

LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 13 of 19

2010

Bate Stamp Numbers

00092752 – 00093765

Prepared for

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

1976 – 2010

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

VOLUME 13 of 19

2010

- A. Title: Report – (Continued) Final Feasibility Study, LHAAP-29, Former TNT
 Production Area, Group 2, Longhorn Army Ammunition Plant, Karnack,
 Texas, April 2010
 Author(s): US Army Corps of Engineers
 Recipient: USEPA
 Date: April 30, 2010
 Bate Stamp: 00092752 – 00093765

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

Laboratory Report Number: L0612485

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 our team member noted in the Reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

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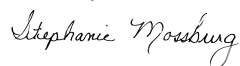
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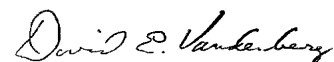
This report was reviewed on 05-JAN-07.



STEPHANIE MOSSBURG

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 an '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 05-JAN-07.



DAVID VANDENBERG

FL DOH NELAP ID: E8755

This report contains a total of 192 pages.

Protecting Our Environmental Future

Laboratory Data Package Cover Page

00092753

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

January 2, 2007

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: L0612485
Project Name: 798-LONGHORN
Method: 8260B
Prep Batch Number(s): 230324, 230417, 230415
Reviewer Name: MIKE D. ALBERTSON
LRC Date: January 02, 2007

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?			✓		
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?		✓			1
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?		✓			2
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					
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?	✓				

00092756

EXCEPTIONS REPORT

ER# - Description

- #1: The alternate source analyzed 11/20/06 on HPMS-6 yielded a % drift for methyl acetate above the upper control limit.
 #2: The CCV analyzed 12/28/06 on HPMS-6 yielded a % drift for dichlorodifluoromethane below the lower control limit.

Footnotes:

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

Laboratory Data Package Cover Page

00092757

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.

MICHAEL D. COCHRAN



Semivolatiles Lab Supervisor

January 2, 2007

Name (Printed)

Signature

Official Title (printed)

DATE

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
Laboratory Log Number: L0612485
Project Name: 798-LONGHORN
Method: 300
Prep Batch Number(s): WG230107
Reviewer Name: MICHAEL D. COCHRAN
LRC Date: December 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?	✓				1

Description	Yes	No	NA(1)	NR(2)	ER(3)
Were MS/MSD RPDs within laboratory QC limits?	✓				
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?	✓				2
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					
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?	✓				

00092760

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name:	KEMRON
Laboratory Log Number:	L0612485
Project Name:	798-LONGHORN
Method:	300
Prep Batch Number(s):	WG230107
Reviewer Name:	MICHAEL D. COCHRAN
LRC Date:	December 20, 2006

EXCEPTIONS REPORT

ER# - Description

1. The MS and MSD associated with the analytical batch for these samples had % recoveries for Cl below the advisory limit. The parent sample chosen for the MS and MSD had a Cl result greater than the calibration range.
2. Samples L0612485-01, 03, 04, 05, 06 were analyzed for NO₂ and NO₃ at a dilution due to the levels of Cl and SO₄ in them. The Cl and SO₄ levels are too high in order to analyze these samples undiluted for NO₂ and NO₃. Cl peaks of this magnitude in size "cover up" any NO₂ peak near its RL. The analytical column has a tolerance of 200 ppm for a single anion and 400 ppm for all anions before the column becomes overloaded. The dilutions chosen for NO₂ and NO₃ were performed in order to reduce the total anion load on the analytical column and reduce the interference of large Cl peaks over NO₂'s retention time window.

Footnotes:

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

Laboratory Data Package Cover Page

00092762

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

December 27, 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: L0612485
Project Name: 798-LONGHORN
Method: GC
Prep Batch Number(s): WG230008, WG230108
Reviewer Name: MIKE D. ALBERTSON
LRC Date: December 27, 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 laboratorys 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?			✓		
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?	✓				

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Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					
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?	✓				

00092765

EXCEPTIONS REPORT

ER# - Description

No exceptions.

