA56-94-D-0020	Cal ID: HPMS10 - 15-JUL-06	

Analytes	Expected	Found	% Rec	LCS Limits			Q
1,1,1-Trichloroethane	20.0	24.7	123	80	-	134	
1,1,2,2-Tetrachloroethane	20.0	21.3	107	79	-	125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	12.7	63.6	80	-	130	*
1,1,2-Trichloroethane	20.0	22.1	111	80	-	125	
1,1-Dichloroethane	20.0	23.3	117	80	-	125	
1,1-Dichloroethene	20.0	21.8	109	80	-	132	
1,2,4-Trichlorobenzene	20.0	20.1	101	65	-	135	
1,2-Dibromo-3-chloropropane	20.0	21.9	110	50	-	130	
1,2-Dibromoethane	20.0	22.2	111	80	-	125	
1,2-Dichlorobenzene	20.0	20.3	102	80	-	125	
1,2-Dichloroethane	20.0	26.2	131	80	-	129	*
cis-1,2-Dichloroethene	20.0	21.6	108	70	-	125	
trans-1,2-Dichloroethene	20.0	21.3	107	80	-	127	
1,2-Dichloropropane	20.0	22.9	115	80	-	120	
1,3-Dichlorobenzene	20.0	20.4	102	80	-	120	
1,4-Dichlorobenzene	20.0	20.3	101	80	-	120	
2-Butanone	20.0	24.9	124	30	-	150	
2-Hexanone	20.0	23.3	117	55	-	130	
4-Methyl-2-pentanone	20.0	22.9	114	64	-	140	
Acetone	20.0	25.2	126	40	-	142	
Benzene	20.0	20.9	105	80	-	121	
Bromodichloromethane	20.0	26.4	132	80	-	131	*
Bromoform	20.0	23.9	119	70	-	130	
Bromomethane	20.0	27.5	137	30	-	145	
Carbon disulfide	20.0	20.5	103	58	-	138	
Carbon tetrachloride	20.0	23.3	117	65	-	140	
Chlorobenzene	20.0	21.0	105	80	-	120	
Chloroethane	20.0	22.1	111	60	-	135	
Chloroform	20.0	23.6	118	80	-	125	
Chloromethane	20.0	27.5	138	40	-	125	*
cis-1,3-Dichloropropene	20.0	22.9	115	70	-	130	
Cyclohexane	20.0	21.1	106	80	-	130	
Dibromochloromethane	20.0	23.4	117	60	-	135	
Dichlorodifluoromethane	20.0	20.3	101	50	-	133	
Ethyl benzene	20.0	21.9	109	80	-	122	
Isopropylbenzene	20.0	20.2	101	80	-	122	
Methyl acetate	20.0	27.3	137	80	-	130	*
Methyl tert-butyl ether	20.0	23.1	116	65	-	125	
Methylcyclohexane	20.0	20.4	102	80	-	130	
Methylene chloride	20.0	20.0	99.9	80	-	123	
Styrene	20.0	20.3	102	80	-	123	

LABORATORY CONTROL SAMPLE (LCS)

00046156

Login Number: L0608183 Run Date: 08/10/2006 Sample ID: WG219565-02
 Instrument ID: HPMS10 Run Time: 09:56 Prep Method: 5030B
 File ID: 10M47972 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219565 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Tetrachloroethene	20.0	21.8	109	80 - 124	
Toluene	20.0	20.5	103	80 - 124	
trans-1,3-Dichloropropene	20.0	21.9	110	80 - 130	
Trichloroethene	20.0	22.0	110	80 - 122	
Trichlorofluoromethane	20.0	21.8	109	62 - 151	
Vinyl chloride	20.0	25.3	126	65 - 140	
Xylenes, Total	60.0	63.0	105	80 - 121	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	117	80 - 120	PASS
Dibromofluoromethane	110	86 - 118	PASS
p-Bromofluorobenzene	102	86 - 115	PASS
Toluene-d8	102	88 - 110	PASS

* FAILS %REC LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046157

BFB

Login Number: L0608183	Tune ID: WG217397-01
Instrument: HPMS10	Run Date: 07/15/2006
Analyst: CMS	Run Time: 12:02
Workgroup: WG217397	File ID: 10M47246
	Cal ID: HPMS10-15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	20.3	6639	PASS
75.0	95.0	30.0	60.0	45.2	14755	PASS
95.0	95.0	100	100	100	32637	PASS
96.0	95.0	5.00	9.00	6.52	2129	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.0	27402	PASS
175	174	5.00	9.00	7.77	2130	PASS
176	174	95.0	101	95.8	26256	PASS
177	176	5.00	9.00	7.24	1900	PASS

This check relates to the following samples, MS, MSD:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG217397-11	SSCV	01	07/15/2006 18:09	
WG217397-10	STD	01	07/15/2006 16:37	
WG217397-09	STD	01	07/15/2006 16:07	
WG217397-08	CCV	01	07/15/2006 15:37	
WG217397-07	STD	01	07/15/2006 15:06	
WG217397-06	STD	01	07/15/2006 14:35	
WG217397-05	STD	01	07/15/2006 14:05	
WG217397-04	STD	01	07/15/2006 13:34	
WG217397-03	STD	01	07/15/2006 13:03	
WG217397-02	STD	01	07/15/2006 12:33	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046158

BFB

Login Number: L0608183
Instrument: HPMS10
Analyst: MES
Workgroup: WG219564

Tune ID: WG219564-01
Run Date: 08/10/2006
Run Time: 08:32
File ID: 10M47969

Cal ID: HPMS10 -15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	22.4	7192	PASS
75.0	95.0	30.0	60.0	53.5	17191	PASS
95.0	95.0	100	100	100	32138	PASS
96.0	95.0	5.00	9.00	7.38	2373	PASS
173	174	0	2.00	0.385	103	PASS
174	95.0	50.0	100	83.2	26741	PASS
175	174	5.00	9.00	7.76	2076	PASS
176	174	95.0	101	98.4	26312	PASS
177	176	5.00	9.00	6.21	1635	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG219564-02	CCV	08/10/2006 08:54

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219565-01	BLANK	01	08/10/2006 09:25	
WG219565-02	LCS	01	08/10/2006 09:56	
L0608183-01	G7WW01/G4WW01	01	08/10/2006 18:12	
L0608183-02	G7WW02	01	08/10/2006 18:43	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00046159

Login Number: L0608183
 Analytical Method: 8260B
 ICAL Workgroup: WG217397

Instrument ID: HPMS10
 Initial Calibration Date: 15-JUL-06 16:37
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
1,1-Dichloroethene	CCC	0.2477	13.7		
1,2-Dichloropropane	CCC	0.2842	4.38		
Chloroform	CCC	0.4605	7.94		
Ethylbenzene	CCC	0.5099	7.78		
Toluene	CCC	1.413	4.62		
Vinyl Chloride	CCC	0.1446	12.7		
1,1,2,2-Tetrachloroethane	SPCC	0.4140	10.4		
1,1-Dichloroethane	SPCC	0.5470	4.92		
Bromoform	SPCC	0.1038	24.8		1.00
Chlorobenzene	SPCC	0.9490	5.07		
Chloromethane	SPCC	0.1846	5.29		
1,1,1-Trichloroethane		0.3888	12.3		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2697	6.60		
1,1,2-Trichloroethane		0.2162	3.27		
1,2,4-Trichlorobenzene		0.7784	9.12		
1,2-Dibromo-3-Chloropropane		0.06202	21.4		1.00
1,2-Dibromoethane		0.2235	6.08		
1,2-Dichlorobenzene		1.269	7.02		
1,2-Dichloroethane		0.3301	5.92		
1,3-Dichlorobenzene		1.436	3.86		
1,4-Dichlorobenzene		1.468	7.30		
2-Butanone		0.05478	4.81		
2-Hexanone		0.1113	8.25		
4-Methyl-2-Pentanone		0.05537	6.85		
Acetone		0.04005	14.0		
Benzene		1.053	5.37		
Bromodichloromethane		0.2797	12.0		
Bromomethane		0.08886	10.1		
Carbon Disulfide		0.8671	9.75		
Carbon Tetrachloride		0.3201	18.6	1.00	
Chloroethane		0.2205	6.79		
Cyclohexane		0.5447	5.61		
Dibromochloromethane		0.2116	18.7	1.00	
Dichlorodifluoromethane		0.3087	4.07		
Isopropylbenzene		1.414	7.32		
Methyl Tert Butyl Ether		0.5495	4.68		
Methyl acetate		0.1194	3.04		
Methylcyclohexane		0.4123	5.19		
Methylene Chloride		0.2841	10.4		
Styrene		1.029	4.51		
Tetrachloroethene		0.2865	11.4		
Trichloroethene		0.2800	6.92		
Trichlorofluoromethane		0.4877	14.7		
cis-1,2-Dichloroethene		0.2827	5.59		
cis-1,3-Dichloropropene		0.3820	5.49		

KEMRON FORMS - Modified 06/12/2006
 Version 1.5 PDF File ID: 540031
 Report generated 08/11/2006 14:53

INITIAL CALIBRATION SUMMARY

00046160

Login Number: **L0608183**
Analytical Method: **8260B**
ICAL Workgroup: **WG217397**

Instrument ID: **HPMS10**
Initial Calibration Date: **15-JUL-06 16:37**
Column ID: **F**

Analyte		AVG RF	% RSD	LINEAR	QUAD
m-, p-Xylene		0.6229	7.97		
o-Xylene		0.6131	4.93		
trans-1,2-Dichloroethene		0.2747	6.68		
trans-1,3-Dichloropropene		0.4096	5.80		

INITIAL CALIBRATION DATA

00046161

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2155	0.1768	1.00	7552	0.2481
1,2-Dichloropropane	NA	NA	NA	0.400	3286	0.2696	1.00	8387	0.2756
Chloroform	0.300	3611	0.3788	0.400	5503	0.4516	1.00	13646	0.4484
Ethylbenzene	NA	NA	NA	0.400	4291	0.4814	1.00	11933	0.5337
Toluene	NA	NA	NA	0.400	12765	1.432	1.00	32232	1.442
Vinyl Chloride	NA	NA	NA	0.400	1986	0.1630	1.00	4642	0.1525
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2225	0.4981	1.00	4015	0.3548
1,1-Dichloroethane	NA	NA	NA	0.400	6118	0.5020	1.00	16423	0.5396
Bromoform	NA	NA	NA	NA	NA	NA	1.00	1677	0.07500
Chlorobenzene	NA	NA	NA	0.400	8400	0.9424	1.00	22223	0.9939
Chloromethane	NA	NA	NA	0.400	2489	0.2042	1.00	5413	0.1779
1,1,1-Trichloroethane	NA	NA	NA	0.400	3590	0.2946	1.00	11390	0.3742
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	1.00	7064	0.2321
1,1,2-Trichloroethane	NA	NA	NA	0.400	1993	0.2236	1.00	4758	0.2128
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4173	0.9343	1.00	8769	0.7750
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1711	0.1920	1.00	5059	0.2263
1,2-Dichlorobenzene	0.300	3977	1.162	0.400	6424	1.438	1.00	14615	1.292
1,2-Dichloroethane	NA	NA	NA	0.400	3632	0.2980	1.00	10116	0.3324
1,3-Dichlorobenzene	NA	NA	NA	0.400	6404	1.434	1.00	16357	1.446
1,4-Dichlorobenzene	0.300	4673	1.365	0.400	7504	1.680	1.00	16442	1.453
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	12926	1.061	1.00	32640	1.073
Bromodichloromethane	NA	NA	NA	0.400	2994	0.2457	1.00	7247	0.2381
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	2267	0.07450
Carbon Disulfide	NA	NA	NA	0.400	8322	0.6829	1.00	26540	0.8720
Carbon Tetrachloride	NA	NA	NA	0.400	2603	0.2136	1.00	9005	0.2959
Chloroethane	NA	NA	NA	0.400	2463	0.2021	1.00	6013	0.1976
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	16858	0.5539
Dibromochloromethane	NA	NA	NA	0.400	1554	0.1744	1.00	3887	0.1738
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8788	0.2888
Isopropylbenzene	NA	NA	NA	0.400	11116	1.247	1.00	30781	1.377
Methyl Tert Butyl Ether	NA	NA	NA	0.400	6217	0.5102	1.00	15981	0.5251
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	11744	0.3859
Methylene Chloride	NA	NA	NA	0.400	4138	0.3396	1.00	9498	0.3121
Styrene	NA	NA	NA	0.400	9184	1.030	1.00	22553	1.009
Tetrachloroethene	NA	NA	NA	0.400	1971	0.2211	1.00	6598	0.2951
Trichloroethene	NA	NA	NA	0.400	3037	0.2492	1.00	9012	0.2961

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 540031
Report generated 08/11/2006 14:53

INITIAL CALIBRATION DATA

00046162

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	13300	0.2202	5.00	39494	0.2668	20.0	157889	0.2687
1,2-Dichloropropane	2.00	16876	0.2793	5.00	43326	0.2926	20.0	175735	0.2991
Chloroform	2.00	26821	0.4440	5.00	71128	0.4804	20.0	286292	0.4873
Ethylbenzene	2.00	21374	0.4811	5.00	61604	0.5657	20.0	237507	0.5396
Toluene	2.00	59951	1.349	5.00	163466	1.501	20.0	636381	1.446
Vinyl Chloride	2.00	9672	0.1601	5.00	23420	0.1582	20.0	79694	0.1356
1,1,2,2-Tetrachloroethane	2.00	8402	0.3770	5.00	23352	0.4215	20.0	94876	0.4269
1,1-Dichloroethane	2.00	31792	0.5263	5.00	84471	0.5705	20.0	333056	0.5669
Bromoform	2.00	3400	0.07650	5.00	9039	0.08300	20.0	45931	0.1044
Chlorobenzene	2.00	41356	0.9308	5.00	107647	0.9885	20.0	433501	0.9849
Chloromethane	2.00	10457	0.1731	5.00	26838	0.1813	20.0	109763	0.1868
1,1,1-Trichloroethane	2.00	21124	0.3497	5.00	61118	0.4128	20.0	252890	0.4304
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	16160	0.2675	5.00	41383	0.2795	20.0	165877	0.2823
1,1,2-Trichloroethane	2.00	9523	0.2143	5.00	23769	0.2183	20.0	96364	0.2189
1,2,4-Trichlorobenzene	2.00	16347	0.7335	5.00	43577	0.7866	20.0	174334	0.7844
1,2-Dibromo-3-Chloropropane	2.00	1031	0.04630	5.00	2508	0.04530	20.0	13833	0.06220
1,2-Dibromoethane	2.00	10100	0.2273	5.00	24575	0.2257	20.0	102677	0.2333
1,2-Dichlorobenzene	2.00	27302	1.225	5.00	73258	1.322	20.0	290271	1.306
1,2-Dichloroethane	2.00	19924	0.3298	5.00	50650	0.3421	20.0	205661	0.3500
1,3-Dichlorobenzene	2.00	31297	1.404	5.00	82523	1.490	20.0	333022	1.499
1,4-Dichlorobenzene	2.00	32671	1.466	5.00	85330	1.540	20.0	334940	1.507
2-Butanone	2.00	3489	0.05780	5.00	8175	0.05520	20.0	32157	0.05470
2-Hexanone	2.00	4746	0.1068	5.00	12944	0.1189	20.0	52586	0.1195
4-Methyl-2-Pentanone	2.00	3053	0.05050	5.00	8358	0.05650	20.0	34236	0.05830
Acetone	2.00	2992	0.04950	5.00	6507	0.04400	20.0	22876	0.03890
Benzene	2.00	61054	1.011	5.00	165630	1.119	20.0	644633	1.097
Bromodichloromethane	2.00	14734	0.2439	5.00	40674	0.2747	20.0	176212	0.2999
Bromomethane	2.00	4848	0.08020	5.00	13785	0.09310	20.0	51620	0.08790
Carbon Disulfide	2.00	54632	0.9043	5.00	136052	0.9189	20.0	543854	0.9256
Carbon Tetrachloride	2.00	15690	0.2597	5.00	47793	0.3228	20.0	206570	0.3516
Chloroethane	2.00	13269	0.2196	5.00	34263	0.2314	20.0	139332	0.2371
Cyclohexane	2.00	33305	0.5513	5.00	84549	0.5711	20.0	328563	0.5592
Dibromochloromethane	2.00	7310	0.1645	5.00	21283	0.1954	20.0	97086	0.2206
Dichlorodifluoromethane	2.00	18369	0.3041	5.00	47240	0.3191	20.0	187142	0.3185
Isopropylbenzene	2.00	58775	1.323	5.00	164943	1.515	20.0	666472	1.514
Methyl Tert Butyl Ether	2.00	33220	0.5499	5.00	83348	0.5630	20.0	333902	0.5683
Methyl acetate	2.00	7192	0.1190	5.00	16913	0.1142	20.0	70054	0.1192
Methylcyclohexane	2.00	24159	0.3999	5.00	63431	0.4284	20.0	251187	0.4275
Methylene Chloride	2.00	16950	0.2806	5.00	41377	0.2795	20.0	163552	0.2784
Styrene	2.00	43781	0.9854	5.00	116097	1.066	20.0	473446	1.076
Tetrachloroethene	2.00	11410	0.2568	5.00	34511	0.3169	20.0	135423	0.3077
Trichloroethene	2.00	15717	0.2602	5.00	43388	0.2931	20.0	174150	0.2964

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 540031
Report generated 08/11/2006 14:53

INITIAL CALIBRATION DATA

00046163

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	395105	0.2792	100	746883	0.2681	200	1407541	0.2538
1,2-Dichloropropane	50.0	424112	0.2997	100	804346	0.2887	200	1493303	0.2693
Chloroform	50.0	707811	0.5001	100	1362341	0.4890	200	2577742	0.4648
Ethylbenzene	50.0	563335	0.5313	100	1039224	0.5022	200	1804054	0.4444
Toluene	50.0	1533585	1.447	100	2882090	1.393	200	5251372	1.294
Vinyl Chloride	50.0	175535	0.1240	100	330230	0.1185	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	233701	0.4306	100	432363	0.4089	200	819486	0.3940
1,1-Dichloroethane	50.0	817848	0.5779	100	1572533	0.5644	200	2927948	0.5280
Bromoform	50.0	132160	0.1247	100	269661	0.1303	200	539702	0.1329
Chlorobenzene	50.0	1031892	0.9733	100	1922747	0.9291	200	3446617	0.8490
Chloromethane	50.0	266196	0.1881	100	525212	0.1885	200	980824	0.1769
1,1,1-Trichloroethane	50.0	613851	0.4338	100	1173075	0.4210	200	2183759	0.3938
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	399812	0.2825	100	771869	0.2770	200	1480622	0.2670
1,1,2-Trichloroethane	50.0	238815	0.2252	100	441173	0.2132	200	823736	0.2029
1,2,4-Trichlorobenzene	50.0	422238	0.7780	100	787610	0.7449	200	1436381	0.6905
1,2-Dibromo-3-Chloropropane	50.0	38747	0.07140	100	76766	0.07260	200	154640	0.07430
1,2-Dibromoethane	50.0	248933	0.2348	100	473783	0.2290	200	889735	0.2192
1,2-Dichlorobenzene	50.0	703512	1.296	100	1307212	1.236	200	2386559	1.147
1,2-Dichloroethane	50.0	497835	0.3518	100	923329	0.3314	200	1692271	0.3052
1,3-Dichlorobenzene	50.0	795692	1.466	100	1504951	1.423	200	2753792	1.324
1,4-Dichlorobenzene	50.0	803373	1.480	100	1494835	1.414	200	2716928	1.306
2-Butanone	50.0	81094	0.05730	100	147473	0.05290	200	281672	0.05080
2-Hexanone	50.0	125686	0.1185	100	222058	0.1073	200	393105	0.09680
4-Methyl-2-Pentanone	50.0	85134	0.06020	100	154207	0.05530	200	284832	0.05140
Acetone	50.0	51865	0.03660	100	98172	0.03520	200	200255	0.03610
Benzene	50.0	1539273	1.088	100	2887312	1.036	200	5221294	0.9415
Bromodichloromethane	50.0	450434	0.3183	100	879465	0.3157	200	1670781	0.3013
Bromomethane	50.0	127151	0.08980	100	271375	0.09740	200	549682	0.09910
Carbon Disulfide	50.0	1328773	0.9389	100	2460454	0.8831	200	4499082	0.8113
Carbon Tetrachloride	50.0	528039	0.3731	100	1047948	0.3761	200	2042508	0.3683
Chloroethane	50.0	333370	0.2356	100	631553	0.2267	200	1186233	0.2139
Cyclohexane	50.0	797216	0.5633	100	1487040	0.5337	200	2665271	0.4806
Dibromochloromethane	50.0	265828	0.2507	100	531454	0.2568	200	1041322	0.2565
Dichlorodifluoromethane	50.0	455437	0.3218	100	868503	0.3117	200	1645246	0.2967
Isopropylbenzene	50.0	1613156	1.522	100	3027220	1.463	200	5500748	1.355
Methyl Tert Butyl Ether	50.0	835199	0.5902	100	1548940	0.5559	200	2957843	0.5334
Methyl acetate	50.0	174861	0.1236	100	336543	0.1208	200	663941	0.1197
Methylcyclohexane	50.0	612213	0.4326	100	1171875	0.4206	200	2169748	0.3913
Methylene Chloride	50.0	390691	0.2761	100	733721	0.2633	200	1346612	0.2428
Styrene	50.0	1143677	1.079	100	2145111	1.037	200	3846545	0.9475
Tetrachloroethene	50.0	331718	0.3129	100	619182	0.2992	200	1146919	0.2825
Trichloroethene	50.0	418485	0.2957	100	797556	0.2863	200	1456615	0.2627

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 540031
Report generated 08/11/2006 14:53

INITIAL CALIBRATION DATA

00046164

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	3902	0.3202	1.00	14191	0.4663
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3189	0.2617	1.00	8459	0.2779
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4549	0.3733	1.00	10955	0.3600
m-,p-Xylene	NA	NA	NA	0.800	10700	0.6002	2.00	29801	0.6664
o-Xylene	NA	NA	NA	0.400	5519	0.6192	1.00	13413	0.5999
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3008	0.2468	1.00	8004	0.2630
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3487	0.3912	1.00	8520	0.3810

INITIAL CALIBRATION DATA

00046165

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	30655	0.5074	5.00	77087	0.5207	20.0	311587	0.5303
cis-1,2-Dichloroethene	2.00	15852	0.2624	5.00	43448	0.2935	20.0	172950	0.2944
cis-1,3-Dichloropropene	2.00	21618	0.3578	5.00	57511	0.3885	20.0	240114	0.4087
m-,p-Xylene	4.00	54965	0.6185	10.0	147386	0.6767	40.0	580911	0.6599
o-Xylene	2.00	26177	0.5892	5.00	71342	0.6551	20.0	280089	0.6363
trans-1,2-Dichloroethene	2.00	15320	0.2536	5.00	42965	0.2902	20.0	170194	0.2897
trans-1,3-Dichloropropene	2.00	17116	0.3852	5.00	45044	0.4136	20.0	190224	0.4322

INITIAL CALIBRATION DATA

00046166

Login Number: L0608183

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	765832	0.5411	100	1455283	0.5223	200	2735861	0.4933
cis-1,2-Dichloroethene	50.0	430153	0.3040	100	815973	0.2929	200	1523643	0.2748
cis-1,3-Dichloropropene	50.0	579447	0.4094	100	1096027	0.3934	200	2023151	0.3648
m-,p-Xylene	100	1358343	0.6406	200	2462969	0.5951	400	4267218	0.5256
o-Xylene	50.0	673662	0.6354	100	1260659	0.6092	200	2274735	0.5603
trans-1,2-Dichloroethene	50.0	414867	0.2931	100	803880	0.2885	200	1512005	0.2727
trans-1,3-Dichloropropene	50.0	472078	0.4453	100	884748	0.4275	200	1626717	0.4007

ALTERNATE SOURCE CALIBRATION REPORT

00046167

Login Number: L0608183 Run Date: 07/15/2006 Sample ID: WG217397-11
 Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
 File ID: 10M47258 Analyst: CMS
 ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	20	21.6	0.268	8.1	ug/L	
1,2-Dichloropropane	CCC	20	22.0	0.313	10.2	ug/L	
Chloroform	CCC	20	22.2	0.512	11.2	ug/L	
Ethylbenzene	CCC	20	22.8	0.582	14.2	ug/L	
Toluene	CCC	20	21.7	1.54	8.7	ug/L	
Vinyl Chloride	CCC	20	18.4	0.133	8.2	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	21.5	0.444	7.3	ug/L	
1,1-Dichloroethane	SPCC	20	21.6	0.590	7.9	ug/L	
Bromoform	SPCC	20	19.2	0.114	3.8	ug/L	
Chlorobenzene	SPCC	20	21.8	1.03	9	ug/L	
Chloromethane	SPCC	20	21.0	0.193	4.8	ug/L	
1,1,1-Trichloroethane		20	23.0	0.447	15.1	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20	21.4	0.288	6.8	ug/L	
1,1,2-Trichloroethane		20	21.9	0.237	9.5	ug/L	
1,2,4-Trichlorobenzene		20	21.2	0.825	6	ug/L	
1,2-Dibromo-3-Chloropropane		20	21.5	0.0724	7.7	ug/L	
1,2-Dibromoethane		20	22.3	0.249	11.3	ug/L	
1,2-Dichlorobenzene		20	21.4	1.36	7.1	ug/L	
1,2-Dichloroethane		20	22.1	0.365	10.5	ug/L	
cis-1,2-Dichloroethene		20	21.8	0.308	8.9	ug/L	
trans-1,2-Dichloroethene		20	21.1	0.290	5.4	ug/L	
1,3-Dichlorobenzene		20	21.9	1.57	9.5	ug/L	
1,4-Dichlorobenzene		20	21.7	1.59	8.5	ug/L	
2-Butanone		20	21.6	0.0591	7.9	ug/L	
2-Hexanone		20	21.4	0.119	7.1	ug/L	
4-Methyl-2-Pentanone		20	22.3	0.0617	11.4	ug/L	
Acetone		20	20.1	0.0402	.4	ug/L	
Benzene		20	21.3	1.12	6.5	ug/L	
Bromodichloromethane		20	23.7	0.331	18.4	ug/L	
Bromomethane		20	20.6	0.0915	3	ug/L	
Carbon Disulfide		20	20.3	0.880	1.4	ug/L	
Carbon Tetrachloride		20	20.2	0.370	1	ug/L	
Chloroethane		20	20.2	0.223	.9	ug/L	
cis-1,3-Dichloropropene		20	22.1	0.422	10.4	ug/L	
Cyclohexane		20	20.2	0.549	.8	ug/L	
Dibromochloromethane		20	20.0	0.244	.2	ug/L	
Dichlorodifluoromethane		20	18.7	0.289	6.3	ug/L	
Isopropylbenzene		20	21.3	1.50	6.3	ug/L	
Methyl acetate		20	21.6	0.129	7.8	ug/L	
Methyl Tert Butyl Ether		20	21.5	0.590	7.5	ug/L	
Methylcyclohexane		20	20.3	0.418	1.3	ug/L	
Methylene Chloride		20	19.7	0.280	1.5	ug/L	

KEMRON FORMS - Modified 07/26/2006
 Version 1.5 PDF File ID: 540032
 Report generated 08/11/2006 14:53

ALTERNATE SOURCE CALIBRATION REPORT

00046168

Login Number: L0608183 Run Date: 07/15/2006 Sample ID: WG217397-11
Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
File ID: 10M47258 Analyst: CMS
ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		20	22.5	1.16	12.7	ug/L	
Tetrachloroethene		20	22.6	0.324	13.2	ug/L	
trans-1,3-Dichloropropene		20	20.6	0.422	3.1	ug/L	
Trichloroethene		20	22.1	0.310	10.7	ug/L	
Trichlorofluoromethane		20	19.2	0.469	3.9	ug/L	
m-,p-Xylene		40	45.3	0.706	13.3	ug/L	
o-Xylene		20	22.5	0.689	12.3	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00046169

Login Number: L0608183 Run Date: 08/10/2006 Sample ID: WG219564-02
 Instrument ID: HPMS10 Run Time: 08:54 Method: 8260B
 File ID: 10M47970 Analvst: MES
 Workgroup (AAB#): WG219565 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	50	58.0	0.288	16.1	ug/L	
1,2-Dichloropropane	CCC	50	54.0	0.307	7.9	ug/L	
Chloroform	CCC	50	58.6	0.539	17.1	ug/L	
Ethylbenzene	CCC	50	53.8	0.549	7.7	ug/L	
Toluene	CCC	50	53.1	1.50	6.2	ug/L	
Vinyl Chloride	CCC	50	57.9	0.167	15.8	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50	48.5	0.402	2.9	ug/L	
1,1-Dichloroethane	SPCC	50	58.2	0.637	16.4	ug/L	
Bromoform	SPCC	50	57.8	0.146	15.7	ug/L	
Chlorobenzene	SPCC	50	52.5	0.996	5	ug/L	
Chloromethane	SPCC	50	66.3	0.245	32.6	ug/L	
1,1,1-Trichloroethane		50	60.9	0.474	21.8	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50	56.4	0.304	12.8	ug/L	
1,1,2-Trichloroethane		50	50.6	0.219	1.1	ug/L	
1,2,4-Trichlorobenzene		50	47.8	0.745	4.3	ug/L	
1,2-Dibromo-3-Chloropropane		50	49.3	0.0696	1.5	ug/L	
1,2-Dibromoethane		50	52.1	0.233	4.3	ug/L	
1,2-Dichlorobenzene		50	50.0	1.27	0	ug/L	
1,2-Dichloroethane		50	59.3	0.392	18.6	ug/L	
cis-1,2-Dichloroethene		50	54.5	0.308	9	ug/L	
trans-1,2-Dichloroethene		50	54.7	0.300	9.3	ug/L	
1,3-Dichlorobenzene		50	52.5	1.51	5.1	ug/L	
1,4-Dichlorobenzene		50	50.5	1.48	.9	ug/L	
2-Butanone		50	53.1	0.0581	6.1	ug/L	
2-Hexanone		50	51.7	0.115	3.4	ug/L	
4-Methyl-2-Pentanone		50	47.6	0.0527	4.7	ug/L	
Acetone		50	58.4	0.0468	16.9	ug/L	
Benzene		50	51.7	1.09	3.4	ug/L	
Bromodichloromethane		50	61.8	0.346	23.5	ug/L	
Bromomethane		50	64.4	0.115	28.8	ug/L	
Carbon Disulfide		50	47.6	0.826	4.8	ug/L	
Carbon Tetrachloride		50	58.8	0.434	17.6	ug/L	
Chloroethane		50	57.0	0.251	13.9	ug/L	
cis-1,3-Dichloropropene		50	54.8	0.419	9.6	ug/L	
Cyclohexane		50	50.5	0.550	1	ug/L	
Dibromochloromethane		50	55.5	0.281	11	ug/L	
Dichlorodifluoromethane		50	53.7	0.332	7.4	ug/L	
Isopropylbenzene		50	56.2	1.59	12.5	ug/L	
Methyl acetate		50	49.8	0.119	.4	ug/L	
Methyl Tert Butyl Ether		50	46.9	0.516	6.2	ug/L	
Methylcyclohexane		50	50.1	0.414	.3	ug/L	
Methylene Chloride		50	51.3	0.292	2.7	ug/L	

KEMRON FORMS - Modified 06/21/2006
 Version 1.3 PDF File ID: 540035
 Report generated 08/11/2006 14:53

CONTINUING CALIBRATION VERIFICATION (CCV)

00046170

Login Number: L0608183 Run Date: 08/10/2006 Sample ID: WG219564-02
Instrument ID: HPMS10 Run Time: 08:54 Method: 8260B
File ID: 10M47970 Analyst: MES
Workgroup (AAB#): WG219565 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		50	52.0	1.07	4	ug/L	
Tetrachloroethene		50	56.0	0.321	12.1	ug/L	
trans-1,3-Dichloropropene		50	58.2	0.477	16.4	ug/L	
Trichloroethene		50	53.2	0.298	6.3	ug/L	
Trichlorofluoromethane		50	63.1	0.616	26.2	ug/L	
m-,p-Xylene		100	108	0.671	7.8	ug/L	
o-Xylene		50	52.5	0.644	5	ug/L	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046171

Login Number: L0608183
Instrument ID: HPMS10
Workgroup (AAB#): WG219565

CCV Number: WG219564-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219564-02	NA	NA	258172	507268	709731
Upper Limit	NA	NA	516344	1014536	1419462
Lower Limit	NA	NA	129086	253634	354866
L0608183-01	1.00	01	191928	392947	554807
L0608183-02	1.00	01	189494	385385	538273
WG219565-01	1.00	01	246554	496299	678882
WG219565-02	1.00	01	250994	482282	647622

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046172

Login Number: L0608183
Instrument ID: HPMS10
Workgroup (AAB#): WG219565

CCV Number: WG219564-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219564-02	NA	NA	15.52	12.55	8.71
Upper Limit	NA	NA	16.02	13.05	9.21
Lower Limit	NA	NA	15.02	12.05	8.21
L0608183-01	1.00	01	15.53	12.55	8.71
L0608183-02	1.00	01	15.52	12.55	8.72
WG219565-01	1.00	01	15.52	12.55	8.71
WG219565-02	1.00	01	15.52	12.55	8.71

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON Environmental Services
Data Checklist

00046173

Date: 27 - MAR - 2006

Analyst: JLS

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Analytical Workgroups: WG209269

Runlog ID number:	9527
System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	NA
Narrative Summary	NA
Results Reporting/Data Qualifiers	NA
Client Data Package Assembly	NA
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
27 - MAR - 2006



Secondary Reviewer:
29 - MAR - 2006



Generated: MAR - 29 - 2006 15:32:38

KEMRON Environmental Services Data Checklist

00046174

Date: 14 - AUG - 2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 11751
 Analytical Workgroups: WG219875

System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	X
Narrative Summary	NA
Results Reporting/Data Qualifiers	X
Client Data Package Assembly	X
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
15 - AUG - 2006



Secondary Reviewer:
15 - AUG - 2006



Generated: AUG -15 -2006 15:43:41

KEMRON Environmental Services

Instrument Run Log

00046175

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103

Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT

Workgroups: WG209269

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3094	WG209269-01 50ug/ml STD	NA	1	1	STD115796	03/27/06 09:47
2	16G3095	WG209269-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 10:06
3	16G3098	WG209269-01 .1ug/ml STD	NA	1	1	STD11579	03/27/06 12:52
4	16G3099	WG209269-02 1ug/ml STD	NA	1	1	STD11579	03/27/06 13:06
5	16G3100	WG209269-03 10ug/ml STD	NA	1	1	STD11579	03/27/06 13:20
6	16G3101	WG209269-04 20ug/ml STD	NA	1	1	STD11579	03/27/06 13:34
7	16G3102	WG209269-05 50ug/ml STD	NA	1	1	STD11579	03/27/06 13:48
8	16G3103	WG209269-06 100ug/ml STD	NA	1	1	STD11579	03/27/06 14:02
9	16G3104	WG209269-07 200ug/ml STD	NA	1	1	STD11579	03/27/06 14:16
10	16G3105	WG209269-08 300ug/ml STD	NA	1	1	STD11579	03/27/06 14:30
11	16G3106	RINSE	NA	1	1		03/27/06 14:44
12	16G3107	RINSE	NA	1	1		03/27/06 14:58
13	16G3108	WG209269-09 20ug/ml STD	NA	1	1	STD11579	03/27/06 15:12
14	16G3109	WG209270-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 15:34
15	16G3110	WG209306-01 BLANK	NA	1	1		03/27/06 15:50
16	16G3111	WG209306-02 20ug/ml LCS	NA	1	1	STD11579	03/27/06 16:04
17	16G3113	L0603426-01 A	NA	1	1		03/27/06 17:04
18	16G3114	L0603426-02 A	NA	1	1		03/27/06 17:18
19	16G3115	L0603426-03 A	NA	1	1		03/27/06 17:32
20	16G3116	L0603426-04 A	NA	1	1		03/27/06 17:46
21	16G3117	RINSE	NA	1	1		03/27/06 18:00
22	16G3118	RINSE	NA	1	1		03/27/06 18:14

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X		Check Standard Failure	
File ID: 16G3094				
2				
File ID: 16G3095				
Run ICAL.				
17	X			

Approved: March 29, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046176

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG209269

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G3113				
No ending ccv.				
18	X			
File ID: 16G3114				
No ending ccv.				
19	X			
File ID: 16G3115				
No ending ccv.				
20	X			
File ID: 16G3116				
No ending ccv.				

Approved: March 29, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046177

Instrument: HP16 Dataset: 081406
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15168

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219875

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3677	WG219874-01 50ug/ml STD	NA	1	1	STD11579	08/14/06 13:16
2	16G3678	WG219875-01 BLANK	NA	1	1		08/14/06 13:39
3	16G3679	WG219875-02 20ug/ml LCS	NA	1	1	STD11579	08/14/06 13:53
4	16G3680	WG219875-03 20ug/ml LCS DUP	NA	1	1	STD11579	08/14/06 14:07
5	16G3681	L0607001-02 QMDL	NA	1	1	STD11579	08/14/06 14:36
6	16G3682	L0607002-02 QMDL	NA	1	1	STD11579	08/14/06 14:50
7	16G3683	WG219874-02 50ug/ml STD	NA	1	1	STD11579	08/14/06 15:04
8	16G3684	L0608044-01 A 10X	7	1	10		08/14/06 15:25
9	16G3685	L0608044-03 A 10X	7	1	10		08/14/06 15:39
10	16G3686	L0608044-06 A 10X	7	1	10		08/14/06 15:53
11	16G3687	L0608044-08 A 10X	7	1	10		08/14/06 16:07
12	16G3688	L0608109-17 A 10X	7	1	10		08/14/06 16:21
13	16G3689	L0608109-19 A 10X	7	1	10		08/14/06 16:35
14	16G3690	L0608154-01 A 10X	7	1	10		08/14/06 16:49
15	16G3691	L0608154-03 A 10X	7	1	10		08/14/06 17:03
16	16G3692	L0608154-05 A 10X	7	1	10		08/14/06 17:17
17	16G3693	L0608154-07 A 10X	7	1	10		08/14/06 17:31
18	16G3694	WG219874-03 50ug/ml STD	NA	1	1	STD11579	08/14/06 17:45
19	16G3695	L0608183-01 A	7	1	1		08/14/06 17:59
20	16G3696	L0608183-02 A	7	1	1		08/14/06 18:13
21	16G3697	L0608184-01 A 10X	7	1	10		08/14/06 18:27
22	16G3698	L0608184-03 A 10X	7	1	10		08/14/06 18:41
23	16G3699	L0608184-05 A 10X	7	1	10		08/14/06 18:55
24	16G3700	L0608204-01 A	7	1	1		08/14/06 19:09
25	16G3701	L0608240-02 A	7	1	1		08/14/06 19:23
26	16G3702	L0608240-03 A	7	1	1		08/14/06 19:37
27	16G3703	WG219874-04 50ug/ml STD	NA	1	1	STD11579	08/14/06 19:51

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9	X	100	Over Calibration Range	Carbon dioxide

Approved: August 15, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046178

Instrument: HP16 Dataset: 081406
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15168

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219875

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID:16G3685				
11	X	50	Over Calibration Range	Carbon dioxide
File ID:16G3687				
15	X	100	Over Calibration Range	Carbon dioxide
File ID:16G3691				
16	X	100	Over Calibration Range	Carbon dioxide
File ID:16G3692				
21	X		Check Standard Failure	
File ID:16G3697				
Ending ccv failed for carbon dioxide.				
22	X		Check Standard Failure	
File ID:16G3698				
Ending ccv failed for carbon dioxide.				
23	X		Check Standard Failure	
File ID:16G3699				
Ending ccv failed for carbon dioxide.				

Approved: August 15, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046179

Analytical Method: RSK175
Login Number: L0608183

AAB#: WG219875

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
G7WW01/G4WW01	08/07/06	08/08/06	08/14/06	14	7.11	08/14/06	14	7.11	
G7WW02	08/07/06	08/08/06	08/14/06	14	7.27	08/14/06	14	7.27	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046180

Login Number: L0608183
Blank File ID: 16G3678
Date Analyzed: 08/14/06
Time Analyzed: 13:39
Analyst: JLS

Work Group: WG219875
Blank Sample ID: WG219875-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219875-02	16G3679	08/14/06 13:53	01
LCS2	WG219875-03	16G3680	08/14/06 14:07	01
G7WW01/G4WW01	L0608183-01	16G3695	08/14/06 17:59	01
G7WW02	L0608183-02	16G3696	08/14/06 18:13	01

METHOD BLANK REPORT

00046181

Login Number: L0608183 Run Date: 08/14/2006 Sample ID: WG219875-01
Instrument ID: HP16 Run Time: 13:39 Prep Method: 5021
File ID: 16G3678 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219875 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.319	1	J
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046182

Login Number: L0608183 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219875 Units: ug/L
 Sample ID: WG219875-02 LCS File ID: 16G3679 Run Date: 08/14/2006 13:53
 Sample ID: WG219875-03 LCS2 File ID: 16G3680 Run Date: 08/14/2006 14:07

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	32.0	93.3	34.3	34.5	101	7.75	56 - 140	40	
ethene	59.9	53.8	89.8	59.9	60.1	100	11.0	56 - 140	40	
ethane	64.2	59.3	92.3	64.2	64.6	101	8.56	56 - 137	40	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

00046183

Login Number: L0608183
Analytical Method: RSK175
ICAL Workgroup: WG209269

Instrument ID: HP16
Initial Calibration Date: 27-MAR-06

Analyte		AVG RF	% RSD	R2	QUAD
ethane		131700	9.70	0.997	
ethene		126600	7.29	0.997	
methane		91930	64.3	0.997	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608183 Instrument ID: HP16 00046184
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-01			WG209269-02		
	CONC	RESP	RF	CONC	RESP	RF
ethane	0.100	14314	143100	1.00	155076	155100
ethene	0.100	12296	123000	1.00	143937	143900
methane	0.100	23610	236100	1.00	95195	95190

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608183 Instrument ID: HP16 00046185
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-03			WG209269-04		
	CONC	RESP	RF	CONC	RESP	RF
ethane	10.0	1157044	115700	20.0	2464700	123200
ethene	10.0	1143709	114400	20.0	2436804	121800
methane	10.0	648171	64820	20.0	1314765	65740

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KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608183 Instrument ID: HP16 00046186
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-06			WG209269-07		
	CONC	RESP	RF	CONC	RESP	RF
ethane	100	12548213	125500	200	27671040	138400
ethene	100	12381421	123800	200	27247290	136200
methane	100	6627355	66270	200	14639720	73200

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608183 Instrument ID: HP16 00046187
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-08		
	CONC	RESP	RF
ethane	300	37840789	126100
ethene	300	37181559	123900
methane	300	19991743	66640

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Version 1.3 PDF File ID: 542117
Report generated 08/15/2006 16:58

KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00046188

Login Number: L0608183 Run Date: 03/27/2006 Sample ID: WG209269-09
Instrument ID: HP16 Run Time: 15:12 Method: RSK175
File ID: 16G3108 Analyst: JLS
Ical Workgroup: WG209269 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		20	19.3	66200	3.3	ug/L	
ethene		20	19.0	121000	4.9	ug/L	
ethane		20	18.8	122000	5.9	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046189

Login Number: L0608183 Run Date: 08/14/2006 Sample ID: WG219874-01
Instrument ID: HP16 Run Time: 13:16 Method: RSK175
File ID: 16G3677 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	83.2	66500	2.80	ug/L	
ethene		150	146	124000	2.80	ug/L	
ethane		160	156	126000	3.10	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046190

Login Number: L0608183 Run Date: 08/14/2006 Sample ID: WG219874-02
Instrument ID: HP16 Run Time: 15:04 Method: RSK175
File ID: 16G3683 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	79.0	63200	7.70	ug/L	
ethene		150	138	117000	7.90	ug/L	
ethane		160	148	119000	8.00	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046191

Login Number: L0608183 Run Date: 08/14/2006 Sample ID: WG219874-04
Instrument ID: HP16 Run Time: 19:51 Method: RSK175
File ID: 16G3703 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	92.0	73600	7.50	ug/L	
ethene		150	158	134000	5.30	ug/L	
ethane		160	170	137000	6.00	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046192

Login Number: L0608183 Run Date: 08/14/2006 Sample ID: WG219874-03
Instrument ID: HP16 Run Time: 17:45 Method: RSK175
File ID: 16G3694 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	82.8	66200	3.30	ug/L	
ethene		150	145	123000	3.40	ug/L	
ethane		160	156	126000	2.90	ug/L	

* Exceeds %D Limit

Inorganic QA/QC

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046194

Analytical Method: 300.0
Login Number: L0608183

AAB#: WG219499

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
G7WW01/G4WW01	08/07/06	08/08/06	08/08/06	2	1.01	08/08/06	2	1.01	
G7WW01/G4WW01	08/07/06	08/08/06	08/08/06	2	1.02	08/08/06	2	1.02	
G7WW01/G4WW01	08/07/06	08/08/06	08/08/06	2	1.03	08/08/06	2	1.03	
G7WW01/G4WW01	08/07/06	08/08/06	08/08/06	2	1.04	08/08/06	2	1.04	
G7WW02	08/07/06	08/08/06	08/08/06	2	1.21	08/08/06	2	1.21	
G7WW02	08/07/06	08/08/06	08/08/06	2	1.22	08/08/06	2	1.22	
G7WW02	08/07/06	08/08/06	08/08/06	2	1.24	08/08/06	2	1.24	
G7WW02	08/07/06	08/08/06	08/08/06	2	1.25	08/08/06	2	1.25	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046195

Login Number: L0608183	Work Group: WG219499
Blank File ID: I2080806.12	Blank Sample ID: WG219499-01
Date Analyzed: 08/08/06	Instrument ID: IC2
Time Analyzed: 15:01	Method: 300.0
Analyst: JWR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219499-02	I2080806.13	08/08/06 15:19	01
G7WW01/G4WW01	L0608183-01	I2080806.14	08/08/06 15:36	01
G7WW01/G4WW01	L0608183-01	I2080806.15	08/08/06 15:53	DL01
G7WW01/G4WW01	L0608183-01	I2080806.16	08/08/06 16:11	DL02
G7WW01/G4WW01	L0608183-01	I2080806.17	08/08/06 16:28	DL03
G7WW02	L0608183-02	I2080806.18	08/08/06 16:46	01
G7WW02	L0608183-02	I2080806.19	08/08/06 17:03	DL01
G7WW02	L0608183-02	I2080806.20	08/08/06 17:20	DL02
G7WW02	L0608183-02	I2080806.21	08/08/06 17:38	DL03
DUP	WG219499-04	I2080806.36	08/08/06 21:59	01

METHOD BLANK REPORT

00046196

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219499-01
Instrument ID: IC2 Run Time: 15:01 Prep Method: 300.0
File ID: I2080806.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219499 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046197

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219499-02
Instrument ID: IC2 Run Time: 15:19 Prep Method: 300.0
File ID: I2080806.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219499 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.98	99.6	90 - 110	
Nitrate	4.07	4.12	101	90 - 110	
Nitrite	3.65	3.47	94.9	90 - 110	
Sulfate	30.0	30.5	102	90 - 110	

CONTINUING CALIBRATION VERIFICATION (CCV)

00046198

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219504-01
Instrument ID: IC2 Run Time: 14:44 Method: 300.0
File ID: I2080806.11 Analyst: JWR
Workgroup (AAB#): WG219499 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.92	7.88	1.3	mg/L	
N03-N		4.0662	4.10	3.27	.8	mg/L	
N02-N		3.6534	3.55	3.70	3	mg/L	
S04		30	30.8	10.1	2.8	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046199

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219504-02
Instrument ID: IC2 Run Time: 17:55 Method: 300.0
File ID: I2080806.22 Analyst: JWR
Workgroup (AAB#): WG219499 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	6.11	7.62	1.8	mg/L	
N03-N		4.0662	4.10	3.27	.8	mg/L	
N02-N		3.6534	3.70	3.54	1.2	mg/L	
S04		30	29.9	10.5	.4	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046200

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219504-03
Instrument ID: IC2 Run Time: 21:24 Method: 300.0
File ID: I2080806.34 Analyst: JWR
Workgroup (AAB#): WG219499 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.97	7.81	.5	mg/L	
N03-N		4.0662	4.10	3.26	.9	mg/L	
N02-N		3.6534	3.57	3.68	2.4	mg/L	
S04		30	30.3	10.3	1.1	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046201

Login Number: L0608183 Run Date: 08/08/2006 Sample ID: WG219504-04
Instrument ID: IC2 Run Time: 22:16 Method: 300.0
File ID: I2080806.37 Analvst: JWR
Workgroup (AAB#): WG219499 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	6.04	7.71	.7	mg/L	
N03-N		4.0662	4.20	3.18	3.3	mg/L	
N02-N		3.6534	3.61	3.63	1.1	mg/L	
S04		30	30.1	10.4	.3	mg/L	

* Exceeds %D Criteria

KEMRON Environmental Services
HOLDING TIMES
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00046202

Analytical Method: 415.1
Login Number: L0608183

AAB#: WG219597

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
G7WW01/G4WW01	08/07/06	08/08/06	08/09/06	28	2.17	08/09/06	28	2.17	
G7WW02	08/07/06	08/08/06	08/09/06	28	2.32	08/09/06	28	2.32	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046203

Login Number: L0608183
 Blank File ID: TC08-09-2006.33
 Date Analyzed: 08/09/06
 Time Analyzed: 14:40
 Analyst: DIH

Work Group: WG219597
 Blank Sample ID: WG219597-01
 Instrument ID: TOC-VWP
 Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219597-02	TC08-09-2006.34	08/09/06 14:53	01
LCS2	WG219597-03	TC08-09-2006.35	08/09/06 15:06	01
DUP	WG219597-05	TC08-09-2006.49	08/09/06 18:18	01
G7WW02	L0608183-02	TC08-09-2006.53	08/09/06 19:16	01
G7WW02	L0608183-02	TC08-09-2006.53	08/09/06 19:16	01
G7WW01/G4WW01	L0608183-01	TC08-09-2006.54	08/09/06 19:30	01
G7WW01/G4WW01	L0608183-01	TC08-09-2006.54	08/09/06 19:30	01

METHOD BLANK REPORT

00046204

Login Number: L0608183 Run Date: 08/09/2006 Sample ID: WG219597-01
Instrument ID: TOC-VWP Run Time: 14:40 Prep Method: 415.1
File ID: TC08-09-2006.33 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG219597 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046205

Login Number: L0608183 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG219597 Units: mg/L
Sample ID: WG219597-02 LCS File ID: TC08-09-2006.34 Run Date: 08/09/2006 14:53
Sample ID: WG219597-03 LCS2 File ID: TC08-09-2006.35 Run Date: 08/09/2006 15:06

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.1	92.3	25.0	23.1	92.2	0.0867	85 - 115	15	

[illegible]

***Homogenize all composite samples prior to analysis**

B2705
00046207

SAMPLE RECEIPT FORM

Date: 8-8-06 Client: Shaw E & I

156 STARLITE DRIVE
MARIETTA, OH
45750
(740) 373-4071

Shipped By: () Fed-Ex () UPS () DHL () KEMRON () Client () Other 9:45

Opened By: [Signature]

Logged By: [Signature] Login # L06 8-183

IR Temp Gun: () D 77G

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	9387	3	J1945631951		
2					
3					
4					
5					
6					

Were all coolers sealed?

☒ Y N N/A

Were custody seals used on all coolers?

Y ☒ N N/A

Were custody seals intact?

Y N ☒ N/A

Was visible ice present?

☒ Y N N/A

Were all coolers in the temperature range of 2-6C? (>6C*)

☒ Y N N/A

Were the samples frozen?*

Y ☒ N N/A

Were COC papers provided?

☒ Y N N/A

Were all sample containers intact?*

☒ Y N N/A

Were all sample labels intact?

☒ Y N N/A

Were all sample labels legible?*

☒ Y N N/A

Did all sample labels match the COC?*

☒ Y N N/A

Was the label information complete?*

☒ Y N N/A

Were the correct containers used?*

☒ Y N N/A

Were the correct preservatives added to water samples?*

☒ Y N N/A

Was the pH tested on preserved water samples?

☒ Y N N/A

Were pH ranges acceptable?*

☒ Y N N/A

Was sufficient amount of sample provided?*

☒ Y N N/A

Were bubbles present in VOA samples?*

Y ☒ N N/A

Were COC's signed and dated?

☒ Y N N/A

Did samples arrive before hold time expired?*

☒ Y N N/A

Are discrepancy forms attached?

Y N ☒ N/A

*Requires a discrepancy form

CRF #1

Revised 8/22/03

Comments: _____

Subject: [Fwd: Please change sample dates from 8/6/06 to 8/7/06]

Date: Tue, 08 Aug 2006 08:42:50 -0400

From: Stephanie Mossburg <smossburg@kemron-lab.com>

To: Brenda Gregory <bgregory@kemron-lab.com>

Let me know when the Longhorn samples arrive please.

Subject: Please change sample dates from 8/6/06 to 8/7/06

Date: Tue, 8 Aug 2006 07:39:11 -0500

From: "Wagner, Delbert" <delbert.wagner@shawgrp.com>

To: <smossburg@kemron-lab.com>

Stephanie:

All dates were for the samples received on 8/8/06 were actually taken on 8/7/06 instead of 8/6/06. In error, we wrote 8/6/06 on all sample containers and Chains of Custodies.

Thanks

M. Allen Willmore, Jr.

Shaw E & I

3010 Briarpark Drive, Suite 4N

Houston, Texas 77042

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or your employer do not consent to Internet email for messages of this

kind. Opinions, conclusions and other information in this message

Subject: Please change sample dates from 8/6/06 to 8/7/06
From: "Wagner, Delbert" <delbert.wagner@shawgrp.com>
Date: Tue, 8 Aug 2006 07:39:11 -0500
To: <smossburg@kemron-lab.com>

Stephanie:

All dates were for the samples received on 8/8/06 were actually taken on 8/7/06 instead of 8/6/06. In error, we wrote 8/6/06 on all sample containers and Chains of Custodies.

Thanks

M. Allen Willmore, Jr.
Shaw E & I
3010 Briarpark Drive, Suite 4N
Houston, Texas 77042

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KEMRON Environmental Services
Internal Chain of Custody Report

00046210

Login: L0608183
Account: 2773
Project: 2773.025
Samples: 2
Due Date: 15-AUG-2006

Samplenum **Container ID** **Products**
L0608183-01 259931 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	L1	WET	08-AUG-2006 11:57	JWR	JS
3	STORE	WET	A1	11-AUG-2006 11:31	JS	JWR

Samplenum **Container ID** **Products**
L0608183-01 259932 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Samplenum **Container ID** **Products**
L0608183-01 259933 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046211

Login: L0608183
Account: 2773
Project: 2773.025
Samples: 2
Due Date: 15-AUG-2006

Samplenum **Container ID** **Products**
L0608183-01 259934 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	W1	WET	08-AUG-2006 15:58	DIH	JKT
3	STORE	WET	A1	11-AUG-2006 07:05	JS	DIH

Samplenum **Container ID** **Products**
L0608183-02 259935 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	L1	WET	08-AUG-2006 11:57	JWR	JS
3	STORE	WET	A1	11-AUG-2006 11:31	JS	JWR

Samplenum **Container ID** **Products**
L0608183-02 259936 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	

KEMRON Environmental Services
Internal Chain of Custody Report

00046212

Login: L0608183
Account: 2773
Project: 2773.025
Samples: 2
Due Date: 15-AUG-2006

Samplenum **Container ID** **Products**
L0608183-02 259937 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:03	JLS	JS

Samplenum **Container ID** **Products**
L0608183-02 259938 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			08-AUG-2006 11:45	JS	
2	ANALYZ	W1	WET	08-AUG-2006 15:58	DIH	JKT
3	STORE	WET	A1	11-AUG-2006 07:05	JS	DIH



156 Starlite Drive, Marietta, OH 45750 • TEL 740-373-4071 • FAX 740-373-4835 • <http://www.kemron.com>

Laboratory Report Number: L0608204

Please find enclosed the analytical results for the samples you submitted to KEMRON Environmental Services.

Review and compilation of your report was completed by KEMRON's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Debra Elliott - Team Leader
delliott@kemron-lab.com

Amanda Fickiesen - Client Services Specialist
afickiesen@kemron-lab.com

Cheryl Koelsch - Team Chemist/Data Specialist
ckoelsch@kemron-lab.com

Annie Bock - Client Services Specialist
abock@kemron-lab.com

Stephanie Mossburg - Team Chemist/Data Specialist
smossburg@kemron-lab.com

Kathy Albertson - Team Chemist/Data Specialist
kalbertson@kemron-lab.com

This report was reviewed on August 17, 2006.

A handwritten signature in cursive script that reads "Stephanie Mossburg".

STEPHANIE MOSSBURG - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the NELAP standards and other applicable contract terms and conditions. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services.

This report was certified on August 17, 2006.

A handwritten signature in cursive script that reads "David E. Vandenberg".

David Vandenberg - Vice President

FL DOH NELAP ID: E8755
This report contains a total of 94 pages.

Protecting Our Environmental Future

LABORATORY REPORT

L0608204

00046214

08/17/06 09:45

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID: LHAAP

P.O. Number: 200328

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
67WW05	L0608204-01	08-AUG-06	09-AUG-06

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0608204

CHAIN OF CUSTODY: The chain of custody number was 10019.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 2 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Approved: 10-AUG-06

<i>Stephanie Mossburg</i>

Laboratory Data Package Cover Page

00046216

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608204
 Project Name: 798-LONGHORN
 Method: TOC
 Prep Batch Number(s): WG219907
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 15, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓			00046218	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046219
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608204
Project Name:	798-LONGHORN
Method:	TOC
Prep Batch Number(s):	WG219907
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 15, 2006

EXCEPTIONS REPORT**ER# - Description**

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046221

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608204
 Project Name: 798-LONGHORN
 Method: 9056-300
 Prep Batch Number(s): WG219805
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 15, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓			00046223	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046224
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608204
Project Name:	798-LONGHORN
Method:	9056-300
Prep Batch Number(s):	WG219805
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 15, 2006

EXCEPTIONS REPORT**ER# - Description**

Sample L0608204-01 was analyzed at a dilution for nitrite due to the amount of chloride present in the sample which covers up any nitrite at the reporting limit. The reporting limit is elevated accordingly.

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046226

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

✓R1 Field chain-of-custody documentation;

✓R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10

b) dilution factors,

c) preparation methods,

d) Cleanup methods, and

e) If required for the project, tentatively identified compounds (TICs)

✓R4 Surrogate recovery data including:

a) Calculated recovery (%R) for each analyte, and

b) The laboratory's surrogate QC limits.

✓R5 Test reports/summary forms for blank samples;

✓R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amount,

b) Calculated %R for each analyte, and

c) The laboratory's LCS QC limits.

✓R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,

b) MS/MSD spiking amounts,

c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d) Calculated %R and relative percent differences (RPDs), and

e) The laboratory's MS/MSD QC limits

✓R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,

b) the calculated RPD, and

c) the laboratory's QC limits for analytical duplicates.

✓R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

✓R10 Other problems or anomalies.

✓The exception Report for every "No" or "Not Reviewed (NR)" item IN laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [✓] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

August 16, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608204
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 219789
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: August 16, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			1
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046228	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?			✓		
Were analytical duplicates analyzed at the appropriate frequency?			✓		
Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?			✓		
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?	✓				
Were ion abundance data within the method-required QC limits?	✓				
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?	✓				
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046229
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

EXCEPTIONS REPORT

ER# - Description

#1: Chloromethane and methyl acetate exceeded the upper advisory limits.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Report Number: **L0608204**Report Date : **August 17, 2006**

00046230

Sample Number: **L0608204-01**
 Client ID: **67WW05**
 Matrix: **Water**
 Workgroup Number: **WG219907**
 Collect Date: **08/08/2006 11:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **3**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/14/2006 14:49**
 Cal Date: _____
 Run Date: **08/14/2006 14:49**
 File ID: **TC08-14-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		77.4		3.00	1.50

Sample Number: **L0608204-01**
 Client ID: **67WW05**
 Matrix: **Water**
 Workgroup Number: **WG219907**
 Collect Date: **08/08/2006 11:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **3**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/14/2006 14:49**
 Cal Date: _____
 Run Date: **08/14/2006 14:49**
 File ID: **TC08-14-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		10.4		3.00	1.50

Sample Number: **L0608204-01**
 Client ID: **67WW05**
 Matrix: **Water**
 Workgroup Number: **WG219789**
 Collect Date: **08/08/2006 11:35**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/12/2006 15:50**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/12/2006 15:50**
 File ID: **10M48040**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	2.82	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125

Report Number: **L0608204**Report Date : **August 17, 2006**

00046231

Sample Number: **L0608204-01**
 Client ID: **67WW05**
 Matrix: **Water**
 Workgroup Number: **WG219789**
 Collect Date: **08/08/2006 11:35**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/12/2006 15:50**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/12/2006 15:50**
 File ID: **10M48040**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	113	80	120		
Dibromofluoromethane	105	86	118		
p-Bromofluorobenzene	104	86	115		
Toluene-d8	102	88	110		

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Sample Number: **L0608204-01**
 Client ID: **67WW05**
 Matrix: **Water**
 Workgroup Number: **WG219805**
 Collect Date: **08/08/2006 11:35**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/09/2006 16:32**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/09/2006 16:32**
 File ID: **I2080906.14**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	344	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	68.7	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608204**Report Date : **August 17, 2006**

00046232

Sample Number: L0608204-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 67WW05	Prep Method: 300.0	Prep Date: 08/09/2006 16:49
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219805	Analyst: JWR	Run Date: 08/09/2006 16:49
Collect Date: 08/08/2006 11:35	Dilution: 4	File ID: I2080906.15
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	772	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Sulfate	14808-79-8	67.9		4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608204-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 67WW05	Prep Method: 300.0	Prep Date: 08/09/2006 17:06
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219805	Analyst: JWR	Run Date: 08/09/2006 17:06
Collect Date: 08/08/2006 11:35	Dilution: 20	File ID: I2080906.16
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	977	I	4.00	2.00
Nitrate	14797-55-8		U	12.0	2.00
Nitrite	14797-65-0		U	8.00	2.00
Sulfate	14808-79-8	67.0		20.0	10.0

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608204-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 67WW05	Prep Method: 300.0	Prep Date: 08/09/2006 17:24
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219805	Analyst: JWR	Run Date: 08/09/2006 17:24
Collect Date: 08/08/2006 11:35	Dilution: 100	File ID: I2080906.17
Sample Tag: DL03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	909		20.0	10.0
Nitrate	14797-55-8		U	60.0	10.0
Nitrite	14797-65-0		U	40.0	10.0
Sulfate	14808-79-8	66.1	J	100	50.0

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: L0608204-01	PrePrep Method: NONE	Instrument: HP16
Client ID: 67WW05	Prep Method: 5021	Prep Date: 08/14/2006 19:09
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG219875	Analyst: JLS	Run Date: 08/14/2006 19:09
Collect Date: 08/08/2006 11:35	Dilution: 1	File ID: I663700
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	8.88		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

00046234

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG219789

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05			08/12/06 15:50	01	HPMS10	MES

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG219789

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05				219789	HPMS10	MES

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG219805

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05			08/09/06 16:32	01	IC2	JWR
L0608204-01	67WW05			08/09/06 16:49	DL01	IC2	JWR
L0608204-01	67WW05			08/09/06 17:06	DL02	IC2	JWR
L0608204-01	67WW05			08/09/06 17:24	DL03	IC2	JWR

Analysis:Common Anions

Extraction Method:METH0D

Workgroup:WG219805

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05		08/09/06 15:40			FILTER	JWR

WORKGROUP SUMMARY BY METHOD

00046235

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG219875

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05			08/14/06 19:09	01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG219875

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05				219875	HP16	JLS

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG219907

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05			08/14/06 14:49	DL01	TOC-VWP	DIH
L0608204-01	67WW05			08/14/06 14:49	DL01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG219907

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608204-01	67WW05			08/14/06 14:49	DL01	TOC-VWP	DIH

Kemron Environmental Services
Analyst Listing
August 17, 2006

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH	CEB - CHAD E. BARNES
CFB - CHAD F. BOOK	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS
CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN	CSA - LUCINDA S. ARNOLD
CSH - CHRIS S. HILL	DAS - DALLAS A. SULLIVAN	DD - DIANE M. DENNIS
DDE - DEBRA D. ELLIOTT	DEL - DON E. LIGHTFRITZ	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DR - DEANNA ROBERTS
DRP - DAVE R. PITZER	DSM - DAVID S. MOSSOR	DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JKT - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL	JNB - JOSHUA N. BOOTH	JS - JENNIFER L. SOUTHALL
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES	JYH - JI Y. HU
KCZ - KEVIN C. ZUMBRO	KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO	MLR - MARY L. ROCHOTTE	MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
PAS - PATRICK A. STREET	PJM - PAUL J. MILLER	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SCM - SUSAN C. MOELLENDICK	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	SRM - SAMUEL R. MCFEE
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WFM - WALTER F. MARTIN		

Qualkey: STD

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
FL	Free Liquid
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	ESTIMATE & COLUMNS DON'T AGREE TO WITHIN 40%
L	Sample reporting limits elevated due to matrix interference
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria fail. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Undetected; the concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

Organic QA/QC

KEMRON Environmental Services

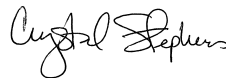
Data Checklist

00046239

Date: 15-JUL-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B/624
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11244
 Analytical Workgroups: WG217397;WG217415

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
17-JUL-2006



Secondary Reviewer:
17-JUL-2006



Generated: JUL-17-2006 14:39:37

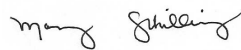
KEMRON Environmental Services Data Checklist

00046240

Date: 12 - AUG - 2006
 Analyst: MES
 Analyst: NA
 Method: 8260
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11745
 Analytical Workgroups: WG219789

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	X
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
15 - AUG - 2006



Secondary Reviewer:
16 - AUG - 2006



Generated: AUG -16 - 2006 08:22:58

KEMRON Environmental Services

Instrument Run Log

00046241

Instrument: HPMS10 Dataset: 071506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B/5035 SOP: PAT01 Rev: 10
 Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
 CCV: STD13787 LCS: STD13712 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG217397;WG217415

Comments: Files 10M47238-10M47244: Retuned instrument.Troubleshooting purposes only. All tunes passed.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M47238	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 08:15
2	10M47239	BFB 50ng STD CHECK 8260-PURGED	NA	1	1	STD13589	07/15/06 08:55
3	10M47240	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 09:09
4	10M47241	IS/SS SYSTEM BLANK CHECK	NA	1	1		07/15/06 09:45
5	10M47242	IS/SS SYSTEM BLANK CHECK 1800	NA	1	1		07/15/06 10:28
6	10M47243	IS/SS SYSTEM BLANK CHECK 1859	NA	1	1		07/15/06 11:00
7	10M47244	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 11:27
8	10M47245	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 11:48
9	10M47246	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 12:02
10	10M47247	WG217397-02 0.30ug/L STD 8260	NA	1	1	STD13787	07/15/06 12:33
11	10M47248	WG217397-03 0.40ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:03
12	10M47249	WG217397-04 1ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:34
13	10M47250	WG217397-05 2ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:05
14	10M47251	WG217397-06 5ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:35
15	10M47252	WG217397-07 20ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:06
16	10M47253	WG217397-08 50ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:37
17	10M47254	WG217397-09 100ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:07
18	10M47255	WG217397-10 200ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:37
19	10M47256	SYSTEM BLANK	NA	1	1		07/15/06 17:08
20	10M47257	SYSTEM BLANK	NA	1	1		07/15/06 17:39
21	10M47258	WG217397-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD13712	07/15/06 18:09
22	10M47259	WG217415-01 VBLK0715 BLANK 8260	NA	1	1		07/15/06 18:40
23	10M47260	L0606678-01 A 826-REF-BLK	NA	1	1		07/15/06 19:11
24	10M47261	L0606678-02 A 826-REF-BLK	NA	1	1		07/15/06 19:41
25	10M47262	L0606678-03 A 826-REF-BLK	NA	1	1		07/15/06 20:11
26	10M47263	L0606678-04 A 826-REF-BLK	NA	1	1		07/15/06 20:42
27	10M47264	L0606678-05 A 826-REF-BLK	NA	1	1		07/15/06 21:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8	X			

Approved: July 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046242

Instrument: HPMS10 Dataset: 071506
Analyst1: CMS Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 10
Method: 624 SOP: MSV10 Rev: 9
Method: 5030B/5035 SOP: PAT01 Rev: 10
Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
CCV: STD13787 LCS: STD13712 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG217397;WG217415

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M47245				
Tune failed/DNR				

Approved: July 17, 2006



KEMRON Environmental Services

Instrument Run Log

00046243

Instrument: HPMS10 Dataset: 081206
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15163

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219789

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M48031	WG219788-01 50NG BFB STD 8260	NA	1	1	STD14237	08/12/06 11:20
2	10M48032	WG219788-02 50ug/L WATER STD 8260	NA	1	1	STD14330	08/12/06 11:45
3	10M48033	WG219789-01 VBLK0812 BLANK 8260	NA	1	1		08/12/06 12:15
4	10M48034	WG219789-02 20ug/L LCS 8260	NA	1	1	STD14341	08/12/06 12:46
5	10M48035	WG219789-03 20ug/L LCSDUP 8260	NA	1	1	STD14341	08/12/06 13:17
6	10M48036	WG219789-04 FLUID BLANK 8/9/06	NA	1	1		08/12/06 13:47
7	10M48037	L0608200-01 A 826-SPE	<2	1	1		08/12/06 14:18
8	10M48038	L0608240-01 A 826-SPE	<2	1	1		08/12/06 14:49
9	10M48039	L0608313-01 A 826-LOW	<2	1	1		08/12/06 15:19
10	10M48040	L0608204-01 A 826-SPE	<2	1	1		08/12/06 15:50
11	10M48041	L0608206-01 A 826-SPE	<2	1	1		08/12/06 16:20
12	10M48042	L0608206-04 A 826-SPE	<2	1	1		08/12/06 16:51
13	10M48043	L0608240-02 A 826-SPE	<2	1	1		08/12/06 17:21
14	10M48044	L0608240-03 A 826-SPE	<2	1	1		08/12/06 17:52
15	10M48045	L0608240-04 A 826-SPE	<2	1	1		08/12/06 18:22
16	10M48046	L0608240-05 A 826-SPE	<2	1	1		08/12/06 18:53
17	10M48047	L0608240-06 A 826-SPE	<2	1	1		08/12/06 19:24
18	10M48048	L0608240-07 A 826-SPE	<2	1	1		08/12/06 19:54
19	10M48049	L0608250-01 A 826-SPLP	NA	18	1		08/12/06 20:25
20	10M48050	L0608250-02 A 826-SPLP	NA	18	1		08/12/06 20:56
21	10M48051	L0608250-03 A 826-SPLP	NA	18	1		08/12/06 21:27
22	10M48052	L0608250-04 A 826-SPLP	NA	18	1		08/12/06 21:57
23	10M48053	L0608250-05 A 826-SPLP	NA	18	1		08/12/06 22:28
24	10M48054	L0608250-06 A 826-SPLP	NA	18	1		08/12/06 22:59
25	10M48055	SYSTEM BLANK	NA	1	1		08/12/06 23:30

Comments

Seq.	Rerun	Dil.	Reason	Analytes
22	X	100	Over Calibration Range	ethyl,m/p, and o-xylene, 1,2,4-TMB, and naph
File ID:10M48052				
23	X	100	Over Calibration Range	ethyl,m/p, and naphthalene

Approved: August 16, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046244

Instrument: HPMS10 Dataset: 081206
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15163

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219789

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M48053				
24	X	100	Over Calibration Range	ethyl,m/p, 1,2,4-TMB, and naphthalene
File ID: 10M48054				

Approved: August 16, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046245

Analytical Method: 8260B
Login Number: L0608204

AAB#: WG219789

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
67WW05	08/08/06	08/09/06	08/12/06	14	4.18	08/12/06	14	4.18	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00046246

Login Number: L0608204
 Instrument Id: HPMS10
 Workgroup (AAB#): WG219789

Method: 8260
 CAL ID: HPMS10 - 15-JUL-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608204-01	1.00	01	113	105	104	102
WG219789-01	1.00	01	109	103	103	105
WG219789-02	1.00	01	114	108	102	104
WG219789-03	1.00	01	113	108	103	105
WG219789-04	1.00	01	117	107	105	106

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

METHOD BLANK SUMMARY

00046247

Login Number: L0608204
Blank File ID: 10M48033
Date Analyzed: 08/12/06
Time Analyzed: 12:15
Analyst: MES

Work Group: WG219789
Blank Sample ID: WG219789-01
Instrument ID: HPMS10
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219789-02	10M48034	08/12/06 12:46	01
LCS2	WG219789-03	10M48035	08/12/06 13:17	01
FBLK	WG219789-04	10M48036	08/12/06 13:47	01
67WW05	L0608204-01	10M48040	08/12/06 15:50	01

METHOD BLANK REPORT

00046248

Login Number: L0608204 Run Date: 08/12/2006 Sample ID: WG219789-01
 Instrument ID: HPMS10 Run Time: 12:15 Prep Method: 5030B
 File ID: 10M48033 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219789 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.223	1	J
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 542685
 Report generated 08/16/2006 12:52

METHOD BLANK REPORT

00046249

Login Number: L0608204 Run Date: 08/12/2006 Sample ID: WG219789-01
 Instrument ID: HPMS10 Run Time: 12:15 Prep Method: 5030B
 File ID: 10M48033 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219789 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	109	80 - 120	PASS
Dibromofluoromethane	103	86 - 118	PASS
p-Bromofluorobenzene	103	86 - 115	PASS
Toluene-d8	105	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046250

Login Number: L0608204 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219789 Units: ug/L
 Sample ID: WG219789-02 LCS File ID: 10M48034 Run Date: 08/12/2006 12:46
 Sample ID: WG219789-03 LCS2 File ID: 10M48035 Run Date: 08/12/2006 13:17

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	23.1	116	20.0	23.7	119	2.62	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	20.6	103	20.0	21.2	106	2.62	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	23.2	116	20.0	23.4	117	1.14	80 - 130	20	
1,1,2-Trichloroethane	20.0	21.1	105	20.0	22.1	110	4.67	80 - 125	20	
1,1-Dichloroethane	20.0	21.8	109	20.0	22.8	114	4.45	80 - 125	20	
1,1-Dichloroethene	20.0	20.5	102	20.0	21.2	106	3.55	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	19.1	95.6	20.0	19.4	97.2	1.59	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	20.6	103	20.0	19.9	99.6	3.49	50 - 130	20	
1,2-Dibromoethane	20.0	22.2	111	20.0	22.5	113	1.13	80 - 125	20	
1,2-Dichlorobenzene	20.0	20.0	100	20.0	20.5	102	2.26	80 - 125	20	
1,2-Dichloroethane	20.0	24.2	121	20.0	25.0	125	3.21	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.5	102	20.0	21.1	106	3.14	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.9	99.4	20.0	20.7	104	4.28	80 - 127	20	
1,2-Dichloropropane	20.0	21.8	109	20.0	22.4	112	2.88	80 - 120	20	
1,3-Dichlorobenzene	20.0	19.9	99.3	20.0	20.6	103	3.48	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.7	98.7	20.0	20.7	103	4.50	80 - 120	20	
2-Butanone	20.0	23.2	116	20.0	23.0	115	0.958	30 - 150	20	
2-Hexanone	20.0	21.5	107	20.0	21.8	109	1.50	55 - 130	20	
4-Methyl-2-pentanone	20.0	21.9	110	20.0	22.5	112	2.56	64 - 140	20	
Acetone	20.0	24.0	120	20.0	23.0	115	4.35	40 - 142	20	
Benzene	20.0	20.0	99.8	20.0	20.6	103	3.05	80 - 121	20	
Bromodichloromethane	20.0	24.8	124	20.0	25.7	128	3.62	80 - 131	20	
Bromoform	20.0	24.2	121	20.0	24.5	123	1.29	70 - 130	20	
Bromomethane	20.0	24.9	125	20.0	26.1	130	4.49	30 - 145	20	
Carbon disulfide	20.0	19.7	98.7	20.0	20.4	102	3.20	58 - 138	20	
Carbon tetrachloride	20.0	21.7	108	20.0	22.8	114	4.80	65 - 140	20	
Chlorobenzene	20.0	20.3	101	20.0	21.3	106	4.85	80 - 120	20	
Chloroethane	20.0	20.6	103	20.0	21.4	107	3.88	60 - 135	20	
Chloroform	20.0	21.9	110	20.0	23.1	115	5.24	80 - 125	20	
Chloromethane	20.0	24.3	121	20.0	25.3	127	4.31	40 - 125	20	*
cis-1,3-Dichloropropene	20.0	21.6	108	20.0	22.0	110	1.45	70 - 130	20	
Cyclohexane	20.0	20.0	100	20.0	20.3	101	1.18	80 - 130	20	
Dibromochloromethane	20.0	22.7	114	20.0	23.4	117	2.90	60 - 135	20	
Dichlorodifluoromethane	20.0	17.0	85.2	20.0	17.3	86.7	1.74	50 - 133	20	
Ethyl benzene	20.0	20.8	104	20.0	21.8	109	4.71	80 - 122	20	
Isopropylbenzene	20.0	19.3	96.5	20.0	20.3	102	5.33	80 - 122	20	
Methyl acetate	20.0	26.5	132	20.0	26.3	132	0.575	80 - 130	20	*
Methyl tert-butyl ether	20.0	22.1	110	20.0	21.9	109	0.851	65 - 125	20	
Methylcyclohexane	20.0	19.1	95.5	20.0	19.3	96.5	1.05	80 - 130	20	
Methylene chloride	20.0	19.3	96.3	20.0	19.9	99.6	3.39	80 - 123	20	
Styrene	20.0	19.9	99.3	20.0	20.9	104	4.87	80 - 123	20	
Tetrachloroethene	20.0	20.9	104	20.0	22.1	110	5.57	80 - 124	20	

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 Report generated 08/16/2006 12:52

LABORATORY CONTROL SAMPLE (LCS)

00046251

Login Number: L0608204 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219789 Units: ug/L
 Sample ID: WG219789-02 LCS File ID: 10M48034 Run Date: 08/12/2006 12:46
 Sample ID: WG219789-03 LCS2 File ID: 10M48035 Run Date: 08/12/2006 13:17

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	19.7	98.6	20.0	20.8	104	5.40	80 - 124	20	
trans-1,3-Dichloropropene	20.0	21.5	107	20.0	21.8	109	1.50	80 - 130	20	
Trichloroethene	20.0	20.6	103	20.0	21.8	109	5.54	80 - 122	20	
Trichlorofluoromethane	20.0	20.3	102	20.0	20.6	103	1.53	62 - 151	20	
Vinyl chloride	20.0	24.1	120	20.0	23.5	118	2.34	65 - 140	20	
Xylenes, Total	60.0	61.5	102	60.0	64.4	107	4.73	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	108	108	86 - 118	PASS
1,2-Dichloroethane-d4	114	113	80 - 120	PASS
Toluene-d8	104	105	88 - 110	PASS
p-Bromofluorobenzene	102	103	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046252

BFB

Login Number: L0608204	Tune ID: WG217397-01
Instrument: HPMS10	Run Date: 07/15/2006
Analyst: CMS	Run Time: 12:02
Workgroup: WG217397	File ID: 10M47246
	Cal ID: HPMS10-15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	20.3	6639	PASS
75.0	95.0	30.0	60.0	45.2	14755	PASS
95.0	95.0	100	100	100	32637	PASS
96.0	95.0	5.00	9.00	6.52	2129	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.0	27402	PASS
175	174	5.00	9.00	7.77	2130	PASS
176	174	95.0	101	95.8	26256	PASS
177	176	5.00	9.00	7.24	1900	PASS

This check relates to the following samples, MS, MSD:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG217397-11	SSCV	01	07/15/2006 18:09	
WG217397-10	STD	01	07/15/2006 16:37	
WG217397-09	STD	01	07/15/2006 16:07	
WG217397-08	STD-CCV	01	07/15/2006 15:37	
WG217397-07	STD	01	07/15/2006 15:06	
WG217397-06	STD	01	07/15/2006 14:35	
WG217397-05	STD	01	07/15/2006 14:05	
WG217397-04	STD	01	07/15/2006 13:34	
WG217397-03	STD	01	07/15/2006 13:03	
WG217397-02	STD	01	07/15/2006 12:33	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046253

BFB

Login Number: L0608204
Instrument: HPMS10
Analyst: MES
Workgroup: WG219788

Tune ID: WG219788-01
Run Date: 08/12/2006
Run Time: 11:20
File ID: 10M48031

Cal ID: HPMS10 -15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	23.8	7051	PASS
75.0	95.0	30.0	60.0	50.9	15070	PASS
95.0	95.0	100	100	100	29581	PASS
96.0	95.0	5.00	9.00	7.02	2078	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	83.1	24570	PASS
175	174	5.00	9.00	7.45	1831	PASS
176	174	95.0	101	100	24648	PASS
177	176	5.00	9.00	6.88	1697	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG219788-02	CCV	08/12/2006 11:45

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219789-01	BLANK	01	08/12/2006 12:15	
WG219789-02	LCS	01	08/12/2006 12:46	
WG219789-03	LCS2	01	08/12/2006 13:17	
WG219789-04	FBLK	01	08/12/2006 13:47	
L0608204-01	67WW05	01	08/12/2006 15:50	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00046254

Login Number: L0608204
 Analytical Method: 8260B
 ICAL Workgroup: WG217397

Instrument ID: HPMS10
 Initial Calibration Date: 15-JUL-06 16:37
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
1,1-Dichloroethene	CCC	0.2477	13.7		
1,2-Dichloropropane	CCC	0.2842	4.38		
Chloroform	CCC	0.4605	7.94		
Ethylbenzene	CCC	0.5099	7.78		
Toluene	CCC	1.413	4.62		
Vinyl Chloride	CCC	0.1446	12.7		
1,1,2,2-Tetrachloroethane	SPCC	0.4140	10.4		
1,1-Dichloroethane	SPCC	0.5470	4.92		
Bromoform	SPCC	0.1038	24.8		1.00
Chlorobenzene	SPCC	0.9490	5.07		
Chloromethane	SPCC	0.1846	5.29		
1,1,1-Trichloroethane		0.3888	12.3		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2697	6.60		
1,1,2-Trichloroethane		0.2162	3.27		
1,2,4-Trichlorobenzene		0.7784	9.12		
1,2-Dibromo-3-Chloropropane		0.06202	21.4		1.00
1,2-Dibromoethane		0.2235	6.08		
1,2-Dichlorobenzene		1.269	7.02		
1,2-Dichloroethane		0.3301	5.92		
1,3-Dichlorobenzene		1.436	3.86		
1,4-Dichlorobenzene		1.468	7.30		
2-Butanone		0.05478	4.81		
2-Hexanone		0.1113	8.25		
4-Methyl-2-Pentanone		0.05537	6.85		
Acetone		0.04005	14.0		
Benzene		1.053	5.37		
Bromodichloromethane		0.2797	12.0		
Bromomethane		0.08886	10.1		
Carbon Disulfide		0.8671	9.75		
Carbon Tetrachloride		0.3201	18.6	1.00	
Chloroethane		0.2205	6.79		
Cyclohexane		0.5447	5.61		
Dibromochloromethane		0.2116	18.7	1.00	
Dichlorodifluoromethane		0.3087	4.07		
Isopropylbenzene		1.414	7.32		
Methyl Tert Butyl Ether		0.5495	4.68		
Methyl acetate		0.1194	3.04		
Methylcyclohexane		0.4123	5.19		
Methylene Chloride		0.2841	10.4		
Styrene		1.029	4.51		
Tetrachloroethene		0.2865	11.4		
Trichloroethene		0.2800	6.92		
Trichlorofluoromethane		0.4877	14.7		
cis-1,2-Dichloroethene		0.2827	5.59		
cis-1,3-Dichloropropene		0.3820	5.49		

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 Version 1.5 PDF File ID: 542687
 Report generated 08/16/2006 12:52

INITIAL CALIBRATION SUMMARY

00046255

Login Number: **L0608204**
Analytical Method: **8260B**
ICAL Workgroup: **WG217397**

Instrument ID: **HPMS10**
Initial Calibration Date: **15-JUL-06 16:37**
Column ID: **F**

Analyte		AVG RF	% RSD	LINEAR	QUAD
m-, p-Xylene		0.6229	7.97		
o-Xylene		0.6131	4.93		
trans-1,2-Dichloroethene		0.2747	6.68		
trans-1,3-Dichloropropene		0.4096	5.80		

INITIAL CALIBRATION DATA

00046256

Login Number:L0608204

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2155	0.1768	1.00	7552	0.2481
1,2-Dichloropropane	NA	NA	NA	0.400	3286	0.2696	1.00	8387	0.2756
Chloroform	0.300	3611	0.3788	0.400	5503	0.4516	1.00	13646	0.4484
Ethylbenzene	NA	NA	NA	0.400	4291	0.4814	1.00	11933	0.5337
Toluene	NA	NA	NA	0.400	12765	1.432	1.00	32232	1.442
Vinyl Chloride	NA	NA	NA	0.400	1986	0.1630	1.00	4642	0.1525
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2225	0.4981	1.00	4015	0.3548
1,1-Dichloroethane	NA	NA	NA	0.400	6118	0.5020	1.00	16423	0.5396
Bromoform	NA	NA	NA	NA	NA	NA	1.00	1677	0.07500
Chlorobenzene	NA	NA	NA	0.400	8400	0.9424	1.00	22223	0.9939
Chloromethane	NA	NA	NA	0.400	2489	0.2042	1.00	5413	0.1779
1,1,1-Trichloroethane	NA	NA	NA	0.400	3590	0.2946	1.00	11390	0.3742
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	1.00	7064	0.2321
1,1,2-Trichloroethane	NA	NA	NA	0.400	1993	0.2236	1.00	4758	0.2128
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4173	0.9343	1.00	8769	0.7750
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1711	0.1920	1.00	5059	0.2263
1,2-Dichlorobenzene	0.300	3977	1.162	0.400	6424	1.438	1.00	14615	1.292
1,2-Dichloroethane	NA	NA	NA	0.400	3632	0.2980	1.00	10116	0.3324
1,3-Dichlorobenzene	NA	NA	NA	0.400	6404	1.434	1.00	16357	1.446
1,4-Dichlorobenzene	0.300	4673	1.365	0.400	7504	1.680	1.00	16442	1.453
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	12926	1.061	1.00	32640	1.073
Bromodichloromethane	NA	NA	NA	0.400	2994	0.2457	1.00	7247	0.2381
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	2267	0.07450
Carbon Disulfide	NA	NA	NA	0.400	8322	0.6829	1.00	26540	0.8720
Carbon Tetrachloride	NA	NA	NA	0.400	2603	0.2136	1.00	9005	0.2959
Chloroethane	NA	NA	NA	0.400	2463	0.2021	1.00	6013	0.1976
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	16858	0.5539
Dibromochloromethane	NA	NA	NA	0.400	1554	0.1744	1.00	3887	0.1738
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8788	0.2888
Isopropylbenzene	NA	NA	NA	0.400	11116	1.247	1.00	30781	1.377
Methyl Tert Butyl Ether	NA	NA	NA	0.400	6217	0.5102	1.00	15981	0.5251
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	11744	0.3859
Methylene Chloride	NA	NA	NA	0.400	4138	0.3396	1.00	9498	0.3121
Styrene	NA	NA	NA	0.400	9184	1.030	1.00	22553	1.009
Tetrachloroethene	NA	NA	NA	0.400	1971	0.2211	1.00	6598	0.2951
Trichloroethene	NA	NA	NA	0.400	3037	0.2492	1.00	9012	0.2961

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Version 1.6 PDF File ID: 542687
Report generated 08/16/2006 12:52

INITIAL CALIBRATION DATA

00046257

Login Number: L0608204

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	13300	0.2202	5.00	39494	0.2668	20.0	157889	0.2687
1,2-Dichloropropane	2.00	16876	0.2793	5.00	43326	0.2926	20.0	175735	0.2991
Chloroform	2.00	26821	0.4440	5.00	71128	0.4804	20.0	286292	0.4873
Ethylbenzene	2.00	21374	0.4811	5.00	61604	0.5657	20.0	237507	0.5396
Toluene	2.00	59951	1.349	5.00	163466	1.501	20.0	636381	1.446
Vinyl Chloride	2.00	9672	0.1601	5.00	23420	0.1582	20.0	79694	0.1356
1,1,2,2-Tetrachloroethane	2.00	8402	0.3770	5.00	23352	0.4215	20.0	94876	0.4269
1,1-Dichloroethane	2.00	31792	0.5263	5.00	84471	0.5705	20.0	333056	0.5669
Bromoform	2.00	3400	0.07650	5.00	9039	0.08300	20.0	45931	0.1044
Chlorobenzene	2.00	41356	0.9308	5.00	107647	0.9885	20.0	433501	0.9849
Chloromethane	2.00	10457	0.1731	5.00	26838	0.1813	20.0	109763	0.1868
1,1,1-Trichloroethane	2.00	21124	0.3497	5.00	61118	0.4128	20.0	252890	0.4304
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	16160	0.2675	5.00	41383	0.2795	20.0	165877	0.2823
1,1,2-Trichloroethane	2.00	9523	0.2143	5.00	23769	0.2183	20.0	96364	0.2189
1,2,4-Trichlorobenzene	2.00	16347	0.7335	5.00	43577	0.7866	20.0	174334	0.7844
1,2-Dibromo-3-Chloropropane	2.00	1031	0.04630	5.00	2508	0.04530	20.0	13833	0.06220
1,2-Dibromoethane	2.00	10100	0.2273	5.00	24575	0.2257	20.0	102677	0.2333
1,2-Dichlorobenzene	2.00	27302	1.225	5.00	73258	1.322	20.0	290271	1.306
1,2-Dichloroethane	2.00	19924	0.3298	5.00	50650	0.3421	20.0	205661	0.3500
1,3-Dichlorobenzene	2.00	31297	1.404	5.00	82523	1.490	20.0	333022	1.499
1,4-Dichlorobenzene	2.00	32671	1.466	5.00	85330	1.540	20.0	334940	1.507
2-Butanone	2.00	3489	0.05780	5.00	8175	0.05520	20.0	32157	0.05470
2-Hexanone	2.00	4746	0.1068	5.00	12944	0.1189	20.0	52586	0.1195
4-Methyl-2-Pentanone	2.00	3053	0.05050	5.00	8358	0.05650	20.0	34236	0.05830
Acetone	2.00	2992	0.04950	5.00	6507	0.04400	20.0	22876	0.03890
Benzene	2.00	61054	1.011	5.00	165630	1.119	20.0	644633	1.097
Bromodichloromethane	2.00	14734	0.2439	5.00	40674	0.2747	20.0	176212	0.2999
Bromomethane	2.00	4848	0.08020	5.00	13785	0.09310	20.0	51620	0.08790
Carbon Disulfide	2.00	54632	0.9043	5.00	136052	0.9189	20.0	543854	0.9256
Carbon Tetrachloride	2.00	15690	0.2597	5.00	47793	0.3228	20.0	206570	0.3516
Chloroethane	2.00	13269	0.2196	5.00	34263	0.2314	20.0	139332	0.2371
Cyclohexane	2.00	33305	0.5513	5.00	84549	0.5711	20.0	328563	0.5592
Dibromochloromethane	2.00	7310	0.1645	5.00	21283	0.1954	20.0	97086	0.2206
Dichlorodifluoromethane	2.00	18369	0.3041	5.00	47240	0.3191	20.0	187142	0.3185
Isopropylbenzene	2.00	58775	1.323	5.00	164943	1.515	20.0	666472	1.514
Methyl Tert Butyl Ether	2.00	33220	0.5499	5.00	83348	0.5630	20.0	333902	0.5683
Methyl acetate	2.00	7192	0.1190	5.00	16913	0.1142	20.0	70054	0.1192
Methylcyclohexane	2.00	24159	0.3999	5.00	63431	0.4284	20.0	251187	0.4275
Methylene Chloride	2.00	16950	0.2806	5.00	41377	0.2795	20.0	163552	0.2784
Styrene	2.00	43781	0.9854	5.00	116097	1.066	20.0	473446	1.076
Tetrachloroethene	2.00	11410	0.2568	5.00	34511	0.3169	20.0	135423	0.3077
Trichloroethene	2.00	15717	0.2602	5.00	43388	0.2931	20.0	174150	0.2964

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542687
Report generated 08/16/2006 12:52

INITIAL CALIBRATION DATA

00046258

Login Number: L0608204

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	100	746883	0.2681	200	1407541	0.2538
1,2-Dichloropropane	100	804346	0.2887	200	1493303	0.2693
Chloroform	100	1362341	0.4890	200	2577742	0.4648
Ethylbenzene	100	1039224	0.5022	200	1804054	0.4444
Toluene	100	2882090	1.393	200	5251372	1.294
Vinyl Chloride	100	330230	0.1185	NA	NA	NA
1,1,2,2-Tetrachloroethane	100	432363	0.4089	200	819486	0.3940
1,1-Dichloroethane	100	1572533	0.5644	200	2927948	0.5280
Bromoform	100	269661	0.1303	200	539702	0.1329
Chlorobenzene	100	1922747	0.9291	200	3446617	0.8490
Chloromethane	100	525212	0.1885	200	980824	0.1769
1,1,1-Trichloroethane	100	1173075	0.4210	200	2183759	0.3938
1,1,2-Trichloro-1,2,2-Trifluoroethane	100	771869	0.2770	200	1480622	0.2670
1,1,2-Trichloroethane	100	441173	0.2132	200	823736	0.2029
1,2,4-Trichlorobenzene	100	787610	0.7449	200	1436381	0.6905
1,2-Dibromo-3-Chloropropane	100	76766	0.07260	200	154640	0.07430
1,2-Dibromoethane	100	473783	0.2290	200	889735	0.2192
1,2-Dichlorobenzene	100	1307212	1.236	200	2386559	1.147
1,2-Dichloroethane	100	923329	0.3314	200	1692271	0.3052
1,3-Dichlorobenzene	100	1504951	1.423	200	2753792	1.324
1,4-Dichlorobenzene	100	1494835	1.414	200	2716928	1.306
2-Butanone	100	147473	0.05290	200	281672	0.05080
2-Hexanone	100	222058	0.1073	200	393105	0.09680
4-Methyl-2-Pentanone	100	154207	0.05530	200	284832	0.05140
Acetone	100	98172	0.03520	200	200255	0.03610
Benzene	100	2887312	1.036	200	5221294	0.9415
Bromodichloromethane	100	879465	0.3157	200	1670781	0.3013
Bromomethane	100	271375	0.09740	200	549682	0.09910
Carbon Disulfide	100	2460454	0.8831	200	4499082	0.8113
Carbon Tetrachloride	100	1047948	0.3761	200	2042508	0.3683
Chloroethane	100	631553	0.2267	200	1186233	0.2139
Cyclohexane	100	1487040	0.5337	200	2665271	0.4806
Dibromochloromethane	100	531454	0.2568	200	1041322	0.2565
Dichlorodifluoromethane	100	868503	0.3117	200	1645246	0.2967
Isopropylbenzene	100	3027220	1.463	200	5500748	1.355
Methyl Tert Butyl Ether	100	1548940	0.5559	200	2957843	0.5334
Methyl acetate	100	336543	0.1208	200	663941	0.1197
Methylcyclohexane	100	1171875	0.4206	200	2169748	0.3913
Methylene Chloride	100	733721	0.2633	200	1346612	0.2428
Styrene	100	2145111	1.037	200	3846545	0.9475
Tetrachloroethene	100	619182	0.2992	200	1146919	0.2825
Trichloroethene	100	797556	0.2863	200	1456615	0.2627

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542687
Report generated 08/16/2006 12:52

INITIAL CALIBRATION DATA

00046259

Login Number:L0608204

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	3902	0.3202	1.00	14191	0.4663
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3189	0.2617	1.00	8459	0.2779
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4549	0.3733	1.00	10955	0.3600
m-,p-Xylene	NA	NA	NA	0.800	10700	0.6002	2.00	29801	0.6664
o-Xylene	NA	NA	NA	0.400	5519	0.6192	1.00	13413	0.5999
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3008	0.2468	1.00	8004	0.2630
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3487	0.3912	1.00	8520	0.3810

INITIAL CALIBRATION DATA

00046260

Login Number: L0608204

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	30655	0.5074	5.00	77087	0.5207	20.0	311587	0.5303
cis-1,2-Dichloroethene	2.00	15852	0.2624	5.00	43448	0.2935	20.0	172950	0.2944
cis-1,3-Dichloropropene	2.00	21618	0.3578	5.00	57511	0.3885	20.0	240114	0.4087
m-,p-Xylene	4.00	54965	0.6185	10.0	147386	0.6767	40.0	580911	0.6599
o-Xylene	2.00	26177	0.5892	5.00	71342	0.6551	20.0	280089	0.6363
trans-1,2-Dichloroethene	2.00	15320	0.2536	5.00	42965	0.2902	20.0	170194	0.2897
trans-1,3-Dichloropropene	2.00	17116	0.3852	5.00	45044	0.4136	20.0	190224	0.4322

INITIAL CALIBRATION DATA

Login Number: L0608204

Instrument ID: HPMS10

00046261

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	100	1455283	0.5223	200	2735861	0.4933
cis-1,2-Dichloroethene	100	815973	0.2929	200	1523643	0.2748
cis-1,3-Dichloropropene	100	1096027	0.3934	200	2023151	0.3648
m-,p-Xylene	200	2462969	0.5951	400	4267218	0.5256
o-Xylene	100	1260659	0.6092	200	2274735	0.5603
trans-1,2-Dichloroethene	100	803880	0.2885	200	1512005	0.2727
trans-1,3-Dichloropropene	100	884748	0.4275	200	1626717	0.4007

ALTERNATE SOURCE CALIBRATION REPORT

00046262

Login Number: L0608204 Run Date: 07/15/2006 Sample ID: WG217397-11
 Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
 File ID: 10M47258 Analyst: CMS
 ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	20	21.6	0.268	8.1	ug/L	
1,2-Dichloropropane	CCC	20	22.0	0.313	10.2	ug/L	
Chloroform	CCC	20	22.2	0.512	11.2	ug/L	
Ethylbenzene	CCC	20	22.8	0.582	14.2	ug/L	
Toluene	CCC	20	21.7	1.54	8.7	ug/L	
Vinyl Chloride	CCC	20	18.4	0.133	8.2	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	21.5	0.444	7.3	ug/L	
1,1-Dichloroethane	SPCC	20	21.6	0.590	7.9	ug/L	
Bromoform	SPCC	20	19.2	0.114	3.8	ug/L	
Chlorobenzene	SPCC	20	21.8	1.03	9	ug/L	
Chloromethane	SPCC	20	21.0	0.193	4.8	ug/L	
1,1,1-Trichloroethane		20	23.0	0.447	15.1	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20	21.4	0.288	6.8	ug/L	
1,1,2-Trichloroethane		20	21.9	0.237	9.5	ug/L	
1,2,4-Trichlorobenzene		20	21.2	0.825	6	ug/L	
1,2-Dibromo-3-Chloropropane		20	21.5	0.0724	7.7	ug/L	
1,2-Dibromoethane		20	22.3	0.249	11.3	ug/L	
1,2-Dichlorobenzene		20	21.4	1.36	7.1	ug/L	
1,2-Dichloroethane		20	22.1	0.365	10.5	ug/L	
cis-1,2-Dichloroethene		20	21.8	0.308	8.9	ug/L	
trans-1,2-Dichloroethene		20	21.1	0.290	5.4	ug/L	
1,3-Dichlorobenzene		20	21.9	1.57	9.5	ug/L	
1,4-Dichlorobenzene		20	21.7	1.59	8.5	ug/L	
2-Butanone		20	21.6	0.0591	7.9	ug/L	
2-Hexanone		20	21.4	0.119	7.1	ug/L	
4-Methyl-2-Pentanone		20	22.3	0.0617	11.4	ug/L	
Acetone		20	20.1	0.0402	.4	ug/L	
Benzene		20	21.3	1.12	6.5	ug/L	
Bromodichloromethane		20	23.7	0.331	18.4	ug/L	
Bromomethane		20	20.6	0.0915	3	ug/L	
Carbon Disulfide		20	20.3	0.880	1.4	ug/L	
Carbon Tetrachloride		20	20.2	0.370	1	ug/L	
Chloroethane		20	20.2	0.223	.9	ug/L	
cis-1,3-Dichloropropene		20	22.1	0.422	10.4	ug/L	
Cyclohexane		20	20.2	0.549	.8	ug/L	
Dibromochloromethane		20	20.0	0.244	.2	ug/L	
Dichlorodifluoromethane		20	18.7	0.289	6.3	ug/L	
Isopropylbenzene		20	21.3	1.50	6.3	ug/L	
Methyl acetate		20	21.6	0.129	7.8	ug/L	
Methyl Tert Butyl Ether		20	21.5	0.590	7.5	ug/L	
Methylcyclohexane		20	20.3	0.418	1.3	ug/L	
Methylene Chloride		20	19.7	0.280	1.5	ug/L	

KEMRON FORMS - Modified 07/26/2006
 Version 1.5 PDF File ID: 542688
 Report generated 08/16/2006 12:52

ALTERNATE SOURCE CALIBRATION REPORT

00046263

Login Number: L0608204 Run Date: 07/15/2006 Sample ID: WG217397-11
Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
File ID: 10M47258 Analyst: CMS
ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		20	22.5	1.16	12.7	ug/L	
Tetrachloroethene		20	22.6	0.324	13.2	ug/L	
trans-1,3-Dichloropropene		20	20.6	0.422	3.1	ug/L	
Trichloroethene		20	22.1	0.310	10.7	ug/L	
Trichlorofluoromethane		20	19.2	0.469	3.9	ug/L	
m-,p-Xylene		40	45.3	0.706	13.3	ug/L	
o-Xylene		20	22.5	0.689	12.3	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00046264

Login Number: L0608204 Run Date: 08/12/2006 Sample ID: WG219788-02
 Instrument ID: HPMS10 Run Time: 11:45 Method: 8260B
 File ID: 10M48032 Analvst: MES
 Workgroup (AAB#): WG219789 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	50	55.3	0.274	10.6	ug/L	
1,2-Dichloropropane	CCC	50	51.8	0.294	3.6	ug/L	
Chloroform	CCC	50	55.5	0.511	10.9	ug/L	
Ethylbenzene	CCC	50	51.2	0.522	2.4	ug/L	
Toluene	CCC	50	50.5	1.43	1	ug/L	
Vinyl Chloride	CCC	50	52.2	0.151	4.5	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50	47.2	0.391	5.6	ug/L	
1,1-Dichloroethane	SPCC	50	56.0	0.612	11.9	ug/L	
Bromoform	SPCC	50	54.8	0.138	9.6	ug/L	
Chlorobenzene	SPCC	50	49.8	0.946	.3	ug/L	
Chloromethane	SPCC	50	56.8	0.210	13.7	ug/L	
1,1,1-Trichloroethane		50	57.0	0.444	14.1	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50	52.7	0.284	5.3	ug/L	
1,1,2-Trichloroethane		50	47.6	0.206	4.9	ug/L	
1,2,4-Trichlorobenzene		50	44.7	0.696	10.6	ug/L	
1,2-Dibromo-3-Chloropropane		50	47.8	0.0675	4.4	ug/L	
1,2-Dibromoethane		50	49.3	0.220	1.5	ug/L	
1,2-Dichlorobenzene		50	47.7	1.21	4.6	ug/L	
1,2-Dichloroethane		50	56.1	0.370	12.2	ug/L	
cis-1,2-Dichloroethene		50	52.7	0.298	5.4	ug/L	
trans-1,2-Dichloroethene		50	52.5	0.288	5	ug/L	
1,3-Dichlorobenzene		50	50.0	1.44	0	ug/L	
1,4-Dichlorobenzene		50	48.0	1.41	3.9	ug/L	
2-Butanone		50	45.9	0.0503	8.2	ug/L	
2-Hexanone		50	46.2	0.103	7.7	ug/L	
4-Methyl-2-Pentanone		50	44.7	0.0494	10.7	ug/L	
Acetone		50	46.7	0.0374	6.6	ug/L	
Benzene		50	49.7	1.05	.6	ug/L	
Bromodichloromethane		50	58.5	0.328	17.1	ug/L	
Bromomethane		50	61.5	0.109	23	ug/L	
Carbon Disulfide		50	42.4	0.736	15.1	ug/L	
Carbon Tetrachloride		50	54.4	0.402	8.9	ug/L	
Chloroethane		50	52.2	0.230	4.4	ug/L	
cis-1,3-Dichloropropene		50	52.1	0.398	4.2	ug/L	
Cyclohexane		50	45.7	0.498	8.6	ug/L	
Dibromochloromethane		50	52.6	0.266	5.2	ug/L	
Dichlorodifluoromethane		50	40.8	0.252	18.5	ug/L	
Isopropylbenzene		50	53.3	1.51	6.7	ug/L	
Methyl acetate		50	49.8	0.119	.5	ug/L	
Methyl Tert Butyl Ether		50	44.6	0.490	10.9	ug/L	
Methylcyclohexane		50	45.8	0.377	8.5	ug/L	
Methylene Chloride		50	49.1	0.279	1.9	ug/L	

KEMRON FORMS - Modified 08/16/2006
 Version 1.3 PDF File ID: 542691
 Report generated 08/16/2006 12:52

CONTINUING CALIBRATION VERIFICATION (CCV)

00046265

Login Number: L0608204 Run Date: 08/12/2006 Sample ID: WG219788-02
 Instrument ID: HPMS10 Run Time: 11:45 Method: 8260B
 File ID: 10M48032 Analyst: MES
 Workgroup (AAB#): WG219789 Cal ID: HPMS10 - 15-JUL-06

Analyte	Expected	Found	RF	%D	UNITS	Q
Styrene	50	49.5	1.02	1	ug/L	
Tetrachloroethene	50	52.9	0.303	5.8	ug/L	
trans-1,3-Dichloropropene	50	54.6	0.447	9.1	ug/L	
Trichloroethene	50	50.7	0.284	1.5	ug/L	
Trichlorofluoromethane	50	57.7	0.563	15.4	ug/L	
Xylenes	150	151	0.621	.8	ug/L	
1,2-Dichloroethene	100	105	0.293	5.2	ug/L	
o-Xylene	50	49.6	0.608	.8	ug/L	
m-,p-Xylene	100	102	0.633	1.7	ug/L	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046266

Login Number: L0608204
Instrument ID: HPMS10
Workgroup (AAB#): WG219789

CCV Number: WG219788-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219788-02	NA	NA	271533	537362	747905
Upper Limit	NA	NA	543066	1074724	1495810
Lower Limit	NA	NA	135767	268681	373953
L0608204-01	1.00	01	219467	446929	622463
WG219789-01	1.00	01	248943	495264	695197
WG219789-02	1.00	01	247139	479217	657437
WG219789-03	1.00	01	244717	473690	659638

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046267

Login Number: L0608204
Instrument ID: HPMS10
Workgroup (AAB#): WG219789

CCV Number: WG219788-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219788-02	NA	NA	15.52	12.55	8.71
Upper Limit	NA	NA	16.02	13.05	9.21
Lower Limit	NA	NA	15.02	12.05	8.21
L0608204-01	1.00	01	15.52	12.55	8.72
WG219789-01	1.00	01	15.52	12.55	8.71
WG219789-02	1.00	01	15.52	12.55	8.71
WG219789-03	1.00	01	15.52	12.55	8.71

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON Environmental Services
Data Checklist

00046268

Date: 27 - MAR - 2006

Analyst: JLS

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Analytical Workgroups: WG209269

Runlog ID number:	9527
System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	NA
Narrative Summary	NA
Results Reporting/Data Qualifiers	NA
Client Data Package Assembly	NA
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
27 - MAR - 2006



Secondary Reviewer:
29 - MAR - 2006



Generated: MAR - 29 - 2006 15:32:38

KEMRON Environmental Services Data Checklist

00046269

Date: 14 - AUG - 2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 11751
 Analytical Workgroups: WG219875

System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	X
Narrative Summary	NA
Results Reporting/Data Qualifiers	X
Client Data Package Assembly	X
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
15 - AUG - 2006



Secondary Reviewer:
15 - AUG - 2006



Generated: AUG -15 -2006 15:43:41

KEMRON Environmental Services

Instrument Run Log

00046270

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103

Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT

Workgroups: WG209269

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3094	WG209269-01 50ug/ml STD	NA	1	1	STD115796	03/27/06 09:47
2	16G3095	WG209269-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 10:06
3	16G3098	WG209269-01 .1ug/ml STD	NA	1	1	STD11579	03/27/06 12:52
4	16G3099	WG209269-02 1ug/ml STD	NA	1	1	STD11579	03/27/06 13:06
5	16G3100	WG209269-03 10ug/ml STD	NA	1	1	STD11579	03/27/06 13:20
6	16G3101	WG209269-04 20ug/ml STD	NA	1	1	STD11579	03/27/06 13:34
7	16G3102	WG209269-05 50ug/ml STD	NA	1	1	STD11579	03/27/06 13:48
8	16G3103	WG209269-06 100ug/ml STD	NA	1	1	STD11579	03/27/06 14:02
9	16G3104	WG209269-07 200ug/ml STD	NA	1	1	STD11579	03/27/06 14:16
10	16G3105	WG209269-08 300ug/ml STD	NA	1	1	STD11579	03/27/06 14:30
11	16G3106	RINSE	NA	1	1		03/27/06 14:44
12	16G3107	RINSE	NA	1	1		03/27/06 14:58
13	16G3108	WG209269-09 20ug/ml STD	NA	1	1	STD11579	03/27/06 15:12
14	16G3109	WG209270-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 15:34
15	16G3110	WG209306-01 BLANK	NA	1	1		03/27/06 15:50
16	16G3111	WG209306-02 20ug/ml LCS	NA	1	1	STD11579	03/27/06 16:04
17	16G3113	L0603426-01 A	NA	1	1		03/27/06 17:04
18	16G3114	L0603426-02 A	NA	1	1		03/27/06 17:18
19	16G3115	L0603426-03 A	NA	1	1		03/27/06 17:32
20	16G3116	L0603426-04 A	NA	1	1		03/27/06 17:46
21	16G3117	RINSE	NA	1	1		03/27/06 18:00
22	16G3118	RINSE	NA	1	1		03/27/06 18:14

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X		Check Standard Failure	
File ID: 16G3094				
2				
File ID: 16G3095				
Run ICAL.				
17	X			

Approved: March 29, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046271

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103

Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT

Workgroups: WG209269

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G3113				
No ending ccv.				
18	X			
File ID: 16G3114				
No ending ccv.				
19	X			
File ID: 16G3115				
No ending ccv.				
20	X			
File ID: 16G3116				
No ending ccv.				