Footnotes:

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

Laboratory Data Package Cover Page

00092766

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

December 28, 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: L0612485
Project Name: 798-LONGHORN
Method: TOC
Prep Batch Number(s): WG230208, WG230345
Reviewer Name: DEANNA I. HESSON
LRC Date: December 28, 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?	✓				
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?	✓				

00092769

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					
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:	L0612485
Project Name:	798-LONGHORN
Method:	TOC
Prep Batch Number(s):	WG230208, WG230345
Reviewer Name:	DEANNA I. HESSON
LRC Date:	December 28, 2006

EXCEPTIONS REPORT

ER# - Description

Footnotes:

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

LABORATORY REPORT

L0612485

00092771

01/03/07 08:23

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
12WW01	L0612485-01	19-DEC-06	20-DEC-06
12WW02	L0612485-02	19-DEC-06	20-DEC-06
12WW20	L0612485-03	19-DEC-06	20-DEC-06
12WW24	L0612485-04	19-DEC-06	20-DEC-06
12WW05	L0612485-05	19-DEC-06	20-DEC-06
12WW24-QC	L0612485-06	19-DEC-06	20-DEC-06
29WW40	L0612485-07	19-DEC-06	20-DEC-06

Report Number: **L0612485**Report Date : **January 3, 2007**

00092772

Sample Number: **L0612485-01**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **WG230008**
 Collect Date: **12/19/2006 14:15**
 Sample Tag: **01**

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

Instrument: **HP16**
 Prep Date: **12/20/2006 17:49**
 Cal Date: **09/27/2006 15:29**
 Run Date: **12/20/2006 17:49**
 File ID: **16G5686**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	0.295	J	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

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

Sample Number: **L0612485-01**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 14:15**
 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: **12/20/2006 15:40**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 15:40**
 File ID: **I2122006.22**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	742		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	377		100	50.0

U Not detected at or above adjusted sample detection limit

Sample Number: **L0612485-01**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 14:15**
 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: **12/20/2006 13:38**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 13:38**
 File ID: **I2122006.15**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	681	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	386		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-01**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 14:15**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **4**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 15:22**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 15:22**
 File ID: **I2122006.21**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	559	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	391	I	4.00	2.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Report Number: L0612485

Report Date : January 3, 2007

00092773

Sample Number: L0612485-01
 Client ID: 12WW01
 Matrix: Water
 Workgroup Number: WG230208
 Collect Date: 12/19/2006 14:15
 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: 12/26/2006 22:34
 Cal Date: 01/12/2006 10:36
 Run Date: 12/26/2006 22:34
 File ID: TC12-26-2006.36

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		8.44		1.00	0.500

Sample Number: L0612485-01
 Client ID: 12WW01
 Matrix: Water
 Workgroup Number: WG230208
 Collect Date: 12/19/2006 14:15
 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: 12/26/2006 22:34
 Cal Date: 01/12/2006 10:36
 Run Date: 12/26/2006 22:34
 File ID: TC12-26-2006.36

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		33.6		1.00	0.500

Sample Number: L0612485-01
 Client ID: 12WW01
 Matrix: Water
 Workgroup Number: WG230324
 Collect Date: 12/19/2006 14:15
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 12/27/2006 15:58
 Cal Date: 11/28/2006 12:56
 Run Date: 12/27/2006 15:58
 File ID: 11M39130

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	111		10.0	2.50
Benzene	71-43-2		U	5.00	0.125

Report Number: **L0612485**Report Date : **January 3, 2007**

00092774

Sample Number: **L0612485-01**
 Client ID: **12WW01**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 14:15**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 15:58**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 15:58**
 File ID: **11M39130**

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	93.6	80	120		
Dibromofluoromethane	95.6	86	118		
p-Bromofluorobenzene	89.7	86	115		
Toluene-d8	93.3	88	110		

U Not detected at or above adjusted sample detection limit

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **W6230345**
 Collect Date: **12/19/2006 10:05**
 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: **12/27/2006 12:39**
 Cal Date: **01/12/2006 10:36**
 Run Date: **12/27/2006 12:39**
 File ID: **TC12-27-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		98.4		4.00	2.00

Report Number: **L0612485**Report Date : **January 3, 2007****00092775**

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230345**
 Collect Date: **12/19/2006 10:05**
 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: **12/27/2006 12:39**
 Cal Date: **01/12/2006 10:36**
 Run Date: **12/27/2006 12:39**
 File ID: **TC12-27-2006.07**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		17.7		4.00	2.00

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230324**
 Collect Date: **12/19/2006 10:05**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 16:29**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 16:29**
 File ID: **11M39131**

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	4.11	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
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	1.39	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	0.254	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	0.230	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	0.177	J	5.00	0.125
Chloroethane	75-00-3	0.685	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

Report Number: **L0612485**Report Date : **January 3, 2007**

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Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230324**
 Collect Date: **12/19/2006 10:05**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 16:29**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 16:29**
 File ID: **11M39131**

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		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	4.30	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	94.1	80	120		
Dibromofluoromethane	96.5	86	118		
p-Bromofluorobenzene	90.7	86	115		
Toluene-d8	92.5	88	110		