Approved: March 29, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046272

Instrument: HP16 Dataset: 081406
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15168

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219875

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3677	WG219874-01 50ug/ml STD	NA	1	1	STD11579	08/14/06 13:16
2	16G3678	WG219875-01 BLANK	NA	1	1		08/14/06 13:39
3	16G3679	WG219875-02 20ug/ml LCS	NA	1	1	STD11579	08/14/06 13:53
4	16G3680	WG219875-03 20ug/ml LCS DUP	NA	1	1	STD11579	08/14/06 14:07
5	16G3681	L0607001-02 QMDL	NA	1	1	STD11579	08/14/06 14:36
6	16G3682	L0607002-02 QMDL	NA	1	1	STD11579	08/14/06 14:50
7	16G3683	WG219874-02 50ug/ml STD	NA	1	1	STD11579	08/14/06 15:04
8	16G3684	L0608044-01 A 10X	7	1	10		08/14/06 15:25
9	16G3685	L0608044-03 A 10X	7	1	10		08/14/06 15:39
10	16G3686	L0608044-06 A 10X	7	1	10		08/14/06 15:53
11	16G3687	L0608044-08 A 10X	7	1	10		08/14/06 16:07
12	16G3688	L0608109-17 A 10X	7	1	10		08/14/06 16:21
13	16G3689	L0608109-19 A 10X	7	1	10		08/14/06 16:35
14	16G3690	L0608154-01 A 10X	7	1	10		08/14/06 16:49
15	16G3691	L0608154-03 A 10X	7	1	10		08/14/06 17:03
16	16G3692	L0608154-05 A 10X	7	1	10		08/14/06 17:17
17	16G3693	L0608154-07 A 10X	7	1	10		08/14/06 17:31
18	16G3694	WG219874-03 50ug/ml STD	NA	1	1	STD11579	08/14/06 17:45
19	16G3695	L0608183-01 A	7	1	1		08/14/06 17:59
20	16G3696	L0608183-02 A	7	1	1		08/14/06 18:13
21	16G3697	L0608184-01 A 10X	7	1	10		08/14/06 18:27
22	16G3698	L0608184-03 A 10X	7	1	10		08/14/06 18:41
23	16G3699	L0608184-05 A 10X	7	1	10		08/14/06 18:55
24	16G3700	L0608204-01 A	7	1	1		08/14/06 19:09
25	16G3701	L0608240-02 A	7	1	1		08/14/06 19:23
26	16G3702	L0608240-03 A	7	1	1		08/14/06 19:37
27	16G3703	WG219874-04 50ug/ml STD	NA	1	1	STD11579	08/14/06 19:51

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9	X	100	Over Calibration Range	Carbon dioxide

Approved: August 15, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046273

Instrument: HP16 Dataset: 081406
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15168

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219875

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G3685				
11	X	50	Over Calibration Range	Carbon dioxide
File ID: 16G3687				
15	X	100	Over Calibration Range	Carbon dioxide
File ID: 16G3691				
16	X	100	Over Calibration Range	Carbon dioxide
File ID: 16G3692				
21	X		Check Standard Failure	
File ID: 16G3697				
Ending ccv failed for carbon dioxide.				
22	X		Check Standard Failure	
File ID: 16G3698				
Ending ccv failed for carbon dioxide.				
23	X		Check Standard Failure	
File ID: 16G3699				
Ending ccv failed for carbon dioxide.				

Approved: August 15, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046274

Analytical Method: RSK175
Login Number: L0608204

AAB#: WG219875

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
67WW05	08/08/06	08/09/06	08/14/06	14	6.32	08/14/06	14	6.32	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046275

Login Number: L0608204
Blank File ID: 16G3678
Date Analyzed: 08/14/06
Time Analyzed: 13:39
Analyst: JLS

Work Group: WG219875
Blank Sample ID: WG219875-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219875-02	16G3679	08/14/06 13:53	01
LCS2	WG219875-03	16G3680	08/14/06 14:07	01
67WW05	L0608204-01	16G3700	08/14/06 19:09	01

METHOD BLANK REPORT

00046276

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219875-01
Instrument ID: HP16 Run Time: 13:39 Prep Method: 5021
File ID: 16G3678 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219875 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.319	1	J
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046277

Login Number: L0608204 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219875 Units: ug/L
 Sample ID: WG219875-02 LCS File ID: 16G3679 Run Date: 08/14/2006 13:53
 Sample ID: WG219875-03 LCS2 File ID: 16G3680 Run Date: 08/14/2006 14:07

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	32.0	93.3	34.3	34.5	101	7.75	56 - 140	40	
ethene	59.9	53.8	89.8	59.9	60.1	100	11.0	56 - 140	40	
ethane	64.2	59.3	92.3	64.2	64.6	101	8.56	56 - 137	40	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

00046278

Login Number: L0608204
Analytical Method: RSK175
ICAL Workgroup: WG209269

Instrument ID: HP16
Initial Calibration Date: 27-MAR-06

Analyte		AVG RF	% RSD	R2	QUAD
ethane		131700	9.70	0.997	
ethene		126600	7.29	0.997	
methane		91930	64.3	0.997	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608204 Instrument ID: HP16 00046279
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-01			WG209269-02		
	CONC	RESP	RF	CONC	RESP	RF
ethane	0.100	14314	143100	1.00	155076	155100
ethene	0.100	12296	123000	1.00	143937	143900
methane	0.100	23610	236100	1.00	95195	95190

KEMRON FORMS - Modified 06/27/2006
Version 1.3 PDF File ID: 542124
Report generated 08/15/2006 16:59

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608204 Instrument ID: HP16 00046280
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-03			WG209269-04		
	CONC	RESP	RF	CONC	RESP	RF
ethane	10.0	1157044	115700	20.0	2464700	123200
ethene	10.0	1143709	114400	20.0	2436804	121800
methane	10.0	648171	64820	20.0	1314765	65740

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608204 Instrument ID: HP16 00046281
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-06			WG209269-07		
	CONC	RESP	RF	CONC	RESP	RF
ethane	100	12548213	125500	200	27671040	138400
ethene	100	12381421	123800	200	27247290	136200
methane	100	6627355	66270	200	14639720	73200

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608204 Instrument ID: HP16 00046282
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-08		
	CONC	RESP	RF
ethane	300	37840789	126100
ethene	300	37181559	123900
methane	300	19991743	66640

KEMRON FORMS - Modified 06/27/2006
Version 1.3 PDF File ID: 542124
Report generated 08/15/2006 16:59

KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00046283

Login Number: L0608204 Run Date: 03/27/2006 Sample ID: WG209269-09
Instrument ID: HP16 Run Time: 15:12 Method: RSK175
File ID: 16G3108 Analyst: JLS
Ical Workgroup: WG209269 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		20	19.3	66200	3.3	ug/L	
ethene		20	19.0	121000	4.9	ug/L	
ethane		20	18.8	122000	5.9	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046284

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219874-01
Instrument ID: HP16 Run Time: 13:16 Method: RSK175
File ID: 16G3677 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	83.2	66500	2.80	ug/L	
ethene		150	146	124000	2.80	ug/L	
ethane		160	156	126000	3.10	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046285

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219874-02
Instrument ID: HP16 Run Time: 15:04 Method: RSK175
File ID: 16G3683 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	79.0	63200	7.70	ug/L	
ethene		150	138	117000	7.90	ug/L	
ethane		160	148	119000	8.00	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046286

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219874-04
Instrument ID: HP16 Run Time: 19:51 Method: RSK175
File ID: 16G3703 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	92.0	73600	7.50	ug/L	
ethene		150	158	134000	5.30	ug/L	
ethane		160	170	137000	6.00	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046287

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219874-03
Instrument ID: HP16 Run Time: 17:45 Method: RSK175
File ID: 16G3694 Analvst: JLS
Workgroup (AAB#): WG219875 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	82.8	66200	3.30	ug/L	
ethene		150	145	123000	3.40	ug/L	
ethane		160	156	126000	2.90	ug/L	

* Exceeds %D Limit

Inorganic QA/QC

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046289

Analytical Method: 300.0
Login Number: L0608204

AAB#: WG219805

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
67WW05	08/08/06	08/09/06	08/09/06	2	1.21	08/09/06	2	1.21	
67WW05	08/08/06	08/09/06	08/09/06	2	1.22	08/09/06	2	1.22	
67WW05	08/08/06	08/09/06	08/09/06	2	1.23	08/09/06	2	1.23	
67WW05	08/08/06	08/09/06	08/09/06	2	1.24	08/09/06	2	1.24	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046290

Login Number: L0608204	Work Group: WG219805
Blank File ID: I2080906.12	Blank Sample ID: WG219805-01
Date Analyzed: 08/09/06	Instrument ID: IC2
Time Analyzed: 15:57	Method: 300.0
Analyst: JWR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219805-02	I2080906.13	08/09/06 16:14	01
67WW05	L0608204-01	I2080906.14	08/09/06 16:32	01
67WW05	L0608204-01	I2080906.15	08/09/06 16:49	DL01
67WW05	L0608204-01	I2080906.16	08/09/06 17:06	DL02
67WW05	L0608204-01	I2080906.17	08/09/06 17:24	DL03
DUP	WG219805-04	I2080906.25	08/09/06 19:43	01
DUP	WG219805-09	I2080906.41	08/10/06 00:21	01

METHOD BLANK REPORT

00046291

Login Number: L0608204 Run Date: 08/09/2006 Sample ID: WG219805-01
Instrument ID: IC2 Run Time: 15:57 Prep Method: 300.0
File ID: I2080906.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219805 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046292

Login Number: L0608204 Run Date: 08/09/2006 Sample ID: WG219805-02
Instrument ID: IC2 Run Time: 16:14 Prep Method: 300.0
File ID: I2080906.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219805 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.95	99.1	90 - 110	
Nitrate	4.07	4.12	101	90 - 110	
Nitrite	3.65	3.52	96.4	90 - 110	
Sulfate	30.0	30.6	102	90 - 110	

CONTINUING CALIBRATION VERIFICATION (CCV)

00046293

Login Number: L0608204 Run Date: 08/09/2006 Sample ID: WG219806-01
Instrument ID: IC2 Run Time: 15:40 Method: 300.0
File ID: I2080906.11 Analyst: JWR
Workgroup (AAB#): WG219805 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.90	7.91	1.7	mg/L	
N03-N		4.0662	4.25	3.14	4.4	mg/L	
N02-N		3.6534	3.62	3.62	.9	mg/L	
S04		30	30.9	10.1	3	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046294

Login Number: L0608204 Run Date: 08/09/2006 Sample ID: WG219806-02
Instrument ID: IC2 Run Time: 18:51 Method: 300.0
File ID: I2080906.22 Analyst: JWR
Workgroup (AAB#): WG219805 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	6.05	7.71	.8	mg/L	
N03-N		4.0662	4.11	3.25	1.2	mg/L	
N02-N		3.6534	3.72	3.52	1.9	mg/L	
S04		30	30.2	10.4	.7	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046295

Login Number: L0608204 Run Date: 08/09/2006 Sample ID: WG219806-03
Instrument ID: IC2 Run Time: 22:20 Method: 300.0
File ID: I2080906.34 Analyst: JWR
Workgroup (AAB#): WG219805 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.97	7.81	.5	mg/L	
N03-N		4.0662	4.26	3.14	4.7	mg/L	
N02-N		3.6534	3.46	3.79	5.3	mg/L	
S04		30	30.2	10.4	.6	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046296

Login Number: L0608204 Run Date: 08/10/2006 Sample ID: WG219806-04
Instrument ID: IC2 Run Time: 00:56 Method: 300.0
File ID: I2080906.43 Analyst: JWR
Workgroup (AAB#): WG219805 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	6.05	7.70	.9	mg/L	
N03-N		4.0662	4.16	3.21	2.3	mg/L	
N02-N		3.6534	3.70	3.54	1.2	mg/L	
S04		30	30.1	10.4	.5	mg/L	

* Exceeds %D Criteria

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046297

Analytical Method: 415.1
Login Number: L0608204

AAB#: WG219907

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
67WW05	08/08/06	08/09/06	08/14/06	28	6.14	08/14/06	28	6.14	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046298

Login Number: L0608204
Blank File ID: TC08-14-2006.04
Date Analyzed: 08/14/06
Time Analyzed: 14:09
Analyst: DIH

Work Group: WG219907
Blank Sample ID: WG219907-01
Instrument ID: TOC-VWP
Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219907-02	TC08-14-2006.05	08/14/06 14:22	01
LCS2	WG219907-03	TC08-14-2006.06	08/14/06 14:35	01
67WW05	L0608204-01	TC08-14-2006.07	08/14/06 14:49	DL01
67WW05	L0608204-01	TC08-14-2006.07	08/14/06 14:49	DL01
DUP	WG219907-05	TC08-14-2006.31	08/14/06 20:27	01

METHOD BLANK REPORT

00046299

Login Number: L0608204 Run Date: 08/14/2006 Sample ID: WG219907-01
Instrument ID: TOC-VWP Run Time: 14:09 Prep Method: 415.1
File ID: TC08-14-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG219907 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046300

Login Number: L0608204 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG219907 Units: mg/L
Sample ID: WG219907-02 LCS File ID: TC08-14-2006.05 Run Date: 08/14/2006 14:22
Sample ID: WG219907-03 LCS2 File ID: TC08-14-2006.06 Run Date: 08/14/2006 14:35

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.5	90.2	25.0	24.5	97.8	8.13	85 - 115	15	

DUPLICATE (DUP)

00046301

Sample Ref: L0608256-01 Cal ID: TOC-VWP - Worknum: WG219907
Instrument ID: TOC-VWP Method: 400
Sample ID: WG219907-04 File ID: TC08-14-2006.30 Dil: 1 Matrix: WATER
Duplicate ID: WG219907-05 File ID: TC08-14-2006.31 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Total Organic Carbon	16.5	17.1	3.27	15	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE (MS)

00046302

Loginnum: L0608204 Cal ID: TOC-VWP -
Instrument ID: TOC-VWP Contract #: DACA56-94-D-0020
Parent ID: WG219907-04 File ID: TC08-14-2006.30 Dil: 1
Sample ID: WG219907-06 MS File ID: TC08-14-2006.32 Dil: 1

Worknum: WG219907
Method: 415.1
Matrix: WATER
Units: mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	%Rec Limits	Q
Total Organic Carbon	16.5	10.0	28.5	120	85 - 115	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.


Shaw® Shaw Environmental, Inc.

 3010 Briarpark Drive, Suite 4N
 Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10019

Laboratory Name: Kemron		Address: 156 Star lite Dr.		Contact: Stephanie Mossburg												
Project Name LHAAP		Project Location Karnack, Tx		Analysis and Method Desired (Indicate separate containers)												
Project No. 845714.048001		Project Contact Diane Meyer		Project Telephone No. (713) 996-4408												
Point of contact: Allen Willmore		Project Manager/Supervisor: Praveen Srivastav		Remarks												
Telephone No. (713) 247-9292																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOCs ^{40mL}	TOC ^{500mL} Glass	Anions ^{500mL} HPLC	D-GASES ^{40mL} VOCs				
1	12WV05	8/8/06	11:35		-	N	12WV05	8	3	1	1	3				
2	67WV05															
3	per client.															
4	AJF															
5																
6																
7																
8																
9																
10																
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions								
M. All		8/8/06 12:35		Scott Bassinger		8/8/06 12:40		c/c Sealed								
				Jennifer Smith		8/9/06 10:00		Seal intact								
								FedEx Airbill No.:								
								Sampler's Signature								
TAT: ☐ Standard ☒ Rush Due: ☐ Seals Intact? ☒ Y ☐ N Received Good Condition ☒ Y ☐ N ☒ Cold																

White - Lab Copy Canary - Field Copy Pink - File Copy

SAMPLE RECEIPT FORM

B2705

00046304

Date: 8-9-06 Client: Shaw

156 STARLITE DRIVE
MARIETTA, OH
45750
(740) 373-4071

Shipped By: () Fed-Ex () UPS () DHL () KEMRON () Client () Other 10:00

Opened By: [Signature]

Logged By: [Signature] Login # L06 8-204

IR Temp Gun: () D PG

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	746	2	12166V 7250190700069	10019	
2					
3					
4					
5					
6					

Were all coolers sealed?

(Y) N N/A

Were custody seals used on all coolers?

(Y) N N/A

Were custody seals intact?

(Y) N N/A

Was visible ice present?

(Y) N N/A

Were all coolers in the temperature range of 2-6C? (>6C*)

(Y) N N/A

Were the samples frozen?*

Y (N) N/A

Were COC papers provided?

(Y) N N/A

Were all sample containers intact?*

(Y) N N/A

Were all sample labels intact?

(Y) N N/A

Were all sample labels legible?*

(Y) N N/A

Did all sample labels match the COC?*

(Y) N N/A

Was the label information complete?*

(Y) N N/A

Were the correct containers used?*

(Y) N N/A

Were the correct preservatives added to water samples?*

(Y) N N/A

Was the pH tested on preserved water samples?

(Y) N N/A

Were pH ranges acceptable?*

(Y) N N/A

Was sufficient amount of sample provided?*

(Y) N N/A

Were bubbles present in VOA samples?*

Y (N) N/A

Were COC's signed and dated?

(Y) N N/A

Did samples arrive before hold time expired?*

(Y) N N/A

Are discrepancy forms attached?

Y N (N/A)

*Requires a discrepancy form

Comments: _____

CRF #1
Revised 8/22/03

KEMRON Environmental Services
Internal Chain of Custody Report

00046305

Login: L0608204
Account: 2773
Project: 2773.025
Samples: 1
Due Date: 16-AUG-2006

Samplenum **Container ID** **Products**
L0608204-01 260568 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	L1	WET	09-AUG-2006 13:06	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Samplenum **Container ID** **Products**
L0608204-01 260569 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	09-AUG-2006 11:50	MES	BRG

Samplenum **Container ID** **Products**
L0608204-01 260570 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:04	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:04	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:04	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046306

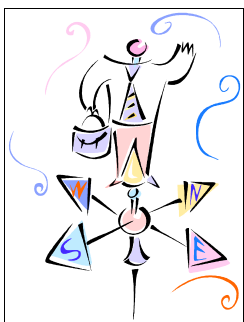
Login: L0608204
Account: 2773
Project: 2773.025
Samples: 1
Due Date: 16-AUG-2006

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L0608204-01	260571	TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			09-AUG-2006 11:14	JS	
2	ANALYZ	W1	WET	10-AUG-2006 16:48	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

August 23, 2006



New Style, New Direction....

KEMRON Environmental Services is pleased to introduce our new report deliverable — the result of extensive client feedback & programming over the past year. This new version provides all of the content of our previous reports, with the enhanced usability demanded by busy project managers, project chemists and validators. More closely aligned with CLP report configurations, our new report is sectioned by product (rather than SDG), allowing for simplified distribution across multiple validators and/or project chemists — and a better project bottom line.

Based on the success of our client trials this spring, KEMRON has adopted this reporting option as our standard default, for Level I-IV reports effective August 23, 2006. Your enclosed report has been generated accordingly. Please feel free to contact us with questions and/or comments at:

KEMRON Environmental Services
156 Starlite Drive Marietta, OH 45750
Phone: (800) 373-4071 FAX: (740) 374-4835 Email: dsullivan@kemron-lab.com

Thank you for choosing KEMRON for your analytical needs. We look forward to serving you again soon.



156 Starlite Drive, Marietta, OH 45750 • TEL 740-373-4071 • FAX 740-373-4835 • <http://www.kemron.com>

Laboratory Report Number: L0608240

Please find enclosed the analytical results for the samples you submitted to KEMRON Environmental Services.

Review and compilation of your report was completed by KEMRON's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Debra Elliott - Team Leader
delliott@kemron-lab.com

Amanda Fickiesen - Client Services Specialist
afickiesen@kemron-lab.com

Cheryl Koelsch - Team Chemist/Data Specialist
ckoelsch@kemron-lab.com

Annie Bock - Client Services Specialist
abock@kemron-lab.com

Stephanie Mossburg - Team Chemist/Data Specialist
smossburg@kemron-lab.com

Kathy Albertson - Team Chemist/Data Specialist
kalbertson@kemron-lab.com

This report was reviewed on August 23, 2006.

A handwritten signature in cursive script that reads "Stephanie Mossburg".

STEPHANIE MOSSBURG - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the NELAP standards and other applicable contract terms and conditions. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services.

This report was certified on August 23, 2006.

A handwritten signature in cursive script that reads "David E. Vandenberg".

David Vandenberg - Vice President

FL DOH NELAP ID: E8755

This report contains a total of 178 pages.

Protecting Our Environmental Future

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0608240

CHAIN OF CUSTODY: The chain of custody number was 10021.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 1 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Approved: 14-AUG-06

<i>Stephanie Mosburg</i>

LABORATORY REPORT

L0608240

00046310

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta, OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
TRIP BLANK	L0608240-01	8260B	1	10-AUG-06
67WW06	L0608240-02	8260B	1	10-AUG-06
67WW07	L0608240-03	8260B	1	10-AUG-06
LHSMW58	L0608240-04	8260B	1	10-AUG-06
35BWW03	L0608240-05	8260B	1	10-AUG-06
35BWW03-DUP	L0608240-06	8260B	1	10-AUG-06
67WW03	L0608240-07	8260B	1	10-AUG-06

Report Number: L0608240

Report Date : August 22, 2006

00046311

Sample Number: L0608240-01
 Client ID: TRIP BLANK
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/08/2006 17:00
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 14:49
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 14:49
 File ID: 10M48038

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.786	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

1 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046312

Sample Number: **L0608240-01**
Client ID: **TRIP BLANK**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/08/2006 17:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 14:49**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 14:49**
File ID: **10M48038**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	114	80	120	
Dibromofluoromethane	107	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	107	88	110	

J The analyte was positively identified, but the quantitation was below the RL
U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046313

Sample Number: L0608240-02
 Client ID: 67WW06
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/08/2006 16:50
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 17:21
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 17:21
 File ID: 10M48043

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2	3.02	J	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

3 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046314

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 17:21**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 17:21**
File ID: **10M48043**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	116	80	120	
Dibromofluoromethane	105	86	118	
p-Bromofluorobenzene	104	86	115	
Toluene-d8	107	88	110	

J The analyte was positively identified, but the quantitation was below the RL
U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046315

Sample Number: L0608240-03
 Client ID: 67WW07
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/08/2006 16:50
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 17:52
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 17:52
 File ID: 10M48044

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

5 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046316

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 17:52**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 17:52**
File ID: **10M48044**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	119	80	120	
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	107	88	110	

U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046317

Sample Number: L0608240-04
 Client ID: LHSMW58
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/09/2006 14:00
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 18:22
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 18:22
 File ID: 10M48045

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	69.2		10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3	0.436	J	5.00	0.125
1,1-Dichloroethene	75-35-4	2.11	J	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	0.716	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7	1.19	J	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3	0.210	J	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4	21.8		5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6	21.8		5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

7 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046318

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 18:22**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 18:22**
File ID: **10M48045**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	121	80	120	*
Dibromofluoromethane	110	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	107	88	110	

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046319

Sample Number: L0608240-05
 Client ID: 35BWW03
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/09/2006 14:00
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 18:53
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 18:53
 File ID: 10M48046

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	8.98	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

9 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046320

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 18:53**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 18:53**
File ID: **10M48046**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	122	80	120	*
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	105	86	115	
Toluene-d8	104	88	110	

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046321

Sample Number: L0608240-06
 Client ID: 35BWW03-DUP
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/09/2006 14:00
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 19:24
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 19:24
 File ID: 10M48047

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	9.77	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

11 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046322

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 19:24**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 19:24**
File ID: **10M48047**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	122	80	120	*
Dibromofluoromethane	110	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	106	88	110	

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: L0608240

Report Date : August 22, 2006

00046323

Sample Number: L0608240-07
 Client ID: 67WW03
 Matrix: Water
 Workgroup Number: WG219789
 Collect Date: 08/09/2006 10:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/12/2006 19:54
 Cal Date: 07/15/2006 16:37
 Run Date: 08/12/2006 19:54
 File ID: 10M48048

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

13 of 14

Report Number: **L0608240**Report Date : **August 22, 2006**

00046324

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG219789**
Collect Date: **08/09/2006 10:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **MES**
Dilution: **1**
Units: **ug/L**

Instrument: **HPMS10**
Prep Date: **08/12/2006 19:54**
Cal Date: **07/15/2006 16:37**
Run Date: **08/12/2006 19:54**
File ID: **10M48048**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	121	80	120	*
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	105	86	115	
Toluene-d8	104	88	110	

* Surrogate or spike compound out of range

U Not detected at or above adjusted sample detection limit

METHOD BLANK SUMMARY

00046325

Login Number: L0608240	Work Group: WG219789
Blank File ID: 10M48033	Blank Sample ID: WG219789-01
Date Analyzed: 08/12/06	Instrument ID: HPMS10
Time Analyzed: 12:15	Method: 8260B
Analyst: MES	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219789-02	10M48034	08/12/06 12:46	01
LCS2	WG219789-03	10M48035	08/12/06 13:17	01
FBLK	WG219789-04	10M48036	08/12/06 13:47	01
TRIP BLANK	L0608240-01	10M48038	08/12/06 14:49	01
67WW06	L0608240-02	10M48043	08/12/06 17:21	01
67WW07	L0608240-03	10M48044	08/12/06 17:52	01
LHSMW58	L0608240-04	10M48045	08/12/06 18:22	01
35BWW03	L0608240-05	10M48046	08/12/06 18:53	01
35BWW03-DUP	L0608240-06	10M48047	08/12/06 19:24	01
67WW03	L0608240-07	10M48048	08/12/06 19:54	01

METHOD BLANK REPORT

00046326

Login Number: L0608240 Run Date: 08/12/2006 Sample ID: WG219789-01
 Instrument ID: HPMS10 Run Time: 12:15 Prep Method: 5030B
 File ID: 10M48033 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219789 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.223	1	J
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 542697
 Report generated 08/16/2006 12:52

METHOD BLANK REPORT

00046327

Login Number: L0608240 Run Date: 08/12/2006 Sample ID: WG219789-01
 Instrument ID: HPMS10 Run Time: 12:15 Prep Method: 5030B
 File ID: 10M48033 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219789 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	109	80 - 120	PASS
Dibromofluoromethane	103	86 - 118	PASS
p-Bromofluorobenzene	103	86 - 115	PASS
Toluene-d8	105	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046328

Login Number: L0608240 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219789 Units: ug/L
 Sample ID: WG219789-02 LCS File ID: 10M48034 Run Date: 08/12/2006 12:46
 Sample ID: WG219789-03 LCS2 File ID: 10M48035 Run Date: 08/12/2006 13:17

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	23.1	116	20.0	23.7	119	2.62	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	20.6	103	20.0	21.2	106	2.62	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	23.2	116	20.0	23.4	117	1.14	80 - 130	20	
1,1,2-Trichloroethane	20.0	21.1	105	20.0	22.1	110	4.67	80 - 125	20	
1,1-Dichloroethane	20.0	21.8	109	20.0	22.8	114	4.45	80 - 125	20	
1,1-Dichloroethene	20.0	20.5	102	20.0	21.2	106	3.55	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	19.1	95.6	20.0	19.4	97.2	1.59	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	20.6	103	20.0	19.9	99.6	3.49	50 - 130	20	
1,2-Dibromoethane	20.0	22.2	111	20.0	22.5	113	1.13	80 - 125	20	
1,2-Dichlorobenzene	20.0	20.0	100	20.0	20.5	102	2.26	80 - 125	20	
1,2-Dichloroethane	20.0	24.2	121	20.0	25.0	125	3.21	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.5	102	20.0	21.1	106	3.14	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.9	99.4	20.0	20.7	104	4.28	80 - 127	20	
1,2-Dichloropropane	20.0	21.8	109	20.0	22.4	112	2.88	80 - 120	20	
1,3-Dichlorobenzene	20.0	19.9	99.3	20.0	20.6	103	3.48	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.7	98.7	20.0	20.7	103	4.50	80 - 120	20	
2-Butanone	20.0	23.2	116	20.0	23.0	115	0.958	30 - 150	20	
2-Hexanone	20.0	21.5	107	20.0	21.8	109	1.50	55 - 130	20	
4-Methyl-2-pentanone	20.0	21.9	110	20.0	22.5	112	2.56	64 - 140	20	
Acetone	20.0	24.0	120	20.0	23.0	115	4.35	40 - 142	20	
Benzene	20.0	20.0	99.8	20.0	20.6	103	3.05	80 - 121	20	
Bromodichloromethane	20.0	24.8	124	20.0	25.7	128	3.62	80 - 131	20	
Bromoform	20.0	24.2	121	20.0	24.5	123	1.29	70 - 130	20	
Bromomethane	20.0	24.9	125	20.0	26.1	130	4.49	30 - 145	20	
Carbon disulfide	20.0	19.7	98.7	20.0	20.4	102	3.20	58 - 138	20	
Carbon tetrachloride	20.0	21.7	108	20.0	22.8	114	4.80	65 - 140	20	
Chlorobenzene	20.0	20.3	101	20.0	21.3	106	4.85	80 - 120	20	
Chloroethane	20.0	20.6	103	20.0	21.4	107	3.88	60 - 135	20	
Chloroform	20.0	21.9	110	20.0	23.1	115	5.24	80 - 125	20	
Chloromethane	20.0	24.3	121	20.0	25.3	127	4.31	40 - 125	20	*
cis-1,3-Dichloropropene	20.0	21.6	108	20.0	22.0	110	1.45	70 - 130	20	
Cyclohexane	20.0	20.0	100	20.0	20.3	101	1.18	80 - 130	20	
Dibromochloromethane	20.0	22.7	114	20.0	23.4	117	2.90	60 - 135	20	
Dichlorodifluoromethane	20.0	17.0	85.2	20.0	17.3	86.7	1.74	50 - 133	20	
Ethyl benzene	20.0	20.8	104	20.0	21.8	109	4.71	80 - 122	20	
Isopropylbenzene	20.0	19.3	96.5	20.0	20.3	102	5.33	80 - 122	20	
Methyl acetate	20.0	26.5	132	20.0	26.3	132	0.575	80 - 130	20	*
Methyl tert-butyl ether	20.0	22.1	110	20.0	21.9	109	0.851	65 - 125	20	
Methylcyclohexane	20.0	19.1	95.5	20.0	19.3	96.5	1.05	80 - 130	20	
Methylene chloride	20.0	19.3	96.3	20.0	19.9	99.6	3.39	80 - 123	20	
Styrene	20.0	19.9	99.3	20.0	20.9	104	4.87	80 - 123	20	
Tetrachloroethene	20.0	20.9	104	20.0	22.1	110	5.57	80 - 124	20	

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 Version 1.5 PDF File ID: 541686
 Report generated 08/16/2006 12:52

LABORATORY CONTROL SAMPLE (LCS)

00046329

Login Number: L0608240 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219789 Units: ug/L
 Sample ID: WG219789-02 LCS File ID: 10M48034 Run Date: 08/12/2006 12:46
 Sample ID: WG219789-03 LCS2 File ID: 10M48035 Run Date: 08/12/2006 13:17

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	19.7	98.6	20.0	20.8	104	5.40	80 - 124	20	
trans-1,3-Dichloropropene	20.0	21.5	107	20.0	21.8	109	1.50	80 - 130	20	
Trichloroethene	20.0	20.6	103	20.0	21.8	109	5.54	80 - 122	20	
Trichlorofluoromethane	20.0	20.3	102	20.0	20.6	103	1.53	62 - 151	20	
Vinyl chloride	20.0	24.1	120	20.0	23.5	118	2.34	65 - 140	20	
Xylenes, Total	60.0	61.5	102	60.0	64.4	107	4.73	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	108	108	86 - 118	PASS
1,2-Dichloroethane-d4	114	113	80 - 120	PASS
Toluene-d8	104	105	88 - 110	PASS
p-Bromofluorobenzene	102	103	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

SURROGATE STANDARDS

00046330

Login Number: L0608240
 Instrument Id: HPMS10
 Workgroup (AAB#): WG219789

Method: 8260
 CAL ID: HPMS10 - 15-JUL-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608240-01	1.00	01	114	107	106	107
L0608240-02	1.00	01	116	105	104	107
L0608240-03	1.00	01	119	109	107	107
L0608240-04	1.00	01	<u>121</u>	110	107	107
L0608240-05	1.00	01	<u>122</u>	109	105	104
L0608240-06	1.00	01	<u>122</u>	110	107	106
L0608240-07	1.00	01	<u>121</u>	109	105	104
WG219789-01	1.00	01	109	103	103	105
WG219789-02	1.00	01	114	108	102	104
WG219789-03	1.00	01	113	108	103	105
WG219789-04	1.00	01	117	107	105	106

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046331

Login Number: L0608240
Instrument ID: HPMS10
Workgroup (AAB#): WG219789

CCV Number: WG219788-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219788-02	NA	NA	271533	537362	747905
Upper Limit	NA	NA	543066	1074724	1495810
Lower Limit	NA	NA	135767	268681	373953
<u>L0608240-01</u>	<u>1.00</u>	<u>01</u>	<u>217130</u>	<u>444482</u>	<u>621148</u>
L0608240-02	1.00	01	208404	424116	596689
L0608240-03	1.00	01	204335	412628	573251
L0608240-04	1.00	01	199163	410167	571625
L0608240-05	1.00	01	204223	413345	566354
L0608240-06	1.00	01	197630	403948	557103
L0608240-07	1.00	01	199693	411118	567282
WG219789-01	1.00	01	248943	495264	695197
WG219789-02	1.00	01	247139	479217	657437
WG219789-03	1.00	01	244717	473690	659638

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046332

Login Number: L0608240
Instrument ID: HPMS10
Workgroup (AAB#): WG219789

CCV Number: WG219788-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219788-02	NA	NA	15.52	12.55	8.71
Upper Limit	NA	NA	16.02	13.05	9.21
Lower Limit	NA	NA	15.02	12.05	8.21
L0608240-01	1.00	01	15.52	12.55	8.71
L0608240-02	1.00	01	15.52	12.55	8.71
L0608240-03	1.00	01	15.52	12.55	8.71
L0608240-04	1.00	01	15.52	12.55	8.71
L0608240-05	1.00	01	15.52	12.55	8.71
L0608240-06	1.00	01	15.52	12.55	8.71
L0608240-07	1.00	01	15.52	12.55	8.71
WG219789-01	1.00	01	15.52	12.55	8.71
WG219789-02	1.00	01	15.52	12.55	8.71
WG219789-03	1.00	01	15.52	12.55	8.71

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

LABORATORY REPORT

L0608240

00046333

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta, OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
67WW06	L0608240-02	RSK175	1	10-AUG-06
67WW07	L0608240-03	RSK175	1	10-AUG-06
LHSMW58	L0608240-04	RSK175	1	10-AUG-06
35BWW03	L0608240-05	RSK175	1	10-AUG-06
35BWW03-DUP	L0608240-06	RSK175	1	10-AUG-06
67WW03	L0608240-07	RSK175	1	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046334

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG219875**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/14/2006 19:23**
Cal Date: **03/27/2006 14:30**
Run Date: **08/14/2006 19:23**
File ID: **1663701**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	340		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046335

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219875**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/14/2006 19:37**
Cal Date: **03/27/2006 14:30**
Run Date: **08/14/2006 19:37**
File ID: **1663702**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	3.18		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046336

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219977**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/15/2006 15:18**
Cal Date: **03/27/2006 14:30**
Run Date: **08/15/2006 15:18**
File ID: **1663716**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	1.19		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046337

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219977**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/15/2006 15:32**
Cal Date: **03/27/2006 14:30**
Run Date: **08/15/2006 15:32**
File ID: **1663717**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	117		0.500	0.250
ethene	74-85-1	1.90		0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046338

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219977**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/15/2006 15:46**
Cal Date: **03/27/2006 14:30**
Run Date: **08/15/2006 15:46**
File ID: **1663718**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	110		0.500	0.250
ethene	74-85-1	1.82		0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046339

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG219977**
Collect Date: **08/09/2006 10:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **5021**
Analytical Method: **RSK175**
Analyst: **JLS**
Dilution: **1**
Units: **ug/L**

Instrument: **HP16**
Prep Date: **08/15/2006 16:00**
Cal Date: **03/27/2006 14:30**
Run Date: **08/15/2006 16:00**
File ID: **1663719**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.561		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

METHOD BLANK SUMMARY

00046340

Login Number: L0608240
Blank File ID: 16G3678
Date Analyzed: 08/14/06
Time Analyzed: 13:39
Analyst: JLS

Work Group: WG219875
Blank Sample ID: WG219875-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219875-02	16G3679	08/14/06 13:53	01
LCS2	WG219875-03	16G3680	08/14/06 14:07	01
67WW06	L0608240-02	16G3701	08/14/06 19:23	01
67WW07	L0608240-03	16G3702	08/14/06 19:37	01

METHOD BLANK SUMMARY

00046341

Login Number: L0608240	Work Group: WG219977
Blank File ID: 16G3705	Blank Sample ID: WG219977-01
Date Analyzed: 08/15/06	Instrument ID: HP16
Time Analyzed: 12:36	Method: RSK175
Analyst: JLS	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219977-02	16G3706	08/15/06 12:50	01
LCS2	WG219977-03	16G3707	08/15/06 13:04	01
LHSMW58	L0608240-04	16G3716	08/15/06 15:18	01
35BWW03	L0608240-05	16G3717	08/15/06 15:32	01
35BWW03-DUP	L0608240-06	16G3718	08/15/06 15:46	01
67WW03	L0608240-07	16G3719	08/15/06 16:00	01

METHOD BLANK REPORT

00046342

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219875-01
Instrument ID: HP16 Run Time: 13:39 Prep Method: 5021
File ID: 16G3678 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219875 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.319	1	J
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046343

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG219977-01
Instrument ID: HP16 Run Time: 12:36 Prep Method: 5021
File ID: 16G3705 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.250	1	U
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046344

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219875-02
Instrument ID: HP16 Run Time: 13:53 Prep Method: 5021
File ID: 16G3679 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219875 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
methane	34.3	32.0	93.3	56 - 140	
ethene	59.9	53.8	89.8	56 - 140	
ethane	64.2	59.3	92.3	56 - 137	

LABORATORY CONTROL SAMPLE (LCS)

00046345

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG219977-02
Instrument ID: HP16 Run Time: 12:50 Prep Method: 5021
File ID: 16G3706 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
methane	34.3	31.6	92.2	56 - 140	
ethene	59.9	54.5	91.0	56 - 140	
ethane	64.2	59.5	92.8	56 - 137	

LABORATORY CONTROL SAMPLE (LCS)

00046346

Login Number: L0608240 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219875 Units: ug/L
 Sample ID: WG219875-02 LCS File ID: 16G3679 Run Date: 08/14/2006 13:53
 Sample ID: WG219875-03 LCS2 File ID: 16G3680 Run Date: 08/14/2006 14:07

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	32.0	93.3	34.3	34.5	101	7.75	56 - 140	40	
ethene	59.9	53.8	89.8	59.9	60.1	100	11.0	56 - 140	40	
ethane	64.2	59.3	92.3	64.2	64.6	101	8.56	56 - 137	40	

LABORATORY CONTROL SAMPLE (LCS)

00046347

Login Number: L0608240 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219977 Units: ug/L
 Sample ID: WG219977-02 LCS File ID: 16G3706 Run Date: 08/15/2006 12:50
 Sample ID: WG219977-03 LCS2 File ID: 16G3707 Run Date: 08/15/2006 13:04

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	31.6	92.2	34.3	34.3	100	8.16	56 - 140	40	
ethene	59.9	54.5	91.0	59.9	60.3	101	10.1	56 - 140	40	
ethane	64.2	59.5	92.8	64.2	64.2	100	7.60	56 - 137	40	

LABORATORY REPORT

L0608240

00046348

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta, OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I. Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW62	L0608240-08	6010B	1	10-AUG-06
LHSMW62	L0608240-08	6010B	20	10-AUG-06
LHSMW62	L0608240-09	6010B	1	10-AUG-06
LHSMW62	L0608240-09	6010B	50	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046349

Sample Number: **L0608240-08**
 Client ID: **LHSMW62**
 Matrix: **Water**
 Workgroup Number: **WG219865**
 Collect Date: **08/09/2006 10:00**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/11/2006 07:35**
 Cal Date: **08/16/2006 10:23**
 Run Date: **08/16/2006 16:16**
 File ID: **P2.081606.161606**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2		U	0.0100	0.00500
Barium, Total	7440-39-3	0.0292		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000522	J	0.0100	0.000500
Calcium, Total	7440-70-2	59.7		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0374		0.0200	0.00250
Chromium, Total	7440-47-3	0.167		0.0200	0.00250
Copper, Total	7440-50-8	0.00558	J	0.0200	0.00500
Iron, Total	7439-89-6	3.09		0.100	0.0250
Potassium, Total	7440-09-7		U	1.00	0.250
Magnesium, Total	7439-95-4	35.5		0.500	0.250
Manganese, Total	7439-96-5	0.822		0.0100	0.00500
Nickel, Total	7440-02-0	0.708		0.0400	0.00500
Lead, Total	7439-92-1		U	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0148		0.0100	0.00500
Zinc, Total	7440-66-6	0.0441		0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046350

Sample Number: **L0608240-08**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG219865**
Collect Date: **08/09/2006 10:00**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **20**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **08/11/2006 07:35**
Cal Date: **08/16/2006 10:23**
Run Date: **08/16/2006 18:45**
File ID: **P2.081606.184503**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Total	7440-23-5	399		10.0	5.00

Report Number: **L0608240**Report Date : **August 22, 2006**

00046351

Sample Number: **L0608240-09**
 Client ID: **LHSMW62**
 Matrix: **Water**
 Workgroup Number: **WG219995**
 Collect Date: **08/09/2006 10:00**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/14/2006 07:15**
 Cal Date: **08/15/2006 11:20**
 Run Date: **08/15/2006 15:45**
 File ID: **P2.081506.154509**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2		U	0.0100	0.00200
Barium, Dissolved	7440-39-3	0.0231		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000500
Calcium, Dissolved	7440-70-2	60.4		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.0323		0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.0419		0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	1.92		0.100	0.0250
Potassium, Dissolved	7440-09-7		U	1.00	0.250
Magnesium, Dissolved	7439-95-4	35.5		0.500	0.250
Manganese, Dissolved	7439-96-5	0.697		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.652		0.0400	0.00500
Lead, Dissolved	7439-92-1		U	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.00818	J	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.00854	J	0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046352

Sample Number: **L0608240-09**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG220080**
Collect Date: **08/09/2006 10:00**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **50**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **08/16/2006 06:45**
Cal Date: **08/16/2006 10:23**
Run Date: **08/16/2006 14:28**
File ID: **P2.081606.142820**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Dissolved	7440-23-5	400		25.0	12.5

METHOD BLANK SUMMARY

00046353

Login Number: L0608240	Work Group: WG219865
Blank File ID: P2.081606.150747	Blank Sample ID: WG219712-04
Date Analyzed: 08/16/06	Instrument ID: PE-ICP2
Time Analyzed: 15:07	Method: 6010B
Analyst: KHR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219712-05	P2.081606.151400	08/16/06 15:14	01
DUP	WG219712-08	P2.081606.154056	08/16/06 15:40	01
LHSMW62	L0608240-08	P2.081606.161606	08/16/06 16:16	01
LHSMW62	L0608240-08	P2.081606.184503	08/16/06 18:45	DL01

METHOD BLANK SUMMARY

00046354

Login Number: L0608240
Blank File ID: P2.081506.152948
Date Analyzed: 08/15/06
Time Analyzed: 15:29
Analyst: KHR

Work Group: WG219995
Blank Sample ID: WG219843-02
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219843-03	P2.081506.153601	08/15/06 15:36	01
LHSMW62	L0608240-09	P2.081506.154509	08/15/06 15:45	01

METHOD BLANK SUMMARY

00046355

Login Number: L0608240
Blank File ID: P2.081606.131554
Date Analyzed: 08/16/06
Time Analyzed: 13:15
Analyst: KHR

Work Group: WG220080
Blank Sample ID: WG220030-03
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220030-04	P2.081606.132209	08/16/06 13:22	01
DUP	WG220030-05	P2.081606.135201	08/16/06 13:52	01
LHSMW62	L0608240-09	P2.081606.142820	08/16/06 14:28	DL01
DUP	WG220030-05	P2.081606.144047	08/16/06 14:40	DL01

METHOD BLANK REPORT

00046356

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG219843-02
 Instrument ID: PE-ICP2 Run Time: 15:29 Prep Method: 3005A
 File ID: P2.081506.152948 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG219995 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 15-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Aluminum, Dissolved	0.0500	0.100	0.0500	1	U
Silver, Dissolved	0.00500	0.0100	0.00500	1	U
Arsenic, Dissolved	0.00200	0.0100	0.00200	1	U
Barium, Dissolved	0.00250	0.0100	0.00250	1	U
Beryllium, Dissolved	0.000500	0.0100	0.000500	1	U
Calcium, Dissolved	0.100	0.200	0.100	1	U
Cadmium, Dissolved	0.00250	0.0100	0.00250	1	U
Cobalt, Dissolved	0.00250	0.0200	0.00250	1	U
Chromium, Dissolved	0.00250	0.0200	0.00250	1	U
Copper, Dissolved	0.00500	0.0200	0.00500	1	U
Iron, Dissolved	0.0250	0.100	0.0250	1	U
Potassium, Dissolved	0.250	1.00	0.250	1	U
Magnesium, Dissolved	0.250	0.500	0.250	1	U
Manganese, Dissolved	0.00500	0.0100	0.00500	1	U
Nickel, Dissolved	0.00500	0.0400	0.00500	1	U
Lead, Dissolved	0.00250	0.00500	0.00250	1	U
Vanadium, Dissolved	0.00500	0.0100	0.00500	1	U
Zinc, Dissolved	0.00500	0.0200	0.00500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046357

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220030-03
Instrument ID: PE-ICP2 Run Time: 13:15 Prep Method: 3005A
File ID: P2.081606.131554 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG220080 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Sodium, Dissolved	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046358

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG219712-04
 Instrument ID: PE-ICP2 Run Time: 15:07 Prep Method: 3005A
 File ID: P2.081606.150747 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG219865 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Arsenic, Total	0.00500	0.0100	0.00500	1	U
Barium, Total	0.00250	0.0100	0.00316	1	J
Beryllium, Total	0.000500	0.0100	0.000500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Cadmium, Total	0.00250	0.0100	0.00250	1	U
Cobalt, Total	0.00250	0.0200	0.00250	1	U
Chromium, Total	0.00250	0.0200	0.00250	1	U
Copper, Total	0.00500	0.0200	0.00500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Potassium, Total	0.250	1.00	0.250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Nickel, Total	0.00500	0.0400	0.00500	1	U
Lead, Total	0.00250	0.00500	0.00250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.00500	0.0200	0.00500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046359

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG219843-03
 Instrument ID: PE-ICP2 Run Time: 15:36 Prep Method: 3005A
 File ID: P2.081506.153601 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG219995 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 15-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Dissolved	5.00	5.00	100	85 - 115	
Silver, Dissolved	0.200	0.206	103	85 - 115	
Arsenic, Dissolved	0.200	0.201	100	85 - 115	
Barium, Dissolved	0.500	0.516	103	85 - 115	
Beryllium, Dissolved	0.0250	0.0253	101	85 - 115	
Calcium, Dissolved	5.00	5.34	107	85 - 115	
Cadmium, Dissolved	0.0250	0.0249	99.6	85 - 115	
Cobalt, Dissolved	0.100	0.103	103	85 - 115	
Chromium, Dissolved	0.250	0.259	104	85 - 115	
Copper, Dissolved	0.250	0.257	103	85 - 115	
Iron, Dissolved	2.00	2.01	100	85 - 115	
Potassium, Dissolved	25.0	24.5	97.9	85 - 115	
Magnesium, Dissolved	5.00	4.99	99.8	85 - 115	
Manganese, Dissolved	0.250	0.260	104	85 - 115	
Nickel, Dissolved	0.250	0.258	103	85 - 115	
Lead, Dissolved	0.250	0.257	103	85 - 115	
Vanadium, Dissolved	0.500	0.512	102	85 - 115	
Zinc, Dissolved	0.500	0.509	102	85 - 115	

LABORATORY CONTROL SAMPLE (LCS)

00046360

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220030-04
Instrument ID: PE-ICP2 Run Time: 13:22 Prep Method: 3005A
File ID: P2.081606.132209 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG220080 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Sodium, Dissolved	25.0	25.3	101	85 - 115	

LABORATORY CONTROL SAMPLE (LCS)

00046361

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG219712-05
 Instrument ID: PE-ICP2 Run Time: 15:14 Prep Method: 3005A
 File ID: P2.081606.151400 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG219865 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits			Q
Aluminum, Total	5.00	5.01	100	85	-	115	
Silver, Total	0.200	0.208	104	85	-	115	
Arsenic, Total	0.200	0.207	104	85	-	115	
Barium, Total	0.500	0.519	104	85	-	115	
Beryllium, Total	0.0250	0.0258	103	85	-	115	
Calcium, Total	5.00	5.26	105	85	-	115	
Cadmium, Total	0.0250	0.0256	102	85	-	115	
Cobalt, Total	0.100	0.105	105	85	-	115	
Chromium, Total	0.250	0.259	104	85	-	115	
Copper, Total	0.250	0.257	103	85	-	115	
Iron, Total	2.00	2.03	101	85	-	115	
Potassium, Total	25.0	25.4	102	85	-	115	
Magnesium, Total	5.00	5.05	101	85	-	115	
Manganese, Total	0.250	0.267	107	85	-	115	
Sodium, Total	25.0	25.6	102	85	-	115	
Nickel, Total	0.250	0.263	105	85	-	115	
Lead, Total	0.250	0.266	106	85	-	115	
Vanadium, Total	0.500	0.513	103	85	-	115	
Zinc, Total	0.500	0.524	105	85	-	115	

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046362

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-07
Instrument ID: PE-ICP2 Run Time: 10:34 Method: 6010B
File ID: P2.081606.103415 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-.00361	1	U
Silver	0.00500	0.0100	.00147	1	U
Arsenic	0.00500	0.0100	.00151	1	U
Barium	0.00250	0.0100	.00263	1	F
Beryllium	0.000500	0.0100	.000133	1	U
Calcium	0.100	0.200	-.0228	1	U
Cadmium	0.00250	0.0100	.0000788	1	U
Cobalt	0.00250	0.0200	-.000216	1	U
Chromium	0.00250	0.0200	.00168	1	U
Copper	0.00500	0.0200	.00282	1	U
Iron	0.0250	0.100	-.00512	1	U
Potassium	0.250	1.00	.0478	1	U
Magnesium	0.250	0.500	-.0276	1	U
Manganese	0.00500	0.0100	-.00000579	1	U
Sodium	0.250	0.500	.00122	1	U
Nickel	0.00500	0.0400	.000567	1	U
Lead	0.00250	0.00500	-.000866	1	U
Vanadium	0.00500	0.0100	.00463	1	U
Zinc	0.00500	0.0200	.00225	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046363

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220031-07
Instrument ID: PE-ICP2 Run Time: 11:31 Method: 6010B
File ID: P2.081506.113135 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG219995 Cal ID: PE-ICP - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-.0483	1	U
Silver	0.00500	0.0100	-.000116	1	U
Arsenic	0.00200	0.0100	-.00231	1	F
Barium	0.00250	0.0100	-.00133	1	U
Beryllium	0.000500	0.0100	-.0000422	1	U
Calcium	0.100	0.200	-.0423	1	U
Cadmium	0.00250	0.0100	-.000331	1	U
Cobalt	0.00250	0.0200	-.000545	1	U
Chromium	0.00250	0.0200	-.000714	1	U
Copper	0.00500	0.0200	.000569	1	U
Iron	0.0250	0.100	-.0149	1	U
Potassium	0.250	1.00	.00602	1	U
Magnesium	0.250	0.500	-.0444	1	U
Manganese	0.00500	0.0100	-.00275	1	U
Nickel	0.00500	0.0400	-.0012	1	U
Lead	0.00250	0.00500	-.00318	1	F
Vanadium	0.00500	0.0100	-.000783	1	U
Zinc	0.00500	0.0200	-.00184	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046364

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-07
Instrument ID: PE-ICP2 Run Time: 10:34 Method: 6010B
File ID: P2.081606.103415 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Sodium	0.250	0.500	.00122	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046365

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-11
 Instrument ID: PE-ICP2 Run Time: 10:56 Method: 6010B
 File ID: P2.081606.105645 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0118	1	U
Silver	0.00500	0.0100	0.00128	1	U
Arsenic	0.00500	0.0100	-0.00159	1	U
Barium	0.00250	0.0100	0.00259	1	F
Beryllium	0.000500	0.0100	0.000159	1	U
Calcium	0.100	0.200	0.0554	1	U
Cadmium	0.00250	0.0100	0.0000186	1	U
Cobalt	0.00250	0.0200	-0.000151	1	U
Chromium	0.00250	0.0200	0.00156	1	U
Copper	0.00500	0.0200	0.00272	1	U
Iron	0.0250	0.100	-0.00438	1	U
Potassium	0.250	1.00	0.0448	1	U
Magnesium	0.250	0.500	-0.0220	1	U
Manganese	0.00500	0.0100	-0.0000155	1	U
Sodium	0.250	0.500	-0.0000526	1	U
Nickel	0.00500	0.0400	0.000474	1	U
Lead	0.00250	0.00500	0.000460	1	U
Vanadium	0.00500	0.0100	0.00378	1	U
Zinc	0.00500	0.0200	0.00244	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046366

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-17
 Instrument ID: PE-ICP2 Run Time: 14:58 Method: 6010B
 File ID: P2.081606.145852 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0124	1	U
Silver	0.00500	0.0100	0.00163	1	U
Arsenic	0.00500	0.0100	0.00222	1	U
Barium	0.00250	0.0100	0.00255	1	F
Beryllium	0.000500	0.0100	0.000178	1	U
Calcium	0.100	0.200	0.0272	1	U
Cadmium	0.00250	0.0100	0.0000186	1	U
Cobalt	0.00250	0.0200	-0.000209	1	U
Chromium	0.00250	0.0200	0.00155	1	U
Copper	0.00500	0.0200	0.00263	1	U
Iron	0.0250	0.100	-0.00873	1	U
Potassium	0.250	1.00	0.0284	1	U
Magnesium	0.250	0.500	-0.0243	1	U
Manganese	0.00500	0.0100	-0.000123	1	U
Sodium	0.250	0.500	0.0225	1	U
Nickel	0.00500	0.0400	0.000966	1	U
Lead	0.00250	0.00500	0.00000285	1	U
Vanadium	0.00500	0.0100	0.00295	1	U
Zinc	0.00500	0.0200	0.00245	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046367

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-19
 Instrument ID: PE-ICP2 Run Time: 16:09 Method: 6010B
 File ID: P2.081606.160949 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0112	1	U
Silver	0.00500	0.0100	0.000818	1	U
Arsenic	0.00500	0.0100	-0.00216	1	U
Barium	0.00250	0.0100	0.00255	1	F
Beryllium	0.000500	0.0100	0.000145	1	U
Calcium	0.100	0.200	0.0626	1	U
Cadmium	0.00250	0.0100	0.0000328	1	U
Cobalt	0.00250	0.0200	-0.000249	1	U
Chromium	0.00250	0.0200	0.00156	1	U
Copper	0.00500	0.0200	0.00345	1	U
Iron	0.0250	0.100	-0.00871	1	U
Potassium	0.250	1.00	0.0283	1	U
Magnesium	0.250	0.500	-0.0231	1	U
Manganese	0.00500	0.0100	-0.000175	1	U
Sodium	0.250	0.500	0.0104	1	U
Nickel	0.00500	0.0400	0.00106	1	U
Lead	0.00250	0.00500	-0.000386	1	U
Vanadium	0.00500	0.0100	0.00329	1	U
Zinc	0.00500	0.0200	0.00206	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046368

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-21
 Instrument ID: PE-ICP2 Run Time: 17:12 Method: 6010B
 File ID: P2.081606.171203 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0118	1	U
Silver	0.00500	0.0100	0.00202	1	U
Arsenic	0.00500	0.0100	0.0000972	1	U
Barium	0.00250	0.0100	0.00250	1	F
Beryllium	0.000500	0.0100	0.000167	1	U
Calcium	0.100	0.200	0.0612	1	U
Cadmium	0.00250	0.0100	-0.0000299	1	U
Cobalt	0.00250	0.0200	-0.000284	1	U
Chromium	0.00250	0.0200	0.00181	1	U
Copper	0.00500	0.0200	0.00195	1	U
Iron	0.0250	0.100	-0.00597	1	U
Potassium	0.250	1.00	0.0592	1	U
Magnesium	0.250	0.500	-0.0224	1	U
Manganese	0.00500	0.0100	-0.0000586	1	U
Sodium	0.250	0.500	0.491	1	F
Nickel	0.00500	0.0400	0.00120	1	U
Lead	0.00250	0.00500	0.000832	1	U
Vanadium	0.00500	0.0100	0.00341	1	U
Zinc	0.00500	0.0200	0.00225	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046369

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-23
 Instrument ID: PE-ICP2 Run Time: 18:26 Method: 6010B
 File ID: P2.081606.182612 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00757	1	U
Silver	0.00500	0.0100	0.00165	1	U
Arsenic	0.00500	0.0100	-0.00142	1	U
Barium	0.00250	0.0100	0.00254	1	F
Beryllium	0.000500	0.0100	0.000170	1	U
Calcium	0.100	0.200	0.0778	1	U
Cadmium	0.00250	0.0100	0.0000438	1	U
Cobalt	0.00250	0.0200	-0.000374	1	U
Chromium	0.00250	0.0200	0.00154	1	U
Copper	0.00500	0.0200	0.00206	1	U
Iron	0.0250	0.100	-0.00738	1	U
Potassium	0.250	1.00	0.0376	1	U
Magnesium	0.250	0.500	-0.0239	1	U
Manganese	0.00500	0.0100	-0.000160	1	U
Sodium	0.250	0.500	0.124	1	U
Nickel	0.00500	0.0400	0.00102	1	U
Lead	0.00250	0.00500	-0.000207	1	U
Vanadium	0.00500	0.0100	0.00389	1	U
Zinc	0.00500	0.0200	0.00234	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046370

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-25
 Instrument ID: PE-ICP2 Run Time: 18:56 Method: 6010B
 File ID: P2.081606.185649 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00801	1	U
Silver	0.00500	0.0100	0.00140	1	U
Arsenic	0.00500	0.0100	0.00155	1	U
Barium	0.00250	0.0100	0.00258	1	F
Beryllium	0.000500	0.0100	0.000196	1	U
Calcium	0.100	0.200	0.0538	1	U
Cadmium	0.00250	0.0100	-0.0000417	1	U
Cobalt	0.00250	0.0200	-0.000140	1	U
Chromium	0.00250	0.0200	0.00160	1	U
Copper	0.00500	0.0200	0.00230	1	U
Iron	0.0250	0.100	-0.00781	1	U
Potassium	0.250	1.00	0.0245	1	U
Magnesium	0.250	0.500	-0.0224	1	U
Manganese	0.00500	0.0100	-0.000171	1	U
Sodium	0.250	0.500	0.0827	1	U
Nickel	0.00500	0.0400	0.000980	1	U
Lead	0.00250	0.00500	-0.00147	1	U
Vanadium	0.00500	0.0100	0.00277	1	U
Zinc	0.00500	0.0200	0.00200	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046371

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220031-11
 Instrument ID: PE-ICP2 Run Time: 11:54 Method: 6010B
 File ID: P2.081506.115407 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219995 Cal ID: PE-ICP - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0457	1	U
Silver	0.00500	0.0100	0.000368	1	U
Arsenic	0.00200	0.0100	-0.00129	1	U
Barium	0.00250	0.0100	-0.00136	1	U
Beryllium	0.000500	0.0100	-0.0000408	1	U
Calcium	0.100	0.200	-0.0473	1	U
Cadmium	0.00250	0.0100	-0.000430	1	U
Cobalt	0.00250	0.0200	-0.000378	1	U
Chromium	0.00250	0.0200	-0.000497	1	U
Copper	0.00500	0.0200	0.000350	1	U
Iron	0.0250	0.100	-0.0151	1	U
Potassium	0.250	1.00	0.0152	1	U
Magnesium	0.250	0.500	-0.0369	1	U
Manganese	0.00500	0.0100	-0.00287	1	U
Nickel	0.00500	0.0400	-0.00108	1	U
Lead	0.00250	0.00500	-0.00348	1	F
Vanadium	0.00500	0.0100	-0.00136	1	U
Zinc	0.00500	0.0200	-0.00170	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046372

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220031-17
 Instrument ID: PE-ICP2 Run Time: 15:23 Method: 6010B
 File ID: P2.081506.152323 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219995 Cal ID: PE-ICP - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0561	1	F
Silver	0.00500	0.0100	-0.000335	1	U
Arsenic	0.00200	0.0100	0.000712	1	U
Barium	0.00250	0.0100	-0.00130	1	U
Beryllium	0.000500	0.0100	-0.0000234	1	U
Calcium	0.100	0.200	-0.00405	1	U
Cadmium	0.00250	0.0100	-0.000397	1	U
Cobalt	0.00250	0.0200	-0.000465	1	U
Chromium	0.00250	0.0200	-0.000659	1	U
Copper	0.00500	0.0200	0.000194	1	U
Iron	0.0250	0.100	-0.0158	1	U
Potassium	0.250	1.00	0.00777	1	U
Magnesium	0.250	0.500	-0.0411	1	U
Manganese	0.00500	0.0100	-0.00268	1	U
Nickel	0.00500	0.0400	-0.00133	1	U
Lead	0.00250	0.00500	-0.00422	1	F
Vanadium	0.00500	0.0100	-0.000761	1	U
Zinc	0.00500	0.0200	-0.000463	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046373

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220031-19
 Instrument ID: PE-ICP2 Run Time: 16:30 Method: 6010B
 File ID: P2.081506.163016 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219995 Cal ID: PE-ICP - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0544	1	F
Silver	0.00500	0.0100	-0.000122	1	U
Arsenic	0.00200	0.0100	-0.00171	1	U
Barium	0.00250	0.0100	-0.00133	1	U
Beryllium	0.000500	0.0100	-0.0000422	1	U
Calcium	0.100	0.200	-0.0388	1	U
Cadmium	0.00250	0.0100	-0.000279	1	U
Cobalt	0.00250	0.0200	-0.000641	1	U
Chromium	0.00250	0.0200	-0.000708	1	U
Copper	0.00500	0.0200	0.000837	1	U
Iron	0.0250	0.100	-0.0147	1	U
Potassium	0.250	1.00	-0.0101	1	U
Magnesium	0.250	0.500	-0.0430	1	U
Manganese	0.00500	0.0100	-0.00264	1	U
Nickel	0.00500	0.0400	-0.00110	1	U
Lead	0.00250	0.00500	-0.00404	1	F
Vanadium	0.00500	0.0100	0.000423	1	U
Zinc	0.00500	0.0200	-0.000429	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046374

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-11
Instrument ID: PE-ICP2 Run Time: 10:56 Method: 6010B
File ID: P2.081606.105645 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Sodium	0.250	0.500	-0.0000526	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046375

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-13
Instrument ID: PE-ICP2 Run Time: 12:13 Method: 6010B
File ID: P2.081606.121319 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Sodium	0.250	0.500	0.0719	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046376

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-15
Instrument ID: PE-ICP2 Run Time: 14:22 Method: 6010B
File ID: P2.081606.142224 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Sodium	0.250	0.500	0.0962	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046377

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-17
Instrument ID: PE-ICP2 Run Time: 14:58 Method: 6010B
File ID: P2.081606.145852 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Sodium	0.250	0.500	0.0225	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046378

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-06
 Instrument ID: PE-ICP2 Run Time: 10:28 Method: 6010B
 File ID: P2.081606.102851 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219865 Cal ID: PE-ICP - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.96	99.6	90 - 110	
Silver		.4	0.407	102	90 - 110	
Arsenic		.4	0.395	98.7	90 - 110	
Barium		1	1.02	102	90 - 110	
Beryllium		.05	0.0499	99.7	90 - 110	
Calcium		10	10.4	104	90 - 110	
Cadmium		.05	0.0499	99.7	90 - 110	
Cobalt		.2	0.198	98.8	90 - 110	
Chromium		.5	0.507	101	90 - 110	
Copper		.5	0.503	101	90 - 110	
Iron		4	4.08	102	90 - 110	
Potassium		50	49.5	99.0	90 - 110	
Magnesium		10	10.1	101	90 - 110	
Manganese		.5	0.510	102	90 - 110	
Sodium		50	49.5	99.0	90 - 110	
Nickel		.5	0.508	102	90 - 110	
Lead		.5	0.515	103	90 - 110	
Vanadium		1	0.996	99.6	90 - 110	
Zinc		1	1.00	100	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046379

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220031-06
 Instrument ID: PE-ICP2 Run Time: 11:26 Method: 6010B
 File ID: P2.081506.112613 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG219995 Cal ID: PE-ICP - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.90	99.0	90 - 110	
Silver		.4	0.417	104	90 - 110	
Arsenic		.4	0.401	100	90 - 110	
Barium		1	1.04	104	90 - 110	
Beryllium		.05	0.0515	103	90 - 110	
Calcium		10	10.7	107	90 - 110	
Cadmium		.05	0.0513	103	90 - 110	
Cobalt		.2	0.203	102	90 - 110	
Chromium		.5	0.518	104	90 - 110	
Copper		.5	0.517	103	90 - 110	
Iron		4	4.02	100	90 - 110	
Potassium		50	48.4	96.8	90 - 110	
Magnesium		10	9.93	99.3	90 - 110	
Manganese		.5	0.512	102	90 - 110	
Nickel		.5	0.524	105	90 - 110	
Lead		.5	0.527	105	90 - 110	
Vanadium		1	1.02	102	90 - 110	
Zinc		1	1.02	102	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046380

Login Number: L0608240 Run Date: 08/16/2006 Sample ID: WG220083-06
Instrument ID: PE-ICP2 Run Time: 10:28 Method: 6010B
File ID: P2.081606.102851 Analvst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Sodium		50	49.5	99.0	90 - 110	

* Exceeds LIMITS Limit

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046381

Login number: L0608240
Instrument ID: PE-ICP2
Sol. A : WG220083-08
Sol. AB : WG220083-09

File ID: P2.081606.104040
File ID: P2.081606.104601

Workgroup (AAB#): WG219865
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	249	99.6	250	249	99.6	
Arsenic	NS	0.00546	NS	0.250	0.250	100	
Barium	NS	0.00416	NS	0.250	0.245	98.0	
Beryllium	NS	0.000450	NS	0.250	0.247	98.8	
Cadmium	NS	0.000100	NS	0.500	0.442	88.4	
Calcium	250	270	108	250	268	107	
Chromium	NS	0.00251	NS	0.250	0.245	98.0	
Cobalt	NS	-0.000300	NS	0.250	0.222	88.8	
Copper	NS	0.00587	NS	0.250	0.242	96.8	
Iron	100	96.2	96.2	100	96.2	96.2	
Lead	NS	0.00353	NS	0.500	0.477	95.4	
Magnesium	250	247	98.8	250	246	98.4	
Manganese	NS	-0.000290	NS	0.250	0.242	96.8	
Nickel	NS	0.00115	NS	0.500	0.455	91.0	
Potassium	NS	-0.0547	NS	5.00	4.89	97.8	
Silver	NS	0.00362	NS	0.500	0.461	92.2	
Sodium	NS	-0.00260	NS	5.00	4.98	99.6	
Vanadium	NS	-0.000460	NS	0.250	0.238	95.2	
Zinc	NS	0.000140	NS	0.500	0.452	90.4	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046382

Login number: L0608240
Instrument ID: PE-ICP2
Sol. A : WG220031-08
Sol. AB : WG220031-09

File ID: P2.081506.113800
File ID: P2.081506.114322

Workgroup (AAB#): WG219995
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	250	100	250	254	102	
Arsenic	NS	-0.000310	NS	0.250	0.247	98.8	
Barium	NS	0.000280	NS	0.250	0.251	100	
Beryllium	NS	0.000460	NS	0.250	0.260	104	
Cadmium	NS	-0.000470	NS	0.500	0.461	92.2	
Calcium	250	279	112	250	285	114	
Chromium	NS	-0.000120	NS	0.250	0.252	101	
Cobalt	NS	-0.000580	NS	0.250	0.231	92.4	
Copper	NS	0.00347	NS	0.250	0.254	102	
Iron	100	96.3	96.3	100	96.0	96.0	
Lead	NS	-0.00168	NS	0.500	0.491	98.2	
Magnesium	250	246	98.4	250	247	98.8	
Manganese	NS	-0.00284	NS	0.250	0.245	98.0	
Nickel	NS	-0.000840	NS	0.500	0.471	94.2	
Potassium	NS	-0.0833	NS	5.00	4.75	95.0	
Silver	NS	0.00252	NS	0.500	0.485	97.0	
Vanadium	NS	-0.00510	NS	0.250	0.245	98.0	
Zinc	NS	-0.00356	NS	0.500	0.464	92.8	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES

00046383

Login number: L0608240
Instrument ID: PE-ICP2
Sol. A : WG220083-08
Sol. AB : WG220083-09

File ID: P2.081606.104040
File ID: P2.081606.104601

Workgroup (AAB#): WG220080
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Sodium	NS	-0.00260	NS	5.00	4.98	99.6	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046384

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINIUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0.190	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	0
BORON	249.68	0	-0.570	0	0	0
CADMIUM	228.80	0	-0.000765	2.00	0	0
CALCIUM	317.93	0	0.152	0.0414	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0.00871	0	0	-1.09
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.126	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	-0.00705	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.0611	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0.504	0.0184	0.305	0	0.918
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046385

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	-0.200	0	0	0
ANTIMONY	206.84	0	0	0	0	17.1
ARSENIC	188.98	0	0.0379	9.40	0	-5.93
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	-0.0105
BORON	249.68	0	0.0238	42.3	3.51	1.50
CADMIUM	228.80	0	0	0	-6.00	0
CALCIUM	317.93	0	0	0	243	-16.6
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0.436
COPPER	327.39	0	-0.0234	0	0.380	0.107
IRON	239.56	0	-14.2	0	1.91	0.331
LEAD	220.35	0	0	0	0	0.183
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.638	0	0	0
MANGANESE	257.61	-1.04	-0.00379	-0.755	-0.0418	0.169
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0.948	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.0778	0	-0.382	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	3.39	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0233	0	0	0.297
VANADIUM	290.88	0	0.0110	0	0	-1.54
ZINC	206.20	0	0.0214	0	0	-3.99

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046386

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.185	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.430	0	0	0.0133
BARIUM	233.53	0	-0.00700	0	0	0
BERYLLIUM	313.11	0	0.182	0	0	0
BORON	249.68	0	-2.39	0	0	0
CADMIUM	228.80	0	-0.00172	0	0	0
CALCIUM	317.93	0	0.737	0	0	0.700
CHROMIUM	267.72	0	-0.0500	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	-0.0206	0	0	0
IRON	239.56	0	0	0	0	-0.168
LEAD	220.35	0.805	0.0435	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.174	0	0	0
MANGANESE	257.61	-0.0457	-0.0117	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	0.0866	0	11.9	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0.831	0	0	0
SELENIUM	196.03	0	-1.08	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0720	-0.198	0	0	0.00521
SODIUM	589.59	0	0.142	0	0	0.210
STRONTIUM	407.77	0	-16.4	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	-0.0284
VANADIUM	290.88	0	-0.0106	0	0	0.0631
ZINC	206.20	0.337	-0.0545	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046387

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	44.9	0	0	0
ANTIMONY	206.84	0	-1.68	0	-0.653	0
ARSENIC	188.98	0	-2.53	0	0	0
BARIUM	233.53	0	0.163	0	0	0
BERYLLIUM	313.11	-0.131	-0.618	0	-0.00974	0
BORON	249.68	0	-2.08	0	0	0
CADMIUM	228.80	0	0	0	-0.0881	0
CALCIUM	317.93	0	-15.0	0	-1000	0
CHROMIUM	267.72	0.247	0.143	0	0	0
COBALT	228.62	0	-1.60	0	0.129	0
COPPER	327.39	0	0.203	0	0.0857	0.235
IRON	239.56	-1.38	0	0	0	0
LEAD	220.35	0.232	-2.40	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.59	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0339	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.134	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.45	0	0
SELENIUM	196.03	0.416	0.199	0	0	0
SILICON	251.61	0	12.9	0	0	0
SILVER	328.07	0.130	-0.140	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.916	0	0	0
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046388

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	-4.70	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	317.93	0	0	2.79	0	0
CHROMIUM	267.72	0	-0.242	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.117	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.288	-0.262	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046389

Login Number: L0608240
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	-3.59	0
ARSENIC	188.98	0	0	0.622	0
BARIUM	233.53	0	0	-3.46	0
BERYLLIUM	313.11	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0100	0
CALCIUM	317.93	0	0	20.3	0
CHROMIUM	267.72	0	0	-0.459	-1.15
COBALT	228.62	2.07	0	0	0
COPPER	327.39	-0.693	0	-0.338	-0.316
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	-0.0280	0
MANGANESE	257.61	-0.227	-0.0414	-0.0601	-0.0553
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.286	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	0	0	0.381	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-6.14	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	0	0	0	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	0.110	0

LINEAR RANGE (QUARTERLY)

00046390

Login Number: L0608240
Instrument ID: PE-ICP2

Date: 06/08/2006
Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	500.0
Antimony	10.00	40.0
Arsenic	10.00	10.0
Barium	10.00	10.0
Beryllium	10.00	2.0
Boron	10.00	20.0
Cadmium	10.00	3.0
Calcium	10.00	500.0
Chromium	10.00	50.0
Cobalt	10.00	50.0
Copper	10.00	50.0
Iron	10.00	400.0
Lead	10.00	50.0
Lithium	10.00	2.0
Magnesium	10.00	500.0
Manganese	10.00	30.0
Molybdenum	10.00	50.0
Nickel	10.00	50.0
Potassium	10.00	100.0
Selenium	10.00	50.0
Silicon	10.00	10.0
Silver	10.00	10.0
Sodium	10.00	200.0
Strontium	10.00	3.0
Thallium	10.00	50.0
Tin	10.00	50.0
Titanium	10.00	10.0
Vanadium	10.00	50.0
Zinc	10.00	40.0

Comments:

LABORATORY REPORT

L0608240

00046391

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I. Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW62	L0608240-08	6020	1	10-AUG-06
LHSMW62	L0608240-09	6020	1	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046392

Sample Number: **L0608240-08**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG219751**
Collect Date: **08/09/2006 10:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **08/11/2006 08:00**
Cal Date: **08/11/2006 11:52**
Run Date: **08/11/2006 15:00**
File ID: **EL.081106.150058**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Total	7440-36-0	0.000350	J	0.00100	0.000250
Selenium, Total	7782-49-2	0.0124		0.00100	0.000500
Thallium, Total	7440-28-0	0.000684		0.000200	0.0000500

J The analyte was positively identified, but the quantitation was below the RL

Report Number: **L0608240**Report Date : **August 22, 2006**

00046393

Sample Number: **L0608240-09**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG219761**
Collect Date: **08/09/2006 10:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **08/11/2006 09:00**
Cal Date: **08/11/2006 11:52**
Run Date: **08/11/2006 15:31**
File ID: **EL.081106.153125**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Dissolved	7440-36-0	0.000352	J	0.00100	0.000250
Selenium, Dissolved	7782-49-2	0.0111		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000496		0.000200	0.0000500

J The analyte was positively identified, but the quantitation was below the RL

METHOD BLANK SUMMARY

00046394

Login Number: L0608240 _____ Work Group: WG219751 _____
Blank File ID: EL.081106.135922 _____ Blank Sample ID: WG219704-03 _____
Date Analyzed: 08/11/06 _____ Instrument ID: ELAN-ICP _____
Time Analyzed: 13:59 _____ Method: 6020 _____
Analyst: JYH _____

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219704-04	EL.081106.140538	08/11/06 14:05	01
LHSMW62	L0608240-08	EL.081106.150058	08/11/06 15:00	01

METHOD BLANK SUMMARY

00046395

Login Number: L0608240 _____ Work Group: WG219761 _____
Blank File ID: EL.081106.151912 _____ Blank Sample ID: WG219724-02 _____
Date Analyzed: 08/11/06 _____ Instrument ID: ELAN-ICP _____
Time Analyzed: 15:19 _____ Method: 6020 _____
Analyst: JYH _____

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219724-03	EL.081106.152519	08/11/06 15:25	01
LHSMW62	L0608240-09	EL.081106.153125	08/11/06 15:31	01

METHOD BLANK REPORT

00046396

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219704-03
Instrument ID: ELAN-ICP Run Time: 13:59 Prep Method: 3015
File ID: EL.081106.135922 Analyst: JYH Method: 6020
Workgroup (AAB#): WG219751 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 11-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Antimony, Total	0.000250	0.00100	0.000250	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.0000500	0.000200	0.0000500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046397

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219724-02
Instrument ID: ELAN-ICP Run Time: 15:19 Prep Method: 3015
File ID: EL.081106.151912 Analyst: JYH Method: 6020
Workgroup (AAB#): WG219761 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 11-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Antimony, Dissolved	0.000250	0.00100	0.000250	1	U
Selenium, Dissolved	0.000500	0.00100	0.000500	1	U
Thallium, Dissolved	0.0000500	0.000200	0.0000500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046398

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219704-04
Instrument ID: ELAN-ICP Run Time: 14:05 Prep Method: 3015
File ID: EL.081106.140538 Analyst: JYH Method: 6020
Workgroup (AAB#): WG219751 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 11-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0605	96.8	80 - 120	
Selenium, Total	0.0625	0.0589	94.2	80 - 120	
Thallium, Total	0.0625	0.0606	96.9	80 - 120	

LABORATORY CONTROL SAMPLE (LCS)

00046399

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219724-03
Instrument ID: ELAN-ICP Run Time: 15:25 Prep Method: 3015
File ID: EL.081106.152519 Analyst: JYH Method: 6020
Workgroup (AAB#): WG219761 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 11-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Dissolved	0.0625	0.0598	95.6	80 - 120	
Selenium, Dissolved	0.0625	0.0538	86.1	80 - 120	
Thallium, Dissolved	0.0625	0.0665	106	80 - 120	

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046400

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-06
Instrument ID: ELAN-ICP Run Time: 12:05 Method: 6020
File ID: EL.081106.120503 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	.189	1	F
Selenium	0.200	0.400	.119	1	U
Thallium	0.0200	0.0800	.0014	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046401

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-06
Instrument ID: ELAN-ICP Run Time: 12:05 Method: 6020
File ID: EL.081106.120503 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219761 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	.189	1	F
Selenium	0.200	0.400	.119	1	U
Thallium	0.0200	0.0800	.0014	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046402

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-12
Instrument ID: ELAN-ICP Run Time: 12:43 Method: 6020
File ID: EL.081106.124339 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.184	1	F
Selenium	0.200	0.400	0.00330	1	U
Thallium	0.0200	0.0800	-0.00100	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046403

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-14
Instrument ID: ELAN-ICP Run Time: 13:44 Method: 6020
File ID: EL 081106.134454 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.156	1	F
Selenium	0.200	0.400	-0.0193	1	U
Thallium	0.0200	0.0800	-0.00130	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046404

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-16
Instrument ID: ELAN-ICP Run Time: 14:54 Method: 6020
File ID: EL 081106.145435 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.157	1	F
Selenium	0.200	0.400	0.0132	1	U
Thallium	0.0200	0.0800	-0.00120	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046405

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-18
Instrument ID: ELAN-ICP Run Time: 16:08 Method: 6020
File ID: EL.081106.160844 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.156	1	F
Selenium	0.200	0.400	0.0914	1	U
Thallium	0.0200	0.0800	0.00960	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046406

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-12
Instrument ID: ELAN-ICP Run Time: 12:43 Method: 6020
File ID: EL 081106.124339 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219761 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.184	1	F
Selenium	0.200	0.400	0.00330	1	U
Thallium	0.0200	0.0800	-0.00100	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046407

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-16
Instrument ID: ELAN-ICP Run Time: 14:54 Method: 6020
File ID: EL.081106.145435 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219761 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.157	1	F
Selenium	0.200	0.400	0.0132	1	U
Thallium	0.0200	0.0800	-0.00120	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046408

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-18
Instrument ID: ELAN-ICP Run Time: 16:08 Method: 6020
File ID: EL.081106.160844 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG219761 Cal ID: ELAN-I - 11-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.156	1	F
Selenium	0.200	0.400	0.0914	1	U
Thallium	0.0200	0.0800	0.00960	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046409

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-05
Instrument ID: ELAN-ICP Run Time: 11:58 Method: 6020
File ID: EL_081106.115839 Analvst: JYH Units: ug/L
Workgroup (AAB#): WG219751 Cal ID: ELAN-I - 11-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.6	99.3	90 - 110	
Selenium		50	48.1	96.1	90 - 110	
Thallium		50	47.6	95.3	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046410

Login Number: L0608240 Run Date: 08/11/2006 Sample ID: WG219771-05
Instrument ID: ELAN-ICP Run Time: 11:58 Method: 6020
File ID: EL_081106.115839 Analvst: JYH Units: ug/L
Workgroup (AAB#): WG219761 Cal ID: ELAN-I - 11-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.6	99.3	90 - 110	
Selenium		50	48.1	96.1	90 - 110	
Thallium		50	47.6	95.3	90 - 110	

* Exceeds LIMITS Limit

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046411

Login number: L0608240
Instrument ID: ELAN-ICP
Sol. A : WG219771-09
Sol. AB : WG219771-10

File ID: EL_081106.122423
File ID: EL_081106.123049

Workgroup (AAB#): WG219751
Method: 6020
Units: ug/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0279	NS	100	106	106	
Selenium	NS	-0.0405	NS	100	101	101	
Thallium	NS	0.0102	NS	100	97.5	97.5	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046412

Login number: L0608240
Instrument ID: ELAN-ICP
Sol. A : WG219771-09
Sol. AB : WG219771-10

File ID: EL_081106.122423
File ID: EL_081106.123049

Workgroup (AAB#): WG219761
Method: 6020
Units: ug/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0279	NS	100	106	106	
Selenium	NS	-0.0405	NS	100	101	101	
Thallium	NS	0.0102	NS	100	97.5	97.5	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

LINEAR RANGE (QUARTERLY)

00046413

Login Number: L0608240 _____ **Date:** 06/09/2006 _____
Instrument ID: ELAN-ICP _____ **Method:** 6020 _____

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:

LABORATORY REPORT

L0608240

00046414

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I. Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW62	L0608240-08	7470A	1	10-AUG-06
LHSMW62	L0608240-09	7470A	1	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046415

Sample Number: **L0608240-08**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG219838**
Collect Date: **08/09/2006 10:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **PAS**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **08/11/2006 09:25**
Cal Date: **08/14/2006 10:04**
Run Date: **08/14/2006 10:16**
File ID: **HY.081406.101628**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046416

Sample Number: **L0608240-09**
Client ID: **LHSMW62**
Matrix: **Water**
Workgroup Number: **WG219838**
Collect Date: **08/09/2006 10:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **PAS**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **08/11/2006 09:25**
Cal Date: **08/14/2006 10:04**
Run Date: **08/14/2006 10:18**
File ID: **HY.081406.101807**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

METHOD BLANK SUMMARY

00046417

Login Number: L0608240 Work Group: WG219838
Blank File ID: HY.081406.101300 Blank Sample ID: WG219750-03
Date Analyzed: 08/14/06 Instrument ID: HYDRA
Time Analyzed: 10:13 Method: 7470A
Analyst: PAS

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219750-04	HY.081406.101451	08/14/06 10:14	01
LHSMW62	L0608240-08	HY.081406.101628	08/14/06 10:16	01
LHSMW62	L0608240-09	HY.081406.101807	08/14/06 10:18	01

METHOD BLANK SUMMARY

00046418

Login Number: L0608240 Work Group: WG219838
Blank File ID: HY.081406.101300 Blank Sample ID: WG219750-03
Date Analyzed: 08/14/06 Instrument ID: HYDRA
Time Analyzed: 10:13 Method: 7470A
Analyst: PAS

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219750-04	HY.081406.101451	08/14/06 10:14	01
LHSMW62	L0608240-08	HY.081406.101628	08/14/06 10:16	01
LHSMW62	L0608240-09	HY.081406.101807	08/14/06 10:18	01

METHOD BLANK REPORT

00046419

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219750-03
Instrument ID: HYDRA Run Time: 10:13 Prep Method: METHOD
File ID: HY.081406.101300 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG219838 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-14-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046420

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219750-03
Instrument ID: HYDRA Run Time: 10:13 Prep Method: METHOD
File ID: HY.081406.101300 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG219838 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-14-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Mercury, Dissolved	0.000100	0.000200	0.000100	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046421

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219750-04
Instrument ID: HYDRA Run Time: 10:14 Prep Method: METHOD
File ID: HY.081406.101451 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG219838 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-14-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00396	99.0	85 - 115	

LABORATORY CONTROL SAMPLE (LCS)

00046422

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219750-04
Instrument ID: HYDRA Run Time: 10:14 Prep Method: METHOD
File ID: HY.081406.101451 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG219838 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 14-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00396	99.0	85 - 115	

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046423

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-08
Instrument ID: HYDRA Run Time: 10:07 Method: 7470A
File ID: HY.081406.100740 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.046	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046424

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-08
Instrument ID: HYDRA Run Time: 10:07 Method: 7470A
File ID: HY.081406.100740 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.046	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046425

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-10
Instrument ID: HYDRA Run Time: 10:11 Method: 7470A
File ID: HY.081406.101117 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0190	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046426

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-12
Instrument ID: HYDRA Run Time: 10:33 Method: 7470A
File ID: HY.081406.103312 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0390	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046427

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-14
Instrument ID: HYDRA Run Time: 10:40 Method: 7470A
File ID: HY.081406.104000 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0330	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046428

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-10
Instrument ID: HYDRA Run Time: 10:11 Method: 7470A
File ID: HY.081406.101117 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0190	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046429

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-12
Instrument ID: HYDRA Run Time: 10:33 Method: 7470A
File ID: HY.081406.103312 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0390	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046430

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-14
Instrument ID: HYDRA Run Time: 10:40 Method: 7470A
File ID: HY.081406.104000 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0330	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046431

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-07
Instrument ID: HYDRA Run Time: 10:05 Method: 7470A
File ID: HY.081406.100559 Analvst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.01	101	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046432

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219866-07
Instrument ID: HYDRA Run Time: 10:05 Method: 7470A
File ID: HY.081406.100559 Analvst: PAS Units: ug/L
Workgroup (AAB#): WG219838 Cal ID: HYDRA - 14-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.01	101	90 - 110	

* Exceeds LIMITS Limit

LABORATORY REPORT

L0608240

00046433

08/22/06 15:33

Submitted By

KEMRON Environmental Services
156 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Shaw E & I. Inc.
ABB Lummus Building
3010 Briarpark
Houston, TX 77042
Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
67WW06	L0608240-02	300.0	5	10-AUG-06
67WW06	L0608240-02	300.0	25	10-AUG-06
67WW06	L0608240-02	300.0	400	10-AUG-06
67WW07	L0608240-03	300.0	1	10-AUG-06
67WW07	L0608240-03	300.0	10	10-AUG-06
67WW07	L0608240-03	300.0	100	10-AUG-06
LHSMW58	L0608240-04	300.0	1	10-AUG-06
LHSMW58	L0608240-04	300.0	4	10-AUG-06
35BWW03	L0608240-05	300.0	1	10-AUG-06
35BWW03	L0608240-05	300.0	10	10-AUG-06
35BWW03-DUP	L0608240-06	300.0	1	10-AUG-06
35BWW03-DUP	L0608240-06	300.0	10	10-AUG-06
67WW03	L0608240-07	300.0	5	10-AUG-06
67WW03	L0608240-07	300.0	25	10-AUG-06
67WW03	L0608240-07	300.0	400	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046434

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **5**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 14:38**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 14:38**
File ID: **I2081006.14**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1480	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	271		5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046435

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **25**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 14:55**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 14:55**
File ID: **I2081006.15**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	2150	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	278		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046436

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL03**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **400**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 19:34**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 19:34**
File ID: **I2081006.31**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	2050		80.0	40.0
Nitrate	14797-55-8		U	240	40.0
Nitrite	14797-65-0		U	160	40.0
Sulfate	14808-79-8	381	J	400	200

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046437

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **1**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 15:30**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 15:30**
File ID: **I2081006.17**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	395	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	12.3		1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046438

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **10**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 15:47**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 15:47**
File ID: **I2081006.18**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	901	I	2.00	1.00
Nitrate	14797-55-8		U	6.00	1.00
Nitrite	14797-65-0		U	4.00	1.00
Sulfate	14808-79-8	14.9		10.0	5.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046439

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **100**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 16:05**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 16:05**
File ID: **I2081006.19**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	889		20.0	10.0
Nitrate	14797-55-8		U	60.0	10.0
Nitrite	14797-65-0		U	40.0	10.0
Sulfate	14808-79-8		U	100	50.0

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046440

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **1**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 16:22**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 16:22**
File ID: **I2081006.20**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	11.8		0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8	77.4	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046441

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **4**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 16:40**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 16:40**
File ID: **I2081006.21**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	11.4		0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Nitrite	14797-65-0		U	1.60	0.400
Sulfate	14808-79-8	76.5		4.00	2.00

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046442

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **1**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 17:32**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 17:32**
File ID: **I2081006.24**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	81.7	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8	4.81		1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046443

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **10**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 17:49**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 17:49**
File ID: **I2081006.25**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	78.8		2.00	1.00
Nitrate	14797-55-8		U	6.00	1.00
Nitrite	14797-65-0		U	4.00	1.00
Sulfate	14808-79-8	5.49	J	10.0	5.00

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046444

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **1**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 18:07**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 18:07**
File ID: **I2081006.26**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	81.2	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8	8.21		1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046445

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 14:00**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **10**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 18:24**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 18:24**
File ID: **I2081006.27**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	77.6		2.00	1.00
Nitrate	14797-55-8		U	6.00	1.00
Nitrite	14797-65-0		U	4.00	1.00
Sulfate	14808-79-8	8.23	J	10.0	5.00

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046446

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 10:45**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **5**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 18:41**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 18:41**
File ID: **I2081006.28**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1640	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	291		5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046447

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 10:45**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **25**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 18:59**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 18:59**
File ID: **I2081006.29**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	2470	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	298		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608240**Report Date : **August 22, 2006**

00046448

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG219807**
Collect Date: **08/09/2006 10:45**
Sample Tag: **DL03**

PrePrep Method: **NONE**
Prep Method: **300.0**
Analytical Method: **300.0**
Analyst: **JWR**
Dilution: **400**
Units: **mg/L**

Instrument: **IC2**
Prep Date: **08/10/2006 23:37**
Cal Date: **07/11/2006 19:22**
Run Date: **08/10/2006 23:37**
File ID: **I2081006.45**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	2360		80.0	40.0
Nitrate	14797-55-8		U	240	40.0
Nitrite	14797-65-0		U	160	40.0
Sulfate	14808-79-8	330	J	400	200

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

METHOD BLANK SUMMARY

00046449

Login Number: L0608240	Work Group: WG219807
Blank File ID: I2081006.12	Blank Sample ID: WG219807-01
Date Analyzed: 08/10/06	Instrument ID: IC2
Time Analyzed: 14:03	Method: 300.0
Analyst: JWR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219807-02	I2081006.13	08/10/06 14:20	01
67WW06	L0608240-02	I2081006.14	08/10/06 14:38	DL01
67WW06	L0608240-02	I2081006.15	08/10/06 14:55	DL02
67WW07	L0608240-03	I2081006.17	08/10/06 15:30	01
67WW07	L0608240-03	I2081006.18	08/10/06 15:47	DL01
67WW07	L0608240-03	I2081006.19	08/10/06 16:05	DL02
LHSMW58	L0608240-04	I2081006.20	08/10/06 16:22	01
LHSMW58	L0608240-04	I2081006.21	08/10/06 16:40	DL01
35BWW03	L0608240-05	I2081006.24	08/10/06 17:32	01
35BWW03	L0608240-05	I2081006.25	08/10/06 17:49	DL01
35BWW03-DUP	L0608240-06	I2081006.26	08/10/06 18:07	01
35BWW03-DUP	L0608240-06	I2081006.27	08/10/06 18:24	DL01
67WW03	L0608240-07	I2081006.28	08/10/06 18:41	DL01
67WW03	L0608240-07	I2081006.29	08/10/06 18:59	DL02
67WW06	L0608240-02	I2081006.31	08/10/06 19:34	DL03
DUP	WG219807-04	I2081006.37	08/10/06 21:18	01
67WW03	L0608240-07	I2081006.45	08/10/06 23:37	DL03
DUP	WG219807-09	I2081006.52	08/11/06 01:39	01

METHOD BLANK REPORT

00046450

Login Number: L0608240 Run Date: 08/10/2006 Sample ID: WG219807-01
Instrument ID: IC2 Run Time: 14:03 Prep Method: 300.0
File ID: I2081006.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219807 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046451

Login Number: L0608240 Run Date: 08/10/2006 Sample ID: WG219807-02
Instrument ID: IC2 Run Time: 14:20 Prep Method: 300.0
File ID: I2081006.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219807 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.86	97.6	90 - 110	
Nitrate	4.07	4.12	101	90 - 110	
Nitrite	3.65	3.43	93.8	90 - 110	
Sulfate	30.0	30.2	101	90 - 110	

LABORATORY REPORT

L0608240

00046452

08/22/06 15:33

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta, OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I. Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Meyer

Account Number: 2773

Work ID:

P.O. Number: 200328

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
67WW06	L0608240-02	415.1	3	10-AUG-06
67WW06	L0608240-02	415.1	3	10-AUG-06
67WW07	L0608240-03	415.1	1	10-AUG-06
67WW07	L0608240-03	415.1	1	10-AUG-06
LHSMW58	L0608240-04	415.1	1	10-AUG-06
LHSMW58	L0608240-04	415.1	1	10-AUG-06
35BWW03	L0608240-05	415.1	1	10-AUG-06
35BWW03	L0608240-05	415.1	1	10-AUG-06
35BWW03-DUP	L0608240-06	415.1	1	10-AUG-06
35BWW03-DUP	L0608240-06	415.1	1	10-AUG-06
67WW03	L0608240-07	415.1	4	10-AUG-06
67WW03	L0608240-07	415.1	4	10-AUG-06

Report Number: **L0608240**Report Date : **August 22, 2006**

00046453

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG220022**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **3**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/15/2006 17:02**
Cal Date: **01/12/2006 10:36**
Run Date: **08/15/2006 17:02**
File ID: **TC08-15-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		23.3		3.00	1.50

Report Number: **L0608240**Report Date : **August 22, 2006**

00046454

Sample Number: **L0608240-02**
Client ID: **67WW06**
Matrix: **Water**
Workgroup Number: **WG220022**
Collect Date: **08/08/2006 16:50**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **3**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/15/2006 17:02**
Cal Date: **01/12/2006 10:36**
Run Date: **08/15/2006 17:02**
File ID: **TC08-15-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		67.7		3.00	1.50

Report Number: **L0608240**Report Date : **August 22, 2006**

00046455

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:23**
Cal Date: _____
Run Date: **08/14/2006 15:23**
File ID: **TC08-14-2006.09**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		42.3		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046456

Sample Number: **L0608240-03**
Client ID: **67WW07**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/08/2006 16:50**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:23**
Cal Date: _____
Run Date: **08/14/2006 15:23**
File ID: **TC08-14-2006.09**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		7.41		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046457

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:38**
Cal Date: _____
Run Date: **08/14/2006 15:38**
File ID: **TC08-14-2006.10**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		18.7		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046458

Sample Number: **L0608240-04**
Client ID: **LHSMW58**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:38**
Cal Date: _____
Run Date: **08/14/2006 15:38**
File ID: **TC08-14-2006.10**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		3.94		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046459

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:52**
Cal Date: _____
Run Date: **08/14/2006 15:52**
File ID: **TC08-14-2006.11**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		12.5		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046460

Sample Number: **L0608240-05**
Client ID: **35BWW03**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 15:52**
Cal Date: _____
Run Date: **08/14/2006 15:52**
File ID: **TC08-14-2006.11**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		9.09		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046461

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 16:06**
Cal Date: _____
Run Date: **08/14/2006 16:06**
File ID: **TC08-14-2006.12**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		13.1		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046462

Sample Number: **L0608240-06**
Client ID: **35BWW03-DUP**
Matrix: **Water**
Workgroup Number: **WG219907**
Collect Date: **08/09/2006 14:00**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/14/2006 16:06**
Cal Date: _____
Run Date: **08/14/2006 16:06**
File ID: **TC08-14-2006.12**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		8.34		1.00	0.500

Report Number: **L0608240**Report Date : **August 22, 2006**

00046463

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG220022**
Collect Date: **08/09/2006 10:45**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **4**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/15/2006 17:16**
Cal Date: **01/12/2006 10:36**
Run Date: **08/15/2006 17:16**
File ID: **TC08-15-2006.08**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		42.7		4.00	2.00

Report Number: **L0608240**Report Date : **August 22, 2006**

00046464

Sample Number: **L0608240-07**
Client ID: **67WW03**
Matrix: **Water**
Workgroup Number: **WG220022**
Collect Date: **08/09/2006 10:45**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **415.1**
Analytical Method: **415.1**
Analyst: **DIH**
Dilution: **4**
Units: **mg/L**

Instrument: **TOC-VWP**
Prep Date: **08/15/2006 17:16**
Cal Date: **01/12/2006 10:36**
Run Date: **08/15/2006 17:16**
File ID: **TC08-15-2006.08**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		13.7		4.00	2.00

METHOD BLANK SUMMARY

00046465

Login Number: L0608240
 Blank File ID: TC08-14-2006.04
 Date Analyzed: 08/14/06
 Time Analyzed: 14:09
 Analyst: DIH

Work Group: WG219907
 Blank Sample ID: WG219907-01
 Instrument ID: TOC-VWP
 Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219907-02	TC08-14-2006.05	08/14/06 14:22	01
LCS2	WG219907-03	TC08-14-2006.06	08/14/06 14:35	01
67WW07	L0608240-03	TC08-14-2006.09	08/14/06 15:23	01
67WW07	L0608240-03	TC08-14-2006.09	08/14/06 15:23	01
LHSMW58	L0608240-04	TC08-14-2006.10	08/14/06 15:38	01
LHSMW58	L0608240-04	TC08-14-2006.10	08/14/06 15:38	01
35BWW03	L0608240-05	TC08-14-2006.11	08/14/06 15:52	01
35BWW03	L0608240-05	TC08-14-2006.11	08/14/06 15:52	01
35BWW03-DUP	L0608240-06	TC08-14-2006.12	08/14/06 16:06	01
35BWW03-DUP	L0608240-06	TC08-14-2006.12	08/14/06 16:06	01
DUP	WG219907-05	TC08-14-2006.31	08/14/06 20:27	01

METHOD BLANK SUMMARY

00046466

Login Number: L0608240
 Blank File ID: TC08-15-2006.04
 Date Analyzed: 08/15/06
 Time Analyzed: 16:21
 Analyst: DIH

Work Group: WG220022
 Blank Sample ID: WG220022-01
 Instrument ID: TOC-VWP
 Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220022-02	TC08-15-2006.05	08/15/06 16:34	01
LCS2	WG220022-03	TC08-15-2006.06	08/15/06 16:47	01
67WW06	L0608240-02	TC08-15-2006.07	08/15/06 17:02	DL01
67WW06	L0608240-02	TC08-15-2006.07	08/15/06 17:02	DL01
67WW03	L0608240-07	TC08-15-2006.08	08/15/06 17:16	DL01
67WW03	L0608240-07	TC08-15-2006.08	08/15/06 17:16	DL01
DUP	WG220022-05	TC08-15-2006.32	08/15/06 22:46	01

METHOD BLANK REPORT

00046467

Login Number: L0608240 Run Date: 08/14/2006 Sample ID: WG219907-01
Instrument ID: TOC-VWP Run Time: 14:09 Prep Method: 415.1
File ID: TC08-14-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG219907 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046468

Login Number: L0608240 Run Date: 08/15/2006 Sample ID: WG220022-01
Instrument ID: TOC-VWP Run Time: 16:21 Prep Method: 415.1
File ID: TC08-15-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG220022 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-12-JAN-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046469

Login Number: L0608240 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG219907 Units: mg/L
Sample ID: WG219907-02 LCS File ID: TC08-14-2006.05 Run Date: 08/14/2006 14:22
Sample ID: WG219907-03 LCS2 File ID: TC08-14-2006.06 Run Date: 08/14/2006 14:35

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.5	90.2	25.0	24.5	97.8	8.13	85 - 115	15	

LABORATORY CONTROL SAMPLE (LCS)

00046470

Login Number: L0608240 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG220022 Units: mg/L
Sample ID: WG220022-02 LCS File ID: TC08-15-2006.05 Run Date: 08/15/2006 16:34
Sample ID: WG220022-03 LCS2 File ID: TC08-15-2006.06 Run Date: 08/15/2006 16:47

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.5	90.1	25.0	28.8	115	24.3	85 - 115	15	

Kemron Environmental Services
Analyst Listing
August 23, 2006

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH	CEB - CHAD E. BARNES
CFB - CHAD F. BOOK	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS
CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN	CSA - LUCINDA S. ARNOLD
CSH - CHRIS S. HILL	DAS - DALLAS A. SULLIVAN	DD - DIANE M. DENNIS
DDE - DEBRA D. ELLIOTT	DEL - DON E. LIGHTFRITZ	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DR - DEANNA ROBERTS
DRP - DAVE R. PITZER	DSM - DAVID S. MOSSOR	DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JKT - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL	JNB - JOSHUA N. BOOTH	JS - JENNIFER L. SOUTHALL
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES	JYH - JI Y. HU
KCZ - KEVIN C. ZUMBRO	KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO	MLR - MARY L. ROCHOTTE	MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
PAS - PATRICK A. STREET	PJM - PAUL J. MILLER	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SCM - SUSAN C. MOELLENDICK	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	SRM - SAMUEL R. MCFEE
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WFM - WALTER F. MARTIN		

Qualkey: STD

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
FL	Free Liquid
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	ESTIMATE & COLUMNS DON'T AGREE TO WITHIN 40%
L	Sample reporting limits elevated due to matrix interference
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria fail. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Undetected; the concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.


Shaw® Shaw Environmental, Inc.

 3010 Briarpark Drive, Suite 4N
 Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10021

Laboratory Name: Kemron		Address: 156 Starlite		Contact: Stephanie Massburg																
Project Name: LHMAP		Project Location: Karnack, Tx		Analysis and Method Desired (Indicate separate containers)																
Project No.: 945714-0480101		Project Contact: Diane Meyer		Project Telephone No.: (713) 996-4408																
Point of contact: Allen Willmore		Project Manager/Supervisor: Praveen Srivastav																		
Telephone No.: (713) 242-9292																				
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOL	TOC	ANIONS	40 mL VOC	600 mL G/SS	600 mL HDPE	40 mL VOC	Filtered	INAL METALS	Unfiltered	INAL METALS	Remarks
1	Temp Blank	8/8/06	1700		✓	W	TB #1	1	1											*10) vial neck broken
2	67 WW06	8/8/06	1650		✓	W	67 WW06	8	3	1	1	3								
3	67 WW07	8/8/06	1650		✓	W	67 WW07	8	3	1	1	3								
4	Temp Blank	8/9/06				W	TB	1												
5	LHSMW58	8/9/06	1400		✓	W	LHSMW58	8	3	1	1	3								
6	35B WW03 + DUP	8/9/06	1400		✓	W	35B WW03 + Dups	16	6	2	2	6								+ Duplicates
7	67 WW03	8/9/06	1045		✓	W	67 WW03	6	2	1	1	2								Turbid Samples
8	LHSMW 62	8/9/06	1000		✓	W	LHSMW 62	2								1	1			
9																				
10																				
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions												
<i>M. H. L.</i>		8/9/06 5:00		<i>Stephanie Massburg</i>		8/9/06		CLC sealed cooler temp 1												
								FedEx Airbill No.:												
								Sampler's Signature												

 TAT: _____ Standard ☒ Rush Due: _____

Seals Intact? _____ Y _____ N

Received Good Condition _____ Y _____ N _____ Cold

White - Lab Copy Canary - Field Copy Pink - File Copy

SAMPLE RECEIPT FORM

B2705

00046474

Date: 8-10-06 Client: Shaw
 Shipped By: () Fed-Ex (X) UPS () DHL () KEMRON () Client () Other
 Opened By: Big
 Logged By: Big Login # L06 08240
 IR Temp Gun: () D (X) G

156 STARLITE DRIVE
 MARIETTA, OH
 45750
 (740) 373-4071

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	0046	1	1266V725019932	2872	
2					
3					
4					
5					
6					

Were all coolers sealed? (Y) N N/A
 Were custody seals used on all coolers? (Y) N N/A
 Were custody seals intact? (Y) N N/A
 Was visible ice present? (Y) N N/A
 Were all coolers in the temperature range of 2-6C? (>6C*) Y (N) N/A
 Were the samples frozen?* Y (N) N/A
 Were COC papers provided? (Y) N N/A
 Were all sample containers intact?* Y (N) N/A
 Were all sample labels intact? (Y) N N/A
 Were all sample labels legible?* (Y) N N/A
 Did all sample labels match the COC?* Y (N) N/A
 Was the label information complete?* (Y) N N/A
 Were the correct containers used?* (Y) N N/A
 Were the correct preservatives added to water samples?* (Y) N N/A
 Was the pH tested on preserved water samples? (Y) N N/A
 Were pH ranges acceptable?* (Y) N N/A
 Was sufficient amount of sample provided?* (Y) N N/A
 Were bubbles present in VOA samples?* Y (N) N/A
 Were COC's signed and dated? (Y) N N/A
 Did samples arrive before hold time expired?* (Y) N N/A
 Are discrepancy forms attached? (Y) N N/A
 *Requires a discrepancy form

Comments: _____

CRF #1
 Revised 8/22/03

CRF#4

Sample Discrepancy Form

Client: Shaw Project: LHAP

Date Received: 8-10-06

_____ Cooler temperature > than 6 degrees Celsius

Reason _____

☒ Samples received not on chain of custody
Rec'd 3 Trip Blanks ID as Trip Blank-1
Trip Blank-2
(1) broke

_____ Samples on chain of custody not received

_____ Information on sample containers different from chain of custody

☒ Sample containers received broken, leaking or not sealed (List sample ID)
(1) Trip Blank

_____ pH out (List sample ID, which container, pH prior to adjusting, amount of acid, preservative)

_____ Insufficient sample volume

_____ Air bubbles present in VOA vials (List sample ID)

_____ Hold time expired (List sample ID)

Service Representative:

Was client notified regarding information: **YES**

Name of Person contacted: _____

Service Representative: _____

NO

Company: _____

Date: _____

Last Revised 08/22/03

KEMRON Environmental Services
Internal Chain of Custody Report

00046476

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-01 260955 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Samplenum **Container ID** **Products**
L0608240-02 260956 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Samplenum **Container ID** **Products**
L0608240-02 260957 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

KEMRON Environmental Services
Internal Chain of Custody Report

00046477

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-02 260958 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Samplenum **Container ID** **Products**
L0608240-02 260959 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608240-03 260960 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

KEMRON Environmental Services
Internal Chain of Custody Report

00046478

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-03 260961 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Samplenum **Container ID** **Products**
L0608240-03 260962 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Samplenum **Container ID** **Products**
L0608240-03 260963 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046479

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-04 260964 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Samplenum **Container ID** **Products**
L0608240-04 260965 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Samplenum **Container ID** **Products**
L0608240-04 260966 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046480

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-04 260967 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608240-05 260968 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Samplenum **Container ID** **Products**
L0608240-05 260969 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

KEMRON Environmental Services
Internal Chain of Custody Report

00046481

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-05 260970 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Samplenum **Container ID** **Products**
L0608240-05 260971 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608240-06 260972 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-06 260973 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Samplenum **Container ID** **Products**
L0608240-06 260974 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Samplenum **Container ID** **Products**
L0608240-06 260975 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046483

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-07 260976 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	L1	WET	10-AUG-2006 11:21	JWR	BRG
3	STORE	WET	A1	11-AUG-2006 11:32	JS	JWR

Samplenum **Container ID** **Products**
L0608240-07 260977 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	10-AUG-2006 14:40	CMS	BRG

Samplenum **Container ID** **Products**
L0608240-07 260978 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	V1	ORG4	14-AUG-2006 11:05	JLS	JS

Samplenum **Container ID** **Products**
L0608240-07 260979 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046484

Login: L0608240
Account: 2773
Project: 2773.025
Samples: 9
Due Date: 17-AUG-2006

Samplenum **Container ID** **Products**
L0608240-08 260980 HG CO CU FE MG MN NI K NA ZN AL BA BE CD CA CF

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	PREP	W1	DIG	10-AUG-2006 16:08	VC	JS
3	STORE	DIG	A1	11-AUG-2006 13:35	JS	VC

Samplenum **Container ID** **Products**
L0608240-09 260981 V-D NA-D NI-D ZN-D K-D AL-D BA-D BE-D CA-D CD-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			10-AUG-2006 11:13	BRG	
2	PREP	W1	DIG	10-AUG-2006 16:08	VC	JS
3	STORE	DIG	A1	14-AUG-2006 13:03	JS	VC
4	PREP	A1	DIG	16-AUG-2006 09:27	REK	JS
5	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC



156 Starlite Drive, Marietta, OH 45750 • TEL 740-373-4071 • FAX 740-373-4835 • <http://www.kemron.com>

Laboratory Report Number: L0608330

Please find enclosed the analytical results for the samples you submitted to KEMRON Environmental Services.

Review and compilation of your report was completed by KEMRON's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Debra Elliott - Team Leader
delliott@kemron-lab.com

Amanda Fickiesen - Client Services Specialist
afickiesen@kemron-lab.com

Cheryl Koelsch - Team Chemist/Data Specialist
ckoelsch@kemron-lab.com

Annie Bock - Client Services Specialist
abock@kemron-lab.com

Stephanie Mossburg - Team Chemist/Data Specialist
smossburg@kemron-lab.com

Kathy Albertson - Team Chemist/Data Specialist
kalbertson@kemron-lab.com

This report was reviewed on August 22, 2006.

A handwritten signature in cursive script that reads "Stephanie Mossburg".

STEPHANIE MOSSBURG - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the NELAP standards and other applicable contract terms and conditions. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services.

This report was certified on August 22, 2006.

A handwritten signature in cursive script that reads "David E. Vandenberg".

David Vandenberg - Vice President

FL DOH NELAP ID: E8755

This report contains a total of 336 pages.

Protecting Our Environmental Future

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0608330

CHAIN OF CUSTODY: The chain of custody number was 10025.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 0 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Approved: 17-AUG-06

<i>Stephanie Mosburg</i>

Laboratory Data Package Cover Page

00046487

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

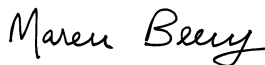
R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MAREN M. BEERY



August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 7471
 Prep Batch Number(s): WG219968
 Reviewer Name: MAREN M. BEERY
 LRC Date: August 15, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?			✓		
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046489	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046490
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	<u>KEMRON</u>
Laboratory Log Number:	<u>L0608330</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>7471</u>
Prep Batch Number(s):	<u>WG219968</u>
Reviewer Name:	<u>MAREN M. BEERY</u>
LRC Date:	<u>August 15, 2006</u>

EXCEPTIONS REPORT**ER# - Description**

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046492

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

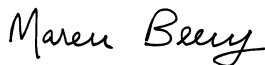
R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MAREN M. BEERY



August 17, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 6010
 Prep Batch Number(s): WG220030
 Reviewer Name: MAREN M. BEERY
 LRC Date: August 17, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?		✓			ER1
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?			✓		
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046494	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046495
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	<u>KEMRON</u>
Laboratory Log Number:	<u>L0608330</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>6010</u>
Prep Batch Number(s):	<u>WG220030</u>
Reviewer Name:	<u>MAREN M. BEERY</u>
LRC Date:	<u>August 17, 2006</u>

EXCEPTIONS REPORT

ER# 1- Due to results that were over the linear range on initial analysis, client samples 02, 04 and 06 were reanalyzed at dilutions for sodium.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046497

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

✓R1 Field chain-of-custody documentation;

✓R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10

b) dilution factors,

c) preparation methods,

d) Cleanup methods, and

e) If required for the project, tentatively identified compounds (TICs)

✓R4 Surrogate recovery data including:

a) Calculated recovery (%R) for each analyte, and

b) The laboratory's surrogate QC limits.

✓R5 Test reports/summary forms for blank samples;

✓R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amount,

b) Calculated %R for each analyte, and

c) The laboratory's LCS QC limits.

✓R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,

b) MS/MSD spiking amounts,

c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,

d) Calculated %R and relative percent differences (RPDs), and

e) The laboratory's MS/MSD QC limits

✓R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,

b) the calculated RPD, and

c) the laboratory's QC limits for analytical duplicates.

✓R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

✓R10 Other problems or anomalies.

✓The exception Report for every "No" or "Not Reviewed (NR)" item IN laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [✓] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

August 17, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 219926
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: August 17, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?		✓			1
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			2
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046499	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?			✓		
Were analytical duplicates analyzed at the appropriate frequency?			✓		
Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?			✓		
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?	✓				
Were ion abundance data within the method-required QC limits?	✓				
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?	✓				
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046500
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

EXCEPTIONS REPORT

ER# - Description

#1: 1,2-Dichloroethane-d4 exceeded the upper control limit in the analyses of samples 05 and 10.

#2: The LCS/LCSD analyzed 08/15/06 on HPMS-10 yielded a % recovery for methyl acetate above the upper advisory limit.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046501

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

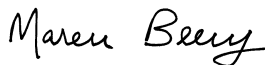
R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MAREN M. BEERY



August 17, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 6020
 Prep Batch Number(s): WG220052
 Reviewer Name: MAREN M. BEERY
 LRC Date:

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?			✓		
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓		00046503
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?		✓			ER1
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?		✓			ER2
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046504
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608330
Project Name:	798-LONGHORN
Method:	6020
Prep Batch Number(s):	WG220052
Reviewer Name:	MAREN M. BEERY
LRC Date:	

EXCEPTIONS REPORT

ER#1 - The duplicate RPD was out of limits for two elements.

ER2 - Due to continuing calibration verification failure for thallium on 17-AUG-2006 at 13:37, client samples 01,03 and 05 were reanalyzed later in the calibration sequence where the CCVs were compliant for thallium. Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046506

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

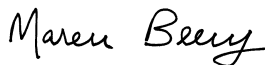
R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MAREN M. BEERY



August 17, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 6020
 Prep Batch Number(s): WG220053
 Reviewer Name: MAREN M. BEERY
 LRC Date: August 17, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?			✓		
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046508	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?		✓			ER1
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046509
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	<u>KEMRON</u>
Laboratory Log Number:	<u>L0608330</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>6020</u>
Prep Batch Number(s):	<u>WG220053</u>
Reviewer Name:	<u>MAREN M. BEERY</u>
LRC Date:	<u>August 17, 2006</u>

EXCEPTIONS REPORT**ER#1 - The duplicate RPD was out of limits for one element****Footnotes:****(1) NA = Not applicable to method or project****(2) NR = Not reviewed****(3) ER# = Exception report number**

Laboratory Data Package Cover Page

00046511

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 18, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: TOC
 Prep Batch Number(s): WG220023, WG220121
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 18, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓				00046513
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046514
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608330
Project Name:	798-LONGHORN
Method:	TOC
Prep Batch Number(s):	WG220023, WG220121
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 18, 2006

EXCEPTIONS REPORT**ER# - Description**

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046516

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

R5 Test reports/summary forms for blank samples;

R6 Test reports/summary forms FOR laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

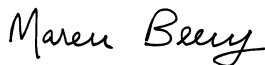
R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MAREN M. BEERY



August 18, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 6010
 Prep Batch Number(s): WG220033
 Reviewer Name: MAREN M. BEERY
 LRC Date: August 18, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?		✓			ER1
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?			✓		
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046518	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046519
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	<u>KEMRON</u>
Laboratory Log Number:	<u>L0608330</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>6010</u>
Prep Batch Number(s):	<u>WG220033</u>
Reviewer Name:	<u>MAREN M. BEERY</u>
LRC Date:	<u>August 18, 2006</u>

EXCEPTIONS REPORT

ER#1 - Due to results that were over the linear range on initial analysis, client samples 01, 03, and 05 were reanalyzed at dilutions for sodium.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00046521

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

✓ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

✓ R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 20, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608330
 Project Name: 798-LONGHORN
 Method: 9056-300
 Prep Batch Number(s): WG219813, WG220214
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 20, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓	✓			
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓	✓			00046523
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046524
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608330
Project Name:	798-LONGHORN
Method:	9056-300
Prep Batch Number(s):	WG219813, WG220214
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 20, 2006

EXCEPTIONS REPORT**ER# - Description**

The MS/MSD recoveries for nitrite and chloride exceeded the advisory limits. Some samples were analyzed out of hold due the late arrival of the samples. Samples were diluted due to the high content of chloride and sulfate in the samples. Nitrite and/or nitrate are reported with elevated reporting limits due the high chloride content which covers up the peak.

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

LABORATORY REPORT

L0608330

00046526

08/22/06 08:01

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Mever

Account Number: 2773

Work ID: _____

P.O. Number: 200328

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
12WW20	L0608330-01	10-AUG-06	12-AUG-06
12WW20	L0608330-02	10-AUG-06	12-AUG-06
12WW20	L0608330-03	10-AUG-06	12-AUG-06
12WW20	L0608330-04	10-AUG-06	12-AUG-06
12WW21	L0608330-05	10-AUG-06	12-AUG-06
12WW21	L0608330-06	10-AUG-06	12-AUG-06
12WW02	L0608330-07	11-AUG-06	12-AUG-06
12WW01	L0608330-08	11-AUG-06	12-AUG-06
12WW05	L0608330-09	11-AUG-06	12-AUG-06
EQUIPMENT RINSE	L0608330-10	11-AUG-06	12-AUG-06

Report Number: L0608330

Report Date : August 22, 2006

00046527

Sample Number: L0608330-01
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/10/2006 15:20
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 02:37
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 02:37
 File ID: TC08-15-2006.49

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		9.31		1.00	0.500

Sample Number: L0608330-01
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/10/2006 15:20
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 02:37
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 02:37
 File ID: TC08-15-2006.49

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		3.51		1.00	0.500

Sample Number: L0608330-01
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: WG220179
 Collect Date: 08/10/2006 15:20
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP2
 Prep Date: 08/16/2006 07:05
 Cal Date: 08/17/2006 11:21
 Run Date: 08/17/2006 14:35
 File ID: P2.081706.143541

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Total	7429-90-5	0.591		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.00513	J	0.0100	0.00500
Barium, Total	7440-39-3	0.0485		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000500
Calcium, Total	7440-70-2	32.6		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0185	J	0.0200	0.00250
Chromium, Total	7440-47-3		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	0.596		0.100	0.0250
Potassium, Total	7440-09-7	1.65		1.00	0.250
Magnesium, Total	7439-95-4	24.9		0.500	0.250
Manganese, Total	7439-96-5	0.333		0.0100	0.00500
Nickel, Total	7440-02-0	0.0151	J	0.0400	0.00500
Lead, Total	7439-92-1		U	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0113		0.0100	0.00500
Zinc, Total	7440-66-6	0.0179	J	0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046528

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: PE-ICP2
Client ID: 12WW20	Prep Method: 3005A	Prep Date: 08/16/2006 07:05
Matrix: Water	Analytical Method: 6010B	Cal Date: 08/17/2006 11:21
Workgroup Number: WG220179	Analyst: KHR	Run Date: 08/17/2006 15:22
Collect Date: 08/10/2006 15:20	Dilution: 20	File ID: P2.081706.152218
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Total	7440-23-5	198		10.0	5.00

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: ELAN-ICP
Client ID: 12WW20	Prep Method: 3015	Prep Date: 08/16/2006 07:30
Matrix: Water	Analytical Method: 6020	Cal Date: 08/17/2006 09:16
Workgroup Number: WG220062	Analyst: JYH	Run Date: 08/17/2006 12:41
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: EL.081706.124136
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Total	7440-36-0	0.00613		0.00100	0.000250
Selenium, Total	7782-49-2	0.0178		0.00100	0.000500

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: ELAN-ICP
Client ID: 12WW20	Prep Method: 3015	Prep Date: 08/16/2006 07:30
Matrix: Water	Analytical Method: 6020	Cal Date: 08/17/2006 09:16
Workgroup Number: WG220062	Analyst: JYH	Run Date: 08/17/2006 15:23
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: EL.081706.152344
Sample Tag: 02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Thallium, Total	7440-28-0	0.000479		0.000200	0.0000500

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: HYDRA
Client ID: 12WW20	Prep Method: METHOD	Prep Date: 08/15/2006 11:40
Matrix: Water	Analytical Method: 7470A	Cal Date: 08/15/2006 15:16
Workgroup Number: WG220003	Analyst: PAS	Run Date: 08/15/2006 15:32
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: HY.081506.153246
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0608330

Report Date : August 22, 2006

00046529

Sample Number: L0608330-01
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: W6219926
 Collect Date: 08/10/2006 15:20
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 15:08
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 15:08
 File ID: 10M48102

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	0.615	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6	0.704	J	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

Report Number: **L0608330**Report Date : **August 22, 2006**

00046530

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: HPMS10
Client ID: 12WW20	Prep Method: 5030B	Prep Date: 08/15/2006 15:08
Matrix: Water	Analytical Method: 8260B	Cal Date: 07/15/2006 16:37
Workgroup Number: WG219926	Analyst: MES	Run Date: 08/15/2006 15:08
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: 10M48102
Sample Tag: 01	Units: ug/L	

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	118	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	105	88	110	

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW20	Prep Method: 300.0	Prep Date: 08/12/2006 15:18
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 15:18
Collect Date: 08/10/2006 15:20	Dilution: 4	File ID: I2081206.15
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	309	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Nitrite	14797-65-0		U	1.60	0.400
Sulfate	14808-79-8	173		4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW20	Prep Method: 300.0	Prep Date: 08/12/2006 15:35
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 15:35
Collect Date: 08/10/2006 15:20	Dilution: 40	File ID: I2081206.16
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	290		8.00	4.00
Nitrate	14797-55-8		U	24.0	4.00
Nitrite	14797-65-0		U	16.0	4.00
Sulfate	14808-79-8	168		40.0	20.0

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-01	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW20	Prep Method: 300.0	Prep Date: 08/12/2006 15:00
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 15:00
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: I2081206.14
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	226	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	165	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046531

Sample Number: **L0608330-01**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG219977**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **08/15/2006 16:56**
 Cal Date: **03/27/2006 14:30**
 Run Date: **08/15/2006 16:56**
 File ID: **1663723**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	4.52		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-02**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220080**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/16/2006 06:45**
 Cal Date: **08/16/2006 10:23**
 Run Date: **08/16/2006 13:45**
 File ID: **P2.081606.134520**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.00533	J	0.0100	0.00200
Barium, Dissolved	7440-39-3	0.0381		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000500
Calcium, Dissolved	7440-70-2	35.8		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.00992	J	0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.00290	J	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6		U	0.100	0.0250
Potassium, Dissolved	7440-09-7	1.63		1.00	0.250
Magnesium, Dissolved	7439-95-4	25.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.213		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0267	J	0.0400	0.00500
Lead, Dissolved	7439-92-1		U	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.0117		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-02**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220080**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **20**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/16/2006 06:45**
 Cal Date: **08/16/2006 10:23**
 Run Date: **08/16/2006 14:34**
 File ID: **P2.081606.143432**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Dissolved	7440-23-5	219		10.0	5.00

Report Number: **L0608330**Report Date : **August 22, 2006**

00046532

Sample Number: L0608330-02	PrePrep Method: NONE	Instrument: ELAN-ICP
Client ID: 12WW20	Prep Method: 3015	Prep Date: 08/16/2006 08:00
Matrix: Water	Analytical Method: 6020	Cal Date: 08/17/2006 09:16
Workgroup Number: WG220064	Analyst: JYH	Run Date: 08/17/2006 14:36
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: EL.081706.143624
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000250
Selenium, Dissolved	7782-49-2	0.00452		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000777		0.000200	0.0000500

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-02	PrePrep Method: NONE	Instrument: HYDRA
Client ID: 12WW20	Prep Method: METHOD	Prep Date: 08/16/2006 09:25
Matrix: Water	Analytical Method: 7470A	Cal Date: 08/16/2006 15:41
Workgroup Number: WG220101	Analyst: PAS	Run Date: 08/16/2006 15:56
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: HY.081606.155653
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-03	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW20	Prep Method: 415.1	Prep Date: 08/16/2006 02:51
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220023	Analyst: DIH	Run Date: 08/16/2006 02:51
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: TC08-15-2006.50
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		11.2		1.00	0.500

Sample Number: L0608330-03	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW20	Prep Method: 415.1	Prep Date: 08/16/2006 02:51
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220023	Analyst: DIH	Run Date: 08/16/2006 02:51
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: TC08-15-2006.50
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		3.70		1.00	0.500

Report Number: **L0608330**Report Date : **August 22, 2006**

00046533

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220179**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/16/2006 07:05**
 Cal Date: **08/17/2006 11:21**
 Run Date: **08/17/2006 14:40**
 File ID: **P2.081706.144059**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Total	7429-90-5	0.640		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.00540	J	0.0100	0.00500
Barium, Total	7440-39-3	0.0512		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000500
Calcium, Total	7440-70-2	34.7		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0199	J	0.0200	0.00250
Chromium, Total	7440-47-3	0.00253	J	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	0.662		0.100	0.0250
Potassium, Total	7440-09-7	1.67		1.00	0.250
Magnesium, Total	7439-95-4	25.6		0.500	0.250
Manganese, Total	7439-96-5	0.354		0.0100	0.00500
Nickel, Total	7440-02-0	0.0160	J	0.0400	0.00500
Lead, Total	7439-92-1		U	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0126		0.0100	0.00500
Zinc, Total	7440-66-6	0.0204		0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220179**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **20**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/16/2006 07:05**
 Cal Date: **08/17/2006 11:21**
 Run Date: **08/17/2006 15:28**
 File ID: **P2.081706.152843**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Total	7440-23-5	205		10.0	5.00

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220062**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **08/16/2006 07:30**
 Cal Date: **08/17/2006 09:16**
 Run Date: **08/17/2006 12:47**
 File ID: **EL.081706.124741**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Total	7440-36-0	0.00130		0.00100	0.000250
Selenium, Total	7782-49-2	0.00858		0.00100	0.000500

Report Number: **L0608330**Report Date : **August 22, 2006**

00046534

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220062**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **02**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **08/16/2006 07:30**
 Cal Date: **08/17/2006 09:16**
 Run Date: **08/17/2006 15:37**
 File ID: **EL.081706.153717**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Thallium, Total	7440-28-0	0.000396		0.000200	0.000500

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220003**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **METHOD**
 Analytical Method: **7470A**
 Analyst: **PAS**
 Dilution: **1**
 Units: **mg/L**

Instrument: **HYDRA**
 Prep Date: **08/15/2006 11:40**
 Cal Date: **08/15/2006 15:16**
 Run Date: **08/15/2006 15:37**
 File ID: **HY.081506.153729**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG219926**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/15/2006 15:39**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/15/2006 15:39**
 File ID: **10M48103**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	0.641	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125

8 of 28

Report Number: **L0608330**Report Date : **August 22, 2006**

00046535

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG219926**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/15/2006 15:39**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/15/2006 15:39**
 File ID: **10M48103**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6	0.715	J	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	115	80	120		
Dibromofluoromethane	108	86	118		
p-Bromofluorobenzene	104	86	115		
Toluene-d8	105	88	110		

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG219813**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/12/2006 15:52**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/12/2006 15:52**
 File ID: **I2081206.17**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	182	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	166	I	1.00	0.500

I Semiquantitative result (out of instrument calibration range)
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046536

Sample Number: L0608330-03	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW20	Prep Method: 300.0	Prep Date: 08/12/2006 16:27
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 16:27
Collect Date: 08/10/2006 15:20	Dilution: 40	File ID: I2081206.19
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	294		8.00	4.00
Nitrate	14797-55-8		U	24.0	4.00
Nitrite	14797-65-0		U	16.0	4.00
Sulfate	14808-79-8	170		40.0	20.0

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-03	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW20	Prep Method: 300.0	Prep Date: 08/12/2006 16:10
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 16:10
Collect Date: 08/10/2006 15:20	Dilution: 4	File ID: I2081206.18
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	308	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Nitrite	14797-65-0		U	1.60	0.400
Sulfate	14808-79-8	172		4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-03	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW20	Prep Method: 5021	Prep Date: 08/15/2006 17:10
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG219977	Analyst: JLS	Run Date: 08/15/2006 17:10
Collect Date: 08/10/2006 15:20	Dilution: 1	File ID: 1663724
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	4.28		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-04	PrePrep Method: NONE	Instrument: PE-ICP2
Client ID: 12WW20	Prep Method: 3005A	Prep Date: 08/16/2006 06:45
Matrix: Water	Analytical Method: 6010B	Cal Date: 08/16/2006 10:23
Workgroup Number: WG220080	Analyst: KHR	Run Date: 08/16/2006 14:40
Collect Date: 08/10/2006 15:20	Dilution: 20	File ID: P2.081606.144047
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Dissolved	7440-23-5	228		10.0	5.00

Report Number: **L0608330**Report Date : **August 22, 2006**

00046537

Sample Number: **L0608330-04**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220080**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **KHR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **08/16/2006 06:45**
 Cal Date: **08/16/2006 10:23**
 Run Date: **08/16/2006 13:52**
 File ID: **P2.081606.135201**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.00638	J	0.0100	0.00200
Barium, Dissolved	7440-39-3	0.0385		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000500
Calcium, Dissolved	7440-70-2	35.4		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.00998	J	0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.00489	J	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6		U	0.100	0.0250
Potassium, Dissolved	7440-09-7	1.56		1.00	0.250
Magnesium, Dissolved	7439-95-4	25.5		0.500	0.250
Manganese, Dissolved	7439-96-5	0.208		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0159	J	0.0400	0.00500
Lead, Dissolved	7439-92-1		U	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.00991	J	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-04**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220064**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **08/16/2006 08:00**
 Cal Date: **08/17/2006 09:16**
 Run Date: **08/17/2006 14:42**
 File ID: **EL.081706.144229**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000250
Selenium, Dissolved	7782-49-2	0.00427		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000614		0.000200	0.0000500

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-04**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG220101**
 Collect Date: **08/10/2006 15:20**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **METHOD**
 Analytical Method: **7470A**
 Analyst: **PAS**
 Dilution: **1**
 Units: **mg/L**

Instrument: **HYDRA**
 Prep Date: **08/16/2006 09:25**
 Cal Date: **08/16/2006 15:41**
 Run Date: **08/16/2006 15:58**
 File ID: **HY.081606.155833**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0608330

Report Date : August 22, 2006

00046538

Sample Number: L0608330-05
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 03:28
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 03:28
 File ID: TC08-15-2006.53

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		9.48		1.00	0.500

Sample Number: L0608330-05
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 03:28
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 03:28
 File ID: TC08-15-2006.53

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		2.88		1.00	0.500

Sample Number: L0608330-05
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG220179
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP2
 Prep Date: 08/16/2006 07:05
 Cal Date: 08/17/2006 11:21
 Run Date: 08/17/2006 14:05
 File ID: P2.081706.140545

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.00623	J	0.0100	0.00500
Barium, Total	7440-39-3	0.111		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000500
Calcium, Total	7440-70-2	252		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0228		0.0200	0.00250
Chromium, Total	7440-47-3		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	0.109		0.100	0.0250
Potassium, Total	7440-09-7	3.92		1.00	0.250
Magnesium, Total	7439-95-4	172		0.500	0.250
Manganese, Total	7439-96-5	1.95		0.0100	0.00500
Nickel, Total	7440-02-0	0.0182	J	0.0400	0.00500
Lead, Total	7439-92-1		U	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0185		0.0100	0.00500
Zinc, Total	7440-66-6	0.0209		0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Report Number: L0608330

Report Date : August 22, 2006

00046539

Sample Number: <u>L0608330-05</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>PE-ICP2</u>
Client ID: <u>12WW21</u>	Prep Method: <u>3005A</u>	Prep Date: <u>08/16/2006 07:05</u>
Matrix: <u>Water</u>	Analytical Method: <u>6010B</u>	Cal Date: <u>08/17/2006 11:21</u>
Workgroup Number: <u>WG220179</u>	Analyst: <u>KHR</u>	Run Date: <u>08/17/2006 14:17</u>
Collect Date: <u>08/10/2006 17:30</u>	Dilution: <u>5</u>	File ID: <u>P2.081706.141733</u>
Sample Tag: <u>DL01</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Total	7440-23-5	638		2.50	1.25

Sample Number: <u>L0608330-05</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>ELAN-ICP</u>
Client ID: <u>12WW21</u>	Prep Method: <u>3015</u>	Prep Date: <u>08/16/2006 07:30</u>
Matrix: <u>Water</u>	Analytical Method: <u>6020</u>	Cal Date: <u>08/17/2006 09:16</u>
Workgroup Number: <u>WG220062</u>	Analyst: <u>JYH</u>	Run Date: <u>08/17/2006 12:53</u>
Collect Date: <u>08/10/2006 17:30</u>	Dilution: <u>1</u>	File ID: <u>EL.081706.125347</u>
Sample Tag: <u>01</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2	0.0303		0.00100	0.000500

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0608330-05</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>ELAN-ICP</u>
Client ID: <u>12WW21</u>	Prep Method: <u>3015</u>	Prep Date: <u>08/16/2006 07:30</u>
Matrix: <u>Water</u>	Analytical Method: <u>6020</u>	Cal Date: <u>08/17/2006 09:16</u>
Workgroup Number: <u>WG220062</u>	Analyst: <u>JYH</u>	Run Date: <u>08/17/2006 15:43</u>
Collect Date: <u>08/10/2006 17:30</u>	Dilution: <u>1</u>	File ID: <u>EL.081706.154321</u>
Sample Tag: <u>02</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Thallium, Total	7440-28-0	0.000184	J	0.000200	0.0000500

J The analyte was positively identified, but the quantitation was below the RL

Sample Number: <u>L0608330-05</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>HYDRA</u>
Client ID: <u>12WW21</u>	Prep Method: <u>METHOD</u>	Prep Date: <u>08/15/2006 11:40</u>
Matrix: <u>Water</u>	Analytical Method: <u>7470A</u>	Cal Date: <u>08/15/2006 15:16</u>
Workgroup Number: <u>WG220003</u>	Analyst: <u>PAS</u>	Run Date: <u>08/15/2006 15:39</u>
Collect Date: <u>08/10/2006 17:30</u>	Dilution: <u>1</u>	File ID: <u>HY.081506.153906</u>
Sample Tag: <u>01</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0608330

Report Date : August 22, 2006

00046540

Sample Number: L0608330-05
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: W6219926
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 16:10
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 16:10
 File ID: 10M48104

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

14 of 28

Report Number: **L0608330**Report Date : **August 22, 2006**

00046541

Sample Number: L0608330-05	PrePrep Method: NONE	Instrument: HPMS10
Client ID: 12WW21	Prep Method: 5030B	Prep Date: 08/15/2006 16:10
Matrix: Water	Analytical Method: 8260B	Cal Date: 07/15/2006 16:37
Workgroup Number: WG219926	Analyst: MES	Run Date: 08/15/2006 16:10
Collect Date: 08/10/2006 17:30	Dilution: 1	File ID: 10M48104
Sample Tag: 01	Units: ug/L	

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	121	80	120	*
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	105	88	110	

* Surrogate or spike compound out of range

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-05	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW21	Prep Method: 300.0	Prep Date: 08/12/2006 16:45
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 16:45
Collect Date: 08/10/2006 17:30	Dilution: 5	File ID: I2081206.20
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1180	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	378	I	5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-05	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW21	Prep Method: 300.0	Prep Date: 08/12/2006 17:02
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 17:02
Collect Date: 08/10/2006 17:30	Dilution: 25	File ID: I2081206.21
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1590	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	364		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-05	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW21	Prep Method: 300.0	Prep Date: 08/12/2006 17:54
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 17:54
Collect Date: 08/10/2006 17:30	Dilution: 200	File ID: I2081206.24
Sample Tag: DL03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	1460		40.0	20.0
Nitrate	14797-55-8		U	120	20.0
Nitrite	14797-65-0		U	80.0	20.0
Sulfate	14808-79-8	371		200	100

U Not detected at or above adjusted sample detection limit

15 of 28

Report Number: L0608330

Report Date : August 22, 2006

00046542

Sample Number: L0608330-05
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG219977
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5021
 Analytical Method: RSK175
 Analyst: JLS
 Dilution: 1
 Units: ug/L

Instrument: HP16
 Prep Date: 08/15/2006 17:24
 Cal Date: 03/27/2006 14:30
 Run Date: 08/15/2006 17:24
 File ID: 1663725

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	190		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-06
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG220080
 Collect Date: 08/10/2006 17:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP2
 Prep Date: 08/16/2006 06:45
 Cal Date: 08/16/2006 10:23
 Run Date: 08/16/2006 13:58
 File ID: P2.081606.135828

Analyte	CAS. Number	Result	Qual	PQL	SQL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.00656	J	0.0100	0.00200
Barium, Dissolved	7440-39-3	0.103		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000500
Calcium, Dissolved	7440-70-2	236		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.0194	J	0.0200	0.00250
Chromium, Dissolved	7440-47-3		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.0489	J	0.100	0.0250
Potassium, Dissolved	7440-09-7	3.42		1.00	0.250
Magnesium, Dissolved	7439-95-4	160		0.500	0.250
Manganese, Dissolved	7439-96-5	1.70		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0177	J	0.0400	0.00500
Lead, Dissolved	7439-92-1		U	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.0158		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.00563	J	0.0200	0.00500

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-06
 Client ID: 12WW21
 Matrix: Water
 Workgroup Number: WG220080
 Collect Date: 08/10/2006 17:30
 Sample Tag: DL01

PrePrep Method: NONE
 Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 5
 Units: mg/L

Instrument: PE-ICP2
 Prep Date: 08/16/2006 06:45
 Cal Date: 08/16/2006 10:23
 Run Date: 08/16/2006 14:10
 File ID: P2.081606.141038

Analyte	CAS. Number	Result	Qual	PQL	SQL
Sodium, Dissolved	7440-23-5	624		2.50	1.25

Report Number: **L0608330**Report Date : **August 22, 2006**

00046543

Sample Number: L0608330-06	PrePrep Method: NONE	Instrument: ELAN-ICP
Client ID: 12WW21	Prep Method: 3015	Prep Date: 08/16/2006 08:00
Matrix: Water	Analytical Method: 6020	Cal Date: 08/17/2006 09:16
Workgroup Number: WG220064	Analyst: JYH	Run Date: 08/17/2006 14:18
Collect Date: 08/10/2006 17:30	Dilution: 1	File ID: EL.081706.141813
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Antimony, Dissolved	7440-36-0	0.000563	J	0.00100	0.000250
Selenium, Dissolved	7782-49-2	0.0173		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000310		0.000200	0.0000500

J The analyte was positively identified, but the quantitation was below the RL

Sample Number: L0608330-06	PrePrep Method: NONE	Instrument: HYDRA
Client ID: 12WW21	Prep Method: METHOD	Prep Date: 08/16/2006 09:25
Matrix: Water	Analytical Method: 7470A	Cal Date: 08/16/2006 15:41
Workgroup Number: WG220101	Analyst: PAS	Run Date: 08/16/2006 16:00
Collect Date: 08/10/2006 17:30	Dilution: 1	File ID: HY.081606.160029
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-07	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW02	Prep Method: 415.1	Prep Date: 08/16/2006 22:46
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220121	Analyst: DIH	Run Date: 08/16/2006 22:46
Collect Date: 08/11/2006 08:40	Dilution: 3	File ID: TC08-16-2006.30
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		64.7		3.00	1.50

Sample Number: L0608330-07	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW02	Prep Method: 415.1	Prep Date: 08/16/2006 22:46
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220121	Analyst: DIH	Run Date: 08/16/2006 22:46
Collect Date: 08/11/2006 08:40	Dilution: 3	File ID: TC08-16-2006.30
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		16.5		3.00	1.50

Report Number: L0608330

Report Date : August 22, 2006

00046544

Sample Number: L0608330-07
 Client ID: 12WW02
 Matrix: Water
 Workgroup Number: W6219926
 Collect Date: 08/11/2006 08:40
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 16:40
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 16:40
 File ID: 10M48105

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3	5.21		5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	1.77	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7	0.473	J	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.292	J	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7	0.270	J	5.00	0.125
Chloroethane	75-00-3	1.08	J	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4	6.88	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

18 of 28

Report Number: **L0608330**Report Date : **August 22, 2006**

00046545

Sample Number: **L0608330-07**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG219926**
 Collect Date: **08/11/2006 08:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/15/2006 16:40**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/15/2006 16:40**
 File ID: **10M48105**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	116	80	120	
Dibromofluoromethane	107	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	105	88	110	

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-07**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG219813**
 Collect Date: **08/11/2006 08:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/12/2006 18:12**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/12/2006 18:12**
 File ID: **I2081206.25**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	139	I	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Sulfate	14808-79-8	47.2		1.00	0.500

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-07**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG219813**
 Collect Date: **08/11/2006 08:40**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **4**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/12/2006 19:21**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/12/2006 19:21**
 File ID: **I2081206.29**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	158	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Nitrite	14797-65-0		U	1.60	0.400
Sulfate	14808-79-8	47.4		4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-07**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG219813**
 Collect Date: **08/11/2006 08:40**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **40**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/12/2006 19:39**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/12/2006 19:39**
 File ID: **I2081206.30**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	146		8.00	4.00
Nitrate	14797-55-8		U	24.0	4.00
Nitrite	14797-65-0		U	16.0	4.00
Sulfate	14808-79-8	50.0		40.0	20.0

U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046546

Sample Number: L0608330-07	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW02	Prep Method: 5021	Prep Date: 08/15/2006 18:20
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG219977	Analyst: JLS	Run Date: 08/15/2006 18:20
Collect Date: 08/11/2006 08:40	Dilution: 1	File ID: 1663729
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	734	I	0.500	0.250
ethene	74-85-1	0.819		0.500	0.250
ethane	74-84-0	0.342	J	0.500	0.250

I Semiquantitative result (out of instrument calibration range)**J** The analyte was positively identified, but the quantitation was below the RL

Sample Number: L0608330-07	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW02	Prep Method: 5021	Prep Date: 08/16/2006 21:38
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG220074	Analyst: JLS	Run Date: 08/16/2006 21:38
Collect Date: 08/11/2006 08:40	Dilution: 10	File ID: 1663769
Sample Tag: DL01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	515		5.00	2.50
ethene	74-85-1		U	5.00	2.50
ethane	74-84-0		U	5.00	2.50

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW01	Prep Method: 415.1	Prep Date: 08/16/2006 04:01
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220023	Analyst: DIH	Run Date: 08/16/2006 04:01
Collect Date: 08/11/2006 10:50	Dilution: 1	File ID: TC08-15-2006.55
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		15.6		1.00	0.500

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW01	Prep Method: 415.1	Prep Date: 08/16/2006 04:01
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG220023	Analyst: DIH	Run Date: 08/16/2006 04:01
Collect Date: 08/11/2006 10:50	Dilution: 1	File ID: TC08-15-2006.55
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		9.83		1.00	0.500

Report Number: L0608330

Report Date : August 22, 2006

00046547

Sample Number: L0608330-08
 Client ID: 12WW01
 Matrix: Water
 Workgroup Number: W6219926
 Collect Date: 08/11/2006 10:50
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 17:10
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 17:10
 File ID: 10M48106

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	52.6		10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4	0.575	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

Report Number: **L0608330**Report Date : **August 22, 2006**

00046548

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: HPMS10
Client ID: 12WW01	Prep Method: 5030B	Prep Date: 08/15/2006 17:10
Matrix: Water	Analytical Method: 8260B	Cal Date: 07/15/2006 16:37
Workgroup Number: WG219926	Analyst: MES	Run Date: 08/15/2006 17:10
Collect Date: 08/11/2006 10:50	Dilution: 1	File ID: 10M48106
Sample Tag: 01	Units: ug/L	

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	119	80	120	
Dibromofluoromethane	106	86	118	
p-Bromofluorobenzene	108	86	115	
Toluene-d8	106	88	110	

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW01	Prep Method: 300.0	Prep Date: 08/12/2006 20:31
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 20:31
Collect Date: 08/11/2006 10:50	Dilution: 250	File ID: I2081206.33
Sample Tag: DL03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	850		50.0	25.0
Nitrate	14797-55-8		U	150	25.0
Nitrite	14797-65-0		U	100	25.0
Sulfate	14808-79-8	423		250	125

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW01	Prep Method: 300.0	Prep Date: 08/12/2006 20:13
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 20:13
Collect Date: 08/11/2006 10:50	Dilution: 25	File ID: I2081206.32
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	902	I	5.00	2.50
Nitrate	14797-55-8		U	15.0	2.50
Nitrite	14797-65-0		U	10.0	2.50
Sulfate	14808-79-8	378		25.0	12.5

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-08	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW01	Prep Method: 300.0	Prep Date: 08/12/2006 19:56
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 19:56
Collect Date: 08/11/2006 10:50	Dilution: 5	File ID: I2081206.31
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	773	I	1.00	0.500
Nitrate	14797-55-8		U	3.00	0.500
Sulfate	14808-79-8	371	I	5.00	2.50

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046549

Sample Number: **L0608330-08**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **WG219977**
 Collect Date: **08/11/2006 10:50**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **08/15/2006 18:34**
 Cal Date: **03/27/2006 14:30**
 Run Date: **08/15/2006 18:34**
 File ID: **1663730**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	499		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-09**
 Client ID: **12WW05**
 Matrix: **Water**
 Workgroup Number: **WG220023**
 Collect Date: **08/11/2006 13:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/16/2006 04:16**
 Cal Date: **01/12/2006 10:36**
 Run Date: **08/16/2006 04:16**
 File ID: **TC08-15-2006.56**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		4.94		1.00	0.500

Sample Number: **L0608330-09**
 Client ID: **12WW05**
 Matrix: **Water**
 Workgroup Number: **WG220023**
 Collect Date: **08/11/2006 13:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/16/2006 04:16**
 Cal Date: **01/12/2006 10:36**
 Run Date: **08/16/2006 04:16**
 File ID: **TC08-15-2006.56**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		9.70		1.00	0.500

Sample Number: **L0608330-09**
 Client ID: **12WW05**
 Matrix: **Water**
 Workgroup Number: **WG219926**
 Collect Date: **08/11/2006 13:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/15/2006 17:41**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/15/2006 17:41**
 File ID: **10M48107**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00

23 of 28

Report Number: L0608330

Report Date : August 22, 2006

00046550

Sample Number: L0608330-09
 Client ID: 12WW05
 Matrix: Water
 Workgroup Number: W6219926
 Collect Date: 08/11/2006 13:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 17:41
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 17:41
 File ID: 10M48107

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	120	80	120		
Dibromofluoromethane	106	86	118		
p-Bromofluorobenzene	105	86	115		
Toluene-d8	105	88	110		

U Not detected at or above adjusted sample detection limit

Report Number: **L0608330**Report Date : **August 22, 2006**

00046551

Sample Number: L0608330-09	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW05	Prep Method: 300.0	Prep Date: 08/12/2006 21:58
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 21:58
Collect Date: 08/11/2006 13:45	Dilution: 200	File ID: I2081206.38
Sample Tag: DL03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	739		40.0	20.0
Nitrate	14797-55-8		U	120	20.0
Nitrite	14797-65-0		U	80.0	20.0
Sulfate	14808-79-8	247		200	100

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-09	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW05	Prep Method: 300.0	Prep Date: 08/12/2006 21:40
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 21:40
Collect Date: 08/11/2006 13:45	Dilution: 20	File ID: I2081206.37
Sample Tag: DL02	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	827	I	4.00	2.00
Nitrate	14797-55-8		U	12.0	2.00
Nitrite	14797-65-0		U	8.00	2.00
Sulfate	14808-79-8	239		20.0	10.0

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-09	PrePrep Method: NONE	Instrument: IC2
Client ID: 12WW05	Prep Method: 300.0	Prep Date: 08/12/2006 21:23
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG219813	Analyst: JWR	Run Date: 08/12/2006 21:23
Collect Date: 08/11/2006 13:45	Dilution: 4	File ID: I2081206.36
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	686	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Sulfate	14808-79-8	241	I	4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-09	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW05	Prep Method: 5021	Prep Date: 08/15/2006 18:48
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG219977	Analyst: JLS	Run Date: 08/15/2006 18:48
Collect Date: 08/11/2006 13:45	Dilution: 1	File ID: 1663731
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	2.38		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Report Number: L0608330

Report Date : August 22, 2006

00046552

Sample Number: L0608330-10
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/11/2006 14:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 04:28
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 04:28
 File ID: TC08-15-2006.57

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon			U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-10
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG220023
 Collect Date: 08/11/2006 14:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/16/2006 04:28
 Cal Date: 01/12/2006 10:36
 Run Date: 08/16/2006 04:28
 File ID: TC08-15-2006.57

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		0.523	J	1.00	0.500

J The analyte was positively identified, but the quantitation was below the RL

Sample Number: L0608330-10
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG219926
 Collect Date: 08/11/2006 14:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/15/2006 18:11
 Cal Date: 07/15/2006 16:37
 Run Date: 08/15/2006 18:11
 File ID: 10M48108

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	4.13	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125

Report Number: **L0608330**Report Date : **August 22, 2006**

00046553

Sample Number: **L0608330-10**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG219926**
 Collect Date: **08/11/2006 14:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/15/2006 18:11**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/15/2006 18:11**
 File ID: **10M48108**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.385	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	122	80	120	*	
Dibromofluoromethane	108	86	118		
p-Bromofluorobenzene	107	86	115		
Toluene-d8	106	88	110		

* Surrogate or spike compound out of range

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608330-10**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG220214**
 Collect Date: **08/11/2006 14:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/14/2006 16:30**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/14/2006 16:30**
 File ID: **I2081406.15**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6		U	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8		U	1.00	0.500

Report Number: **L0608330**Report Date : **August 22, 2006**

00046554

Sample Number: L0608330-10	PrePrep Method: NONE	Instrument: IC2
Client ID: EQUIPMENT RINSE	Prep Method: 300.0	Prep Date: 08/14/2006 16:30
Matrix: Water	Analytical Method: 300.0	Cal Date: 07/11/2006 19:22
Workgroup Number: WG220214	Analyst: JWR	Run Date: 08/14/2006 16:30
Collect Date: 08/11/2006 14:30	Dilution: 1	File ID: I2081406.15
Sample Tag: 01	Units: mg/L	

U Not detected at or above adjusted sample detection limit

Sample Number: L0608330-10	PrePrep Method: NONE	Instrument: HP16
Client ID: EQUIPMENT RINSE	Prep Method: 5021	Prep Date: 08/16/2006 21:52
Matrix: Water	Analytical Method: RSK175	Cal Date: 03/27/2006 14:30
Workgroup Number: WG220074	Analyst: JLS	Run Date: 08/16/2006 21:52
Collect Date: 08/11/2006 14:30	Dilution: 1	File ID: 1663770
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.252	J	0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

J The analyte was positively identified, but the quantitation was below the RL**U** Not detected at or above adjusted sample detection limit

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

00046556

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG219813

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20			08/12/06 15:00	01	IC2	JWR
L0608330-01	12WW20			08/12/06 15:18	DL01	IC2	JWR
L0608330-01	12WW20			08/12/06 15:35	DL02	IC2	JWR
L0608330-03	12WW20			08/12/06 15:52	01	IC2	JWR
L0608330-03	12WW20			08/12/06 16:10	DL01	IC2	JWR
L0608330-03	12WW20			08/12/06 16:27	DL02	IC2	JWR
L0608330-05	12WW21			08/12/06 16:45	DL01	IC2	JWR
L0608330-05	12WW21			08/12/06 17:02	DL02	IC2	JWR
L0608330-05	12WW21			08/12/06 17:54	DL03	IC2	JWR
L0608330-07	12WW02			08/12/06 18:12	01	IC2	JWR
L0608330-07	12WW02			08/12/06 19:21	DL01	IC2	JWR
L0608330-07	12WW02			08/12/06 19:39	DL02	IC2	JWR
L0608330-08	12WW01			08/12/06 19:56	DL01	IC2	JWR
L0608330-08	12WW01			08/12/06 20:13	DL02	IC2	JWR
L0608330-08	12WW01			08/12/06 20:31	DL03	IC2	JWR
L0608330-09	12WW05			08/12/06 21:23	DL01	IC2	JWR
L0608330-09	12WW05			08/12/06 21:40	DL02	IC2	JWR
L0608330-09	12WW05			08/12/06 21:58	DL03	IC2	JWR

Analysis:Common Anions

Extraction Method:METH0D

Workgroup:WG219813

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/12/06 14:08			FILTER	JWR
L0608330-03	12WW20		08/12/06 14:08			FILTER	JWR
L0608330-05	12WW21		08/12/06 14:08			FILTER	JWR
L0608330-07	12WW02		08/12/06 14:08			FILTER	JWR
L0608330-08	12WW01		08/12/06 14:08			FILTER	JWR
L0608330-09	12WW05		08/12/06 14:08			FILTER	JWR

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG219926

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20			08/15/06 15:08	01	HPMS10	MES
L0608330-03	12WW20			08/15/06 15:39	01	HPMS10	MES
L0608330-05	12WW21			08/15/06 16:10	01	HPMS10	MES
L0608330-07	12WW02			08/15/06 16:40	01	HPMS10	MES
L0608330-08	12WW01			08/15/06 17:10	01	HPMS10	MES
L0608330-09	12WW05			08/15/06 17:41	01	HPMS10	MES
L0608330-10	EQUIPMENT RINSE			08/15/06 18:11	01	HPMS10	MES

WORKGROUP SUMMARY BY METHOD

00046557

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG219926

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20				219926	HPMS10	MES
L0608330-03	12WW20				219926	HPMS10	MES
L0608330-05	12WW21				219926	HPMS10	MES
L0608330-07	12WW02				219926	HPMS10	MES
L0608330-08	12WW01				219926	HPMS10	MES
L0608330-09	12WW05				219926	HPMS10	MES
L0608330-10	EQUIPMENT RINSE				219926	HPMS10	MES

Analysis:Mercury, Total

Extraction Method:METH0D

Workgroup:WG219968

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/15/06 11:40			HOT BLOCK	REK
L0608330-03	12WW20		08/15/06 11:40			HOT BLOCK	REK
L0608330-05	12WW21		08/15/06 11:40			HOT BLOCK	REK

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG219977

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20			08/15/06 16:56	01	HP16	JLS
L0608330-03	12WW20			08/15/06 17:10	01	HP16	JLS
L0608330-05	12WW21			08/15/06 17:24	01	HP16	JLS
L0608330-07	12WW02			08/15/06 18:20	01	HP16	JLS
L0608330-08	12WW01			08/15/06 18:34	01	HP16	JLS
L0608330-09	12WW05			08/15/06 18:48	01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG219977

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20				219977	HP16	JLS
L0608330-03	12WW20				219977	HP16	JLS
L0608330-05	12WW21				219977	HP16	JLS
L0608330-07	12WW02				219977	HP16	JLS
L0608330-08	12WW01				219977	HP16	JLS
L0608330-09	12WW05				219977	HP16	JLS

WORKGROUP SUMMARY BY METHOD

00046558

Analysis:Mercury, Total

Analytical Method:7470A

Workgroup:WG220003

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/15/06 11:40	08/15/06 15:32	01	HYDRA	PAS
L0608330-03	12WW20		08/15/06 11:40	08/15/06 15:37	01	HYDRA	PAS
L0608330-05	12WW21		08/15/06 11:40	08/15/06 15:39	01	HYDRA	PAS

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG220023

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20			08/16/06 02:37	01	TOC-VWP	DIH
L0608330-01	12WW20			08/16/06 02:37	01	TOC-VWP	DIH
L0608330-03	12WW20			08/16/06 02:51	01	TOC-VWP	DIH
L0608330-03	12WW20			08/16/06 02:51	01	TOC-VWP	DIH
L0608330-05	12WW21			08/16/06 03:28	01	TOC-VWP	DIH
L0608330-05	12WW21			08/16/06 03:28	01	TOC-VWP	DIH
L0608330-08	12WW01			08/16/06 04:01	01	TOC-VWP	DIH
L0608330-08	12WW01			08/16/06 04:01	01	TOC-VWP	DIH
L0608330-09	12WW05			08/16/06 04:16	01	TOC-VWP	DIH
L0608330-09	12WW05			08/16/06 04:16	01	TOC-VWP	DIH
L0608330-10	EQUIPMENT RINSE			08/16/06 04:28	01	TOC-VWP	DIH
L0608330-10	EQUIPMENT RINSE			08/16/06 04:28	01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG220023

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20			08/16/06 02:37	01	TOC-VWP	DIH
L0608330-03	12WW20			08/16/06 02:51	01	TOC-VWP	DIH
L0608330-05	12WW21			08/16/06 03:28	01	TOC-VWP	DIH
L0608330-08	12WW01			08/16/06 04:01	01	TOC-VWP	DIH
L0608330-09	12WW05			08/16/06 04:16	01	TOC-VWP	DIH
L0608330-10	EQUIPMENT RINSE			08/16/06 04:28	01	TOC-VWP	DIH

WORKGROUP SUMMARY BY METHOD

00046559

Analysis:_____

Extraction Method:3005A_____

Workgroup:WG220030_____

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 06:45			HOT BLOCK	REK
L0608330-02	12WW20		08/16/06 06:45			HOT BLOCK	REK
L0608330-04	12WW20		08/16/06 06:45			HOT BLOCK	REK
L0608330-04	12WW20		08/16/06 06:45			HOT BLOCK	REK
L0608330-06	12WW21		08/16/06 06:45			HOT BLOCK	REK
L0608330-06	12WW21		08/16/06 06:45			HOT BLOCK	REK

Analysis:_____

Extraction Method:3005A_____

Workgroup:WG220033_____

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/16/06 07:05			HOT BLOCK	REK
L0608330-01	12WW20		08/16/06 07:05			HOT BLOCK	REK
L0608330-03	12WW20		08/16/06 07:05			HOT BLOCK	REK
L0608330-03	12WW20		08/16/06 07:05			HOT BLOCK	REK
L0608330-05	12WW21		08/16/06 07:05			HOT BLOCK	REK
L0608330-05	12WW21		08/16/06 07:05			HOT BLOCK	REK

Analysis:Antimony, Total_____

Extraction Method:3015_____

Workgroup:WG220052_____

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/16/06 07:30			MICROWAVE	VC
L0608330-03	12WW20		08/16/06 07:30			MICROWAVE	VC
L0608330-05	12WW21		08/16/06 07:30			MICROWAVE	VC

Analysis:Metals Analysis_____

Extraction Method:3015_____

Workgroup:WG220053_____

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 08:00			MICROWAVE	VC
L0608330-04	12WW20		08/16/06 08:00			MICROWAVE	VC
L0608330-06	12WW21		08/16/06 08:00			MICROWAVE	VC

WORKGROUP SUMMARY BY METHOD

00046560

Analysis:Mercury, Dissolved

Extraction Method:METH0D

Workgroup:WG220054

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 09:25			HOT BLOCK	REK
L0608330-04	12WW20		08/16/06 09:25			HOT BLOCK	REK
L0608330-06	12WW21		08/16/06 09:25			HOT BLOCK	REK

Analysis:Metals Analysis

Analytical Method:6020

Workgroup:WG220062

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/16/06 07:30	08/17/06 12:41	01	ELAN-ICP	JYH
L0608330-01	12WW20		08/16/06 07:30	08/17/06 15:23	02	ELAN-ICP	JYH
L0608330-03	12WW20		08/16/06 07:30	08/17/06 12:47	01	ELAN-ICP	JYH
L0608330-03	12WW20		08/16/06 07:30	08/17/06 15:37	02	ELAN-ICP	JYH
L0608330-05	12WW21		08/16/06 07:30	08/17/06 12:53	01	ELAN-ICP	JYH
L0608330-05	12WW21		08/16/06 07:30	08/17/06 15:43	02	ELAN-ICP	JYH

Analysis:Metals Analysis

Analytical Method:6020

Workgroup:WG220064

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 08:00	08/17/06 14:36	01	ELAN-ICP	JYH
L0608330-04	12WW20		08/16/06 08:00	08/17/06 14:42	01	ELAN-ICP	JYH
L0608330-06	12WW21		08/16/06 08:00	08/17/06 14:18	01	ELAN-ICP	JYH

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG220074

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-07	12WW02			08/16/06 21:38	DL01	HP16	JLS
L0608330-10	EQUIPMENT RINSE			08/16/06 21:52	01	HP16	JLS

WORKGROUP SUMMARY BY METHOD

00046561

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG220074

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-07	12WW02				220074	HP16	JLS
L0608330-10	EQUIPMENT RINSE				220074	HP16	JLS

Analysis:

Analytical Method:6010B

Workgroup:WG220080

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 06:45	08/16/06 13:45	01	PE-ICP2	KHR
L0608330-02	12WW20		08/16/06 06:45	08/16/06 13:45	01	PE-ICP2	KHR
L0608330-02	12WW20		08/16/06 06:45	08/16/06 14:34	DL01	PE-ICP2	KHR
L0608330-02	12WW20		08/16/06 06:45	08/16/06 14:34	DL01	PE-ICP2	KHR
L0608330-04	12WW20		08/16/06 06:45	08/16/06 13:52	01	PE-ICP2	KHR
L0608330-04	12WW20		08/16/06 06:45	08/16/06 13:52	01	PE-ICP2	KHR
L0608330-04	12WW20		08/16/06 06:45	08/16/06 14:40	DL01	PE-ICP2	KHR
L0608330-04	12WW20		08/16/06 06:45	08/16/06 14:40	DL01	PE-ICP2	KHR
L0608330-06	12WW21		08/16/06 06:45	08/16/06 13:58	01	PE-ICP2	KHR
L0608330-06	12WW21		08/16/06 06:45	08/16/06 13:58	01	PE-ICP2	KHR
L0608330-06	12WW21		08/16/06 06:45	08/16/06 14:10	DL01	PE-ICP2	KHR
L0608330-06	12WW21		08/16/06 06:45	08/16/06 14:10	DL01	PE-ICP2	KHR

Analysis:Mercury, Dissolved

Analytical Method:7470A

Workgroup:WG220101

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-02	12WW20		08/16/06 09:25	08/16/06 15:56	01	HYDRA	PAS
L0608330-04	12WW20		08/16/06 09:25	08/16/06 15:58	01	HYDRA	PAS
L0608330-06	12WW21		08/16/06 09:25	08/16/06 16:00	01	HYDRA	PAS

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG220121

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-07	12WW02			08/16/06 22:46	DL01	TOC-VWP	DIH
L0608330-07	12WW02			08/16/06 22:46	DL01	TOC-VWP	DIH

WORKGROUP SUMMARY BY METHOD

00046562

Analysis:Total Organic Carbon

Extraction Method:METHOD

Workgroup:WG220121

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-07	12WW02			08/16/06 22:46	DL01	TOC-VWP	DIH

Analysis:

Analytical Method:6010B

Workgroup:WG220179

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-01	12WW20		08/16/06 07:05	08/17/06 14:35	01	PE-ICP2	KHR
L0608330-01	12WW20		08/16/06 07:05	08/17/06 14:35	01	PE-ICP2	KHR
L0608330-01	12WW20		08/16/06 07:05	08/17/06 15:22	DL01	PE-ICP2	KHR
L0608330-01	12WW20		08/16/06 07:05	08/17/06 15:22	DL01	PE-ICP2	KHR
L0608330-03	12WW20		08/16/06 07:05	08/17/06 14:40	01	PE-ICP2	KHR
L0608330-03	12WW20		08/16/06 07:05	08/17/06 14:40	01	PE-ICP2	KHR
L0608330-03	12WW20		08/16/06 07:05	08/17/06 15:28	DL01	PE-ICP2	KHR
L0608330-03	12WW20		08/16/06 07:05	08/17/06 15:28	DL01	PE-ICP2	KHR
L0608330-05	12WW21		08/16/06 07:05	08/17/06 14:05	01	PE-ICP2	KHR
L0608330-05	12WW21		08/16/06 07:05	08/17/06 14:05	01	PE-ICP2	KHR
L0608330-05	12WW21		08/16/06 07:05	08/17/06 14:17	DL01	PE-ICP2	KHR
L0608330-05	12WW21		08/16/06 07:05	08/17/06 14:17	DL01	PE-ICP2	KHR

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG220214

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-10	EQUIPMENT RINSE			08/14/06 16:30	01	IC2	JWR

Analysis:Common Anions

Extraction Method:300.0

Workgroup:WG220214

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608330-10	EQUIPMENT RINSE		08/14/06 15:20			FILTER	JWR

Kemron Environmental Services
Analyst Listing
August 22, 2006

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH	CEB - CHAD E. BARNES
CFB - CHAD F. BOOK	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS
CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN	CSA - LUCINDA S. ARNOLD
CSH - CHRIS S. HILL	DAS - DALLAS A. SULLIVAN	DD - DIANE M. DENNIS
DDE - DEBRA D. ELLIOTT	DEL - DON E. LIGHTFRITZ	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DR - DEANNA ROBERTS
DRP - DAVE R. PITZER	DSM - DAVID S. MOSSOR	DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JKT - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL	JNB - JOSHUA N. BOOTH	JS - JENNIFER L. SOUTHALL
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES	JYH - JI Y. HU
KCZ - KEVIN C. ZUMBRO	KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO	MLR - MARY L. ROCHOTTE	MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
PAS - PATRICK A. STREET	PJM - PAUL J. MILLER	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SCM - SUSAN C. MOELLENDICK	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	SRM - SAMUEL R. MCFEE
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WFM - WALTER F. MARTIN		

Qualkey: STD

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
FL	Free Liquid
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	ESTIMATE & COLUMNS DON'T AGREE TO WITHIN 40%
L	Sample reporting limits elevated due to matrix interference
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria fail. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Undetected; the concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

Organic QA/QC

KEMRON Environmental Services

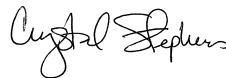
Data Checklist

00046566

Date: 15-JUL-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B/624
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11244
 Analytical Workgroups: WG217397;WG217415

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
17-JUL-2006



Secondary Reviewer:
17-JUL-2006



Generated: JUL-17-2006 14:39:37

KEMRON Environmental Services Data Checklist

00046567

Date: 15 - AUG - 2006
 Analyst: MES
 Analyst: NA
 Method: 8260
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11775
 Analytical Workgroups: WG219926

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
16 - AUG - 2006



Secondary Reviewer:
17 - AUG - 2006



Generated: AUG -17 -2006 08:29:14

KEMRON Environmental Services

Instrument Run Log

00046568

Instrument: HPMS10 Dataset: 071506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B/5035 SOP: PAT01 Rev: 10
 Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
 CCV: STD13787 LCS: STD13712 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG217397;WG217415

Comments: Files 10M47238-10M47244: Retuned instrument.Troubleshooting purposes only. All tunes passed.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M47238	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 08:15
2	10M47239	BFB 50ng STD CHECK 8260-PURGED	NA	1	1	STD13589	07/15/06 08:55
3	10M47240	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 09:09
4	10M47241	IS/SS SYSTEM BLANK CHECK	NA	1	1		07/15/06 09:45
5	10M47242	IS/SS SYSTEM BLANK CHECK 1800	NA	1	1		07/15/06 10:28
6	10M47243	IS/SS SYSTEM BLANK CHECK 1859	NA	1	1		07/15/06 11:00
7	10M47244	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 11:27
8	10M47245	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 11:48
9	10M47246	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 12:02
10	10M47247	WG217397-02 0.30ug/L STD 8260	NA	1	1	STD13787	07/15/06 12:33
11	10M47248	WG217397-03 0.40ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:03
12	10M47249	WG217397-04 1ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:34
13	10M47250	WG217397-05 2ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:05
14	10M47251	WG217397-06 5ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:35
15	10M47252	WG217397-07 20ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:06
16	10M47253	WG217397-08 50ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:37
17	10M47254	WG217397-09 100ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:07
18	10M47255	WG217397-10 200ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:37
19	10M47256	SYSTEM BLANK	NA	1	1		07/15/06 17:08
20	10M47257	SYSTEM BLANK	NA	1	1		07/15/06 17:39
21	10M47258	WG217397-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD13712	07/15/06 18:09
22	10M47259	WG217415-01 VBLK0715 BLANK 8260	NA	1	1		07/15/06 18:40
23	10M47260	L0606678-01 A 826-REF-BLK	NA	1	1		07/15/06 19:11
24	10M47261	L0606678-02 A 826-REF-BLK	NA	1	1		07/15/06 19:41
25	10M47262	L0606678-03 A 826-REF-BLK	NA	1	1		07/15/06 20:11
26	10M47263	L0606678-04 A 826-REF-BLK	NA	1	1		07/15/06 20:42
27	10M47264	L0606678-05 A 826-REF-BLK	NA	1	1		07/15/06 21:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8	X			

Approved: July 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046569

Instrument: HPMS10 Dataset: 071506
Analyst1: CMS Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 10
Method: 624 SOP: MSV10 Rev: 9
Method: 5030B/5035 SOP: PAT01 Rev: 10
Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
CCV: STD13787 LCS: STD13712 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG217397;WG217415

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M47245				
Tune failed/DNR				

Approved: July 17, 2006



KEMRON Environmental Services

Instrument Run Log

00046570

Instrument: HPMS10 Dataset: 081506
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15193

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219926

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M48088	WG219925-01 50NG BFB STD 8260	NA	1	1	STD14237	08/15/06 08:25
2	10M48089	WG219925-01 50NG BFB STD 8260	NA	1	1	STD14237	08/15/06 08:38
3	10M48090	WG219925-02 50ug/L WATER STD 8260	NA	1	1	STD14330	08/15/06 09:00
4	10M48091	WG219926-01 VBLK0815 BLANK 8260	NA	1	1		08/15/06 09:31
5	10M48092	WG219926-02 20ug/L LCS 8260	NA	1	1	STD14341	08/15/06 10:02
6	10M48093	WG219926-03 20ug/L LCSDUP 8260	NA	1	1	STD14341	08/15/06 10:33
7	10M48094	L0608316-04 B 826-BETX	<2	1	1		08/15/06 11:03
8	10M48095	L0608250-04 B 100X 826-SPLP	NA	18	100		08/15/06 11:34
9	10M48096	L0608250-05 B 100X 826-SPLP	NA	18	100		08/15/06 12:05
10	10M48097	L0608316-05 B 826-BETX	<2	1	1		08/15/06 12:36
11	10M48098	L0608316-08 B D1 10X 826-BETX	<2	1	10		08/15/06 13:07
12	10M48099	L0608316-07 B 5X 826-BETX	<2	1	5		08/15/06 13:37
13	10M48100	L0608316-02 B D1 20X 826-BETX	<2	1	20		08/15/06 14:07
14	10M48101	L0608316-03 B D1 100X 826-BETX	<2	1	100		08/15/06 14:38
15	10M48102	L0608330-01 A 826-SPE	<2	1	1		08/15/06 15:08
16	10M48103	L0608330-03 A 826-SPE	2.2	1	1		08/15/06 15:39
17	10M48104	L0608330-05 A 826-SPE	<2	1	1		08/15/06 16:10
18	10M48105	L0608330-07 A 826-SPE	5	1	1		08/15/06 16:40
19	10M48106	L0608330-08 A 826-SPE	<2	1	1		08/15/06 17:10
20	10M48107	L0608330-09 A 826-SPE	<2	1	1		08/15/06 17:41
21	10M48108	L0608330-10 A 826-SPE	<2	1	1		08/15/06 18:11
22	10M48109	L0608280-01 A 10000X 8260	NA	12	10000		08/15/06 18:42
23	10M48110	L0608280-03 A 10000X 8260	NA	12	10000		08/15/06 19:12
24	10M48111	L0608280-06 A 10000X 8260	NA	12	10000		08/15/06 19:42
25	10M48112	L0608280-07 A 10000X 8260	NA	12	10000		08/15/06 20:12
26	10M48113	SYSTEM BLANK	NA	1	1		08/15/06 20:44
27	10M48114	SYSTEM BLANK	NA	1	1		08/15/06 21:15

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1				

Approved: August 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046571

Instrument: HPMS10 Dataset: 081506
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15193

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219926

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M48088				
RR-BFB failed.				
22	X	1000000	Over Calibration Range	chlorobenzene
File ID: 10M48109				
23	X	1000	Analyzed too dilute	
File ID: 10M48110				
Do not report.				
24	X	1000000	Over Calibration Range	acetone,tol,cb, and o-xylene
File ID: 10M48111				
25	X	100	Analyzed too dilute	
File ID: 10M48112				
Do not report.				

Approved: August 17, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046572

Analytical Method: 8260B
Login Number: L0608330

AAB#: WG219926

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/15/06	14	4.99	08/15/06	14	4.99	
12WW20	08/10/06	08/12/06	08/15/06	14	5.01	08/15/06	14	5.01	
12WW21	08/10/06	08/12/06	08/15/06	14	4.94	08/15/06	14	4.94	
12WW02	08/11/06	08/12/06	08/15/06	14	4.33	08/15/06	14	4.33	
12WW01	08/11/06	08/12/06	08/15/06	14	4.26	08/15/06	14	4.26	
12WW05	08/11/06	08/12/06	08/15/06	14	4.16	08/15/06	14	4.16	
EQUIPMENT RINSE	08/11/06	08/12/06	08/15/06	14	4.15	08/15/06	14	4.15	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00046573

Login Number: L0608330
 Instrument Id: HPMS10
 Workgroup (AAB#): WG219926

Method: 8260
 CAL ID: HPMS10 - 15-JUL-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608330-01	1.00	01	118	108	108	105
L0608330-03	1.00	01	115	108	104	105
L0608330-05	1.00	01	121	108	106	105
L0608330-07	1.00	01	116	107	106	105
L0608330-08	1.00	01	119	106	108	106
L0608330-09	1.00	01	120	106	105	105
L0608330-10	1.00	01	122	108	107	106
WG219926-01	1.00	01	112	108	105	106
WG219926-02	1.00	01	115	108	101	105
WG219926-03	1.00	01	115	108	102	105

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

METHOD BLANK SUMMARY

00046574

Login Number: L0608330	Work Group: WG219926
Blank File ID: 10M48091	Blank Sample ID: WG219926-01
Date Analyzed: 08/15/06	Instrument ID: HPMS10
Time Analyzed: 09:31	Method: 8260B
Analyst: MES	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219926-02	10M48092	08/15/06 10:02	01
LCS2	WG219926-03	10M48093	08/15/06 10:33	01
12WW20	L0608330-01	10M48102	08/15/06 15:08	01
12WW20	L0608330-03	10M48103	08/15/06 15:39	01
12WW21	L0608330-05	10M48104	08/15/06 16:10	01
12WW02	L0608330-07	10M48105	08/15/06 16:40	01
12WW01	L0608330-08	10M48106	08/15/06 17:10	01
12WW05	L0608330-09	10M48107	08/15/06 17:41	01
EQUIPMENT RINSE	L0608330-10	10M48108	08/15/06 18:11	01

METHOD BLANK REPORT

00046575

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219926-01
 Instrument ID: HPMS10 Run Time: 09:31 Prep Method: 5030B
 File ID: 10M48091 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219926 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.200	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 543903
 Report generated 08/17/2006 14:03

METHOD BLANK REPORT

00046576

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219926-01
 Instrument ID: HPMS10 Run Time: 09:31 Prep Method: 5030B
 File ID: 10M48091 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219926 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	112	80 - 120	PASS
Dibromofluoromethane	108	86 - 118	PASS
p-Bromofluorobenzene	105	86 - 115	PASS
Toluene-d8	106	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046577

Login Number: L0608330 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219926 Units: ug/L
 Sample ID: WG219926-02 LCS File ID: 10M48092 Run Date: 08/15/2006 10:02
 Sample ID: WG219926-03 LCS2 File ID: 10M48093 Run Date: 08/15/2006 10:33

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	23.4	117	20.0	23.0	115	2.04	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	20.3	102	20.0	20.2	101	0.478	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	23.5	118	20.0	22.4	112	4.87	80 - 130	20	
1,1,2-Trichloroethane	20.0	21.0	105	20.0	21.4	107	1.60	80 - 125	20	
1,1-Dichloroethane	20.0	22.0	110	20.0	21.7	108	1.67	80 - 125	20	
1,1-Dichloroethene	20.0	20.3	101	20.0	19.6	98.2	3.19	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	18.4	92.2	20.0	18.4	92.2	0.0224	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	19.0	95.1	20.0	19.0	95.2	0.138	50 - 130	20	
1,2-Dibromoethane	20.0	21.5	108	20.0	21.6	108	0.530	80 - 125	20	
1,2-Dichlorobenzene	20.0	19.0	95.2	20.0	19.3	96.7	1.56	80 - 125	20	
1,2-Dichloroethane	20.0	24.6	123	20.0	24.5	123	0.344	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.5	102	20.0	20.5	102	0.0231	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.8	99.1	20.0	19.7	98.4	0.740	80 - 127	20	
1,2-Dichloropropane	20.0	21.6	108	20.0	21.2	106	1.88	80 - 120	20	
1,3-Dichlorobenzene	20.0	19.8	98.9	20.0	19.4	97.0	1.94	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.4	97.2	20.0	19.2	96.0	1.20	80 - 120	20	
2-Butanone	20.0	23.4	117	20.0	22.4	112	4.11	30 - 150	20	
2-Hexanone	20.0	21.2	106	20.0	21.5	107	1.32	55 - 130	20	
4-Methyl-2-pentanone	20.0	21.2	106	20.0	21.4	107	0.972	64 - 140	20	
Acetone	20.0	24.5	123	20.0	23.2	116	5.35	40 - 142	20	
Benzene	20.0	20.0	100	20.0	19.6	98.1	2.08	80 - 121	20	
Bromodichloromethane	20.0	25.4	127	20.0	25.1	125	1.25	80 - 131	20	
Bromoform	20.0	23.4	117	20.0	23.4	117	0.195	70 - 130	20	
Bromomethane	20.0	24.0	120	20.0	23.2	116	3.07	30 - 145	20	
Carbon disulfide	20.0	20.1	100	20.0	18.9	94.3	6.17	58 - 138	20	
Carbon tetrachloride	20.0	22.2	111	20.0	21.7	109	2.28	65 - 140	20	
Chlorobenzene	20.0	20.4	102	20.0	20.1	101	1.47	80 - 120	20	
Chloroethane	20.0	20.2	101	20.0	19.4	97.2	3.74	60 - 135	20	
Chloroform	20.0	22.2	111	20.0	22.4	112	0.775	80 - 125	20	
Chloromethane	20.0	23.5	118	20.0	23.3	117	0.832	40 - 125	20	
cis-1,3-Dichloropropene	20.0	21.6	108	20.0	21.3	107	1.27	70 - 130	20	
Cyclohexane	20.0	20.5	102	20.0	19.6	98.0	4.47	80 - 130	20	
Dibromochloromethane	20.0	22.2	111	20.0	22.6	113	1.49	60 - 135	20	
Dichlorodifluoromethane	20.0	13.0	65.1	20.0	12.3	61.7	5.30	50 - 133	20	
Ethyl benzene	20.0	20.9	104	20.0	20.6	103	1.03	80 - 122	20	
Isopropylbenzene	20.0	19.5	97.4	20.0	19.0	94.8	2.73	80 - 122	20	
Methyl acetate	20.0	27.2	136	20.0	27.0	135	0.925	80 - 130	20	*
Methyl tert-butyl ether	20.0	21.8	109	20.0	21.0	105	3.75	65 - 125	20	
Methylcyclohexane	20.0	19.6	98.2	20.0	18.6	93.2	5.20	80 - 130	20	
Methylene chloride	20.0	19.4	96.8	20.0	19.1	95.6	1.30	80 - 123	20	
Styrene	20.0	19.7	98.6	20.0	19.5	97.4	1.18	80 - 123	20	
Tetrachloroethene	20.0	21.2	106	20.0	20.8	104	1.99	80 - 124	20	

KEMRON FORMS - Modified 07/13/2006
 Version 1.5 PDF File ID: 542983
 Report generated 08/17/2006 14:03

LABORATORY CONTROL SAMPLE (LCS)

00046578

Login Number: L0608330 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219926 Units: ug/L
 Sample ID: WG219926-02 LCS File ID: 10M48092 Run Date: 08/15/2006 10:02
 Sample ID: WG219926-03 LCS2 File ID: 10M48093 Run Date: 08/15/2006 10:33

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	20.1	100	20.0	19.9	99.5	0.916	80 - 124	20	
trans-1,3-Dichloropropene	20.0	21.0	105	20.0	21.3	107	1.63	80 - 130	20	
Trichloroethene	20.0	20.8	104	20.0	20.2	101	3.02	80 - 122	20	
Trichlorofluoromethane	20.0	19.9	99.4	20.0	19.3	96.4	3.05	62 - 151	20	
Vinyl chloride	20.0	23.1	116	20.0	21.8	109	5.86	65 - 140	20	
Xylenes, Total	60.0	62.0	103	60.0	60.4	101	2.67	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	108	108	86 - 118	PASS
1,2-Dichloroethane-d4	115	115	80 - 120	PASS
Toluene-d8	105	105	88 - 110	PASS
p-Bromofluorobenzene	101	102	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046579

BFB

Login Number: L0608330	Tune ID: WG217397-01
Instrument: HPMS10	Run Date: 07/15/2006
Analyst: CMS	Run Time: 12:02
Workgroup: WG217397	File ID: 10M47246
	Cal ID: HPMS10-15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	20.3	6639	PASS
75.0	95.0	30.0	60.0	45.2	14755	PASS
95.0	95.0	100	100	100	32637	PASS
96.0	95.0	5.00	9.00	6.52	2129	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.0	27402	PASS
175	174	5.00	9.00	7.77	2130	PASS
176	174	95.0	101	95.8	26256	PASS
177	176	5.00	9.00	7.24	1900	PASS

This check relates to the following samples, MS, MSD:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG217397-11	SSCV	01	07/15/2006 18:09	
WG217397-10	STD	01	07/15/2006 16:37	
WG217397-09	STD	01	07/15/2006 16:07	
WG217397-08	STD-CCV	01	07/15/2006 15:37	
WG217397-07	STD	01	07/15/2006 15:06	
WG217397-06	STD	01	07/15/2006 14:35	
WG217397-05	STD	01	07/15/2006 14:05	
WG217397-04	STD	01	07/15/2006 13:34	
WG217397-03	STD	01	07/15/2006 13:03	
WG217397-02	STD	01	07/15/2006 12:33	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046580

BFB

Login Number: L0608330
Instrument: HPMS10
Analyst: MES
Workgroup: WG219925

Tune ID: WG219925-01
Run Date: 08/15/2006
Run Time: 08:38
File ID: 10M48089

Cal ID: HPMS10 -15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	25.0	7426	PASS
75.0	95.0	30.0	60.0	51.1	15190	PASS
95.0	95.0	100	100	100	29738	PASS
96.0	95.0	5.00	9.00	6.11	1817	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	83.0	24672	PASS
175	174	5.00	9.00	6.31	1556	PASS
176	174	95.0	101	95.7	23616	PASS
177	176	5.00	9.00	7.02	1659	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG219925-02	CCV	08/15/2006 09:00

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219926-01	BLANK	01	08/15/2006 09:31	
WG219926-02	LCS	01	08/15/2006 10:02	
WG219926-03	LCS2	01	08/15/2006 10:33	
L0608330-01	12WW20	01	08/15/2006 15:08	
L0608330-03	12WW20	01	08/15/2006 15:39	
L0608330-05	12WW21	01	08/15/2006 16:10	
L0608330-07	12WW02	01	08/15/2006 16:40	
L0608330-08	12WW01	01	08/15/2006 17:10	
L0608330-09	12WW05	01	08/15/2006 17:41	
L0608330-10	EQUIPMENT RINSE	01	08/15/2006 18:11	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00046581

Login Number: L0608330
 Analytical Method: 8260B
 ICAL Workgroup: WG217397

Instrument ID: HPMS10
 Initial Calibration Date: 15-JUL-06 16:37
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
1,1-Dichloroethene	CCC	0.2477	13.7		
1,2-Dichloropropane	CCC	0.2842	4.38		
Chloroform	CCC	0.4605	7.94		
Ethylbenzene	CCC	0.5099	7.78		
Toluene	CCC	1.413	4.62		
Vinyl Chloride	CCC	0.1446	12.7		
1,1,2,2-Tetrachloroethane	SPCC	0.4140	10.4		
1,1-Dichloroethane	SPCC	0.5470	4.92		
Bromoform	SPCC	0.1038	24.8		1.00
Chlorobenzene	SPCC	0.9490	5.07		
Chloromethane	SPCC	0.1846	5.29		
1,1,1-Trichloroethane		0.3888	12.3		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2697	6.60		
1,1,2-Trichloroethane		0.2162	3.27		
1,2,4-Trichlorobenzene		0.7784	9.12		
1,2-Dibromo-3-Chloropropane		0.06202	21.4		1.00
1,2-Dibromoethane		0.2235	6.08		
1,2-Dichlorobenzene		1.269	7.02		
1,2-Dichloroethane		0.3301	5.92		
1,3-Dichlorobenzene		1.436	3.86		
1,4-Dichlorobenzene		1.468	7.30		
2-Butanone		0.05478	4.81		
2-Hexanone		0.1113	8.25		
4-Methyl-2-Pentanone		0.05537	6.85		
Acetone		0.04005	14.0		
Benzene		1.053	5.37		
Bromodichloromethane		0.2797	12.0		
Bromomethane		0.08886	10.1		
Carbon Disulfide		0.8671	9.75		
Carbon Tetrachloride		0.3201	18.6	1.00	
Chloroethane		0.2205	6.79		
Cyclohexane		0.5447	5.61		
Dibromochloromethane		0.2116	18.7	1.00	
Dichlorodifluoromethane		0.3087	4.07		
Isopropylbenzene		1.414	7.32		
Methyl Tert Butyl Ether		0.5495	4.68		
Methyl acetate		0.1194	3.04		
Methylcyclohexane		0.4123	5.19		
Methylene Chloride		0.2841	10.4		
Styrene		1.029	4.51		
Tetrachloroethene		0.2865	11.4		
Trichloroethene		0.2800	6.92		
Trichlorofluoromethane		0.4877	14.7		
cis-1,2-Dichloroethene		0.2827	5.59		
cis-1,3-Dichloropropene		0.3820	5.49		

KEMRON FORMS - Modified 08/16/2006
 Version 1.5 PDF File ID: 543904
 Report generated 08/17/2006 14:03

INITIAL CALIBRATION SUMMARY

00046582

Login Number: **L0608330**
Analytical Method: **8260B**
ICAL Workgroup: **WG217397**

Instrument ID: **HPMS10**
Initial Calibration Date: **15-JUL-06 16:37**
Column ID: **F**

Analyte		AVG RF	% RSD	LINEAR	QUAD
m-, p-Xylene		0.6229	7.97		
o-Xylene		0.6131	4.93		
trans-1,2-Dichloroethene		0.2747	6.68		
trans-1,3-Dichloropropene		0.4096	5.80		

INITIAL CALIBRATION DATA

00046583

Login Number:L0608330

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2155	0.1768	1.00	7552	0.2481
1,2-Dichloropropane	NA	NA	NA	0.400	3286	0.2696	1.00	8387	0.2756
Chloroform	0.300	3611	0.3788	0.400	5503	0.4516	1.00	13646	0.4484
Ethylbenzene	NA	NA	NA	0.400	4291	0.4814	1.00	11933	0.5337
Toluene	NA	NA	NA	0.400	12765	1.432	1.00	32232	1.442
Vinyl Chloride	NA	NA	NA	0.400	1986	0.1630	1.00	4642	0.1525
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2225	0.4981	1.00	4015	0.3548
1,1-Dichloroethane	NA	NA	NA	0.400	6118	0.5020	1.00	16423	0.5396
Bromoform	NA	NA	NA	NA	NA	NA	1.00	1677	0.07500
Chlorobenzene	NA	NA	NA	0.400	8400	0.9424	1.00	22223	0.9939
Chloromethane	NA	NA	NA	0.400	2489	0.2042	1.00	5413	0.1779
1,1,1-Trichloroethane	NA	NA	NA	0.400	3590	0.2946	1.00	11390	0.3742
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	1.00	7064	0.2321
1,1,2-Trichloroethane	NA	NA	NA	0.400	1993	0.2236	1.00	4758	0.2128
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4173	0.9343	1.00	8769	0.7750
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1711	0.1920	1.00	5059	0.2263
1,2-Dichlorobenzene	0.300	3977	1.162	0.400	6424	1.438	1.00	14615	1.292
1,2-Dichloroethane	NA	NA	NA	0.400	3632	0.2980	1.00	10116	0.3324
1,3-Dichlorobenzene	NA	NA	NA	0.400	6404	1.434	1.00	16357	1.446
1,4-Dichlorobenzene	0.300	4673	1.365	0.400	7504	1.680	1.00	16442	1.453
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	12926	1.061	1.00	32640	1.073
Bromodichloromethane	NA	NA	NA	0.400	2994	0.2457	1.00	7247	0.2381
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	2267	0.07450
Carbon Disulfide	NA	NA	NA	0.400	8322	0.6829	1.00	26540	0.8720
Carbon Tetrachloride	NA	NA	NA	0.400	2603	0.2136	1.00	9005	0.2959
Chloroethane	NA	NA	NA	0.400	2463	0.2021	1.00	6013	0.1976
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	16858	0.5539
Dibromochloromethane	NA	NA	NA	0.400	1554	0.1744	1.00	3887	0.1738
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8788	0.2888
Isopropylbenzene	NA	NA	NA	0.400	11116	1.247	1.00	30781	1.377
Methyl Tert Butyl Ether	NA	NA	NA	0.400	6217	0.5102	1.00	15981	0.5251
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	11744	0.3859
Methylene Chloride	NA	NA	NA	0.400	4138	0.3396	1.00	9498	0.3121
Styrene	NA	NA	NA	0.400	9184	1.030	1.00	22553	1.009
Tetrachloroethene	NA	NA	NA	0.400	1971	0.2211	1.00	6598	0.2951
Trichloroethene	NA	NA	NA	0.400	3037	0.2492	1.00	9012	0.2961

INITIAL CALIBRATION DATA

00046584

Login Number:L0608330

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	13300	0.2202	5.00	39494	0.2668	20.0	157889	0.2687
1,2-Dichloropropane	2.00	16876	0.2793	5.00	43326	0.2926	20.0	175735	0.2991
Chloroform	2.00	26821	0.4440	5.00	71128	0.4804	20.0	286292	0.4873
Ethylbenzene	2.00	21374	0.4811	5.00	61604	0.5657	20.0	237507	0.5396
Toluene	2.00	59951	1.349	5.00	163466	1.501	20.0	636381	1.446
Vinyl Chloride	2.00	9672	0.1601	5.00	23420	0.1582	20.0	79694	0.1356
1,1,2,2-Tetrachloroethane	2.00	8402	0.3770	5.00	23352	0.4215	20.0	94876	0.4269
1,1-Dichloroethane	2.00	31792	0.5263	5.00	84471	0.5705	20.0	333056	0.5669
Bromoform	2.00	3400	0.07650	5.00	9039	0.08300	20.0	45931	0.1044
Chlorobenzene	2.00	41356	0.9308	5.00	107647	0.9885	20.0	433501	0.9849
Chloromethane	2.00	10457	0.1731	5.00	26838	0.1813	20.0	109763	0.1868
1,1,1-Trichloroethane	2.00	21124	0.3497	5.00	61118	0.4128	20.0	252890	0.4304
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	16160	0.2675	5.00	41383	0.2795	20.0	165877	0.2823
1,1,2-Trichloroethane	2.00	9523	0.2143	5.00	23769	0.2183	20.0	96364	0.2189
1,2,4-Trichlorobenzene	2.00	16347	0.7335	5.00	43577	0.7866	20.0	174334	0.7844
1,2-Dibromo-3-Chloropropane	2.00	1031	0.04630	5.00	2508	0.04530	20.0	13833	0.06220
1,2-Dibromoethane	2.00	10100	0.2273	5.00	24575	0.2257	20.0	102677	0.2333
1,2-Dichlorobenzene	2.00	27302	1.225	5.00	73258	1.322	20.0	290271	1.306
1,2-Dichloroethane	2.00	19924	0.3298	5.00	50650	0.3421	20.0	205661	0.3500
1,3-Dichlorobenzene	2.00	31297	1.404	5.00	82523	1.490	20.0	333022	1.499
1,4-Dichlorobenzene	2.00	32671	1.466	5.00	85330	1.540	20.0	334940	1.507
2-Butanone	2.00	3489	0.05780	5.00	8175	0.05520	20.0	32157	0.05470
2-Hexanone	2.00	4746	0.1068	5.00	12944	0.1189	20.0	52586	0.1195
4-Methyl-2-Pentanone	2.00	3053	0.05050	5.00	8358	0.05650	20.0	34236	0.05830
Acetone	2.00	2992	0.04950	5.00	6507	0.04400	20.0	22876	0.03890
Benzene	2.00	61054	1.011	5.00	165630	1.119	20.0	644633	1.097
Bromodichloromethane	2.00	14734	0.2439	5.00	40674	0.2747	20.0	176212	0.2999
Bromomethane	2.00	4848	0.08020	5.00	13785	0.09310	20.0	51620	0.08790
Carbon Disulfide	2.00	54632	0.9043	5.00	136052	0.9189	20.0	543854	0.9256
Carbon Tetrachloride	2.00	15690	0.2597	5.00	47793	0.3228	20.0	206570	0.3516
Chloroethane	2.00	13269	0.2196	5.00	34263	0.2314	20.0	139332	0.2371
Cyclohexane	2.00	33305	0.5513	5.00	84549	0.5711	20.0	328563	0.5592
Dibromochloromethane	2.00	7310	0.1645	5.00	21283	0.1954	20.0	97086	0.2206
Dichlorodifluoromethane	2.00	18369	0.3041	5.00	47240	0.3191	20.0	187142	0.3185
Isopropylbenzene	2.00	58775	1.323	5.00	164943	1.515	20.0	666472	1.514
Methyl Tert Butyl Ether	2.00	33220	0.5499	5.00	83348	0.5630	20.0	333902	0.5683
Methyl acetate	2.00	7192	0.1190	5.00	16913	0.1142	20.0	70054	0.1192
Methylcyclohexane	2.00	24159	0.3999	5.00	63431	0.4284	20.0	251187	0.4275
Methylene Chloride	2.00	16950	0.2806	5.00	41377	0.2795	20.0	163552	0.2784
Styrene	2.00	43781	0.9854	5.00	116097	1.066	20.0	473446	1.076
Tetrachloroethene	2.00	11410	0.2568	5.00	34511	0.3169	20.0	135423	0.3077
Trichloroethene	2.00	15717	0.2602	5.00	43388	0.2931	20.0	174150	0.2964

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 543904
Report generated 08/17/2006 14:03

INITIAL CALIBRATION DATA

00046585

Login Number: L0608330

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	395105	0.2792	100	746883	0.2681	200	1407541	0.2538
1,2-Dichloropropane	50.0	424112	0.2997	100	804346	0.2887	200	1493303	0.2693
Chloroform	50.0	707811	0.5001	100	1362341	0.4890	200	2577742	0.4648
Ethylbenzene	50.0	563335	0.5313	100	1039224	0.5022	200	1804054	0.4444
Toluene	50.0	1533585	1.447	100	2882090	1.393	200	5251372	1.294
Vinyl Chloride	50.0	175535	0.1240	100	330230	0.1185	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	233701	0.4306	100	432363	0.4089	200	819486	0.3940
1,1-Dichloroethane	50.0	817848	0.5779	100	1572533	0.5644	200	2927948	0.5280
Bromoform	50.0	132160	0.1247	100	269661	0.1303	200	539702	0.1329
Chlorobenzene	50.0	1031892	0.9733	100	1922747	0.9291	200	3446617	0.8490
Chloromethane	50.0	266196	0.1881	100	525212	0.1885	200	980824	0.1769
1,1,1-Trichloroethane	50.0	613851	0.4338	100	1173075	0.4210	200	2183759	0.3938
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	399812	0.2825	100	771869	0.2770	200	1480622	0.2670
1,1,2-Trichloroethane	50.0	238815	0.2252	100	441173	0.2132	200	823736	0.2029
1,2,4-Trichlorobenzene	50.0	422238	0.7780	100	787610	0.7449	200	1436381	0.6905
1,2-Dibromo-3-Chloropropane	50.0	38747	0.07140	100	76766	0.07260	200	154640	0.07430
1,2-Dibromoethane	50.0	248933	0.2348	100	473783	0.2290	200	889735	0.2192
1,2-Dichlorobenzene	50.0	703512	1.296	100	1307212	1.236	200	2386559	1.147
1,2-Dichloroethane	50.0	497835	0.3518	100	923329	0.3314	200	1692271	0.3052
1,3-Dichlorobenzene	50.0	795692	1.466	100	1504951	1.423	200	2753792	1.324
1,4-Dichlorobenzene	50.0	803373	1.480	100	1494835	1.414	200	2716928	1.306
2-Butanone	50.0	81094	0.05730	100	147473	0.05290	200	281672	0.05080
2-Hexanone	50.0	125686	0.1185	100	222058	0.1073	200	393105	0.09680
4-Methyl-2-Pentanone	50.0	85134	0.06020	100	154207	0.05530	200	284832	0.05140
Acetone	50.0	51865	0.03660	100	98172	0.03520	200	200255	0.03610
Benzene	50.0	1539273	1.088	100	2887312	1.036	200	5221294	0.9415
Bromodichloromethane	50.0	450434	0.3183	100	879465	0.3157	200	1670781	0.3013
Bromomethane	50.0	127151	0.08980	100	271375	0.09740	200	549682	0.09910
Carbon Disulfide	50.0	1328773	0.9389	100	2460454	0.8831	200	4499082	0.8113
Carbon Tetrachloride	50.0	528039	0.3731	100	1047948	0.3761	200	2042508	0.3683
Chloroethane	50.0	333370	0.2356	100	631553	0.2267	200	1186233	0.2139
Cyclohexane	50.0	797216	0.5633	100	1487040	0.5337	200	2665271	0.4806
Dibromochloromethane	50.0	265828	0.2507	100	531454	0.2568	200	1041322	0.2565
Dichlorodifluoromethane	50.0	455437	0.3218	100	868503	0.3117	200	1645246	0.2967
Isopropylbenzene	50.0	1613156	1.522	100	3027220	1.463	200	5500748	1.355
Methyl Tert Butyl Ether	50.0	835199	0.5902	100	1548940	0.5559	200	2957843	0.5334
Methyl acetate	50.0	174861	0.1236	100	336543	0.1208	200	663941	0.1197
Methylcyclohexane	50.0	612213	0.4326	100	1171875	0.4206	200	2169748	0.3913
Methylene Chloride	50.0	390691	0.2761	100	733721	0.2633	200	1346612	0.2428
Styrene	50.0	1143677	1.079	100	2145111	1.037	200	3846545	0.9475
Tetrachloroethene	50.0	331718	0.3129	100	619182	0.2992	200	1146919	0.2825
Trichloroethene	50.0	418485	0.2957	100	797556	0.2863	200	1456615	0.2627

KEMRON FORMS - Modified 03/06/2006
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INITIAL CALIBRATION DATA

00046586

Login Number: L0608330

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	3902	0.3202	1.00	14191	0.4663
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3189	0.2617	1.00	8459	0.2779
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4549	0.3733	1.00	10955	0.3600
m-,p-Xylene	NA	NA	NA	0.800	10700	0.6002	2.00	29801	0.6664
o-Xylene	NA	NA	NA	0.400	5519	0.6192	1.00	13413	0.5999
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3008	0.2468	1.00	8004	0.2630
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3487	0.3912	1.00	8520	0.3810

INITIAL CALIBRATION DATA

00046587

Login Number: L0608330

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	30655	0.5074	5.00	77087	0.5207	20.0	311587	0.5303
cis-1,2-Dichloroethene	2.00	15852	0.2624	5.00	43448	0.2935	20.0	172950	0.2944
cis-1,3-Dichloropropene	2.00	21618	0.3578	5.00	57511	0.3885	20.0	240114	0.4087
m-,p-Xylene	4.00	54965	0.6185	10.0	147386	0.6767	40.0	580911	0.6599
o-Xylene	2.00	26177	0.5892	5.00	71342	0.6551	20.0	280089	0.6363
trans-1,2-Dichloroethene	2.00	15320	0.2536	5.00	42965	0.2902	20.0	170194	0.2897
trans-1,3-Dichloropropene	2.00	17116	0.3852	5.00	45044	0.4136	20.0	190224	0.4322

INITIAL CALIBRATION DATA

00046588

Login Number: L0608330

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	765832	0.5411	100	1455283	0.5223	200	2735861	0.4933
cis-1,2-Dichloroethene	50.0	430153	0.3040	100	815973	0.2929	200	1523643	0.2748
cis-1,3-Dichloropropene	50.0	579447	0.4094	100	1096027	0.3934	200	2023151	0.3648
m-,p-Xylene	100	1358343	0.6406	200	2462969	0.5951	400	4267218	0.5256
o-Xylene	50.0	673662	0.6354	100	1260659	0.6092	200	2274735	0.5603
trans-1,2-Dichloroethene	50.0	414867	0.2931	100	803880	0.2885	200	1512005	0.2727
trans-1,3-Dichloropropene	50.0	472078	0.4453	100	884748	0.4275	200	1626717	0.4007

ALTERNATE SOURCE CALIBRATION REPORT

00046589

Login Number: L0608330 Run Date: 07/15/2006 Sample ID: WG217397-11
 Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
 File ID: 10M47258 Analyst: CMS
 ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	20	21.6	0.268	8.1	ug/L	
1,2-Dichloropropane	CCC	20	22.0	0.313	10.2	ug/L	
Chloroform	CCC	20	22.2	0.512	11.2	ug/L	
Ethylbenzene	CCC	20	22.8	0.582	14.2	ug/L	
Toluene	CCC	20	21.7	1.54	8.7	ug/L	
Vinyl Chloride	CCC	20	18.4	0.133	8.2	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	21.5	0.444	7.3	ug/L	
1,1-Dichloroethane	SPCC	20	21.6	0.590	7.9	ug/L	
Bromoform	SPCC	20	19.2	0.114	3.8	ug/L	
Chlorobenzene	SPCC	20	21.8	1.03	9	ug/L	
Chloromethane	SPCC	20	21.0	0.193	4.8	ug/L	
1,1,1-Trichloroethane		20	23.0	0.447	15.1	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20	21.4	0.288	6.8	ug/L	
1,1,2-Trichloroethane		20	21.9	0.237	9.5	ug/L	
1,2,4-Trichlorobenzene		20	21.2	0.825	6	ug/L	
1,2-Dibromo-3-Chloropropane		20	21.5	0.0724	7.7	ug/L	
1,2-Dibromoethane		20	22.3	0.249	11.3	ug/L	
1,2-Dichlorobenzene		20	21.4	1.36	7.1	ug/L	
1,2-Dichloroethane		20	22.1	0.365	10.5	ug/L	
cis-1,2-Dichloroethene		20	21.8	0.308	8.9	ug/L	
trans-1,2-Dichloroethene		20	21.1	0.290	5.4	ug/L	
1,3-Dichlorobenzene		20	21.9	1.57	9.5	ug/L	
1,4-Dichlorobenzene		20	21.7	1.59	8.5	ug/L	
2-Butanone		20	21.6	0.0591	7.9	ug/L	
2-Hexanone		20	21.4	0.119	7.1	ug/L	
4-Methyl-2-Pentanone		20	22.3	0.0617	11.4	ug/L	
Acetone		20	20.1	0.0402	.4	ug/L	
Benzene		20	21.3	1.12	6.5	ug/L	
Bromodichloromethane		20	23.7	0.331	18.4	ug/L	
Bromomethane		20	20.6	0.0915	3	ug/L	
Carbon Disulfide		20	20.3	0.880	1.4	ug/L	
Carbon Tetrachloride		20	20.2	0.370	1	ug/L	
Chloroethane		20	20.2	0.223	.9	ug/L	
cis-1,3-Dichloropropene		20	22.1	0.422	10.4	ug/L	
Cyclohexane		20	20.2	0.549	.8	ug/L	
Dibromochloromethane		20	20.0	0.244	.2	ug/L	
Dichlorodifluoromethane		20	18.7	0.289	6.3	ug/L	
Isopropylbenzene		20	21.3	1.50	6.3	ug/L	
Methyl acetate		20	21.6	0.129	7.8	ug/L	
Methyl Tert Butyl Ether		20	21.5	0.590	7.5	ug/L	
Methylcyclohexane		20	20.3	0.418	1.3	ug/L	
Methylene Chloride		20	19.7	0.280	1.5	ug/L	

KEMRON FORMS - Modified 07/26/2006
 Version 1.5 PDF File ID: 543905
 Report generated 08/17/2006 14:03

ALTERNATE SOURCE CALIBRATION REPORT

00046590

Login Number: L0608330 Run Date: 07/15/2006 Sample ID: WG217397-11
Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
File ID: 10M47258 Analyst: CMS
ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		20	22.5	1.16	12.7	ug/L	
Tetrachloroethene		20	22.6	0.324	13.2	ug/L	
trans-1,3-Dichloropropene		20	20.6	0.422	3.1	ug/L	
Trichloroethene		20	22.1	0.310	10.7	ug/L	
Trichlorofluoromethane		20	19.2	0.469	3.9	ug/L	
m-,p-Xylene		40	45.3	0.706	13.3	ug/L	
o-Xylene		20	22.5	0.689	12.3	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00046591

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219925-02
 Instrument ID: HPMS10 Run Time: 09:00 Method: 8260B
 File ID: 10M48090 Analvst: MES
 Workgroup (AAB#): WG219926 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	50.0	53.8	0.267	7.70	ug/L	
1,2-Dichloropropane	CCC	50.0	52.0	0.295	3.90	ug/L	
Chloroform	CCC	50.0	55.3	0.510	10.7	ug/L	
Ethylbenzene	CCC	50.0	52.2	0.532	4.40	ug/L	
Toluene	CCC	50.0	51.2	1.45	2.40	ug/L	
Vinyl Chloride	CCC	50.0	49.4	0.143	1.30	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50.0	47.7	0.395	4.50	ug/L	
1,1-Dichloroethane	SPCC	50.0	55.8	0.610	11.5	ug/L	
Bromoform	SPCC	50.0	56.1	0.142	12.2	ug/L	
Chlorobenzene	SPCC	50.0	50.2	0.953	0.400	ug/L	
Chloromethane	SPCC	50.0	50.9	0.188	1.70	ug/L	
1,1,1-Trichloroethane		50.0	57.9	0.450	15.7	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	53.0	0.286	5.90	ug/L	
1,1,2-Trichloroethane		50.0	48.2	0.209	3.50	ug/L	
1,2,4-Trichlorobenzene		50.0	45.1	0.702	9.80	ug/L	
1,2-Dibromo-3-Chloropropane		50.0	44.9	0.0632	10.1	ug/L	
1,2-Dibromoethane		50.0	50.0	0.224	0.100	ug/L	
1,2-Dichlorobenzene		50.0	48.2	1.22	3.60	ug/L	
1,2-Dichloroethane		50.0	56.4	0.372	12.8	ug/L	
cis-1,2-Dichloroethene		50.0	52.2	0.295	4.30	ug/L	
trans-1,2-Dichloroethene		50.0	52.5	0.289	5.10	ug/L	
1,3-Dichlorobenzene		50.0	50.1	1.44	0.100	ug/L	
1,4-Dichlorobenzene		50.0	49.0	1.44	1.90	ug/L	
2-Butanone		50.0	49.4	0.0542	1.20	ug/L	
2-Hexanone		50.0	50.7	0.113	1.40	ug/L	
4-Methyl-2-Pentanone		50.0	47.4	0.0525	5.20	ug/L	
Acetone		50.0	50.4	0.0404	0.700	ug/L	
Benzene		50.0	49.9	1.05	0.100	ug/L	
Bromodichloromethane		50.0	59.2	0.331	18.3	ug/L	
Bromomethane		50.0	59.0	0.105	17.9	ug/L	
Carbon Disulfide		50.0	49.7	0.861	0.700	ug/L	
Carbon Tetrachloride		50.0	56.2	0.414	12.3	ug/L	
Chloroethane		50.0	51.0	0.225	2.10	ug/L	
cis-1,3-Dichloropropene		50.0	52.6	0.402	5.10	ug/L	
Cyclohexane		50.0	50.4	0.549	0.800	ug/L	
Dibromochloromethane		50.0	54.4	0.276	8.90	ug/L	
Dichlorodifluoromethane		50.0	31.7	0.196	36.7	ug/L	
Isopropylbenzene		50.0	54.3	1.53	8.50	ug/L	
Methyl acetate		50.0	55.5	0.133	11.0	ug/L	
Methyl Tert Butyl Ether		50.0	46.3	0.509	7.40	ug/L	
Methylcyclohexane		50.0	49.8	0.411	0.400	ug/L	
Methylene Chloride		50.0	48.9	0.278	2.10	ug/L	

KEMRON FORMS - Modified 08/16/2006
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CONTINUING CALIBRATION VERIFICATION (CCV)

00046592

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219925-02
Instrument ID: HPMS10 Run Time: 09:00 Method: 8260B
File ID: 10M48090 Analyst: MES
Workgroup (AAB#): WG219926 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		50.0	50.3	1.03	0.600	ug/L	
Tetrachloroethene		50.0	54.3	0.311	8.60	ug/L	
trans-1,3-Dichloropropene		50.0	56.2	0.461	12.5	ug/L	
Trichloroethene		50.0	50.7	0.284	1.30	ug/L	
Trichlorofluoromethane		50.0	57.0	0.556	13.9	ug/L	
Xylenes		150	155	0.635	3.30	ug/L	
m-,p-Xylene		100	104	0.650	4.30	ug/L	
o-Xylene		50.0	50.6	0.621	1.30	ug/L	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046593

Login Number: L0608330
Instrument ID: HPMS10
Workgroup (AAB#): WG219926

CCV Number: WG219925-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219925-02	NA	NA	255178	502152	708001
Upper Limit	NA	NA	510356	1004304	1416002
Lower Limit	NA	NA	127589	251076	354001
<u>L0608330-01</u>	<u>1.00</u>	<u>01</u>	<u>204999</u>	<u>431559</u>	<u>597332</u>
L0608330-03	1.00	01	202708	422881	588753
L0608330-05	1.00	01	200117	414346	572446
L0608330-07	1.00	01	197621	414317	575068
L0608330-08	1.00	01	195380	406187	565316
L0608330-09	1.00	01	195216	402247	560953
L0608330-10	1.00	01	190903	396639	552698
WG219926-01	1.00	01	232182	477642	661154
WG219926-02	1.00	01	241715	466551	643360
WG219926-03	1.00	01	237809	463970	639072

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046594

Login Number: L0608330
Instrument ID: HPMS10
Workgroup (AAB#): WG219926

CCV Number: WG219925-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219925-02	NA	NA	15.52	12.55	8.71
Upper Limit	NA	NA	16.02	13.05	9.21
Lower Limit	NA	NA	15.02	12.05	8.21
L0608330-01	1.00	01	15.52	12.55	8.71
L0608330-03	1.00	01	15.52	12.55	8.71
L0608330-05	1.00	01	15.52	12.55	8.71
L0608330-07	1.00	01	15.52	12.55	8.71
L0608330-08	1.00	01	15.52	12.55	8.71
L0608330-09	1.00	01	15.52	12.55	8.71
L0608330-10	1.00	01	15.52	12.55	8.71
WG219926-01	1.00	01	15.52	12.55	8.71
WG219926-02	1.00	01	15.52	12.55	8.71
WG219926-03	1.00	01	15.52	12.55	8.71

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON Environmental Services
Data Checklist

00046595

Date: 27 - MAR - 2006

Analyst: JLS

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Analytical Workgroups: WG209269

Runlog ID number:	9527
System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	NA
Narrative Summary	NA
Results Reporting/Data Qualifiers	NA
Client Data Package Assembly	NA
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
27 - MAR - 2006



Secondary Reviewer:
29 - MAR - 2006



Generated: MAR - 29 - 2006 15:32:38

KEMRON Environmental Services
Data Checklist

00046596

Date: 15 - AUG - 2006

Analyst: JLS

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Runlog ID: 11780

Analytical Workgroups: WG219977

System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	X
Narrative Summary	NA
Results Reporting/Data Qualifiers	X
Client Data Package Assembly	X
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
16 - AUG - 2006



Secondary Reviewer:
17 - AUG - 2006



Generated: AUG -17 -2006 09:29:51

KEMRON Environmental Services Data Checklist

00046597

Date: 16 - AUG - 2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 11805
 Analytical Workgroups: WG220074

System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	X
Narrative Summary	NA
Results Reporting/Data Qualifiers	X
Client Data Package Assembly	X
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
18 - AUG - 2006



Secondary Reviewer:
18 - AUG - 2006



Generated: AUG -18 -2006 10:41:02

KEMRON Environmental Services

Instrument Run Log

00046598

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103

Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT

Workgroups: WG209269

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3094	WG209269-01 50ug/ml STD	NA	1	1	STD115796	03/27/06 09:47
2	16G3095	WG209269-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 10:06
3	16G3098	WG209269-01 .1ug/ml STD	NA	1	1	STD11579	03/27/06 12:52
4	16G3099	WG209269-02 1ug/ml STD	NA	1	1	STD11579	03/27/06 13:06
5	16G3100	WG209269-03 10ug/ml STD	NA	1	1	STD11579	03/27/06 13:20
6	16G3101	WG209269-04 20ug/ml STD	NA	1	1	STD11579	03/27/06 13:34
7	16G3102	WG209269-05 50ug/ml STD	NA	1	1	STD11579	03/27/06 13:48
8	16G3103	WG209269-06 100ug/ml STD	NA	1	1	STD11579	03/27/06 14:02
9	16G3104	WG209269-07 200ug/ml STD	NA	1	1	STD11579	03/27/06 14:16
10	16G3105	WG209269-08 300ug/ml STD	NA	1	1	STD11579	03/27/06 14:30
11	16G3106	RINSE	NA	1	1		03/27/06 14:44
12	16G3107	RINSE	NA	1	1		03/27/06 14:58
13	16G3108	WG209269-09 20ug/ml STD	NA	1	1	STD11579	03/27/06 15:12
14	16G3109	WG209270-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 15:34
15	16G3110	WG209306-01 BLANK	NA	1	1		03/27/06 15:50
16	16G3111	WG209306-02 20ug/ml LCS	NA	1	1	STD11579	03/27/06 16:04
17	16G3113	L0603426-01 A	NA	1	1		03/27/06 17:04
18	16G3114	L0603426-02 A	NA	1	1		03/27/06 17:18
19	16G3115	L0603426-03 A	NA	1	1		03/27/06 17:32
20	16G3116	L0603426-04 A	NA	1	1		03/27/06 17:46
21	16G3117	RINSE	NA	1	1		03/27/06 18:00
22	16G3118	RINSE	NA	1	1		03/27/06 18:14

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X		Check Standard Failure	
File ID: 16G3094				
2				
File ID: 16G3095				
Run ICAL.				
17	X			

Approved: March 29, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046599

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG209269

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G3113				
No ending ccv.				
18	X			
File ID: 16G3114				
No ending ccv.				
19	X			
File ID: 16G3115				
No ending ccv.				
20	X			
File ID: 16G3116				
No ending ccv.				

Approved: March 29, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046600

Instrument: HP16 Dataset: 081506
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 151

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219977

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3704	WG219975-01 50ug/ml STD	NA	1	1	STD11579	08/15/06 12:21
2	16G3705	WG219977-01 BLANK	NA	1	1		08/15/06 12:36
3	16G3706	WG219977-02 20ug/ml LCS	NA	1	1	STD11579	08/15/06 12:50
4	16G3707	WG219977-03 20ug/ml LCS DUP	NA	1	1	STD11579	08/15/06 13:04
5	16G3708	L0608044-03 B 100X	7	1	100		08/15/06 13:24
6	16G3709	L0608044-08 B 50X	7	1	50		08/15/06 13:38
7	16G3710	L0608154-03 B 100X	7	1	100		08/15/06 13:52
8	16G3711	L0608154-05 B 100X	7	1	100		08/15/06 14:06
9	16G3712	L0608184-01 B 10X	7	1	10		08/15/06 14:20
10	16G3713	L0608184-03 B 100X	7	1	100		08/15/06 14:34
11	16G3714	L0608184-05 B 100X	7	1	100		08/15/06 14:48
12	16G3715	WG219975-02 50ug/ml STD	NA	1	1	STD11579	08/15/06 15:02
13	16G3716	L0608240-04 A	7	1	1		08/15/06 15:18
14	16G3717	L0608240-05 A	10	1	1		08/15/06 15:32
15	16G3718	L0608240-06 A	10	1	1		08/15/06 15:46
16	16G3719	L0608240-07 A	7	1	1		08/15/06 16:00
17	16G3720	L0608289-01 A	7	1	1		08/15/06 16:14
18	16G3721	L0608289-02 A	7	1	1		08/15/06 16:28
19	16G3722	L0608289-03 A	7	1	1		08/15/06 16:42
20	16G3723	L0608330-01 A	7	1	1		08/15/06 16:56
21	16G3724	L0608330-03 A	7	1	1		08/15/06 17:10
22	16G3725	L0608330-05 A	7	1	1		08/15/06 17:24
23	16G3726	RINSE	NA	1	1		08/15/06 17:38
24	16G3727	RINSE	NA	1	1		08/15/06 17:52
25	16G3728	WG219975-03 50ug/ml STD	NA	1	1	STD11579	08/15/06 18:06
26	16G3729	L0608330-07 A	7	1	1		08/15/06 18:20
27	16G3730	L0608330-08 A	7	1	1		08/15/06 18:34
28	16G3731	L0608330-09 A	7	1	1		08/15/06 18:48
29	16G3732	RINSE	NA	1	1		08/15/06 19:02
30	16G3733	RINSE	NA	1	1		08/15/06 19:16
31	16G3734	WG219975-04 50ug/ml STD	NA	1	1	STD11579	08/15/06 19:30

Approved: August 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046601

Instrument: HP16 Dataset: 081506
Analyst1: JLS Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 7
Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 151

Internal Standard: NA Surrogate Standard: NA
CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
Workgroups: WG219977

Comments

Seq.	Rerun	Dil.	Reason	Analytes
26	X	10	Over Calibration Range	Methane
File ID:16G3729				

Approved: August 17, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046602

Instrument: HP16 Dataset: 081606
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15214

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG220074

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3735	WG220073-01 50ug/ml STD	NA	1	1	STD11579	08/16/06 13:00
2	16G3736	WG220074-01 BLANK	NA	1	1		08/16/06 13:21
3	16G3737	WG220074-02 20ug/ml LCS	NA	1	1	STD11579	08/16/06 13:36
4	16G3738	WG220074-03 20ug/ml LCS DUP	NA	1	1	STD11579	08/16/06 13:50
5	16G3739	L0608205-01 A 10X	7	1	10		08/16/06 14:09
6	16G3740	L0608205-02 A 10X	7	1	10		08/16/06 14:23
7	16G3741	L0608205-04 A 10X	7	1	10		08/16/06 14:37
8	16G3742	L0608205-05 A 10X	7	1	10		08/16/06 14:51
9	16G3743	L0608205-07 A 10X	7	1	10		08/16/06 15:05
36	16G3744	RINSE	NA	1	1		08/16/06 15:43
37	16G3745	RINSE	NA	1	1		08/16/06 15:57
10	16G3746	WG220073-02 50ug/ml STD	NA	1	1	STD11579	08/16/06 16:11
11	16G3747	L0608210-01 A 10X	7	1	10		08/16/06 16:29
12	16G3748	L0608210-02 A 10X	7	1	10		08/16/06 16:43
13	16G3749	L0608210-03 A 10X	7	1	10		08/16/06 16:57
14	16G3750	L0608210-04 A 10X	7	1	10		08/16/06 17:11
15	16G3751	L0608210-05 A 10X	7	1	10		08/16/06 17:25
16	16G3752	RINSE	NA	1	1		08/16/06 17:39
17	16G3753	RINSE	NA	1	1		08/16/06 17:53
18	16G3754	WG220073-03 50ug/ml STD	NA	1	1	STD11579	08/16/06 18:07
19	16G3755	L0608253-01 A 10X	7	1	10		08/16/06 18:21
20	16G3756	L0608253-02 A 10X	7	1	10		08/16/06 18:35
21	16G3757	L0608253-03 A 10X	7	1	10		08/16/06 18:49
22	16G3758	L0608253-04 A 10X	7	1	10		08/16/06 19:03
23	16G3759	L0608253-05 A MS 10X	7	1	10	STD11579	08/16/06 19:17
24	16G3760	L0608253-06 A MSD 10X	7	1	10	STD11579	08/16/06 19:31
25	16G3761	RINSE	NA	1	1		08/16/06 19:45
26	16G3762	RINSE	NA	1	1		08/16/06 19:59
27	16G3763	WG220073-04 50ug/ml STD	NA	1	10	STD11579	08/16/06 20:14
28	16G3764	L0608253-08 A 10X	7	1	10		08/16/06 20:28
29	16G3765	L0608253-09 A 10X	7	1	10		08/16/06 20:42
30	16G3766	RINSE	NA	1	1		08/16/06 20:56

Approved: August 18, 2006

Page: 1 of 3



KEMRON Environmental Services

Instrument Run Log

00046603

Instrument: HP16 Dataset: 081606
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15214

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG220074

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
38	16G3767	RINSE	NA	1	1		08/16/06 21:10
31	16G3768	WG220073-05 50ug/ml STD	NA	1	1	STD11579	08/16/06 21:24
32	16G3769	L0608330-07 B 10X	7	1	10		08/16/06 21:38
33	16G3770	L0608330-10 A	7	1	1		08/16/06 21:52
39	16G3771	RINSE	NA	1	1		08/16/06 22:06
34	16G3772	RINSE	NA	1	1		08/16/06 22:20
35	16G3773	WG220073-06 50ug/ml STD	NA	1	1	STD11579	08/16/06 22:34

Comments

Seq.	Rerun	Dil.	Reason	Analytes
6	X	100	Over Calibration Range	Carbon dioxide
File ID: 16G3740				
8	X	50	Over Calibration Range	Carbon dioxide
File ID: 16G3742				
9	X	50	Over Calibration Range	Carbon dioxide
File ID: 16G3743				
11	X		Check Standard Failure	Carbon dioxide
File ID: 16G3747				
13	X		Check Standard Failure	Carbon dioxide
File ID: 16G3749				
14	X		Check Standard Failure	Carbon dioxide
File ID: 16G3750				
15	X		Check Standard Failure	Carbon dioxide
File ID: 16G3751				
19	X		Check Standard Failure	Carbon dioxide
File ID: 16G3755				

Approved: August 18, 2006

Page: 2 of 3



KEMRON Environmental Services

Instrument Run Log

00046604

Instrument: HP16 Dataset: 081606
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15214

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG220074

Comments

Seq.	Rerun	Dil.	Reason	Analytes
21	X	50	Check Standard Failure	Carbon dioxide
File ID:16G3757				
22	X		Check Standard Failure	Carbon dioxide
File ID:16G3758				
23	X		Check Standard Failure	Carbon dioxide
File ID:16G3759				
24	X		Check Standard Failure	Carbon dioxide
File ID:16G3760				
28	X		Check Standard Failure	Carbon dioxide
File ID:16G3764				
29	X		Check Standard Failure	Carbon dioxide
File ID:16G3765				

Approved: August 18, 2006

Page: 3 of 3



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046605

Analytical Method: RSK175
Login Number: L0608330

AAB#: WG219977

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/15/06	14	5.07	08/15/06	14	5.07	
12WW20	08/10/06	08/12/06	08/15/06	14	5.08	08/15/06	14	5.08	
12WW21	08/10/06	08/12/06	08/15/06	14	5.00	08/15/06	14	5.00	
12WW02	08/11/06	08/12/06	08/15/06	14	4.40	08/15/06	14	4.40	
12WW01	08/11/06	08/12/06	08/15/06	14	4.32	08/15/06	14	4.32	
12WW05	08/11/06	08/12/06	08/15/06	14	4.21	08/15/06	14	4.21	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046606

Analytical Method: RSK175
Login Number: L0608330

AAB#: WG220074

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW02	08/11/06	08/12/06	08/16/06	14	5.54	08/16/06	14	5.54	
EQUIPMENT RINSE	08/11/06	08/12/06	08/16/06	14	5.31	08/16/06	14	5.31	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046607

Login Number: L0608330
Blank File ID: 16G3705
Date Analyzed: 08/15/06
Time Analyzed: 12:36
Analyst: JLS

Work Group: WG219977
Blank Sample ID: WG219977-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219977-02	16G3706	08/15/06 12:50	01
LCS2	WG219977-03	16G3707	08/15/06 13:04	01
12WW20	L0608330-01	16G3723	08/15/06 16:56	01
12WW20	L0608330-03	16G3724	08/15/06 17:10	01
12WW21	L0608330-05	16G3725	08/15/06 17:24	01
12WW02	L0608330-07	16G3729	08/15/06 18:20	01
12WW01	L0608330-08	16G3730	08/15/06 18:34	01
12WW05	L0608330-09	16G3731	08/15/06 18:48	01

METHOD BLANK SUMMARY

00046608

Login Number: L0608330
Blank File ID: 16G3736
Date Analyzed: 08/16/06
Time Analyzed: 13:21
Analyst: JLS

Work Group: WG220074
Blank Sample ID: WG220074-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220074-02	16G3737	08/16/06 13:36	01
LCS2	WG220074-03	16G3738	08/16/06 13:50	01
12WW02	L0608330-07	16G3769	08/16/06 21:38	DL01
EQUIPMENT RINSE	L0608330-10	16G3770	08/16/06 21:52	01

METHOD BLANK REPORT

00046609

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219977-01
Instrument ID: HP16 Run Time: 12:36 Prep Method: 5021
File ID: 16G3705 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.250	1	U
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046610

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220074-01
Instrument ID: HP16 Run Time: 13:21 Prep Method: 5021
File ID: 16G3736 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG220074 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.250	1	U
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046611

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219977-02
Instrument ID: HP16 Run Time: 12:50 Prep Method: 5021
File ID: 16G3706 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
methane	34.3	31.6	92.2	56 - 140	
ethene	59.9	54.5	91.0	56 - 140	
ethane	64.2	59.5	92.8	56 - 137	

LABORATORY CONTROL SAMPLE (LCS)

00046612

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220074-02
Instrument ID: HP16 Run Time: 13:36 Prep Method: 5021
File ID: 16G3737 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG220074 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
methane	34.3	33.5	97.8	56 - 140	
ethene	59.9	57.9	96.7	56 - 140	
ethane	64.2	62.6	97.5	56 - 137	

LABORATORY CONTROL SAMPLE (LCS)

00046613

Login Number: L0608330 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219977 Units: ug/L
 Sample ID: WG219977-02 LCS File ID: 16G3706 Run Date: 08/15/2006 12:50
 Sample ID: WG219977-03 LCS2 File ID: 16G3707 Run Date: 08/15/2006 13:04

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	31.6	92.2	34.3	34.3	100	8.16	56 - 140	40	
ethene	59.9	54.5	91.0	59.9	60.3	101	10.1	56 - 140	40	
ethane	64.2	59.5	92.8	64.2	64.2	100	7.60	56 - 137	40	

LABORATORY CONTROL SAMPLE (LCS)

00046614

Login Number: L0608330 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG220074 Units: ug/L
 Sample ID: WG220074-02 LCS File ID: 16G3737 Run Date: 08/16/2006 13:36
 Sample ID: WG220074-03 LCS2 File ID: 16G3738 Run Date: 08/16/2006 13:50

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	33.5	97.8	34.3	31.4	91.7	6.44	56 - 140	40	
ethene	59.9	57.9	96.7	59.9	54.8	91.4	5.56	56 - 140	40	
ethane	64.2	62.6	97.5	64.2	59.2	92.2	5.61	56 - 137	40	

INITIAL CALIBRATION SUMMARY

00046615

Login Number: L0608330
Analytical Method: RSK175
ICAL Workgroup: WG209269

Instrument ID: HP16
Initial Calibration Date: 27-MAR-06 14:30
Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
ethane		131700	9.70	0.997	
ethene		126600	7.29	0.997	
methane		91930	64.3	0.997	

INITIAL CALIBRATION DATA

Login Number:L0608330

Instrument ID:HP16

00046616

Analytical Method:RSK175

Initial Calibration Date:27-MAR-06 14:30

Column ID:F

Analyte	WG209269-01			WG209269-02			WG209269-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	0.100	14314	143100	1.00	155076	155100	10.0	1157044	115700
ethene	0.100	12296	123000	1.00	143937	143900	10.0	1143709	114400
methane	0.100	23610	236100	1.00	95195	95190	10.0	648171	64820

INITIAL CALIBRATION DATA

00046617

Login Number:L0608330

Instrument ID:HP16

Analytical Method:RSK175

Initial Calibration Date:27-MAR-06 14:30

Column ID:F

Analyte	WG209269-04			WG209269-05			WG209269-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	20.0	2464700	123200	50.0	6342718	126900	100	12548213	125500
ethene	20.0	2436804	121800	50.0	6267079	125300	100	12381421	123800
methane	20.0	1314765	65740	50.0	3373362	67470	100	6627355	66270

INITIAL CALIBRATION DATA

00046618

Login Number: L0608330

Instrument ID: HP16

Analytical Method: RSK175

Initial Calibration Date: 27-MAR-06 14:30

Column ID: F

Analyte	WG209269-07			WG209269-08		
	CONC	RESP	RF	CONC	RESP	RF
ethane	200	27671040	138400	300	37840789	126100
ethene	200	27247290	136200	300	37181559	123900
methane	200	14639720	73200	300	19991743	66640

CONTINUING CALIBRATION VERIFICATION (CCV)

00046619

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219975-01
Instrument ID: HP16 Run Time: 12:21 Method: RSK175
File ID: 16G3704 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	75.2	60100	12.1	ug/L	
ethene		150	134	114000	10.8	ug/L	
ethane		160	142	114000	11.7	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046620

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219975-02
Instrument ID: HP16 Run Time: 15:02 Method: RSK175
File ID: 16G3715 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	87.4	69900	2.10	ug/L	
ethene		150	153	130000	2.20	ug/L	
ethane		160	164	132000	2.20	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046621

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219975-03
Instrument ID: HP16 Run Time: 18:06 Method: RSK175
File ID: 16G3728 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	79.3	63400	7.40	ug/L	
ethene		150	139	118000	7.40	ug/L	
ethane		160	150	121000	6.80	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046622

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219975-04
Instrument ID: HP16 Run Time: 19:30 Method: RSK175
File ID: 16G3734 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	88.1	70400	2.90	ug/L	
ethene		150	152	129000	1.60	ug/L	
ethane		160	164	133000	2.40	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046623

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220073-01
Instrument ID: HP16 Run Time: 13:00 Method: RSK175
File ID: 16G3735 Analvst: JLS
Workgroup (AAB#): WG220074 Cal ID: HP16 -

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	81.9	65500	4.40	ug/L	
ethene		150	144	122000	4.00	ug/L	
ethane		160	154	124000	3.90	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046624

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220073-02
Instrument ID: HP16 Run Time: 16:11 Method: RSK175
File ID: 16G3746 Analvst: JLS
Workgroup (AAB#): WG220074 Cal ID: HP16 -

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	79.8	63800	6.80	ug/L	
ethene		150	139	119000	6.90	ug/L	
ethane		160	151	122000	6.10	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046625

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220073-05
Instrument ID: HP16 Run Time: 21:24 Method: RSK175
File ID: 16G3768 Analvst: JLS
Workgroup (AAB#): WG220074 Cal ID: HP16 -

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	77.9	62300	9.00	ug/L	
ethene		150	134	114000	10.3	ug/L	
ethane		160	145	117000	9.50	ug/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046626

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220073-06
Instrument ID: HP16 Run Time: 22:34 Method: RSK175
File ID: 16G3773 Analvst: JLS
Workgroup (AAB#): WG220074 Cal ID: HP16 -

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	86.4	69000	0.900	ug/L	
ethene		150	148	126000	1.10	ug/L	
ethane		160	160	129000	0.500	ug/L	

* Exceeds %D Criteria

Inorganic QA/QC

KEMRON Environmental Services
Data Checklist

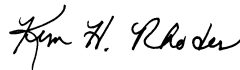
00046628

Date: 16 - AUG - 2006
Analyst: KHR
Analyst: NA
Method: 6010B
Instrument: PE - ICP2
Curve Workgroup: 220083
Runlog ID: 11767
Analytical Workgroups: 220058, 220080, 219865

Calibration/Linearity	X
CV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	240, 330
Level 4	253, 260, 264, 271
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
17 - AUG - 2006

Secondary Reviewer:
17 - AUG - 2006




Generated: AUG -17 -2006 18:45:14

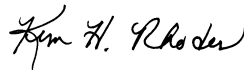
KEMRON Environmental Services Data Checklist

00046629

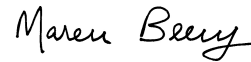
Date: 17 - AUG - 2006
 Analyst: KHR
 Analyst: NA
 Method: 6010B
 Instrument: PE-ICP2
 Curve Workgroup: 220230
 Runlog ID: 11794
 Analytical Workgroups: 219865, 220179, 220201

Calibration/Linearity	X
CV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	330
Level 4	253, 264, 352
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
18 - AUG - 2006



Secondary Reviewer:
18 - AUG - 2006



Generated: AUG -18 -2006 19:18:03

KEMRON Environmental Services

Instrument Run Log

00046630

Instrument: PE-ICP2 Dataset: 081606H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 6
 Maintenance Log ID: 15178

Calibration Std: STD14366 ICV/CCV Std: STD14301 Post Spike: STD13676
 ICSA: STD14360 ICSAB: STD14365

Workgroups: 220058, 220080, 219865

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.081606.095808	WG220083-01	Calibration Point		1		08/16/06 09:58
2	P2.081606.100423	WG220083-02	Calibration Point		1		08/16/06 10:04
3	P2.081606.101035	WG220083-03	Calibration Point		1		08/16/06 10:10
4	P2.081606.101751	WG220083-04	Calibration Point		1		08/16/06 10:17
5	P2.081606.102316	WG220083-05	Calibration Point		1		08/16/06 10:23
6	P2.081606.102851	WG220083-06	Initial Calibration Verification		1		08/16/06 10:28
7	P2.081606.103415	WG220083-07	Initial Calib Blank		1		08/16/06 10:34
8	P2.081606.104040	WG220083-08	Interference Check		1		08/16/06 10:40
9	P2.081606.104601	WG220083-09	Interference Check		1		08/16/06 10:46
10	P2.081606.105125	WG220083-10	CCV		1		08/16/06 10:51
11	P2.081606.105645	WG220083-11	CCB		1		08/16/06 10:56
12	P2.081606.110422	WG219924-02	Method/Prep Blank	50/50	1		08/16/06 11:04
13	P2.081606.111036	WG219924-03	Laboratory Control S	50/50	1		08/16/06 11:10
14	P2.081606.111609	WG219924-01	Reference Sample		5	L0608299-01	08/16/06 11:16
15	P2.081606.112822	WG219924-04	Matrix Spike	50/50	5		08/16/06 11:28
16	P2.081606.113340	WG219924-05	Matrix Spike Duplica	50/50	5		08/16/06 11:33
17	P2.081606.113906	L0608294-02	EFFLUENT/COMP	50/50	1		08/16/06 11:39
18	P2.081606.114430	L0608295-02	OUTFALL/COMP.	50/50	1		08/16/06 11:44
19	P2.081606.115048	L0608267-01	008	50/50	1		08/16/06 11:50
20	P2.081606.115611	WG220058-01	Post Digestion Spike		1	L0608267-01	08/16/06 11:56
21	P2.081606.120135	WG220058-02	Serial Dilution		5	L0608267-01	08/16/06 12:01
22	P2.081606.120756	WG220083-12	CCV		1		08/16/06 12:07
23	P2.081606.121319	WG220083-13	CCB		1		08/16/06 12:13
24	P2.081606.131554	WG220030-03	Method/Prep Blank	50/50	1		08/16/06 13:15
25	P2.081606.132209	WG220030-04	Laboratory Control S	50/50	1		08/16/06 13:22
26	P2.081606.132754	WG220030-02	Reference Sample		1	L0608358-02	08/16/06 13:27
27	P2.081606.133410	WG220030-06	Matrix Spike	50/50	1		08/16/06 13:34
28	P2.081606.133946	WG220030-07	Matrix Spike Duplica	50/50	1		08/16/06 13:39
29	P2.081606.134520	WG220030-01	Reference Sample		1	L0608330-02	08/16/06 13:45
30	P2.081606.135201	L0608330-04	12WW20	50/50	1		08/16/06 13:52
31	P2.081606.135828	L0608330-06	12WW21	50/50	1		08/16/06 13:58
32	P2.081606.140503	WG220080-01	Post Digestion Spike		1	L0608330-06	08/16/06 14:05
33	P2.081606.141038	L0608330-06	12WW21		5		08/16/06 14:10
34	P2.081606.141701	WG220083-14	CCV		1		08/16/06 14:17
35	P2.081606.142224	WG220083-15	CCB		1		08/16/06 14:22
36	P2.081606.142820	L0608240-09	LHSMW62	50/50	50		08/16/06 14:28
37	P2.081606.143432	WG220030-01	Reference Sample		20	L0608330-02	08/16/06 14:34

Page: 1 of 3

Approved: August 17, 2006

Maren Beery

KEMRON Environmental Services

Instrument Run Log

00046631

Instrument: PE-ICP2 Dataset: 081606H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 6
 Maintenance Log ID: 15178

Calibration Std: STD14366 ICV/CCV Std: STD14301 Post Spike: STD13676
 ICSA: STD14360 ICSAB: STD14365

Workgroups: 220058, 220080, 219865

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	P2.081606.144047	L0608330-04	12WW20	50/50	20		08/16/06 14:40
39	P2.081606.144707	WG220080-02	SERIAL DILUTION		25	L0608330-06	08/16/06 14:47
40	P2.081606.145323	WG220083-16	CCV		1		08/16/06 14:53
41	P2.081606.145852	WG220083-17	CCB		1		08/16/06 14:58
42	P2.081606.150747	WG219712-04	Method/Prep Blank	50/50	1		08/16/06 15:07
43	P2.081606.151400	WG219712-05	Laboratory Control S	50/50	1		08/16/06 15:14
44	P2.081606.151926	WG219712-01	Reference Sample		1	L0608253-04	08/16/06 15:19
45	P2.081606.152442	WG219712-06	Matrix Spike	50/50	1	L0608253-05	08/16/06 15:24
46	P2.081606.153008	WG219712-07	Matrix Spike Duplica	50/50	1	L0608253-06	08/16/06 15:30
47	P2.081606.153532	WG219712-02	Reference Sample		1	L0608264-01	08/16/06 15:35
48	P2.081606.154056	L0608264-03	SLF-DUP	50/50	1		08/16/06 15:40
49	P2.081606.154618	L0608253-01	IW21-02A	50/50	1		08/16/06 15:46
50	P2.081606.155146	WG219865-01	Post Digestion Spike		1	L0608253-01	08/16/06 15:51
51	P2.081606.155710	WG219865-02	Serial Dilution		5	L0608253-01	08/16/06 15:57
52	P2.081606.160426	WG220083-18	CCV		1		08/16/06 16:04
53	P2.081606.160949	WG220083-19	CCB		1		08/16/06 16:09
54	P2.081606.161606	L0608240-08	LHSMW62	50/50	1		08/16/06 16:16
55	P2.081606.162126	WG219712-03	Reference Sample		1	L0608271-05	08/16/06 16:21
56	P2.081606.162650	WG219712-09	Matrix Spike	50/50	1	L0608271-06	08/16/06 16:26
57	P2.081606.163214	WG219712-10	Matrix Spike Duplica	50/50	1	L0608271-07	08/16/06 16:32
58	P2.081606.163738	L0608271-01	TT4S4-RE-NS-11:00-08/09	50/50	1		08/16/06 16:37
59	P2.081606.164301	WG219865-03	Post Digestion Spike		1	L0608271-01	08/16/06 16:43
60	P2.081606.164827	WG219865-04	Serial Dilution		5	L0608271-01	08/16/06 16:48
61	P2.081606.165351	L0608271-02	TT4S4-RE-NS-11:00-08/09	50/50	20		08/16/06 16:53
62	P2.081606.170013	L0608271-08	TT4S4-RE-NS-16:00-08/09	50/50	20		08/16/06 17:00
63	P2.081606.170639	WG220083-20	CCV		1		08/16/06 17:06
64	P2.081606.171203	WG220083-21	CCB		1		08/16/06 17:12
65	P2.081606.171925	L0608253-02	PMW21-02B	50/50	1		08/16/06 17:19
66	P2.081606.172448	L0608253-03	IW21-03A	50/50	1		08/16/06 17:24
67	P2.081606.173103	L0608253-09	PMW21-04	50/50	1		08/16/06 17:31
68	P2.081606.173723	L0608253-10	RB-PHASE 1	50/50	1		08/16/06 17:37
69	P2.081606.174345	L0608260-04	HCC-EB2	50/50	1		08/16/06 17:43
70	P2.081606.174959	L0608271-01	TT4S4-RE-NS-11:00-08/09	50/50	50		08/16/06 17:49
71	P2.081606.175624	WG219865-03	Post Digestion Spike		50	L0608271-01	08/16/06 17:56
72	P2.081606.180149	WG219712-03	Reference Sample		50	L0608271-05	08/16/06 18:01
73	P2.081606.180808	WG219712-09	Matrix Spike	50/50	50	L0608271-06	08/16/06 18:08
74	P2.081606.181428	WG219712-10	Matrix Spike Duplica	50/50	50	L0608271-07	08/16/06 18:14

Page: 2 of 3

Approved: August 17, 2006

Maren Beery

KEMRON Environmental Services

Instrument Run Log

00046632

Instrument: PE-ICP2 Dataset: 081606H.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 6
 Maintenance Log ID: 15178

Calibration Std: STD14366 ICV/CCV Std: STD14301 Post Spike: STD13676
 ICSA: STD14360 ICSAB: STD14365

Workgroups: 220058, 220080, 219865

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	P2.081606.182050	WG220083-22	CCV		1		08/16/06 18:20
76	P2.081606.182612	WG220083-23	CCB		1		08/16/06 18:26
77	P2.081606.183848	L0608253-08	PMW21-01	50/50	1		08/16/06 18:38
78	P2.081606.184503	L0608240-08	LHSMW62	50/50	20		08/16/06 18:45
79	P2.081606.185126	WG220083-24	CCV		1		08/16/06 18:51
80	P2.081606.185649	WG220083-25	CCB		1		08/16/06 18:56

Maren Berry

KEMRON Environmental Services

Instrument Run Log

00046633

Instrument: PE-ICP2 Dataset: 081706HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 6
 Maintenance Log ID: 15207

Calibration Std: STD14366 ICV/CCV Std: STD14301 Post Spike: STD13676
 ICSA: STD14360 ICSAB: STD14365

Workgroups: 219865, 220179, 220201

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.081706.105705	WG220230-01	Calibration Point		1		08/17/06 10:57
2	P2.081706.110322	WG220230-02	Calibration Point		1		08/17/06 11:03
3	P2.081706.110937	WG220230-03	Calibration Point		1		08/17/06 11:09
4	P2.081706.111600	WG220230-04	Calibration Point		1		08/17/06 11:16
5	P2.081706.112131	WG220230-05	Calibration Point		1		08/17/06 11:21
6	P2.081706.112725	WG220230-06	Initial Calibration Verification		1		08/17/06 11:27
7	P2.081706.113254	WG220230-07	Initial Calib Blank		1		08/17/06 11:32
8	P2.081706.113958	WG220230-08	Interference Check		1		08/17/06 11:39
9	P2.081706.114529	WG220230-09	Interference Check		1		08/17/06 11:45
10	P2.081706.115050	WG220230-10	CCV		1		08/17/06 11:50
11	P2.081706.115611	WG220230-11	CCB		1		08/17/06 11:56
12	P2.081706.120014	L0608253-01	IW21-02A	50/50	2		08/17/06 12:00
13	P2.081706.120626	WG219865-01	Post Digestion Spike		2	L0608253-01	08/17/06 12:06
14	P2.081706.121152	L0608253-02	PMW21-02B	50/50	2		08/17/06 12:11
15	P2.081706.121715	L0608253-09	PMW21-04	50/50	2		08/17/06 12:17
16	P2.081706.122327	L0608264-01	SLF-05		5		08/17/06 12:23
17	P2.081706.122851	WG219712-08	Duplicate	50/50	5	L0608264-03	08/17/06 12:28
18	P2.081706.123413	WG220230-12	CCV		1		08/17/06 12:34
19	P2.081706.123934	WG220230-13	CCB		1		08/17/06 12:39
20	P2.081706.125948	L0608264-01	SLF-05		20		08/17/06 12:59
21	P2.081706.130505	WG219712-08	Duplicate	50/50	20	L0608264-03	08/17/06 13:05
22	P2.081706.131032	WG220230-14	CCV		1		08/17/06 13:10
23	P2.081706.131603	WG220230-15	CCB		1		08/17/06 13:16
24	P2.081706.133740	WG220033-03	Method/Prep Blank	50/50	1		08/17/06 13:37
25	P2.081706.134353	WG220033-04	Laboratory Control S	50/50	1		08/17/06 13:43
26	P2.081706.134922	WG220033-02	Reference Sample		1	L0608352-01	08/17/06 13:49
27	P2.081706.135442	WG220033-06	Matrix Spike	50/50	1		08/17/06 13:54
28	P2.081706.140014	WG220033-07	Matrix Spike Duplica	50/50	1		08/17/06 14:00
29	P2.081706.140545	L0608330-05	12WW21	50/50	1		08/17/06 14:05
30	P2.081706.141207	WG220179-01	Post Digestion Spike		1	L0608330-05	08/17/06 14:12
31	P2.081706.141733	WG220179-02	Serial Dilution		5	L0608330-05	08/17/06 14:17
32	P2.081706.142400	WG220230-16	CCV		1		08/17/06 14:24
33	P2.081706.142923	WG220230-17	CCB		1		08/17/06 14:29
34	P2.081706.143541	WG220033-01	Reference Sample		1	L0608330-01	08/17/06 14:35
35	P2.081706.144059	WG220033-05	Duplicate	50/50	1	L0608330-03	08/17/06 14:40
36	P2.081706.144631	L0608342-03	EFFLUENT	50/50	1		08/17/06 14:46
37	P2.081706.145849	WG220033-02	Reference Sample		5	L0608352-01	08/17/06 14:58

Page: 1 of 2

Approved: August 18, 2006

Maren Beery

KEMRON Environmental Services

Instrument Run Log

00046634

Instrument: PE-ICP2 Dataset: 081706HR.CSV
 Analyst1: KHR Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 6
 Maintenance Log ID: 15207

Calibration Std: STD14366 ICV/CCV Std: STD14301 Post Spike: STD13676
 ICSA: STD14360 ICSAB: STD14365

Workgroups: 219865, 220179, 220201

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	P2.081706.150512	WG220033-06	Matrix Spike	50/50	5		08/17/06 15:05
39	P2.081706.151039	WG220033-07	Matrix Spike Duplica	50/50	5		08/17/06 15:10
40	P2.081706.151601	WG220179-02	Serial Dilution		25	L0608330-05	08/17/06 15:16
41	P2.081706.152218	WG220033-01	Reference Sample		20	L0608330-01	08/17/06 15:22
42	P2.081706.152843	WG220033-05	Duplicate	50/50	20	L0608330-03	08/17/06 15:28
43	P2.081706.153504	WG220230-18	CCV		1		08/17/06 15:35
44	P2.081706.154024	WG220230-19	CCB		1		08/17/06 15:40
45	P2.081706.155348	WG220142-02	Method/Prep Blank	50/50	1		08/17/06 15:53
46	P2.081706.160002	WG220142-03	Laboratory Control S	50/50	1		08/17/06 16:00
47	P2.081706.160535	WG220142-01	Reference Sample		1	L0608369-02	08/17/06 16:05
48	P2.081706.161053	WG220142-04	Matrix Spike	50/50	1		08/17/06 16:10
49	P2.081706.161615	WG220142-05	Matrix Spike Duplica	50/50	1		08/17/06 16:16
50	P2.081706.162143	L0608384-02	OUTFALL 002/COMP	50/50	1		08/17/06 16:21
51	P2.081706.162805	L0608378-02	OUTFALL 003/COMP	50/50	1		08/17/06 16:28
52	P2.081706.163427	WG220201-01	Post Digestion Spike		1	L0608378-02	08/17/06 16:34
53	P2.081706.163950	WG220201-02	Serial Dilution		5	L0608378-02	08/17/06 16:39
54	P2.081706.164616	WG220230-20	CCV		1		08/17/06 16:46
55	P2.081706.165139	WG220230-21	CCB		1		08/17/06 16:51
56	P2.081706.165755	L0608378-04	OUTFALL 800/COMP	50/50	1		08/17/06 16:57
57	P2.081706.170419	L0608380-01	72 FLUME	5/50	1		08/17/06 17:04
58	P2.081706.171040	L0608380-02	AFC EFFLUENT	5/50	1		08/17/06 17:10
59	P2.081706.171659	L0608380-03	AFC BLEED	5/50	1		08/17/06 17:16
60	P2.081706.172221	L0608377-01	DRL-Z-OUTLET 001	50/50	1		08/17/06 17:22
61	P2.081706.172841	L0608358-01	C-004	50/50	1		08/17/06 17:28
62	P2.081706.173503	L0608359-01	C-004/COMP-MTHLY	50/50	1		08/17/06 17:35
63	P2.081706.174118	L0608365-02	FINAL EFFLUENT (COMP)	50/50	1		08/17/06 17:41
64	P2.081706.174738	L0608366-02	BACKWASH/COMP	50/50	1		08/17/06 17:47
65	P2.081706.175302	WG220230-22	CCV		1		08/17/06 17:53
66	P2.081706.175824	WG220230-23	CCB		1		08/17/06 17:58
67	P2.081706.180441	L0608369-03	OUTLET 016	50/50	1		08/17/06 18:04
68	P2.081706.180959	L0608369-04	OUTLET 018	50/50	1		08/17/06 18:09
69	P2.081706.181620	L0608369-05	OUTLET 020	50/50	1		08/17/06 18:16
70	P2.081706.182147	L0608369-06	OUTLET 024	50/50	1		08/17/06 18:21
71	P2.081706.182704	L0608369-07	OUTLET 027	50/50	1		08/17/06 18:27
72	P2.081706.183324	WG220230-24	CCV		1		08/17/06 18:33
73	P2.081706.183846	WG220230-25	CCB		1		08/17/06 18:38

Page: 2 of 2

Approved: August 18, 2006

Maren Beery

Metals Digestion Log

Analyst(s): PM
Date: 8/16/06
LCS: 5 ml STD 13676
MS/MSD: 5 ml STD 13676
Witness: MP
HNO₃ Lot #: 16T 10338
1:1HNO₃: N/A
HCl Lot #: RET 10430
H₂O₂ Lot #: N/A
Earliest Sample Due Date: 8/16/06
Hotblock #: 4
Hotblock Temp - Start: 94.6°C 8/16/06
Hotblock Temp - End: 95.8°C 8/16/06

Box: 78
Digestion Work Group: WG 220030
General Digestion
ME401 Revision # 12 - Method 3005A-Water
ME403 Revision # _____ - Method 3050B-Soil
Furnace Digestion
ME402 Revision # _____ - Method 3020A-Water
ME403 Revision # _____ - Method 3050B-Soil
AS/SE Digestion
ME410 Revision # _____ - Method 7060/7740-Water
Relinquished By: PM
Digest Received By: PAS Date: 8/16/06

	KEMRON #	Initial WT/Vol	Final Volume	Comments	Due Date
1	<u>PM</u>	<u>50ml</u>	<u>50ml</u>	<u>LAG KLT 8/16</u>	<u>03</u>
2	<u>LCS</u>				<u>04</u>
3	<u>08-330-02 REF</u>				<u>01 9/21</u>
4	<u>-04 RLP</u>				<u>05</u>
5	<u>026</u>				
6	<u>08-358-02</u>			<u>NPRS</u>	<u>02 9/25</u>
7	<u>-02 MS</u>				<u>06</u>
8	<u>-02 MSD</u>				<u>07</u>
9	<u>08-240-09</u>	<u>50ml</u>	<u>50ml</u>	<u>* REPR</u>	<u>8/17</u>
10					
11					
12					
13					
14					
15					
16					
17					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					

Comments: * Added AFTER line was drawn.

Primary Review: 8/16/06

Secondary Review: Vicki Colley 8/16/06

Metals Digestion Log

Analyst(s): AK
Date: 8/16/06
LCS: 5 ml STD 13676
MS/MSD: 5 ml STD 13676
Witness: AK
HNO₃ Lot #: RGT 10338
1:1HNO₃: N/A
HCl Lot #: RGT 10430
H₂O₂ Lot #: N/A
Earliest Sample Due Date: 8/21
Hotblock #: 4
Hotblock Temp - Start: 91.5°C 0705
Hotblock Temp - End: 96.0°C 1105

Box: 87
Digestion Work Group: WG 220033
General Digestion
ME401 Revision # 12 - Method 3005A-Water
ME403 Revision # _____ - Method 3050B-Soil
Furnace Digestion
ME402 Revision # _____ - Method 3020A-Water
ME403 Revision # _____ - Method 3050B-Soil
AS/SE Digestion
ME410 Revision # _____ - Method 7060/7740-Water
Relinquished By: AK
Digest Received By: PAS Date: 8/16/06

	KEMRON #	Initial WT/Vol	Final Volume	Comments	Due Date
1	AKW	50 ml	50 ml		
2	AKW				
3	08-330-01 Ref				8/21
4	03 Ref				
5	05				
6	08-342-03				8/22
7	08-352-01			Level 41	8/29
8	01 MS				
9	01 MSD				
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					

Comments: _____

Primary Review: AK 8/16/06

Secondary Review: Vicki Allen 8/16/06

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046637

Analytical Method: 6010B
Login Number: L0608330

AAB#: WG220080

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	180	5.64	08/16/06	180	0.292	
12WW20	08/10/06	08/12/06	08/16/06	180	5.64	08/16/06	180	0.326	
12WW20	08/10/06	08/12/06	08/16/06	180	5.64	08/16/06	180	0.297	
12WW20	08/10/06	08/12/06	08/16/06	180	5.64	08/16/06	180	0.330	
12WW21	08/10/06	08/12/06	08/16/06	180	5.55	08/16/06	180	0.301	
12WW21	08/10/06	08/12/06	08/16/06	180	5.55	08/16/06	180	0.309	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046638

Analytical Method: 6010B
Login Number: L0608330

AAB#: WG220179

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	180	5.66	08/17/06	180	1.31	
12WW20	08/10/06	08/12/06	08/16/06	180	5.66	08/17/06	180	1.35	
12WW20	08/10/06	08/12/06	08/16/06	180	5.66	08/17/06	180	1.32	
12WW20	08/10/06	08/12/06	08/16/06	180	5.66	08/17/06	180	1.35	
12WW21	08/10/06	08/12/06	08/16/06	180	5.57	08/17/06	180	1.29	
12WW21	08/10/06	08/12/06	08/16/06	180	5.57	08/17/06	180	1.30	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046639

Login Number: L0608330
Blank File ID: P2.081606.131554
Date Analyzed: 08/16/06
Time Analyzed: 13:15
Analyst: KHR

Work Group: WG220080
Blank Sample ID: WG220030-03
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220030-04	P2.081606.132209	08/16/06 13:22	01
12WW20	L0608330-02	P2.081606.134520	08/16/06 13:45	01
12WW20	L0608330-04	P2.081606.135201	08/16/06 13:52	01
DUP	WG220030-05	P2.081606.135201	08/16/06 13:52	01
12WW21	L0608330-06	P2.081606.135828	08/16/06 13:58	01
12WW21	L0608330-06	P2.081606.141038	08/16/06 14:10	DL01
12WW20	L0608330-02	P2.081606.143432	08/16/06 14:34	DL01
12WW20	L0608330-04	P2.081606.144047	08/16/06 14:40	DL01
DUP	WG220030-05	P2.081606.144047	08/16/06 14:40	DL01

METHOD BLANK SUMMARY

00046640

Login Number: L0608330	Work Group: WG220179
Blank File ID: P2.081706.133740	Blank Sample ID: WG220033-03
Date Analyzed: 08/17/06	Instrument ID: PE-ICP2
Time Analyzed: 13:37	Method: 6010B
Analyst: KHR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220033-04	P2.081706.134353	08/17/06 13:43	01
12WW21	L0608330-05	P2.081706.140545	08/17/06 14:05	01
12WW21	L0608330-05	P2.081706.141733	08/17/06 14:17	DL01
12WW20	L0608330-01	P2.081706.143541	08/17/06 14:35	01
12WW20	L0608330-03	P2.081706.144059	08/17/06 14:40	01
DUP	WG220033-05	P2.081706.144059	08/17/06 14:40	01
12WW20	L0608330-01	P2.081706.152218	08/17/06 15:22	DL01
12WW20	L0608330-03	P2.081706.152843	08/17/06 15:28	DL01
DUP	WG220033-05	P2.081706.152843	08/17/06 15:28	DL01

METHOD BLANK REPORT

00046641

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220030-03
 Instrument ID: PE-ICP2 Run Time: 13:15 Prep Method: 3005A
 File ID: P2.081606.131554 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG220080 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Aluminum, Dissolved	0.0500	0.100	0.0500	1	U
Silver, Dissolved	0.00500	0.0100	0.00500	1	U
Arsenic, Dissolved	0.00200	0.0100	0.00200	1	U
Barium, Dissolved	0.00250	0.0100	0.00319	1	J
Beryllium, Dissolved	0.000500	0.0100	0.000500	1	U
Calcium, Dissolved	0.100	0.200	0.117	1	J
Cadmium, Dissolved	0.00250	0.0100	0.00250	1	U
Cobalt, Dissolved	0.00250	0.0200	0.00250	1	U
Chromium, Dissolved	0.00250	0.0200	0.00250	1	U
Copper, Dissolved	0.00500	0.0200	0.00500	1	U
Iron, Dissolved	0.0250	0.100	0.0250	1	U
Potassium, Dissolved	0.250	1.00	0.250	1	U
Magnesium, Dissolved	0.250	0.500	0.250	1	U
Manganese, Dissolved	0.00500	0.0100	0.00500	1	U
Sodium, Dissolved	0.250	0.500	0.250	1	U
Nickel, Dissolved	0.00500	0.0400	0.00500	1	U
Lead, Dissolved	0.00250	0.00500	0.00250	1	U
Vanadium, Dissolved	0.00500	0.0100	0.00500	1	U
Zinc, Dissolved	0.00500	0.0200	0.00508	1	J

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046642

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220033-03
 Instrument ID: PE-ICP2 Run Time: 13:37 Prep Method: 3005A
 File ID: P2.081706.133740 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG220179 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 17-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Arsenic, Total	0.00500	0.0100	0.00500	1	U
Barium, Total	0.00250	0.0100	0.00261	1	J
Beryllium, Total	0.000500	0.0100	0.000500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Cadmium, Total	0.00250	0.0100	0.00250	1	U
Cobalt, Total	0.00250	0.0200	0.00250	1	U
Chromium, Total	0.00250	0.0200	0.00250	1	U
Copper, Total	0.00500	0.0200	0.00500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Potassium, Total	0.250	1.00	0.250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Nickel, Total	0.00500	0.0400	0.00500	1	U
Lead, Total	0.00250	0.00500	0.00250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.00500	0.0200	0.00501	1	J

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046643

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220030-04
 Instrument ID: PE-ICP2 Run Time: 13:22 Prep Method: 3005A
 File ID: P2.081606.132209 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG220080 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 16-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Dissolved	5.00	5.07	101	85 - 115	
Silver, Dissolved	0.200	0.207	104	85 - 115	
Arsenic, Dissolved	0.200	0.198	98.8	85 - 115	
Barium, Dissolved	0.500	0.513	103	85 - 115	
Beryllium, Dissolved	0.0250	0.0255	102	85 - 115	
Calcium, Dissolved	5.00	5.07	101	85 - 115	
Cadmium, Dissolved	0.0250	0.0248	99.1	85 - 115	
Cobalt, Dissolved	0.100	0.102	102	85 - 115	
Chromium, Dissolved	0.250	0.256	102	85 - 115	
Copper, Dissolved	0.250	0.257	103	85 - 115	
Iron, Dissolved	2.00	2.05	102	85 - 115	
Potassium, Dissolved	25.0	25.0	100	85 - 115	
Magnesium, Dissolved	5.00	5.09	102	85 - 115	
Manganese, Dissolved	0.250	0.264	105	85 - 115	
Sodium, Dissolved	25.0	25.3	101	85 - 115	
Nickel, Dissolved	0.250	0.258	103	85 - 115	
Lead, Dissolved	0.250	0.253	101	85 - 115	
Vanadium, Dissolved	0.500	0.506	101	85 - 115	
Zinc, Dissolved	0.500	0.511	102	85 - 115	

LABORATORY CONTROL SAMPLE (LCS)

00046644

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220033-04
 Instrument ID: PE-ICP2 Run Time: 13:43 Prep Method: 3005A
 File ID: P2.081706.134353 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG220179 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 17-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits			Q
Aluminum, Total	5.00	5.07	101	85	-	115	
Silver, Total	0.200	0.208	104	85	-	115	
Arsenic, Total	0.200	0.206	103	85	-	115	
Barium, Total	0.500	0.523	105	85	-	115	
Beryllium, Total	0.0250	0.0258	103	85	-	115	
Calcium, Total	5.00	5.24	105	85	-	115	
Cadmium, Total	0.0250	0.0254	102	85	-	115	
Cobalt, Total	0.100	0.104	104	85	-	115	
Chromium, Total	0.250	0.262	105	85	-	115	
Copper, Total	0.250	0.257	103	85	-	115	
Iron, Total	2.00	2.12	106	85	-	115	
Potassium, Total	25.0	26.2	105	85	-	115	
Magnesium, Total	5.00	5.15	103	85	-	115	
Manganese, Total	0.250	0.267	107	85	-	115	
Sodium, Total	25.0	25.9	104	85	-	115	
Nickel, Total	0.250	0.265	106	85	-	115	
Lead, Total	0.250	0.265	106	85	-	115	
Vanadium, Total	0.500	0.516	103	85	-	115	
Zinc, Total	0.500	0.526	105	85	-	115	

DUPLICATE REPORT

00046645

Login Number: L0608330

Worknum: WG220080

Instrument ID: PE-ICP2

Method: 6010B

Sample ID: L0608330-02 File ID: P2.081606.134520 Dil: 1

Matrix: Water

Duplicate ID: L0608330-04 File ID: P2.081606.135201 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Aluminum, Dissolved	ND	ND	0	20	
Arsenic, Dissolved	0.00533	0.00638	17.8	20	
Barium, Dissolved	0.0381	0.0385	1.04	20	
Beryllium, Dissolved	ND	ND	0	20	
Cadmium, Dissolved	ND	ND	0	20	
Calcium, Dissolved	35.8	35.4	1.29	20	
Chromium, Dissolved	0.00290	0.00489	51.2	20	#
Cobalt, Dissolved	0.00992	0.00998	0.663	20	
Copper, Dissolved	ND	ND	0	20	
Iron, Dissolved	ND	ND	0	20	
Lead, Dissolved	ND	ND	0	20	
Magnesium, Dissolved	25.3	25.5	0.578	20	
Manganese, Dissolved	0.213	0.208	2.21	20	
Nickel, Dissolved	0.0267	0.0159	50.4	20	#
Potassium, Dissolved	1.63	1.56	4.39	20	
Silver, Dissolved	ND	ND	0	20	
Vanadium, Dissolved	0.0117	0.00991	16.4	20	
Zinc, Dissolved	ND	ND	0	20	

DUPLICATE REPORT

00046646

Login Number: L0608330

Worknum: WG220080

Instrument ID: PE-ICP2

Method: 6010B

Sample ID: L0608330-02 File ID: P2.081606.143432 Dil: 20

Matrix: Water

Duplicate ID: L0608330-04 File ID: P2.081606.144047 Dil: 20

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Sodium, Dissolved	219	228	4.00	20	

DUPLICATE REPORT

00046647

Login Number: L0608330

Worknum: WG220179

Instrument ID: PE-ICP2

Method: 6010B

Sample ID: L0608330-01 File ID: P2.081706.143541 Dil: 1

Matrix: Water

Duplicate ID: L0608330-03 File ID: P2.081706.144059 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Aluminum, Total	0.591	0.640	7.96	20	
Arsenic, Total	0.00513	0.00540	5.09	20	
Barium, Total	0.0485	0.0512	5.56	20	
Beryllium, Total	ND	ND	0	20	
Cadmium, Total	ND	ND	0	20	
Calcium, Total	32.6	34.7	5.95	20	
Chromium, Total	ND	0.00253	200	20	#
Cobalt, Total	0.0185	0.0199	7.28	20	
Copper, Total	ND	ND	0	20	
Iron, Total	0.596	0.662	10.4	20	
Lead, Total	ND	ND	0	20	
Magnesium, Total	24.9	25.6	2.96	20	
Manganese, Total	0.333	0.354	6.04	20	
Nickel, Total	0.0151	0.0160	5.70	20	
Potassium, Total	1.65	1.67	1.62	20	
Silver, Total	ND	ND	0	20	
Vanadium, Total	0.0113	0.0126	10.6	20	
Zinc, Total	0.0179	0.0204	12.9	20	

DUPLICATE REPORT

00046648

Login Number: L0608330

Worknum: WG220179

Instrument ID: PE-ICP2

Method: 6010B

Sample ID: L0608330-01 File ID: P2.081706.152218 Dil: 20

Matrix: Water

Duplicate ID: L0608330-03 File ID: P2.081706.152843 Dil: 20

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Sodium, Total	198	205	3.48	20	

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046649

Loginnum: L0608330 Cal ID: PE-ICP2- Worknum: WG220080
 Instrument ID: PE-ICP2 Contract #: DACA56-94-D-0020 Method: 6010B
 Parent ID: WG220030-02 File ID: P2.081606.132754 Dil: 1 Matrix: WATER
 Sample ID: WG220030-06 MS File ID: P2.081606.133410 Dil: 1 Units: mg/L
 Sample ID: WG220030-07 MSD File ID: P2.081606.133946 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Dissolved	ND	5.00	5.00	100	5.00	4.93	98.6	1.42	75 - 125	20	
Arsenic, Dissolved	0.00897	0.200	0.212	101	0.200	0.207	99.2	2.14	75 - 125	20	
Barium, Dissolved	0.0912	0.500	0.601	102	0.500	0.598	101	0.513	75 - 125	20	
Beryllium, Dissolved	ND	0.0250	0.0258	103	0.0250	0.0256	102	0.556	75 - 125	20	
Cadmium, Dissolved	ND	0.0250	0.0245	98.2	0.0250	0.0245	98.1	0.0815	75 - 125	20	
Calcium, Dissolved	86.1	5.00	99.2	260	5.00	98.0	237	1.20	75 - 125	20	*
Chromium, Dissolved	0.00295	0.250	0.257	101	0.250	0.255	101	0.469	75 - 125	20	
Cobalt, Dissolved	ND	0.100	0.0999	99.9	0.100	0.100	100	0.303	75 - 125	20	
Copper, Dissolved	0.00856	0.250	0.259	100	0.250	0.257	99.3	0.707	75 - 125	20	
Iron, Dissolved	0.0543	2.00	2.06	100	2.00	2.04	99.1	1.36	75 - 125	20	
Lead, Dissolved	ND	0.250	0.253	101	0.250	0.252	101	0.120	75 - 125	20	
Magnesium, Dissolved	12.3	5.00	17.9	113	5.00	17.6	106	1.83	75 - 125	20	
Manganese, Dissolved	0.0105	0.250	0.273	105	0.250	0.271	104	0.850	75 - 125	20	
Nickel, Dissolved	ND	0.250	0.257	103	0.250	0.257	103	0.213	75 - 125	20	
Potassium, Dissolved	3.62	25.0	28.5	99.6	25.0	28.2	98.3	1.15	75 - 125	20	
Silver, Dissolved	ND	0.200	0.204	102	0.200	0.201	101	1.13	75 - 125	20	
Sodium, Dissolved	65.2	25.0	93.7	114	25.0	94.2	116	0.554	75 - 125	20	
Vanadium, Dissolved	0.00940	0.500	0.523	103	0.500	0.518	102	0.938	75 - 125	20	
Zinc, Dissolved	0.0105	0.500	0.503	98.4	0.500	0.498	97.6	0.828	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046650

Loginnum: L0608330 Cal ID: PE-ICP2- Worknum: WG220179
 Instrument ID: PE-ICP2 Contract #: DACA56-94-D-0020 Method: 6010B
 Parent ID: WG220033-02 File ID: P2.081706.134922 Dil: 1 Matrix: WATER
 Sample ID: WG220033-06 MS File ID: P2.081706.135442 Dil: 1 Units: mg/L
 Sample ID: WG220033-07 MSD File ID: P2.081706.140014 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	0.623	5.00	5.82	104	5.00	5.66	101	2.75	75 - 125	20	
Arsenic, Total	0.00725	0.200	0.200	96.5	0.200	0.204	98.3	1.70	75 - 125	20	
Barium, Total	0.0861	0.500	0.579	98.5	0.500	0.576	98.0	0.450	75 - 125	20	
Beryllium, Total	ND	0.0250	0.0249	99.8	0.0250	0.0249	99.7	0.0985	75 - 125	20	
Cadmium, Total	ND	0.0250	0.0232	92.8	0.0250	0.0235	94.0	1.26	75 - 125	20	
Chromium, Total	ND	0.250	0.251	101	0.250	0.248	99.0	1.58	75 - 125	20	
Cobalt, Total	ND	0.100	0.0956	95.6	0.100	0.0959	95.9	0.292	75 - 125	20	
Copper, Total	ND	0.250	0.241	96.4	0.250	0.240	96.1	0.352	75 - 125	20	
Iron, Total	0.985	2.00	3.09	105	2.00	3.02	102	2.52	75 - 125	20	
Lead, Total	ND	0.250	0.246	98.4	0.250	0.245	98.0	0.431	75 - 125	20	
Manganese, Total	0.0772	0.250	0.329	101	0.250	0.328	100	0.296	75 - 125	20	
Nickel, Total	ND	0.250	0.241	96.4	0.250	0.242	96.7	0.313	75 - 125	20	
Potassium, Total	2.26	25.0	28.0	103	25.0	27.1	99.3	3.33	75 - 125	20	
Silver, Total	ND	0.200	0.197	98.7	0.200	0.197	98.3	0.389	75 - 125	20	
Sodium, Total	31.4	25.0	56.6	101	25.0	56.8	101	0.402	75 - 125	20	
Vanadium, Total	0.0136	0.500	0.510	99.3	0.500	0.507	98.7	0.599	75 - 125	20	
Zinc, Total	0.00601	0.500	0.479	94.6	0.500	0.477	94.3	0.368	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046651

Loginnum: L0608330 Cal ID: PE-ICP2- Worknum: WG220179
 Instrument ID: PE-ICP2 Contract #: DACA56-94-D-0020 Method: 6010B
 Parent ID: WG220033-02 File ID: P2.081706.145849 Dil: 5 Matrix: WATER
 Sample ID: WG220033-06 MS File ID: P2.081706.150512 Dil: 5 Units: mg/L
 Sample ID: WG220033-07 MSD File ID: P2.081706.151039 Dil: 5

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Calcium, Total	71.9	5.00	77.2	108	5.00	73.4	30.4	5.12	75 - 125	20	*
Magnesium, Total	50.1	5.00	56.7	132	5.00	54.2	81.5	4.51	75 - 125	20	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

**KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT**

00046652

Sample Login ID: L0608330
 Instrument ID: PE-ICP2
 Sample ID: L0608330-06 File ID: P2.081606.135828 Dil: 1
 Serial Dilution ID: WG220080-02 File ID: P2.081606.141038 Dil: 5

Worknum: WG220080
 Method: 6010B
 Units: mg/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Aluminum	ND	U	ND	U		
Arsenic	0.00656	F	0.0198	F	202	
Barium	0.103	X	0.114	X	10.7	
Beryllium	0	U	0	U		
Cadmium	0	U	0	U		
Calcium	236		224		5.08	
Chromium	0	U	0	U		
Cobalt	0.0194	F	0.0190	F	2.06	
Copper	0	U	0	U		
Iron	0.0489	F	0	U	100	
Lead	ND	U	0	U		
Magnesium	160		158		1.25	
Manganese	1.70		1.72		1.18	
Nickel	0.0177	F	0	U	100	
Potassium	3.42	X	3.43	F	0.292	
Silver	ND	U	0	U		
Sodium	713		624		12.5	E
Vanadium	0.0158	X	0.0495	F	213	
Zinc	0.00563	F	0.0310	F	451	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 50 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 50 times the MDL

**KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT**

00046653

Sample Login ID: L0608330
Instrument ID: PE-ICP2
Sample ID: L0608330-06 File ID: P2.081606.141038 Dil: 5
Serial Dilution ID: WG220080-02 File ID: P2.081606.144707 Dil: 25

Worknum: WG220080
Method: 6010B
Units: mg/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Aluminum	ND	U	ND	U		
Arsenic	0.0198	F	0.0796	F	302	
Barium	0.114	X	0.170	F	49.1	
Beryllium	0	U	0	U		
Cadmium	0	U	ND	U		
Calcium	224		226		0.893	
Chromium	0	U	0	U		
Cobalt	0.0190	F	0	U	100	
Copper	0	U	0	U		
Iron	0	U	ND	U		
Lead	0	U	0	U		
Magnesium	158		163	X	3.16	
Manganese	1.72		1.77	X	2.91	
Nickel	0	U	0	U		
Potassium	3.43	F	0	U	100	
Silver	0	U	0	U		
Sodium	624		632		1.28	
Vanadium	0.0495	F	0	U	100	
Zinc	0.0310	F	0	U	100	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 50 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 50 times the MDL

**KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT**

00046654

Sample Login ID: L0608330
 Instrument ID: PE-ICP2
 Sample ID: L0608330-05 File ID: P2.081706.140545 Dil: 1
 Serial Dilution ID: WG220179-02 File ID: P2.081706.141733 Dil: 5

Worknum: WG220179
 Method: 6010B
 Units: mg/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Aluminum	0	U	ND	U		
Arsenic	0.00623	F	0.0379	F	508	
Barium	0.111	X	0.121	X	9.01	
Beryllium	0	U	0	U		
Cadmium	0	U	0	U		
Calcium	252		235		6.75	
Chromium	0	U	0	U		
Cobalt	0.0228	X	0.0248	F	8.77	
Copper	0	U	0	U		
Iron	0.109	X	0	U	100	
Lead	ND	U	ND	U		
Magnesium	172		171		0.581	
Manganese	1.95		1.96		0.513	
Nickel	0.0182	F	0	U	100	
Potassium	3.92	X	3.73	F	4.85	
Silver	0	U	0	U		
Sodium	713		638		10.5	E
Vanadium	0.0185	X	0.0571	X	209	
Zinc	0.0209	X	0.0469	F	124	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 50 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 50 times the MDL

**KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT**

00046655

Sample Login ID: L0608330
Instrument ID: PE-ICP2
Sample ID: L0608330-05 File ID: P2.081706.141733 Dil: 5
Serial Dilution ID: WG220179-02 File ID: P2.081706.151601 Dil: 25

Worknum: WG220179
Method: 6010B
Units: mg/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Aluminum	ND	U	0	U		
Arsenic	0.0379	F	0	U	100	
Barium	0.121	X	0.176	F	45.5	
Beryllium	0	U	0	U		
Cadmium	0	U	ND	U		
Calcium	235		235		0.00	
Chromium	0	U	0	U		
Cobalt	0.0248	F	0	U	100	
Copper	0	U	0	U		
Iron	0	U	0	U		
Lead	ND	U	0	U		
Magnesium	171		182	X	6.43	
Manganese	1.96		2.00	X	2.04	
Nickel	0	U	0	U		
Potassium	3.73	F	0	U	100	
Silver	0	U	0	U		
Sodium	638		655		2.66	
Vanadium	0.0571	X	0.148	F	159	
Zinc	0.0469	F	0	U	100	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 50 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 50 times the MDL

**KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT**

00046656

Sample Login ID: L0608330

Instrument ID: PE-ICP2

Post Spike ID: WG220080-01 File ID: P2.081606.140503 Dil: 1

Sample ID: L0608330-06 File ID: P2.081606.135828 Dil: 1

Worknum: WG220080

Method: 6010B

Units: mg/L

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
ALUMINUM	75 - 125	5.11		ND	U	5.00	102	
ARSENIC	75 - 125	0.208		0.00656	F	0.200	101	
BARIUM	75 - 125	0.594		0.103		0.500	100	
BERYLLIUM	75 - 125	0.0252		0	U	0.0250	101	
CADMIUM	75 - 125	0.0242		0	U	0.0250	96.8	
CALCIUM	75 - 125	225		236		5.00	252	N
CHROMIUM	75 - 125	0.253		0	U	0.250	101	
COBALT	75 - 125	0.113		0.0194	F	0.100	95.5	
COPPER	75 - 125	0.248		0	U	0.250	99.2	
IRON	75 - 125	2.08		0.0489	F	2.00	102	
LEAD	75 - 125	0.246		ND	U	0.250	98.4	
MAGNESIUM	75 - 125	157		160		5.00	260	N
MANGANESE	75 - 125	1.81		1.70		0.250	112	
NICKEL	75 - 125	0.252		0.0177	F	0.250	94.4	
POTASSIUM	75 - 125	28.8		3.42		25.0	103	
SILVER	75 - 125	0.201		ND	U	0.200	101	
SODIUM	75 - 125	680		713		25.0	153	N
VANADIUM	75 - 125	0.528		0.0158		0.500	103	
ZINC	75 - 125	0.478		0.00563	F	0.500	94.6	

N = % Recovery exceeds control limits of 75% - 125%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

**KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT**

00046657

Sample Login ID: L0608330

Instrument ID: PE-ICP2

Post Spike ID: WG220179-01 File ID: P2.081706.141207 Dil: 1

Sample ID: L0608330-05 File ID: P2.081706.140545 Dil: 1

Worknum: WG220179

Method: 6010B

Units: mg/L

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
ALUMINUM	75 - 125	4.81		0	U	5.00	96.2	
ARSENIC	75 - 125	0.195		0.00623	F	0.200	94.7	
BARIUM	75 - 125	0.576		0.111		0.500	95.2	
BERYLLIUM	75 - 125	0.0246		0	U	0.0250	98.4	
CADMIUM	75 - 125	0.0233		0	U	0.0250	93.2	
CALCIUM	75 - 125	228		252		5.00	24.0	N
CHROMIUM	75 - 125	0.241		0	U	0.250	96.4	
COBALT	75 - 125	0.110		0.0228		0.100	89.5	
COPPER	75 - 125	0.242		0	U	0.250	96.8	
IRON	75 - 125	2.03		0.109		2.00	96.6	
LEAD	75 - 125	0.231		ND	U	0.250	92.4	
MAGNESIUM	75 - 125	155		172		5.00	4.00	N
MANGANESE	75 - 125	1.95		1.95		0.250	78.0	
NICKEL	75 - 125	0.240		0.0182	F	0.250	89.4	
POTASSIUM	75 - 125	28.0		3.92		25.0	97.9	
SILVER	75 - 125	0.197		0	U	0.200	98.5	
SODIUM	75 - 125	653		713		25.0	45.2	N
VANADIUM	75 - 125	0.508		0.0185		0.500	98.3	
ZINC	75 - 125	0.464		0.0209		0.500	89.0	

N = % Recovery exceeds control limits of 75% - 125%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

INITIAL CALIBRATION SUMMARY

Login Number: L0608330

Workgroup (AAB#): WG220080

00046658

Analytical Method: 6010B

Instrument ID: PE-ICP2

ICAL Worknum: WG220083

Initial Calibration Date: 16-AUG-2006 10:23

Analyte	WG220083-01		WG220083-02		WG220083-03		WG220083-04		WG220083-05		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT		
Aluminum	0	36.52421913	.1	1065.379446	.2	2301.759609	10	118379.1247	20	235221.5772	0.999995	
Arsenic	0	-12.3438520	NA	NA	.008	7.18910539	.4	332.0916127	.8	662.267184	0.999999	
Barium	0	-95.4431040	.01	901.1585532	.02	1772.745128	1	87836.14329	2	179275.5284	0.999952	
Beryllium	0	-785.434835	.0005	275.855679	.001	556.6485652	.05	25967.84254	.1	53346.32687	0.999915	
Cadmium	0	49.31517771	.0005	26.18010185	.001	42.56714437	.05	2107.106302	.1	4239.302823	0.999995	
Calcium	0	-114.141468	.1	14.37519068	.2	26.25484016	10	1255.956648	20	2579.272298	0.999917	
Chromium	0	67.11784473	.005	225.2050296	.01	426.1883742	.5	21338.97019	1	43751.59931	0.999928	
Cobalt	0	-128.090804	.002	67.76604834	.004	129.2281129	.2	6424.348284	.4	12752.98087	0.999994	
Copper	0	-80.1392414	.005	585.6599627	.01	947.7111681	.5	41715.82163	1	86212.25124	0.999867	
Iron	0	30.63779768	.04	289.566944	.08	554.807675	4	29833.22365	8	58512.09259	0.999953	
Lead	0	7.841598207	0	17.20332885	.01	30.77393314	.5	1700.294067	1	3374.225391	0.999992	
Magnesium	0	40.72838308	.1	156.5146968	.2	315.4192302	10	17137.09944	20	33623.72728	0.999954	
Manganese	0	206.5205073	.005	3147.709886	.01	6032.572619	.5	300518.2618	1	600554.1804	1.000000	
Nickel	0	23.01924725	.005	85.62795092	.01	161.1311632	.5	8122.609063	1	16493.86907	0.999973	
Potassium	0	-336.645019	.5	1802.718645	1	3524.265069	50	174014.2524	100	344638.8282	1.000000	
Silver	0	-539.085766	.004	539.6783385	.008	1052.439155	.4	48149.99468	.8	99257.01996	0.999891	
Sodium	0	1612.772614	.5	5653.490071	1	11003.08492	50	541371.0484	100	1071013.745	1.000000	
Vanadium	0	4954.149998	.01	1347.219177	.02	2377.598266	1	126900.1661	2	260525.5215	0.999922	
Zinc	0	1.009684692	.01	140.8095683	.02	261.1481404	1	13376.17355	2	27216.03044	0.999966	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

INITIAL CALIBRATION SUMMARY

Login Number: L0608330

Workgroup (AAB#): WG220179

00046659

Analytical Method: 6010B

Instrument ID: PE-ICP2

ICAL Worknum: WG220230

Initial Calibration Date: 17-AUG-2006 11:21

Analyte	WG220230-01		WG220230-02		WG220230-03		WG220230-04		WG220230-05		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT		
Aluminum	0	-35.1017801	.1	1256.742757	.2	2542.997828	10	119202.8545	20	239338.8958	0.999998	
Arsenic	0	-12.2673596	NA	NA	.008	5.679166716	.4	353.3175931	.8	722.8000682	0.999938	
Barium	0	-98.3556730	.01	966.7522713	.02	1984.981749	1	93825.95169	2	191832.1921	0.999943	
Beryllium	0	-791.236243	.0005	251.3081241	.001	555.7594124	.05	27885.21132	.1	57578.9718	0.999884	
Cadmium	0	52.02353926	.0005	30.6300136	.001	59.83314385	.05	2311.997178	.1	4642.868287	0.999994	
Calcium	0	-117.540853	.1	4.187241222	.2	24.11128121	10	1364.39111	20	2786.713968	0.999952	
Chromium	0	69.3359623	.005	239.0387103	.01	487.411117	.5	22997.75208	1	47066.07294	0.999937	
Cobalt	0	-127.045070	.002	73.37806109	.004	129.0388423	.2	6743.213376	.4	13677.55725	0.999977	
Copper	0	-12.9331869	.005	538.7965209	.01	1054.517358	.5	44812.18	1	92346.01722	0.999890	
Iron	0	19.9427489	.04	307.0405211	.08	626.3647836	4	29386.72359	8	59056.27856	0.999997	
Lead	0	4.862509745	0	25.7820898	.01	39.90588682	.5	1808.827993	1	3637.431815	0.999994	
Magnesium	0	22.93343292	.1	178.6015531	.2	354.3942314	10	16792.92241	20	33784.26482	0.999995	
Manganese	0	101.1306884	.005	3407.448219	.01	6879.423715	.5	325817.1938	1	643827.0063	0.999983	
Nickel	0	23.79730311	.005	79.914956	.01	175.8357454	.5	8713.110254	1	17770.22869	0.999956	
Potassium	0	-239.876028	.5	1798.530611	1	3858.693235	50	179860.4321	100	360446.9882	1.00000	
Silver	0	-553.335629	.004	551.6482316	.008	1148.666437	.4	52004.33717	.8	106740.6572	0.999920	
Sodium	0	2049.686637	.5	5961.518088	1	12142.54732	50	562095.803	100	1113873.912	1.00000	
Vanadium	0	5323.921564	.01	1531.080044	.02	3073.508759	1	136189.6752	2	278314.8058	0.999943	
Zinc	0	-.746257141	.01	152.078643	.02	295.6272	1	14310.81572	2	29407.15516	0.999914	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046660

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-07
Instrument ID: PE-ICP2 Run Time: 10:34 Method: 6010B
File ID: P2.081606.103415 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-.00361	1	U
Silver	0.00500	0.0100	.00147	1	U
Arsenic	0.00200	0.0100	.00151	1	U
Barium	0.00250	0.0100	.00263	1	F
Beryllium	0.000500	0.0100	.000133	1	U
Calcium	0.100	0.200	-.0228	1	U
Cadmium	0.00250	0.0100	.0000788	1	U
Cobalt	0.00250	0.0200	-.000216	1	U
Chromium	0.00250	0.0200	.00168	1	U
Copper	0.00500	0.0200	.00282	1	U
Iron	0.0250	0.100	-.00512	1	U
Potassium	0.250	1.00	.0478	1	U
Magnesium	0.250	0.500	-.0276	1	U
Manganese	0.00500	0.0100	-.00000579	1	U
Sodium	0.250	0.500	.00122	1	U
Nickel	0.00500	0.0400	.000567	1	U
Lead	0.00250	0.00500	-.000866	1	U
Vanadium	0.00500	0.0100	.00463	1	U
Zinc	0.00500	0.0200	.00225	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046661

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-07
Instrument ID: PE-ICP2 Run Time: 11:32 Method: 6010B
File ID: P2.081706.113254 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.00976	1	U
Silver	0.00500	0.0100	.00176	1	U
Arsenic	0.00500	0.0100	.00431	1	U
Barium	0.00250	0.0100	.00252	1	F
Beryllium	0.000500	0.0100	.000161	1	U
Calcium	0.100	0.200	-.0456	1	U
Cadmium	0.00250	0.0100	-.00000495	1	U
Cobalt	0.00250	0.0200	.00043	1	U
Chromium	0.00250	0.0200	.00149	1	U
Copper	0.00500	0.0200	.00254	1	U
Iron	0.0250	0.100	.00274	1	U
Potassium	0.250	1.00	.0124	1	U
Magnesium	0.250	0.500	.00216	1	U
Manganese	0.00500	0.0100	-.000885	1	U
Sodium	0.250	0.500	-.0205	1	U
Nickel	0.00500	0.0400	.000992	1	U
Lead	0.00250	0.00500	.000471	1	U
Vanadium	0.00500	0.0100	.00382	1	U
Zinc	0.00500	0.0200	.00307	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046662

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-11
 Instrument ID: PE-ICP2 Run Time: 10:56 Method: 6010B
 File ID: P2.081606.105645 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0118	1	U
Silver	0.00500	0.0100	0.00128	1	U
Arsenic	0.00200	0.0100	-0.00159	1	U
Barium	0.00250	0.0100	0.00259	1	F
Beryllium	0.000500	0.0100	0.000159	1	U
Calcium	0.100	0.200	0.0554	1	U
Cadmium	0.00250	0.0100	0.0000186	1	U
Cobalt	0.00250	0.0200	-0.000151	1	U
Chromium	0.00250	0.0200	0.00156	1	U
Copper	0.00500	0.0200	0.00272	1	U
Iron	0.0250	0.100	-0.00438	1	U
Potassium	0.250	1.00	0.0448	1	U
Magnesium	0.250	0.500	-0.0220	1	U
Manganese	0.00500	0.0100	-0.0000155	1	U
Sodium	0.250	0.500	-0.0000526	1	U
Nickel	0.00500	0.0400	0.000474	1	U
Lead	0.00250	0.00500	0.000460	1	U
Vanadium	0.00500	0.0100	0.00378	1	U
Zinc	0.00500	0.0200	0.00244	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046663

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-13
 Instrument ID: PE-ICP2 Run Time: 12:13 Method: 6010B
 File ID: P2.081606.121319 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00969	1	U
Silver	0.00500	0.0100	0.00155	1	U
Arsenic	0.00200	0.0100	-0.000677	1	U
Barium	0.00250	0.0100	0.00258	1	F
Beryllium	0.000500	0.0100	0.000157	1	U
Calcium	0.100	0.200	0.0416	1	U
Cadmium	0.00250	0.0100	0.0000791	1	U
Cobalt	0.00250	0.0200	0.00000846	1	U
Chromium	0.00250	0.0200	0.00148	1	U
Copper	0.00500	0.0200	0.00252	1	U
Iron	0.0250	0.100	-0.00604	1	U
Potassium	0.250	1.00	0.0325	1	U
Magnesium	0.250	0.500	-0.0299	1	U
Manganese	0.00500	0.0100	-0.0000855	1	U
Sodium	0.250	0.500	0.0719	1	U
Nickel	0.00500	0.0400	0.00103	1	U
Lead	0.00250	0.00500	0.000442	1	U
Vanadium	0.00500	0.0100	0.00356	1	U
Zinc	0.00500	0.0200	0.00217	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046664

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-15
 Instrument ID: PE-ICP2 Run Time: 14:22 Method: 6010B
 File ID: P2.081606.142224 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00836	1	U
Silver	0.00500	0.0100	0.00140	1	U
Arsenic	0.00200	0.0100	0.00179	1	U
Barium	0.00250	0.0100	0.00252	1	F
Beryllium	0.000500	0.0100	0.000152	1	U
Calcium	0.100	0.200	0.0385	1	U
Cadmium	0.00250	0.0100	0.0000923	1	U
Cobalt	0.00250	0.0200	-0.000326	1	U
Chromium	0.00250	0.0200	0.00172	1	U
Copper	0.00500	0.0200	0.00274	1	U
Iron	0.0250	0.100	-0.00842	1	U
Potassium	0.250	1.00	0.0359	1	U
Magnesium	0.250	0.500	-0.0207	1	U
Manganese	0.00500	0.0100	0.0000387	1	U
Sodium	0.250	0.500	0.0962	1	U
Nickel	0.00500	0.0400	0.000933	1	U
Lead	0.00250	0.00500	-0.000428	1	U
Vanadium	0.00500	0.0100	0.00387	1	U
Zinc	0.00500	0.0200	0.00237	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046665

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-17
 Instrument ID: PE-ICP2 Run Time: 14:58 Method: 6010B
 File ID: P2.081606.145852 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.0124	1	U
Silver	0.00500	0.0100	0.00163	1	U
Arsenic	0.00200	0.0100	0.00222	1	F
Barium	0.00250	0.0100	0.00255	1	F
Beryllium	0.000500	0.0100	0.000178	1	U
Calcium	0.100	0.200	0.0272	1	U
Cadmium	0.00250	0.0100	0.0000186	1	U
Cobalt	0.00250	0.0200	-0.000209	1	U
Chromium	0.00250	0.0200	0.00155	1	U
Copper	0.00500	0.0200	0.00263	1	U
Iron	0.0250	0.100	-0.00873	1	U
Potassium	0.250	1.00	0.0284	1	U
Magnesium	0.250	0.500	-0.0243	1	U
Manganese	0.00500	0.0100	-0.000123	1	U
Sodium	0.250	0.500	0.0225	1	U
Nickel	0.00500	0.0400	0.000966	1	U
Lead	0.00250	0.00500	0.00000285	1	U
Vanadium	0.00500	0.0100	0.00295	1	U
Zinc	0.00500	0.0200	0.00245	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046666

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-11
 Instrument ID: PE-ICP2 Run Time: 11:56 Method: 6010B
 File ID: P2.081706.115611 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	0.00429	1	U
Silver	0.00500	0.0100	0.00134	1	U
Arsenic	0.00500	0.0100	0.00224	1	U
Barium	0.00250	0.0100	0.00245	1	U
Beryllium	0.000500	0.0100	0.000152	1	U
Calcium	0.100	0.200	-0.00936	1	U
Cadmium	0.00250	0.0100	0.0000530	1	U
Cobalt	0.00250	0.0200	0.000450	1	U
Chromium	0.00250	0.0200	0.00115	1	U
Copper	0.00500	0.0200	0.00278	1	U
Iron	0.0250	0.100	0.00557	1	U
Potassium	0.250	1.00	-0.0332	1	U
Magnesium	0.250	0.500	0.00671	1	U
Manganese	0.00500	0.0100	-0.000940	1	U
Sodium	0.250	0.500	-0.0214	1	U
Nickel	0.00500	0.0400	0.000842	1	U
Lead	0.00250	0.00500	-0.000567	1	U
Vanadium	0.00500	0.0100	0.00551	1	F
Zinc	0.00500	0.0200	0.00309	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046667

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-15
 Instrument ID: PE-ICP2 Run Time: 13:16 Method: 6010B
 File ID: P2.081706.131603 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00749	1	U
Silver	0.00500	0.0100	0.00178	1	U
Arsenic	0.00500	0.0100	0.00284	1	U
Barium	0.00250	0.0100	0.00252	1	F
Beryllium	0.000500	0.0100	0.000188	1	U
Calcium	0.100	0.200	0.0332	1	U
Cadmium	0.00250	0.0100	0.0000659	1	U
Cobalt	0.00250	0.0200	0.000465	1	U
Chromium	0.00250	0.0200	0.00127	1	U
Copper	0.00500	0.0200	0.00251	1	U
Iron	0.0250	0.100	0.00222	1	U
Potassium	0.250	1.00	-0.0253	1	U
Magnesium	0.250	0.500	0.00559	1	U
Manganese	0.00500	0.0100	-0.000979	1	U
Sodium	0.250	0.500	-0.0361	1	U
Nickel	0.00500	0.0400	0.000847	1	U
Lead	0.00250	0.00500	-0.000734	1	U
Vanadium	0.00500	0.0100	0.00267	1	U
Zinc	0.00500	0.0200	0.00305	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046668

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-17
 Instrument ID: PE-ICP2 Run Time: 14:29 Method: 6010B
 File ID: P2.081706.142923 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	-0.00176	1	U
Silver	0.00500	0.0100	0.00141	1	U
Arsenic	0.00500	0.0100	0.000727	1	U
Barium	0.00250	0.0100	0.00252	1	F
Beryllium	0.000500	0.0100	0.000152	1	U
Calcium	0.100	0.200	0.0416	1	U
Cadmium	0.00250	0.0100	-0.0000127	1	U
Cobalt	0.00250	0.0200	0.000404	1	U
Chromium	0.00250	0.0200	0.00132	1	U
Copper	0.00500	0.0200	0.00288	1	U
Iron	0.0250	0.100	0.000975	1	U
Potassium	0.250	1.00	-0.0104	1	U
Magnesium	0.250	0.500	0.00349	1	U
Manganese	0.00500	0.0100	-0.000758	1	U
Sodium	0.250	0.500	0.0301	1	U
Nickel	0.00500	0.0400	0.000862	1	U
Lead	0.00250	0.00500	-0.000317	1	U
Vanadium	0.00500	0.0100	0.00375	1	U
Zinc	0.00500	0.0200	0.00314	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046669

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-19
 Instrument ID: PE-ICP2 Run Time: 15:40 Method: 6010B
 File ID: P2.081706.154024 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	0.000432	1	U
Silver	0.00500	0.0100	0.00134	1	U
Arsenic	0.00500	0.0100	0.00374	1	U
Barium	0.00250	0.0100	0.00251	1	F
Beryllium	0.000500	0.0100	0.000152	1	U
Calcium	0.100	0.200	0.0320	1	U
Cadmium	0.00250	0.0100	0.0000208	1	U
Cobalt	0.00250	0.0200	0.000452	1	U
Chromium	0.00250	0.0200	0.00142	1	U
Copper	0.00500	0.0200	0.00283	1	U
Iron	0.0250	0.100	0.000884	1	U
Potassium	0.250	1.00	-0.00988	1	U
Magnesium	0.250	0.500	0.00726	1	U
Manganese	0.00500	0.0100	-0.000892	1	U
Sodium	0.250	0.500	-0.0288	1	U
Nickel	0.00500	0.0400	0.00114	1	U
Lead	0.00250	0.00500	0.000323	1	U
Vanadium	0.00500	0.0100	0.00276	1	U
Zinc	0.00500	0.0200	0.00291	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046670

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-06
 Instrument ID: PE-ICP2 Run Time: 10:28 Method: 6010B
 File ID: P2.081606.102851 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.96	99.6	90 - 110	
Silver		.4	0.407	102	90 - 110	
Arsenic		.4	0.395	98.7	90 - 110	
Barium		1	1.02	102	90 - 110	
Beryllium		.05	0.0499	99.7	90 - 110	
Calcium		10	10.4	104	90 - 110	
Cadmium		.05	0.0499	99.7	90 - 110	
Cobalt		.2	0.198	98.8	90 - 110	
Chromium		.5	0.507	101	90 - 110	
Copper		.5	0.503	101	90 - 110	
Iron		4	4.08	102	90 - 110	
Potassium		50	49.5	99.0	90 - 110	
Magnesium		10	10.1	101	90 - 110	
Manganese		.5	0.510	102	90 - 110	
Sodium		50	49.5	99.0	90 - 110	
Nickel		.5	0.508	102	90 - 110	
Lead		.5	0.515	103	90 - 110	
Vanadium		1	0.996	99.6	90 - 110	
Zinc		1	1.00	100	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046671

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-06
 Instrument ID: PE-ICP2 Run Time: 11:27 Method: 6010B
 File ID: P2.081706.112725 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	9.96	99.6	90 - 110	
Silver	.4	0.392	97.9	90 - 110	
Arsenic	.4	0.381	95.2	90 - 110	
Barium	1	0.991	99.1	90 - 110	
Beryllium	.05	0.0484	96.7	90 - 110	
Calcium	10	10.1	101	90 - 110	
Cadmium	.05	0.0484	96.7	90 - 110	
Cobalt	.2	0.192	96.2	90 - 110	
Chromium	.5	0.489	97.8	90 - 110	
Copper	.5	0.487	97.3	90 - 110	
Iron	4	4.04	101	90 - 110	
Potassium	50	49.8	99.6	90 - 110	
Magnesium	10	9.93	99.3	90 - 110	
Manganese	.5	0.504	101	90 - 110	
Sodium	50	49.3	98.6	90 - 110	
Nickel	.5	0.494	98.8	90 - 110	
Lead	.5	0.505	101	90 - 110	
Vanadium	1	0.967	96.7	90 - 110	
Zinc	1	0.972	97.2	90 - 110	

* Exceeds LIMITS Limit

CONTINUING CALIBRATION VERIFICATION (CCV)

00046672

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-12
 Instrument ID: PE-ICP2 Run Time: 12:07 Method: 6010B
 File ID: P2.081606.120756 Analyst: KHR
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	9.65	96.5	90 - 110	mg/L	
Silver	0.400	0.392	98.1	90 - 110	mg/L	
Arsenic	0.400	0.387	96.9	90 - 110	mg/L	
Barium	1.00	0.989	98.9	90 - 110	mg/L	
Beryllium	0.0500	0.0483	96.6	90 - 110	mg/L	
Calcium	10.0	10.2	102	90 - 110	mg/L	
Cadmium	0.0500	0.0485	97.1	90 - 110	mg/L	
Cobalt	0.200	0.195	97.3	90 - 110	mg/L	
Chromium	0.500	0.491	98.2	90 - 110	mg/L	
Copper	0.500	0.485	97.1	90 - 110	mg/L	
Iron	4.00	3.93	98.2	90 - 110	mg/L	
Potassium	50.0	47.8	95.6	90 - 110	mg/L	
Magnesium	10.0	9.76	97.6	90 - 110	mg/L	
Manganese	0.500	0.496	99.2	90 - 110	mg/L	
Sodium	50.0	48.6	97.2	90 - 110	mg/L	
Nickel	0.500	0.500	99.9	90 - 110	mg/L	
Lead	0.500	0.509	102	90 - 110	mg/L	
Vanadium	1.00	0.960	96.0	90 - 110	mg/L	
Zinc	1.00	0.978	97.8	90 - 110	mg/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046673

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-14
 Instrument ID: PE-ICP2 Run Time: 14:17 Method: 6010B
 File ID: P2.081606.141701 Analyst: KHR
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	10.1	101	90 - 110	mg/L	
Silver	0.400	0.392	98.1	90 - 110	mg/L	
Arsenic	0.400	0.388	97.0	90 - 110	mg/L	
Barium	1.00	1.01	101	90 - 110	mg/L	
Beryllium	0.0500	0.0487	97.5	90 - 110	mg/L	
Calcium	10.0	10.2	102	90 - 110	mg/L	
Cadmium	0.0500	0.0485	97.0	90 - 110	mg/L	
Cobalt	0.200	0.193	96.7	90 - 110	mg/L	
Chromium	0.500	0.494	98.8	90 - 110	mg/L	
Copper	0.500	0.487	97.3	90 - 110	mg/L	
Iron	4.00	4.10	102	90 - 110	mg/L	
Potassium	50.0	50.0	100	90 - 110	mg/L	
Magnesium	10.0	10.2	102	90 - 110	mg/L	
Manganese	0.500	0.510	102	90 - 110	mg/L	
Sodium	50.0	49.6	99.1	90 - 110	mg/L	
Nickel	0.500	0.503	101	90 - 110	mg/L	
Lead	0.500	0.514	103	90 - 110	mg/L	
Vanadium	1.00	0.977	97.7	90 - 110	mg/L	
Zinc	1.00	0.995	99.5	90 - 110	mg/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046674

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220083-16
 Instrument ID: PE-ICP2 Run Time: 14:53 Method: 6010B
 File ID: P2.081606.145323 Analyst: KHR
 Workgroup (AAB#): WG220080 Cal ID: PE-ICP - 16-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	10.0	100	90 - 110	mg/L	
Silver	0.400	0.389	97.3	90 - 110	mg/L	
Arsenic	0.400	0.386	96.6	90 - 110	mg/L	
Barium	1.00	0.991	99.1	90 - 110	mg/L	
Beryllium	0.0500	0.0484	96.8	90 - 110	mg/L	
Calcium	10.0	10.2	102	90 - 110	mg/L	
Cadmium	0.0500	0.0480	96.1	90 - 110	mg/L	
Cobalt	0.200	0.194	97.1	90 - 110	mg/L	
Chromium	0.500	0.491	98.2	90 - 110	mg/L	
Copper	0.500	0.481	96.2	90 - 110	mg/L	
Iron	4.00	4.03	101	90 - 110	mg/L	
Potassium	50.0	49.5	98.9	90 - 110	mg/L	
Magnesium	10.0	10.0	100	90 - 110	mg/L	
Manganese	0.500	0.499	99.8	90 - 110	mg/L	
Sodium	50.0	50.1	100	90 - 110	mg/L	
Nickel	0.500	0.498	99.6	90 - 110	mg/L	
Lead	0.500	0.508	102	90 - 110	mg/L	
Vanadium	1.00	0.961	96.1	90 - 110	mg/L	
Zinc	1.00	0.990	99.0	90 - 110	mg/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046675

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-14
 Instrument ID: PE-ICP2 Run Time: 13:10 Method: 6010B
 File ID: P2.081706.131032 Analyst: KHR
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	9.76	97.6	90 - 110	mg/L	
Silver	0.400	0.397	99.4	90 - 110	mg/L	
Arsenic	0.400	0.382	95.4	90 - 110	mg/L	
Barium	1.00	1.00	100	90 - 110	mg/L	
Beryllium	0.0500	0.0490	98.0	90 - 110	mg/L	
Calcium	10.0	10.2	102	90 - 110	mg/L	
Cadmium	0.0500	0.0486	97.2	90 - 110	mg/L	
Cobalt	0.200	0.196	97.8	90 - 110	mg/L	
Chromium	0.500	0.495	98.9	90 - 110	mg/L	
Copper	0.500	0.491	98.3	90 - 110	mg/L	
Iron	4.00	4.00	100	90 - 110	mg/L	
Potassium	50.0	48.9	97.7	90 - 110	mg/L	
Magnesium	10.0	9.86	98.6	90 - 110	mg/L	
Manganese	0.500	0.502	100	90 - 110	mg/L	
Sodium	50.0	49.0	98.1	90 - 110	mg/L	
Nickel	0.500	0.500	100	90 - 110	mg/L	
Lead	0.500	0.506	101	90 - 110	mg/L	
Vanadium	1.00	0.973	97.3	90 - 110	mg/L	
Zinc	1.00	0.989	98.9	90 - 110	mg/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046676

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-16
 Instrument ID: PE-ICP2 Run Time: 14:24 Method: 6010B
 File ID: P2.081706.142400 Analyst: KHR
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	9.76	97.6	90 - 110	mg/L	
Silver	0.400	0.380	95.1	90 - 110	mg/L	
Arsenic	0.400	0.380	95.1	90 - 110	mg/L	
Barium	1.00	0.969	96.9	90 - 110	mg/L	
Beryllium	0.0500	0.0470	94.0	90 - 110	mg/L	
Calcium	10.0	10.1	101	90 - 110	mg/L	
Cadmium	0.0500	0.0477	95.4	90 - 110	mg/L	
Cobalt	0.200	0.189	94.3	90 - 110	mg/L	
Chromium	0.500	0.479	95.8	90 - 110	mg/L	
Copper	0.500	0.470	93.9	90 - 110	mg/L	
Iron	4.00	4.04	101	90 - 110	mg/L	
Potassium	50.0	49.0	98.1	90 - 110	mg/L	
Magnesium	10.0	9.91	99.1	90 - 110	mg/L	
Manganese	0.500	0.499	99.7	90 - 110	mg/L	
Sodium	50.0	49.1	98.2	90 - 110	mg/L	
Nickel	0.500	0.486	97.2	90 - 110	mg/L	
Lead	0.500	0.506	101	90 - 110	mg/L	
Vanadium	1.00	0.942	94.2	90 - 110	mg/L	
Zinc	1.00	0.957	95.7	90 - 110	mg/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046677

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220230-18
 Instrument ID: PE-ICP2 Run Time: 15:35 Method: 6010B
 File ID: P2.081706.153504 Analyst: KHR
 Workgroup (AAB#): WG220179 Cal ID: PE-ICP - 17-AUG-06

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10.0	10.2	102	90 - 110	mg/L	
Silver	0.400	0.409	102	90 - 110	mg/L	
Arsenic	0.400	0.402	101	90 - 110	mg/L	
Barium	1.00	1.03	103	90 - 110	mg/L	
Beryllium	0.0500	0.0505	101	90 - 110	mg/L	
Calcium	10.0	10.5	105	90 - 110	mg/L	
Cadmium	0.0500	0.0500	100	90 - 110	mg/L	
Cobalt	0.200	0.204	102	90 - 110	mg/L	
Chromium	0.500	0.512	102	90 - 110	mg/L	
Copper	0.500	0.505	101	90 - 110	mg/L	
Iron	4.00	4.18	104	90 - 110	mg/L	
Potassium	50.0	50.9	102	90 - 110	mg/L	
Magnesium	10.0	10.3	103	90 - 110	mg/L	
Manganese	0.500	0.516	103	90 - 110	mg/L	
Sodium	50.0	50.7	101	90 - 110	mg/L	
Nickel	0.500	0.518	104	90 - 110	mg/L	
Lead	0.500	0.527	105	90 - 110	mg/L	
Vanadium	1.00	1.00	100	90 - 110	mg/L	
Zinc	1.00	1.02	102	90 - 110	mg/L	

* Exceeds LIMITS Criteria

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046678

Login number: L0608330
Instrument ID: PE-ICP2
Sol. A : WG220083-08
Sol. AB : WG220083-09

File ID: P2.081606.104040
File ID: P2.081606.104601

Workgroup (AAB#): WG220080
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	249	99.6	250	249	99.6	
Arsenic	NS	0.00546	NS	0.250	0.250	100	
Barium	NS	0.00416	NS	0.250	0.245	98.0	
Beryllium	NS	0.000450	NS	0.250	0.247	98.8	
Cadmium	NS	0.000100	NS	0.500	0.442	88.4	
Calcium	250	270	108	250	268	107	
Chromium	NS	0.00251	NS	0.250	0.245	98.0	
Cobalt	NS	-0.000300	NS	0.250	0.222	88.8	
Copper	NS	0.00587	NS	0.250	0.242	96.8	
Iron	100	96.2	96.2	100	96.2	96.2	
Lead	NS	0.00353	NS	0.500	0.477	95.4	
Magnesium	250	247	98.8	250	246	98.4	
Manganese	NS	-0.000290	NS	0.250	0.242	96.8	
Nickel	NS	0.00115	NS	0.500	0.455	91.0	
Potassium	NS	-0.0547	NS	5.00	4.89	97.8	
Silver	NS	0.00362	NS	0.500	0.461	92.2	
Sodium	NS	-0.00260	NS	5.00	4.98	99.6	
Vanadium	NS	-0.000460	NS	0.250	0.238	95.2	
Zinc	NS	0.000140	NS	0.500	0.452	90.4	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046679

Login number: L0608330
Instrument ID: PE-ICP2
Sol. A : WG220230-08
Sol. AB : WG220230-09

File ID: P2.081706.113958
File ID: P2.081706.114529

Workgroup (AAB#): WG220179
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	255	102	250	244	97.6	
Arsenic	NS	0.0000200	NS	0.250	0.227	90.8	
Barium	NS	0.00409	NS	0.250	0.246	98.4	
Beryllium	NS	0.000110	NS	0.250	0.245	98.0	
Cadmium	NS	-0.000200	NS	0.500	0.436	87.2	
Calcium	250	278	111	250	271	108	
Chromium	NS	0.00184	NS	0.250	0.242	96.8	
Cobalt	NS	0.000200	NS	0.250	0.220	88.0	
Copper	NS	0.0000100	NS	0.250	0.239	95.6	
Iron	100	95.9	95.9	100	95.2	95.2	
Lead	NS	0.00340	NS	0.500	0.467	93.4	
Magnesium	250	245	98.0	250	243	97.2	
Manganese	NS	-0.000760	NS	0.250	0.240	96.0	
Nickel	NS	0.00143	NS	0.500	0.449	89.8	
Potassium	NS	-0.107	NS	5.00	4.96	99.2	
Silver	NS	0.00335	NS	0.500	0.466	93.2	
Sodium	NS	-0.0145	NS	5.00	4.99	99.8	
Vanadium	NS	0.00120	NS	0.250	0.239	95.6	
Zinc	NS	0.00160	NS	0.500	0.444	88.8	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046680

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINIUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0.190	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	0
BORON	249.68	0	-0.570	0	0	0
CADMIUM	228.80	0	-0.000765	2.00	0	0
CALCIUM	317.93	0	0.152	0.0414	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0.00871	0	0	-1.09
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.126	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	-0.00705	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.0611	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0.504	0.0184	0.305	0	0.918
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046681

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	-0.200	0	0	0
ANTIMONY	206.84	0	0	0	0	17.1
ARSENIC	188.98	0	0.0379	9.40	0	-5.93
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	-0.0105
BORON	249.68	0	0.0238	42.3	3.51	1.50
CADMIUM	228.80	0	0	0	-6.00	0
CALCIUM	317.93	0	0	0	243	-16.6
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0.436
COPPER	327.39	0	-0.0234	0	0.380	0.107
IRON	239.56	0	-14.2	0	1.91	0.331
LEAD	220.35	0	0	0	0	0.183
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.638	0	0	0
MANGANESE	257.61	-1.04	-0.00379	-0.755	-0.0418	0.169
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0.948	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.0778	0	-0.382	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	3.39	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0233	0	0	0.297
VANADIUM	290.88	0	0.0110	0	0	-1.54
ZINC	206.20	0	0.0214	0	0	-3.99

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046682

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.185	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.430	0	0	0.0133
BARIUM	233.53	0	-0.00700	0	0	0
BERYLLIUM	313.11	0	0.182	0	0	0
BORON	249.68	0	-2.39	0	0	0
CADMIUM	228.80	0	-0.00172	0	0	0
CALCIUM	317.93	0	0.737	0	0	0.700
CHROMIUM	267.72	0	-0.0500	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	-0.0206	0	0	0
IRON	239.56	0	0	0	0	-0.168
LEAD	220.35	0.805	0.0435	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.174	0	0	0
MANGANESE	257.61	-0.0457	-0.0117	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	0.0866	0	11.9	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0.831	0	0	0
SELENIUM	196.03	0	-1.08	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0720	-0.198	0	0	0.00521
SODIUM	589.59	0	0.142	0	0	0.210
STRONTIUM	407.77	0	-16.4	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	-0.0284
VANADIUM	290.88	0	-0.0106	0	0	0.0631
ZINC	206.20	0.337	-0.0545	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046683

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	44.9	0	0	0
ANTIMONY	206.84	0	-1.68	0	-0.653	0
ARSENIC	188.98	0	-2.53	0	0	0
BARIUM	233.53	0	0.163	0	0	0
BERYLLIUM	313.11	-0.131	-0.618	0	-0.00974	0
BORON	249.68	0	-2.08	0	0	0
CADMIUM	228.80	0	0	0	-0.0881	0
CALCIUM	317.93	0	-15.0	0	-1000	0
CHROMIUM	267.72	0.247	0.143	0	0	0
COBALT	228.62	0	-1.60	0	0.129	0
COPPER	327.39	0	0.203	0	0.0857	0.235
IRON	239.56	-1.38	0	0	0	0
LEAD	220.35	0.232	-2.40	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.59	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0339	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.134	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.45	0	0
SELENIUM	196.03	0.416	0.199	0	0	0
SILICON	251.61	0	12.9	0	0	0
SILVER	328.07	0.130	-0.140	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.916	0	0	0
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046684

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	-4.70	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	313.11	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	317.93	0	0	2.79	0	0
CHROMIUM	267.72	0	-0.242	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.117	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.288	-0.262	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	0

INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00046685

Login Number: L0608330
 Instrument ID: PE-ICP2

Date: 06/08/2006
 Method: 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINIUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	-3.59	0
ARSENIC	188.98	0	0	0.622	0
BARIUM	233.53	0	0	-3.46	0
BERYLLIUM	313.11	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0100	0
CALCIUM	317.93	0	0	20.3	0
CHROMIUM	267.72	0	0	-0.459	-1.15
COBALT	228.62	2.07	0	0	0
COPPER	327.39	-0.693	0	-0.338	-0.316
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	-0.0280	0
MANGANESE	257.61	-0.227	-0.0414	-0.0601	-0.0553
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.286	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	0	0	0.381	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-6.14	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	0	0	0	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	0.110	0

LINEAR RANGE (QUARTERLY)

00046686

Login Number: L0608330

Date: 06/08/2006

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	500.0
Antimony	10.00	40.0
Arsenic	10.00	10.0
Barium	10.00	10.0
Beryllium	10.00	2.0
Boron	10.00	20.0
Cadmium	10.00	3.0
Calcium	10.00	500.0
Chromium	10.00	50.0
Cobalt	10.00	50.0
Copper	10.00	50.0
Iron	10.00	400.0
Lead	10.00	50.0
Lithium	10.00	2.0
Magnesium	10.00	500.0
Manganese	10.00	30.0
Molybdenum	10.00	50.0
Nickel	10.00	50.0
Potassium	10.00	100.0
Selenium	10.00	50.0
Silicon	10.00	10.0
Silver	10.00	10.0
Sodium	10.00	200.0
Strontium	10.00	3.0
Thallium	10.00	50.0
Tin	10.00	50.0
Titanium	10.00	10.0
Vanadium	10.00	50.0
Zinc	10.00	40.0

Comments:

KEMRON Environmental Services
Data Checklist

00046687

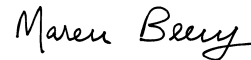
Date: 17 - AUG - 2006
 Analyst: JYH
 Analyst: NA
 Method: 6020
 Instrument: ELAN-ICP
 Curve Workgroup: 220191
 Runlog ID: 11792
 Analytical Workgroups: 220062,220163,220064

Calibration/Linearity	X
CV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	370,352,330
Client Forms	X
Level X	
Level 3	330
Level 4	370,330
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:



 Secondary Reviewer:
 17 - AUG - 2006



Generated: AUG -17 - 2006 20:23:55

KEMRON Environmental Services

Instrument Run Log

00046688

Instrument: ELAN-ICP Dataset: 081706A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 3
 Maintenance Log ID: 14546

Calibration Std: STD14097 ICV/CCV Std: STD14167 Post Spike: COA11342
 ICSA: STD13686 ICSAB: STD13816

Workgroups: 220062,220163,220064

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.081706.085239	Blank	Blank		1		08/17/06 08:52
2	EL.081706.085841	WG220191-01	Calibration Point		1		08/17/06 08:58
3	EL.081706.090444	WG220191-02	Calibration Point		1		08/17/06 09:04
4	EL.081706.091048	WG220191-03	Calibration Point		1		08/17/06 09:10
5	EL.081706.091652	WG220191-04	Calibration Point		1		08/17/06 09:16
6	EL.081706.092257	WG220191-05	Initial Calibration Verification		1		08/17/06 09:22
7	EL.081706.092921	WG220191-06	Initial Calib Blank		1		08/17/06 09:29
8	EL.081706.093546	WG220191-07	CRQL Check Solid		1		08/17/06 09:35
9	EL.081706.094215	WG220191-08	CRQL Check Water		1		08/17/06 09:42
10	EL.081706.094842	WG220191-09	Interference Check		1		08/17/06 09:48
11	EL.081706.095511	WG220191-10	Interference Check		1		08/17/06 09:55
12	EL.081706.100137	WG220191-11	CCV		1		08/17/06 10:01
13	EL.081706.100802	WG220191-12	CCB		1		08/17/06 10:08
14	EL.081706.101424	WG220052-03	Method/Prep Blank	40/100	1		08/17/06 10:14
15	EL.081706.102027	WG220052-04	Laboratory Control S	40/100	1		08/17/06 10:20
16	EL.081706.102630	WG220052-02	Reference Sample		1	L0608352-01	08/17/06 10:26
17	EL.081706.103234	WG220052-06	Matrix Spike	40/100	1		08/17/06 10:32
18	EL.081706.103838	WG220052-07	Matrix Spike Duplica	40/100	1		08/17/06 10:38
19	EL.081706.104442	WG220062-01	Post Digestion Spike		1	L0608352-01	08/17/06 10:44
20	EL.081706.105921	WG220062-02	Serial Dilution		5	L0608352-01	08/17/06 10:59
21	EL.081706.110526	WG220191-13	CCV		1		08/17/06 11:05
22	EL.081706.111150	WG220191-14	CCB		1		08/17/06 11:11
23	EL.081706.111813	WG220159-02	Method/Prep Blank	.5/200	1		08/17/06 11:18
24	EL.081706.112419	WG220159-03	Laboratory Control S	.5/200	1		08/17/06 11:24
25	EL.081706.113027	WG220159-01	Reference Sample		5	L0608370-01	08/17/06 11:30
26	EL.081706.113633	WG220159-04	Matrix Spike	.506/200	5		08/17/06 11:36
27	EL.081706.114240	WG220159-05	Matrix Spike Duplica	.506/200	5		08/17/06 11:42
28	EL.081706.114845	L0608370-02	BIP-SL-P2W-A-09-G	.5/200	5		08/17/06 11:48
29	EL.081706.115448	L0608370-03	BIP-SL-P2W-C-09-G	.514/200	5		08/17/06 11:54
30	EL.081706.120052	WG220163-01	Post Digestion Spike		5	L0608370-03	08/17/06 12:00
31	EL.081706.120657	WG220163-02	Serial Dilution		25	L0608370-03	08/17/06 12:06
32	EL.081706.122242	WG220159-01	Reference Sample		1000	L0608370-01	08/17/06 12:22
33	EL.081706.122848	WG220191-15	CCV		1		08/17/06 12:28
34	EL.081706.123512	WG220191-16	CCB		1		08/17/06 12:35
35	EL.081706.124136	L0608330-01	12WW20	40/100	1		08/17/06 12:41
36	EL.081706.124741	L0608330-03	12WW20	40/100	1		08/17/06 12:47
37	EL.081706.125347	L0608330-05	12WW21	40/100	1		08/17/06 12:53

Page: 1 of 2

Approved: August 17, 2006

Maren Beery

KEMRON Environmental Services

Instrument Run Log

00046689

Instrument: ELAN-ICP Dataset: 081706A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 3
 Maintenance Log ID: 14546

Calibration Std: STD14097 ICV/CCV Std: STD14167 Post Spike: COA11342
 ICSA: STD13686 ICSAB: STD13816

Workgroups: 220062,220163,220064

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	EL.081706.125953	WG220159-04	Matrix Spike	.506/200	1000		08/17/06 12:59
39	EL.081706.130600	WG220159-05	Matrix Spike Duplica	.506/200	1000		08/17/06 13:06
40	EL.081706.131205	L0608370-02	BIP-SL-P2W-A-09-G	.5/200	1000		08/17/06 13:12
41	EL.081706.131809	L0608370-03	BIP-SL-P2W-C-09-G	.514/200	1000		08/17/06 13:18
42	EL.081706.132413	WG220163-01	Post Digestion Spike		1000	L0608370-03	08/17/06 13:24
43	EL.081706.133017	WG220163-02	Serial Dilution		5000	L0608370-03	08/17/06 13:30
44	EL.081706.133708	WG220191-17	CCV		1		08/17/06 13:37
45	EL.081706.134331	WG220191-18	CCB		1		08/17/06 13:43
46	EL.081706.135314	WG220191-19	CCV		1		08/17/06 13:53
47	EL.081706.135938	WG220191-20	CCB		1		08/17/06 13:59
48	EL.081706.140602	WG220053-03	Method/Prep Blank	40/100	1		08/17/06 14:06
49	EL.081706.141208	WG220053-04	Laboratory Control S	40/100	1		08/17/06 14:12
50	EL.081706.141813	WG220053-01	Reference Sample		1	L0608330-06	08/17/06 14:18
51	EL.081706.142417	WG220053-05	Matrix Spike	40/100	1		08/17/06 14:24
52	EL.081706.143020	WG220053-06	Matrix Spike Duplica	40/100	1		08/17/06 14:30
53	EL.081706.143624	L0608330-02	12WW20	40/100	1		08/17/06 14:36
54	EL.081706.144229	L0608330-04	12WW20	40/100	1		08/17/06 14:42
55	EL.081706.144834	WG220064-01	Post Digestion Spike		1	L0608330-02	08/17/06 14:48
56	EL.081706.145800	WG220064-02	Serial Dilution		5	L0608330-02	08/17/06 14:58
57	EL.081706.150724	WG220191-21	CCV		1		08/17/06 15:07
58	EL.081706.151720	WG220191-22	CCB		1		08/17/06 15:17
59	EL.081706.152344	L0608330-01	12WW20	40/100	1		08/17/06 15:23
60	EL.081706.152949	L0608330-03	12WW20		1		08/17/06 15:29
61	EL.081706.153717	L0608330-03	12WW20	40/100	1		08/17/06 15:37
62	EL.081706.154321	L0608330-05	12WW21	40/100	1		08/17/06 15:43
63	EL.081706.154927	WG220191-23	CCV		1		08/17/06 15:49
64	EL.081706.155551	WG220191-24	CCB		1		08/17/06 15:55

Page: 2 of 2

Approved: August 17, 2006

Maren Beery

Microwave Digestion Log

Analyst(s): VC
Date: 8/16/06 7:30
LCS: .25 M (STA 11024)
MS/MSD: .25 M (STA 11024)
Witness: [Signature]
HNO₃ Lot #: RCT10338
HCl Lot #: [Blank]
Earliest Sample Due Date: 8/21
Microwave # MW2

Box: BS R1100444
Digestion Work Group: WG 220052
ME407 Revision # 8 Method 3015-Water
ME406 Revision # [Blank] Method 3051-Soil-Oil
Relinquished By: VC
Digest Received By: PAS Date: 8/16/06

	KEMRON #	Initial Wt/Vol	Final Volume	Initial Weight	Final Weight	Comments	Due Date
1	PBW	40 M	100 M	207.21 g	209.19 g	03	
2	LSW			207.46	207.45	04	
3	08-330-01 g			207.03	207.01	01	8/21
4	03 g			205.08	205.07	05	
5	05			205.57	205.56		
6	352.01 g			207.45	207.43	02	8/29
7	01 M			205.85	205.78	06	
8	01 MSD			208.23	208.21	07	
9							
10							
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29							
30							

Comments: Handwritten

Primary Review: Vicki Cuddy 8/16/06

Secondary Review: [Signature] 8/16/06

Microwave Digestion Log

Analyst(s): VC
Date: 8/16/06 8:00
LCS: 0.25 mL STD 11024
MS/MSD: 0.25 mL STD 11024
Witness: [Signature]
HNO₃ Lot #: RCT 10738
HCl Lot #: [Signature]
Earliest Sample Due Date: 8/21
Microwave # HW 2

Box: 62 R1100457
Digestion Work Group: WG 220053
ME407 Revision # 8 Method 3015-Water
ME406 Revision # [Blank] Method 3051-Soil-Oil
Relinquished By: VC
Digest Received By: PAS Date: 8/16/06

	KEMRON #	Initial Wt/Vol	Final Volume	Initial Weight	Final Weight	Comments	Due Date
1	Filter BCK 8/16	40mL	100 mL	208.67	208.65	LAB Filtered	03
2	LCS			207.46	207.45		04
3	08-330-02			206.76	206.75	LAB Filtered	02
4	04			205.97	205.95		07
5	06			208.74	208.71		01
6	06 MS			205.28	205.26		05
7	06 MSD			208.33	208.31		06
8							
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30							

Comments: _____

Primary Review: [Signature] 8/16/06 Secondary Review: [Signature] 8/16/06

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046692

Analytical Method: 6020
Login Number: L0608330

AAB#: WG220062

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	180	5.67	08/17/06	180	1.22	
12WW20	08/10/06	08/12/06	08/16/06	180	5.67	08/17/06	180	1.33	
12WW20	08/10/06	08/12/06	08/16/06	180	5.67	08/17/06	180	1.22	
12WW20	08/10/06	08/12/06	08/16/06	180	5.67	08/17/06	180	1.34	
12WW21	08/10/06	08/12/06	08/16/06	180	5.58	08/17/06	180	1.22	
12WW21	08/10/06	08/12/06	08/16/06	180	5.58	08/17/06	180	1.34	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046693

Analytical Method: 6020
Login Number: L0608330

AAB#: WG220064

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	180	5.69	08/17/06	180	1.28	
12WW20	08/10/06	08/12/06	08/16/06	180	5.69	08/17/06	180	1.28	
12WW21	08/10/06	08/12/06	08/16/06	180	5.60	08/17/06	180	1.26	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046694

Login Number: L0608330
Blank File ID: EL.081706.101424
Date Analyzed: 08/17/06
Time Analyzed: 10:14
Analyst: JYH

Work Group: WG220062
Blank Sample ID: WG220052-03
Instrument ID: ELAN-ICP
Method: 6020

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220052-04	EL.081706.102027	08/17/06 10:20	01
12WW20	L0608330-01	EL.081706.124136	08/17/06 12:41	01
12WW20	L0608330-03	EL.081706.124741	08/17/06 12:47	01
12WW21	L0608330-05	EL.081706.125347	08/17/06 12:53	01
12WW20	L0608330-01	EL.081706.152344	08/17/06 15:23	02
12WW20	L0608330-03	EL.081706.153717	08/17/06 15:37	02
12WW21	L0608330-05	EL.081706.154321	08/17/06 15:43	02

METHOD BLANK SUMMARY

00046695

Login Number: L0608330
Blank File ID: EL.081706.140602
Date Analyzed: 08/17/06
Time Analyzed: 14:06
Analyst: JYH

Work Group: WG220064
Blank Sample ID: WG220053-03
Instrument ID: ELAN-ICP
Method: 6020

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220053-04	EL.081706.141208	08/17/06 14:12	01
12WW21	L0608330-06	EL.081706.141813	08/17/06 14:18	01
12WW20	L0608330-02	EL.081706.143624	08/17/06 14:36	01
12WW20	L0608330-04	EL.081706.144229	08/17/06 14:42	01

METHOD BLANK REPORT

00046696

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220052-03
Instrument ID: ELAN-ICP Run Time: 10:14 Prep Method: 3015
File ID: EL.081706.101424 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220062 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 17-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Antimony, Total	0.000250	0.00100	0.000250	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.0000500	0.000200	0.0000500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046697

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220053-03
Instrument ID: ELAN-ICP Run Time: 14:06 Prep Method: 3015
File ID: EL.081706.140602 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220064 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 17-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Antimony, Dissolved	0.000250	0.00100	0.000250	1	U
Selenium, Dissolved	0.000500	0.00100	0.000500	1	U
Thallium, Dissolved	0.0000500	0.000200	0.0000500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046698

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220052-04
Instrument ID: ELAN-ICP Run Time: 10:20 Prep Method: 3015
File ID: EL.081706.102027 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220062 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 17-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0615	98.4	80 - 120	
Selenium, Total	0.0625	0.0624	99.8	80 - 120	
Thallium, Total	0.0625	0.0607	97.1	80 - 120	

LABORATORY CONTROL SAMPLE (LCS)

00046699

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220053-04
Instrument ID: ELAN-ICP Run Time: 14:12 Prep Method: 3015
File ID: EL.081706.141208 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220064 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 17-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Dissolved	0.0625	0.0621	99.4	80 - 120	
Selenium, Dissolved	0.0625	0.0627	100	80 - 120	
Thallium, Dissolved	0.0625	0.0583	93.3	80 - 120	

DUPLICATE REPORT

00046700

Login Number: L0608330

Worknum: WG220062

Instrument ID: ELAN-ICP

Method: 6020

Sample ID: L0608330-01 File ID: EL.081706.124136 Dil: 1

Matrix: Water

Duplicate ID: L0608330-03 File ID: EL.081706.124741 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Antimony, Total	0.00613	0.00130	130	20	#
Selenium, Total	0.0178	0.00858	70.1	20	#

DUPLICATE REPORT

00046701

Login Number: L0608330

Worknum: WG220062

Instrument ID: ELAN-ICP

Method: 6020

Sample ID: L0608330-01 File ID: EL.081706.152344 Dil: 1

Matrix: Water

Duplicate ID: L0608330-03 File ID: EL.081706.153717 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Thallium, Total	0.000479	0.000396	19.0	20	

DUPLICATE REPORT

00046702

Login Number: L0608330

Worknum: WG220064

Instrument ID: ELAN-ICP

Method: 6020

Sample ID: L0608330-02 File ID: EL.081706.143624 Dil: 1

Matrix: Water

Duplicate ID: L0608330-04 File ID: EL.081706.144229 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Antimony, Dissolved	ND	ND	0	20	
Selenium, Dissolved	0.00452	0.00427	5.65	20	
Thallium, Dissolved	0.000777	0.000614	23.5	20	#

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046703

Loginnum: L0608330 Cal ID: ELAN-ICP - Worknum: WG220062
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG220052-02 File ID: EL.081706.102630 Dil: 1 Matrix: WATER
 Sample ID: WG220052-06 MS File ID: EL.081706.103234 Dil: 1 Units: mg/L
 Sample ID: WG220052-07 MSD File ID: EL.081706.103838 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	0.000685	0.0625	0.0603	95.4	0.0625	0.0629	99.5	4.22	75 - 125	20	
Selenium, Total	ND	0.0625	0.0546	87.3	0.0625	0.0552	88.3	1.13	75 - 125	20	
Thallium, Total	0.000102	0.0625	0.0594	94.9	0.0625	0.0602	96.1	1.33	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046704

Loginnum: L0608330 Cal ID: ELAN-ICP - Worknum: WG220064
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG220053-01 File ID: EL.081706.141813 Dil: 1 Matrix: WATER
 Sample ID: WG220053-05 MS File ID: EL.081706.142417 Dil: 1 Units: mg/L
 Sample ID: WG220053-06 MSD File ID: EL.081706.143020 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	0.000563	0.0625	0.0644	102	0.0625	0.0646	102	0.300	75 - 125	20	
Selenium, Dissolved	0.0173	0.0625	0.0718	87.2	0.0625	0.0711	86.1	0.982	75 - 125	20	
Thallium, Dissolved	0.000310	0.0625	0.0547	87.0	0.0625	0.0565	89.9	3.25	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT

00046705

Sample Login ID: L0608330
Instrument ID: ELAN-ICP
Sample ID: L0608352-01 File ID: EL.081706.102630 Dil: 1
Serial Dilution ID: WG220062-02 File ID: EL.081706.105921 Dil: 5

Worknum: WG220062
Method: 6020
Units: ug/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Antimony	0.274	F	0	U	100	
Selenium	0	U	0	U		
Thallium	0.0407	F	0	U	100	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 100 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 100 times the MDL

KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT

00046706

Sample Login ID: L0608330
Instrument ID: ELAN-ICP
Sample ID: L0608330-02 File ID: EL.081706.143624 Dil: 1
Serial Dilution ID: WG220064-02 File ID: EL.081706.145800 Dil: 5

Worknum: WG220064
Method: 6020
Units: ug/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Antimony	0	U	0	U		
Selenium	1.81	X	3.28	X	81.2	
Thallium	0.311	X	0.787	X	153	

U = Result is below MDL

F = Result is between MDL and RL

X = Result is greater than RL and less than 100 times the MDL

E = %D exceeds control limit of 10% and initial

sample result is greater than or equal to 100 times the MDL

**KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT**

00046707

Sample Login ID: L0608330

Worknum: WG220062

Instrument ID: ELAN-ICP

Method: 6020

Post Spike ID: WG220062-01 File ID: EL.081706.104442 Dil: 1

Units: ug/L

Sample ID: L0608352-01 File ID: EL.081706.102630 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
ANTIMONY	75 - 125	52.6		0.274	F	50.0	105	
SELENIUM	75 - 125	46.4		0	U	50.0	92.8	
THALLIUM	75 - 125	51.0		0.0407	F	50.0	102	

N = % Recovery exceeds control limits of 75% - 125%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

**KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT**

00046708

Sample Login ID: L0608330

Worknum: WG220064

Instrument ID: ELAN-ICP

Method: 6020

Post Spike ID: WG220064-01 File ID: EL.081706.144834 Dil: 1

Units: ug/L

Sample ID: L0608330-02 File ID: EL.081706.143624 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
ANTIMONY	75 - 125	52.3		0	U	50.0	105	
SELENIUM	75 - 125	46.3		1.81		50.0	89.0	
THALLIUM	75 - 125	50.4		0.311		50.0	100	

N = % Recovery exceeds control limits of 75% - 125%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

INITIAL CALIBRATION SUMMARY

Login Number: L0608330
 Analytical Method: 6020
 ICAL Worknum: WG220191

Workgroup (AAB#): WG220062 00046709
 Instrument ID: ELAN-ICP
 Initial Calibration Date: 17-AUG-2006 09:16

Analyte	WG220191-01		WG220191-02		WG220191-03		WG220191-04		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT		
Antimony	0	334.02	.4	2418.539	50	321118.513	100	637277.498	0.999982	
Selenium	0	32.372	.4	96.921	50	10681.19	100	21224.108	0.999949	
Thallium	0	39	.4	4350.039	50	544529.238	100	1059905.229	0.999907	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

INITIAL CALIBRATION SUMMARY

Login Number: L0608330
 Analytical Method: 6020
 ICAL Worknum: WG220191

Workgroup (AAB#): WG220064 00046710
 Instrument ID: ELAN-ICP
 Initial Calibration Date: 17-AUG-2006 09:16

Analyte	WG220191-01		WG220191-02		WG220191-03		WG220191-04		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT		
Antimony	0	334.02	.4	2418.539	50	321118.513	100	637277.498	0.999982	
Selenium	0	32.372	.4	96.921	50	10681.19	100	21224.108	0.999949	
Thallium	0	39	.4	4350.039	50	544529.238	100	1059905.229	0.999907	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046711

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-06
Instrument ID: ELAN-ICP Run Time: 09:29 Method: 6020
File ID: EL.081706.092921 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	.197	1	F
Selenium	0.200	0.400	-.0105	1	U
Thallium	0.0200	0.0800	.0019	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046712

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-06
Instrument ID: ELAN-ICP Run Time: 09:29 Method: 6020
File ID: EL.081706.092921 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	.197	1	F
Selenium	0.200	0.400	-.0105	1	U
Thallium	0.0200	0.0800	.0019	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046713

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-12
Instrument ID: ELAN-ICP Run Time: 10:08 Method: 6020
File ID: EL 081706.100802 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.174	1	F
Selenium	0.200	0.400	-0.0352	1	U
Thallium	0.0200	0.0800	0.00320	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046714

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-14
Instrument ID: ELAN-ICP Run Time: 11:11 Method: 6020
File ID: EL_081706.111150 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.140	1	F
Selenium	0.200	0.400	-0.111	1	U
Thallium	0.0200	0.0800	0.000700	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046715

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-16
Instrument ID: ELAN-ICP Run Time: 12:35 Method: 6020
File ID: EL.081706.123512 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.129	1	F
Selenium	0.200	0.400	-0.0127	1	U
Thallium	0.0200	0.0800	0.00100	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046716

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-18
Instrument ID: ELAN-ICP Run Time: 13:43 Method: 6020
File ID: EL_081706.134331 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.131	1	F
Selenium	0.200	0.400	-0.0306	1	U
Thallium	0.0200	0.0800	0.00250	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046717

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-22
Instrument ID: ELAN-ICP Run Time: 15:17 Method: 6020
File ID: EL.081706.151720 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.0728	1	U
Selenium	0.200	0.400	0.0317	1	U
Thallium	0.0200	0.0800	0.00590	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046718

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-24
Instrument ID: ELAN-ICP Run Time: 15:55 Method: 6020
File ID: EL 081706.155551 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.138	1	F
Selenium	0.200	0.400	0.325	1	F
Thallium	0.0200	0.0800	0.0118	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046719

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-12
Instrument ID: ELAN-ICP Run Time: 10:08 Method: 6020
File ID: EL.081706.100802 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.174	1	F
Selenium	0.200	0.400	-0.0352	1	U
Thallium	0.0200	0.0800	0.00320	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046720

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-20
Instrument ID: ELAN-ICP Run Time: 13:59 Method: 6020
File ID: EL.081706.135938 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.142	1	F
Selenium	0.200	0.400	-0.0273	1	U
Thallium	0.0200	0.0800	0.00280	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046721

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-22
Instrument ID: ELAN-ICP Run Time: 15:17 Method: 6020
File ID: EL_081706_151720 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.100	0.400	0.0728	1	U
Selenium	0.200	0.400	0.0317	1	U
Thallium	0.0200	0.0800	0.00590	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046722

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-05
Instrument ID: ELAN-ICP Run Time: 09:22 Method: 6020
File ID: EL_081706_092257 Analvst: JYH Units: ug/L
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.1	98.3	90 - 110	
Selenium		50	49.5	99.0	90 - 110	
Thallium		50	47.4	94.7	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046723

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-05
Instrument ID: ELAN-ICP Run Time: 09:22 Method: 6020
File ID: EL_081706_092257 Analvst: JYH Units: ug/L
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.1	98.3	90 - 110	
Selenium		50	49.5	99.0	90 - 110	
Thallium		50	47.4	94.7	90 - 110	

* Exceeds LIMITS Limit

CONTINUING CALIBRATION VERIFICATION (CCV)

00046724

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-11
Instrument ID: ELAN-ICP Run Time: 10:01 Method: 6020
File ID: EL_081706.100137 Analvst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.122	0.244	90 - 110	mg/L	*
Selenium		0.0500	0.124	0.248	90 - 110	mg/L	*
Thallium		0.0500	0.115	0.231	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046725

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-13
Instrument ID: ELAN-ICP Run Time: 11:05 Method: 6020
File ID: EL.081706.110526 Analyst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.120	0.240	90 - 110	mg/L	*
Selenium		0.0500	0.121	0.242	90 - 110	mg/L	*
Thallium		0.0500	0.118	0.235	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046726

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-15
Instrument ID: ELAN-ICP Run Time: 12:28 Method: 6020
File ID: EL_081706.122848 Analvst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.122	0.243	90 - 110	mg/L	*
Selenium		0.0500	0.123	0.247	90 - 110	mg/L	*
Thallium		0.0500	0.116	0.233	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046727

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-17
Instrument ID: ELAN-ICP Run Time: 13:37 Method: 6020
File ID: EL.081706.133708 Analvst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.119	0.239	90 - 110	mg/L	*
Selenium		0.0500	0.123	0.246	90 - 110	mg/L	*
Thallium		0.0500	0.111	0.223	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046728

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-19
Instrument ID: ELAN-ICP Run Time: 13:53 Method: 6020
File ID: EL 081706.135314 Analvst: JYH
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.122	0.244	90 - 110	mg/L	*
Selenium		0.0500	0.123	0.247	90 - 110	mg/L	*
Thallium		0.0500	0.117	0.233	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046729

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-21
Instrument ID: ELAN-ICP Run Time: 15:07 Method: 6020
File ID: EL.081706.150724 Analvst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.117	0.233	90 - 110	mg/L	*
Selenium		0.0500	0.121	0.242	90 - 110	mg/L	*
Thallium		0.0500	0.123	0.246	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046730

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-21
Instrument ID: ELAN-ICP Run Time: 15:07 Method: 6020
File ID: EL.081706.150724 Analvst: JYH
Workgroup (AAB#): WG220064 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.117	0.233	90 - 110	mg/L	*
Selenium		0.0500	0.121	0.242	90 - 110	mg/L	*
Thallium		0.0500	0.123	0.246	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046731

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-23
Instrument ID: ELAN-ICP Run Time: 15:49 Method: 6020
File ID: EL.081706.154927 Analyst: JYH
Workgroup (AAB#): WG220062 Cal ID: ELAN-I - 17-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		0.0500	0.122	0.244	90 - 110	mg/L	*
Selenium		0.0500	0.127	0.254	90 - 110	mg/L	*
Thallium		0.0500	0.122	0.244	90 - 110	mg/L	*

* Exceeds LIMITS Criteria

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046732

Login number: L0608330
Instrument ID: ELAN-ICP
Sol. A : WG220191-09
Sol. AB : WG220191-10

File ID: EL.081706.094842
File ID: EL.081706.095511

Workgroup (AAB#): WG220062
Method: 6020
Units: ug/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0531	NS	100	104	104	
Selenium	NS	-0.147	NS	100	102	102	
Thallium	NS	0.0120	NS	100	93.5	93.5	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00046733

Login number: L0608330
Instrument ID: ELAN-ICP
Sol. A : WG220191-09
Sol. AB : WG220191-10

File ID: EL.081706.094842
File ID: EL.081706.095511

Workgroup (AAB#): WG220064
Method: 6020
Units: ug/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0531	NS	100	104	104	
Selenium	NS	-0.147	NS	100	102	102	
Thallium	NS	0.0120	NS	100	93.5	93.5	

NS = Not spiked

*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

CRI SAMPLE

00046734

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-08
Instrument ID: ELAN-ICP Run Time: 09:42 Prep Method: 3015
File ID: EL.081706.094215 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220191 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-ICP - 17-AUG-2006 09:16

Analytes	Expected	Found	% Rec	Limits	Q
Thallium	0.0800	0.0869	109	50 - 150	

CRI SAMPLE

00046735

Login Number: L0608330 Run Date: 08/17/2006 Sample ID: WG220191-08
Instrument ID: ELAN-ICP Run Time: 09:42 Prep Method: 3015
File ID: EL.081706.094215 Analyst: JYH Method: 6020
Workgroup (AAB#): WG220191 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-ICP - 17-AUG-2006 09:16

Analytes	Expected	Found	% Rec	Limits	Q
Thallium	0.0800	0.0869	109	50 - 150	

LINEAR RANGE (QUARTERLY)

00046736

Login Number: L0608330 Date: 06/09/2006
Insturment ID: ELAN-ICP Method: 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:

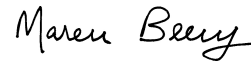
KEMRON Environmental Services Data Checklist

00046737

Date: 15 - AUG - 2006
 Analyst: PAS
 Analyst: NA
 Method: 7470A
 Instrument: HYDRA
 Curve Workgroup: 220012
 Runlog ID: 11752
 Analytical Workgroups: 220003

Calibration/Linearity	X
CV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	
Workgroup Forms	X
Case Narrative	08 - 330
Client Forms	X
Level X	
Level 3	08 - 330
Level 4	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PAS
Secondary Reviewer	MMB
Comments	

Primary Reviewer:


Secondary Reviewer:
15 - AUG - 2006


Generated: AUG -15 -2006 16:26:23

KEMRON Environmental Services Data Checklist

00046738

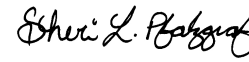
Date: 16 - AUG - 2006
 Analyst: PAS
 Analyst: NA
 Method: 7470A
 Instrument: HYDRA
 Curve Workgroup: 220110
 Runlog ID: 11778
 Analytical Workgroups: 220101

Calibration/Linearity	X
CV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	
Workgroup Forms	X
Case Narrative	08 - 330, 352
Client Forms	X
Level X	
Level 3	08 - 330
Level 4	08 - 352
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PAS
Secondary Reviewer	SLP
Comments	

Primary Reviewer:



 Secondary Reviewer:
 17 - AUG - 2006



Generated: AUG -17 -2006 10:18:13

KEMRON Environmental Services

Instrument Run Log

00046739

Instrument: HYDRA Dataset: 081506C.PRN
 Analyst1: PAS Analyst2: N/A
 Method: 7470A SOP: 404 Rev: 9
 Maintenance Log ID: 15155

Calibration Std: STD14446 ICV/CCV Std: STD14440 Post Spike: STD14446
 ICSA: N/A ICSAB: N/A

Workgroups: 220003

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.081506.150739	WG220012-01	Calibration Point		1		08/15/06 15:07
2	HY.081506.150918	WG220012-02	Calibration Point		1		08/15/06 15:09
3	HY.081506.151058	WG220012-03	Calibration Point		1		08/15/06 15:10
4	HY.081506.151238	WG220012-04	Calibration Point		1		08/15/06 15:12
5	HY.081506.151417	WG220012-05	Calibration Point		1		08/15/06 15:14
6	HY.081506.151600	WG220012-06	Calibration Point		1		08/15/06 15:16
7	HY.081506.151918	WG220012-07	Initial Calibration Verification		1		08/15/06 15:19
8	HY.081506.152058	WG220012-08	Initial Calib Blank		1		08/15/06 15:20
9	HY.081506.152239	WG220012-09	CCV		1		08/15/06 15:22
10	HY.081506.152419	WG220012-10	CCB		1		08/15/06 15:24
11	HY.081506.152915	WG219968-03	Method/Prep Blank	40/40	1		08/15/06 15:29
12	HY.081506.153104	WG219968-04	Laboratory Control S	40/40	1		08/15/06 15:31
13	HY.081506.153246	WG219968-01	Reference Sample		1	L0608330-01	08/15/06 15:32
14	HY.081506.153423	WG220003-01	Post Digestion Spike		1	L0608330-01	08/15/06 15:34
15	HY.081506.153729	L0608330-03	12WW20	40/40	1		08/15/06 15:37
16	HY.081506.153906	WG219968-02	Reference Sample		1	L0608330-05	08/15/06 15:39
17	HY.081506.154126	WG219968-06	Matrix Spike	36/40	1		08/15/06 15:41
18	HY.081506.154332	WG219968-07	Matrix Spike Duplica	36/40	1		08/15/06 15:43
19	HY.081506.154510	WG219915-01	Fluid Blank		1		08/15/06 15:45
20	HY.081506.154708	L0608340-01	PSF SUMP AREA	4/40	1		08/15/06 15:47
21	HY.081506.154856	WG220012-11	CCV		1		08/15/06 15:48
22	HY.081506.155055	WG220012-12	CCB		1		08/15/06 15:50
23	HY.081506.155236	WG220003-02	Post Digestion Spike		1	L0608340-01	08/15/06 15:52
24	HY.081506.155433	WG220012-13	CCV		1		08/15/06 15:54
25	HY.081506.155644	WG220012-14	CCB		1		08/15/06 15:56

Page: 1 of 1

Approved: August 15, 2006

Maren Beery

KEMRON Environmental Services

Instrument Run Log

00046740

Instrument: HYDRA Dataset: 081606A.PRN
 Analyst1: PAS Analyst2: N/A
 Method: 7470A SOP: 404 Rev: 9
 Maintenance Log ID: 15196

Calibration Std: STD14471 ICV/CCV Std: STD14465 Post Spike: STD14471
 ICSA: N/A ICSAB: N/A

Workgroups: 220101

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.081606.153501	WG220110-01	Calibration Point		1		08/16/06 15:35
2	HY.081606.153655	WG220110-02	Calibration Point		1		08/16/06 15:36
3	HY.081606.153836	WG220110-03	Calibration Point		1		08/16/06 15:38
4	HY.081606.154017	WG220110-04	Calibration Point		1		08/16/06 15:40
5	HY.081606.154157	WG220110-05	Calibration Point		1		08/16/06 15:41
6	HY.081606.154334	WG220110-06	Calibration Point		1		08/16/06 15:43
7	HY.081606.154532	WG220110-07	Initial Calibration Verification		1		08/16/06 15:45
8	HY.081606.154708	WG220110-08	Initial Calib Blank		1		08/16/06 15:47
9	HY.081606.154848	WG220110-09	CCV		1		08/16/06 15:48
10	HY.081606.155045	WG220110-10	CCB		1		08/16/06 15:50
11	HY.081606.155246	WG220054-03	Method/Prep Blank	40/40	1		08/16/06 15:52
12	HY.081606.155505	WG220054-04	Laboratory Control S	40/40	1		08/16/06 15:55
13	HY.081606.155653	WG220054-01	Reference Sample		1	L0608330-02	08/16/06 15:56
14	HY.081606.155833	L0608330-04	12WW20	40/40	1		08/16/06 15:58
15	HY.081606.160029	L0608330-06	12WW21	40/40	1		08/16/06 16:00
16	HY.081606.160240	WG220054-02	Reference Sample		1	L0608352-01	08/16/06 16:02
17	HY.081606.160429	WG220101-01	Post Digestion Spike		1	L0608352-01	08/16/06 16:04
18	HY.081606.160619	WG220054-06	Matrix Spike	36/40	1		08/16/06 16:06
19	HY.081606.160810	WG220054-07	Matrix Spike Duplica	36/40	1		08/16/06 16:08
20	HY.081606.160958	WG220110-11	CCV		1		08/16/06 16:09
21	HY.081606.161139	WG220110-12	CCB		1		08/16/06 16:11

Page: 1 of 1

Approved: August 17, 2006

Shirley L. Babcock

Mercury Digestion Log

Analyst(s): JA
Date: 8/15/06
LCS: 7ml STD 14438
MS/MSD: 4ml STD 14438
Witness: VC
H₂SO₄ Lot #: PET 10299
K₂S₂O₈ Lot #: PET 10431
KMNO₄ Lot #: PET 10516
HNO₃ Lot #: PET 10338
Aqua Regia: NK
Earliest Sample Due Date: 8/15/06
ICV / CCV: STD 14440
Std: 0, 0.2, 1, 2, 5, 10: STD 14441 + 14446

Box: 57

Digestion Work Group: WG 219968

ME404 Revision # 9 - Method 7470A-Water
ME405 Revision # - Method 7471A-Soil

Hot Block Temperature at start: 93.8°C @ 1140
Hot Block Temperature at end: 75.5°C @ 1340

Relinquished By: JA
Digest Received By: SLP Date: 8/15/06

	KEMRON #	Initial Wt/Vol	Final Volume	Comments	Due Date
1	<u>PBW</u>	<u>40ml</u>	<u>40ml</u>	<u>-03</u>	
2	<u>LCS</u>			<u>-04</u>	
3	<u>08-370-01 PCH</u>			<u>-01</u>	<u>8/21</u>
4	<u>-03 DUP</u>			<u>-05</u>	
5	<u>-05</u>			<u>-02</u>	
6	<u>-05 MS</u>	<u>36ml</u>		<u>-06</u>	
7	<u>-05 MSD</u>	<u>I</u>		<u>-07</u>	
8	<u>TEBLK 8/14</u>	<u>4ml</u>		<u>WIL 21995E 1800</u>	
9	<u>08-340-01</u>	<u>I</u>	<u>I</u>		<u>8/15</u>
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Comments: _____

Primary Review: JA 8/15/06

Secondary Review: Van Cullen 8/15/06

Mercury Digestion Log

Analyst(s): RM
Date: 8/16/06
LCS: 4 ml STD 14463
MS/MSD: 4 ml STD 14463
Witness: VC
H₂SO₄ Lot #: RG 10299
K₂S₂O₈ Lot #: RG 10431
KMNO₄ Lot #: RG 10516
HNO₃ Lot #: RG 10378
Aqua Regia: N/A
Earliest Sample Due Date: 8/21/06
ICV / CCV: STD 14465
Stds: 0, 0.2, 1, 2, 5, 10: STD 14466 & 14471

Box: 50

Digestion Work Group: WG 220054

ME404 Revision # 8 - Method 7470A-Water
ME405 Revision # - Method 7471A-Soil

Hot Block Temperature at start: 94.3 °C 0925
Hot Block Temperature at end: 95.1 °C 1125

Relinquished By: MA
Digest Received By: PAS Date: 8/16/06

	KEMRON #	Initial Wt/Vol	Final Volume	Comments	Due Date
1	<u>RBW</u>	<u>40 ml</u>	<u>40 ml</u>	<u>-03</u>	
2	<u>LCSW</u>			<u>02</u>	
3	<u>08.330-02 RCF</u>			<u>01</u>	<u>8/21</u>
4	<u>-04 RCF</u>			<u>05</u>	
5	<u>-06</u>				
6	<u>08.352-01</u>			<u>02</u>	<u>8/29</u>
7	<u>-01 ml</u>	<u>36 ml</u>		<u>06</u>	
8	<u>-01 ml P</u>			<u>07</u>	
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Comments: _____

Primary Review: RM 8/16/06 Secondary Review: Vicki Callen 8/16/06

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046743

Analytical Method: 7470A
Login Number: L0608330

AAB#: WG220003

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/15/06	28	4.85	08/15/06	28	0.162	
12WW20	08/10/06	08/12/06	08/15/06	28	4.85	08/15/06	28	0.165	
12WW21	08/10/06	08/12/06	08/15/06	28	4.76	08/15/06	28	0.166	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046744

Analytical Method: 7470A
Login Number: L0608330

AAB#: WG220101

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	28	5.75	08/16/06	28	0.272	
12WW20	08/10/06	08/12/06	08/16/06	28	5.75	08/16/06	28	0.273	
12WW21	08/10/06	08/12/06	08/16/06	28	5.66	08/16/06	28	0.275	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046745

Login Number: L0608330 _____ Work Group: WG220003 _____
Blank File ID: HY.081506.152915 _____ Blank Sample ID: WG219968-03 _____
Date Analyzed: 08/15/06 _____ Instrument ID: HYDRA _____
Time Analyzed: 15:29 _____ Method: 7470A _____
Analyst: PAS _____

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219968-04	HY.081506.153104	08/15/06 15:31	01
12WW20	L0608330-01	HY.081506.153246	08/15/06 15:32	01
12WW20	L0608330-03	HY.081506.153729	08/15/06 15:37	01
12WW21	L0608330-05	HY.081506.153906	08/15/06 15:39	01

METHOD BLANK SUMMARY

00046746

Login Number: L0608330
Blank File ID: HY.081606.155246
Date Analyzed: 08/16/06
Time Analyzed: 15:52
Analyst: PAS

Work Group: WG220101
Blank Sample ID: WG220054-03
Instrument ID: HYDRA
Method: 7470A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220054-04	HY.081606.155505	08/16/06 15:55	01
12WW20	L0608330-02	HY.081606.155653	08/16/06 15:56	01
12WW20	L0608330-04	HY.081606.155833	08/16/06 15:58	01
12WW21	L0608330-06	HY.081606.160029	08/16/06 16:00	01

METHOD BLANK REPORT

00046747

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219968-03
Instrument ID: HYDRA Run Time: 15:29 Prep Method: METHOD
File ID: HY.081506.152915 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG220003 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 15-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046748

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220054-03
Instrument ID: HYDRA Run Time: 15:52 Prep Method: METHOD
File ID: HY.081606.155246 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG220101 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-16-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Mercury, Dissolved	0.000100	0.000200	0.000100	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046749

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG219968-04
Instrument ID: HYDRA Run Time: 15:31 Prep Method: METHOD
File ID: HY.081506.153104 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG220003 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 15-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00397	99.3	85 - 115	

LABORATORY CONTROL SAMPLE (LCS)

00046750

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220054-04
Instrument ID: HYDRA Run Time: 15:55 Prep Method: METHOD
File ID: HY.081606.155505 Analyst: PAS Method: 7470A
Workgroup (AAB#): WG220101 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 16-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00384	96.0	85 - 115	

DUPLICATE REPORT

00046751

Login Number: L0608330
Instrument ID: HYDRA

Worknum: WG220003
Method: 7470A
Matrix: Water
Units: mg/L

Sample ID: L0608330-01 File ID: HY.081506.153246 Dil: 1
Duplicate ID: L0608330-03 File ID: HY.081506.153729 Dil: 1

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Mercury	ND	ND	0	20	

DUPLICATE REPORT

00046752

Login Number: L0608330

Worknum: WG220101

Instrument ID: HYDRA

Method: 7470A

Sample ID: L0608330-02 File ID: HY.081606.155653 Dil: 1

Matrix: Water

Duplicate ID: L0608330-04 File ID: HY.081606.155833 Dil: 1

Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Mercury, Dissolved	ND	ND	0	20	

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046753

Loginnum: L0608330 Cal ID: HYDRA - Worknum: WG220003
 Instrument ID: HYDRA Contract #: DACA56-94-D-0020 Method: 7470A
 Parent ID: WG219968-02 File ID: HY.081506.153906 Dil: 1 Matrix: WATER
 Sample ID: WG219968-06 MS File ID: HY.081506.154126 Dil: 1 Units: mg/L
 Sample ID: WG219968-07 MSD File ID: HY.081506.154332 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00476	107	0.00444	0.00469	106	1.41	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046754

Loginnum: L0608330 Cal ID: HYDRA - Worknum: WG220101
Instrument ID: HYDRA Contract #: DACA56-94-D-0020 Method: 7470A
Parent ID: WG220054-02 File ID: HY.081606.160240 Dil: 1 Matrix: WATER
Sample ID: WG220054-06 MS File ID: HY.081606.160619 Dil: 1 Units: mg/L
Sample ID: WG220054-07 MSD File ID: HY.081606.160810 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	ND	0.00444	0.00468	105	0.00444	0.00441	99.2	5.87	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT

00046755

Sample Login ID: L0608330

Worknum: WG220003

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG220003-01 File ID: HY.081506.153423 Dil: 1

Units: ug/L

Sample ID: L0608330-01 File ID: HY.081506.153246 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
MERCURY	85 - 115	1.06		ND	U	1.00	106	

N = % Recovery exceeds control limits of 85% - 115%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT

00046756

Sample Login ID: L0608330

Worknum: WG220003

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG220003-02 File ID: HY.081506.155236 Dil: 1

Units: ug/L

Sample ID: L0608340-01 File ID: HY.081506.154708 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
MERCURY	85 - 115	0.927		ND	U	1.00	92.7	

N = % Recovery exceeds control limits of 85% - 115%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT

00046757

Sample Login ID: L0608330

Worknum: WG220101

Instrument ID: HYDRA

Method: 7470A

Post Spike ID: WG220101-01 File ID: HY.081606.160429 Dil: 1

Units: ug/L

Sample ID: L0608352-01 File ID: HY.081606.160240 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Q
MERCURY	85 - 115	0.951		ND	U	1.00	95.1	

N = % Recovery exceeds control limits of 85% - 115%

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation.

INITIAL CALIBRATION SUMMARY

00046758

Login Number:L0608330

Instrument ID:HYDRA

Analytical Method:7470A

Initial Calibration Date:08/15/2006 15:16

Initial Calibration Time:15:16

Analyte	WG220012-01		WG220012-02		WG220012-03		WG220012-04		WG220012-05		WG220012-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	6305	0.200	14141	1.00	60779	2.00	106408	5.00	275760	10.0	535519

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

Analyte	R	Q
Mercury	0.9999	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

INITIAL CALIBRATION SUMMARY

00046760

Login Number:L0608330

Instrument ID:HYDRA

Analytical Method:7470A

Initial Calibration Date:08/16/2006 15:43

Initial Calibration Time:15:43

Analyte	WG220110-01		WG220110-02		WG220110-03		WG220110-04		WG220110-05		WG220110-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	893	0.200	17239	1.00	50932	2.00	112416	5.00	278251	10.0	547176

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

Analyte	R	Q
Mercury	0.9999	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; $R < 0.995$

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046762

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-08
Instrument ID: HYDRA Run Time: 15:20 Method: 7470A
File ID: HY.081506.152058 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.066	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
INITIAL CALIBRATION BLANK (ICB)

00046763

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-08
Instrument ID: HYDRA Run Time: 15:47 Method: 7470A
File ID: HY.081606.154708 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.011	1	U

U = Result is less than MDL
F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046764

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-10
Instrument ID: HYDRA Run Time: 15:24 Method: 7470A
File ID: HY.081506.152419 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0810	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046765

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-12
Instrument ID: HYDRA Run Time: 15:50 Method: 7470A
File ID: HY.081506.155055 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.132	1	F

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046766

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-14
Instrument ID: HYDRA Run Time: 15:56 Method: 7470A
File ID: HY.081506.155644 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0640	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046767

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-10
Instrument ID: HYDRA Run Time: 15:50 Method: 7470A
File ID: HY.081606.155045 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0260	1	U

U = Result is less than MDL

F = Result is between MDL and RL

CONTINUING CALIBRATION BLANK (CCB)

00046768

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-12
Instrument ID: HYDRA Run Time: 16:11 Method: 7470A
File ID: HY.081606.161139 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-0.0200	1	U

U = Result is less than MDL

F = Result is between MDL and RL

INITIAL CALIBRATION VERIFICATION (ICV)

00046769

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-07
Instrument ID: HYDRA Run Time: 15:19 Method: 7470A
File ID: HY.081506.151918 Analvst: PAS Units: ug/L
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	2.05	103	90 - 110	

* Exceeds LIMITS Limit

INITIAL CALIBRATION VERIFICATION (ICV)

00046770

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-07
Instrument ID: HYDRA Run Time: 15:45 Method: 7470A
File ID: HY.081606.154532 Analyst: PAS Units: ug/L
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	1.99	99.5	90 - 110	

* Exceeds LIMITS Limit

CONTINUING CALIBRATION VERIFICATION (CCV)

00046771

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-09
Instrument ID: HYDRA Run Time: 15:22 Method: 7470A
File ID: HY.081506.152239 Analvst: PAS
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury		2	1.91	95.5	80 - 120	ug/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046772

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-11
Instrument ID: HYDRA Run Time: 15:48 Method: 7470A
File ID: HY.081506.154856 Analvst: PAS
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury		2	1.98	99.0	80 - 120	ug/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046773

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-13
Instrument ID: HYDRA Run Time: 15:54 Method: 7470A
File ID: HY.081506.155433 Analvst: PAS
Workgroup (AAB#): WG220003 Cal ID: HYDRA - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury		2	1.84	92.0	80 - 120	ug/L	

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046774

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-11
Instrument ID: HYDRA Run Time: 15:48 Method: 7470A
File ID: HY.081506.154856 Analvst: PAS
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury, Total		2	0.00198	0.0990	80 - 120	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046775

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220012-09
Instrument ID: HYDRA Run Time: 15:22 Method: 7470A
File ID: HY.081506.152239 Analvst: PAS
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 15-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury, Total		2	0.00191	0.0955	80 - 120	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046776

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-11
Instrument ID: HYDRA Run Time: 16:09 Method: 7470A
File ID: HY.081606.160958 Analvst: PAS
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury, Total		2	0.00201	0.101	80 - 120	mg/L	*

* Exceeds LIMITS Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046777

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220110-09
Instrument ID: HYDRA Run Time: 15:48 Method: 7470A
File ID: HY.081606.154848 Analvst: PAS
Workgroup (AAB#): WG220101 Cal ID: HYDRA - 16-AUG-06

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury, Total		2	0.00198	0.0990	80 - 120	mg/L	*

* Exceeds LIMITS Criteria

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046778

Analytical Method: 300.0
 Login Number: L0608330

AAB#: WG219813

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/12/06	2	1.99	08/12/06	2	1.99	
12WW20	08/10/06	08/12/06	08/12/06	2	2.00	08/12/06	2	2.00	
12WW20	08/10/06	08/12/06	08/12/06	2	2.01	08/12/06	2	2.01	*ANAL
12WW20	08/10/06	08/12/06	08/12/06	2	2.02	08/12/06	2	2.02	*ANAL
12WW20	08/10/06	08/12/06	08/12/06	2	2.03	08/12/06	2	2.03	*ANAL
12WW20	08/10/06	08/12/06	08/12/06	2	2.05	08/12/06	2	2.05	*ANAL
12WW21	08/10/06	08/12/06	08/12/06	2	1.97	08/12/06	2	1.97	
12WW21	08/10/06	08/12/06	08/12/06	2	1.98	08/12/06	2	1.98	
12WW21	08/10/06	08/12/06	08/12/06	2	2.02	08/12/06	2	2.02	*ANAL
12WW02	08/11/06	08/12/06	08/12/06	2	1.40	08/12/06	2	1.40	
12WW02	08/11/06	08/12/06	08/12/06	2	1.45	08/12/06	2	1.45	
12WW02	08/11/06	08/12/06	08/12/06	2	1.46	08/12/06	2	1.46	
12WW01	08/11/06	08/12/06	08/12/06	2	1.38	08/12/06	2	1.38	
12WW01	08/11/06	08/12/06	08/12/06	2	1.39	08/12/06	2	1.39	
12WW01	08/11/06	08/12/06	08/12/06	2	1.40	08/12/06	2	1.40	
12WW05	08/11/06	08/12/06	08/12/06	2	1.32	08/12/06	2	1.32	
12WW05	08/11/06	08/12/06	08/12/06	2	1.33	08/12/06	2	1.33	
12WW05	08/11/06	08/12/06	08/12/06	2	1.34	08/12/06	2	1.34	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046779

Analytical Method: 300.0
Login Number: L0608330

AAB#: WG220214

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
EQUIPMENT RINSE	08/11/06	08/12/06	08/14/06	2	3.08	08/14/06	2	3.08	*ANAL

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046780

Login Number: L0608330	Work Group: WG219813
Blank File ID: I2081206.12	Blank Sample ID: WG219813-01
Date Analyzed: 08/12/06	Instrument ID: IC2
Time Analyzed: 14:25	Method: 300.0
Analyst: JWR	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219813-02	I2081206.13	08/12/06 14:43	01
12WW20	L0608330-01	I2081206.14	08/12/06 15:00	01
12WW20	L0608330-01	I2081206.15	08/12/06 15:18	DL01
12WW20	L0608330-01	I2081206.16	08/12/06 15:35	DL02
12WW20	L0608330-03	I2081206.17	08/12/06 15:52	01
12WW20	L0608330-03	I2081206.18	08/12/06 16:10	DL01
12WW20	L0608330-03	I2081206.19	08/12/06 16:27	DL02
12WW21	L0608330-05	I2081206.20	08/12/06 16:45	DL01
12WW21	L0608330-05	I2081206.21	08/12/06 17:02	DL02
12WW21	L0608330-05	I2081206.24	08/12/06 17:54	DL03
12WW02	L0608330-07	I2081206.25	08/12/06 18:12	01
DUP	WG219813-04	I2081206.26	08/12/06 18:29	01
12WW02	L0608330-07	I2081206.29	08/12/06 19:21	DL01
12WW02	L0608330-07	I2081206.30	08/12/06 19:39	DL02
12WW01	L0608330-08	I2081206.31	08/12/06 19:56	DL01
12WW01	L0608330-08	I2081206.32	08/12/06 20:13	DL02
12WW01	L0608330-08	I2081206.33	08/12/06 20:31	DL03
12WW05	L0608330-09	I2081206.36	08/12/06 21:23	DL01
12WW05	L0608330-09	I2081206.37	08/12/06 21:40	DL02
12WW05	L0608330-09	I2081206.38	08/12/06 21:58	DL03

METHOD BLANK SUMMARY

00046781

Login Number: L0608330
Blank File ID: I2081406.12
Date Analyzed: 08/14/06
Time Analyzed: 15:38
Analyst: JWR

Work Group: WG220214
Blank Sample ID: WG220214-01
Instrument ID: IC2
Method: 300.0

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220214-02	I2081406.13	08/14/06 15:55	01
LCS2	WG220214-03	I2081406.14	08/14/06 16:12	01
EQUIPMENT RINSE	L0608330-10	I2081406.15	08/14/06 16:30	01
DUP	WG220214-05	I2081406.16	08/14/06 16:47	01

METHOD BLANK REPORT

00046782

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219813-01
Instrument ID: IC2 Run Time: 14:25 Prep Method: 300.0
File ID: I2081206.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219813 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046783

Login Number: L0608330 Run Date: 08/14/2006 Sample ID: WG220214-01
Instrument ID: IC2 Run Time: 15:38 Prep Method: 300.0
File ID: I2081406.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG220214 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046784

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219813-02
Instrument ID: IC2 Run Time: 14:43 Prep Method: 300.0
File ID: I2081206.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219813 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.91	98.5	90 - 110	
Nitrate	4.07	4.05	99.7	90 - 110	
Nitrite	3.65	3.51	96.2	90 - 110	
Sulfate	30.0	29.9	99.8	90 - 110	

LABORATORY CONTROL SAMPLE (LCS)

00046785

Login Number: L0608330 Analyst: JWR Prep Method: 300.0
 Instrument ID: IC2 Matrix: Water Method: 300.0
 Workgroup (AAB#): WG220214 Units: mg/L
 Sample ID: WG220214-02 LCS File ID: I2081406.13 Run Date: 08/14/2006 15:55
 Sample ID: WG220214-03 LCS2 File ID: I2081406.14 Run Date: 08/14/2006 16:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Chloride	6.00	5.93	98.9	6.00	5.83	97.1	1.80	90 - 110	20	
Nitrate	4.07	3.98	98.0	4.07	4.02	98.8	0.800	90 - 110	20	
Nitrite	3.65	3.50	95.7	3.65	3.43	94.0	1.85	90 - 110	20	
Sulfate	30.0	30.0	100	30.0	30.1	100	0.333	90 - 110	20	

DUPLICATE (DUP)

00046786

Sample Ref: L0608330-07 Cal ID: IC2 - Worknum: WG219813
Instrument ID: IC2 Method: 9056
Sample ID: WG219813-03 File ID: I2081206.25 Dil: 1 Matrix: WATER
Duplicate ID: WG219813-04 File ID: I2081206.26 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Chloride	139	138	0.404	20	
Nitrate	ND	ND	0	20	
Nitrite	ND	ND	0	20	
Sulfate	47.2	47.7	0.954	20	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

DUPLICATE (DUP)

00046787

Sample Ref: L0608330-10 Cal ID: IC2 - Worknum: WG220214
Instrument ID: IC2 Method: 9056
Sample ID: WG220214-04 File ID: I2081406.15 Dil: 1 Matrix: WATER
Duplicate ID: WG220214-05 File ID: I2081406.16 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Chloride	ND	ND	0	20	
Nitrate	ND	ND	0	20	
Nitrite	ND	ND	0	20	
Sulfate	ND	ND	0	20	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046788

Loginnum: L0608330 Cal ID: IC2- Worknum: WG219813
 Instrument ID: IC2 Contract #: DACA56-94-D-0020 Method: 300.0
 Parent ID: WG219813-03 File ID: I2081206.25 Dil: 1 Matrix: WATER
 Sample ID: WG219813-05 MS File ID: I2081206.27 Dil: 1 Units: mg/L
 Sample ID: WG219813-06 MSD File ID: I2081206.28 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Chloride	139	6.00	136	-46.3	6.00	137	-38.7	0.331	90 - 110	20	*
Nitrate	ND	4.07	4.26	105	4.07	4.10	101	3.82	90 - 110	20	
Nitrite	ND	3.65	3.27	89.6	3.65	3.34	91.4	2.03	90 - 110	20	*
Sulfate	47.2	30.0	74.7	91.5	30.0	75.0	92.5	0.426	90 - 110	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

CONTINUING CALIBRATION VERIFICATION (CCV)

00046789

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219814-01
Instrument ID: IC2 Run Time: 14:08 Method: 300.0
File ID: I2081206.11 Analvst: JWR
Workgroup (AAB#): WG219813 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.74	8.14	4.40	mg/L	
Nitrate		4.07	4.09	3.27	0.600	mg/L	
Nitrite		3.65	3.48	3.78	4.90	mg/L	
Sulfate		30.0	29.5	10.6	1.80	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046790

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219814-02
Instrument ID: IC2 Run Time: 17:19 Method: 300.0
File ID: I2081206.22 Analvst: JWR
Workgroup (AAB#): WG219813 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.80	8.04	3.30	mg/L	
Nitrate		4.07	4.08	3.28	0.200	mg/L	
Nitrite		3.65	3.69	3.54	1.10	mg/L	
Sulfate		30.0	30.0	10.5	0.100	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046791

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219814-03
Instrument ID: IC2 Run Time: 20:48 Method: 300.0
File ID: I2081206.34 Analvst: JWR
Workgroup (AAB#): WG219813 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.92	7.87	1.30	mg/L	
Nitrate		4.07	4.13	3.24	1.50	mg/L	
Nitrite		3.65	3.60	3.65	1.60	mg/L	
Sulfate		30.0	30.0	10.5	0.100	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046792

Login Number: L0608330 Run Date: 08/12/2006 Sample ID: WG219814-04
Instrument ID: IC2 Run Time: 22:33 Method: 300.0
File ID: I2081206.40 Analvst: JWR
Workgroup (AAB#): WG219813 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.89	7.92	1.80	mg/L	
Nitrate		4.07	4.03	3.32	0.800	mg/L	
Nitrite		3.65	3.50	3.75	4.20	mg/L	
Sulfate		30.0	30.1	10.4	0.400	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046793

Login Number: L0608330 Run Date: 08/14/2006 Sample ID: WG220215-01
Instrument ID: IC2 Run Time: 15:20 Method: 300.0
File ID: I2081406.11 Analyst: JWR
Workgroup (AAB#): WG220214 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.89	7.93	1.80	mg/L	
Nitrate		4.07	4.02	3.34	1.30	mg/L	
Nitrite		3.65	3.58	3.66	2.10	mg/L	
Sulfate		30.0	29.8	10.5	0.500	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046794

Login Number: L0608330 Run Date: 08/14/2006 Sample ID: WG220215-02
Instrument ID: IC2 Run Time: 17:39 Method: 300.0
File ID: I2081406.19 Analyst: JWR
Workgroup (AAB#): WG220214 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloride		6.00	5.83	8.00	2.80	mg/L	
Nitrate		4.07	3.99	3.36	1.80	mg/L	
Nitrite		3.65	3.51	3.74	4.00	mg/L	
Sulfate		30.0	30.2	10.4	0.700	mg/L	

* Exceeds %D Criteria

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046795

Analytical Method: 415.1
Login Number: L0608330

AAB#: WG220023

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW20	08/10/06	08/12/06	08/16/06	28	5.47	08/16/06	28	5.47	
12WW20	08/10/06	08/12/06	08/16/06	28	5.48	08/16/06	28	5.48	
12WW21	08/10/06	08/12/06	08/16/06	28	5.42	08/16/06	28	5.42	
12WW01	08/11/06	08/12/06	08/16/06	28	4.72	08/16/06	28	4.72	
12WW05	08/11/06	08/12/06	08/16/06	28	4.61	08/16/06	28	4.61	
EQUIPMENT RINSE	08/11/06	08/12/06	08/16/06	28	4.58	08/16/06	28	4.58	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046796

Analytical Method: 415.1
Login Number: L0608330

AAB#: WG220121

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
12WW02	08/11/06	08/12/06	08/16/06	28	5.59	08/16/06	28	5.59	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046797

Login Number: L0608330
 Blank File ID: TC08-15-2006.34
 Date Analyzed: 08/15/06
 Time Analyzed: 23:15
 Analyst: DIH

Work Group: WG220023
 Blank Sample ID: WG220023-01
 Instrument ID: TOC-VWP
 Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220023-02	TC08-15-2006.35	08/15/06 23:29	01
LCS2	WG220023-03	TC08-15-2006.36	08/15/06 23:42	01
DUP	WG220023-05	TC08-15-2006.43	08/16/06 01:15	01
12WW20	L0608330-01	TC08-15-2006.49	08/16/06 02:37	01
12WW20	L0608330-01	TC08-15-2006.49	08/16/06 02:37	01
12WW20	L0608330-03	TC08-15-2006.50	08/16/06 02:51	01
12WW20	L0608330-03	TC08-15-2006.50	08/16/06 02:51	01
12WW21	L0608330-05	TC08-15-2006.53	08/16/06 03:28	01
12WW21	L0608330-05	TC08-15-2006.53	08/16/06 03:28	01
12WW01	L0608330-08	TC08-15-2006.55	08/16/06 04:01	01
12WW01	L0608330-08	TC08-15-2006.55	08/16/06 04:01	01
12WW05	L0608330-09	TC08-15-2006.56	08/16/06 04:16	01
12WW05	L0608330-09	TC08-15-2006.56	08/16/06 04:16	01
EQUIPMENT RINSE	L0608330-10	TC08-15-2006.57	08/16/06 04:28	01
EQUIPMENT RINSE	L0608330-10	TC08-15-2006.57	08/16/06 04:28	01

METHOD BLANK SUMMARY

00046798

Login Number: L0608330
Blank File ID: TC08-16-2006.04
Date Analyzed: 08/16/06
Time Analyzed: 16:40
Analyst: DIH

Work Group: WG220121
Blank Sample ID: WG220121-01
Instrument ID: TOC-VWP
Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG220121-02	TC08-16-2006.05	08/16/06 16:53	01
LCS2	WG220121-03	TC08-16-2006.06	08/16/06 17:06	01
12WW02	L0608330-07	TC08-16-2006.30	08/16/06 22:46	DL01
12WW02	L0608330-07	TC08-16-2006.30	08/16/06 22:46	DL01
DUP	WG220121-05	TC08-16-2006.31	08/16/06 23:00	DL02
DUP	WG220121-05	TC08-16-2006.32	08/16/06 23:14	DL01

METHOD BLANK REPORT

00046799

Login Number: L0608330 Run Date: 08/15/2006 Sample ID: WG220023-01
Instrument ID: TOC-VWP Run Time: 23:15 Prep Method: 415.1
File ID: TC08-15-2006.34 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG220023 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-12-JAN-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046800

Login Number: L0608330 Run Date: 08/16/2006 Sample ID: WG220121-01
Instrument ID: TOC-VWP Run Time: 16:40 Prep Method: 415.1
File ID: TC08-16-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG220121 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-12-JAN-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046801

Login Number: L0608330 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG220023 Units: mg/L
Sample ID: WG220023-02 LCS File ID: TC08-15-2006.35 Run Date: 08/15/2006 23:29
Sample ID: WG220023-03 LCS2 File ID: TC08-15-2006.36 Run Date: 08/15/2006 23:42

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.7	94.7	25.0	23.7	94.7	0.0422	85 - 115	15	

LABORATORY CONTROL SAMPLE (LCS)

00046802

Login Number: L0608330 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG220121 Units: mg/L
Sample ID: WG220121-02 LCS File ID: TC08-16-2006.05 Run Date: 08/16/2006 16:53
Sample ID: WG220121-03 LCS2 File ID: TC08-16-2006.06 Run Date: 08/16/2006 17:06

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	21.8	87.2	25.0	23.5	94.1	7.59	85 - 115	15	

DUPLICATE (DUP)

00046803

Sample Ref: L0608253-04 Cal ID: TOC-VWP - Worknum: WG220023
Instrument ID: TOC-VWP Method: 400
Sample ID: WG220023-04 File ID: TC08-15-2006.42 Dil: 1 Matrix: WATER
Duplicate ID: WG220023-05 File ID: TC08-15-2006.43 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Total Organic Carbon	2.93	2.52	15.3	15	#

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

DUPLICATE (DUP)

00046804

Sample Ref: L0608264-01 Cal ID: TOC-VWP - Worknum: WG220121
Instrument ID: TOC-VWP Method: 400
Sample ID: WG220121-04 File ID: TC08-16-2006.26 Dil: 5 Matrix: WATER
Duplicate ID: WG220121-05 File ID: TC08-16-2006.32 Dil: 5 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Total Organic Carbon	26.9	67.5	85.8	15	#

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

DUPLICATE (DUP)

00046805

Sample Ref: L0608264-01 Cal ID: TOC-VWP - Worknum: WG220121
Instrument ID: TOC-VWP Method: 400
Sample ID: WG220121-04 File ID: TC08-16-2006.31 Dil: 5 Matrix: WATER
Duplicate ID: WG220121-05 File ID: TC08-16-2006.31 Dil: 5 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Total Organic Carbon	21.0	21.0	0	15	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

00046806

Loginnum: L0608330 Cal ID: TOC-VWP - Worknum: WG220023
 Instrument ID: TOC-VWP Contract #: DACA56-94-D-0020 Method: 415.1
 Parent ID: WG220023-04 File ID: TC08-15-2006.42 Dil: 1 Matrix: WATER
 Sample ID: WG220023-06 MS File ID: TC08-15-2006.44 Dil: 1 Units: mg/L
 Sample ID: WG220023-07 MSD File ID: TC08-15-2006.45 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Total Organic Carbon	2.93	10.0	10.8	78.5	10.0	9.95	70.2	7.99	85 - 115	15	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.



Shaw® Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10025

Laboratory Name:

KEMPON

Address: 156 Starlite

Maricopa, AZ

Contact: Stephanie Masberg

Project Name: LHMAR

Project Location: Karnack, TX

Project No.:

845714.04801610

Project Contact:

Diane Meyer

Project Telephone No.:

(713) 996-4408

Point of contact:

Allen Willmore

Project Manager/Supervisor:

Praveen Srivastava

Telephone No.:

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	Analysis and Method Desired (Indicate separate containers)	Remarks

1	12 WNW 20 + Dips	8/10/06	15:20		✓	W	12 WNW 20 + Dips	10	VOCs 40mL Va ANION 500mL HDPE TOC 500mL gbr D-Gasses 40mL Va TAL Metals (Filt) TAL METAL (Unfilt)	Duplicates

2	12 WNW 21	8/10/06	17:30		✓	W	12 WNW 21	3		

3	12 WNW 02	8/11/06	08:40		✓	W	12 WNW 02	3		

4	12 WNW 01	8/11/06	10:50		✓	W	12 WNW 01	3		

5	12 WNW 05	8/11/06	13:45		✓	W	12 WNW 05	3		

6	EQUIPMENT RINSE	8/11/06	14:30		✓	W	EQUIPMENT RINSE	3		

7										

8										

9										

10										

Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions	

A. Hill		8/11/06		17:00					

TAT: Standard ☒ Rush Due: ☐		Seals Intact? ☐ Y ☐ N		Received Good Condition ☐ Y ☐ N		Cold ☐			

FedEx Airbill No.:

8/12/06 09:45

Sample's Signature

COLEMAN

clealed
sprayed

White - Lab Copy Canary - Field Copy Pink - File Copy

145

B2705

SAMPLE RECEIPT FORM

00046808

Date: 8-12-06 Client: SHAW - LHAAP

Shipped By: () Fed-Ex ☒ UPS () DHL () KEMRON () Client () Other

Opened By: Big

Logged By: Big Login # L06 08330

IR Temp Gun: ☒ D () G

156 STARLITE DRIVE
MARIETTA, OH
45750
(740) 373-4071

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	<u>0057</u>	<u>0</u>			
2					
3					
4					
5					
6					

Were all coolers sealed?	☒ Y	N	N/A
Were custody seals used on all coolers?	☒ Y	N	N/A
Were custody seals intact?	☒ Y	N	N/A
Was visible ice present?	☒ Y	N	N/A
Were all coolers in the temperature range of 2-6C? (>6C*)	Y	☒ N	N/A
Were the samples frozen?*	Y	☒ N	N/A
Were COC papers provided?	☒ Y	N	N/A
Were all sample containers intact?*	☒ Y	N	N/A
Were all sample labels intact?	☒ Y	N	N/A
Were all sample labels legible?*	☒ Y	N	N/A
Did all sample labels match the COC?*	Y	☒ N	N/A
Was the label information complete?*	☒ Y	N	N/A
Were the correct containers used?*	☒ Y	N	N/A
Were the correct preservatives added to water samples?*	☒ Y	N	N/A
Was the pH tested on preserved water samples?	☒ Y	N	N/A
Were pH ranges acceptable?*	☒ Y	N	N/A
Was sufficient amount of sample provided?*	☒ Y	N	N/A
Were bubbles present in VOA samples?*	Y	☒ N	N/A
Were COC's signed and dated?	☒ Y	N	N/A
Did samples arrive before hold time expired?*	☒ Y	N	N/A
Are discrepancy forms attached?	☒ Y	N	N/A

*Requires a discrepancy form

Comments: _____

CRF #1
Revised 8/22/03

CRF#4

Sample Discrepancy Form

Client: Shaw Project: _____

Date Received: 8-12-06

_____ Cooler temperature > than 6 degrees Celsius

Reason _____

_____ Samples received not on chain of custody

_____ Samples on chain of custody not received

☒ Information on sample containers different from chain of custody, CLC ER Rinse 8/11 @ 1430 = labels "67WW04" 8/11 @ 1430
_____ for RSK VOA TOC

_____ Sample containers received broken, leaking or not sealed (List sample ID) Rec'd dis-metals Id as "Equip Rinse"

_____ pH out (List sample ID, which container, pH prior to adjusting, amount of acid, preservative) not marked on CLC but 9056 marked on CLC & no bottle rec'd

_____ Insufficient sample volume

_____ Air bubbles present in VOA vials (List sample ID)

_____ Hold time expired (List sample ID)

Service Representative:

Was client notified regarding information: YES

NO

Name of Person contacted: Diane Meyer

Company: Shaw

Service Representative: sum

Date: _____

67WW04 is the ER.

Use dissolved metals bottle for Anions.

Analyze out of hold, per the client.

sum 8/14/06 Last Revised 08/22/03

KEMRON Environmental Services
Internal Chain of Custody Report

00046810

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-01 261812 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

Samplenum **Container ID** **Products**
L0608330-01 261813 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Samplenum **Container ID** **Products**
L0608330-01 261814 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046811

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-01 261815 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608330-01 261932 AG AL AS-AX BA BE CA CD CO CR CU FE HG K MG MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

Samplenum **Container ID** **Products**
L0608330-02 261933 NI-D PB-AXD SB-MS-D SE-MS-D TL-MS-D V-D ZN-D /

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

Samplenum **Container ID** **Products**
L0608330-03 261816 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

KEMRON Environmental Services
Internal Chain of Custody Report

00046812

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-03 261817 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Samplenum **Container ID** **Products**
L0608330-03 261818 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Samplenum **Container ID** **Products**
L0608330-03 261819 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-03 261934 NA NI PB-AX SB-MS SE-MS AG AL AS-AX BA BE CA C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

Samplenum **Container ID** **Products**
L0608330-04 261935 AL-D AS-AXD BA-D BE-D CA-D CD-D CO-D CR-D CU-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

Samplenum **Container ID** **Products**
L0608330-05 261820 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

Samplenum **Container ID** **Products**
L0608330-05 261821 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-05 261822 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Samplenum **Container ID** **Products**
L0608330-05 261823 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608330-05 261936 NI PB-AX SB-MS SE-MS AG AL AS-AX BA BE CA CD C

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

Samplenum **Container ID** **Products**
L0608330-06 261937 AS-AXD BA-D BE-D CA-D CD-D CO-D CR-D CU-D AG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			14-AUG-2006 10:01	BRG	
2	PREP	W1	DIG	14-AUG-2006 10:41	REK	BRG
3	STORE	DIG	A1	16-AUG-2006 13:31	JS	VC

KEMRON Environmental Services
Internal Chain of Custody Report

00046815

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-07 261824 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

Samplenum **Container ID** **Products**
L0608330-07 261825 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Samplenum **Container ID** **Products**
L0608330-07 261826 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-07 261827 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	21-AUG-2006 07:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608330-08 261828 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

Samplenum **Container ID** **Products**
L0608330-08 261829 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:46	CMS	BRG

KEMRON Environmental Services
Internal Chain of Custody Report

00046817

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-08 261830 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Samplenum **Container ID** **Products**
L0608330-08 261831 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608330-09 261832 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	L1	WET	12-AUG-2006 10:23	JWR	BRG

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-09 261833 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Samplenum **Container ID** **Products**
L0608330-09 261834 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Samplenum **Container ID** **Products**
L0608330-09 261835 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:08	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046819

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-10 261836 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	14-AUG-2006 10:51	JWR	BRG

Samplenum **Container ID** **Products**
L0608330-10 261837 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 09:47	CMS	BRG

Samplenum **Container ID** **Products**
L0608330-10 261838 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:33	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046820

Login: L0608330
Account: 2773
Project: 2773.025
Samples: 10
Due Date: 21-AUG-2006

Samplenum **Container ID** **Products**
L0608330-10 261839 TOC TIC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			12-AUG-2006 10:17	BRG	
2	ANALYZ	W1	WET	15-AUG-2006 15:09	DIH	BRG
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH



156 Starlite Drive, Marietta, OH 45750 • TEL 740-373-4071 • FAX 740-373-4835 • <http://www.kemron.com>

Laboratory Report Number: L0608289

Please find enclosed the analytical results for the samples you submitted to KEMRON Environmental Services.

Review and compilation of your report was completed by KEMRON's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Debra Elliott - Team Leader
delliott@kemron-lab.com

Amanda Fickiesen - Client Services Specialist
afickiesen@kemron-lab.com

Cheryl Koelsch - Team Chemist/Data Specialist
ckoelsch@kemron-lab.com

Annie Bock - Client Services Specialist
abock@kemron-lab.com

Stephanie Mossburg - Team Chemist/Data Specialist
smossburg@kemron-lab.com

Kathy Albertson - Team Chemist/Data Specialist
kalbertson@kemron-lab.com

This report was reviewed on August 21, 2006.

A handwritten signature in cursive script that reads "Stephanie Mossburg".

STEPHANIE MOSSBURG - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the NELAP standards and other applicable contract terms and conditions. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of KEMRON Environmental Services.

This report was certified on August 21, 2006.

A handwritten signature in cursive script that reads "David E. Vandenberg".

David Vandenberg - Vice President

FL DOH NELAP ID: E8755

This report contains a total of 140 pages.

Protecting Our Environmental Future

LABORATORY REPORT

L0608289

00046822

08/21/06 08:31

Submitted By

KEMRON Environmental Services

156 Starlite Drive

Marietta , OH 45750

(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.

ABB Lummus Building

3010 Briarpark

Houston, TX 77042

Attention: Diane Mever

Account Number: 2773

Work ID: LHAAP

P.O. Number: 200328

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
35BWW01	L0608289-01	10-AUG-06	11-AUG-06
LHSMW59	L0608289-02	10-AUG-06	11-AUG-06
EQUIPMENT RINSE	L0608289-03	10-AUG-06	11-AUG-06
TRIP BLANK-1	L0608289-04	10-AUG-06	11-AUG-06
TRIP BLANK-2	L0608289-05	10-AUG-06	11-AUG-06
TRIP BLANK-3	L0608289-06	10-AUG-06	11-AUG-06
TRIP BLANK-4	L0608289-07	10-AUG-06	11-AUG-06
TRIP BLANK-5	L0608289-08	10-AUG-06	11-AUG-06

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0608289

CHAIN OF CUSTODY: The chain of custody number was 10024.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 4 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Approved: 15-AUG-06

<i>Stephanie Mossburg</i>

KEMRON ENVIRONMENTAL SERVICES
GC VOLATILE ORGANICS - RSK-175**KEMRON Login No.:** L0608289**METHOD****Analysis:** RSK-175**HOLDING TIMES****Sample Preparation:** All holding times were met.**Sample Analysis:** All holding times were met.**PREPARATION**

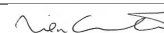
Sample preparation proceeded normally.

CALIBRATION**Initial Calibration:** For all compounds, linear or higher order equations were applied. All acceptance criteria were met.**Alternate Source Standards:** All acceptance criteria were met.**Continuing Calibration:** All acceptance criteria were met.**BATCH QA/QC****Method Blank:** All acceptance criteria were met.**Laboratory Control Sample:** All acceptance criteria were met.**Matrix Spikes/Sample Duplicates:** The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Kemron recommends site specific MS/MSD samples to avoid possible data qualifications.**SAMPLES****Samples:** All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: JLS

Approved: 17-AUG-06



Laboratory Data Package Cover Page

00046825

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 15, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608289
 Project Name: 798-LONGHORN
 Method: TOC
 Prep Batch Number(s): WG219907
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 15, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓				00046827
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046828
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608289
Project Name:	798-LONGHORN
Method:	TOC
Prep Batch Number(s):	WG219907
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 15, 2006

EXCEPTIONS REPORT**ER# - Description**

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046830

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

R3 Test reports (analytical data sheets) for each environmental sample that includes:

- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) Cleanup methods, and
- e) If required for the project, tentatively identified compounds (TICs)

R4 Surrogate recovery data including:

- a) Calculated recovery (%R) for each analyte, and
- b) The laboratory's surrogate QC limits.

✓ R5 Test reports/summary forms for blank samples;

✓ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

- a) LCS spiking amount,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %R and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

R10 Other problems or anomalies.

The exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, If applicable: ☐ This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

DEANNA I. HESSON



Conventional Lab Supervisor

August 17, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608289
 Project Name: 798-LONGHORN
 Method: 9056-300
 Prep Batch Number(s): WG219809
 Reviewer Name: DEANNA I. HESSON
 LRC Date: August 17, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?	✓				
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	✓				
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?	✓				
Were MS/MSD analyzed at the appropriate frequency?	✓				
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓			00046832	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?	✓				
Were analytical duplicates analyzed at the appropriate frequency?	✓				
Were RPDs or relative standard deviations within the laboratory QC limits?	✓				
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046833
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0608289
Project Name:	798-LONGHORN
Method:	9056-300
Prep Batch Number(s):	WG219809
Reviewer Name:	DEANNA I. HESSON
LRC Date:	August 17, 2006

EXCEPTIONS REPORT**ER# - Description**

Sample L0608289-01 had an extreme amount of suspended solids. The sample was centrifuged, filtered and diluted to reduce the matrix interference. Sample L0608289-02 was analyzed at a dilution for nitrite and nitrate due to the high concentration of chloride and sulfate in the sample which would interfere with the nitrite peak.

Footnotes:

- (1) NA = Not applicable to method or project
- (2) NR = Not reviewed
- (3) ER# = Exception report number

Laboratory Data Package Cover Page

00046835

This data Package consists of:

This signature page, the laboratory review checklists, and the following reportable data:

- ✓R1 Field chain-of-custody documentation;
- ✓R2 sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) Cleanup methods, and
 - e) If required for the project, tentatively identified compounds (TICs)
- ✓R4 Surrogate recovery data including:
 - a) Calculated recovery (%R) for each analyte, and
 - b) The laboratory's surrogate QC limits.
- ✓R5 Test reports/summary forms for blank samples;
- ✓R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amount,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ✓R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %R and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- ✓R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ✓R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ✓R10 Other problems or anomalies.
- ✓The exception Report for every "No" or "Not Reviewed (NR)" item IN laboratory review checklist.

Release statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exceptions reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [✓] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

August 18, 2006

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
 Laboratory Log Number: L0608289
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 219861, 219916
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: August 17, 2006

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?	✓				
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			1
Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	✓				
Was the LCSD RPD within QC limits?	✓				
Matrix spike (MS) and matrix spike duplicate (MSD) data					
Were the project/method specified analytes included in the MS and MSD?			✓		
Were MS/MSD analyzed at the appropriate frequency?			✓		
Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			✓		

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?			✓	00046837	
Analytical duplicate data					
Were appropriate analytical duplicates analyzed for each matrix?			✓		
Were analytical duplicates analyzed at the appropriate frequency?			✓		
Were RPDs or relative standard deviations within the laboratory QC limits?			✓		
Method quantitation limits (MQLs):					
Are the MQLs for each method analyte included in the laboratory data package?	✓				
Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	✓				
Are unadjusted MQLs included in the laboratory data package?	✓				
Other problems/anomalies					
Are all known problems/anomalies/special conditions noted in this LRC and ER?	✓				
Were all necessary corrective actions performed for the reported data?	✓				
Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	✓				
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?	✓				
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <MDL?			✓		
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?	✓				
Were ion abundance data within the method-required QC limits?	✓				
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?	✓				
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?	✓				
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?			✓		
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			✓		
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSS?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					00046838
Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	✓				
Compound/analyte identification procedures					
Are the procedures for compound/analyte identification documented?	✓				
Demonstration of analyst competency (DOC)					
Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	✓				
Is documentation of the analyst's competency up-to-date and on file?	✓				
Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
Are all the methods used to generate the data documented, verified, and validated, where applicable?	✓				
Laboratory standard operating procedures (SOPs):					
Are laboratory SOPs current and on file for each method performed?	✓				

EXCEPTIONS REPORT

ER# - Description

#1: Methyl acetate exceeded the upper advisory limit in the LCS/LCSD analyzed 08/14/06 on HPMS-10.

#2: Acetone and methyl acetate exceeded the upper advisory limits in the LCS analyzed 08/16/-6 on HPMS11.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Report Number: L0608289

Report Date : August 21, 2006

00046839

Sample Number: <u>L0608289-01</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>TOC-VWP</u>
Client ID: <u>35BWW01</u>	Prep Method: <u>415.1</u>	Prep Date: <u>08/14/2006 19:05</u>
Matrix: <u>Water</u>	Analytical Method: <u>415.1</u>	Cal Date: _____
Workgroup Number: <u>WG219907</u>	Analyst: <u>DIH</u>	Run Date: <u>08/14/2006 19:05</u>
Collect Date: <u>08/10/2006 08:10</u>	Dilution: <u>10</u>	File ID: <u>TC08-14-2006.25</u>
Sample Tag: <u>DL01</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon			U	10.0	5.00

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0608289-01</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>TOC-VWP</u>
Client ID: <u>35BWW01</u>	Prep Method: <u>415.1</u>	Prep Date: <u>08/14/2006 19:05</u>
Matrix: <u>Water</u>	Analytical Method: <u>415.1</u>	Cal Date: _____
Workgroup Number: <u>WG219907</u>	Analyst: <u>DIH</u>	Run Date: <u>08/14/2006 19:05</u>
Collect Date: <u>08/10/2006 08:10</u>	Dilution: <u>10</u>	File ID: <u>TC08-14-2006.25</u>
Sample Tag: <u>DL01</u>	Units: <u>mg/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		11.6		10.0	5.00

Sample Number: <u>L0608289-01</u>	PrePrep Method: <u>NONE</u>	Instrument: <u>HPMS11</u>
Client ID: <u>35BWW01</u>	Prep Method: <u>5030B</u>	Prep Date: <u>08/15/2006 14:20</u>
Matrix: <u>Water</u>	Analytical Method: <u>8260B</u>	Cal Date: <u>08/09/2006 19:31</u>
Workgroup Number: <u>WG219916</u>	Analyst: <u>CMS</u>	Run Date: <u>08/15/2006 14:20</u>
Collect Date: <u>08/10/2006 08:10</u>	Dilution: <u>1</u>	File ID: <u>11M35656</u>
Sample Tag: <u>01</u>	Units: <u>ug/L</u>	

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125

1 of 14

Report Number: **L0608289**Report Date : **August 21, 2006**

00046840

Sample Number: **L0608289-01**
 Client ID: **35BWW01**
 Matrix: **Water**
 Workgroup Number: **WG219916**
 Collect Date: **08/10/2006 08:10**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **08/15/2006 14:20**
 Cal Date: **08/09/2006 19:31**
 Run Date: **08/15/2006 14:20**
 File ID: **11M35656**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	96.6	80	120		
Dibromofluoromethane	101	86	118		
p-Bromofluorobenzene	103	86	115		
Toluene-d8	99.6	88	110		

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-01**
 Client ID: **35BWW01**
 Matrix: **Water**
 Workgroup Number: **WG219809**
 Collect Date: **08/10/2006 08:10**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **10**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/11/2006 23:04**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/11/2006 23:04**
 File ID: **I2081106.41**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	5.32		2.00	1.00
Nitrate	14797-55-8		U	6.00	1.00
Nitrite	14797-65-0		U	4.00	1.00
Sulfate	14808-79-8	14.6		10.0	5.00

U Not detected at or above adjusted sample detection limit

Report Number: L0608289

Report Date : August 21, 2006

00046841

Sample Number: L0608289-01
 Client ID: 35BWW01
 Matrix: Water
 Workgroup Number: WG219977
 Collect Date: 08/10/2006 08:10
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5021
 Analytical Method: RSK175
 Analyst: JLS
 Dilution: 1
 Units: ug/L

Instrument: HP16
 Prep Date: 08/15/2006 16:14
 Cal Date: 03/27/2006 14:30
 Run Date: 08/15/2006 16:14
 File ID: 1663720

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	2.57		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: L0608289-02
 Client ID: LHSMW59
 Matrix: Water
 Workgroup Number: WG219907
 Collect Date: 08/10/2006 10:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/14/2006 19:20
 Cal Date:
 Run Date: 08/14/2006 19:20
 File ID: TC08-14-2006.26

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		28.6		1.00	0.500

Sample Number: L0608289-02
 Client ID: LHSMW59
 Matrix: Water
 Workgroup Number: WG219907
 Collect Date: 08/10/2006 10:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/14/2006 19:20
 Cal Date:
 Run Date: 08/14/2006 19:20
 File ID: TC08-14-2006.26

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		5.99		1.00	0.500

Sample Number: L0608289-02
 Client ID: LHSMW59
 Matrix: Water
 Workgroup Number: WG219916
 Collect Date: 08/10/2006 10:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: CMS
 Dilution: 1
 Units: ug/L

Instrument: HPMS11
 Prep Date: 08/15/2006 14:50
 Cal Date: 08/09/2006 19:31
 Run Date: 08/15/2006 14:50
 File ID: 11M35657

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00

3 of 14

Report Number: L0608289

Report Date : August 21, 2006

00046842

Sample Number: L0608289-02
 Client ID: LHSMW59
 Matrix: Water
 Workgroup Number: W6219916
 Collect Date: 08/10/2006 10:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: CMS
 Dilution: 1
 Units: ug/L

Instrument: HPMS11
 Prep Date: 08/15/2006 14:50
 Cal Date: 08/09/2006 19:31
 Run Date: 08/15/2006 14:50
 File ID: 11M35657

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	0.521	J	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2		U	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4	1.19	J	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6	135		5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	96.8	80	120		
Dibromofluoromethane	102	86	118		
p-Bromofluorobenzene	100	86	115		
Toluene-d8	99.7	88	110		

J The analyte was positively identified, but the quantitation was below the RL
 U Not detected at or above adjusted sample detection limit

Report Number: **L0608289**Report Date : **August 21, 2006**

00046843

Sample Number: **L0608289-02**
 Client ID: **LHSMW59**
 Matrix: **Water**
 Workgroup Number: **WG219809**
 Collect Date: **08/10/2006 10:45**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **4**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/11/2006 15:15**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/11/2006 15:15**
 File ID: **I2081106.14**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	107	I	0.800	0.400
Nitrate	14797-55-8		U	2.40	0.400
Nitrite	14797-65-0		U	1.60	0.400
Sulfate	14808-79-8	143		4.00	2.00

I Semiquantitative result (out of instrument calibration range)

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-02**
 Client ID: **LHSMW59**
 Matrix: **Water**
 Workgroup Number: **WG219809**
 Collect Date: **08/10/2006 10:45**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **10**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/11/2006 15:32**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/11/2006 15:32**
 File ID: **I2081106.15**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	103		2.00	1.00
Nitrate	14797-55-8		U	6.00	1.00
Nitrite	14797-65-0		U	4.00	1.00
Sulfate	14808-79-8	143		10.0	5.00

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-02**
 Client ID: **LHSMW59**
 Matrix: **Water**
 Workgroup Number: **WG219977**
 Collect Date: **08/10/2006 10:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **08/15/2006 16:28**
 Cal Date: **03/27/2006 14:30**
 Run Date: **08/15/2006 16:28**
 File ID: **1663721**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.530		0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-03**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG219907**
 Collect Date: **08/10/2006 11:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **08/14/2006 19:55**
 Cal Date:
 Run Date: **08/14/2006 19:55**
 File ID: **TC08-14-2006.29**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon			U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Report Number: L0608289

Report Date : August 21, 2006

00046844

Sample Number: L0608289-03
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG219907
 Collect Date: 08/10/2006 11:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 415.1
 Analytical Method: 415.1
 Analyst: DIH
 Dilution: 1
 Units: mg/L

Instrument: TOC-VWP
 Prep Date: 08/14/2006 19:55
 Cal Date: _____
 Run Date: 08/14/2006 19:55
 File ID: TC08-14-2006.29

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon			U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: L0608289-03
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG219916
 Collect Date: 08/10/2006 11:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: CMS
 Dilution: 1
 Units: ug/L

Instrument: HPMS11
 Prep Date: 08/15/2006 12:18
 Cal Date: 08/09/2006 19:31
 Run Date: 08/15/2006 12:18
 File ID: 11M35652

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1	3.82	J	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250

Report Number: **L0608289**Report Date : **August 21, 2006**

00046845

Sample Number: **L0608289-03**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG219916**
 Collect Date: **08/10/2006 11:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **08/15/2006 12:18**
 Cal Date: **08/09/2006 19:31**
 Run Date: **08/15/2006 12:18**
 File ID: **11M35652**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.518	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	102	80	120		
Dibromofluoromethane	104	86	118		
p-Bromofluorobenzene	99.8	86	115		
Toluene-d8	101	88	110		

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-03**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG219809**
 Collect Date: **08/10/2006 11:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **1**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **08/11/2006 21:37**
 Cal Date: **07/11/2006 19:22**
 Run Date: **08/11/2006 21:37**
 File ID: **I2081106.36**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6		U	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8		U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-03**
 Client ID: **EQUIPMENT RINSE**
 Matrix: **Water**
 Workgroup Number: **WG219977**
 Collect Date: **08/10/2006 11:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **08/15/2006 16:42**
 Cal Date: **03/27/2006 14:30**
 Run Date: **08/15/2006 16:42**
 File ID: **16G3722**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.346	J	0.500	0.250
ethene	74-85-1		U	0.500	0.250
ethane	74-84-0		U	0.500	0.250

J The analyte was positively identified, but the quantitation was below the RL

Report Number: L0608289

Report Date : August 21, 2006

00046846

Sample Number: L0608289-03
 Client ID: EQUIPMENT RINSE
 Matrix: Water
 Workgroup Number: WG219977
 Collect Date: 08/10/2006 11:30
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5021
 Analytical Method: RSK175
 Analyst: JLS
 Dilution: 1
 Units: ug/L

Instrument: HP16
 Prep Date: 08/15/2006 16:42
 Cal Date: 03/27/2006 14:30
 Run Date: 08/15/2006 16:42
 File ID: 1663722

U Not detected at or above adjusted sample detection limit

Sample Number: L0608289-04
 Client ID: TRIP BLANK-1
 Matrix: Water
 Workgroup Number: WG219861
 Collect Date: 08/10/2006 00:01
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/14/2006 14:31
 Cal Date: 07/15/2006 16:37
 Run Date: 08/14/2006 14:31
 File ID: 10M48068

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250

8 of 14

Report Number: **L0608289**Report Date : **August 21, 2006**

00046847

Sample Number: **L0608289-04**
 Client ID: **TRIP BLANK-1**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 14:31**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 14:31**
 File ID: **10M48068**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.721	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	109	80	120		
Dibromofluoromethane	104	86	118		
p-Bromofluorobenzene	105	86	115		
Toluene-d8	107	88	110		

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-05**
 Client ID: **TRIP BLANK-2**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 15:02**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 15:02**
 File ID: **10M48069**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50

Report Number: **L0608289**Report Date : **August 21, 2006**

00046848

Sample Number: **L0608289-05**
 Client ID: **TRIP BLANK-2**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 15:02**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 15:02**
 File ID: **10M48069**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.737	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	114	80	120		
Dibromofluoromethane	106	86	118		
p-Bromofluorobenzene	107	86	115		
Toluene-d8	107	88	110		

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Report Number: **L0608289**Report Date : **August 21, 2006**

00046849

Sample Number: **L0608289-06**
 Client ID: **TRIP BLANK-3**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 15:32**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 15:32**
 File ID: **10M48070**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.682	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

11 of 14

Report Number: **L0608289**Report Date : **August 21, 2006**

00046850

Sample Number: **L0608289-06**
 Client ID: **TRIP BLANK-3**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 15:32**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 15:32**
 File ID: **10M48070**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	114	80	120	
Dibromofluoromethane	105	86	118	
p-Bromofluorobenzene	106	86	115	
Toluene-d8	103	88	110	

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-07**
 Client ID: **TRIP BLANK-4**
 Matrix: **Water**
 Workgroup Number: **WG219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 16:03**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 16:03**
 File ID: **10M48071**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250

12 of 14

Report Number: **L0608289**Report Date : **August 21, 2006**

00046851

Sample Number: **L0608289-07**
 Client ID: **TRIP BLANK-4**
 Matrix: **Water**
 Workgroup Number: **W6219861**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **08/14/2006 16:03**
 Cal Date: **07/15/2006 16:37**
 Run Date: **08/14/2006 16:03**
 File ID: **10M48071**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.747	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	113	80	120		
Dibromofluoromethane	105	86	118		
p-Bromofluorobenzene	105	86	115		
Toluene-d8	104	88	110		

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

Sample Number: **L0608289-08**
 Client ID: **TRIP BLANK-5**
 Matrix: **Water**
 Workgroup Number: **W6219916**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **08/15/2006 11:47**
 Cal Date: **08/09/2006 19:31**
 Run Date: **08/15/2006 11:47**
 File ID: **11M35651**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	5.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.125
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	10.0	0.250
1,1,2-Trichloroethane	79-00-5		U	5.00	0.250
1,1-Dichloroethane	75-34-3		U	5.00	0.125
1,1-Dichloroethene	75-35-4		U	5.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	5.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	5.00	0.250
1,2-Dichlorobenzene	95-50-1		U	5.00	0.125
1,2-Dichloroethane	107-06-2		U	5.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	10.0	0.250
trans-1,2-Dichloroethene	156-60-5		U	5.00	0.250
1,2-Dichloropropane	78-87-5		U	5.00	0.200
1,3-Dichlorobenzene	541-73-1		U	5.00	0.250
1,4-Dichlorobenzene	106-46-7		U	5.00	0.125
2-Butanone	78-93-3		U	10.0	2.50

13 of 14

Report Number: **L0608289**Report Date : **August 21, 2006**

00046852

Sample Number: **L0608289-08**
 Client ID: **TRIP BLANK-5**
 Matrix: **Water**
 Workgroup Number: **W6219916**
 Collect Date: **08/10/2006 00:01**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **08/15/2006 11:47**
 Cal Date: **08/09/2006 19:31**
 Run Date: **08/15/2006 11:47**
 File ID: **11M35651**

Analyte	CAS. Number	Result	Qual	PQL	SQL
2-Hexanone	591-78-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	5.00	0.125
Bromodichloromethane	75-27-4		U	5.00	0.250
Bromoform	75-25-2		U	5.00	0.500
Bromomethane	74-83-9		U	10.0	0.500
Carbon disulfide	75-15-0		U	5.00	0.500
Carbon tetrachloride	56-23-5		U	5.00	0.250
Chlorobenzene	108-90-7		U	5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3		U	5.00	0.125
Chloromethane	74-87-3		U	10.0	0.250
cis-1,3-Dichloropropene	10061-01-5		U	5.00	0.250
Cyclohexane	110-82-7		U	10.0	0.250
Dibromochloromethane	124-48-1		U	5.00	0.250
Dichlorodifluoromethane	75-71-8		U	10.0	0.250
Ethyl benzene	100-41-4		U	5.00	0.250
Isopropylbenzene	98-82-8		U	5.00	0.250
Methyl acetate	79-20-9		U	10.0	0.250
Methyl tert-butyl ether	1634-04-4		U	5.00	0.500
Methylcyclohexane	108-87-2		U	10.0	0.250
Methylene chloride	75-09-2	0.765	J	5.00	0.250
Styrene	100-42-5		U	5.00	0.125
Tetrachloroethene	127-18-4		U	5.00	0.250
Toluene	108-88-3		U	5.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	5.00	0.500
Trichloroethene	79-01-6		U	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4		U	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	101	80	120		
Dibromofluoromethane	104	86	118		
p-Bromofluorobenzene	101	86	115		
Toluene-d8	100	88	110		

J The analyte was positively identified, but the quantitation was below the RL

U Not detected at or above adjusted sample detection limit

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

00046854

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG219809

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01			08/11/06 23:04	DL01	IC2	JWR
L0608289-02	LHSMW59			08/11/06 15:15	DL01	IC2	JWR
L0608289-02	LHSMW59			08/11/06 15:32	DL02	IC2	JWR
L0608289-03	EQUIPMENT RINSE			08/11/06 21:37	01	IC2	JWR

Analysis:Common Anions

Extraction Method:300.0

Workgroup:WG219809

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01		08/11/06 14:22			FILTER	JWR
L0608289-02	LHSMW59		08/11/06 14:22			FILTER	JWR
L0608289-03	EQUIPMENT RINSE		08/11/06 14:22			FILTER	JWR

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG219861

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-04	TRIP BLANK-1			08/14/06 14:31	01	HPMS10	MES
L0608289-05	TRIP BLANK-2			08/14/06 15:02	01	HPMS10	MES
L0608289-06	TRIP BLANK-3			08/14/06 15:32	01	HPMS10	MES
L0608289-07	TRIP BLANK-4			08/14/06 16:03	01	HPMS10	MES

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG219861

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-04	TRIP BLANK-1				219861	HPMS10	MES
L0608289-05	TRIP BLANK-2				219861	HPMS10	MES
L0608289-06	TRIP BLANK-3				219861	HPMS10	MES
L0608289-07	TRIP BLANK-4				219861	HPMS10	MES

WORKGROUP SUMMARY BY METHOD

00046855

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG219907

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01			08/14/06 19:05	DL01	TOC-VWP	DIH
L0608289-01	35BWW01			08/14/06 19:05	DL01	TOC-VWP	DIH
L0608289-02	LHSMW59			08/14/06 19:20	01	TOC-VWP	DIH
L0608289-02	LHSMW59			08/14/06 19:20	01	TOC-VWP	DIH
L0608289-03	EQUIPMENT RINSE			08/14/06 19:55	01	TOC-VWP	DIH
L0608289-03	EQUIPMENT RINSE			08/14/06 19:55	01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG219907

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01			08/14/06 19:05	DL01	TOC-VWP	DIH
L0608289-02	LHSMW59			08/14/06 19:20	01	TOC-VWP	DIH
L0608289-03	EQUIPMENT RINSE			08/14/06 19:55	01	TOC-VWP	DIH

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG219916

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01			08/15/06 14:20	01	HPMS11	CMS
L0608289-02	LHSMW59			08/15/06 14:50	01	HPMS11	CMS
L0608289-03	EQUIPMENT RINSE			08/15/06 12:18	01	HPMS11	CMS
L0608289-08	TRIP BLANK-5			08/15/06 11:47	01	HPMS11	CMS

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG219916

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01				219916	HPMS11	CMS
L0608289-02	LHSMW59				219916	HPMS11	CMS
L0608289-03	EQUIPMENT RINSE				219916	HPMS11	CMS
L0608289-08	TRIP BLANK-5				219916	HPMS11	CMS

WORKGROUP SUMMARY BY METHOD

00046856

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG219977

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01			08/15/06 16:14	01	HP16	JLS
L0608289-02	LHSMW59			08/15/06 16:28	01	HP16	JLS
L0608289-03	EQUIPMENT RINSE			08/15/06 16:42	01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG219977

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0608289-01	35BWW01				219977	HP16	JLS
L0608289-02	LHSMW59				219977	HP16	JLS
L0608289-03	EQUIPMENT RINSE				219977	HP16	JLS

Kemron Environmental Services
Analyst Listing
August 21, 2006

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	BRG - BRENDA R. GREGORY	CAA - CASSIE A. AUGENSTEIN
CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH	CEB - CHAD E. BARNES
CFB - CHAD F. BOOK	CLC - CHRYS L. CRAWFORD	CLS - CARA L. STRICKLER
CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS
CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN	CSA - LUCINDA S. ARNOLD
CSH - CHRIS S. HILL	DAS - DALLAS A. SULLIVAN	DD - DIANE M. DENNIS
DDE - DEBRA D. ELLIOTT	DEL - DON E. LIGHTFRITZ	DEV - DAVID E. VANDENBERG
DGB - DOUGLAS G. BUTCHER	DIH - DEANNA I. HESSON	DLB - DAVID L. BUMGARNER
DLP - DOROTHY L. PAYNE	DLR - DIANNA L. RAUCH	DR - DEANNA ROBERTS
DRP - DAVE R. PITZER	DSM - DAVID S. MOSSOR	DST - DENNIS S. TEPE
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JKT - JANE K. THOMPSON
JLS - JANICE L. SCHIMMEL	JNB - JOSHUA N. BOOTH	JS - JENNIFER L. SOUTHALL
JWR - JOHN W. RICHARDS	JWS - JACK W. SHEAVES	JYH - JI Y. HU
KCZ - KEVIN C. ZUMBRO	KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES
KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA
MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING
MKZ - MARILYN K. ZUMBRO	MLR - MARY L. ROCHOTTE	MLS - MICHAEL L. SCHIMMEL
MMB - MAREN M. BEERY	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
PAS - PATRICK A. STREET	PJM - PAUL J. MILLER	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SCM - SUSAN C. MOELLENDICK	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	SRM - SAMUEL R. MCFEE
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WFM - WALTER F. MARTIN		

Qualkey: STD

<u>Qualifier</u>	<u>Description</u>
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	Analyte present in method blank
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
FL	Free Liquid
I	Semiquantitative result (out of instrument calibration range)
J	The analyte was positively identified, but the quantitation was below the RL
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	ESTIMATE & COLUMNS DON'T AGREE TO WITHIN 40%
L	Sample reporting limits elevated due to matrix interference
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
ND	Not detected at or above the reporting limit
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria fail. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Undetected; the concentration is below the reported MDL.
UJ	Undetected; the MDL and RL are estimated due to quality control discrepancies.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

Organic QA/QC

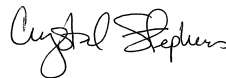
KEMRON Environmental Services Data Checklist

00046860

Date: 15-JUL-2006
Analyst: CMS
Analyst: NA
Method: 8260B/624
Instrument: HPMS10
Curve Workgroup: NA
Runlog ID: 11244
Analytical Workgroups: WG217397;WG217415

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
17-JUL-2006



Secondary Reviewer:
17-JUL-2006



Generated: JUL-17-2006 14:39:37

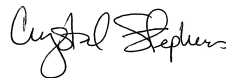
KEMRON Environmental Services Data Checklist

00046861

Date: 09 - AUG - 2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B/624
 Instrument: HPMS11
 Curve Workgroup: NA
 Runlog ID: 11702
 Analytical Workgroups: WG219518

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	NA
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
11 - AUG - 2006



Secondary Reviewer:
14 - AUG - 2006



Generated: AUG -14 -2006 08:44:31

KEMRON Environmental Services Data Checklist

00046862

Date: 14-AUG-2006
 Analyst: MES
 Analyst: NA
 Method: 8260
 Instrument: HPMS10
 Curve Workgroup: NA
 Runlog ID: 11770
 Analytical Workgroups: WG219861

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
16-AUG-2006



Secondary Reviewer:
17-AUG-2006



Generated: AUG-17-2006 08:23:23

KEMRON Environmental Services
Data Checklist

00046863

Date: 15 - AUG - 2006

Analyst: CMS

Analyst: NA

Method: 8260B

Instrument: HPMS11

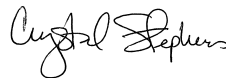
Curve Workgroup: NA

Runlog ID: 11776

Analytical Workgroups: WG219916

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CMS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
16 - AUG - 2006



Secondary Reviewer:
17 - AUG - 2006



Generated: AUG -17 -2006 08:21:56

KEMRON Environmental Services

Instrument Run Log

00046864

Instrument: HPMS10 Dataset: 071506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B/5035 SOP: PAT01 Rev: 10
 Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
 CCV: STD13787 LCS: STD13712 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG217397;WG217415

Comments: Files 10M47238-10M47244: Retuned instrument.Troubleshooting purposes only. All tunes passed.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M47238	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 08:15
2	10M47239	BFB 50ng STD CHECK 8260-PURGED	NA	1	1	STD13589	07/15/06 08:55
3	10M47240	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 09:09
4	10M47241	IS/SS SYSTEM BLANK CHECK	NA	1	1		07/15/06 09:45
5	10M47242	IS/SS SYSTEM BLANK CHECK 1800	NA	1	1		07/15/06 10:28
6	10M47243	IS/SS SYSTEM BLANK CHECK 1859	NA	1	1		07/15/06 11:00
7	10M47244	BFB 50ng STD CHECK 8260	NA	1	1	STD13589	07/15/06 11:27
8	10M47245	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 11:48
9	10M47246	WG217397-01 BFB 50ng STD 8260	NA	1	1	STD13589	07/15/06 12:02
10	10M47247	WG217397-02 0.30ug/L STD 8260	NA	1	1	STD13787	07/15/06 12:33
11	10M47248	WG217397-03 0.40ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:03
12	10M47249	WG217397-04 1ug/L STD 8260	NA	1	1	STD13787	07/15/06 13:34
13	10M47250	WG217397-05 2ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:05
14	10M47251	WG217397-06 5ug/L STD 8260	NA	1	1	STD13787	07/15/06 14:35
15	10M47252	WG217397-07 20ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:06
16	10M47253	WG217397-08 50ug/L STD 8260	NA	1	1	STD13787	07/15/06 15:37
17	10M47254	WG217397-09 100ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:07
18	10M47255	WG217397-10 200ug/L STD 8260	NA	1	1	STD13787	07/15/06 16:37
19	10M47256	SYSTEM BLANK	NA	1	1		07/15/06 17:08
20	10M47257	SYSTEM BLANK	NA	1	1		07/15/06 17:39
21	10M47258	WG217397-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD13712	07/15/06 18:09
22	10M47259	WG217415-01 VBLK0715 BLANK 8260	NA	1	1		07/15/06 18:40
23	10M47260	L0606678-01 A 826-REF-BLK	NA	1	1		07/15/06 19:11
24	10M47261	L0606678-02 A 826-REF-BLK	NA	1	1		07/15/06 19:41
25	10M47262	L0606678-03 A 826-REF-BLK	NA	1	1		07/15/06 20:11
26	10M47263	L0606678-04 A 826-REF-BLK	NA	1	1		07/15/06 20:42
27	10M47264	L0606678-05 A 826-REF-BLK	NA	1	1		07/15/06 21:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8	X			

Approved: July 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046865

Instrument: HPMS10 Dataset: 071506
Analyst1: CMS Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 10
Method: 624 SOP: MSV10 Rev: 9
Method: 5030B/5035 SOP: PAT01 Rev: 10
Maintenance Log ID: 14710

Internal Standard: STD13238 Surrogate Standard: STD13782
CCV: STD13787 LCS: STD13712 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG217397;WG217415

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M47245				
Tune failed/DNR				

Approved: July 17, 2006



KEMRON Environmental Services

Instrument Run Log

00046866

Instrument: HPMS11 Dataset: 080906
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B SOP: PAT01 Rev: 10
 Maintenance Log ID: 15126

Internal Standard: STD14046 Surrogate Standard: STD14270
 CCV: STD14330;STD14338 LCS: STD14341;STD14339 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219518

Comments: Troubleshoot the instrument from files 11M35495-11M35504. Refer to maintenance log. THE WATER CURVE ALSO CONTAINS A MA-OXY CRV WITH THE EXCEPTION OF 1,4-DIOXANE.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M35495	WG219351-01 BFB 50ng STD 8260	NA	1	1	STD14237	08/09/06 06:40
2	11M35496	WG219459-01 BFB 50ng STD 8260	NA	1	1	STD14237	08/09/06 06:59
3	11M35497	WG219459-01 BFB 50ng STD 8260	NA	1	1	STD14237	08/09/06 09:07
4	11M35498	SYSTEM BLK-RETUNED IS/SS CHK	NA	1	1		08/09/06 09:40
5	11M35499	SYSTEM BLK-1776	NA	1	1		08/09/06 10:11
6	11M35500	BFB CHK	NA	1	1	STD14237	08/09/06 10:41
7	11M35501	BFB CHK-purged	NA	1	1	STD14237	08/09/06 11:15
8	11M35502	BFB CHK-1812	NA	1	1	STD14237	08/09/06 11:41
9	11M35503	BFB CHK-1800	NA	1	1	STD14237	08/09/06 12:31
10	11M35504	I S/SS CHECK	NA	1	1		08/09/06 12:55
11	11M35505	WG219518-01 BFB 50ng STD 8260	NA	1	1	STD14237	08/09/06 13:24
12	11M35506	WG219517-02 50ug/L STD 8260	NA	1	1	STD14330	08/09/06 13:52
13	11M35507	WG219517-02 100ug/L MAOXY STD 8260	NA	1	1	STD14338	08/09/06 14:25
14	11M35508	SYSTEM BLANK	NA	1	1		08/09/06 14:56
15	11M35509	WG219518-03 0.40ug/L STD 8260	NA	1	1	STD14330	08/09/06 15:27
16	11M35510	WG219518-02 0.30ug/L STD 8260	NA	1	1	STD14330	08/09/06 15:58
17	11M35511	WG219518-04 1ug/L STD 8260	NA	1	1	STD14330	08/09/06 16:28
18	11M35512	WG219518-05 2ug/L STD 8260	NA	1	1	STD14330	08/09/06 16:59
19	11M35513	WG219518-06 5ug/L STD 8260	NA	1	1	STD14330	08/09/06 17:29
20	11M35514	WG219518-07 20ug/L STD 8260	NA	1	1	STD14330	08/09/06 17:59
21	11M35515	WG219518-08 50ug/L STD 8260	NA	1	1	STD14330	08/09/06 18:30
22	11M35516	WG219518-09 100ug/L STD 8260	NA	1	1	STD14330	08/09/06 19:00
23	11M35517	WG219518-10 200ug/L STD 8260	NA	1	1	STD14330	08/09/06 19:31
24	11M35518	SYSTEM BLANK	NA	1	1		08/09/06 20:01
25	11M35519	SYSTEM BLANK	NA	1	1		08/09/06 20:32
26	11M35520	WG219518-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD14341	08/09/06 21:02

Comments

Seq.	Rerun	Dil.	Reason	Analytes
12				
File ID: 11M35506				

Approved: August 14, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046867

Instrument: HPMS11 Dataset: 080906
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV10 Rev: 9
 Method: 5030B SOP: PAT01 Rev: 10
 Maintenance Log ID: 15126

Internal Standard: STD14046 Surrogate Standard: STD14270
 CCV: STD14330;STD14338 LCS: STD14341;STD14339 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219518

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			DNR-response check	
13				
File ID: 11M35507				
			DNR-response check	

Approved: August 14, 2006



KEMRON Environmental Services

Instrument Run Log

00046868

Instrument: HPMS10 Dataset: 081406
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15188

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219861

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M48057	SYSTEM BLANK	NA	1	1		08/14/06 09:08
2	10M48058	SYSTEM BLANK	NA	1	1		08/14/06 09:39
3	10M48059	WG219860-01 50NG BFB STD 8260	NA	1	1	STD14237	08/14/06 10:10
4	10M48060	WG219860-01 50NG BFB STD 8260	NA	1	1	STD14237	08/14/06 10:24
5	10M48061	WG219860-02 50ug/L WATER STD 8260	NA	1	1	STD14330	08/14/06 10:45
6	10M48062	WG219860-02 50ug/L WATER STD 8260	NA	1	1	STD14330	08/14/06 11:21
7	10M48063	WG219861-01 VBLK0814 BLANK 8260	NA	1	1		08/14/06 11:57
8	10M48064	WG219861-02 20ug/L LCS 8260	NA	1	1	STD14341	08/14/06 12:28
9	10M48065	WG219861-03 20ug/L LCSDUP 8260	NA	1	1	STD14341	08/14/06 12:58
10	10M48066	WG219861-04 SPLP BLANK 8/10/06	NA	1	1		08/14/06 13:29
11	10M48067	L0608316-01 A 10X 826-BETX	<2	1	10		08/14/06 14:01
12	10M48068	L0608289-04 A 826-SPE	<2	1	1		08/14/06 14:31
13	10M48069	L0608289-05 A 826-SPE	<2	1	1		08/14/06 15:02
14	10M48070	L0608289-06 A 826-SPE	<2	1	1		08/14/06 15:32
15	10M48071	L0608289-07 A 826-SPE	<2	1	1		08/14/06 16:03
16	10M48072	L0608250-04 B 10X 826-SPLP	NA	18	10		08/14/06 16:35
17	10M48073	L0608250-05 B 10X 826-SPLP	NA	18	10		08/14/06 17:05
18	10M48074	L0608250-06 B D1 100X 826-SPLP	NA	18	100		08/14/06 17:36
19	10M48075	L0608316-08 A 826-BETX	<2	1	1		08/14/06 18:07
20	10M48076	L0608316-02 A 826-BETX	<2	1	1		08/14/06 18:37
21	10M48077	L0608316-03 A 20X 826-BETX	<2	1	20		08/14/06 19:08
22	10M48078	L0608316-04 A 20X 826-BETX	<2	1	20		08/14/06 19:38
23	10M48079	L0608316-05 A D1 5X 826-BETX	<2	1	5		08/14/06 20:09
24	10M48080	L0608316-06 A 20X 826-BETX	<2	1	20		08/14/06 20:39
25	10M48081	L0608316-07 A D1 10X 826-BETX	<2	1	10		08/14/06 21:10
26	10M48082	L0608316-09 A 50X 826-BETX	<2	1	50		08/14/06 21:41
27	10M48083	L0608316-10 A 100X 826-BETX	<2	1	100		08/14/06 22:11
28	10M48084	SYSTEM BLANK	NA	1	1		08/14/06 22:42
29	10M48085	SYSTEM BLANK	NA	1	1		08/14/06 23:13

Comments

Approved: August 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046869

Instrument: HPMS10 Dataset: 081406
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15188

Internal Standard: STD13898 Surrogate Standard: STD14435
 CCV: STD14330 LCS: STD14341 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219861

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3				
File ID: 10M48059				
RR-BFB failed.				
5				
File ID: 10M48061				
RR for SS.				
16				
File ID: 10M48072				
Do not report; wrong dilution.				
17				
File ID: 10M48073				
Do not report; wrong dilution.				
19	X	10	Over Calibration Range	benzene
File ID: 10M48075				
20	X	20	Over Calibration Range	TEX
File ID: 10M48076				
21	X	100	Over Calibration Range	toluene
File ID: 10M48077				
22	X	1	Analyzed too dilute	
File ID: 10M48078				
Do not report.				
23	X	1	Analyzed too dilute	
File ID: 10M48079				
25	X	5	Analyzed too dilute	
File ID: 10M48081				

Approved: August 17, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046870

Instrument: HPMS11 Dataset: 081506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15194

Internal Standard: STD14046 Surrogate Standard: STD14270
 CCV: STD14349 LCS: STD14430 MS/MSD: STD14430
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219916

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M35643	WG219914-01 BFB 50ng STD 8260	NA	1	1	STD14237	08/15/06 07:42
2	11M35644	WG219914-02 50ug/L STD 8260	NA	1	1	STD14349	08/15/06 08:14
3	11M35645	WG219916-01 VBLK0815 BLANK 8260	NA	1	1		08/15/06 08:44
4	11M35646	WG219916-01 VBLK0815 BLANK 8260	NA	1	1		08/15/06 09:15
5	11M35647	WG219916-02 20ug/L LCS STD 8260	NA	1	1	STD14430	08/15/06 09:45
6	11M35648	L0608310-01 A 826-SPE	<2	1	1		08/15/06 10:16
7	11M35649	L0608284-12 B 8260	<2	1	1		08/15/06 10:46
8	11M35650	L0608331-01 A 826-LOW	<2	1	1		08/15/06 11:17
9	11M35651	L0608289-08 A 826-SPE	<2	1	1		08/15/06 11:47
10	11M35652	L0608289-03 A 826-SPE	<2	1	1		08/15/06 12:18
11	11M35653	WG219916-03 L0608331-04 A 826-LOW	<2	1	1		08/15/06 12:48
12	11M35654	WG219916-04 L0608331-05 MS A 826-LO	<2	1	1	STD14430	08/15/06 13:19
13	11M35655	WG219916-05 L0608331-06 MSD A 826-L	<2	1	1	STD14430	08/15/06 13:49
14	11M35656	L0608289-01 A,B 826-SPE	<2	1	1		08/15/06 14:20
15	11M35657	L0608289-02 A 826-SPE	<2	1	1		08/15/06 14:50
16	11M35658	L0608238-04 A 10X 826-TC	<2	17	10		08/15/06 15:20
17	11M35659	L0608191-01 A 20X 826-SPE	=7	1	20		08/15/06 15:51
18	11M35660	L0608331-02 A 826-LOW	<2	1	1		08/15/06 16:22
19	11M35661	L0608331-03 A 826-LOW	<2	1	1		08/15/06 16:52
20	11M35662	L0608331-07 A 826-LOW	<2	1	1		08/15/06 17:23
21	11M35663	L0608331-08 A 826-LOW	<2	1	1		08/15/06 17:54
22	11M35664	L0608331-09 A 826-LOW	<2	1	1		08/15/06 18:24
23	11M35665	L0608285-01 A 100X 826-SPE	=14	1	100		08/15/06 18:54
24	11M35666	L0608285-02 A 100X 826-SPE	=14	1	100		08/15/06 19:25
25	11M35667	SYSTEM BLANK	NA	1	1		08/15/06 19:55

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M35645				
DNR				
18	X		Carry-over contamination	

Approved: August 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046871

Instrument: HPMS11 Dataset: 081506
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 15194

Internal Standard: STD14046 Surrogate Standard: STD14270
 CCV: STD14349 LCS: STD14430 MS/MSD: STD14430
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG219916

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M35660				
DNR				
20	X	5	Over Calibration Range	cis-1,2-DCE
File ID: 11M35662				
21	X	5	Over Calibration Range	cis-1,2-DCE
File ID: 11M35663				
22	X	5	Over Calibration Range	cis-1,2-DCE
File ID: 11M35664				
23	X	10	Analyzed too dilute	
File ID: 11M35665				
DNR				
24	X	20	Analyzed too dilute	
File ID: 11M35666				
DNR				

Approved: August 17, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046872

Analytical Method: 8260B
Login Number: L0608289

AAB#: WG219861

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
TRIP BLANK-1	08/10/06	08/11/06	08/14/06	14	4.60	08/14/06	14	4.60	
TRIP BLANK-2	08/10/06	08/11/06	08/14/06	14	4.63	08/14/06	14	4.63	
TRIP BLANK-3	08/10/06	08/11/06	08/14/06	14	4.65	08/14/06	14	4.65	
TRIP BLANK-4	08/10/06	08/11/06	08/14/06	14	4.67	08/14/06	14	4.67	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046873

Analytical Method: 8260B
Login Number: L0608289

AAB#: WG219916

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
35BWW01	08/10/06	08/11/06	08/15/06	14	5.26	08/15/06	14	5.26	
LHSMW59	08/10/06	08/11/06	08/15/06	14	5.17	08/15/06	14	5.17	
EQUIPMENT RINSE	08/10/06	08/11/06	08/15/06	14	5.03	08/15/06	14	5.03	
TRIP BLANK-5	08/10/06	08/11/06	08/15/06	14	5.49	08/15/06	14	5.49	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00046874

Login Number: L0608289
 Instrument Id: HPMS10
 Workgroup (AAB#): WG219861

Method: 8260
 CAL ID: HPMS10 - 15-JUL-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608289-04	1.00	01	109	104	105	107
L0608289-05	1.00	01	114	106	107	107
L0608289-06	1.00	01	114	105	106	103
L0608289-07	1.00	01	113	105	105	104
WG219861-01	1.00	01	108	106	105	107
WG219861-02	1.00	01	106	104	102	102
WG219861-03	1.00	01	109	107	104	105
WG219861-04	1.00	01	108	103	104	105

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

SURROGATE STANDARDS

00046875

Login Number: L0608289
 Instrument Id: HPMS11
 Workgroup (AAB#): WG219916

Method: 8260
 CAL ID: HPMS11 - 09-AUG-06
 Matrix: WATER

Sample Number	Dilution	Tag	1	2	3	4
L0608289-01	1.00	01	96.6	101	103	99.6
L0608289-02	1.00	01	96.8	102	100	99.7
L0608289-03	1.00	01	102	104	99.8	101
L0608289-08	1.00	01	101	104	101	100
WG219916-01	1.00	01	101	102	102	99.8
WG219916-02	1.00	01	100	104	101	98.2

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - p-Bromofluorobenzene	86	-	115
4 - Toluene-d8	88	-	110

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

METHOD BLANK SUMMARY

00046876

Login Number: L0608289
Blank File ID: 10M48063
Date Analyzed: 08/14/06
Time Analyzed: 11:57
Analyst: MES

Work Group: WG219861
Blank Sample ID: WG219861-01
Instrument ID: HPMS10
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219861-02	10M48064	08/14/06 12:28	01
LCS2	WG219861-03	10M48065	08/14/06 12:58	01
FBLK	WG219861-04	10M48066	08/14/06 13:29	01
TRIP BLANK-1	L0608289-04	10M48068	08/14/06 14:31	01
TRIP BLANK-2	L0608289-05	10M48069	08/14/06 15:02	01
TRIP BLANK-3	L0608289-06	10M48070	08/14/06 15:32	01
TRIP BLANK-4	L0608289-07	10M48071	08/14/06 16:03	01

METHOD BLANK SUMMARY

00046877

Login Number: L0608289
Blank File ID: 11M35646
Date Analyzed: 08/15/06
Time Analyzed: 09:15
Analyst: CMS

Work Group: WG219916
Blank Sample ID: WG219916-01
Instrument ID: HPMS11
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219916-02	11M35647	08/15/06 09:45	01
TRIP BLANK-5	L0608289-08	11M35651	08/15/06 11:47	01
EQUIPMENT RINSE	L0608289-03	11M35652	08/15/06 12:18	01
35BWW01	L0608289-01	11M35656	08/15/06 14:20	01
LHSMW59	L0608289-02	11M35657	08/15/06 14:50	01

METHOD BLANK REPORT

00046878

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219861-01
 Instrument ID: HPMS10 Run Time: 11:57 Prep Method: 5030B
 File ID: 10M48063 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219861 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.321	1	J
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 542966
 Report generated 08/17/2006 14:02

METHOD BLANK REPORT

00046879

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219861-01
 Instrument ID: HPMS10 Run Time: 11:57 Prep Method: 5030B
 File ID: 10M48063 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219861 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	108	80 - 120	PASS
Dibromofluoromethane	106	86 - 118	PASS
p-Bromofluorobenzene	105	86 - 115	PASS
Toluene-d8	107	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00046880

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219916-01
 Instrument ID: HPMS11 Run Time: 09:15 Prep Method: 5030B
 File ID: 11M35646 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG219916 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 09-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
1,1,1-Trichloroethane	0.250	5.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	5.00	0.125	1	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.250	10.0	0.250	1	U
1,1,2-Trichloroethane	0.250	5.00	0.250	1	U
1,1-Dichloroethane	0.125	5.00	0.125	1	U
1,1-Dichloroethene	0.500	5.00	0.500	1	U
1,2,4-Trichlorobenzene	0.200	5.00	0.200	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	5.00	0.250	1	U
1,2-Dichlorobenzene	0.125	5.00	0.125	1	U
1,2-Dichloroethane	0.250	5.00	0.250	1	U
cis-1,2-Dichloroethene	0.250	10.0	0.250	1	U
trans-1,2-Dichloroethene	0.250	5.00	0.250	1	U
1,2-Dichloropropane	0.200	5.00	0.200	1	U
1,3-Dichlorobenzene	0.250	5.00	0.250	1	U
1,4-Dichlorobenzene	0.125	5.00	0.125	1	U
2-Butanone	2.50	10.0	2.50	1	U
2-Hexanone	2.50	10.0	2.50	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	5.00	0.125	1	U
Bromodichloromethane	0.250	5.00	0.250	1	U
Bromoform	0.500	5.00	0.500	1	U
Bromomethane	0.500	10.0	0.500	1	U
Carbon disulfide	0.500	5.00	0.500	1	U
Carbon tetrachloride	0.250	5.00	0.250	1	U
Chlorobenzene	0.125	5.00	0.125	1	U
Chloroethane	0.500	10.0	0.500	1	U
Chloroform	0.125	5.00	0.125	1	U
Chloromethane	0.250	10.0	0.250	1	U
cis-1,3-Dichloropropene	0.250	5.00	0.250	1	U
Cyclohexane	0.250	10.0	0.250	1	U
Dibromochloromethane	0.250	5.00	0.250	1	U
Dichlorodifluoromethane	0.250	10.0	0.250	1	U
Ethyl benzene	0.250	5.00	0.250	1	U
Isopropylbenzene	0.250	5.00	0.250	1	U
Methyl acetate	0.250	10.0	0.250	1	U
Methyl tert-butyl ether	0.500	5.00	0.500	1	U
Methylcyclohexane	0.250	10.0	0.250	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Styrene	0.125	5.00	0.125	1	U
Tetrachloroethene	0.250	5.00	0.250	1	U

KEMRON FORMS - Modified 07/21/2006
 Version 1.5 PDF File ID: 542966
 Report generated 08/17/2006 14:02

METHOD BLANK REPORT

00046881

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219916-01
 Instrument ID: HPMS11 Run Time: 09:15 Prep Method: 5030B
 File ID: 11M35646 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG219916 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 09-AUG-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Toluene	0.250	5.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	5.00	0.500	1	U
Trichloroethene	0.250	5.00	0.250	1	U
Trichlorofluoromethane	0.250	10.0	0.250	1	U
Vinyl chloride	0.250	10.0	0.250	1	U
Xylenes, Total	0.500	5.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	101	80 - 120	PASS
Dibromofluoromethane	102	86 - 118	PASS
p-Bromofluorobenzene	102	86 - 115	PASS
Toluene-d8	99.8	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046882

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219861-02
 Instrument ID: HPMS10 Run Time: 12:28 Prep Method: 5030B
 File ID: 10M48064 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219861 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits			Q
1,1,1-Trichloroethane	20.0	23.1	116	80	-	134	
1,1,2,2-Tetrachloroethane	20.0	20.0	100	79	-	125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	22.6	113	80	-	130	
1,1,2-Trichloroethane	20.0	20.2	101	80	-	125	
1,1-Dichloroethane	20.0	21.5	108	80	-	125	
1,1-Dichloroethene	20.0	20.0	100	80	-	132	
1,2,4-Trichlorobenzene	20.0	18.6	92.8	65	-	135	
1,2-Dibromo-3-chloropropane	20.0	17.9	89.7	50	-	130	
1,2-Dibromoethane	20.0	21.1	105	80	-	125	
1,2-Dichlorobenzene	20.0	19.7	98.4	80	-	125	
1,2-Dichloroethane	20.0	23.8	119	80	-	129	
cis-1,2-Dichloroethene	20.0	20.5	103	70	-	125	
trans-1,2-Dichloroethene	20.0	19.8	99.1	80	-	127	
1,2-Dichloropropane	20.0	21.3	107	80	-	120	
1,3-Dichlorobenzene	20.0	20.1	100	80	-	120	
1,4-Dichlorobenzene	20.0	19.5	97.5	80	-	120	
2-Butanone	20.0	22.3	111	30	-	150	
2-Hexanone	20.0	21.2	106	55	-	130	
4-Methyl-2-pentanone	20.0	21.3	106	64	-	140	
Acetone	20.0	22.3	111	40	-	142	
Benzene	20.0	19.8	99.0	80	-	121	
Bromodichloromethane	20.0	24.4	122	80	-	131	
Bromoform	20.0	22.6	113	70	-	130	
Bromomethane	20.0	24.2	121	30	-	145	
Carbon disulfide	20.0	19.6	98.1	58	-	138	
Carbon tetrachloride	20.0	22.1	110	65	-	140	
Chlorobenzene	20.0	20.0	100	80	-	120	
Chloroethane	20.0	20.0	99.8	60	-	135	
Chloroform	20.0	22.0	110	80	-	125	
Chloromethane	20.0	23.9	120	40	-	125	
cis-1,3-Dichloropropene	20.0	21.0	105	70	-	130	
Cyclohexane	20.0	20.0	99.9	80	-	130	
Dibromochloromethane	20.0	21.8	109	60	-	135	
Dichlorodifluoromethane	20.0	13.2	66.0	50	-	133	
Ethyl benzene	20.0	20.9	105	80	-	122	
Isopropylbenzene	20.0	19.2	96.2	80	-	122	
Methyl acetate	20.0	26.1	131	80	-	130	*
Methyl tert-butyl ether	20.0	20.5	102	65	-	125	
Methylcyclohexane	20.0	19.0	95.2	80	-	130	
Methylene chloride	20.0	18.5	92.3	80	-	123	
Styrene	20.0	19.6	97.8	80	-	123	

LABORATORY CONTROL SAMPLE (LCS)

00046883

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219861-02
 Instrument ID: HPMS10 Run Time: 12:28 Prep Method: 5030B
 File ID: 10M48064 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG219861 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 15-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Tetrachloroethene	20.0	21.0	105	80 - 124	
Toluene	20.0	20.0	100	80 - 124	
trans-1,3-Dichloropropene	20.0	20.5	102	80 - 130	
Trichloroethene	20.0	21.0	105	80 - 122	
Trichlorofluoromethane	20.0	19.3	96.3	62 - 151	
Vinyl chloride	20.0	22.4	112	65 - 140	
Xylenes, Total	60.0	61.1	102	80 - 121	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	106	80 - 120	PASS
Dibromofluoromethane	104	86 - 118	PASS
p-Bromofluorobenzene	102	86 - 115	PASS
Toluene-d8	102	88 - 110	PASS

* FAILS %REC LIMIT

LABORATORY CONTROL SAMPLE (LCS)

00046884

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219916-02
 Instrument ID: HPMS11 Run Time: 09:45 Prep Method: 5030B
 File ID: 11M35647 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG219916 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 09-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits			Q
1,1,1-Trichloroethane	20.0	23.0	115	80	-	134	
1,1,2,2-Tetrachloroethane	20.0	22.4	112	79	-	125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	23.8	119	80	-	130	
1,1,2-Trichloroethane	20.0	21.4	107	80	-	125	
1,1-Dichloroethane	20.0	21.0	105	80	-	125	
1,1-Dichloroethene	20.0	19.9	99.3	80	-	132	
1,2,4-Trichlorobenzene	20.0	21.2	106	65	-	135	
1,2-Dibromo-3-chloropropane	20.0	24.2	121	50	-	130	
1,2-Dibromoethane	20.0	21.7	108	80	-	125	
1,2-Dichlorobenzene	20.0	20.5	103	80	-	125	
1,2-Dichloroethane	20.0	22.2	111	80	-	129	
cis-1,2-Dichloroethene	20.0	22.4	112	70	-	125	
trans-1,2-Dichloroethene	20.0	21.5	107	80	-	127	
1,2-Dichloropropane	20.0	22.1	110	80	-	120	
1,3-Dichlorobenzene	20.0	20.3	101	80	-	120	
1,4-Dichlorobenzene	20.0	19.9	99.7	80	-	120	
2-Butanone	20.0	26.1	131	30	-	150	
2-Hexanone	20.0	21.7	109	55	-	130	
4-Methyl-2-pentanone	20.0	23.2	116	64	-	140	
Acetone	20.0	29.3	146	40	-	142	*
Benzene	20.0	21.4	107	80	-	121	
Bromodichloromethane	20.0	23.2	116	80	-	131	
Bromoform	20.0	20.8	104	70	-	130	
Bromomethane	20.0	21.7	108	30	-	145	
Carbon disulfide	20.0	23.9	119	58	-	138	
Carbon tetrachloride	20.0	23.9	120	65	-	140	
Chlorobenzene	20.0	20.7	103	80	-	120	
Chloroethane	20.0	21.8	109	60	-	135	
Chloroform	20.0	21.2	106	80	-	125	
Chloromethane	20.0	23.2	116	40	-	125	
cis-1,3-Dichloropropene	20.0	23.3	117	70	-	130	
Cyclohexane	20.0	20.7	104	80	-	130	
Dibromochloromethane	20.0	22.4	112	60	-	135	
Dichlorodifluoromethane	20.0	23.0	115	50	-	133	
Ethyl benzene	20.0	21.8	109	80	-	122	
Isopropylbenzene	20.0	17.7	88.5	80	-	122	
Methyl acetate	20.0	30.9	155	80	-	130	*
Methyl tert-butyl ether	20.0	24.1	121	65	-	125	
Methylcyclohexane	20.0	22.2	111	80	-	130	
Methylene chloride	20.0	19.4	96.9	80	-	123	
Styrene	20.0	19.7	98.4	80	-	123	

LABORATORY CONTROL SAMPLE (LCS)

00046885

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219916-02
 Instrument ID: HPMS11 Run Time: 09:45 Prep Method: 5030B
 File ID: 11M35647 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG219916 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 09-AUG-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Tetrachloroethene	20.0	21.7	108	80 - 124	
Toluene	20.0	21.0	105	80 - 124	
trans-1,3-Dichloropropene	20.0	20.3	102	80 - 130	
Trichloroethene	20.0	22.3	111	80 - 122	
Trichlorofluoromethane	20.0	21.1	106	62 - 151	
Vinyl chloride	20.0	22.3	112	65 - 140	
Xylenes, Total	60.0	66.3	111	80 - 121	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	100	80 - 120	PASS
Dibromofluoromethane	104	86 - 118	PASS
p-Bromofluorobenzene	101	86 - 115	PASS
Toluene-d8	98.2	88 - 110	PASS

* FAILS %REC LIMIT

LABORATORY CONTROL SAMPLE (LCS)

00046886

Login Number: L0608289 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219861 Units: ug/L
 Sample ID: WG219861-02 LCS File ID: 10M48064 Run Date: 08/14/2006 12:28
 Sample ID: WG219861-03 LCS2 File ID: 10M48065 Run Date: 08/14/2006 12:58

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	23.1	116	20.0	22.3	112	3.51	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	20.0	100	20.0	19.8	99.1	0.976	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	22.6	113	20.0	21.7	108	4.06	80 - 130	20	
1,1,2-Trichloroethane	20.0	20.2	101	20.0	20.4	102	0.973	80 - 125	20	
1,1-Dichloroethane	20.0	21.5	108	20.0	21.4	107	0.649	80 - 125	20	
1,1-Dichloroethene	20.0	20.0	100	20.0	18.9	94.7	5.60	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	18.6	92.8	20.0	18.3	91.6	1.29	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	17.9	89.7	20.0	19.3	96.7	7.43	50 - 130	20	
1,2-Dibromoethane	20.0	21.1	105	20.0	20.8	104	1.12	80 - 125	20	
1,2-Dichlorobenzene	20.0	19.7	98.4	20.0	19.1	95.5	3.01	80 - 125	20	
1,2-Dichloroethane	20.0	23.8	119	20.0	23.5	117	1.19	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.5	103	20.0	20.0	100	2.28	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.8	99.1	20.0	18.9	94.5	4.76	80 - 127	20	
1,2-Dichloropropane	20.0	21.3	107	20.0	20.9	104	2.11	80 - 120	20	
1,3-Dichlorobenzene	20.0	20.1	100	20.0	19.2	96.2	4.10	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.5	97.5	20.0	19.1	95.5	2.13	80 - 120	20	
2-Butanone	20.0	22.3	111	20.0	23.8	119	6.66	30 - 150	20	
2-Hexanone	20.0	21.2	106	20.0	20.6	103	2.88	55 - 130	20	
4-Methyl-2-pentanone	20.0	21.3	106	20.0	21.8	109	2.39	64 - 140	20	
Acetone	20.0	22.3	111	20.0	22.6	113	1.50	40 - 142	20	
Benzene	20.0	19.8	99.0	20.0	19.3	96.7	2.38	80 - 121	20	
Bromodichloromethane	20.0	24.4	122	20.0	24.5	122	0.375	80 - 131	20	
Bromoform	20.0	22.6	113	20.0	22.8	114	0.915	70 - 130	20	
Bromomethane	20.0	24.2	121	20.0	24.0	120	0.676	30 - 145	20	
Carbon disulfide	20.0	19.6	98.1	20.0	18.9	94.4	3.89	58 - 138	20	
Carbon tetrachloride	20.0	22.1	110	20.0	20.9	104	5.77	65 - 140	20	
Chlorobenzene	20.0	20.0	100	20.0	20.0	99.8	0.171	80 - 120	20	
Chloroethane	20.0	20.0	99.8	20.0	19.3	96.3	3.57	60 - 135	20	
Chloroform	20.0	22.0	110	20.0	21.8	109	0.934	80 - 125	20	
Chloromethane	20.0	23.9	120	20.0	23.6	118	1.31	40 - 125	20	
cis-1,3-Dichloropropene	20.0	21.0	105	20.0	20.7	104	1.48	70 - 130	20	
Cyclohexane	20.0	20.0	99.9	20.0	19.3	96.4	3.56	80 - 130	20	
Dibromochloromethane	20.0	21.8	109	20.0	22.0	110	0.662	60 - 135	20	
Dichlorodifluoromethane	20.0	13.2	66.0	20.0	12.6	62.9	4.93	50 - 133	20	
Ethyl benzene	20.0	20.9	105	20.0	20.3	102	3.00	80 - 122	20	
Isopropylbenzene	20.0	19.2	96.2	20.0	18.8	94.1	2.26	80 - 122	20	
Methyl acetate	20.0	26.1	131	20.0	25.7	129	1.53	80 - 130	20	*
Methyl tert-butyl ether	20.0	20.5	102	20.0	20.5	103	0.120	65 - 125	20	
Methylcyclohexane	20.0	19.0	95.2	20.0	18.0	90.1	5.55	80 - 130	20	
Methylene chloride	20.0	18.5	92.3	20.0	18.3	91.4	1.03	80 - 123	20	
Styrene	20.0	19.6	97.8	20.0	19.3	96.3	1.55	80 - 123	20	
Tetrachloroethene	20.0	21.0	105	20.0	20.2	101	3.83	80 - 124	20	

KEMRON FORMS - Modified 07/13/2006
 Version 1.5 PDF File ID: 542798
 Report generated 08/18/2006 11:57

LABORATORY CONTROL SAMPLE (LCS)

00046887

Login Number: L0608289 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG219861 Units: ug/L
 Sample ID: WG219861-02 LCS File ID: 10M48064 Run Date: 08/14/2006 12:28
 Sample ID: WG219861-03 LCS2 File ID: 10M48065 Run Date: 08/14/2006 12:58

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	20.0	100	20.0	19.7	98.6	1.40	80 - 124	20	
trans-1,3-Dichloropropene	20.0	20.5	102	20.0	20.6	103	0.410	80 - 130	20	
Trichloroethene	20.0	21.0	105	20.0	20.4	102	3.15	80 - 122	20	
Trichlorofluoromethane	20.0	19.3	96.3	20.0	18.5	92.3	4.24	62 - 151	20	
Vinyl chloride	20.0	22.4	112	20.0	21.1	105	6.21	65 - 140	20	
Xylenes, Total	60.0	61.1	102	60.0	60.3	101	1.18	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	104	107	86 - 118	PASS
1,2-Dichloroethane-d4	106	109	80 - 120	PASS
Toluene-d8	102	105	88 - 110	PASS
p-Bromofluorobenzene	102	104	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046888

BFB

Login Number: L0608289	Tune ID: WG217397-01
Instrument: HPMS10	Run Date: 07/15/2006
Analyst: CMS	Run Time: 12:02
Workgroup: WG217397	File ID: 10M47246
	Cal ID: HPMS10-15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	20.3	6639	PASS
75.0	95.0	30.0	60.0	45.2	14755	PASS
95.0	95.0	100	100	100	32637	PASS
96.0	95.0	5.00	9.00	6.52	2129	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.0	27402	PASS
175	174	5.00	9.00	7.77	2130	PASS
176	174	95.0	101	95.8	26256	PASS
177	176	5.00	9.00	7.24	1900	PASS

This check relates to the following samples, MS, MSD:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG217397-11	SSCV	01	07/15/2006 18:09	
WG217397-10	STD	01	07/15/2006 16:37	
WG217397-09	STD	01	07/15/2006 16:07	
WG217397-08	STD-CCV	01	07/15/2006 15:37	
WG217397-07	STD	01	07/15/2006 15:06	
WG217397-06	STD	01	07/15/2006 14:35	
WG217397-05	STD	01	07/15/2006 14:05	
WG217397-04	STD	01	07/15/2006 13:34	
WG217397-03	STD	01	07/15/2006 13:03	
WG217397-02	STD	01	07/15/2006 12:33	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046889

BFB

Login Number: L0608289	Tune ID: WG219518-01
Instrument: HPMS11	Run Date: 08/09/2006
Analyst: CMS	Run Time: 13:24
Workgroup: WG219518	File ID: 11M35505
	Cal ID: HPMS11-09-AUG-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	24.7	9308	PASS
75.0	95.0	30.0	60.0	49.9	18826	PASS
95.0	95.0	100	100	100	37749	PASS
96.0	95.0	5.00	9.00	6.99	2640	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	77.0	29050	PASS
175	174	5.00	9.00	7.53	2188	PASS
176	174	95.0	101	99.8	28997	PASS
177	176	5.00	9.00	5.87	1701	PASS

This check relates to the following samples, MS, MSD:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219518-11	SSCV	01	08/09/2006 21:02	
WG219518-10	STD	01	08/09/2006 19:31	
WG219518-09	STD	01	08/09/2006 19:00	
WG219518-08	STD-CCV	01	08/09/2006 18:30	
WG219518-07	STD	01	08/09/2006 17:59	
WG219518-06	STD	01	08/09/2006 17:29	
WG219518-05	STD	01	08/09/2006 16:59	
WG219518-04	STD	01	08/09/2006 16:28	
WG219518-02	STD	01	08/09/2006 15:58	
WG219518-03	STD	01	08/09/2006 15:27	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046890

BFB

Login Number: L0608289
Instrument: HPMS10
Analyst: MES
Workgroup: WG219860

Tune ID: WG219860-01
Run Date: 08/14/2006
Run Time: 10:24
File ID: 10M48060

Cal ID: HPMS10 -15-JUL-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	24.4	6731	PASS
75.0	95.0	30.0	60.0	48.7	13405	PASS
95.0	95.0	100	100	100	27536	PASS
96.0	95.0	5.00	9.00	6.99	1925	PASS
173	174	0	2.00	0.524	121	PASS
174	95.0	50.0	100	83.8	23088	PASS
175	174	5.00	9.00	8.08	1865	PASS
176	174	95.0	101	95.8	22114	PASS
177	176	5.00	9.00	6.78	1499	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG219860-02	CCV	08/14/2006 11:21

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219861-01	BLANK	01	08/14/2006 11:57	
WG219861-02	LCS	01	08/14/2006 12:28	
WG219861-03	LCS2	01	08/14/2006 12:58	
WG219861-04	FBLK	01	08/14/2006 13:29	
L0608289-04	TRIP BLANK-1	01	08/14/2006 14:31	
L0608289-05	TRIP BLANK-2	01	08/14/2006 15:02	
L0608289-06	TRIP BLANK-3	01	08/14/2006 15:32	
L0608289-07	TRIP BLANK-4	01	08/14/2006 16:03	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00046891

BFB

Login Number: L0608289
Instrument: HPMS11
Analyst: CMS
Workgroup: WG219914

Tune ID: WG219914-01
Run Date: 08/15/2006
Run Time: 07:42
File ID: 11M35643

Cal ID: HPMS11-09-AUG-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	25.7	3970	PASS
75.0	95.0	30.0	60.0	49.5	7644	PASS
95.0	95.0	100	100	100	15442	PASS
96.0	95.0	5.00	9.00	7.07	1092	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	81.4	12577	PASS
175	174	5.00	9.00	8.18	1029	PASS
176	174	95.0	101	98.9	12442	PASS
177	176	5.00	9.00	5.96	741	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG219914-02	CCV	08/15/2006 08:14

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG219916-01	BLANK	01	08/15/2006 09:15	
WG219916-02	LCS	01	08/15/2006 09:45	
L0608289-08	TRIP BLANK-5	01	08/15/2006 11:47	
L0608289-03	EQUIPMENT RINSE	01	08/15/2006 12:18	
L0608289-01	35BWW01	01	08/15/2006 14:20	
L0608289-02	LHSMW59	01	08/15/2006 14:50	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00046892

Login Number: L0608289
 Analytical Method: 8260B
 ICAL Workgroup: WG217397

Instrument ID: HPMS10
 Initial Calibration Date: 15-JUL-06 16:37
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
1,1-Dichloroethene	CCC	0.2477	13.7		
1,2-Dichloropropane	CCC	0.2842	4.38		
Chloroform	CCC	0.4605	7.94		
Ethylbenzene	CCC	0.5099	7.78		
Toluene	CCC	1.413	4.62		
Vinyl Chloride	CCC	0.1446	12.7		
1,1,2,2-Tetrachloroethane	SPCC	0.4140	10.4		
1,1-Dichloroethane	SPCC	0.5470	4.92		
Bromoform	SPCC	0.1038	24.8		1.00
Chlorobenzene	SPCC	0.9490	5.07		
Chloromethane	SPCC	0.1846	5.29		
1,1,1-Trichloroethane		0.3888	12.3		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2697	6.60		
1,1,2-Trichloroethane		0.2162	3.27		
1,2,4-Trichlorobenzene		0.7784	9.12		
1,2-Dibromo-3-Chloropropane		0.06202	21.4		1.00
1,2-Dibromoethane		0.2235	6.08		
1,2-Dichlorobenzene		1.269	7.02		
1,2-Dichloroethane		0.3301	5.92		
1,3-Dichlorobenzene		1.436	3.86		
1,4-Dichlorobenzene		1.468	7.30		
2-Butanone		0.05478	4.81		
2-Hexanone		0.1113	8.25		
4-Methyl-2-Pentanone		0.05537	6.85		
Acetone		0.04005	14.0		
Benzene		1.053	5.37		
Bromodichloromethane		0.2797	12.0		
Bromomethane		0.08886	10.1		
Carbon Disulfide		0.8671	9.75		
Carbon Tetrachloride		0.3201	18.6	1.00	
Chloroethane		0.2205	6.79		
Cyclohexane		0.5447	5.61		
Dibromochloromethane		0.2116	18.7	1.00	
Dichlorodifluoromethane		0.3087	4.07		
Isopropylbenzene		1.414	7.32		
Methyl Tert Butyl Ether		0.5495	4.68		
Methyl acetate		0.1194	3.04		
Methylcyclohexane		0.4123	5.19		
Methylene Chloride		0.2841	10.4		
Styrene		1.029	4.51		
Tetrachloroethene		0.2865	11.4		
Trichloroethene		0.2800	6.92		
Trichlorofluoromethane		0.4877	14.7		
cis-1,2-Dichloroethene		0.2827	5.59		
cis-1,3-Dichloropropene		0.3820	5.49		

KEMRON FORMS - Modified 08/16/2006
 Version 1.5 PDF File ID: 542967
 Report generated 08/17/2006 14:02

INITIAL CALIBRATION SUMMARY

00046893

Login Number: L0608289
Analytical Method: 8260B
ICAL Workgroup: WG217397

Instrument ID: HPMS10
Initial Calibration Date: 15-JUL-06 16:37
Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
m-, p-Xylene		0.6229	7.97		
o-Xylene		0.6131	4.93		
trans-1,2-Dichloroethene		0.2747	6.68		
trans-1,3-Dichloropropene		0.4096	5.80		

INITIAL CALIBRATION SUMMARY

00046894

Login Number: L0608289
 Analytical Method: 8260B
 ICAL Workgroup: WG219518

Instrument ID: HPMS11
 Initial Calibration Date: 09-AUG-06 19:31
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
1,1-Dichloroethene	CCC	0.2008	16.9		1.00
1,2-Dichloropropane	CCC	0.2389	4.81		
Chloroform	CCC	0.4697	3.86		
Ethylbenzene	CCC	0.4599	7.40		
Toluene	CCC	1.243	7.06		
Vinyl Chloride	CCC	0.2056	14.1		
1,1,2,2-Tetrachloroethane	SPCC	0.3535	6.99		
1,1-Dichloroethane	SPCC	0.5050	4.83		
Bromoform	SPCC	0.1494	14.0		
Chlorobenzene	SPCC	0.8569	7.57		
Chloromethane	SPCC	0.2792	4.54		
1,1,1-Trichloroethane		0.4203	8.54		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2329	4.94		
1,1,2-Trichloroethane		0.2015	3.96		
1,2,4-Trichlorobenzene		0.7912	6.96		
1,2-Dibromo-3-Chloropropane		0.06079	7.84		
1,2-Dibromoethane		0.1916	11.2		
1,2-Dichlorobenzene		1.145	6.15		
1,2-Dichloroethane		0.3715	4.06		
1,3-Dichlorobenzene		1.304	5.20		
1,4-Dichlorobenzene		1.366	7.64		
2-Butanone		0.04290	5.97		
2-Hexanone		0.09914	7.46		
4-Methyl-2-Pentanone		0.04258	6.37		
Acetone		0.02928	3.08		
Benzene		0.8934	4.15		
Bromodichloromethane		0.3047	6.97		
Bromomethane		0.1853	7.87		
Carbon Disulfide		0.6085	11.1		
Carbon Tetrachloride		0.3715	10.5		
Chloroethane		0.1764	12.9		
Cyclohexane		0.3846	21.8	1.00	
Dibromochloromethane		0.2497	12.4		
Dichlorodifluoromethane		0.2912	13.4		
Isopropylbenzene		1.337	16.8		1.00
Methyl Tert Butyl Ether		0.3985	13.4		
Methyl acetate		0.09455	9.47		
Methylcyclohexane		0.3470	14.2		
Methylene Chloride		0.2461	13.3		
Styrene		0.8470	19.3		1.00
Tetrachloroethene		0.2622	10.8		
Trichloroethene		0.2386	7.48		
Trichlorofluoromethane		0.4775	14.0		
cis-1,2-Dichloroethene		0.2441	8.04		
cis-1,3-Dichloropropene		0.3271	13.1		

KEMRON FORMS - Modified 08/16/2006
 Version 1.5 PDF File ID: 542967
 Report generated 08/17/2006 14:02

INITIAL CALIBRATION SUMMARY

00046895

Login Number: L0608289
Analytical Method: 8260B
ICAL Workgroup: WG219518

Instrument ID: HPMS11
Initial Calibration Date: 09-AUG-06 19:31
Column ID: F

Analyte		AVG RF	% RSD	LINEAR	QUAD
m-, p-Xylene		0.5676	7.62		
o-Xylene		0.5174	14.9		
trans-1,2-Dichloroethene		0.2342	6.46		
trans-1,3-Dichloropropene		0.3978	12.8		

INITIAL CALIBRATION DATA

00046896

Login Number:L0608289

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2155	0.1768	1.00	7552	0.2481
1,2-Dichloropropane	NA	NA	NA	0.400	3286	0.2696	1.00	8387	0.2756
Chloroform	0.300	3611	0.3788	0.400	5503	0.4516	1.00	13646	0.4484
Ethylbenzene	NA	NA	NA	0.400	4291	0.4814	1.00	11933	0.5337
Toluene	NA	NA	NA	0.400	12765	1.432	1.00	32232	1.442
Vinyl Chloride	NA	NA	NA	0.400	1986	0.1630	1.00	4642	0.1525
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2225	0.4981	1.00	4015	0.3548
1,1-Dichloroethane	NA	NA	NA	0.400	6118	0.5020	1.00	16423	0.5396
Bromoform	NA	NA	NA	NA	NA	NA	1.00	1677	0.07500
Chlorobenzene	NA	NA	NA	0.400	8400	0.9424	1.00	22223	0.9939
Chloromethane	NA	NA	NA	0.400	2489	0.2042	1.00	5413	0.1779
1,1,1-Trichloroethane	NA	NA	NA	0.400	3590	0.2946	1.00	11390	0.3742
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	1.00	7064	0.2321
1,1,2-Trichloroethane	NA	NA	NA	0.400	1993	0.2236	1.00	4758	0.2128
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4173	0.9343	1.00	8769	0.7750
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1711	0.1920	1.00	5059	0.2263
1,2-Dichlorobenzene	0.300	3977	1.162	0.400	6424	1.438	1.00	14615	1.292
1,2-Dichloroethane	NA	NA	NA	0.400	3632	0.2980	1.00	10116	0.3324
1,3-Dichlorobenzene	NA	NA	NA	0.400	6404	1.434	1.00	16357	1.446
1,4-Dichlorobenzene	0.300	4673	1.365	0.400	7504	1.680	1.00	16442	1.453
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	12926	1.061	1.00	32640	1.073
Bromodichloromethane	NA	NA	NA	0.400	2994	0.2457	1.00	7247	0.2381
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	2267	0.07450
Carbon Disulfide	NA	NA	NA	0.400	8322	0.6829	1.00	26540	0.8720
Carbon Tetrachloride	NA	NA	NA	0.400	2603	0.2136	1.00	9005	0.2959
Chloroethane	NA	NA	NA	0.400	2463	0.2021	1.00	6013	0.1976
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	16858	0.5539
Dibromochloromethane	NA	NA	NA	0.400	1554	0.1744	1.00	3887	0.1738
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8788	0.2888
Isopropylbenzene	NA	NA	NA	0.400	11116	1.247	1.00	30781	1.377
Methyl Tert Butyl Ether	NA	NA	NA	0.400	6217	0.5102	1.00	15981	0.5251
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	11744	0.3859
Methylene Chloride	NA	NA	NA	0.400	4138	0.3396	1.00	9498	0.3121
Styrene	NA	NA	NA	0.400	9184	1.030	1.00	22553	1.009
Tetrachloroethene	NA	NA	NA	0.400	1971	0.2211	1.00	6598	0.2951
Trichloroethene	NA	NA	NA	0.400	3037	0.2492	1.00	9012	0.2961

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542967
Report generated 08/17/2006 14:02

INITIAL CALIBRATION DATA

00046897

Login Number:L0608289

Instrument ID:HPMS10

Analytical Method:8260B

Initial Calibration Date:15-JUL-06 16:37

Column ID:F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	13300	0.2202	5.00	39494	0.2668	20.0	157889	0.2687
1,2-Dichloropropane	2.00	16876	0.2793	5.00	43326	0.2926	20.0	175735	0.2991
Chloroform	2.00	26821	0.4440	5.00	71128	0.4804	20.0	286292	0.4873
Ethylbenzene	2.00	21374	0.4811	5.00	61604	0.5657	20.0	237507	0.5396
Toluene	2.00	59951	1.349	5.00	163466	1.501	20.0	636381	1.446
Vinyl Chloride	2.00	9672	0.1601	5.00	23420	0.1582	20.0	79694	0.1356
1,1,2,2-Tetrachloroethane	2.00	8402	0.3770	5.00	23352	0.4215	20.0	94876	0.4269
1,1-Dichloroethane	2.00	31792	0.5263	5.00	84471	0.5705	20.0	333056	0.5669
Bromoform	2.00	3400	0.07650	5.00	9039	0.08300	20.0	45931	0.1044
Chlorobenzene	2.00	41356	0.9308	5.00	107647	0.9885	20.0	433501	0.9849
Chloromethane	2.00	10457	0.1731	5.00	26838	0.1813	20.0	109763	0.1868
1,1,1-Trichloroethane	2.00	21124	0.3497	5.00	61118	0.4128	20.0	252890	0.4304
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	16160	0.2675	5.00	41383	0.2795	20.0	165877	0.2823
1,1,2-Trichloroethane	2.00	9523	0.2143	5.00	23769	0.2183	20.0	96364	0.2189
1,2,4-Trichlorobenzene	2.00	16347	0.7335	5.00	43577	0.7866	20.0	174334	0.7844
1,2-Dibromo-3-Chloropropane	2.00	1031	0.04630	5.00	2508	0.04530	20.0	13833	0.06220
1,2-Dibromoethane	2.00	10100	0.2273	5.00	24575	0.2257	20.0	102677	0.2333
1,2-Dichlorobenzene	2.00	27302	1.225	5.00	73258	1.322	20.0	290271	1.306
1,2-Dichloroethane	2.00	19924	0.3298	5.00	50650	0.3421	20.0	205661	0.3500
1,3-Dichlorobenzene	2.00	31297	1.404	5.00	82523	1.490	20.0	333022	1.499
1,4-Dichlorobenzene	2.00	32671	1.466	5.00	85330	1.540	20.0	334940	1.507
2-Butanone	2.00	3489	0.05780	5.00	8175	0.05520	20.0	32157	0.05470
2-Hexanone	2.00	4746	0.1068	5.00	12944	0.1189	20.0	52586	0.1195
4-Methyl-2-Pentanone	2.00	3053	0.05050	5.00	8358	0.05650	20.0	34236	0.05830
Acetone	2.00	2992	0.04950	5.00	6507	0.04400	20.0	22876	0.03890
Benzene	2.00	61054	1.011	5.00	165630	1.119	20.0	644633	1.097
Bromodichloromethane	2.00	14734	0.2439	5.00	40674	0.2747	20.0	176212	0.2999
Bromomethane	2.00	4848	0.08020	5.00	13785	0.09310	20.0	51620	0.08790
Carbon Disulfide	2.00	54632	0.9043	5.00	136052	0.9189	20.0	543854	0.9256
Carbon Tetrachloride	2.00	15690	0.2597	5.00	47793	0.3228	20.0	206570	0.3516
Chloroethane	2.00	13269	0.2196	5.00	34263	0.2314	20.0	139332	0.2371
Cyclohexane	2.00	33305	0.5513	5.00	84549	0.5711	20.0	328563	0.5592
Dibromochloromethane	2.00	7310	0.1645	5.00	21283	0.1954	20.0	97086	0.2206
Dichlorodifluoromethane	2.00	18369	0.3041	5.00	47240	0.3191	20.0	187142	0.3185
Isopropylbenzene	2.00	58775	1.323	5.00	164943	1.515	20.0	666472	1.514
Methyl Tert Butyl Ether	2.00	33220	0.5499	5.00	83348	0.5630	20.0	333902	0.5683
Methyl acetate	2.00	7192	0.1190	5.00	16913	0.1142	20.0	70054	0.1192
Methylcyclohexane	2.00	24159	0.3999	5.00	63431	0.4284	20.0	251187	0.4275
Methylene Chloride	2.00	16950	0.2806	5.00	41377	0.2795	20.0	163552	0.2784
Styrene	2.00	43781	0.9854	5.00	116097	1.066	20.0	473446	1.076
Tetrachloroethene	2.00	11410	0.2568	5.00	34511	0.3169	20.0	135423	0.3077
Trichloroethene	2.00	15717	0.2602	5.00	43388	0.2931	20.0	174150	0.2964

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542967
Report generated 08/17/2006 14:02

INITIAL CALIBRATION DATA

00046898

Login Number: L0608289

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	395105	0.2792	100	746883	0.2681	200	1407541	0.2538
1,2-Dichloropropane	50.0	424112	0.2997	100	804346	0.2887	200	1493303	0.2693
Chloroform	50.0	707811	0.5001	100	1362341	0.4890	200	2577742	0.4648
Ethylbenzene	50.0	563335	0.5313	100	1039224	0.5022	200	1804054	0.4444
Toluene	50.0	1533585	1.447	100	2882090	1.393	200	5251372	1.294
Vinyl Chloride	50.0	175535	0.1240	100	330230	0.1185	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	233701	0.4306	100	432363	0.4089	200	819486	0.3940
1,1-Dichloroethane	50.0	817848	0.5779	100	1572533	0.5644	200	2927948	0.5280
Bromoform	50.0	132160	0.1247	100	269661	0.1303	200	539702	0.1329
Chlorobenzene	50.0	1031892	0.9733	100	1922747	0.9291	200	3446617	0.8490
Chloromethane	50.0	266196	0.1881	100	525212	0.1885	200	980824	0.1769
1,1,1-Trichloroethane	50.0	613851	0.4338	100	1173075	0.4210	200	2183759	0.3938
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	399812	0.2825	100	771869	0.2770	200	1480622	0.2670
1,1,2-Trichloroethane	50.0	238815	0.2252	100	441173	0.2132	200	823736	0.2029
1,2,4-Trichlorobenzene	50.0	422238	0.7780	100	787610	0.7449	200	1436381	0.6905
1,2-Dibromo-3-Chloropropane	50.0	38747	0.07140	100	76766	0.07260	200	154640	0.07430
1,2-Dibromoethane	50.0	248933	0.2348	100	473783	0.2290	200	889735	0.2192
1,2-Dichlorobenzene	50.0	703512	1.296	100	1307212	1.236	200	2386559	1.147
1,2-Dichloroethane	50.0	497835	0.3518	100	923329	0.3314	200	1692271	0.3052
1,3-Dichlorobenzene	50.0	795692	1.466	100	1504951	1.423	200	2753792	1.324
1,4-Dichlorobenzene	50.0	803373	1.480	100	1494835	1.414	200	2716928	1.306
2-Butanone	50.0	81094	0.05730	100	147473	0.05290	200	281672	0.05080
2-Hexanone	50.0	125686	0.1185	100	222058	0.1073	200	393105	0.09680
4-Methyl-2-Pentanone	50.0	85134	0.06020	100	154207	0.05530	200	284832	0.05140
Acetone	50.0	51865	0.03660	100	98172	0.03520	200	200255	0.03610
Benzene	50.0	1539273	1.088	100	2887312	1.036	200	5221294	0.9415
Bromodichloromethane	50.0	450434	0.3183	100	879465	0.3157	200	1670781	0.3013
Bromomethane	50.0	127151	0.08980	100	271375	0.09740	200	549682	0.09910
Carbon Disulfide	50.0	1328773	0.9389	100	2460454	0.8831	200	4499082	0.8113
Carbon Tetrachloride	50.0	528039	0.3731	100	1047948	0.3761	200	2042508	0.3683
Chloroethane	50.0	333370	0.2356	100	631553	0.2267	200	1186233	0.2139
Cyclohexane	50.0	797216	0.5633	100	1487040	0.5337	200	2665271	0.4806
Dibromochloromethane	50.0	265828	0.2507	100	531454	0.2568	200	1041322	0.2565
Dichlorodifluoromethane	50.0	455437	0.3218	100	868503	0.3117	200	1645246	0.2967
Isopropylbenzene	50.0	1613156	1.522	100	3027220	1.463	200	5500748	1.355
Methyl Tert Butyl Ether	50.0	835199	0.5902	100	1548940	0.5559	200	2957843	0.5334
Methyl acetate	50.0	174861	0.1236	100	336543	0.1208	200	663941	0.1197
Methylcyclohexane	50.0	612213	0.4326	100	1171875	0.4206	200	2169748	0.3913
Methylene Chloride	50.0	390691	0.2761	100	733721	0.2633	200	1346612	0.2428
Styrene	50.0	1143677	1.079	100	2145111	1.037	200	3846545	0.9475
Tetrachloroethene	50.0	331718	0.3129	100	619182	0.2992	200	1146919	0.2825
Trichloroethene	50.0	418485	0.2957	100	797556	0.2863	200	1456615	0.2627

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542967
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INITIAL CALIBRATION DATA

00046899

Login Number: L0608289

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-02			WG217397-03			WG217397-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	3902	0.3202	1.00	14191	0.4663
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3189	0.2617	1.00	8459	0.2779
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4549	0.3733	1.00	10955	0.3600
m-,p-Xylene	NA	NA	NA	0.800	10700	0.6002	2.00	29801	0.6664
o-Xylene	NA	NA	NA	0.400	5519	0.6192	1.00	13413	0.5999
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3008	0.2468	1.00	8004	0.2630
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3487	0.3912	1.00	8520	0.3810

INITIAL CALIBRATION DATA

00046900

Login Number: L0608289

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-05			WG217397-06			WG217397-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	30655	0.5074	5.00	77087	0.5207	20.0	311587	0.5303
cis-1,2-Dichloroethene	2.00	15852	0.2624	5.00	43448	0.2935	20.0	172950	0.2944
cis-1,3-Dichloropropene	2.00	21618	0.3578	5.00	57511	0.3885	20.0	240114	0.4087
m-,p-Xylene	4.00	54965	0.6185	10.0	147386	0.6767	40.0	580911	0.6599
o-Xylene	2.00	26177	0.5892	5.00	71342	0.6551	20.0	280089	0.6363
trans-1,2-Dichloroethene	2.00	15320	0.2536	5.00	42965	0.2902	20.0	170194	0.2897
trans-1,3-Dichloropropene	2.00	17116	0.3852	5.00	45044	0.4136	20.0	190224	0.4322

INITIAL CALIBRATION DATA

00046901

Login Number: L0608289

Instrument ID: HPMS10

Analytical Method: 8260B

Initial Calibration Date: 15-JUL-06 16:37

Column ID: F

Analyte	WG217397-08			WG217397-09			WG217397-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	765832	0.5411	100	1455283	0.5223	200	2735861	0.4933
cis-1,2-Dichloroethene	50.0	430153	0.3040	100	815973	0.2929	200	1523643	0.2748
cis-1,3-Dichloropropene	50.0	579447	0.4094	100	1096027	0.3934	200	2023151	0.3648
m-,p-Xylene	100	1358343	0.6406	200	2462969	0.5951	400	4267218	0.5256
o-Xylene	50.0	673662	0.6354	100	1260659	0.6092	200	2274735	0.5603
trans-1,2-Dichloroethene	50.0	414867	0.2931	100	803880	0.2885	200	1512005	0.2727
trans-1,3-Dichloropropene	50.0	472078	0.4453	100	884748	0.4275	200	1626717	0.4007

INITIAL CALIBRATION DATA

00046902

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-02			WG219518-03			WG219518-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2168	0.1442	1.00	5835	0.1596
1,2-Dichloropropane	NA	NA	NA	0.400	3506	0.2332	1.00	8114	0.2220
Chloroform	0.300	5600	0.5059	0.400	7153	0.4759	1.00	16946	0.4636
Ethylbenzene	NA	NA	NA	0.400	5156	0.4683	1.00	11504	0.4197
Toluene	NA	NA	NA	0.400	12807	1.163	1.00	30813	1.124
Vinyl Chloride	NA	NA	NA	NA	NA	NA	1.00	6251	0.1710
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	1737	0.2963	1.00	5344	0.3592
1,1-Dichloroethane	NA	NA	NA	0.400	7474	0.4972	1.00	17466	0.4779
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3334	0.1216
Chlorobenzene	NA	NA	NA	0.400	10289	0.9345	1.00	23674	0.8637
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	10070	0.2755
1,1,1-Trichloroethane	NA	NA	NA	0.400	5576	0.3710	1.00	14224	0.3892
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	0.400	2242	0.2036	1.00	5565	0.2030
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4690	0.8000	1.00	11051	0.7427
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	1.00	821	0.05520
1,2-Dibromoethane	NA	NA	NA	0.400	1596	0.1450	1.00	5159	0.1882
1,2-Dichlorobenzene	0.300	5415	1.256	0.400	6426	1.096	1.00	16472	1.107
1,2-Dichloroethane	NA	NA	NA	0.400	5603	0.3728	1.00	13757	0.3764
1,3-Dichlorobenzene	NA	NA	NA	0.400	7675	1.309	1.00	19805	1.331
1,4-Dichlorobenzene	0.300	6623	1.536	0.400	8596	1.466	1.00	20106	1.351
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	13438	0.8940	1.00	31175	0.8529
Bromodichloromethane	NA	NA	NA	0.400	4307	0.2865	1.00	10265	0.2808
Bromomethane	NA	NA	NA	0.400	2812	0.1871	1.00	5584	0.1528
Carbon Disulfide	NA	NA	NA	0.400	9505	0.6323	1.00	17010	0.4654
Carbon Tetrachloride	NA	NA	NA	0.400	5068	0.3372	1.00	11438	0.3129
Chloroethane	NA	NA	NA	0.400	2733	0.1818	1.00	4493	0.1229
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	8072	0.2208
Dibromochloromethane	NA	NA	NA	0.400	2202	0.2000	1.00	6090	0.2222
Dichlorodifluoromethane	NA	NA	NA	0.400	4513	0.3002	1.00	7507	0.2054
Isopropylbenzene	NA	NA	NA	0.400	11414	1.037	1.00	28627	1.044
Methyl Tert Butyl Ether	NA	NA	NA	0.400	4535	0.3017	1.00	12395	0.3391
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA	NA	NA	1.00	11420	0.3124
Styrene	NA	NA	NA	0.400	6335	0.5754	1.00	18464	0.6736
Tetrachloroethene	NA	NA	NA	0.400	2358	0.2142	1.00	6388	0.2330
Trichloroethene	NA	NA	NA	0.400	3327	0.2213	1.00	8290	0.2268

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INITIAL CALIBRATION DATA

00046903

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-05			WG219518-06			WG219518-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	14614	0.1943	5.00	37339	0.1959	20.0	183411	0.2338
1,2-Dichloropropane	2.00	17133	0.2278	5.00	44692	0.2345	20.0	198315	0.2528
Chloroform	2.00	34059	0.4527	5.00	86222	0.4523	20.0	379339	0.4836
Ethylbenzene	2.00	24991	0.4510	5.00	66733	0.4735	20.0	297014	0.5123
Toluene	2.00	66106	1.193	5.00	175384	1.244	20.0	797627	1.376
Vinyl Chloride	2.00	17075	0.2270	5.00	46043	0.2415	20.0	180097	0.2296
1,1,2,2-Tetrachloroethane	2.00	10342	0.3470	5.00	27606	0.3612	20.0	118278	0.3700
1,1-Dichloroethane	2.00	35650	0.4739	5.00	93025	0.4880	20.0	419670	0.5350
Bromoform	2.00	6865	0.1239	5.00	19500	0.1383	20.0	93330	0.1610
Chlorobenzene	2.00	47745	0.8617	5.00	122275	0.8675	20.0	533007	0.9194
Chloromethane	2.00	21019	0.2794	5.00	56932	0.2987	20.0	230904	0.2944
1,1,1-Trichloroethane	2.00	30069	0.3997	5.00	78393	0.4113	20.0	369108	0.4705
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	16595	0.2206	5.00	47355	0.2484	20.0	191647	0.2443
1,1,2-Trichloroethane	2.00	10610	0.1915	5.00	28945	0.2054	20.0	121038	0.2088
1,2,4-Trichlorobenzene	2.00	23243	0.7799	5.00	61282	0.8018	20.0	279007	0.8728
1,2-Dibromo-3-Chloropropane	2.00	1653	0.05550	5.00	4370	0.05720	20.0	19672	0.06150
1,2-Dibromoethane	2.00	10305	0.1860	5.00	26704	0.1895	20.0	120748	0.2083
1,2-Dichlorobenzene	2.00	33546	1.126	5.00	87734	1.148	20.0	393948	1.232
1,2-Dichloroethane	2.00	28190	0.3747	5.00	71847	0.3769	20.0	304298	0.3879
1,3-Dichlorobenzene	2.00	37376	1.254	5.00	99929	1.307	20.0	447471	1.400
1,4-Dichlorobenzene	2.00	39953	1.341	5.00	104153	1.363	20.0	451516	1.412
2-Butanone	NA	NA	NA	5.00	7830	0.04110	20.0	30933	0.03940
2-Hexanone	NA	NA	NA	5.00	12422	0.08810	20.0	55024	0.09490
4-Methyl-2-Pentanone	NA	NA	NA	5.00	7376	0.03870	20.0	32111	0.04090
Acetone	NA	NA	NA	5.00	5638	0.02960	20.0	22833	0.02910
Benzene	2.00	65106	0.8655	5.00	169377	0.8886	20.0	749236	0.9551
Bromodichloromethane	2.00	21210	0.2819	5.00	56467	0.2962	20.0	255510	0.3257
Bromomethane	2.00	14172	0.1884	5.00	38379	0.2013	20.0	153749	0.1960
Carbon Disulfide	2.00	46134	0.6133	5.00	106297	0.5576	20.0	531331	0.6773
Carbon Tetrachloride	2.00	25985	0.3454	5.00	70848	0.3717	20.0	332998	0.4245
Chloroethane	2.00	12711	0.1690	5.00	36849	0.1933	20.0	149676	0.1908
Cyclohexane	2.00	26877	0.3573	5.00	66027	0.3464	20.0	353740	0.4509
Dibromochloromethane	2.00	12639	0.2281	5.00	34504	0.2448	20.0	159892	0.2758
Dichlorodifluoromethane	2.00	21830	0.2902	5.00	62913	0.3300	20.0	255578	0.3258
Isopropylbenzene	2.00	65781	1.187	5.00	188564	1.338	20.0	918581	1.585
Methyl Tert Butyl Ether	2.00	29254	0.3889	5.00	76738	0.4026	20.0	346095	0.4412
Methyl acetate	2.00	7122	0.09470	5.00	16869	0.08850	20.0	72222	0.09210
Methylcyclohexane	2.00	23455	0.3118	5.00	56267	0.2952	20.0	299727	0.3821
Methylene Chloride	2.00	19576	0.2602	5.00	45551	0.2390	20.0	188277	0.2400
Styrene	2.00	41485	0.7487	5.00	123543	0.8765	20.0	590076	1.018
Tetrachloroethene	2.00	14647	0.2643	5.00	37272	0.2644	20.0	174198	0.3005
Trichloroethene	2.00	16526	0.2197	5.00	45298	0.2376	20.0	209528	0.2671

INITIAL CALIBRATION DATA

00046904

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-08			WG219518-09			WG219518-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	474238	0.2306	100	952593	0.2263	200	1939755	0.2214
1,2-Dichloropropane	50.0	515848	0.2508	100	1053102	0.2502	200	2102904	0.2400
Chloroform	50.0	980757	0.4769	100	1966600	0.4672	200	3938866	0.4495
Ethylbenzene	50.0	742598	0.4896	100	1427751	0.4553	200	2686841	0.4098
Toluene	50.0	2039626	1.345	100	4034905	1.287	200	7948728	1.212
Vinyl Chloride	50.0	429793	0.2090	100	808006	0.1920	200	1482757	0.1692
1,1,2,2-Tetrachloroethane	50.0	315255	0.3750	100	653721	0.3650	200	1325789	0.3541
1,1-Dichloroethane	50.0	1096795	0.5333	100	2207558	0.5244	200	4472033	0.5104
Bromoform	50.0	258209	0.1702	100	527935	0.1684	200	1064693	0.1624
Chlorobenzene	50.0	1320917	0.8709	100	2541915	0.8107	200	4762935	0.7264
Chloromethane	50.0	561713	0.2731	100	1123209	0.2668	200	2338060	0.2668
1,1,1-Trichloroethane	50.0	954828	0.4642	100	1870121	0.4443	200	3610997	0.4121
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	483113	0.2349	100	948127	0.2252	200	1964235	0.2242
1,1,2-Trichloroethane	50.0	319040	0.2103	100	631859	0.2015	200	1230172	0.1876
1,2,4-Trichlorobenzene	50.0	713956	0.8494	100	1404324	0.7840	200	2617555	0.6991
1,2-Dibromo-3-Chloropropane	50.0	55139	0.06560	100	116934	0.06530	200	244054	0.06520
1,2-Dibromoethane	50.0	323371	0.2132	100	651470	0.2078	200	1276856	0.1947
1,2-Dichlorobenzene	50.0	1000244	1.190	100	1994698	1.114	200	3867901	1.033
1,2-Dichloroethane	50.0	785320	0.3818	100	1527095	0.3628	200	2968378	0.3388
1,3-Dichlorobenzene	50.0	1150954	1.369	100	2287073	1.277	200	4426619	1.182
1,4-Dichlorobenzene	50.0	1150533	1.369	100	2295501	1.282	200	4384857	1.171
2-Butanone	50.0	90924	0.04420	100	186225	0.04420	200	399735	0.04560
2-Hexanone	50.0	159671	0.1053	100	324080	0.1034	200	682204	0.1040
4-Methyl-2-Pentanone	50.0	92560	0.04500	100	182544	0.04340	200	393006	0.04490
Acetone	50.0	63074	0.03070	100	119855	0.02850	200	250062	0.02850
Benzene	50.0	1922632	0.9348	100	3799631	0.9027	200	7481125	0.8538
Bromodichloromethane	50.0	682419	0.3318	100	1375100	0.3267	200	2695801	0.3077
Bromomethane	50.0	377389	0.1835	100	766602	0.1821	200	1672072	0.1908
Carbon Disulfide	50.0	1341758	0.6524	100	2689867	0.6390	200	5526173	0.6307
Carbon Tetrachloride	50.0	854996	0.4157	100	1668513	0.3964	200	3225874	0.3682
Chloroethane	50.0	383424	0.1864	100	763472	0.1814	200	1627665	0.1858
Cyclohexane	50.0	905773	0.4404	100	1850379	0.4396	200	3824987	0.4365
Dibromochloromethane	50.0	432727	0.2853	100	877920	0.2800	200	1716055	0.2617
Dichlorodifluoromethane	50.0	633279	0.3079	100	1226301	0.2913	200	2441858	0.2787
Isopropylbenzene	50.0	2375083	1.566	100	4779203	1.524	200	9281864	1.416
Methyl Tert Butyl Ether	50.0	928804	0.4516	100	1805581	0.4289	200	3803796	0.4341
Methyl acetate	50.0	200757	0.09760	100	401688	0.09540	200	867326	0.09900
Methylcyclohexane	50.0	757295	0.3682	100	1537105	0.3652	200	3148982	0.3594
Methylene Chloride	50.0	484953	0.2358	100	930863	0.2211	200	1878725	0.2144
Styrene	50.0	1527524	1.007	100	3043090	0.9705	200	5941290	0.9061
Tetrachloroethene	50.0	438654	0.2892	100	869599	0.2773	200	1668170	0.2544
Trichloroethene	50.0	532131	0.2587	100	1049322	0.2493	200	2001733	0.2284

KEMRON FORMS - Modified 03/06/2006
Version 1.6 PDF File ID: 542967
Report generated 08/17/2006 14:02

INITIAL CALIBRATION DATA

00046905

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-02			WG219518-03			WG219518-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	7143	0.4752	1.00	11762	0.3218
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3222	0.2144	1.00	8300	0.2271
cis-1,3-Dichloropropene	NA	NA	NA	0.400	3979	0.2647	1.00	10554	0.2888
m-,p-Xylene	NA	NA	NA	0.800	11895	0.5402	2.00	28243	0.5152
o-Xylene	NA	NA	NA	0.400	4452	0.4044	1.00	11629	0.4242
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3502	0.2330	1.00	7936	0.2171
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3496	0.3175	1.00	9394	0.3427

INITIAL CALIBRATION DATA

00046906

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-05			WG219518-06			WG219518-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	34516	0.4588	5.00	98018	0.5142	20.0	416668	0.5312
cis-1,2-Dichloroethene	2.00	17692	0.2352	5.00	44583	0.2339	20.0	211008	0.2690
cis-1,3-Dichloropropene	2.00	21558	0.2866	5.00	61713	0.3237	20.0	288630	0.3679
m-,p-Xylene	4.00	62568	0.5646	10.0	166207	0.5896	40.0	737421	0.6360
o-Xylene	2.00	26063	0.4704	5.00	75183	0.5334	20.0	352782	0.6085
trans-1,2-Dichloroethene	2.00	15959	0.2121	5.00	43567	0.2286	20.0	199907	0.2548
trans-1,3-Dichloropropene	2.00	20150	0.3637	5.00	57061	0.4048	20.0	257897	0.4449

INITIAL CALIBRATION DATA

00046907

Login Number: L0608289

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 09-AUG-06 19:31

Column ID: F

Analyte	WG219518-08			WG219518-09			WG219518-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	1051224	0.5111	100	2136262	0.5075	200	4381824	0.5001
cis-1,2-Dichloroethene	50.0	547250	0.2661	100	1090182	0.2590	200	2170569	0.2477
cis-1,3-Dichloropropene	50.0	772780	0.3757	100	1538651	0.3655	200	3014794	0.3441
m-,p-Xylene	100	1835842	0.6052	200	3617463	0.5768	400	6733624	0.5135
o-Xylene	50.0	904709	0.5965	100	1797508	0.5733	200	3464431	0.5284
trans-1,2-Dichloroethene	50.0	517029	0.2514	100	1020919	0.2425	200	2053370	0.2343
trans-1,3-Dichloropropene	50.0	689189	0.4544	100	1380849	0.4404	200	2713045	0.4138

ALTERNATE SOURCE CALIBRATION REPORT

00046908

Login Number: L0608289 Run Date: 07/15/2006 Sample ID: WG217397-11
 Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
 File ID: 10M47258 Analyst: CMS
 ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	20	21.6	0.268	8.1	ug/L	
1,2-Dichloropropane	CCC	20	22.0	0.313	10.2	ug/L	
Chloroform	CCC	20	22.2	0.512	11.2	ug/L	
Ethylbenzene	CCC	20	22.8	0.582	14.2	ug/L	
Toluene	CCC	20	21.7	1.54	8.7	ug/L	
Vinyl Chloride	CCC	20	18.4	0.133	8.2	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	21.5	0.444	7.3	ug/L	
1,1-Dichloroethane	SPCC	20	21.6	0.590	7.9	ug/L	
Bromoform	SPCC	20	19.2	0.114	3.8	ug/L	
Chlorobenzene	SPCC	20	21.8	1.03	9	ug/L	
Chloromethane	SPCC	20	21.0	0.193	4.8	ug/L	
1,1,1-Trichloroethane		20	23.0	0.447	15.1	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20	21.4	0.288	6.8	ug/L	
1,1,2-Trichloroethane		20	21.9	0.237	9.5	ug/L	
1,2,4-Trichlorobenzene		20	21.2	0.825	6	ug/L	
1,2-Dibromo-3-Chloropropane		20	21.5	0.0724	7.7	ug/L	
1,2-Dibromoethane		20	22.3	0.249	11.3	ug/L	
1,2-Dichlorobenzene		20	21.4	1.36	7.1	ug/L	
1,2-Dichloroethane		20	22.1	0.365	10.5	ug/L	
cis-1,2-Dichloroethene		20	21.8	0.308	8.9	ug/L	
trans-1,2-Dichloroethene		20	21.1	0.290	5.4	ug/L	
1,3-Dichlorobenzene		20	21.9	1.57	9.5	ug/L	
1,4-Dichlorobenzene		20	21.7	1.59	8.5	ug/L	
2-Butanone		20	21.6	0.0591	7.9	ug/L	
2-Hexanone		20	21.4	0.119	7.1	ug/L	
4-Methyl-2-Pentanone		20	22.3	0.0617	11.4	ug/L	
Acetone		20	20.1	0.0402	.4	ug/L	
Benzene		20	21.3	1.12	6.5	ug/L	
Bromodichloromethane		20	23.7	0.331	18.4	ug/L	
Bromomethane		20	20.6	0.0915	3	ug/L	
Carbon Disulfide		20	20.3	0.880	1.4	ug/L	
Carbon Tetrachloride		20	20.2	0.370	1	ug/L	
Chloroethane		20	20.2	0.223	.9	ug/L	
cis-1,3-Dichloropropene		20	22.1	0.422	10.4	ug/L	
Cyclohexane		20	20.2	0.549	.8	ug/L	
Dibromochloromethane		20	20.0	0.244	.2	ug/L	
Dichlorodifluoromethane		20	18.7	0.289	6.3	ug/L	
Isopropylbenzene		20	21.3	1.50	6.3	ug/L	
Methyl acetate		20	21.6	0.129	7.8	ug/L	
Methyl Tert Butyl Ether		20	21.5	0.590	7.5	ug/L	
Methylcyclohexane		20	20.3	0.418	1.3	ug/L	
Methylene Chloride		20	19.7	0.280	1.5	ug/L	

KEMRON FORMS - Modified 07/26/2006
 Version 1.5 PDF File ID: 542968
 Report generated 08/17/2006 14:02

ALTERNATE SOURCE CALIBRATION REPORT

00046909

Login Number: L0608289 Run Date: 07/15/2006 Sample ID: WG217397-11
Instrument ID: HPMS10 Run Time: 18:09 Method: 8260B
File ID: 10M47258 Analyst: CMS
ICal Workgroup: WG217397 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		20	22.5	1.16	12.7	ug/L	
Tetrachloroethene		20	22.6	0.324	13.2	ug/L	
trans-1,3-Dichloropropene		20	20.6	0.422	3.1	ug/L	
Trichloroethene		20	22.1	0.310	10.7	ug/L	
Trichlorofluoromethane		20	19.2	0.469	3.9	ug/L	
m-,p-Xylene		40	45.3	0.706	13.3	ug/L	
o-Xylene		20	22.5	0.689	12.3	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

ALTERNATE SOURCE CALIBRATION REPORT

00046910

Login Number: L0608289 Run Date: 08/09/2006 Sample ID: WG219518-11
 Instrument ID: HPMS11 Run Time: 21:02 Method: 8260B
 File ID: 11M35520 Analyst: CMS
 ICal Workgroup: WG219518 Cal ID: HPMS11 - 09-AUG-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	20	20.0	0.229	.1	ug/L	
1,2-Dichloropropane	CCC	20	21.9	0.261	9.4	ug/L	
Chloroform	CCC	20	19.9	0.467	.6	ug/L	
Ethylbenzene	CCC	20	22.2	0.511	11.2	ug/L	
Toluene	CCC	20	21.6	1.34	7.8	ug/L	
Vinyl Chloride	CCC	20	18.7	0.192	6.7	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	20.2	0.357	.9	ug/L	
1,1-Dichloroethane	SPCC	20	20.8	0.526	4.1	ug/L	
Bromoform	SPCC	20	20.1	0.150	.6	ug/L	
Chlorobenzene	SPCC	20	20.9	0.895	4.5	ug/L	
Chloromethane	SPCC	20	21.1	0.295	5.5	ug/L	
1,1,1-Trichloroethane		20	21.0	0.442	5.2	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20	21.7	0.253	8.6	ug/L	
1,1,2-Trichloroethane		20	21.3	0.215	6.5	ug/L	
1,2,4-Trichlorobenzene		20	22.2	0.878	11	ug/L	
1,2-Dibromo-3-Chloropropane		20	20.5	0.0622	2.4	ug/L	
1,2-Dibromoethane		20	21.5	0.206	7.3	ug/L	
1,2-Dichlorobenzene		20	21.0	1.20	5	ug/L	
1,2-Dichloroethane		20	19.6	0.364	2	ug/L	
cis-1,2-Dichloroethene		20	21.9	0.268	9.6	ug/L	
trans-1,2-Dichloroethene		20	21.3	0.249	6.3	ug/L	
1,3-Dichlorobenzene		20	20.8	1.36	4.2	ug/L	
1,4-Dichlorobenzene		20	20.1	1.37	.7	ug/L	
2-Butanone		20	23.7	0.0509	18.7	ug/L	
2-Hexanone		20	19.1	0.0947	4.4	ug/L	
4-Methyl-2-Pentanone		20	20.8	0.0442	3.8	ug/L	
Acetone		20	20.6	0.0301	2.9	ug/L	
Benzene		20	21.4	0.956	7	ug/L	
Bromodichloromethane		20	21.4	0.326	6.9	ug/L	
Bromomethane		20	22.0	0.204	9.9	ug/L	
Carbon Disulfide		20	24.1	0.732	20.3	ug/L	
Carbon Tetrachloride		20	20.9	0.388	4.6	ug/L	
Chloroethane		20	21.5	0.190	7.7	ug/L	
cis-1,3-Dichloropropene		20	22.5	0.368	12.5	ug/L	
Cyclohexane		20	21.5	0.466	7.3	ug/L	
Dibromochloromethane		20	21.2	0.265	6.1	ug/L	
Dichlorodifluoromethane		20	20.2	0.294	.9	ug/L	
Isopropylbenzene		20	18.2	1.44	8.9	ug/L	
Methyl acetate		20	25.8	0.122	28.9	ug/L	*
Methyl Tert Butyl Ether		20	25.0	0.498	24.9	ug/L	
Methylcyclohexane		20	21.9	0.381	9.7	ug/L	
Methylene Chloride		20	18.9	0.232	5.6	ug/L	

KEMRON FORMS - Modified 07/26/2006
 Version 1.5 PDF File ID: 542968
 Report generated 08/17/2006 14:02

ALTERNATE SOURCE CALIBRATION REPORT

00046911

Login Number: L0608289 Run Date: 08/09/2006 Sample ID: WG219518-11
Instrument ID: HPMS11 Run Time: 21:02 Method: 8260B
File ID: 11M35520 Analyst: CMS
ICal Workgroup: WG219518 Cal ID: HPMS11 - 09-AUG-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		20	20.1	1.01	.3	ug/L	
Tetrachloroethene		20	22.3	0.293	11.7	ug/L	
trans-1,3-Dichloropropene		20	20.0	0.398	.1	ug/L	
Trichloroethene		20	22.6	0.269	12.9	ug/L	
Trichlorofluoromethane		20	18.7	0.446	6.5	ug/L	
m-,p-Xylene		40	44.4	0.630	11	ug/L	
o-Xylene		20	23.7	0.614	18.7	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00046912

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219860-02
 Instrument ID: HPMS10 Run Time: 11:21 Method: 8260B
 File ID: 10M48062 Analvst: MES
 Workgroup (AAB#): WG219861 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	50.0	54.1	0.268	8.30	ug/L	
1,2-Dichloropropane	CCC	50.0	53.9	0.306	7.70	ug/L	
Chloroform	CCC	50.0	55.9	0.515	11.8	ug/L	
Ethylbenzene	CCC	50.0	53.0	0.540	5.90	ug/L	
Toluene	CCC	50.0	52.0	1.47	4.00	ug/L	
Vinyl Chloride	CCC	50.0	49.1	0.142	1.90	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50.0	50.9	0.421	1.70	ug/L	
1,1-Dichloroethane	SPCC	50.0	55.9	0.612	11.8	ug/L	
Bromoform	SPCC	50.0	60.8	0.154	21.5	ug/L	
Chlorobenzene	SPCC	50.0	52.0	0.986	3.90	ug/L	
Chloromethane	SPCC	50.0	52.1	0.192	4.10	ug/L	
1,1,1-Trichloroethane		50.0	58.8	0.457	17.6	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	51.3	0.277	2.60	ug/L	
1,1,2-Trichloroethane		50.0	52.0	0.225	3.90	ug/L	
1,2,4-Trichlorobenzene		50.0	48.6	0.756	2.80	ug/L	
1,2-Dibromo-3-Chloropropane		50.0	51.8	0.0733	3.50	ug/L	
1,2-Dibromoethane		50.0	54.8	0.245	9.50	ug/L	
1,2-Dichlorobenzene		50.0	50.1	1.27	0.200	ug/L	
1,2-Dichloroethane		50.0	59.8	0.395	19.6	ug/L	
cis-1,2-Dichloroethene		50.0	53.5	0.303	7.00	ug/L	
trans-1,2-Dichloroethene		50.0	52.9	0.291	5.80	ug/L	
1,3-Dichlorobenzene		50.0	51.4	1.47	2.70	ug/L	
1,4-Dichlorobenzene		50.0	50.4	1.48	0.700	ug/L	
2-Butanone		50.0	57.7	0.0633	15.5	ug/L	
2-Hexanone		50.0	58.6	0.131	17.2	ug/L	
4-Methyl-2-Pentanone		50.0	54.2	0.0600	8.40	ug/L	
Acetone		50.0	61.9	0.0496	23.8	ug/L	
Benzene		50.0	50.5	1.06	0.900	ug/L	
Bromodichloromethane		50.0	61.4	0.343	22.8	ug/L	
Bromomethane		50.0	60.3	0.107	20.7	ug/L	
Carbon Disulfide		50.0	50.2	0.871	0.500	ug/L	
Carbon Tetrachloride		50.0	56.9	0.420	13.9	ug/L	
Chloroethane		50.0	51.7	0.228	3.50	ug/L	
cis-1,3-Dichloropropene		50.0	55.3	0.423	10.6	ug/L	
Cyclohexane		50.0	51.4	0.560	2.80	ug/L	
Dibromochloromethane		50.0	57.8	0.293	15.7	ug/L	
Dichlorodifluoromethane		50.0	34.1	0.211	31.8	ug/L	
Isopropylbenzene		50.0	55.1	1.56	10.3	ug/L	
Methyl acetate		50.0	60.1	0.144	20.1	ug/L	
Methyl Tert Butyl Ether		50.0	50.7	0.557	1.40	ug/L	
Methylcyclohexane		50.0	50.8	0.419	1.50	ug/L	
Methylene Chloride		50.0	49.5	0.281	1.00	ug/L	

KEMRON FORMS - Modified 08/16/2006
 Version 1.3 PDF File ID: 542973
 Report generated 08/18/2006 11:17

CONTINUING CALIBRATION VERIFICATION (CCV)

00046913

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219860-02
Instrument ID: HPMS10 Run Time: 11:21 Method: 8260B
File ID: 10M48062 Analyst: MES
Workgroup (AAB#): WG219861 Cal ID: HPMS10 - 15-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		50.0	51.5	1.06	3.10	ug/L	
Tetrachloroethene		50.0	54.9	0.315	9.90	ug/L	
trans-1,3-Dichloropropene		50.0	59.3	0.486	18.6	ug/L	
Trichloroethene		50.0	51.4	0.288	2.90	ug/L	
Trichlorofluoromethane		50.0	56.0	0.546	12.0	ug/L	
Xylenes		150	158	0.647	5.00	ug/L	
m-,p-Xylene		100	106	0.659	5.80	ug/L	
o-Xylene		50.0	51.7	0.634	3.50	ug/L	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00046914

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219914-02
 Instrument ID: HPMS11 Run Time: 08:14 Method: 8260B
 File ID: 11M35644 Analvst: CMS
 Workgroup (AAB#): WG219916 Cal ID: HPMS11 - 09-AUG-06

Analyte		Expected	Found	RF	%D	UNITS	Q
1,1-Dichloroethene	CCC	50.0	52.1	0.239	4.30	ug/L	
1,2-Dichloropropane	CCC	50.0	51.3	0.245	2.60	ug/L	
Chloroform	CCC	50.0	51.7	0.485	3.30	ug/L	
Ethylbenzene	CCC	50.0	51.8	0.477	3.60	ug/L	
Toluene	CCC	50.0	51.8	1.29	3.70	ug/L	
Vinyl Chloride	CCC	50.0	57.9	0.238	15.9	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50.0	47.9	0.339	4.20	ug/L	
1,1-Dichloroethane	SPCC	50.0	52.7	0.533	5.50	ug/L	
Bromoform	SPCC	50.0	51.6	0.154	3.20	ug/L	
Chlorobenzene	SPCC	50.0	49.2	0.842	1.70	ug/L	
Chloromethane	SPCC	50.0	56.8	0.317	13.6	ug/L	
1,1,1-Trichloroethane		50.0	57.1	0.480	14.2	ug/L	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	61.9	0.289	23.9	ug/L	
1,1,2-Trichloroethane		50.0	47.0	0.189	6.10	ug/L	
1,2,4-Trichlorobenzene		50.0	49.2	0.778	1.70	ug/L	
1,2-Dibromo-3-Chloropropane		50.0	52.8	0.0641	5.50	ug/L	
1,2-Dibromoethane		50.0	48.9	0.187	2.30	ug/L	
1,2-Dichlorobenzene		50.0	48.3	1.11	3.40	ug/L	
1,2-Dichloroethane		50.0	50.0	0.372	0.100	ug/L	
cis-1,2-Dichloroethene		50.0	54.6	0.267	9.20	ug/L	
trans-1,2-Dichloroethene		50.0	54.7	0.256	9.40	ug/L	
1,3-Dichlorobenzene		50.0	49.2	1.28	1.50	ug/L	
1,4-Dichlorobenzene		50.0	47.4	1.29	5.20	ug/L	
2-Butanone		50.0	51.5	0.0442	3.00	ug/L	
2-Hexanone		50.0	47.7	0.0947	4.50	ug/L	
4-Methyl-2-Pentanone		50.0	47.9	0.0408	4.20	ug/L	
Acetone		50.0	63.3	0.0370	26.5	ug/L	
Benzene		50.0	52.0	0.929	4.00	ug/L	
Bromodichloromethane		50.0	53.6	0.327	7.20	ug/L	
Bromomethane		50.0	54.2	0.201	8.30	ug/L	
Carbon Disulfide		50.0	59.9	0.729	19.7	ug/L	
Carbon Tetrachloride		50.0	59.2	0.440	18.4	ug/L	
Chloroethane		50.0	56.8	0.200	13.6	ug/L	
cis-1,3-Dichloropropene		50.0	56.0	0.367	12.1	ug/L	
Cyclohexane		50.0	53.2	0.465	6.50	ug/L	
Dibromochloromethane		50.0	51.8	0.259	3.50	ug/L	
Dichlorodifluoromethane		50.0	58.6	0.341	17.2	ug/L	
Isopropylbenzene		50.0	49.8	1.56	0.400	ug/L	
Methyl acetate		50.0	57.0	0.108	13.9	ug/L	
Methyl Tert Butyl Ether		50.0	50.0	0.398	0	ug/L	
Methylcyclohexane		50.0	56.0	0.389	12.0	ug/L	
Methylene Chloride		50.0	47.4	0.233	5.30	ug/L	

KEMRON FORMS - Modified 08/16/2006
 Version 1.3 PDF File ID: 542973
 Report generated 08/18/2006 11:17

CONTINUING CALIBRATION VERIFICATION (CCV)

00046915

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219914-02
Instrument ID: HPMS11 Run Time: 08:14 Method: 8260B
File ID: 11M35644 Analyst: CMS
Workgroup (AAB#): WG219916 Cal ID: HPMS11 - 09-AUG-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Styrene		50.0	49.1	0.985	1.80	ug/L	
Tetrachloroethene		50.0	53.0	0.278	6.00	ug/L	
trans-1,3-Dichloropropene		50.0	52.6	0.418	5.10	ug/L	
Trichloroethene		50.0	53.6	0.256	7.10	ug/L	
Trichlorofluoromethane		50.0	59.8	0.571	19.7	ug/L	
m-,p-Xylene		100	106	0.601	5.80	ug/L	
o-Xylene		50.0	56.8	0.587	13.5	ug/L	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046916

Login Number: L0608289
Instrument ID: HPMS10
Workgroup (AAB#): WG219861

CCV Number: WG219860-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219860-02	NA	NA	261535	507225	706960
Upper Limit	NA	NA	523070	1014450	1413920
Lower Limit	NA	NA	130768	253613	353480
L0608289-04	1.00	01	222111	456217	634190
L0608289-05	1.00	01	213399	441760	615333
L0608289-06	1.00	01	216521	446318	613130
L0608289-07	1.00	01	215100	442904	608081
WG219861-01	1.00	01	242740	492961	691744
WG219861-02	1.00	01	251824	498568	684436
WG219861-03	1.00	01	248228	481031	664022

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

00046917

Login Number: L0608289
Instrument ID: HPMS11
Workgroup (AAB#): WG219916

CCV Number: WG219914-02
CAL ID: HPMS11 - 09-AUG-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219914-02	NA	NA	433512	742183	932520
Upper Limit	NA	NA	867024	1484366	1865040
Lower Limit	NA	NA	216756	371092	466260
L0608289-01	1.00	01	372183	707505	929304
L0608289-02	1.00	01	362339	683439	887619
L0608289-03	1.00	01	338493	628276	823256
L0608289-08	1.00	01	338842	632076	832067
WG219916-01	1.00	01	353356	657704	864344
WG219916-02	1.00	01	406508	710285	893745

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046918

Login Number: L0608289
Instrument ID: HPMS10
Workgroup (AAB#): WG219861

CCV Number: WG219860-02
CAL ID: HPMS10 - 15-JUL-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219860-02	NA	NA	15.52	12.55	8.71
Upper Limit	NA	NA	16.02	13.05	9.21
Lower Limit	NA	NA	15.02	12.05	8.21
L0608289-04	1.00	01	15.52	12.55	8.71
L0608289-05	1.00	01	15.52	12.55	8.71
L0608289-06	1.00	01	15.52	12.55	8.71
L0608289-07	1.00	01	15.52	12.55	8.71
WG219861-01	1.00	01	15.52	12.55	8.71
WG219861-02	1.00	01	15.52	12.55	8.71
WG219861-03	1.00	01	15.52	12.55	8.71

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON ENVIRONMENTAL SERVICES
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00046919

Login Number: L0608289
Instrument ID: HPMS11
Workgroup (AAB#): WG219916

CCV Number: WG219914-02
CAL ID: HPMS11-09-AUG-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG219914-02	NA	NA	16.47	13.66	10.04
Upper Limit	NA	NA	16.97	14.16	10.54
Lower Limit	NA	NA	15.97	13.16	9.54
L0608289-01	1.00	01	16.466	13.664	10.041
L0608289-02	1.00	01	16.466	13.664	10.04
L0608289-03	1.00	01	16.466	13.664	10.04
L0608289-08	1.00	01	16.466	13.664	10.04
WG219916-01	1.00	01	16.466	13.664	10.041
WG219916-02	1.00	01	16.466	13.664	10.04

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Chlorobenzene-d5
IS-3 - Fluorobenzene

Underline = Response outside limits

KEMRON Environmental Services
Data Checklist

00046920

Date: 27 - MAR - 2006

Analyst: JLS

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Analytical Workgroups: WG209269

Runlog ID number:	9527
System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	NA
Narrative Summary	NA
Results Reporting/Data Qualifiers	NA
Client Data Package Assembly	NA
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
27 - MAR - 2006



Secondary Reviewer:
29 - MAR - 2006



Generated: MAR - 29 - 2006 15:32:38

KEMRON Environmental Services Data Checklist

00046921

Date: 15 - AUG - 2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 11780
 Analytical Workgroups: WG219977

System Performance Check	NA
BFB	NA
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Excel Spreadsheets	X
Case Narrative	X
Narrative Summary	NA
Results Reporting/Data Qualifiers	X
Client Data Package Assembly	X
Check for Completeness	X
Primary Reviewer	JLS
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
16 - AUG - 2006



Secondary Reviewer:
17 - AUG - 2006



Generated: AUG -17 -2006 09:29:51

KEMRON Environmental Services

Instrument Run Log

00046922

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103

Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT

Workgroups: WG209269

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3094	WG209269-01 50ug/ml STD	NA	1	1	STD115796	03/27/06 09:47
2	16G3095	WG209269-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 10:06
3	16G3098	WG209269-01 .1ug/ml STD	NA	1	1	STD11579	03/27/06 12:52
4	16G3099	WG209269-02 1ug/ml STD	NA	1	1	STD11579	03/27/06 13:06
5	16G3100	WG209269-03 10ug/ml STD	NA	1	1	STD11579	03/27/06 13:20
6	16G3101	WG209269-04 20ug/ml STD	NA	1	1	STD11579	03/27/06 13:34
7	16G3102	WG209269-05 50ug/ml STD	NA	1	1	STD11579	03/27/06 13:48
8	16G3103	WG209269-06 100ug/ml STD	NA	1	1	STD11579	03/27/06 14:02
9	16G3104	WG209269-07 200ug/ml STD	NA	1	1	STD11579	03/27/06 14:16
10	16G3105	WG209269-08 300ug/ml STD	NA	1	1	STD11579	03/27/06 14:30
11	16G3106	RINSE	NA	1	1		03/27/06 14:44
12	16G3107	RINSE	NA	1	1		03/27/06 14:58
13	16G3108	WG209269-09 20ug/ml STD	NA	1	1	STD11579	03/27/06 15:12
14	16G3109	WG209270-01 50ug/ml STD	NA	1	1	STD11579	03/27/06 15:34
15	16G3110	WG209306-01 BLANK	NA	1	1		03/27/06 15:50
16	16G3111	WG209306-02 20ug/ml LCS	NA	1	1	STD11579	03/27/06 16:04
17	16G3113	L0603426-01 A	NA	1	1		03/27/06 17:04
18	16G3114	L0603426-02 A	NA	1	1		03/27/06 17:18
19	16G3115	L0603426-03 A	NA	1	1		03/27/06 17:32
20	16G3116	L0603426-04 A	NA	1	1		03/27/06 17:46
21	16G3117	RINSE	NA	1	1		03/27/06 18:00
22	16G3118	RINSE	NA	1	1		03/27/06 18:14

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X		Check Standard Failure	
File ID: 16G3094				
2				
File ID: 16G3095				
Run ICAL.				
17	X			

Approved: March 29, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046923

Instrument: HP16 Dataset: 032706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Internal Standard: NA Surrogate Standard: NA
 CCV: SV13136/SV15103 LCS: SV13136/SV15103 MS/MSD: SV13136/SV15103
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG209269

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G3113				
No ending ccv.				
18	X			
File ID: 16G3114				
No ending ccv.				
19	X			
File ID: 16G3115				
No ending ccv.				
20	X			
File ID: 16G3116				
No ending ccv.				

Approved: March 29, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00046924

Instrument: HP16 Dataset: 081506
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 151

Internal Standard: NA Surrogate Standard: NA
 CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG219977

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G3704	WG219975-01 50ug/ml STD	NA	1	1	STD11579	08/15/06 12:21
2	16G3705	WG219977-01 BLANK	NA	1	1		08/15/06 12:36
3	16G3706	WG219977-02 20ug/ml LCS	NA	1	1	STD11579	08/15/06 12:50
4	16G3707	WG219977-03 20ug/ml LCS DUP	NA	1	1	STD11579	08/15/06 13:04
5	16G3708	L0608044-03 B 100X	7	1	100		08/15/06 13:24
6	16G3709	L0608044-08 B 50X	7	1	50		08/15/06 13:38
7	16G3710	L0608154-03 B 100X	7	1	100		08/15/06 13:52
8	16G3711	L0608154-05 B 100X	7	1	100		08/15/06 14:06
9	16G3712	L0608184-01 B 10X	7	1	10		08/15/06 14:20
10	16G3713	L0608184-03 B 100X	7	1	100		08/15/06 14:34
11	16G3714	L0608184-05 B 100X	7	1	100		08/15/06 14:48
12	16G3715	WG219975-02 50ug/ml STD	NA	1	1	STD11579	08/15/06 15:02
13	16G3716	L0608240-04 A	7	1	1		08/15/06 15:18
14	16G3717	L0608240-05 A	10	1	1		08/15/06 15:32
15	16G3718	L0608240-06 A	10	1	1		08/15/06 15:46
16	16G3719	L0608240-07 A	7	1	1		08/15/06 16:00
17	16G3720	L0608289-01 A	7	1	1		08/15/06 16:14
18	16G3721	L0608289-02 A	7	1	1		08/15/06 16:28
19	16G3722	L0608289-03 A	7	1	1		08/15/06 16:42
20	16G3723	L0608330-01 A	7	1	1		08/15/06 16:56
21	16G3724	L0608330-03 A	7	1	1		08/15/06 17:10
22	16G3725	L0608330-05 A	7	1	1		08/15/06 17:24
23	16G3726	RINSE	NA	1	1		08/15/06 17:38
24	16G3727	RINSE	NA	1	1		08/15/06 17:52
25	16G3728	WG219975-03 50ug/ml STD	NA	1	1	STD11579	08/15/06 18:06
26	16G3729	L0608330-07 A	7	1	1		08/15/06 18:20
27	16G3730	L0608330-08 A	7	1	1		08/15/06 18:34
28	16G3731	L0608330-09 A	7	1	1		08/15/06 18:48
29	16G3732	RINSE	NA	1	1		08/15/06 19:02
30	16G3733	RINSE	NA	1	1		08/15/06 19:16
31	16G3734	WG219975-04 50ug/ml STD	NA	1	1	STD11579	08/15/06 19:30

Approved: August 17, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00046925

Instrument: HP16 Dataset: 081506
Analyst1: JLS Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 7
Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 151

Internal Standard: NA Surrogate Standard: NA
CCV: STD11579/STD13954 LCS: STD11579/STD13954 MS/MSD: STD11579/STD13954
Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
Workgroups: WG219977

Comments

Seq.	Rerun	Dil.	Reason	Analytes
26	X	10	Over Calibration Range	Methane
File ID:16G3729				

Approved: August 17, 2006

Page: 2 of 2



KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046926

Analytical Method: RSK175
Login Number: L0608289

AAB#: WG219977

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
35BWW01	08/10/06	08/11/06	08/15/06	14	5.34	08/15/06	14	5.34	
LHSMW59	08/10/06	08/11/06	08/15/06	14	5.24	08/15/06	14	5.24	
EQUIPMENT RINSE	08/10/06	08/11/06	08/15/06	14	5.22	08/15/06	14	5.22	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046927

Login Number: L0608289
Blank File ID: 16G3705
Date Analyzed: 08/15/06
Time Analyzed: 12:36
Analyst: JLS

Work Group: WG219977
Blank Sample ID: WG219977-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219977-02	16G3706	08/15/06 12:50	01
LCS2	WG219977-03	16G3707	08/15/06 13:04	01
35BWW01	L0608289-01	16G3720	08/15/06 16:14	01
LHSMW59	L0608289-02	16G3721	08/15/06 16:28	01
EQUIPMENT RINSE	L0608289-03	16G3722	08/15/06 16:42	01

METHOD BLANK REPORT

00046928

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219977-01
Instrument ID: HP16 Run Time: 12:36 Prep Method: 5021
File ID: 16G3705 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.250	1	U
ethene	0.250	0.500	0.250	1	U
ethane	0.250	0.500	0.250	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046929

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219977-02
Instrument ID: HP16 Run Time: 12:50 Prep Method: 5021
File ID: 16G3706 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG219977 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 27-MAR-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
methane	34.3	31.6	92.2	56 - 140	
ethene	59.9	54.5	91.0	56 - 140	
ethane	64.2	59.5	92.8	56 - 137	

LABORATORY CONTROL SAMPLE (LCS)

00046930

Login Number: L0608289 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG219977 Units: ug/L
 Sample ID: WG219977-02 LCS File ID: 16G3706 Run Date: 08/15/2006 12:50
 Sample ID: WG219977-03 LCS2 File ID: 16G3707 Run Date: 08/15/2006 13:04

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	31.6	92.2	34.3	34.3	100	8.16	56 - 140	40	
ethene	59.9	54.5	91.0	59.9	60.3	101	10.1	56 - 140	40	
ethane	64.2	59.5	92.8	64.2	64.2	100	7.60	56 - 137	40	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

00046931

Login Number: L0608289
Analytical Method: RSK175
ICAL Workgroup: WG209269

Instrument ID: HP16
Initial Calibration Date: 27-MAR-06

Analyte		AVG RF	% RSD	R2	QUAD
ethane		131700	9.70	0.997	
ethene		126600	7.29	0.997	
methane		91930	64.3	0.997	

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608289 Instrument ID: HP16 00046932
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-01			WG209269-02		
	CONC	RESP	RF	CONC	RESP	RF
ethane	0.100	14314	143100	1.00	155076	155100
ethene	0.100	12296	123000	1.00	143937	143900
methane	0.100	23610	236100	1.00	95195	95190

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608289
Analytical Method: RSK175

Instrument ID: HP16 00046933
Initial Calibration Date: 27-MAR-06

Analyte	WG209269-03			WG209269-04		
	CONC	RESP	RF	CONC	RESP	RF
ethane	10.0	1157044	115700	20.0	2464700	123200
ethene	10.0	1143709	114400	20.0	2436804	121800
methane	10.0	648171	64820	20.0	1314765	65740

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608289
Analytical Method: RSK175

Instrument ID: HP16 00046934
Initial Calibration Date: 27-MAR-06

Analyte	WG209269-05			WG209269-06		
	CONC	RESP	RF	CONC	RESP	RF
ethane	50.0	6342718	126900	100	12548213	125500
ethene	50.0	6267079	125300	100	12381421	123800
methane	50.0	3373362	67470	100	6627355	66270

KEMRON ENVIRONMENTAL SERVICES
INITIAL CALIBRATION

Login Number: L0608289 Instrument ID: HP16 00046935
Analytical Method: RSK175 Initial Calibration Date: 27-MAR-06

Analyte	WG209269-07			WG209269-08		
	CONC	RESP	RF	CONC	RESP	RF
ethane	200	27671040	138400	300	37840789	126100
ethene	200	27247290	136200	300	37181559	123900
methane	200	14639720	73200	300	19991743	66640

CONTINUING CALIBRATION REPORT

00046936

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219975-01
Instrument ID: HP16 Run Time: 12:21 Method: RSK175
File ID: 16G3704 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	75.2	60100	12.1	ug/L	
ethene		150	134	114000	10.8	ug/L	
ethane		160	142	114000	11.7	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046937

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219975-02
Instrument ID: HP16 Run Time: 15:02 Method: RSK175
File ID: 16G3715 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	87.4	69900	2.10	ug/L	
ethene		150	153	130000	2.20	ug/L	
ethane		160	164	132000	2.20	ug/L	

* Exceeds %D Limit

CONTINUING CALIBRATION REPORT

00046938

Login Number: L0608289 Run Date: 08/15/2006 Sample ID: WG219975-03
Instrument ID: HP16 Run Time: 18:06 Method: RSK175
File ID: 16G3728 Analvst: JLS
Workgroup (AAB#): WG219977 Cal ID: HP16 - 27-MAR-06

Analyte		Expected	Found	RF	%D	UNITS	Q
methane		85.6	79.3	63400	7.40	ug/L	
ethene		150	139	118000	7.40	ug/L	
ethane		160	150	121000	6.80	ug/L	

* Exceeds %D Limit

Inorganic QA/QC

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046940

Analytical Method: 300.0
Login Number: L0608289

AAB#: WG219809

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
35BWW01	08/10/06	08/11/06	08/11/06	2	1.62	08/11/06	2	1.62	
LHSMW59	08/10/06	08/11/06	08/11/06	2	1.19	08/11/06	2	1.19	
LHSMW59	08/10/06	08/11/06	08/11/06	2	1.20	08/11/06	2	1.20	
EQUIPMENT RINSE	08/10/06	08/11/06	08/11/06	2	1.42	08/11/06	2	1.42	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046941

Login Number: L0608289
Blank File ID: I2081106.12
Date Analyzed: 08/11/06
Time Analyzed: 14:40
Analyst: JWR

Work Group: WG219809
Blank Sample ID: WG219809-01
Instrument ID: IC2
Method: 300.0

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219809-02	I2081106.13	08/11/06 14:57	01
LHSMW59	L0608289-02	I2081106.14	08/11/06 15:15	DL01
LHSMW59	L0608289-02	I2081106.15	08/11/06 15:32	DL02
DUP	WG219809-06	I2081106.20	08/11/06 16:59	01
EQUIPMENT RINSE	L0608289-03	I2081106.36	08/11/06 21:37	01
35BWW01	L0608289-01	I2081106.41	08/11/06 23:04	DL01
DUP	WG219809-04	I2081106.44	08/11/06 23:57	DL01

METHOD BLANK REPORT

00046942

Login Number: L0608289 Run Date: 08/11/2006 Sample ID: WG219809-01
Instrument ID: IC2 Run Time: 14:40 Prep Method: 300.0
File ID: I2081106.12 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219809 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Nitrate	0.100	0.600	0.100	1	U
Nitrite	0.100	0.400	0.100	1	U
Sulfate	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046943

Login Number: L0608289 Run Date: 08/11/2006 Sample ID: WG219809-02
Instrument ID: IC2 Run Time: 14:57 Prep Method: 300.0
File ID: I2081106.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG219809 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-11-JUL-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	6.01	100	90 - 110	
Nitrate	4.07	4.10	101	90 - 110	
Nitrite	3.65	3.67	100	90 - 110	
Sulfate	30.0	29.5	98.2	90 - 110	

DUPLICATE (DUP)

00046944

Sample Ref: L0608289-02 Cal ID: IC2 - Worknum: WG219809
Instrument ID: IC2 Method: 9056
Sample ID: WG219809-03 File ID: I2081106.14 Dil: 4 Matrix: WATER
Duplicate ID: WG219809-04 File ID: I2081106.44 Dil: 4 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Chloride	107	107	0.224	20	
Nitrate	ND	ND	0	20	
Nitrite	ND	ND	0	20	
Sulfate	143	147	2.62	20	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

DUPLICATE (DUP)

00046945

Sample Ref: L0608292-02 Cal ID: IC2 - Worknum: WG219809
Instrument ID: IC2 Method: 9056
Sample ID: WG219809-05 File ID: I2081106.19 Dil: 1 Matrix: WATER
Duplicate ID: WG219809-06 File ID: I2081106.20 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Chloride	14.0	14.4	2.99	20	
Nitrate	3.15	3.24	2.79	20	
Nitrite	ND	ND	0	20	
Sulfate	13.4	13.0	2.63	20	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

CONTINUING CALIBRATION VERIFICATION (CCV)

00046946

Login Number: L0608289 Run Date: 08/11/2006 Sample ID: WG219810-01
Instrument ID: IC2 Run Time: 14:22 Method: 300.0
File ID: I2081106.11 Analyst: JWR
Workgroup (AAB#): WG219809 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.89	7.93	1.8	mg/L	
N03-N		4.0662	3.98	3.37	2.2	mg/L	
N02-N		3.6534	3.48	3.77	4.8	mg/L	
S04		30	29.6	10.6	1.4	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046947

Login Number: L0608289 Run Date: 08/11/2006 Sample ID: WG219810-02
Instrument ID: IC2 Run Time: 17:34 Method: 300.0
File ID: I2081106.22 Analyst: JWR
Workgroup (AAB#): WG219809 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.91	7.89	1.4	mg/L	
N03-N		4.0662	4.07	3.29	0	mg/L	
N02-N		3.6534	3.53	3.72	3.4	mg/L	
S04		30	29.7	10.6	1.2	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046948

Login Number: L0608289 Run Date: 08/11/2006 Sample ID: WG219810-03
Instrument ID: IC2 Run Time: 21:03 Method: 300.0
File ID: I2081106.34 Analyst: JWR
Workgroup (AAB#): WG219809 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.86	7.97	2.3	mg/L	
N03-N		4.0662	4.04	3.31	.6	mg/L	
N02-N		3.6534	3.58	3.66	2	mg/L	
S04		30	30.3	10.3	1	mg/L	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00046949

Login Number: L0608289 Run Date: 08/12/2006 Sample ID: WG219810-04
Instrument ID: IC2 Run Time: 00:14 Method: 300.0
File ID: I2081106.45 Analyst: JWR
Workgroup (AAB#): WG219809 Cal ID: IC2 - 11-JUL-06

Analyte		Expected	Found	RF	%D	UNITS	Q
Cl		6	5.87	7.96	2.2	mg/L	
N03-N		4.0662	4.07	3.29	.1	mg/L	
N02-N		3.6534	3.60	3.64	1.4	mg/L	
S04		30	30.1	10.4	.2	mg/L	

* Exceeds %D Criteria

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00046950

Analytical Method: 415.1
Login Number: L0608289

AAB#: WG219907

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
35BWW01	08/10/06	08/11/06	08/14/06	28	4.46	08/14/06	28	4.46	
LHSMW59	08/10/06	08/11/06	08/14/06	28	4.36	08/14/06	28	4.36	
EQUIPMENT RINSE	08/10/06	08/11/06	08/14/06	28	4.35	08/14/06	28	4.35	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00046951

Login Number: L0608289
 Blank File ID: TC08-14-2006.04
 Date Analyzed: 08/14/06
 Time Analyzed: 14:09
 Analyst: DIH

Work Group: WG219907
 Blank Sample ID: WG219907-01
 Instrument ID: TOC-VWP
 Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG219907-02	TC08-14-2006.05	08/14/06 14:22	01
LCS2	WG219907-03	TC08-14-2006.06	08/14/06 14:35	01
35BWW01	L0608289-01	TC08-14-2006.25	08/14/06 19:05	DL01
35BWW01	L0608289-01	TC08-14-2006.25	08/14/06 19:05	DL01
LHSMW59	L0608289-02	TC08-14-2006.26	08/14/06 19:20	01
LHSMW59	L0608289-02	TC08-14-2006.26	08/14/06 19:20	01
EQUIPMENT RINSE	L0608289-03	TC08-14-2006.29	08/14/06 19:55	01
EQUIPMENT RINSE	L0608289-03	TC08-14-2006.29	08/14/06 19:55	01
DUP	WG219907-05	TC08-14-2006.31	08/14/06 20:27	01

METHOD BLANK REPORT

00046952

Login Number: L0608289 Run Date: 08/14/2006 Sample ID: WG219907-01
Instrument ID: TOC-VWP Run Time: 14:09 Prep Method: 415.1
File ID: TC08-14-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG219907 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	1	U

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00046953

Login Number: L0608289 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG219907 Units: mg/L
Sample ID: WG219907-02 LCS File ID: TC08-14-2006.05 Run Date: 08/14/2006 14:22
Sample ID: WG219907-03 LCS2 File ID: TC08-14-2006.06 Run Date: 08/14/2006 14:35

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.5	90.2	25.0	24.5	97.8	8.13	85 - 115	15	


Shaw® Shaw Environmental, Inc.

 3010 Briarpark Drive, Suite 4N
 Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10024

Laboratory Name: Kemron		Address: 156 Starlite Marrietta, OH		Contact: Stephanie Massburg												
Project Name: LHAAP		Project Location: Karnack, TX		Analysis and Method Desired (Indicate separate containers)												
Project No.: 845714		Project Contact: Diane Meyer		Project Telephone No.: (713) 996-4408												
Point of contact: Allen Willmore		Project Manager/Supervisor: Praveen Srivastav														
Telephone No.: (713) 247-9292																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOCs 40 mL Vol	TBC 600 mL 91055	Anions 500 mL HDPC	D-Gases 40 mL Vol				Remarks
1	35BWW01	8/16/06	8:10		✓	W	35BWW01	6	2	1	1	2				Turbid Sample
2	LHSMW59	8/10/06	10:45		✓	W	LHSMW59	8	3	1	1	3				
3	EQUIPMENT RINSE	8/10/06	11:30		✓	W	EQUIPMENT RINSE	8	3	1	1	3				
4																
5																
6																
7																
8																
9																
10																
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions								
<i>M. H. C.</i>		8/10/06 11:45		<i>Stephanie Massburg</i>		8/10/06 11:50		C/C Sealed OKD intact <i>JLL</i>								
				<i>Jennifer Donthues</i>		8/10/06 10:21		FedEx Airbill No.:								
				Laboratory				Sampler's Signature								
TAT: ☐ Standard ☒ Rush Due: ☐ Seals Intact? ☐ Y ☐ N Received Good Condition ☐ Y ☐ N ☐ Cold																

White - Lab Copy Canary - Field Copy Pink - File Copy

SAMPLE RECEIPT FORM

B2705

00046955

Date: 8-11-06 Client: Shaw
 Shipped By: () Fed-Ex (x) UPS () DHL () KEMRON () Client () Other 10121
 Opened By: [Signature]
 Logged By: [Signature] Login # L06 8-289
 IR Temp Gun: () D (x) G

156 STARLITE DRIVE
 MARIETTA, OH
 45750
 (740) 373-4071

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	799	4	1266V 7250190128778		
2					
3					
4					
5					
6					

Were all coolers sealed? (Y) N N/A
 Were custody seals used on all coolers? (Y) N N/A
 Were custody seals intact? (Y) N N/A
 Was visible ice present? (Y) N N/A
 Were all coolers in the temperature range of 2-6C? (>6C*) (Y) N N/A
 Were the samples frozen?* Y (N) N/A
 Were COC papers provided? (Y) N N/A
 Were all sample containers intact?* (Y) N N/A
 Were all sample labels intact? (Y) N N/A
 Were all sample labels legible?* (Y) N N/A
 Did all sample labels match the COC?* (Y) N N/A
 Was the label information complete?* (Y) N N/A
 Were the correct containers used?* (Y) N N/A
 Were the correct preservatives added to water samples?* (Y) N N/A
 Was the pH tested on preserved water samples? (Y) N N/A
 Were pH ranges acceptable?* (Y) N N/A
 Was sufficient amount of sample provided?* (Y) N N/A
 Were bubbles present in VOA samples?* Y (N) N/A
 Were COC's signed and dated? (Y) N N/A
 Did samples arrive before hold time expired?* (Y) N N/A
 Are discrepancy forms attached? (Y) N N/A JS
 *Requires a discrepancy form

Comments: _____

CRF #1
 Revised 8/22/03

KEMRON Environmental Services
Internal Chain of Custody Report

00046956

Login: L0608289
Account: 2773
Project: 2773.025
Samples: 8
Due Date: 18-AUG-2006

Samplenum **Container ID** **Products**
L0608289-01 261478 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	L1	WET	11-AUG-2006 11:42	JWR	JS

Samplenum **Container ID** **Products**
L0608289-01 261479 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-01 261480 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-01 261481 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046957

Login: L0608289
Account: 2773
Project: 2773.025
Samples: 8
Due Date: 18-AUG-2006

Samplenum **Container ID** **Products**
L0608289-02 261482 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	L1	WET	11-AUG-2006 11:42	JWR	JS

Samplenum **Container ID** **Products**
L0608289-02 261483 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-02 261484 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Samplenum **Container ID** **Products**
L0608289-02 261485 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

KEMRON Environmental Services
Internal Chain of Custody Report

00046958

Login: L0608289
Account: 2773
Project: 2773.025
Samples: 8
Due Date: 18-AUG-2006

Samplenum **Container ID** **Products**
L0608289-03 261486 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	L1	WET	11-AUG-2006 11:42	JWR	JS

Samplenum **Container ID** **Products**
L0608289-03 261487 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-03 261488

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-03 261489 RSK175 RSK175-HP16

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	V1	ORG4	15-AUG-2006 13:32	JLS	JS

KEMRON Environmental Services
Internal Chain of Custody Report

00046959

Login: L0608289
Account: 2773
Project: 2773.025
Samples: 8
Due Date: 18-AUG-2006

Samplenum **Container ID** **Products**
L0608289-03 261490 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	
2	ANALYZ	W1	WET	14-AUG-2006 07:02	DIH	JS
3	STORE	WET	A1	16-AUG-2006 08:21	BRG	DIH

Samplenum **Container ID** **Products**
L0608289-04 261491 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-05 261492 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-06 261493 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

KEMRON Environmental Services
Internal Chain of Custody Report

00046960

Login: L0608289
Account: 2773
Project: 2773.025
Samples: 8
Due Date: 18-AUG-2006

Samplenum **Container ID** **Products**
L0608289-07 261494 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Samplenum **Container ID** **Products**
L0608289-08 261495 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			11-AUG-2006 11:37	JS	

Shaw Environmental & Infrastructure, Inc.



Technology Applications

312 Directors Drive

Knoxville, TN 37923

Phone: 865.690.3211

FAX: 865.694.9573

STATEMENT OF ANALYSIS

Client: Longhorn Army Ammunition Plant

Date: September 14, 2006

Contact: Allen Willmore/Diane Meyer

Project No. 845714

Client Project Name / ID:	Longhorn Army Ammunition Plant.
Date Received by Lab:	August 8, 9, 10, 11 and 14, 2006
Number of Samples:	Fourteen (14)
Sample Type:	Groundwater

1.0 Introduction

On August 8, 9, 10, 11 and 14, 2006 a total of fourteen (14) groundwater samples arrived at Shaw Environmental, Inc. Technology Development Laboratory in Knoxville, Tennessee. The microbial communities from the groundwater samples were screened for the presence of *Dehalococcoides* species.

2.0 Overview of Analytical Methodology

A Roche Real-Time LightCycler PCR instrument was used to determine the presence of and quantify *Dehalococcoides* sp. in groundwater. All cells (animals, plants, fungi, and bacteria) contain DNA that allows for their identification. The polymerase chain reaction (PCR) is a method of copying a specific sequence of DNA into a quantity that can be detected. If the sequence in *Dehalococcoides* sp. is located, the reaction creates multiple copies. During this reaction a genetic fluorescent tag specific for the region attaches to each copied strand of DNA, which is then detected by the instrument. A *Dehalococcoides* species DNA (positive control), a *Dehalococcoides*-negative bacterial species (negative control), and no template control (blank) are analyzed to verify the test results.

3.0 Results

The microbial communities in the groundwater samples were screened for the presence of *Dehalococcoides* species. The results are shown in the Table 1 below.

Table 1. *Dehalococcoides* Results

Sample No.	Shaw Sample No.	Concentration (cells / milliliter)
IZWW05	10549	1.0×10^1 U
67WW01/G4WW01	10550	1.0×10^1 U
67WW02	10551	1.1×10^2
67WW06	10584	6.3×10^2
67WW07	10585	1.0×10^1 U
LHSMW58	10586	1.8×10^1 U
67WW03	10587	3.3×10^3 U
35BWW01	10577	3.3×10^1 U
LHSMW59	10578	4.2×10^1
12WW20	10579	1.0×10^1 U
12WW21	10580	1.6×10^2
12WW02	10581	1.5×10^3
12WW01	10582	8.2×10^3
12WW05	10583	8.9×10^1
Dehalococcoides – Positive Control	--	1.0×10^6
Negative (no DNA template control)	--	$<1.0 \times 10^1$

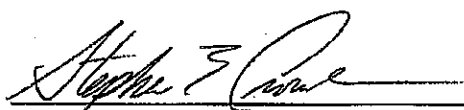
U: Less than method detection limit.

4.0 Quality Control (QC)

Standard laboratory QC was performed.

Analyst: Robert Mayer

Reviewed and Approved



Stephen Crouch
Shaw Environmental, Inc.



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3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10020

Laboratory Name: Shaw		Address: 304 Directors Dr. Knoxville, TN		Contact: Robert Mayer	
Project Name: LHAPP	Project Location: Karnack, Tx	Project Contact: Allen Willmore		Analysis and Method Desired (Indicate separate containers)	
Project No.: 245714.0480101	Project Telephone No.: (713) 996-4586	Project Manager/Supervisor: Praveen Srivastav		Number of Containers: 1	
Point of contact: Diane Meyer		Telephone No.: (713) 996-4408		Remarks: 702 10549	
Sample Number	Date	Time	Comp	Grab	Matrix
1	8/8/06	11:35			W
2					
3					
4					
5					
6					
7					
8					
9					
10					
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)	
<i>[Signature]</i>		8/8/06 12:25		<i>[Signature]</i>	
<i>[Signature]</i>		8/8/06 12:46		<i>[Signature]</i>	
TAT: ☒ Standard ☐ Rush Due: ☐		Seals Intact? ☒ Y ☐ N		Received Good Condition ☐ Y ☐ N ☐ Cold	
FedEx Airbill No.:		Sampler's Signature			

White - Lab Copy Canary - Field Copy Pink - File Copy

~~156 Starlite Drive NW~~
~~Marietta, OH 45750~~ (N)

Kemtron
ENVIRONMENTAL SERVICES

Phone: 740-373-4071

Fax: 740-373-4835

CHAIN-OF-CUSTODY RECORD

[illegible]

***Homogenize all composite samples prior to analysis**



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CHAIN-OF-CUSTODY

No. 10022

Laboratory Name: Shaw				Address: 304 Directors Dr. Knoxville, TN				Contact: Robert Mayer			
Project Name LHAAP		Project Location Kannack, TX		Analysis and Method Desired (Indicate separate containers)				Remarks			
Project No. 845714.0480101		Project Contact Allen Willmore		Project Telephone No. (713) 996-4586							
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastava									
Telephone No. (713) 996-4408											
Item	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers			
1	~~673~~ WW06	8/8/06	1650	-	-	W	673 WW06	1	BehavCoceals		
2	~~673~~ WW07	8/8/06	1650	-	-	W	673 WW07	1			
3	LHSMW058	8/9/06	1400	-	-	W	LHSMW058	1			
4	35BW003	8/9/06	1400	-	-	W	35BW003	1			
5	67FW003	8/9/06	1045	-	-	W	67FW003	1			
6	LHSMW062	8/9/06	1000	-	-	W	LHSMW062	1			
7											
8											
9											
10											
Transfers Relinquished By (Signature) <i>M. J. C. A.</i>				Date/Time 8/8/06 10:50		Transfers Accepted By (Signature) <i>Sebastian / 9/06</i>		Date/Time		Special Instructions	
TAT: <u>Standard</u> ☒ Rush Due: <u> </u>				Seals Intact? <u>Y</u> <u>N</u>		Received Good Condition <u>Y</u> <u>N</u>		Cold		FedEx Airbill No.:	
Laboratory Signature <i>[Signature]</i>				Laboratory Date/Time 8/9/06/10:30		Sampler's Signature		Sampler's Date/Time			

713
10584
10585
10586
10587
10588

00046965

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CHAIN-OF-CUSTODY

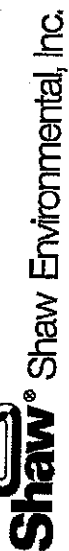
No. 10023

Laboratory Name: Shaw		Address: 304 Directors Dr. Knoxville, TN		Contact: Robert May Jr							
Project Name	Project Location	Project Contact		Analysis and Method Desired (Indicate separate containers)							
Project No. 845714.04801010	Allen Williams	Project Telephone No. (713) 247-9292									
Point of contact: Diane Maye		Project Manager/Supervisor: Praveen Sivastav									
Telephone No. (713) 996-4408											
Line #	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	Dehalococci	Special Instructions	Remarks
1	35BWW01	8/10/06	810		✓	W	35B WW01	1	1		Turbid Sample
2	LHSMW59	8/10/06	1045		✓	W	LHSMW59	1	1		
3											
4											
5											
6											
7											
8											
9											
10											
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions			
<i>Al. Herl</i>		8/10/06 11:45		<i>Sat Boesig</i>		8/10/06 11:50					
TAT: ☐ Standard ☒ Rush Due: _____		Seals Intact? ☐ Y ☐ N		Received Good Condition ☐ Y ☐ N		Cold		FedEx Airbill No.: _____			
Laboratory		<i>Robert May Jr</i>		Sampler's Signature		8/10/06 11:00					

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TPL
1057
10578



CHAIN-OF-CUSTODY

Contact: Robert Mayer

Address: 304 Directors Dr.
Knoxville, TN

Laboratory Name: Shaw

Project Name	Longhorn Army Ammunition	Project Location	Corrington, Tx
Project No.		Project Contact	
		Project Telephone No.	

Corroack, Tx
Project Telephone No.

Unit/Ch	Project Location	Project Contact	Project Telephone No.
		Conrack, Tx	

Project Name Longhorn Army Ammunition
Project No.

Point of contact:	945714, 64801010 Allen Willmore (713) 247-9292	Project Manager/Supervisor:
	Debra Meyer	

Project Manager/Supervisor: (713) 247-9292

Point of contact: 945714, 04801010 Allen Williams
Diane Meyer

Telephone No.	(713) 996-4408	Praveen Srivastav

Praveen Srivastava

Telephone No. (713) 991-4408

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Numl	Dch
1	12WWZ0	8/10/06	15:20		✓	W	12WWZ0	1	-
2	12WWZ1	8/10/06	17:30		✓	W	12WWZ1	1	-
3	12WWOZ	8/11/06	08:40		✓	W	12WWOZ	1	-
4	12WWO1	8/11/06	10:50		✓	W	12WWO1	1	-
5	12WWO5	8/11/06	13:45		✓	W	12WWO5	1	-
6		4/2/06							

[illegible][illegible][illegible]

Signature of (Signature)	Date/Time	Transfers Accepted By (Signature)	Date/Time	Special Instructions
M. J. McCa	8/11/06 1700			

[illegible]

04696

TAT: <u>Standard</u> ☒ <u>Rush</u> ☐ Due: <u> </u>		Seals Intact? <u>Y</u> ☐ <u>N</u> ☒		Received Good Condition <u>Y</u> ☐ <u>N</u> ☐ Cold <u> </u>	
Laboratory		Sampler's Signature		Date/Time <u>10/19/06 12:30</u>	

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1

**DATA EVALUATION REPORT
OF KEMRON REPORT NUMBERS
L0608183, L0608204, L0608240, L0608289 and L0608330
LONGHORN ARMY AMMUNITION PLANT
MONITORING FOR NATURAL ATTENUATION
SITES 12, 37 AND 67
KARNACK, TEXAS**

SHAW PROJECT NUMBER 845714

Prepared by

**Shaw Environmental, Inc.
3010 Briarpark Drive, Suite 4N
Houston, Texas 77042**

September 6, 2006

**DATA EVALUATION REPORT
MONITORING FOR NATURAL ATTENUATION
SITES 12, 37 AND 67
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS**

September 6, 2006

Approved by: Diane Meyer
Diane Meyer, Program Chemist

Date: 9/6/06

Table of Contents

List of Tables.....	i
Acronyms and Abbreviations.....	ii
1.0 Introduction.....	1-1
2.0 Volatiles.....	2-1
2.1 Initial and Continuing Calibration	2-1
2.2 Internal Standards.....	2-1
2.3 Accuracy	2-1
2.3.1 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries	2-1
2.3.2 Surrogate Recoveries.....	2-2
2.4 Precision	2-2
2.5 Representativeness	2-2
3.0 Dissolved Gases	3-1
3.1 Initial and Continuing Calibration	3-1
3.2 Accuracy	3-1
3.3 Precision	3-1
3.4 Representativeness	3-1
4.0 General Chemistry	4-1
4.1 Accuracy	4-1
4.2 Precision	4-1
4.3 Representativeness	4-1
5.0 Metals.....	5-1
5.1 Initial and Continuing Calibration	5-1
5.2 Accuracy	5-1
5.2.1 Matrix Spike/Matrix Spike Duplicate Recoveries	5-1
5.3 Precision	5-1
5.4 Representativeness	5-1
6.0 Technical Summary.....	6-1
6.1 Documentation.....	6-1
6.2 Completeness.....	6-1
6.3 Conclusion	6-1
7.0 References.....	7-1

List of Tables

Table 1-1	Chain-of-Custody Summary	1-2
Table 2-1	Laboratory Control Sample Recoveries.....	2-1
Table 2-2	Surrogate Recoveries.....	2-2
Table 2-3	Field Duplicate Comparison	2-3
Table 3-1	Field Duplicate Comparison	3-1
Table 4-1	Field Duplicate Comparison	4-1
Table 5-1	Matrix Spike/Matrix Spike Duplicate Recoveries	5-1
Table 5-2	Field Duplicate Comparison	5-2
Table 6-1	Data Validation Qualifier Definitions	6-1
Table 6-2	Data Validation Reason Code Definitions.....	6-2

Acronyms and Abbreviations

COC	chain of custody
IDL	instrument detection limit
LCS	laboratory control sample
LHAAP	Longhorn Army Ammunition Plant
MNA	Monitoring natural attenuation
MQL	method quantitation limit
MS	matrix spike
MSD	matrix spike duplicate
NFG	National Functional Guidelines
QA	quality assurance
QC	quality control
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
SQL	sample quantitation limit
TERC	Total Environmental Restoration Contract
TIC	total inorganic carbon
TOC	total organic carbon
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compounds

1.0 Introduction

Shaw Environmental, Inc. has performed a review of the laboratory data associated with sampling for Monitoring for Natural Attenuation (MNA) at Sites 12, 37, and 67 at Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas. **Table 1-1** provides a list of the samples collected, a sample identification number and laboratory sample number cross-references, sample matrix, chain of custody (COC) number, date collected, sample location, and analytical method performed for each sample.

The work was performed under the Total Environmental Restoration Contract (TERC), Number DACA56-94-D-0020, and Task Order 109. This Data Evaluation Report is a summary of the analytical data generated by Kemron Environmental Services, Marietta, Ohio.

The purpose of the analytical data review is to assess the effect of the overall analytical process on the usability of the data. The review involved comparing the analytical data summary forms, as submitted by the laboratory, to method requirements set forth in methods found in SW-846, 3rd Edition, Update III, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (USEPA, 1997) and further guidance from *EPA Contract Laboratory Programs National Functional Guidelines for Organic Data Review* (EPA, 1994) (NFG).

Additionally, surrogate spike recoveries, if applicable, matrix spike recoveries, and duplicate sample results were reviewed to determine any matrix interference. The data packages were reviewed by the Project Chemist using the process outlined in Standard Operating Procedure 1141, Analytical Data Quality Evaluation and Reporting (Shaw, revised 2002).

This data evaluation report discusses accuracy, precision, and representativeness for each type of analysis. **Sections 2.0** through **Section 5.0** contain a discussion of precision, accuracy, and representativeness for each method. **Section 6.0** of this report is a technical summary of the data review for the data group as a whole, including completeness. **Section 7.0** lists references.

Data qualifiers were added to the applicable results in the data package. A list of validation qualifiers and validation codes are shown in **Tables 6-1** and **Table 6-2**.

Table 1-1
Chain-of-Custody Summary

Sample I.D.	Lab Sample Number	Matrix	Chain of Custody Number	Date Collected	Methods
G7WW01/G4WW01	L0608183-01	Water	62298	8/7/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC ³ - EPA 415.1
G7WW02	L0608183-01	Water	62298	8/7/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
67WW05	L0608204	Water	10019	8/8/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
Trip Blank	L0608240-01	Water	10021	8/8/06	Volatiles- SW-846 8260B
67WW06	L0608240-02	Water	10021	8/8/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
67WW07	L0608240-03	Water	10021	8/8/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
LHSMW58	L0608240-04	Water	10021	8/9/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
35EWW03	L0608240-05	Water	10021	8/9/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1

Table 1-2 (continued)
Chain-of-Custody Summary

Sample I.D.	Lab Sample Number	Matrix	Chain of Custody Number	Date Collected	Methods SW-846 ¹
35BWW03-DUP	L0608240-06	Water	10021	8/9/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.11
67WW03	L0608240-07	Water	10021	8/9/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
LHSMW62	L0608240-08	Water	10021	8/9/06	TAL metals- SW 6010B, 6020, 7470A
LHSMW62	L0608240-09	Water	10021	8/9/06	Dissolved TAL metals –SW 6010B, 6020, 7470A
35BWW01	L0608289-01	Water	10024	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
LHSMW59	L0608289-02	Water	10024	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
Equipment rinse	L0608289-03	Water	10024	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
Trip blank	L0608289-04	Water	10024	8/10/06	Volatiles – SW-846 8260B
12WW20	L0608330-01	Water	10025	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
12WW20	L0608330-02	Water	10025	8/10/06	TAL metals – SW 6010B, 6020, 7470A Dissolved TAL metals –SW 6010B, 6020, 7470A

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Table 1-3 (continued)
Chain-of-Custody Summary

Sample I.D.	Lab Sample Number	Matrix	Chain of Custody Number	Date Collected	Methods SW-846 ¹
12WW20-DUP	L0608330-03	Water	10025	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1 TAL metals – SW 6010B, 6020, 7470A Dissolved TAL metals –SW 6010B, 6020, 7470A
12WW20-DUP	L0608330-04	Water	10025	8/10/06	
12WW21	L0608330-05	Water	10025	8/10/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1 TAL metals – SW 6010B, 6020, 7470A Dissolved TAL metals –SW 6010B, 6020, 7470A
12WW21	L0608330-06	Water	10025	8/10/06	
12WW02	L0608330-07	Water	10025	8/11/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
12WW01	L0608330-08	Water	10025	8/11/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
12WW05	L0608330-09	Water	10025	8/11/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1
Equipment rinse	L0608330-10	Water	10025	8/11/06	Volatiles- SW-846 8260B Dissolved Gases – EPA RSK 175 Anions – EPA 300.0 TOC/TIC - EPA 415.1

Notes and Abbreviations:

¹United States Environmental Protection Agency (USEPA), 1997, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Update III, Washington, D.C.

² United States Environmental Protection Agency (USEPA), 1983. *Methods for Chemical Analysis of Water and Wastes*, EPA-600/4-79-020. Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.

³TOC/TIC = total organic carbon and total inorganic carbon

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2.0 Volatiles

The aqueous samples, equipment blanks, and trip blanks were collected and analyzed for volatiles organic compounds (VOC) by SW-846 Method 8260B.

2.1 Initial and Continuing Calibration

The instrument tunes, initial and continuing calibrations were within established limits, except the following continuing calibrations exceeded 25% deviation.

- SDG L0608183: chloromethane (32.6%), trichlorofluoromethane (26.2%), and bromomethane (28.8%) and these analytes were qualified "UJ" with code 05B.
- SDG L0608289: acetone (26.5%) and detects were qualified "J" and non-detects were qualified "UJ" with code 05B.
- SDG L0608330: dichlorodifluoromethane (36.7%) and samples were qualified "UJ" with code 05B.

2.2 Internal Standards

The internal standards were within laboratory control limits.

2.3 Accuracy

The laboratory control sample (LCS), laboratory control sample duplicate (LCSD), and surrogates were within quality control limits, except as noted below. No matrix spike (MS) and matrix spike duplicate (MSD) was analyzed.

2.3.1 Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

The following analytes were outside quality control limits.

Table 2-1
Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

SDG	Analyte	LCS (%R)	LCSD (%R)	Control Limit (%)
L0608183	1,1,2-trichloro-1,2,2-trifluoroethane	63.6	NA	80 - 130
L0608183	1,2-dichloroethane	131	NA	80 - 129
L0608183	Bromodichloromethane	132	NA	80 - 131
L0608183	Chloromethane	138	NA	40 - 125
L0608183	Methyl acetate	137	NA	80 - 130
L0608204	Chloromethane	127	NA	40 - 125
L0608204	Methyl acetate	132	NA	80 - 130
L0608240	Chloromethane	121	127	40 - 125
L0608240	Methyl acetate	132	132	80 - 130

Table 2-1(continued)
Laboratory Control Sample/Laboratory Control Sample Duplicate Recoveries

SDG	Analyte	LCS (%R)	LCSD (%R)	Control Limit (%)
L0608289	Acetone	146	NA	40 - 142
L0608289	Methyl acetate	155	NA	80 - 130
L0608330	Methyl acetate	136	135	80 - 130

1,1,2-trichloro-1,2,2-trichlorofluoroethane in SDG L0608183 was qualified "UJL" for all samples with code 11A. For sample L0608183-01, the analyte 1,2-dichloroethane was qualified "JH" with code 11A. All other analytes with elevated recoveries were non-detect in the associated samples and data were not qualified.

2.3.2 Surrogate Recoveries

The following analytes were outside quality control limits.

Table 2-2
Surrogate Recoveries

SDG	Sample	Surrogate	%Recovery	Control Limit (%)
L0608183	L0608183-01	1,2-dichloroethane-d4	126	80 - 120
L0608183	L0608183-02	1,2-dichloroethane-d4	128	80 - 120
L0608240	L0608240-04	1,2-dichloroethane-d4	121	80 - 120
L0608240	L0608240-05	1,2-dichloroethane-d4	122	80 - 120
L0608240	L0608240-06	1,2-dichloroethane-d4	122	80 - 120
L0608240	L0608240-07	1,2-dichloroethane-d4	121	80 - 120
L0608330	L0608330-05	1,2-dichloroethane-d4	121	80 - 120
L0608330	L0608330-10	1,2-dichloroethane-d4	122	80 - 120

Detected results were qualified "JH" with code 07A. The non-detects were not qualified.

2.4 Precision

The LCS/LSCD relative percent (RPD) values were within quality control limits.

2.5 Representativeness

The method blank for batch SDG L0608204 contained 1,2,4-trichlorobenzene at 0.223 J µg/L, but all sample results were non-detect. All other method blanks were free of contamination. One equipment blank contained acetone at 3.82 µg/L and methylene chloride at 0.518 µg/L; the second equipment blank contained acetone at 4.13 µg/L and methylene chloride at 0.385 µg/L. None of the samples contained methylene chloride. However, some samples contained acetone within 10 times the blank concentration and were qualified "B" with validation code 06C. Some trip blanks contained low levels of methylene chloride. All samples were non-detects for methylene chloride.

Two QC replicate samples were submitted. **Table 2-3** shows the field duplicate comparison. All analytes with concentration > five times the method quantitation limit (MQL) were compared

to a $RPD \leq 35\%$. For analytes < 5 MQL and the difference between the two results was compared to 2.0 times the sample quantitation limit (SQL).

Table 2-3
Field Duplicate Comparison

Analyte	Result – µg/L	Result – µg/L	RPD %	Qualifier
	35BWW03	35BWW03DUP		
Acetone	8.98	9.77	8.4	None
	12WW20	12WW20DUP		
Cis-1,2-Dichloroethene	0.615	0.641	< 2 SQL	None
Trichloroethene	0.704	0.715	< 2 SQL	None

None of the volatiles samples were qualified based on field duplicate disagreement. The samples were analyzed within the 14 day holding time.

3.0 Dissolved Gases

The water samples and equipment blank were collected and analyzed for dissolved gases (methane, ethene, and ethane) by EPA Method RSK 175.

3.1 Initial and Continuing Calibration

The initial and continuing calibrations were within established limits.

3.2 Accuracy

The LCS and LCSD were within quality control limits.

3.3 Precision

The LCS/LCSD RPD values were within quality control limits.

3.4 Representativeness

The method blanks and equipment blanks contained low levels of methane. Most samples contained methane at concentrations > 5 times these blanks concentrations and were not qualified. However, a few samples were < 5 times the blank concentrations and were "B" qualified with codes 06A and 06C.

Two QC replicate samples were submitted. **Table 3-1** shows the field duplicate comparison. All analyte with concentration > five times the method quantitation limit (MQL) were compared to a RPD $\leq$ 35%. For analytes < 5 MQL and the difference between the two results was compared to 2.0 times the sample quantitation limit (SQL).

Table 3-1
Field Duplicate Comparison

Analyte	Result – µg/L	Result – µg/L	RPD %	Qualifier
	35BWW03	35BWW03DUP		
Methane	117	110	6.2	None
Ethene	1.90	1.82	< 2 SQL	None
	12WW20	12WW20DUP		
Methane	4.52	4.28	5.4	None

None of the dissolved gases samples were qualified based on field duplicate disagreement. The samples were analyzed within the 14 day holding time.

4.0 General Chemistry

The water samples and equipment blank were collected and analyzed for the following general chemistry parameters:

- Anions – chloride, sulfate, nitrate, and nitrite EPA method 300.0
- Total organic carbon (TOC) and total inorganic carbon (TIC) by EPA method 415.1

4.1 Accuracy

The LCS and LCSD were within quality control limits.

4.2 Precision

The LCS/LCSD RPD values were within quality control limits.

4.3 Representativeness

The method blanks were free of contamination. One equipment blank contained TOC at 0.523 mg/L. All associated samples were non-detects. The other equipment blank was free of contamination.

One QC replicate sample was submitted. **Table 4-1** shows the field duplicate comparison. All analyte with concentration > five times the method quantitation limit (MQL) were compared to a $RPD \leq 35\%$. For analytes < 5 MQL and the difference between the two results was compared to 2.0 times the sample quantitation limit (SQL).

Table 4-1
Field Duplicate Comparison

Analyte	Result – µg/L	Result – µg/L	RPD %	Qualifier
	35BWW03	35BWW03DUP		
Chloride	78.8	77.6	1.5	None
Sulfate	4.81	8.21	52.2	J17
TOC	12.5	13.1	4.7	None
TIC	9.09	8.34	8.6	None
	12WW20	12WW20DUP		
Chloride	290	294	1.4	None
Sulfate	173	172	0.6	None
TOC	3.51	3.70	8.6	None
TIC	9.31	11.2	9.0	None

Sulfate results for all samples in SDG L0608240 were qualified "J" with validation code 17.
The samples were analyzed within the 28 day holding time.

5.0 Metals

Selected water samples were collected and analyzed for target analyte metals (TAL) by SW-846 Method 6010B, 6020, and 7470. They were analyzed for both total and dissolved metal concentrations.

5.1 Initial and Continuing Calibration

The initial and continuing calibrations were within established limits. The interference check standard was within QC limits.

5.2 Accuracy

The LCS, MS, and MSD were within quality control limits, except as noted below.

5.2.1 Matrix Spike/Matrix Spike Duplicate Recoveries

The following analytes were outside quality control limits.

Table 5-1
Matrix Spike/Matrix Spike Duplicate Recoveries

	Analyte	MS (%R)	MSD (%R)	Control Limits (%)
Total	Calcium	108	30.4	75 - 125
Total	Magnesium	132	81.5	75 - 125
Dissolved	Calcium	260	237	75 - 125

The sample concentration was greater than four times the spiking level and qualification is not required.

5.3 Precision

The MS/MSD RPD values were within quality control limits. The serial dilution was within QC limits of 10% when the results exceeded 50 times the instrument detection limit. (IDL).

5.4 Representativeness

The method blanks were free of contamination except as follows:

- SDG L0608240 contained barium. All sample results were > 5 times the method blank and were not qualified.
- SDG L0608330 contained low levels of barium, calcium and zinc. Total zinc was "B" qualified for L0608330-01 and 03; dissolved zinc was "B" qualified for L0608330-05. The validation qualifier code 06A was added. Barium and calcium results were greater than five times the method blank concentration.

The initial calibration blanks and continuing calibration blanks were free of contamination, except barium and antimony were detected at trace levels. However, all sample results for barium were > 5 times the blank concentrations and the data were not qualified. Antimony was not qualified as sample results were either non-detect or > 5 times the blank concentration. One QC replicate sample was submitted. **Table 5-2** shows the field duplicate comparison.

Table 5-2
Field Duplicate Comparison

Analyte	Result –mg/L	Result – mg/L	RPD %	Qualifier
Total	12WW20	12WW20DUP		
Aluminum	0.591	0.640	7.9	None
Antimony	0.00613	0.00130	Dif < 2 SQL	None
Arsenic	0.00513	0.00540	Dif < 2 SQL	None
Barium	0.0485	0.0512	5.4	None
Beryllium	ND	ND	Dif < 2 SQL	None
Cadmium	ND	ND	Dif < 2 SQL	None
Calcium	32.6	34.7	5.6	None
Chromium	ND	0.00253	Dif < 2 SQL	None
Cobalt	0.0185	0.0199	Dif < 2 SQL	None
Copper	ND	ND	Dif < 2 SQL	None
Iron	0.596	0.622	4.3	None
Lead	ND	ND	Dif < 2 SQL	None
Magnesium	24.9	25.6	2.8	None
Manganese	0.333	0.354	6.2	None
Nickel	0.0151	0.0160	Dif < 2 SQL	None
Potassium	1.65	1.67	1.2	None
Selenium	0.0178	0.00858	Dif < 2 SQL	None
Silver	ND	ND	Dif < 2 SQL	None
Sodium	198	205	3.5	None
Thallium	0.000479	0.000396	Dif < 2 SQL	None
Vanadium	0.0113	0.0126	Dif < 2 SQL	None
Zinc	0.0179	0.0204	Dif < 2 SQL	None
Mercury	ND	ND	Dif < 2 SQL	None

Table 5-2 (continued)
Field Duplicate Comparison

Analyte	Result –mg/L	Result – mg/L	RPD %	Qualifier
Dissolved	12WW20	12WW20DUP		
Aluminum	ND	ND	Dif < 2 SQL	None
Antimony	ND	ND	Dif < 2 SQL	None
Arsenic	0.00533	0.00638	Dif < 2 SQL	None
Barium	0.0381	0.0385	Dif < 2 SQL	None
Beryllium	ND	ND	Dif < 2 SQL	None
Cadmium	ND	ND	Dif < 2 SQL	None
Calcium	35.8	35.4	1.1	None
Chromium	0.0029	0.00489	Dif < 2 SQL	None
Cobalt	0.00992	0.00998	Dif < 2 SQL	None
Copper	ND	ND	Dif < 2 SQL	None
Iron	ND	ND	Dif < 2 SQL	None
Lead	ND	ND	Dif < 2 SQL	None
Magnesium	25.3	25.5	0.8	None
Manganese	0.213	0.208	Dif < 2 SQL	None
Nickel	0.0267	0.0159	Dif < 2 SQL	None
Potassium	1.63	1.56	4.4	None
Selenium	0.00452	0.00427	Dif < 2 SQL	None
Silver	ND	ND	Dif < 2 SQL	None
Sodium	219	228	4.0	None
Thallium	0.000777	0.000614	Dif < 2 SQL	None
Vanadium	0.0117	0.00991	Dif < 2 SQL	None
Zinc	ND	ND	Dif < 2 SQL	None
Mercury	ND	ND	Dif < 2 SQL	None

The samples were analyzed within the 6 month holding time and mercury within 28 days.

6.0 Technical Summary

The following summarizes the data review for the sampling at LHAAP.

6.1 Documentation

The COC were complete and contained the required information. The actual methods used for sample analysis were based upon the COC submitted with the samples. Upon receipt at the laboratory, cooler receipt forms were completed and are included as part of the laboratory data package.

6.2 Completeness

The 100% completeness goal was met as set forth in the USACE Engineering Manual 200-1-3 (February, 2001). None of the data was rejected.

6.3 Conclusion

An overall review of the samples collected indicates that the chain of custody procedures and laboratory analyses have been conducted in an acceptable manner according to the USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C. (October 1999). **Table 6-1** lists qualifier definitions applied to the samples. **Table 6-2** lists data validation reason codes applied to the samples.

Table 6-1
Data Validation Qualifier Definitions

Qualifier	Definitions
U	Not detected: The analyte was analyzed for, but was not detected above the level of the associated value. The associate value is the sample quantitation limit (SQL).
J	Estimated: The analyte was detected and positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ	Not detected, SQL is estimated: The analyte was analyzed for, but was not detected above the reported SQL. However, the reported SQL is an estimate and may be inaccurate or imprecise.
R	Rejected: The data are unusable. (Note: The presence or absence of the analyte cannot be confirmed.)
B	Analyte was detected in method blank at concentration within 5X/10X sample concentration. Sample result is likely a non-detect.

TABLE 6-2
DATA VALIDATION REASON CODE DEFINITIONS

Reason Code	Description
01	Sample received outside of 4 +/-2 degrees Celsius
01A	Improper sample preservation
02	Holding time exceeded
02A	Extraction
02B	Analysis
03	Instrument performance outside criteria
03A	BFB tune for GC/MS volatiles
03B	DFTPP tune for GC/MS semivolatiles
03C	DDT and/or endrin % breakdown exceeds criteria
03D	Retention time windows
03E	Resolution
04	Initial calibration results outside specified criteria
04A	Compound mean RRF QC criteria not met
04B	Individual % RSD criteria not met
04C	Correlation coefficient < 0.995
05	Continuing calibration results outside specified criteria
05A	Compound mean RRF QC criteria not met
05B	Compound %deviation QC criteria not met
06	Result qualified as a results of the 5X/10X blank correction
06A	Method or preparation blank
06B	Initial calibration blank (ICB) or continuing calibration blank (CCB)
06C	Equipment rinsate
06D	Trip blank
06E	Field blank
07	Surrogate recoveries outside control limits
07A	Sample
07B	Associated method blank or LCS
08	MS/MSD/duplicate results outside criteria
08A	MS and/or MSD recovery not within control limits (accuracy)
08B	% RPD outside acceptance criteria (precision)
09	Post digestion spike outside criteria (GFAA)
10	Internal standards outside specified control limits
10A	Recovery
10B	Retention time
11	Laboratory control sample recoveries outside specified control limits
11A	Recovery
11B	% RPD (if run in duplicate)
12	Interference check standard
13	Serial dilution
14	Tentatively identified compounds
15	Quantitation
16	Multiple results available; alternate analysis preferred
17	Field duplicate RPD criteria is exceeded
18	Percent difference between original and second column exceeds QC criteria
19	Professional judgment was used to qualify the data
20	Pesticide clean-up checks
21	Target compound identification
22	Radiological calibration
23	Radiological quantitation
24	Reported result and/or lab qualifier revised to reflect validation findings

7.0 References

Shaw Environmental, Inc, (revised 2002), *Standard Operating Procedure Manual*, Houston, Texas.

United States Environmental Protection Agency (USEPA), 1997, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, Update III*, Washington, D.C.

Department of the Army, U.S. Army Corps of Engineers, Requirements for the Preparation of Sampling and Analysis Plans USACE Engineering Manual 200-1-3 (February 2001).

USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C., October 1999.

United States Environmental Protection Agency (USEPA), 1983. *Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020*. Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.

SHAW ENVIRONMENTAL, INC.
ANALYTICAL DATA EVALUATION

The Project Chemist reviewed the attached Data Package. Detailed comments concerning specific analyses (i.e. GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

Site/Location: Longhorn
 Project No.: 843714
 Laboratory: Kemron
 Report No.: LOG08183

COMMENTS:

DATA COMPLETENESS				
	REQUIREMENTS: Cooler receipt	Y	N	NA
	Cooler receipt form present?	✓		
	Documentation of broken bottles, bubbles in VOA vials, missing labels, seals, etc.?	✓		
	Was the cooler temperature upon receipt at the laboratory between 2° and 6° C?	✓		
	Was the pH of the sample acceptable?	✓		
	Original chain of custody/analytical request form present and complete?	✓		
	Comparison of the reported parameters to the request on the chain of custody?	✓		
	Each sample number transcribed by the laboratory and correct sample date?	✓		
	Cross reference of field sample number, laboratory number and analytical batch?	✓		
	Date of preparation / extraction and analysis for each sample?	✓		
	Detection / Quantitation limits reported as specified?	✓		
	Results reported for method blanks?	✓		
	Results reported for trip blanks (VOCs only)?			✓
	Matrix Spike (MS) /Matrix Spike Duplicates (MSD) % recoveries and RPDs reported?			✓
	Laboratory Control Samples (LCS) / LCSD % recoveries and RPDs reported?	✓		
	Surrogate values provided (organic samples only)?	✓		

Data Reviewed by: Diane Meyer Date: 9/5/06
 Diane Meyer, Project Chemist

ANALYSIS: VOLATILE		MATRIX: LIQUID <u>X</u>	
EPA METHOD: <u>8260B</u>		SOIL/SOLID	TCLP
BY GC/MS: LIQUID		Hold times met? <u>yes</u>	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds < MDL	✓		
Trip Blank or Equipment Samples	Any contaminants detected?			✓
Matrix Spike % Recovery Value	Within those set by Lab			✓
Matrix Spike Dup % Recovery Value	Within those set by Lab			✓
MS / MSD RPD	< Lab QC Limits			✓
% LCS Recovery Value	Within those set by Lab		✓	
% LCSD Recovery Value	Within those set by Lab			✓
LCS / LCSD RPD	< Lab QC Limits			✓
% Surrogate Recovery Limits	Within those set by Lab		✓	
Field Duplicate Evaluation	RPD < 35% or difference < 2 SQL for water			✓
	RPD < 50% of difference < 3.5 SQL for soil			✓

If "NO," list all samples below:

Blank Information

Blank Type	Blank ID	Prep Batch	Date	Contaminant Found	Concentration (Specify Units)	Associated Samples
equip blank	(LO 608330)			acetone	4.13 ug/L	Quality 02-06C
				mecla	0.385	

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD%

Any runs with one (1) or more recoveries outside limits?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments
01	1,2-dichloroethane-d4		126	80-120	Quality defects JH07A
02	↓		128	↓	↓

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	RPD%
water	1,1,2-trichloro-1,2,2-trifluoroethane	63.6	80-130		
	1,2-dichloroethane	131	80-129 *		
	bromodichloromethane	132	80-131		
	chloromethane	138	40-125		
	methyl acetate	137	80-130		

Quality 25X
VSL code 11A
5X all ND

* quality 01

TIER 2 DATA REVIEW -VOLATILE ANALYSIS

ANALYSIS: VOLATILE ANALYSIS		MATRIX: LIQUID ☒ SOLID/SOIL _____		
EPA METHOD: <u>8260B</u>		TCLP _____		
BY: GC/MS				
REQUIREMENT		Y	N	NA
Tune Calibration Check	BFB Every 12 Hours	✓		
Initial Calibration Check	% RSD <OR = 30%	✓		
Continuing Calibration Check	% DIFF <OR = ~~20%~~ 25%		✓	
SPCC Compounds (Chlorobenzene/1, 1, 2, 2-TCA)	RF = OR > 0.30	✓		
Bromoform, 1, 1-Dichloroethane, Chloromethane	RF = OR > 0.10	✓		
Any CCAL Mean	RF = OR > 0.05	✓		
All sample/blank internal standard areas	Within those set by Lab	✓		
All sample/blank internal standard retention times	Within 30 sec. of Standard IS RT	✓		

alt source-or

If "NO," List all samples below

BFB Run		GC/MS ID	Prep Batch	Associated Samples
Date	Time			

Initial Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						
8/10/06	08:54	HPMS10	Water		31.6	Chloromethane	} Qualify JLU 05/08
					28.8	Bromomethane	
					26.2	Trichlorofluoromethane	

Internal Standard Performance

Sample Number	Internal Standard Area/RT	Limits	Comments

TIER 1 DATA REVIEW – ORGANIC ANALYSIS

ANALYSIS: <u>Dissolved Gases</u>		MATRIX: LIQUID <u>X</u>		
EPA METHOD: <u>RSK 175</u>		SOLID/SOIL _____		TCLP _____
BY: <u>GC</u> OR HPLC		HOLD TIMES MET? <u>yes</u>		
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL		✓	
Matrix Spike % Recovery Values	Within those set by Lab			✓
Matrix Spike Dup % Recovery Values	Within those set by Lab			✓
MS/MSD RPD	<Lab QC Limits			✓
% LCS Recovery Value	Within those set by Lab	✓		
% LCSD Recovery Values	Within those set by Lab	✓		
LCS/LCSD RPD	<Lab QC Limits	✓		
% Surrogate Recovery Limits	Within those set by Lab			✓
Field Duplicate Evaluation	Ratio < 2.0 for water			✓
	Ratio < 5.0 for soil			✓

If "NO," List all samples below:

Blank Information

Run		Date Extracted	Blank ID	Compound	Conc. Units	Associated Samples
Date	Time					
equip blank		10608330		methane	0.25 ug/L	Quality CA 06A, 06C 01 > 5X
method blk				↓	0.139	

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD %

Any runs with one (1) or more recoveries outside limits for each fraction?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	Comments

alt source - ok

If "NO," list all samples below

Initial Calibration

Continuing Calibration

Internal Standard Performance

[illegible]

TIER 1 DATA REVIEW – CONVENTIONAL ANALYSIS

ANALYSIS: <u>ANIONS 3001</u>		MATRIX: LIQUID <u>X</u>		
METHOD: <u>TOC+TIC -415.1</u>		SOLID/SOIL _____		
BY: _____				
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike Recovery Values	75-125%			✓
Matrix Spike Duplicate Recovery Values	75-125%			✓
LCS Recovery Values	80-120%	✓	✓	
LCSD Recovery Values	80-120%	✓	✓	✓
LCS / LCSD RPD	<20%	✓		✓
PRECISION (QC Sample Field Sample or Field Sample/QC Sample)	Ratio <2.0 for Water			✓
	Ratio <5.0 for Soil or RPD < 50%			✓

If "NO," List all samples below:

Blank Type	Run Date	Run Time	Date Prepped	Blank ID	Compound	Concentration (units)	Associated Samples
equup	bix	(L0608330)			TOC = 0.523 mg/L	5x	>5X

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result -2	RPD%

Laboratory Control Sample Analysis

File Name	Analysis Type / Element	Instrument ID	Recovery %

anions CCUS-OK

SHAW ENVIRONMENTAL, INC.
ANALYTICAL DATA EVALUATION

The Project Chemist reviewed the attached Data Package. Detailed comments concerning specific analyses (i.e. GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

Site/Location: Longhorn
 Project No.: 845714
 Laboratory: Kemron
 Report No.: 10608204

COMMENTS:

Equipment Blank in SDG 10608330

DATA COMPLETENESS				
	REQUIREMENTS: Cooler receipt	Y	N	NA
	Cooler receipt form present?	✓		
	Documentation of broken bottles, bubbles in VOA vials, missing labels, seals, etc.?	✓		
	Was the cooler temperature upon receipt at the laboratory between 2° and 6° C?	✓		
	Was the pH of the sample acceptable?	✓		
	Original chain of custody/analytical request form present and complete?	✓		
	Comparison of the reported parameters to the request on the chain of custody?	✓		
	Each sample number transcribed by the laboratory and correct sample date?	✓		
	Cross reference of field sample number, laboratory number and analytical batch?	✓		
	Date of preparation / extraction and analysis for each sample?	✓		
	Detection / Quantitation limits reported as specified?	✓		
	Results reported for method blanks?	✓		
	Results reported for trip blanks (VOCs only)?			✓
	Matrix Spike (MS) /Matrix Spike Duplicates (MSD) % recoveries and RPDs reported?	✓		
	Laboratory Control Samples (LCS) / LCSD % recoveries and RPDs reported?	✓		
	Surrogate values provided (organic samples only)?	✓		

Data Reviewed by:

Diane Meyer
 Diane Meyer, Project Chemist

Date:

8/31/06

ANALYSIS: VOLATILE		MATRIX: LIQUID	
EPA METHOD: 8260B		SOIL/SOLID	TCLP
BY GC/MS: LIQUID		Hold times met?	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds < MDL		✓	
Trip Blank or Equipment Samples	Any contaminants detected?	✓		✓
Matrix Spike % Recovery Value	Within those set by Lab			✓
Matrix Spike Dup % Recovery Value	Within those set by Lab			✓
MS / MSD RPD	< Lab QC Limits			✓
% LCS Recovery Value	Within those set by Lab		✓	
% LCSD Recovery Value	Within those set by Lab		✓	
LCS /LCSD RPD	< Lab QC Limits	✓		
% Surrogate Recovery Limits	Within those set by Lab	✓		
Field Duplicate Evaluation	RPD <35% or difference < 2 SQL for water			✓
	RPD <50% of difference < 3.5 SQL for soil			✓

If "NO," list all samples below:

Blank Information

Blank Type	Blank ID	Prep Batch	Date	Contaminant Found	Concentration (Specify Units)	Associated Samples
method blank			1,2,4	Trichlorobenz	0.223 J ug/L	SK NO
equip blank				acetone	4.13	Qualify 01 BO6A
				mecl2	0.385	SK NO

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD%

Any runs with one (1) or more recoveries outside limits?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	RPD%
water		chloro methane	127	40-125	SK NO
		methyl acetate	132	80-130	

TIER 2 DATA REVIEW -VOLATILE ANALYSIS

ANALYSIS: VOLATILE ANALYSIS		MATRIX: LIQUID ☒		
EPA METHOD: _____		SOLID/SOIL _____ TCLP _____		
BY: GC/MS				
REQUIREMENT		Y	N	NA
Tune Calibration Check	BFB Every 12 Hours	✓		
Initial Calibration Check	% RSD <OR = 30% <i>or 1st 70.990</i>	✓		
Continuing Calibration Check	% DIFF <OR = 20%	✓		
SPOC Compounds (Chlorobenzene/1, 1, 2, 2-TCA)	RF = OR > 0.30	✓		
Bromoform, 1, 1-Dichloroethane, Chloromethane	RF = OR > 0.10	✓		
Any CCAL Mean	RF = OR > 0.05	✓		
All sample/blank internal standard areas	Within those set by Lab	✓		
All sample/blank internal standard retention times	Within 30 sec. of Standard IS RT	✓		

alt source - or

If "NO," List all samples below

BFB Run		GC/MS ID	Prep Batch	Associated Samples
Date	Time			

Initial Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Internal Standard Performance

Sample Number	Internal Standard Area/RT	Limits	Comments

TIER 1 DATA REVIEW – ORGANIC ANALYSIS

ANALYSIS: <u>Dissolved Gases</u>		MATRIX: LIQUID <u>X</u>	
EPA METHOD: <u>RSE 175</u>		SOLID/SOIL _____	TCLP _____
BY: <u>GC OR HPLC</u>		HOLD TIMES MET? <u>yes</u>	

REQUIREMENTS	Y	N	NA
Method Blank	Every Batch or 20 Samples	✓	
	All Compounds <MDL		✓
Matrix Spike % Recovery Values	Within those set by Lab		✓
Matrix Spike Dup % Recovery Values	Within those set by Lab		✓
MS/MSD RPD	<Lab QC Limits		✓
% LCS Recovery Value	Within those set by Lab	✓	
% LCSD Recovery Values	Within those set by Lab	✓	
LCS/LCSD RPD	<Lab QC Limits	✓	
% Surrogate Recovery Limits	Within those set by Lab		✓
Field Duplicate Evaluation	Ratio < 2.0 for water		✓
	Ratio < 5.0 for soil		✓

If "NO," List all samples below:

Blank Information

Run		Date Extracted	Blank ID	Compound	Conc. Units	Associated Samples
Date	Time					
method blank				methane	0.319 µg/L	5x > 5x blank
equip blank				↓	0.25	↓

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD %

Any runs with one (1) or more recoveries outside limits for each fraction?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	Comments

alt source - ok

If "NO," list all samples below

Initial Calibration

Calibration		Instrument ID	Matrix	Correlation Coefficient	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		Instrument ID	Matrix	% Diff.	Compound	Associated Samples
Date	Time					

Internal Standard Performance

[illegible]

TIER 1 DATA REVIEW - CONVENTIONAL ANALYSIS

ANALYSIS: <u>Cl, SO₄, NO₃, NO₂ - 300.0</u>		MATRIX: LIQUID <u>X</u>		
METHOD: <u>TOC-415.1</u>		SOLID/SOIL _____		
BY: <u>TIC-415.1</u>				
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike Recovery Values	75-125% <u>TOC only</u>	✓		✓
Matrix Spike Duplicate Recovery Values	75-125%			✓
LCS Recovery Values	80-120% <u>Ammonia, TOC</u>	✓		
LCSD Recovery Values	80-120% <u>TOC</u>	✓		✓
LCS / LCSD RPD	<20% <u>TOC</u>	✓		✓
PRECISION (QC Sample Field Sample or Field Sample/QC Sample)	Ratio <2.0 for Water			✓
	Ratio <5.0 for Soil or RPD < 50%			✓

TOC - SX dup <20%

If "NO," List all samples below:

Blank Type	Run		Date Prepped	Blank ID	Compound	Concentration (units)	Associated Samples
	Date	Time					

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result -2	RPD%

Laboratory Control Sample Analysis

File Name	Analysis Type / Element	Instrument ID	Recovery %

Multiple runs for ammonia to bring target analytes into lower calibration range.

continuing calibrations w/in QC limits

SHAW ENVIRONMENTAL, INC.
ANALYTICAL DATA EVALUATION

The Project Chemist reviewed the attached Data Package. Detailed comments concerning specific analyses (i.e. GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

Site/Location: Longhorn
 Project No.: 845714
 Laboratory: Kemron
 Report No.: L0608240

COMMENTS:

35 Blw 03 + Dup

DATA COMPLETENESS				
	REQUIREMENTS: Cooler receipt	Y	N	NA
	Cooler receipt form present?	✓		
	Documentation of broken bottles, bubbles in VOA vials, missing labels, seals, etc.?	✓		
	Was the cooler temperature upon receipt at the laboratory between 2° and 6° C?	✓		
	Was the pH of the sample acceptable?	✓		
	Original chain of custody/analytical request form present and complete?	✓		
	Comparison of the reported parameters to the request on the chain of custody?	✓		
	Each sample number transcribed by the laboratory and correct sample date?	✓		
	Cross reference of field sample number, laboratory number and analytical batch?	✓		
	Date of preparation / extraction and analysis for each sample?	✓		
	Detection / Quantitation limits reported as specified?	✓		
	Results reported for method blanks?	✓		
	Results reported for trip blanks (VOCs only)?	✓		
	Matrix Spike (MS) /Matrix Spike Duplicates (MSD) % recoveries and RPDs reported?	✓		
	Laboratory Control Samples (LCS) / LCSD % recoveries and RPDs reported?	✓		
	Surrogate values provided (organic samples only)?	✓		

Data Reviewed by:

Diane Meyer

Date:

8/31/06

Diane Meyer, Project Chemist

ANALYSIS: VOLATILE		MATRIX: LIQUID ☒		
EPA METHOD: 8260B		SOIL/SOLID ☐ TCLP ☐		
BY GC/MS: LIQUID ☐		Hold times met? ☐		
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	☒		
	All Compounds < MDL	☒		
Trip Blank or Equipment Samples	Any contaminants detected?	☒		
Matrix Spike % Recovery Value	Within those set by Lab			☒
Matrix Spike Dup % Recovery Value	Within those set by Lab			☒
MS / MSD RPD	< Lab QC Limits			☒
% LCS Recovery Value	Within those set by Lab		☒	
% LCSD Recovery Value	Within those set by Lab		☒	
LCS / LCSD RPD	< Lab QC Limits	☒		
% Surrogate Recovery Limits	Within those set by Lab		☒	
Field Duplicate Evaluation	RPD < 35% or difference < 2 SQL for water	☒		
35BWW03 + Dup	RPD < 50% of difference < 3.5 SQL for soil			

Acetone = 8.98 NO 9.77 RPD = 84% If "NO," list all samples below:

Blank Information

Blank Type	Blank ID	Prep Batch	Date	Contaminant Found	Concentration (Specify Units)	Associated Samples
Trip blank			8/8/06	methylene chloride	0.786 ug/L	SX NO
equip blank (LO 08330)				acetone	0.385	
					4.13	Qualify all defects BOC

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD%

Any runs with one (1) or more recoveries outside limits?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments
05 35BWW03	1,2-dichloroethane	122	80-120		Qualify acetone
06 35BWW03 Dup		122			
04 145MW58		121			Qualify defects JH; no Qual NO
07 67WW03		121			SX NO

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	RPD%
water		chloromethane	121	127	NO-125
		methyl acetate	132	132	80-130

SX NO
no quals

TIER 2 DATA REVIEW -VOLATILE ANALYSIS

ANALYSIS: VOLATILE ANALYSIS		MATRIX: LIQUID ~~X~~		
EPA METHOD: <u>8260B</u>		SOLID/SOIL _____ TCLP _____		
BY: GC/MS				
REQUIREMENT		Y	N	NA
Tune Calibration Check	BFB Every 12 Hours	} ok - run w samples in 8204.		
Initial Calibration Check	% RSD <OR = 30%			
Continuing Calibration Check	% DIFF <OR = 20%			
SPCC Compounds (Chlorobenzene/1, 1, 2, 2-TCA)	RF = OR > 0.30			
Bromoform, 1, 1-Dichloroethane, Chloromethane	RF = OR > 0.10			
Any CCAL Mean	RF = OR > 0.05			
All sample/blank internal standard areas	Within those set by Lab	✓		
All sample/blank internal standard retention times	Within 30 sec. of Standard IS RT	✓		

If "NO," List all samples below

BFB Run		GC/MS ID	Prep Batch	Associated Samples
Date	Time			

Initial Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Internal Standard Performance

Sample Number	Internal Standard Area/RT	Limits	Comments

TIER 1 DATA REVIEW – ORGANIC ANALYSIS

ANALYSIS: <u>Dissolved Gases</u>		MATRIX: LIQUID <u>X</u>	
EPA METHOD: <u>RSK175</u>		SOLID/SOIL _____	TCLP _____
BY: <u>GC</u> OR HPLC		HOLD TIMES MET? <u>YES</u>	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL		✓	
Matrix Spike % Recovery Values	Within those set by Lab			✓
Matrix Spike Dup % Recovery Values	Within those set by Lab			✓
MS/MSD RPD	<Lab QC Limits			✓
% LCS Recovery Value	Within those set by Lab	✓		
% LCSD Recovery Values	Within those set by Lab	✓		
LCS/LCSD RPD	<Lab QC Limits	✓		
% Surrogate Recovery Limits	Within those set by Lab			✓
Field Duplicate Evaluation <u>35WW03 + Dup</u>	Ratio < 2.0 for water	✓		
	Ratio < 5.0 for soil			

methane 117 vs 110
 ethene 1.90 vs 1.82
 Blank Information

If "NO," List all samples below:

Run		Date Extracted	Blank ID	Compound	Conc. Units	Associated Samples
Date	Time					
equip blank (LO608330)				methane	0.25ug/L	Quality B06C-04,07
method blank				methane	0.319	↓ B06A-04,07

others
 >5X

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD %

Any runs with one (1) or more recoveries outside limits for each fraction?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	Comments

ICAL OK (LO608204)

TIER 1 DATA REVIEW – Metal ANALYSIS

Total + Dissolved

ANALYSIS: <u>TAL metals</u>		MATRIX: LIQUID <u>X</u>		
EPA METHOD: <u>6010B, 6020, 7470A</u>		SOLID/SOIL _____		TCLP _____
BY: GF OR ICP				
REQUIREMENTS		Y	N	NA
Method / Preparation Blank	Every Batch or 20 Sample All Compounds <IDL / <u>(MDL)</u> / RL	✓	✓	
Equipment Rinse Sample	All Compounds <IDL / MDL / RL			✓
Matrix Spike Recovery Values	75-125% Recovery or Lab Limits			✓
Matrix Spike Duplicate Recovery Values	75-125% Recovery or Lab Limits			✓
Matrix Spike / Matrix Spike Duplicate	<20%			✓
Laboratory Control Sample (LCS) Analysis	80-120% Recovery	✓		
ICP Serial Dilutions	<10% difference when the amount is greater than 50 X IDL	✓		
Field Duplicate Evaluation	Ratio <2.0 for Water			✓
~~35BWW03+Dup~~ No Dup	Ratio <5.0 for Soil or RPD < 50%			✓

If "NO," then list

Method Blank or Equipment Rinse

Blank ID	Sample ID	Date Collected	Type of Analysis	Analyte	Concentration (units)
method blank (total)				Ba = 0.003165 mg/L	5x > 5x
↓				Sb = 0.000350 pm	

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result -2	RPD%

Laboratory Control Sample Analysis and Duplicate Sample Analysis

Analysis Type / Element	Recovery %

ICP Serial Dilutions

Analysis Type / Element	Concentration True	Concentration Found	Percent Recovery

ANALYSIS: METALS		MATRIX: _____	LIQUID ☒
METHOD: <u>Total + Dissolved</u>		SOLID / SOIL _____	TCLP _____
BY: _____			

REQUIREMENT		Y	N	NA
Initial Calibration Verification (ICV)	Beginning and every 10 samples	✓		
	ICV % Recovery (90-110%) except Hg (80-120%) and	✓		
	Cn- (85-115%)			✓
RSD of Initial Calibration	Correlation coefficient must be > 0.995			
Initial Calibration Blank (ICB)	Initial calibration present for every analysis date, element, and instrument	✓	✓	
ICP Interference Check Sample (ICSA / ICSB)	Beginning and end of sample batch	✓		
	80-100% Recovery	✓		
Continuing Calibration Verification (CCV)	Every 10 samples	✓		
	CCV % Recovery (90-110%) except Hg (80-120%)	✓		
	and Cn- (85-115%)			✓
Continuing Calibration Blank (CCB)	Every 10 samples	✓	✓	

If "NO," list all samples below

Standard / Blank Check and RSD of Initial Calibration

Calibration Date	Instrument ID	Run No.	Analyte	Standard Levels	Correlation Coefficient

ICV / CCV and ICP Interference Check Sample

Analysis Type / Element	Instrument ID	Run No.	ICV / CCV	Run Date	Concentration True	Concentration Found	Percent Recovery
ICB - Ba = 0.00263 ^{mg/L}			Sx > 5X		CCB Ba - trace	Sx > 5X	
ICB - Sb 0.189 ^{ug/L}			CCB Sb ~		same as ICB	Qualify	total + dissolved Sx
							BOB B

ICP Interference Check Sample

File Name	Analysis Type / Element	Instrument ID	Concentration True	Concentration Found	Percent Recovery

TIER 1 DATA REVIEW - CONVENTIONAL ANALYSIS

ANALYSIS: <u>UNIONTS-300.0</u>	MATRIX: LIQUID _____
METHOD: <u>TIC, TOC-415.1</u>	SOLID/SOIL _____
BY: _____	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike Recovery Values	75-125%			✓
Matrix Spike Duplicate Recovery Values	75-125%			✓
LCS Recovery Values	80-120%	✓		
LCSD Recovery Values	80-120%	✓ _{TOC}		✓ _{A-11/10/15}
LCS / LCSD RPD	<20%	✓ _{TOC}		✓ _{A-11/10/15}
PRECISION (QC Sample Field Sample or Field Sample/QC Sample)	Ratio <2.0 for Water		✓	
	Ratio <5.0 for Soil or RPD < 50%			✓ _{RPD=4.7}

35B W003 + DUP SD4: 4.81 vs 8.21 - Qualify J17 TIC: 12.5 vs 13.1 - OK
CI: 78.8 vs 77.6 - OK If "NO," List all samples below: RPD=52.2 TOC: 9.09 vs 8.34 - OK
RPD=8.6

Blank Type	Run		Date Prepped	Blank ID	Compound	Concentration (units)	Associated Samples
	Date	Time					
equip blank (20608830)				TOC =	0.523 mg/L	✓ >5x blank	

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result -2	RPD%

Laboratory Control Sample Analysis

File Name	Analysis Type / Element	Instrument ID	Recovery %

Qualify Dupes in this SDG only

SHAW ENVIRONMENTAL, INC.
ANALYTICAL DATA EVALUATION

The Project Chemist reviewed the attached Data Package. Detailed comments concerning specific analyses (i.e. GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

Site/Location: Longhorn
 Project No.: 845714
 Laboratory: Kemron
 Report No.: LO608289

COMMENTS:

Equip blank

DATA COMPLETENESS				
	REQUIREMENTS: Cooler receipt	Y	N	NA
	Cooler receipt form present?	✓		
	Documentation of broken bottles, bubbles in VOA vials, missing labels, seals, etc.?	✓		
	Was the cooler temperature upon receipt at the laboratory between 2° and 6° C?	✓		
	Was the pH of the sample acceptable?	✓		
	Original chain of custody/analytical request form present and complete?	✓		
	Comparison of the reported parameters to the request on the chain of custody?	✓		
	Each sample number transcribed by the laboratory and correct sample date?	✓		
	Cross reference of field sample number, laboratory number and analytical batch?	✓		
	Date of preparation / extraction and analysis for each sample?	✓		
	Detection / Quantitation limits reported as specified?	✓		
	Results reported for method blanks?	✓		
	Results reported for trip blanks (VOCs only)?	✓		
	Matrix Spike (MS) /Matrix Spike Duplicates (MSD) % recoveries and RPDs reported?			✓
	Laboratory Control Samples (LCS) / LCSD % recoveries and RPDs reported?	✓		
	Surrogate values provided (organic samples only)?	✓		

Data Reviewed by: Diane Meyer Date: 9/15/06
 Diane Meyer, Project Chemist

ANALYSIS: VOLATILE		MATRIX: LIQUID ☒	
EPA METHOD: 8260B		SOIL/SOLID ☐ TCLP ☐	
BY GC/MS: LIQUID		Hold times met? ☐	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	☒	☐	☐
	All Compounds < MDL	☒	☐	☐
Trip Blank or Equipment Samples	Any contaminants detected?	☒	☐	☐
Matrix Spike % Recovery Value	Within those set by Lab	☐	☐	☒
Matrix Spike Dup % Recovery Value	Within those set by Lab	☐	☐	☒
MS / MSD RPD	< Lab QC Limits	☐	☐	☒
% LCS Recovery Value	Within those set by Lab	☐	☒	☐
% LCSD Recovery Value	Within those set by Lab	☐	☐	☒
LCS / LCSD RPD	< Lab QC Limits	☐	☐	☒
% Surrogate Recovery Limits	Within those set by Lab	☒	☐	☐
Field Duplicate Evaluation	RPD <35% or difference < 2 SQL for water	☐	☐	☒
	RPD <50% of difference < 3.5 SQL for soil	☐	☐	☒

If "NO," list all samples below:

Blank Information

Blank Type	Blank ID	Prep Batch	Date	Contaminant Found	Concentration (Specify Units)	Associated Samples
Equip Blank				acetone	3.82 µg/L	5x NO
				methylene chloride	0.518	
Trip Blank					0.721	

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD%

Any runs with one (1) or more recoveries outside limits?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	RPD%
		acetone	146	40-142	5x NO
		methyl acetate	150	80-130	

TIER 2 DATA REVIEW -VOLATILE ANALYSIS

ANALYSIS: VOLATILE ANALYSIS		MATRIX: LIQUID <u>X</u>		
EPA METHOD: <u>8260B</u>		SOLID/SOIL _____		
BY: GC/MS		TCLP _____		
REQUIREMENT		Y	N	NA
Tune Calibration Check	BFB Every 12 Hours	✓		
Initial Calibration Check	% RSD <OR = 30%	✓		
Continuing Calibration Check	% DIFF <OR = 20% <u>25%</u>		✓	
SPCC Compounds (Chlorobenzene/1, 1, 2, 2-TCA)	RF = OR > 0.30	✓		
Bromoform, 1, 1-Dichloroethane, Chloromethane	RF = OR > 0.10	✓		
Any CCAL Mean	RF = OR > 0.05	✓		
All sample/blank internal standard areas	Within those set by Lab	✓		
All sample/blank internal standard retention times	Within 30 sec. of Standard IS RT	✓		

If "NO," List all samples below

BFB Run		GC/MS ID	Prep Batch	Associated Samples
Date	Time			

Initial Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						
8/15/06	08:14	HPMS11	Water		261.5	Acetone	Qualify WJ 05B - SA equip bit J 05B

Internal Standard Performance

Sample Number	Internal Standard Area/RT	Limits	Comments

TIER 1 DATA REVIEW – ORGANIC ANALYSIS

ANALYSIS: <u>Dissolved Gases</u>		MATRIX: LIQUID <u>X</u>		
EPA METHOD: <u>RSK 175</u>		SOLID/SOIL _____		TCLP _____
BY: <u>GC</u> OR HPLC		HOLD TIMES MET? <u>Yes</u>		
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike % Recovery Values	Within those set by Lab			✓
Matrix Spike Dup % Recovery Values	Within those set by Lab			✓
MS/MSD RPD	<Lab QC Limits			✓
% LCS Recovery Value	Within those set by Lab	✓		
% LCSD Recovery Values	Within those set by Lab	✓		
LCS/LCSD RPD	<Lab QC Limits	✓		
% Surrogate Recovery Limits	Within those set by Lab			✓
Field Duplicate Evaluation	Ratio < 2.0 for water			✓
	Ratio < 5.0 for soil			✓

If "NO," List all samples below:

Run		Date Extracted	Blank ID	Compound	Conc. Units	Associated Samples
Date	Time					
<u>Equip Blank</u>				<u>Methane</u>	<u>0.346 ug/L</u>	<u>- Qualify 02 - 06C</u>

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD %

Any runs with one (1) or more recoveries outside limits for each fraction?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	Comments

Equip blank m.

If "NO," list all samples below

Calibration		Instrument ID	Matrix	Correlation Coefficient	% RSD	Compound	Associated Samples
Date	Time						

Calibration		Instrument ID	Matrix	% Diff.	Compound	Associated Samples
Date	Time					

[illegible]

TIER 1 DATA REVIEW – CONVENTIONAL ANALYSIS

ANALYSIS: <u>ANLON - 3000</u>		MATRIX: LIQUID <u>X</u>		
METHOD: <u>TIC, TOC - 415.1</u>		SOLID/SOIL _____		
BY: _____				
REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike Recovery Values	75-125%			✓
Matrix Spike Duplicate Recovery Values	75-125%			✓
LCS Recovery Values	80-120%	✓		
LCSD Recovery Values	80-120%	✓		
LCS / LCSD RPD	<20%	✓		
PRECISION (QC Sample Field Sample or Field Sample/QC Sample)	Ratio <2.0 for Water			✓
	Ratio <5.0 for Soil or RPD < 50%			✓

If "NO," List all samples below:

Blank Type	Run		Date Prepped	Blank ID	Compound	Concentration (units)	Associated Samples
	Date	Time					

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result - 2	RPD%

Laboratory Control Sample Analysis

File Name	Analysis Type / Element	Instrument ID	Recovery %

anlon CCUs - OK

Equip Sensate - NO - anlon & TOC

SHAW ENVIRONMENTAL, INC.
ANALYTICAL DATA EVALUATION

The Project Chemist reviewed the attached Data Package. Detailed comments concerning specific analyses (i.e. GC/MS Semivolatiles) are provided in the attached review sheets. Any additional comments concerning the data package as a whole are listed below

Site/Location: Longhorn
 Project No.: 845714
 Laboratory: Kemron
 Report No.: 10608330

COMMENTS:

contains EB
contains Dup

DATA COMPLETENESS				
	REQUIREMENTS: Cooler receipt	Y	N	NA
	Cooler receipt form present?	✓		
	Documentation of broken bottles, bubbles in VOA vials, missing labels, seals, etc.?	✓		
	Was the cooler temperature upon receipt at the laboratory between 2° and 6° C?	✓		
	Was the pH of the sample acceptable?	✓		
	Original chain of custody/analytical request form present and complete?	✓		
	Comparison of the reported parameters to the request on the chain of custody?	✓		
	Each sample number transcribed by the laboratory and correct sample date?	✓		
	Cross reference of field sample number, laboratory number and analytical batch?	✓		
	Date of preparation / extraction and analysis for each sample?	✓		
	Detection / Quantitation limits reported as specified?	✓		
	Results reported for method blanks?	✓		
	Results reported for trip blanks (VOCs only)?		✓	
	Matrix Spike (MS) /Matrix Spike Duplicates (MSD) % recoveries and RPDs reported?	✓		
	Laboratory Control Samples (LCS) / LCSD % recoveries and RPDs reported?	✓		
	Surrogate values provided (organic samples only)?	✓		

Data Reviewed by: Diane Meyer Date: 8/31/06
 Diane Meyer, Project Chemist

ANALYSIS: VOLATILE		MATRIX: LIQUID <u>X</u>	
EPA METHOD: <u>8260B</u>		SOIL/SOLID _____	
BY GC/MS: LIQUID _____		TCLP _____	
		Hold times met? <u>yes</u>	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds < MDL	✓		
Trip Blank or Equipment Samples	Any contaminants detected?	✓		
Matrix Spike % Recovery Value	Within those set by Lab			✓
Matrix Spike Dup % Recovery Value	Within those set by Lab			✓
MS / MSD RPD	< Lab QC Limits		✓	✓
% LCS Recovery Value	Within those set by Lab		✓	
% LCSD Recovery Value	Within those set by Lab		✓	
LCS / LCSD RPD	< Lab QC Limits	✓		
% Surrogate Recovery Limits	Within those set by Lab		✓	
Field Duplicate Evaluation	RPD < 35% or difference < 2 SQL for water	✓		
	RPD < 50% of difference < 3.5 SQL for soil			✓

Field Duplicate Evaluation
 12WW 20 + Dup
 NO 1,2-DCB: 0.615/ND 0.641 < 2.5QL
 TCE: 0.704/ND 0.715 < 2.5QL

If "NO," list all samples below:

Blank Information

Blank Type	Blank ID	Prep Batch	Date	Contaminant Found	Concentration (Specify Units)	Associated Samples
equip blank				acetone	4.13 ug/L	5x 08 > 10X
				methylene chloride	0.385 ug/L	5x all ND

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD%

Any runs with one (1) or more recoveries outside limits?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments
05	1,2-dichloroethane-d4		121	80-120	5x ND
10	↓		122	↓	Qualify acetone + mod 2 J1 + code 07A

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	RPD%
		methyl acetate	136/135	80-130	5x all ND

TIER 2 DATA REVIEW -VOLATILE ANALYSIS

ANALYSIS: VOLATILE ANALYSIS		MATRIX: LIQUID <u>X</u>		
EPA METHOD: <u>8260B</u>		SOLID/SOIL _____ TCLP _____		
BY: GC/MS				
REQUIREMENT		Y	N	NA
Tune Calibration Check	BFB Every 12 Hours	✓		
Initial Calibration Check	% RSD <OR = 30%	✓		
Continuing Calibration Check	% DIFF <OR = 20%	✓	✓	
SPCC Compounds (Chlorobenzene/1, 1, 2, 2-TCA)	RF = OR > 0.30	✓		
Bromoform, 1, 1-Dichloroethane, Chloromethane	RF = OR > 0.10	✓		
Any CCAL Mean	RF = OR > 0.05	✓		
All sample/blank internal standard areas	Within those set by Lab	✓		
All sample/blank internal standard retention times	Within 30 sec. of Standard IS RT	✓		

all same-or

If "NO," List all samples below

BFB Run		GC/MS ID	Prep Batch	Associated Samples
Date	Time			

Initial Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						

Continuing Calibration

Calibration		GC/MS ID	Matrix	Mean RRF	% RSD	Compound	Associated Samples
Date	Time						
8/15/06	0900	HPMS10			36.7	dichlorodifluoromethane	UJ 05 B

Internal Standard Performance

Sample Number	Internal Standard Area/RT	Limits	Comments

TIER 1 DATA REVIEW – ORGANIC ANALYSIS

ANALYSIS: <u>dissolved gases</u>		MATRIX: LIQUID <u>X</u>	
EPA METHOD: <u>RSK 175</u>		SOLID/SOIL _____	TCLP _____
BY: <u>GC</u> OR HPLC		HOLD TIMES MET? <u>yes</u>	

REQUIREMENTS	Y	N	NA
Method Blank	Every Batch or 20 Samples	☒	
	All Compounds <MDL	☒	
Matrix Spike % Recovery Values	Within those set by Lab		☒
Matrix Spike Dup % Recovery Values	Within those set by Lab		☒
MS/MSD RPD	<Lab QC Limits		☒
% LCS Recovery Value	Within those set by Lab	☒	
% LCSD Recovery Values	Within those set by Lab	☒	
LCS/LCSD RPD	<Lab QC Limits	☒	
% Surrogate Recovery Limits	Within those set by Lab		☒
Field Duplicate Evaluation <u>12WW20+DuP</u> <u>methane 4.52 vs 4.28 < 25%</u>	Ratio < 2.0 for water	☒	
	Ratio < 5.0 for soil		☒

If "NO," List all samples below:

Blank Information

Run		Date Extracted	Blank ID	Compound	Conc. Units	Associated Samples
Date	Time					
<u>equip blank</u>				<u>methane</u>	<u>0.252 ug/L</u>	<u>5x > 5x blank</u>

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result - 1	Result - 2	RPD %

Any runs with one (1) or more recoveries outside limits for each fraction?

Run Date	Surrogate Compound	Analyte	Original % Recovery	Re-Run Recovery	Comments

Laboratory Control Sample

Sample Type	Sample ID	Compound	LCS %	LCSD %	Comments

410 Quads - multiple runs

If "NO," list all samples below

Calibration		Instrument ID	Matrix	Correlation Coefficient	% RSD	Compound	Associated Samples
Date	Time						

Calibration		Instrument ID	Matrix	% Diff.	Compound	Associated Samples
Date	Time					

[illegible]

TIER 1 DATA REVIEW – CONVENTIONAL ANALYSIS

ANALYSIS: <u>Anions-3000</u>	MATRIX: LIQUID _____
METHOD: <u>TIC, TOC - 415.1</u>	SOLID/SOIL _____
BY: _____	

REQUIREMENTS		Y	N	NA
Method Blank	Every Batch or 20 Samples	✓		
	All Compounds <MDL	✓		
Matrix Spike Recovery Values	75-125%		✓	
Matrix Spike Duplicate Recovery Values	75-125% <u>RPD + 5x dup ok</u>		✓	
LCS Recovery Values	80-120%	✓		
LCSD Recovery Values	80-120%	✓		
LCS / LCSD RPD	<20%	✓		
PRECISION (QC Sample Field Sample or Field Sample/QC Sample)	Ratio <2.0 for Water	✓		
	Ratio <5.0 for Soil or RPD < 50%			✓

12W1020+dup
CI= 290 vs 294

504 = 173 vs 172
 If "NO," List all samples below:

TIC= 9.31 vs 11.2
TOC= 3.51 vs 370

Blank Type	Run		Date Prepped	Blank ID	Compound	Concentration (units)	Associated Samples
Date	Time						

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result - 2	RPD%
<u>water</u>		<u>Chloride</u>	<u>-46.3</u>	<u>-38.7</u>	<u>75-125</u>	<u>5x conc > 4x spike</u>	
		<u>TOC</u>	<u>78.5</u>	<u>70.2</u>	<u>↓</u>	<u>non-project 5x</u>	

Laboratory Control Sample Analysis

File Name	Analysis Type / Element	Instrument ID	Recovery %

Equip blank anions= ND
TIC= ND

TOC = 0.5233 mg/L

Continuing calibrations= ok

5x > 5x blank conc

TIER 1 DATA REVIEW - Metal ANALYSIS

metals

ANALYSIS: ~~Cl, SO₄, NO₃, NO₂ - 300.0~~ MATRIX: LIQUID *X*

EPA METHOD: ~~FOC 415.1~~ SOLID/SOIL _____ TCLP _____

BY: GF OR JCP *Total + Dissolved*

REQUIREMENTS		Y	N	NA
Method / Preparation Blank	Every Batch or 20 Sample All Compounds <IDL (MDL) / RL	✓	✓	
Equipment Rinsate Sample	All Compounds <IDL / MDL / RL <i>no EG for metals</i>			✓
Matrix Spike Recovery Values	75-125% Recovery or Lab Limits		✓	
Matrix Spike Duplicate Recovery Values	75-125% Recovery or Lab Limits		✓	
Matrix Spike / Matrix Spike Duplicate	<20%	✓		
Laboratory Control Sample (LCS) Analysis	80-120% Recovery	✓		
ICP Serial Dilutions	<10% difference when the amount is greater than 50 X IDL	✓	✓	
Field Duplicate Evaluation <i>12/11/20 dup - Total metals - OK - dissolved - OK</i>	Ratio <2.0 for Water Ratio <5.0 for Soil or RPD < 50%	✓		✓

If "NO," then list

Blank ID	Sample ID	Date Collected	Type of Analysis	Analyte	Concentration (units)
<i>method blank (dissolved): Ba = 0.00319, Ca = 0.117; Zn = 0.00508 (Zn - 05)</i>					
<i>method blank (total): Ba = 0.00261; Zn = 0.00501; Quality Zn BGR: 01, 3.5</i>					

Matrix Spike / Matrix Spike Duplicate Results and Field Duplicate

Sample Type	Sample ID	Analyte	MS Recovery	MSD Recovery	Result -1	Result -2	RPD%
<i>water (dissolved)</i>		<i>Ca</i>	<i>260</i>	<i>237</i>	<i>75-125</i>	<i>5x conc > 4x spike</i>	
<i>(total)</i>		<i>Ca</i>	<i>108</i>	<i>304</i>	<i>↓</i>	<i>↓</i>	<i>no quals</i>
<i>↓</i>		<i>Mg</i>	<i>132</i>	<i>81.5</i>	<i>↓</i>	<i>↓</i>	

Laboratory Control Sample Analysis and Duplicate Sample Analysis

Analysis Type / Element	Recovery %

not digestion spike still out

ICP Serial Dilutions

Analysis Type / Element	Concentration True	Concentration Found	Percent Recovery
<i>* Na = 12.5%</i>	<i>Qualify DM</i>	<i>- acceptable needed to be re-run at 5X + 25X for target range</i>	
<i>no quals</i>			

ANALYSIS: METALS		MATRIX:	LIQUID ☒
METHOD: <u>Total + dissolved</u>		SOLID / SOIL	TCLP
BY: _____			

REQUIREMENT		Y	N	NA
Initial Calibration Verification (ICV)	Beginning and every 10 samples.	☒		
	ICV % Recovery (90-110%) except HG (80-120%) and	☒		
	Cn- (85-115%)			☒
RSD of Initial Calibration	Correlation coefficient must be > 0.995	☒		
Initial Calibration Blank (ICB)	Initial calibration present for every analysis date, element, and instrument	☒	☒	
ICP Interference Check Sample (ICSA / ICSB)	Beginning and end of sample batch	☒		
	80-100% Recovery	☒		
Continuing Calibration Verification (CCV)	Every 10 samples	☒		
	CCV % Recovery (90-110%) except Hg (80-120%)	☒		
	and Cn- (85-115%)			☒
Continuing Calibration Blank (CCB)	Every 10 samples		☒	

If "NO," list all samples below

Standard / Blank Check and RSD of Initial Calibration

Calibration Date	Instrument ID	Run No.	Analyte	Standard Levels	Correlation Coefficient

ICV / CCV and ICP Interference Check Sample

Analysis Type / Element	Instrument ID	Run No.	ICV / CCV	Run Date	Concentration True	Concentration Found	Percent Recovery
<i>total</i> <i>dw.</i> ICB: Ba=	0.00263	- CCAL for Ba	at similar level;			5b= 0.197	plus CCB
ICB Ba=	0.00252	↓				5b= 0.197	
						5b Samples NDA	
						> 5x blk	

ICP Interference Check Sample

File Name	Analysis Type / Element	Instrument ID	Concentration True	Concentration Found	Percent Recovery

mercury CCAL when 5x run were within QC limits

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Checked *Diane Meyer*
9/13/06

Page: 25 of 52

00047022

Sample Number:	Analytical/Extraction Method:	Fit REX Dil:	Parameter:	Result:	Units:	Qtr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qtr	Code	1 2 3 4		
L0608183												
67WW02	E300	NONE	N 0 1	CHLORIDE	411	mg/L	E	Y	N		L0608183-02	16:46
				NITRATE	0.600	mg/L	U	N	Y		L0608183-02	16:46
				SULFATE	131	mg/L	E	Y	N		L0608183-02	16:46
	E300	NONE	N 1 5	CHLORIDE	900	mg/L	E	Y	N		L0608183-02	17:03
				NITRATE	3.00	mg/L	U	N	N		L0608183-02	17:03
				SULFATE	134	mg/L	Y	Y	Y		L0608183-02	17:03
	E300	NONE	N 2 25	CHLORIDE	1090	mg/L	E	Y	N		L0608183-02	17:20
				NITRATE	15.0	mg/L	U	N	N		L0608183-02	17:20
				NITRITE	10.0	mg/L	U	N	Y		L0608183-02	17:20
				SULFATE	130	mg/L	Y	N	Y		L0608183-02	17:20
	E300	NONE	N 3 100	CHLORIDE	1020	mg/L	Y	Y	Y		L0608183-02	17:38
				NITRATE	60.0	mg/L	U	N	N		L0608183-02	17:38
				NITRITE	40.0	mg/L	U	N	N		L0608183-02	17:38
				SULFATE	143	mg/L	Y	N	Y		L0608183-02	17:38
				TOTAL INORGANIC CARBON	9.38	mg/L	Y	Y	Y		L0608183-01	19:30
67WW01/G4W W01	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	3.49	mg/L	Y	Y	Y		L0608183-01	19:30
	E415.1	NONE	N 1 1	TOTAL INORGANIC CARBON	21.1	mg/L	Y	Y	Y		L0608183-02	19:16
	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	5.64	mg/L	Y	Y	Y		L0608183-02	19:16
	E415.1	NONE	N 1 1	TOTAL INORGANIC CARBON	5.00	ug/L	U	N	Y		L0608183-01	18:12
67WW01/G4W W01	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N	Y		L0608183-01	18:12
				1,1,2-TRICHLOROETHANE	0.305	ug/L	J	Y	Y	07A 15	L0608183-01	18:12
				1,1-DICHLOROETHANE	5.61	ug/L	Y	Y	Y	07A	L0608183-01	18:12
				1,1-DICHLOROETHENE	153	ug/L	Y	Y	Y		L0608183-01	18:12
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,2-DIBROMOETHANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,2-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,2-DICHLOROETHANE	5.57	ug/L	Q	Y	Y	11A 07A	L0608183-01	18:12
				1,2-DICHLOROPROPANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,3-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				1,4-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				2-BUTANONE	10.0	ug/L	U	N	Y		L0608183-01	18:12
				2-HEXANONE	10.0	ug/L	U	N	Y		L0608183-01	18:12
				4-METHYL-2-PENTANONE	10.0	ug/L	U	N	Y		L0608183-01	18:12
				ACETONE	10.0	ug/L	U	N	Y		L0608183-01	18:12
				BENZENE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				BROMODICHLOROMETHANE	5.00	ug/L	U	N	Y		L0608183-01	18:12
				BROMOFORM	5.00	ug/L	U	N	Y		L0608183-01	18:12

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 26 of 52

00047023

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:		1 2 3 4		
L0608183												
67WVW01/G4W	SW8260B	SW5030	N 0 1	BROMOMETHANE	10.0	ug/L	U	N Y	U	05B	L0608183-01	18:12
W01				CARBON DISULFIDE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				CHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				CHLOROETHANE	10.0	ug/L	U	N Y	U		L0608183-01	18:12
				CHLOROFORM	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				CHLOROMETHANE	10.0	ug/L	U	N Y	U	05B	L0608183-01	18:12
				CIS-1,2-DICHLOROETHENE	0.954	ug/L	J	Y Y	JH	07A 15	L0608183-01	18:12
				CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				CYCLOHEXANE	10.0	ug/L	U	N Y	U		L0608183-01	18:12
				DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U		L0608183-01	18:12
				ETHYL BENZENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				METHYL ACETATE	10.0	ug/L	U	N Y	U		L0608183-01	18:12
				METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U		L0608183-01	18:12
				METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				STYRENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				TETRACHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				TOLUENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U		L0608183-01	18:12
				TRICHLOROETHENE	5.38	ug/L	U	Y Y	JH	07A	L0608183-01	18:12
				TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y	U	05B	L0608183-01	18:12
				VINYL CHLORIDE	1.46	ug/L	J	Y Y	JH	07A 15	L0608183-01	18:12
				XYLENES, TOTAL	5.00	ug/L	U	N Y	U		L0608183-01	18:12
67WVW02	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U	11A	L0608183-02	18:43
				1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,1-DICHLOROETHANE	0.365	ug/L	J	Y Y	JH	07A 15	L0608183-02	18:43
				1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
				1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
					5.00	ug/L	U	N Y	U		L0608183-02	18:43

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Plk

Page: 27 of 52

00047024

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:	1 2 3 4		
L0608183											
67WW02	SW8260B SW5030	N 0 1	1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			2-BUTANONE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			2-HEXANONE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			ACETONE	2.84	ug/L	J	Y Y	B	06C 15	L0608183-02	18:43
			BENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			BROMOFORM	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			BROMOMETHANE	10.0	ug/L	U	N Y	UJ	05B	L0608183-02	18:43
			CARBON DISULFIDE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			CHLOROBENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			CHLOROETHANE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			CHLOROFORM	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			CHLOROMETHANE	10.0	ug/L	U	N Y	UJ	05B	L0608183-02	18:43
			CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			CYCLOHEXANE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			ETHYL BENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			ISOPROPYL BENZENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			METHYL ACETATE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			STYRENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TOLUENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TRICHLOROETHENE	5.00	ug/L	U	N Y	U		L0608183-02	18:43
			TRICHLOROFUOROMETHANE	10.0	ug/L	U	N Y	UJ	05B	L0608183-02	18:43
			VINYL CHLORIDE	10.0	ug/L	U	N Y	U		L0608183-02	18:43
			XYLENES, TOTAL	5.00	ug/L	U	N Y	U		L0608183-02	18:43
L0608204											
67WW05	RSK-175 SW5030	N 0 1	ETHANE	0.500	ug/L	U	N Y	U		L0608204-01	19:09
			ETHENE	0.500	ug/L	U	N Y	U		L0608204-01	19:09
			METHANE	8.88	ug/L		Y Y			L0608204-01	19:09
67WW05	E300 NONE	N 0 1	CHLORIDE	344	mg/L	E	Y N			L0608204-01	16:32

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 28 of 52

00047025

Sample Number:	Analytical/Extraction Method:	Flt REX Dlt:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608204												
67WW05	E300	NONE	N 0 1	NITRATE	0.600	mg/L	U	N	Y		L0608204-01	16:32
				SULFATE	68.7	mg/L	E	Y	N		L0608204-01	16:32
	E300	NONE	N 1 4	CHLORIDE	772	mg/L	E	Y	N		L0608204-01	16:49
				NITRATE	2.40	mg/L	U	N	N		L0608204-01	16:49
				SULFATE	67.9	mg/L		Y	Y		L0608204-01	16:49
	E300	NONE	N 2 20	CHLORIDE	977	mg/L	E	Y	N		L0608204-01	17:06
				NITRATE	12.0	mg/L	U	N	N		L0608204-01	17:06
				NITRITE	8.00	mg/L	U	N	Y		L0608204-01	17:06
				SULFATE	67.0	mg/L		Y	N		L0608204-01	17:06
	E300	NONE	N 3 100	CHLORIDE	909	mg/L		Y	Y		L0608204-01	17:24
				NITRATE	60.0	mg/L	U	N	N		L0608204-01	17:24
				NITRITE	40.0	mg/L	U	N	N		L0608204-01	17:24
				SULFATE	66.1	mg/L	J	Y	N		L0608204-01	17:24
67WW05	E415.1	NONE	N 0 3	TOTAL INORGANIC CARBON	77.4	mg/L		Y	Y		L0608204-01	14:49
	E415.1	NONE	N 1 3	TOTAL ORGANIC CARBON	10.4	mg/L		Y	Y		L0608204-01	14:49
67WW05	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N	Y		L0608204-01	15:50
				1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,1-DICHLOROETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,1-DICHLOROETHENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2-DIBROMOETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2-DICHLOROETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,2-DICHLOROPROPANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,3-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				1,4-DICHLOROBENZENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				2-BUTANONE	10.0	ug/L	U	N	Y		L0608204-01	15:50
				2-HEXANONE	10.0	ug/L	U	N	Y		L0608204-01	15:50
				4-METHYL-2-PENTANONE	10.0	ug/L	U	N	Y		L0608204-01	15:50
				ACETONE	2.82	ug/L	J	Y	Y	06A 15	L0608204-01	15:50
				BENZENE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				BROMODICHLOROMETHANE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				BROMOFORM	5.00	ug/L	U	N	Y		L0608204-01	15:50
				BROMOMETHANE	10.0	ug/L	U	N	Y		L0608204-01	15:50
				CARBON DISULFIDE	5.00	ug/L	U	N	Y		L0608204-01	15:50
				CARBON TETRACHLORIDE	5.00	ug/L	U	N	Y		L0608204-01	15:50

Run Date: September 12, 2006

Sample Number:	Analytical/Extraction Method:		Fit	REX	Dil:	Parameter:	Result:	Units:	Qlfr:	Hit	Use	BCF	Reason Codes				Lab Sample:	Analysis Time:
	1	2											3	4				
L0608204																		
67WW05	SW8260B	SW5030	N	0	I	CHLOROBENZENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						CHLOROETHANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						CHLOROFORM	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						CHLOROMETHANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						CYCLOHEXANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						DIBROMOCHLOROMETHANE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						ETHYL BENZENE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						ISOPROPYLBENZENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						METHYL ACETATE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						METHYLCYCLOHEXANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
METHYLENE CHLORIDE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50							
L0608240																		
35BWW03	RSK-175	SW5030	N	0	I	STYRENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TETRACHLOROETHENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TOLUENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TRICHLOROETHENE	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						VINYL CHLORIDE	10.0	ug/L	U	N	Y	U				L0608204-01	15:50	
						XYLENES, TOTAL	5.00	ug/L	U	N	Y	U				L0608204-01	15:50	
						ETHANE	0.500	ug/L	U	N	Y	U				L0608240-05	15:32	
						ETHENE	1.90	ug/L		Y	Y					L0608240-05	15:32	
						METHANE	117	ug/L		Y	Y					L0608240-05	15:32	
						ETHANE	0.500	ug/L	U	N	Y	U				L0608240-06	15:46	
						ETHENE	1.82	ug/L		Y	Y					L0608240-06	15:46	
METHANE	110	ug/L		Y	Y					L0608240-06	15:46							
ETHANE	0.500	ug/L	U	N	Y	U				L0608240-07	16:00							
ETHENE	0.500	ug/L	U	N	Y	U				L0608240-07	16:00							
METHANE	0.561	ug/L		Y	Y					06A 06C	L0608240-07	16:00						
ETHANE	0.500	ug/L	U	N	Y	U					L0608240-02	19:23						
ETHENE	0.500	ug/L	U	N	Y	U					L0608240-02	19:23						
METHANE	340	ug/L		Y	Y						L0608240-02	19:23						
ETHANE	0.500	ug/L	U	N	Y	U					L0608240-03	19:37						
ETHENE	0.500	ug/L	U	N	Y	U					L0608240-03	19:37						

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 30 of 52

00047027

Sample Number:	Analytical/Extraction Method:	Flt REX Dtl:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr	Code	1 2 3 4		
L0608240												
67WW07	RSK-175	SW5030	N 0 1	METHANE	3.18	ug/L	Y Y				L0608240-03	19:37
LHSMW58	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	N Y	U	U		L0608240-04	15:18
				ETHENE	0.500	ug/L	N Y	U	U		L0608240-04	15:18
				METHANE	1.19	ug/L	Y Y	B	06A 06C		L0608240-04	15:18
33BWW03	E300	NONE	N 0 1	CHLORIDE	81.7	mg/L	Y N				L0608240-05	17:32
				NITRATE	0.600	mg/L	N Y	U	U		L0608240-05	17:32
				NITRITE	0.400	mg/L	N Y	U	U		L0608240-05	17:32
				SULFATE	4.81	mg/L	Y Y				L0608240-05	17:32
	E300	NONE	N 1 10	CHLORIDE	78.8	mg/L	Y Y				L0608240-05	17:49
				NITRATE	6.00	mg/L	N N	U	U		L0608240-05	17:49
				NITRITE	4.00	mg/L	N N	U	U		L0608240-05	17:49
				SULFATE	5.49	mg/L	Y N	J			L0608240-05	17:49
35BWW03DU	E300	NONE	N 0 1	CHLORIDE	81.2	mg/L	Y N	E			L0608240-06	18:07
P				NITRATE	0.600	mg/L	N Y	U	U		L0608240-06	18:07
				NITRITE	0.400	mg/L	N Y	U	U		L0608240-06	18:07
				SULFATE	8.21	mg/L	Y Y				L0608240-06	18:07
	E300	NONE	N 1 10	CHLORIDE	77.6	mg/L	Y Y				L0608240-06	18:24
				NITRATE	6.00	mg/L	N N	U	U		L0608240-06	18:24
				NITRITE	4.00	mg/L	N N	U	U		L0608240-06	18:24
				SULFATE	8.23	mg/L	Y N	J			L0608240-06	18:24
67WW03	E300	NONE	N 0 5	CHLORIDE	1640	mg/L	Y N	E			L0608240-07	18:41
				NITRATE	3.00	mg/L	N Y	U	U		L0608240-07	18:41
				SULFATE	291	mg/L	Y Y				L0608240-07	18:41
	E300	NONE	N 1 25	CHLORIDE	2470	mg/L	Y N	E			L0608240-07	18:59
				NITRATE	15.0	mg/L	N N	U	U		L0608240-07	18:59
				NITRITE	10.0	mg/L	N Y	U	U		L0608240-07	18:59
				SULFATE	298	mg/L	Y N				L0608240-07	18:59
	E300	NONE	N 2 400	CHLORIDE	2360	mg/L	Y Y				L0608240-07	23:37
				NITRATE	240	mg/L	N N	U	U		L0608240-07	23:37
				NITRITE	160	mg/L	N N	U	U		L0608240-07	23:37
				SULFATE	330	mg/L	Y N	J			L0608240-07	23:37
67WW06	E300	NONE	N 0 5	CHLORIDE	1480	mg/L	Y N	E			L0608240-02	14:38
				NITRATE	3.00	mg/L	N Y	U	U		L0608240-02	14:38
				SULFATE	271	mg/L	Y Y				L0608240-02	14:38
	E300	NONE	N 1 25	CHLORIDE	2150	mg/L	Y N	E			L0608240-02	14:55
				NITRATE	15.0	mg/L	N N	U	U		L0608240-02	14:55
				NITRITE	10.0	mg/L	N Y	U	U		L0608240-02	14:55
				SULFATE	278	mg/L	Y N				L0608240-02	14:55
	E300	NONE	N 2 400	CHLORIDE	2050	mg/L	Y Y				L0608240-02	19:34

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 31 of 52

00047028

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608240												
67WW06	E300	NONE	N 2 400	NITRATE	240	mg/L	U	N	N		L0608240-02	19:34
				NITRITE	160	mg/L	U	N	N		L0608240-02	19:34
				SULFATE	381	mg/L	J	Y	N		L0608240-02	19:34
67WW07	E300	NONE	N 0 1	CHLORIDE	395	mg/L	E	Y	N		L0608240-03	15:30
				NITRATE	0.600	mg/L	U	N	Y		L0608240-03	15:30
				SULFATE	12.3	mg/L	Y	Y			L0608240-03	15:30
	E300	NONE	N 1 10	CHLORIDE	901	mg/L	E	Y	N		L0608240-03	15:47
				NITRATE	6.00	mg/L	U	N	N		L0608240-03	15:47
				NITRITE	4.00	mg/L	U	N	Y		L0608240-03	15:47
				SULFATE	14.9	mg/L	Y	N			L0608240-03	15:47
	E300	NONE	N 2 100	CHLORIDE	889	mg/L	Y	Y			L0608240-03	16:05
				NITRATE	60.0	mg/L	U	N	N		L0608240-03	16:05
				NITRITE	40.0	mg/L	U	N	N		L0608240-03	16:05
				SULFATE	100	mg/L	U	N	N		L0608240-03	16:05
LHSMW58	E300	NONE	N 0 1	CHLORIDE	11.8	mg/L	Y	Y			L0608240-04	16:22
				NITRATE	0.600	mg/L	U	N	Y		L0608240-04	16:22
				NITRITE	0.400	mg/L	U	N	Y		L0608240-04	16:22
				SULFATE	77.4	mg/L	E	Y	N		L0608240-04	16:22
	E300	NONE	N 1 4	CHLORIDE	11.4	mg/L	Y	N			L0608240-04	16:40
				NITRATE	2.40	mg/L	U	N	N		L0608240-04	16:40
				NITRITE	1.60	mg/L	U	N	N		L0608240-04	16:40
				SULFATE	76.5	mg/L	Y	Y			L0608240-04	16:40
				ALUMINUM, TOTAL	0.100	mg/L	U	N	Y		L0608240-08	16:16
				ARSENIC, TOTAL	0.0100	mg/L	U	N	Y		L0608240-08	16:16
				BARIUM, TOTAL	0.0292	mg/L	Y	Y			L0608240-08	16:16
				BERYLLIUM, TOTAL	0.000522	mg/L	J	Y	Y	15	L0608240-08	16:16
				CADMIUM, TOTAL	0.0100	mg/L	U	N	Y		L0608240-08	16:16
				CALCIUM, TOTAL	59.7	mg/L	Y	Y			L0608240-08	16:16
				CHROMIUM, TOTAL	0.167	mg/L	Y	Y			L0608240-08	16:16
				COBALT, TOTAL	0.0374	mg/L	Y	Y			L0608240-08	16:16
				COPPER, TOTAL	0.00558	mg/L	J	Y	Y	15	L0608240-08	16:16
				IRON, TOTAL	3.09	mg/L	Y	Y			L0608240-08	16:16
				LEAD, TOTAL	0.00500	mg/L	U	N	Y		L0608240-08	16:16
				MAGNESIUM, TOTAL	35.5	mg/L	Y	Y			L0608240-08	16:16
				MANGANESE, TOTAL	0.822	mg/L	Y	Y			L0608240-08	16:16
				NICKEL, TOTAL	0.708	mg/L	Y	Y			L0608240-08	16:16
				POTASSIUM, TOTAL	1.00	mg/L	U	N	Y		L0608240-08	16:16
				SILVER, TOTAL	0.0100	mg/L	U	N	Y		L0608240-08	16:16
				VANADIUM, TOTAL	0.0148	mg/L	Y	Y			L0608240-08	16:16

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 32 of 52

00047029

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes				Lab Sample:	Analysis Time:
										1	2	3	4		
L0608240															
LHSMW62-080906	SW6010B	TOTREC	N 0 1	ZINC, TOTAL	0.0441	mg/L	Y	Y						L0608240-08	16:16
	SW6010B	TOTREC	N 1 20	SODIUM, TOTAL	399	mg/L	Y	Y						L0608240-08	18:45
	SW6010B	TOTREC	Y 0 1	ALUMINUM, DISSOLVED	0.100	mg/L	U	N	Y	U				L0608240-09	15:45
35BW03				ARSENIC, DISSOLVED	0.0100	mg/L	U	N	Y	U				L0608240-09	15:45
				BARIUM, DISSOLVED	0.0231	mg/L		Y	Y					L0608240-09	15:45
				BERYLLIUM, DISSOLVED	0.0100	mg/L	U	N	Y	U				L0608240-09	15:45
				CADMIUM, DISSOLVED	0.0100	mg/L	U	N	Y	U				L0608240-09	15:45
				CALCIUM, DISSOLVED	60.4	mg/L		Y	Y					L0608240-09	15:45
				CHROMIUM, DISSOLVED	0.0419	mg/L		Y	Y					L0608240-09	15:45
				COBALT, DISSOLVED	0.0323	mg/L		Y	Y					L0608240-09	15:45
				COPPER, DISSOLVED	0.0200	mg/L	U	N	Y	U				L0608240-09	15:45
				IRON, DISSOLVED	1.92	mg/L		Y	Y					L0608240-09	15:45
				LEAD, DISSOLVED	0.00500	mg/L	U	N	Y	U				L0608240-09	15:45
35BW03DU P				MAGNESIUM, DISSOLVED	35.5	mg/L		Y	Y					L0608240-09	15:45
				MANGANESE, DISSOLVED	0.697	mg/L		Y	Y					L0608240-09	15:45
				NICKEL, DISSOLVED	0.652	mg/L		Y	Y					L0608240-09	15:45
				POTASSIUM, DISSOLVED	1.00	mg/L	U	N	Y	U				L0608240-09	15:45
				SILVER, DISSOLVED	0.0100	mg/L	U	N	Y	U				L0608240-09	15:45
				VANADIUM, DISSOLVED	0.00818	mg/L	J	Y	Y	J	15			L0608240-09	15:45
				ZINC, DISSOLVED	0.00854	mg/L	J	Y	Y	J	15			L0608240-09	15:45
	SW6010B	TOTREC	Y 1 50	SODIUM, DISSOLVED	400	mg/L		Y	Y					L0608240-09	14:28
	SW6020	SW3015	N 0 1	ANTIMONY, TOTAL	0.000350	mg/L	J	Y	Y	J	15			L0608240-08	15:00
				SELENIUM, TOTAL	0.0124	mg/L		Y	Y					L0608240-08	15:00
67WW03				THALLIUM, TOTAL	0.000684	mg/L		Y	Y					L0608240-08	15:00
	SW6020	SW3015	Y 0 1	ANTIMONY, DISSOLVED	0.000352	mg/L	J	Y	Y	J	15			L0608240-09	15:31
				SELENIUM, DISSOLVED	0.0111	mg/L		Y	Y					L0608240-09	15:31
67WW06				THALLIUM, DISSOLVED	0.000496	mg/L		Y	Y					L0608240-09	15:31
	SW7470A	METHOD	N 0 1	MERCURY	0.000200	mg/L	U	N	Y	U				L0608240-08	10:16
	SW7470A	METHOD	Y 0 1	MERCURY, DISSOLVED	0.000200	mg/L	U	N	Y	U				L0608240-09	10:18
67WW07	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	12.5	mg/L		Y	Y					L0608240-05	15:52
	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	9.09	mg/L		Y	Y					L0608240-05	15:52
	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	13.1	mg/L		Y	Y					L0608240-06	16:06
67WW07	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	8.34	mg/L		Y	Y					L0608240-06	16:06
	E415.1	NONE	N 0 4	TOTAL INORGANIC CARBON	42.7	mg/L		Y	Y					L0608240-07	17:16
	E415.1	NONE	N 1 4	TOTAL ORGANIC CARBON	13.7	mg/L		Y	Y					L0608240-07	17:16
67WW07	E415.1	NONE	N 0 3	TOTAL INORGANIC CARBON	67.7	mg/L		Y	Y					L0608240-02	17:02
	E415.1	NONE	N 1 3	TOTAL ORGANIC CARBON	23.3	mg/L		Y	Y					L0608240-02	17:02
	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	42.3	mg/L		Y	Y					L0608240-03	15:23

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 33 of 52

00047030

Sample Number:	Analytical/Extraction Method:	Flt REX Dtl:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608240												
67WW07	E415.1	NONE	TOTAL ORGANIC CARBON	7.41	mg/L		Y	Y			L0608240-03	15:23
LHSMW58	E415.1	NONE	TOTAL INORGANIC CARBON	18.7	mg/L		Y	Y			L0608240-04	15:38
	E415.1	NONE	TOTAL ORGANIC CARBON	3.94	mg/L		Y	Y			L0608240-04	15:38
35BWW03	SW8260B	SW5030	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,1-DICHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,1-DICHLOROETHENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2-DIBROMOETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2-DICHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			2-BUTANONE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			2-HEXANONE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			ACETONE	8.98	ug/L	J	Y	Y	B	06C 07A 15	L0608240-05	18:53
			BENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			BROMODICHLOROMETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			BROMOFORM	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			BROMOMETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CARBON DISULFIDE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CARBON TETRACHLORIDE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CHLOROBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CHLOROETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CHLOROFORM	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			CHLOROMETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			CYCLOHEXANE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			ETHYL BENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			ISOPROPYLBENZENE	5.00	ug/L	U	N	Y	U		L0608240-05	18:53
			METHYL ACETATE	10.0	ug/L	U	N	Y	U		L0608240-05	18:53
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N	Y	U		L0608240-05	18:53

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Page: 34 of 52

Longhorn Army Ammunition Plk

00047031

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608240												
35BWW03	SW8260B	SW5030	N 0 1	METHYLCYCLOHEXANE	10.0	ug/L	N Y	U	U		L0608240-05	18:53
				METHYLENE CHLORIDE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				STYRENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TETRACHLOROETHENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TOLUENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TRICHLOROETHENE	5.00	ug/L	N Y	U	U		L0608240-05	18:53
				TRICHLOROFLUOROMETHANE	10.0	ug/L	N Y	U	U		L0608240-05	18:53
				VINYL CHLORIDE	10.0	ug/L	N Y	U	U		L0608240-05	18:53
				XYLENES, TOTAL	5.00	ug/L	N Y	U	U		L0608240-05	18:53
35BWW03DU	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
P				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,1,2,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				1,1,2-TRICHLOROETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,1-DICHLOROETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,1-DICHLOROETHENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2-DIBROMOETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2-DICHLOROBENZENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2-DICHLOROETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,2-DICHLOROPROPANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,3-DICHLOROBENZENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				1,4-DICHLOROBENZENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				2-BUTANONE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				2-HEXANONE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				4-METHYL-2-PENTANONE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				ACETONE	9.77	ug/L	N Y	U	U		L0608240-06	19:24
				BENZENE	5.00	ug/L	N Y	U	U	06A 07A 15	L0608240-06	19:24
				BROMODICHLOROMETHANE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				BROMOFORM	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				BROMOMETHANE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				CARBON DISULFIDE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				CARBON TETRACHLORIDE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				CHLOROBENZENE	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				CHLOROETHANE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				CHLOROFORM	5.00	ug/L	N Y	U	U		L0608240-06	19:24
				CHLOROMETHANE	10.0	ug/L	N Y	U	U		L0608240-06	19:24
				CIS-1,2-DICHLOROETHENE	10.0	ug/L	N Y	U	U		L0608240-06	19:24

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 35 of 52

00047032

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608240	35BWW03DU P	N 0 1	CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			CYCLOHEXANE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			ETHYL BENZENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			METHYL ACETATE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			STYRENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TOLUENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TRICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			TRICHLOROFUOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			VINYL CHLORIDE	10.0	ug/L	U	N Y	U	U		L0608240-06	19:24
			XYLENES, TOTAL	5.00	ug/L	U	N Y	U	U		L0608240-06	19:24
			1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
67WW03	SW8260B	N 0 1	1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,1-DICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			2-BUTANONE	10.0	ug/L	U	N Y	U	U		L0608240-07	19:54
			2-HEXANONE	10.0	ug/L	U	N Y	U	U		L0608240-07	19:54
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U	U		L0608240-07	19:54
			ACETONE	10.0	ug/L	U	N Y	U	U		L0608240-07	19:54
			BENZENE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54
			BROMOFORM	5.00	ug/L	U	N Y	U	U		L0608240-07	19:54

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 36 of 52

00047033

Sample Number:	Analytical/Extraction Method:	Fit-REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Reason Codes	Lab Sample:	Analysis Time:
								Code:	1 2 3 4		
L0608240											
67WW03	SW8260B	SW5030	N 0 1	BROMOMETHANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				CARBON DISULFIDE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				CHLOROBENZENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				CHLOROETHANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				CHLOROFORM	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				CHLOROMETHANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				CYCLOHEXANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				ETHYL BENZENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				METHYL ACETATE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				STYRENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TETRACHLOROETHENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TOLUENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TRICHLOROETHENE	5.00	ug/L	U	N Y	U	L0608240-07	19:54
				TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				VINYL CHLORIDE	10.0	ug/L	U	N Y	U	L0608240-07	19:54
				XYLENES, TOTAL	5.00	ug/L	U	N Y	U	L0608240-07	19:54
67WW06	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U	L0608240-02	17:21
				1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,1-DICHLOROETHANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,2-DICHLOROETHANE	3.02	ug/L	J	Y Y	J	L0608240-02	17:21
				1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U	L0608240-02	17:21
				1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	L0608240-02	17:21

15

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 37 of 52

00047034

Sample Number:	Analytical/Extraction Method:	Fit REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:	1 2 3 4		
L0608240											
67WW06	SW8260B	SW5030	N 0 1	1,4-DICHLOROBENZENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				2-BUTANONE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				2-HEXANONE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				4-METHYL-2-PENTANONE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				ACETONE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				BENZENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				BROMODICHLOROMETHANE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				BROMOFORM	5.00	ug/L	N	Y	U	L0608240-02	17:21
				BROMOMETHANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				CARBON DISULFIDE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				CARBON TETRACHLORIDE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				CHLOROBENZENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				CHLOROETHANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				CHLOROFORM	5.00	ug/L	N	Y	U	L0608240-02	17:21
				CHLOROMETHANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				CIS-1,2-DICHLOROETHENE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				CIS-1,3-DICHLOROPROPENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				CYCLOHEXANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				DIBROMOCHLOROMETHANE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				DICHLORODIFLUOROMETHANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				ETHYL BENZENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				ISOPROPYLBENZENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				METHYL ACETATE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				METHYL TERT-BUTYL ETHER	5.00	ug/L	N	Y	U	L0608240-02	17:21
				METHYLCYCLOHEXANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				METHYLENE CHLORIDE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				STYRENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TETRACHLOROETHENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TOLUENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TRICHLOROETHENE	5.00	ug/L	N	Y	U	L0608240-02	17:21
				TRICHLOROFUOROMETHANE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				VINYL CHLORIDE	10.0	ug/L	N	Y	U	L0608240-02	17:21
				XYLENES, TOTAL	5.00	ug/L	N	Y	U	L0608240-02	17:21
67WW07											
SW8260B	SW5030	N 0 1		1,1,1-TRICHLOROETHANE	5.00	ug/L	N	Y	U	L0608240-03	17:52
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	N	Y	U	L0608240-03	17:52
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	N	Y	U	L0608240-03	17:52
				1,1,2-TRICHLOROETHANE	5.00	ug/L	N	Y	U	L0608240-03	17:52
				1,1-DICHLOROETHANE	5.00	ug/L	N	Y	U	L0608240-03	17:52

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 38 of 52

00047035

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes				Lab Sample:	Analysis Time:
										1	2	3	4		
L0608240															
67WVW07	SW8260B SW5030	N 0 1	1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			2-BUTANONE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			2-HEXANONE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			ACETONE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			BENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			BROMOFORM	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			BROMOMETHANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			CARBON DISULFIDE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			CHLOROBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			CHLOROETHANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			CHLOROFORM	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			CHLOROMETHANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			CYCLOHEXANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			ETHYL BENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			METHYL ACETATE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U	U					L0608240-03	17:52
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			STYRENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			TOLUENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52
			TRICHLOROETHENE	5.00	ug/L	U	N Y	U	U					L0608240-03	17:52

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Plk

Page: 39 of 52

00047036

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr	Code	1 2 3 4		
L0608240	67WW07	SW8260B	SW5030	N 0 1	TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y		L0608240-03	17:52
					VINYL CHLORIDE	10.0	ug/L	U	N Y		L0608240-03	17:52
					XYLENES, TOTAL	5.00	ug/L	U	N Y		L0608240-03	17:52
LHSMW58	SW8260B	SW5030	N 0 1		1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	69.2	ug/L	U	N Y		L0608240-04	18:22
					1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,1-DICHLOROETHANE	0.436	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					1,1-DICHLOROETHENE	2.11	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,2-DIBROMOETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,2-DICHLOROETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					2-BUTANONE	10.0	ug/L	U	N Y		L0608240-04	18:22
					2-HEXANONE	10.0	ug/L	U	N Y		L0608240-04	18:22
					4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y		L0608240-04	18:22
					ACETONE	10.0	ug/L	U	N Y		L0608240-04	18:22
					BENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					BROMODICHLOROMETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					BROMOFORM	5.00	ug/L	U	N Y		L0608240-04	18:22
					BROMOMETHANE	10.0	ug/L	U	N Y		L0608240-04	18:22
					CARBON DISULFIDE	5.00	ug/L	U	N Y		L0608240-04	18:22
					CARBON TETRACHLORIDE	5.00	ug/L	U	N Y		L0608240-04	18:22
					CHLOROBENZENE	1.19	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					CHLOROETHANE	10.0	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					CHLOROFORM	0.210	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					CHLOROMETHANE	10.0	ug/L	U	N Y		L0608240-04	18:22
					CIS-1,2-DICHLOROETHENE	0.716	ug/L	J	Y Y	07A 15	L0608240-04	18:22
					CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					CYCLOHEXANE	10.0	ug/L	U	N Y		L0608240-04	18:22
					DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y		L0608240-04	18:22
					DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y		L0608240-04	18:22
					ETHYL BENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					ISOPROPYLBENZENE	5.00	ug/L	U	N Y		L0608240-04	18:22
					METHYL ACETATE	10.0	ug/L	U	N Y		L0608240-04	18:22
					METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y		L0608240-04	18:22

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Plk

Page: 40 of 52

00047037

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:	1 2 3 4		
L0608240											
LHSMW58	SW8260B	SW5030	N 0 1	METHYLCYCLOHEXANE	10.0	ug/L	N Y	U		L0608240-04	18:22
				METHYLENE CHLORIDE	5.00	ug/L	N Y	U		L0608240-04	18:22
				STYRENE	5.00	ug/L	N Y	U		L0608240-04	18:22
				TETRACHLOROETHENE	21.8	ug/L	Y Y	U	07A	L0608240-04	18:22
				TOLUENE	5.00	ug/L	N Y	U		L0608240-04	18:22
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	N Y	U		L0608240-04	18:22
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	N Y	U		L0608240-04	18:22
				TRICHLOROETHENE	21.8	ug/L	Y Y	U	07A	L0608240-04	18:22
				TRICHLOROFLUOROMETHANE	10.0	ug/L	N Y	U		L0608240-04	18:22
				VINYL CHLORIDE	10.0	ug/L	N Y	U		L0608240-04	18:22
				XYLENES, TOTAL	5.00	ug/L	N Y	U		L0608240-04	18:22
L0608289											
35BWW01	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	N Y	U		L0608289-01	16:14
				ETHENE	0.500	ug/L	N Y	U		L0608289-01	16:14
				METHANE	2.57	ug/L	Y Y	U		L0608289-01	16:14
LHSMW59	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	N Y	U		L0608289-02	16:28
				ETHENE	0.500	ug/L	N Y	U		L0608289-02	16:28
				METHANE	0.530	ug/L	Y Y	B	06C	L0608289-02	16:28
35BWW01	E300	NONE	N 0 10	CHLORIDE	5.32	mg/L	Y Y	U		L0608289-01	23:04
				NITRATE	6.00	mg/L	N Y	U		L0608289-01	23:04
				NITRITE	4.00	mg/L	N Y	U		L0608289-01	23:04
				SULFATE	14.6	mg/L	Y Y	U		L0608289-01	23:04
LHSMW59	E300	NONE	N 0 4	CHLORIDE	107	mg/L	Y N	E		L0608289-02	15:15
				CHLORIDE	107	mg/L	Y Y	U		WG219809-04	23:57
				NITRATE	2.40	mg/L	N N	U		WG219809-04	23:57
				NITRATE	2.40	mg/L	N Y	U		L0608289-02	15:15
				NITRITE	1.60	mg/L	N N	U		WG219809-04	23:57
				NITRITE	1.60	mg/L	N Y	U		L0608289-02	15:15
				SULFATE	143	mg/L	Y Y	U		L0608289-02	15:15
				SULFATE	147	mg/L	Y N	U		WG219809-04	23:57
E300	NONE	N 1 10		CHLORIDE	103	mg/L	Y Y	U		L0608289-02	15:32
				NITRATE	6.00	mg/L	N N	U		L0608289-02	15:32
				NITRITE	4.00	mg/L	N N	U		L0608289-02	15:32
				SULFATE	143	mg/L	Y N	U		L0608289-02	15:32
35BWW01	E415.1	NONE	N 0 10	TOTAL INORGANIC CARBON	10.0	mg/L	N Y	U		L0608289-01	19:05
	E415.1	NONE	N 1 10	TOTAL ORGANIC CARBON	11.6	mg/L	Y Y	U		L0608289-01	19:05
LHSMW59	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	28.6	mg/L	Y Y	U		L0608289-02	19:20
	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	5.99	mg/L	Y Y	U		L0608289-02	19:20

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 41 of 52

00047038

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes				Lab Sample:	Analysis Time:
										1	2	3	4		
L0608289															
35BWW01	SW8260B SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,1-DICHLOROETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			2-BUTANONE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			2-HEXANONE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			ACETONE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			BENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			BROMOFORM	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			BROMOMETHANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			CARBON DISULFIDE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			CHLOROBENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			CHLOROETHANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			CHLOROFORM	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			CHLOROMETHANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			CYCLOHEXANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			ETHYL BENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			METHYL ACETATE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U						L0608289-01	14:20
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U						L0608289-01	14:20
			STYRENE	5.00	ug/L	U	N Y	U						L0608289-01	14:20

05B

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 42 of 52

00047039

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:	
	Method:							Qlfr	1	2	3	4	
L0608289	35BWW01	SW8260B	SW5030	N 0 1	TETRACHLOROETHENE	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					TOLUENE	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					TRICHLOROETHENE	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N	Y	U	L0608289-01	14:20
					VINYL CHLORIDE	10.0	ug/L	U	N	Y	U	L0608289-01	14:20
					XYLENES, TOTAL	5.00	ug/L	U	N	Y	U	L0608289-01	14:20
					1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50
					1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50
LHSMW59	SW8260B	SW5030	N 0 1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,1-DICHLOROETHENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2-DIBROMOETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2-DICHLOROETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,2-DICHLOROPROPANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,3-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				1,4-DICHLOROBENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				2-BUTANONE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				2-HEXANONE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				4-METHYL-2-PENTANONE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				ACETONE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				BENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				BROMODICHLOROMETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				BROMOFORM	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				BROMOMETHANE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				CARBON DISULFIDE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				CARBON TETRACHLORIDE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				CHLOROBENZENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				CHLOROETHANE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				CHLOROFORM	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				CHLOROMETHANE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				CIS-1,2-DICHLOROETHENE	0.521	ug/L	J	Y	Y	J	L0608289-02	14:50	
				CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	
				CYCLOHEXANE	10.0	ug/L	U	N	Y	U	L0608289-02	14:50	
				DIBROMOCHLOROMETHANE	5.00	ug/L	U	N	Y	U	L0608289-02	14:50	

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 43 of 52

00047040

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr	Code:	1 2 3 4		
L0608289												
LHSMW59	SW8260B	SW5030	N 0 1	DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N	Y		L0608289-02	14:50
				ETHYL BENZENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				ISOPROPYLBENZENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				METHYL ACETATE	10.0	ug/L	U	N	Y		L0608289-02	14:50
				METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N	Y		L0608289-02	14:50
				METHYLCYCLOHEXANE	10.0	ug/L	U	N	Y		L0608289-02	14:50
				METHYLENE CHLORIDE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				STYRENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				TETRACHLOROETHENE	1.19	ug/L	J	Y	Y	15	L0608289-02	14:50
				TOLUENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N	Y		L0608289-02	14:50
				TRICHLOROETHENE	135	ug/L	U	Y	Y		L0608289-02	14:50
				TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N	Y		L0608289-02	14:50
				VINYL CHLORIDE	10.0	ug/L	U	N	Y		L0608289-02	14:50
				XYLENES, TOTAL	5.00	ug/L	U	N	Y		L0608289-02	14:50
L0608330												
12WWV20-081006	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	U	N	Y		L0608330-01	16:56
				ETHENE	0.500	ug/L	U	N	Y		L0608330-01	16:56
				METHANE	4.52	ug/L	U	Y	Y		L0608330-01	16:56
12WWV20-081006-DUP	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	U	N	Y		L0608330-03	17:10
				ETHENE	0.500	ug/L	U	N	Y		L0608330-03	17:10
				METHANE	4.28	ug/L	U	Y	Y		L0608330-03	17:10
12WWV21-081006	RSK-175	SW5030	N 0 1	ETHANE	0.500	ug/L	U	N	Y		L0608330-05	17:24
				ETHENE	0.500	ug/L	U	N	Y		L0608330-05	17:24
				METHANE	190	ug/L	U	Y	Y		L0608330-05	17:24
12WWV20-081006	E300	NONE	N 0 1	CHLORIDE	226	mg/L	E	Y	N		L0608330-01	15:00
				NITRATE	0.600	mg/L	U	N	Y		L0608330-01	15:00
				SULFATE	165	mg/L	E	Y	N		L0608330-01	15:00
	E300	NONE	N 1 4	CHLORIDE	309	mg/L	E	Y	N		L0608330-01	15:18
				NITRATE	2.40	mg/L	U	N	N		L0608330-01	15:18
				NITRITE	1.60	mg/L	U	N	Y		L0608330-01	15:18
				SULFATE	173	mg/L	U	Y	Y		L0608330-01	15:18
	E300	NONE	N 2 40	CHLORIDE	290	mg/L	U	Y	Y		L0608330-01	15:35
				NITRATE	24.0	mg/L	U	N	N		L0608330-01	15:35
				NITRITE	16.0	mg/L	U	N	N		L0608330-01	15:35
				SULFATE	168	mg/L	U	Y	N		L0608330-01	15:35
12WWV20-081006-DUP	E300	NONE	N 0 40	CHLORIDE	294	mg/L	U	Y	Y		L0608330-03	16:27
				NITRATE	24.0	mg/L	U	N	N		L0608330-03	16:27

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 44 of 52

00047041

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608330												
12VW20-081006-DUP	E300	NONE	NITRITE	16.0	mg/L	U	N	N	U		L0608330-03	16:27
			SULFATE	170	mg/L		Y	N			L0608330-03	16:27
	E300	NONE	CHLORIDE	182	mg/L	E	Y	N			L0608330-03	15:52
			NITRATE	0.600	mg/L	U	N	Y			L0608330-03	15:52
			SULFATE	166	mg/L	E	Y	N			L0608330-03	15:52
	E300	NONE	CHLORIDE	308	mg/L	E	Y	N			L0608330-03	16:10
			NITRATE	2.40	mg/L	U	N	N			L0608330-03	16:10
			NITRITE	1.60	mg/L	U	N	Y			L0608330-03	16:10
			SULFATE	172	mg/L		Y	Y			L0608330-03	16:10
12VW21-081006	E300	NONE	CHLORIDE	1180	mg/L	E	Y	N			L0608330-05	16:45
			NITRATE	3.00	mg/L	U	N	Y			L0608330-05	16:45
			SULFATE	378	mg/L	E	Y	N			L0608330-05	16:45
	E300	NONE	CHLORIDE	1590	mg/L	E	Y	N			L0608330-05	17:02
			NITRATE	15.0	mg/L	U	N	N			L0608330-05	17:02
			NITRITE	10.0	mg/L	U	N	Y			L0608330-05	17:02
			SULFATE	364	mg/L		Y	Y			L0608330-05	17:02
	E300	NONE	CHLORIDE	1460	mg/L		Y	Y			L0608330-05	17:54
			NITRATE	120	mg/L	U	N	N			L0608330-05	17:54
			NITRITE	80.0	mg/L	U	N	N			L0608330-05	17:54
			SULFATE	371	mg/L		Y	N			L0608330-05	17:54
12VW20-081006	SW6010B	TOTREC	ALUMINUM, TOTAL	0.591	mg/L		Y	Y			L0608330-01	14:35
			ARSENIC, TOTAL	0.00513	mg/L	J	Y	Y		15	L0608330-01	14:35
			BARIIUM, TOTAL	0.0485	mg/L		Y	Y			L0608330-01	14:35
			BERYLLIUM, TOTAL	0.0100	mg/L	U	N	Y			L0608330-01	14:35
			CADMIUM, TOTAL	0.0100	mg/L	U	N	Y			L0608330-01	14:35
			CALCIUM, TOTAL	32.6	mg/L		Y	Y			L0608330-01	14:35
			CHROMIUM, TOTAL	0.0200	mg/L	U	N	Y			L0608330-01	14:35
			COBALT, TOTAL	0.0185	mg/L	J	Y	Y		16 ✓	L0608330-01	14:35
			COPPER, TOTAL	0.0200	mg/L	U	N	Y			L0608330-01	14:35
			IRON, TOTAL	0.596	mg/L		Y	Y			L0608330-01	14:35
			LEAD, TOTAL	0.00500	mg/L	U	N	Y			L0608330-01	14:35
			MAGNESIUM, TOTAL	24.9	mg/L		Y	Y			L0608330-01	14:35
			MANGANESE, TOTAL	0.333	mg/L		Y	Y			L0608330-01	14:35
			NICKEL, TOTAL	0.0151	mg/L	J	Y	Y		15 ✓	L0608330-01	14:35
			POTASSIUM, TOTAL	1.65	mg/L		Y	Y			L0608330-01	14:35
			SILVER, TOTAL	0.0100	mg/L	U	N	Y			L0608330-01	14:35
			VANADIUM, TOTAL	0.0113	mg/L		Y	Y			L0608330-01	14:35
			ZINC, TOTAL	0.0179	mg/L	J	Y	Y		06A 15	L0608330-01	14:35
SW6010B	TOTREC	N 1 20	SODIUM, TOTAL	198	mg/L		Y	Y			L0608330-01	15:22

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 45 of 52

00047042

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:	1 2 3 4		
L0608330 12WW20-081006	SW6010B	TOTREC	Y 0 1	ALUMINUM, DISSOLVED	0.100	mg/L	U	N Y		U	13:45
				ARSENIC, DISSOLVED	0.00533	mg/L	J	Y Y	15	J	13:45
				BARIUM, DISSOLVED	0.0381	mg/L		Y Y			13:45
				BERYLLIUM, DISSOLVED	0.0100	mg/L	U	N Y		U	13:45
				CADMIUM, DISSOLVED	0.0100	mg/L	U	N Y		U	13:45
				CALCIUM, DISSOLVED	35.8	mg/L		Y Y			13:45
				CHROMIUM, DISSOLVED	0.00290	mg/L	J	Y Y	15	J	13:45
				COBALT, DISSOLVED	0.00992	mg/L	J	Y Y	15	J	13:45
				COPPER, DISSOLVED	0.0200	mg/L	U	N Y		U	13:45
				IRON, DISSOLVED	0.100	mg/L	U	N Y		U	13:45
				LEAD, DISSOLVED	0.00500	mg/L	U	N Y		U	13:45
				MAGNESIUM, DISSOLVED	25.3	mg/L		Y Y			13:45
				MANGANESE, DISSOLVED	0.213	mg/L		Y Y			13:45
				NICKEL, DISSOLVED	0.0267	mg/L	J	Y Y	15	J	13:45
				POTASSIUM, DISSOLVED	1.63	mg/L		Y Y			13:45
				SILVER, DISSOLVED	0.0100	mg/L	U	N Y		U	13:45
				VANADIUM, DISSOLVED	0.0117	mg/L		Y Y			13:45
				ZINC, DISSOLVED	0.0200	mg/L	U	N Y		U	13:45
	SW6010B	TOTREC	Y 1 20	SODIUM, DISSOLVED	219	mg/L		Y Y			14:34
	SW6020	SW3015	N 0 1	ANTIMONY, TOTAL	0.00613	mg/L		Y Y			12:41
				SELENIUM, TOTAL	0.0178	mg/L		Y Y			12:41
12WW20-081006-DUP	SW6020	SW3015	N 1 1	THALLIUM, TOTAL	0.000479	mg/L		Y Y			15:23
	SW6020	SW3015	Y 0 1	ANTIMONY, DISSOLVED	0.00100	mg/L	U	N Y		U	14:36
				SELENIUM, DISSOLVED	0.00452	mg/L		Y Y			14:36
				THALLIUM, DISSOLVED	0.000777	mg/L		Y Y			14:36
	SW7470A	METHOD	N 0 1	MERCURY	0.000200	mg/L	U	N Y		U	15:32
	SW7470A	METHOD	Y 0 1	MERCURY, DISSOLVED	0.000200	mg/L	U	N Y		U	15:56
	SW6010B	TOTREC	N 0 1	ALUMINUM, TOTAL	0.640	mg/L		Y Y			14:40
				ARSENIC, TOTAL	0.00540	mg/L	J	Y Y	15	J	14:40
				BARIUM, TOTAL	0.0512	mg/L		Y Y			14:40
				BERYLLIUM, TOTAL	0.0100	mg/L	U	N Y		U	14:40
				CADMIUM, TOTAL	0.0100	mg/L	U	N Y		U	14:40
				CALCIUM, TOTAL	34.7	mg/L		Y Y			14:40
				CHROMIUM, TOTAL	0.00253	mg/L	J	Y Y	15	J	14:40
				COBALT, TOTAL	0.0199	mg/L	J	Y Y	15	J	14:40
				COPPER, TOTAL	0.0200	mg/L	U	N Y		U	14:40
				IRON, TOTAL	0.662	mg/L		Y Y			14:40
				LEAD, TOTAL	0.00500	mg/L	U	N Y		U	14:40
				MAGNESIUM, TOTAL	25.6	mg/L		Y Y			14:40

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Plk

Page: 46 of 52

00047043

Sample Number:	Analytical/Extraction Method:	Flt REX Dtl:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608330 12WW20- 081006-DUP	SW6010B	TOTREC	N 0 1	MANGANESE, TOTAL	0.354	mg/L	Y	Y			L0608330-03	14:40
				NICKEL, TOTAL	0.0160	mg/L	Y	Y	J	15	L0608330-03	14:40
				POTASSIUM, TOTAL	1.67	mg/L	Y	Y			L0608330-03	14:40
				SILVER, TOTAL	0.0100	mg/L	N	Y	U		L0608330-03	14:40
				VANADIUM, TOTAL	0.0126	mg/L	Y	Y			L0608330-03	14:40
				ZINC, TOTAL	0.0204	mg/L	Y	Y	B	06A	L0608330-03	14:40
	SW6010B	TOTREC	N 1 20	SODIUM, TOTAL	205	mg/L	Y	Y			L0608330-03	15:28
	SW6010B	TOTREC	Y 0 1	ALUMINUM, DISSOLVED	0.100	mg/L	N	Y	U		L0608330-04	13:52
				ARSENIC, DISSOLVED	0.00638	mg/L	Y	Y	J	15	L0608330-04	13:52
				BARIUM, DISSOLVED	0.0385	mg/L	Y	Y			L0608330-04	13:52
				BERYLLIUM, DISSOLVED	0.0100	mg/L	N	Y	U		L0608330-04	13:52
				CADMIUM, DISSOLVED	0.0100	mg/L	N	Y	U		L0608330-04	13:52
				CALCIUM, DISSOLVED	35.4	mg/L	Y	Y			L0608330-04	13:52
				CHROMIUM, DISSOLVED	0.00489	mg/L	Y	Y	J	15	L0608330-04	13:52
				COBALT, DISSOLVED	0.00998	mg/L	Y	Y	J	15	L0608330-04	13:52
				COPPER, DISSOLVED	0.0200	mg/L	N	Y	U		L0608330-04	13:52
				IRON, DISSOLVED	0.100	mg/L	N	Y	U		L0608330-04	13:52
				LEAD, DISSOLVED	0.00500	mg/L	N	Y	U		L0608330-04	13:52
				MANGANESE, DISSOLVED	25.5	mg/L	Y	Y			L0608330-04	13:52
				NICKEL, DISSOLVED	0.208	mg/L	Y	Y			L0608330-04	13:52
12WW21- 081006	SW6010B	TOTREC	Y 1 20	POTASSIUM, DISSOLVED	0.0159	mg/L	Y	Y	J	15	L0608330-04	13:52
	SW6020	SW3015	N 0 1	SILVER, DISSOLVED	1.56	mg/L	N	Y	U		L0608330-04	13:52
				VANADIUM, DISSOLVED	0.0100	mg/L	N	Y	U		L0608330-04	13:52
				ZINC, DISSOLVED	0.00991	mg/L	Y	Y	J	15	L0608330-04	13:52
	SW6010B	TOTREC	Y 1 20	SODIUM, DISSOLVED	0.0200	mg/L	N	Y	U		L0608330-04	13:52
	SW6020	SW3015	N 0 1	ANTIMONY, TOTAL	228	mg/L	Y	Y			L0608330-04	14:40
				SELENIUM, TOTAL	0.00130	mg/L	Y	Y			L0608330-03	12:47
				THALLIUM, TOTAL	0.00858	mg/L	Y	Y			L0608330-03	12:47
	SW6020	SW3015	N 1 1	ANTIMONY, DISSOLVED	0.000396	mg/L	Y	Y			L0608330-03	15:37
				SELENIUM, DISSOLVED	0.00100	mg/L	N	Y	U		L0608330-04	14:42
				THALLIUM, DISSOLVED	0.00427	mg/L	Y	Y			L0608330-04	14:42
	SW7470A	METHOD	N 0 1	MERCURY	0.000614	mg/L	Y	Y			L0608330-04	14:42
	SW7470A	METHOD	Y 0 1	MERCURY, DISSOLVED	0.000200	mg/L	N	Y	U		L0608330-03	15:37
	SW6010B	TOTREC	N 0 5	SODIUM, TOTAL	0.000200	mg/L	N	Y	U		L0608330-04	15:58
	SW6010B	TOTREC	N 1 1	ALUMINUM, TOTAL	638	mg/L	Y	Y			L0608330-05	14:17
				ARSENIC, TOTAL	0.100	mg/L	N	Y	U		L0608330-05	14:05
				BARIUM, TOTAL	0.00623	mg/L	Y	Y	J	15	L0608330-05	14:05
				BERYLLIUM, TOTAL	0.111	mg/L	Y	Y			L0608330-05	14:05
					0.0100	mg/L	N	Y	U		L0608330-05	14:05

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 48 of 52

00047045

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Reason Codes	Lab Sample:	Analysis Time:
								Code:	1 2 3 4		
L0608330											
12WW21-081006	SW7470A	METHOD	Y 0 1	MERCURY, DISSOLVED	0.000200	mg/L	U	U		L0608330-06	16:00
12WW20-081006	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	9.31	mg/L	Y	Y		L0608330-01	02:37
	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	3.51	mg/L	Y	Y		L0608330-01	02:37
12WW20-081006-DUP	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	11.2	mg/L	Y	Y		L0608330-03	02:51
	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	3.70	mg/L	Y	Y		L0608330-03	02:51
12WW21-081006	E415.1	NONE	N 0 1	TOTAL INORGANIC CARBON	9.48	mg/L	Y	Y		L0608330-05	03:28
	E415.1	NONE	N 1 1	TOTAL ORGANIC CARBON	2.88	mg/L	Y	Y		L0608330-05	03:28
12WW20-081006	SW8260B	SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	U		L0608330-01	15:08
				1,1,2-TRICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,1-DICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,1-DICHLOROETHENE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2,4-TRICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2-DIBROMOETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2-DICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2-DICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,2-DICHLOROPROPANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,3-DICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				1,4-DICHLOROETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				2-BUTANONE	10.0	ug/L	U	U		L0608330-01	15:08
				2-HEXANONE	10.0	ug/L	U	U		L0608330-01	15:08
				4-METHYL-2-PENTANONE	10.0	ug/L	U	U		L0608330-01	15:08
				ACETONE	10.0	ug/L	U	U		L0608330-01	15:08
				BENZENE	5.00	ug/L	U	U		L0608330-01	15:08
				BROMODICHLOROMETHANE	5.00	ug/L	U	U		L0608330-01	15:08
				BROMOFORM	5.00	ug/L	U	U		L0608330-01	15:08
				BROMOMETHANE	10.0	ug/L	U	U		L0608330-01	15:08
				CARBON DISULFIDE	5.00	ug/L	U	U		L0608330-01	15:08
				CARBON TETRACHLORIDE	5.00	ug/L	U	U		L0608330-01	15:08
				CHLOROBENZENE	5.00	ug/L	U	U		L0608330-01	15:08
				CHLOROETHANE	10.0	ug/L	U	U		L0608330-01	15:08
				CHLOROFORM	5.00	ug/L	U	U		L0608330-01	15:08
				CHLOROMETHANE	10.0	ug/L	U	U		L0608330-01	15:08
				CIS-1,2-DICHLOROETHENE	0.615	ug/L	J	Y		L0608330-01	15:08
				CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	Y		L0608330-01	15:08
				CYCLOHEXANE	10.0	ug/L	U	Y		L0608330-01	15:08

515 ✓

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 49 of 52

00047046

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr	Code	1 2 3 4		
L0608330												
12WW20-081006	SW8260B SW5030	N 0 1	DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U	UJ	05B	L0608330-01	15:08
			ETHYL BENZENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			METHYL ACETATE	10.0	ug/L	U	N Y	U	U		L0608330-01	15:08
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U	U		L0608330-01	15:08
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			STYRENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			TOLUENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
			TRICHLOROETHENE	0.704	ug/L	J	Y Y	U	U		L0608330-01	15:08
			TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-01	15:08
			VINYL CHLORIDE	10.0	ug/L	U	N Y	U	U		L0608330-01	15:08
			XYLENES, TOTAL	5.00	ug/L	U	N Y	U	U		L0608330-01	15:08
12WW20-081006-DUP	SW8260B SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,1-DICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			2-BUTANONE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			2-HEXANONE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			ACETONE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			BENZENE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			BROMOFORM	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39
			BROMOMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-03	15:39
			CARBON DISULFIDE	5.00	ug/L	U	N Y	U	U		L0608330-03	15:39

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Pl

Run Date: September 12, 2006

Page: 50 of 52

00047047

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val Qlfr Code:	Reason Codes	Lab Sample:	Analysis Time:
										1 2 3 4		
L0608330												
12WW20-081006-DUP	SW8260B SW5030	N 0 1	CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			CHLOROBENZENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			CHLOROETHANE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			CHLOROFORM	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			CHLOROMETHANE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			CIS-1,2-DICHLOROETHENE	0.641	ug/L	J	Y Y	J		15	L0608330-03	15:39
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			CYCLOHEXANE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			ETHYL BENZENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			ISOPROPYL BENZENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			METHYL ACETATE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			METHYLCYCLOHEXANE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			METHYLENE CHLORIDE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			STYRENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			TOLUENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U			L0608330-03	15:39
			TRICHLOROETHENE	0.715	ug/L	J	Y Y	J		15	L0608330-03	15:39
			TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y	U		05B	L0608330-03	15:39
			VINYL CHLORIDE	10.0	ug/L	U	N Y	U			L0608330-03	15:39
			XYLENES, TOTAL	5.00	ug/L	U	N Y	U			L0608330-03	15:39
12WW21-081006	SW8260B SW5030	N 0 1	1,1,1-TRICHLOROETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,1,2,2-TETRACHLOROETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10.0	ug/L	U	N Y	U			L0608330-05	16:10
			1,1,2-TRICHLOROETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,1-DICHLOROETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2,4-TRICHLOROBENZENE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2-DIBROMO-3-CHLOROPROPANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2-DIBROMOETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2-DICHLOROBENZENE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2-DICHLOROETHANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,2-DICHLOROPROPANE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,3-DICHLOROBENZENE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			1,4-DICHLOROBENZENE	5.00	ug/L	U	N Y	U			L0608330-05	16:10
			2-BUTANONE	10.0	ug/L	U	N Y	U			L0608330-05	16:10

Validation Qualifier Data Entry Verification

Run Date: September 12, 2006

Longhorn Army Ammunition Pl

Page: 51 of 52

00047048

Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:		1 2 3 4		
L0608330												
12WW21-081006	SW8260B SW5030	N 0 1	2-HEXANONE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			4-METHYL-2-PENTANONE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			ACETONE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			BENZENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			BROMODICHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			BROMOFORM	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			BROMOMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			CARBON DISULFIDE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			CARBON TETRACHLORIDE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			CHLOROBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			CHLOROETHANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			CHLOROFORM	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			CHLOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			CIS-1,2-DICHLOROETHENE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			CIS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			CYCLOHEXANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			DIBROMOCHLOROMETHANE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			DICHLORODIFLUOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			ETHYL BENZENE	5.00	ug/L	U	N Y	U	U	05B	L0608330-05	16:10
			ISOPROPYLBENZENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			METHYL ACETATE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			METHYL TERT-BUTYL ETHER	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			METHYLCYCLOHEXANE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			METHYLENE CHLORIDE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			STYRENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TETRACHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TOLUENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TRANS-1,2-DICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TRICHLOROETHENE	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
			TRICHLOROFLUOROMETHANE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			VINYL CHLORIDE	10.0	ug/L	U	N Y	U	U		L0608330-05	16:10
			XYLENES, TOTAL	5.00	ug/L	U	N Y	U	U		L0608330-05	16:10
LAAP58												
LH-SF650-6806-C	E300	NONE	N 0 5	Sulfate	53	mg/L	Y P				LAAP58-002DL 5X	01:59
	E300	NONE	N 0 50	Chloride	500	mg/L	Y P				LAAP58-002DL 50X	02:12
LH-SF650-6806-G	E300	NONE	N 0 5	Sulfate	52	mg/L	Y P				LAAP58-001DL 5X	00:52

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 12, 2006

Page: 52 of 52

00047049

Sample Number:	Analytical/Extraction Method:	Fit REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes	Lab Sample:	Analysis Time:
								Qlfr Code:				
LAAP58												
LH-SP650-6806-G	E300	NONE	Chloride	490	mg/L		Y	P			LAAP58-001DL 50X	01:05
	E351.2	NONE	Total Kjeldahl Nitrogen	1	mg/L	U	N	P			LAAP58-001	12:13
LH-SP650-6806-C	SW6010B	TOTAL	Barium	19.2	ug/L	B	Y	P	B	15	LAAP58-002	20:06
			Lead	3.78	ug/L	B	Y	P	B	06A 06B 15	LAAP58-002	20:06
LH-SP650-6806-G	SW6010B	TOTAL	Barium	19.5	ug/L	B	Y	P	B	06A 06B 15	LAAP58-001	19:42
			Lead	4.89	ug/L	B	Y	P	J	15	LAAP58-001	19:42
LH-SP650-6806-C	E314.0	NONE	Perchlorate	2	ug/L	U	N	P			LAAP58-002DL 2X	23:25
LH-SP650-6806-G	E314.0	NONE	Perchlorate	2	ug/L	U	N	P			LAAP58-001DL 2X	22:53
LH-SP650-6806-G	SW8260B	SW5030	1,1,1-Trichloroethane	1	ug/L	U	N	P			LAAP58-001	14:51
			1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	U	N	P			LAAP58-001	14:51
			1,1,2-Trichloroethane	1	ug/L	U	N	P			LAAP58-001	14:51
			1,1-Dichloroethane	1	ug/L	U	N	P			LAAP58-001	14:51
			1,1-Dichloroethene	1	ug/L	U	N	P			LAAP58-001	14:51
			1,2-Dichloroethane	1	ug/L	U	N	P			LAAP58-001	14:51
			Acetone	5	ug/L	U	N	P			LAAP58-001	14:51
			Benzene	1	ug/L	U	N	P			LAAP58-001	14:51
			Carbon Tetrachloride	1	ug/L	U	N	P			LAAP58-001	14:51
			Chloroform	1	ug/L	U	N	P			LAAP58-001	14:51
			Ethylbenzene	1	ug/L	U	N	P			LAAP58-001	14:51
			Methylene chloride	1	ug/L	U	N	P			LAAP58-001	14:51
			Styrene	1	ug/L	U	N	P			LAAP58-001	14:51
			Tetrachloroethene	1	ug/L	U	N	P			LAAP58-001	14:51
			Toluene	1	ug/L	U	N	P			LAAP58-001	14:51
			Trichloroethene	3.4	ug/L	U	N	P			LAAP58-001	14:51
			Vinyl chloride	1	ug/L	U	Y	P			LAAP58-001	14:51
			m,p-Xylenes	2	ug/L	U	N	P			LAAP58-001	14:51
			o-Xylene	1	ug/L	U	N	P			LAAP58-001	14:51