U Not detected at or above adjusted sample detection limit

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

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230008**
 Collect Date: **12/19/2006 10:05**
 Sample Tag: **01**

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

Instrument: **HP16**
 Prep Date: **12/20/2006 18:04**
 Cal Date: **09/27/2006 15:29**
 Run Date: **12/20/2006 18:04**
 File ID: **16G5687**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	701	I	0.500	0.250
ethene	74-85-1	0.771		0.500	0.250
ethane	74-84-0	0.335	J	0.500	0.250

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

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230108**
 Collect Date: **12/19/2006 10:05**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5021**
 Analytical Method: **RSK175**
 Analyst: **JLS**
 Dilution: **10**
 Units: **ug/L**

Instrument: **HP16**
 Prep Date: **12/21/2006 17:21**
 Cal Date: **09/27/2006 15:29**
 Run Date: **12/21/2006 17:21**
 File ID: **16G5719**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	478		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

Report Number: **L0612485**Report Date : **January 3, 2007**

00092777

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 10:05**
 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: **12/20/2006 16:32**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 16:32**
 File ID: **I2122006.25**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	116	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	46.9		1.00	0.500

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-02**
 Client ID: **12WW02**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 10:05**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **20**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 17:42**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 17:42**
 File ID: **I2122006.29**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	152		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	50.4		20.0	10.0

U Not detected at or above adjusted sample detection limit

Sample Number: **L0612485-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 11:25**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **2**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 17:59**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 17:59**
 File ID: **I2122006.30**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	223	I	0.400	0.200
Nitrate	14797-55-8		U	1.20	0.200
Nitrite	14797-65-0		U	0.800	0.200
Sulfate	14808-79-8	176	I	2.00	1.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 11:25**
 Sample Tag: **DL03**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **40**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 18:16**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 18:16**
 File ID: **I2122006.31**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	289		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	182		40.0	20.0

U Not detected at or above adjusted sample detection limit

Report Number: L0612485

Report Date : January 3, 2007

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Sample Number: L0612485-03
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: WG230107
 Collect Date: 12/19/2006 11:25
 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: 12/20/2006 14:13
 Cal Date: 12/08/2006 18:15
 Run Date: 12/20/2006 14:13
 File ID: I2122006.17

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	279	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	178		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: L0612485-03
 Client ID: 12WW20
 Matrix: Water
 Workgroup Number: WG230324
 Collect Date: 12/19/2006 11:25
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 12/27/2006 13:24
 Cal Date: 11/28/2006 12:56
 Run Date: 12/27/2006 13:24
 File ID: 11M39125

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	0.594	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

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Sample Number: **L0612485-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 11:25**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 13:24**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 13:24**
 File ID: **11M39125**

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		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	0.713	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	89.9	80	120		
Dibromofluoromethane	94.0	86	118		
p-Bromofluorobenzene	91.0	86	115		
Toluene-d8	92.6	88	110		

U Not detected at or above adjusted sample detection limit

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

Sample Number: **L0612485-03**
 Client ID: **12WW20**
 Matrix: **Water**
 Workgroup Number: **W6230208**
 Collect Date: **12/19/2006 11:25**
 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: **12/26/2006 23:07**
 Cal Date: **01/12/2006 10:36**
 Run Date: **12/26/2006 23:07**
 File ID: **TC12-26-2006.38**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		16.2		1.00	0.500

Report Number: **L0612485**Report Date : **January 3, 2007****00092780**

Sample Number: L0612485-03	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW20	Prep Method: 415.1	Prep Date: 12/26/2006 23:07
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG230208	Analyst: DIH	Run Date: 12/26/2006 23:07
Collect Date: 12/19/2006 11:25	Dilution: 1	File ID: TC12-26-2006.38
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		4.52		1.00	0.500

Sample Number: L0612485-03	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW20	Prep Method: 5021	Prep Date: 12/20/2006 18:18
Matrix: Water	Analytical Method: RSK175	Cal Date: 09/27/2006 15:29
Workgroup Number: WG230008	Analyst: JLS	Run Date: 12/20/2006 18:18
Collect Date: 12/19/2006 11:25	Dilution: 1	File ID: 16G5688
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	76.0		0.500	0.250
ethene	74-85-1	0.476	J	0.500	0.250
ethane	74-84-0		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

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

Sample Number: L0612485-04	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW24	Prep Method: 415.1	Prep Date: 12/27/2006 12:55
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG230345	Analyst: DIH	Run Date: 12/27/2006 12:55
Collect Date: 12/19/2006 13:35	Dilution: 2	File ID: TC12-27-2006.08
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		71.3		2.00	1.00

Sample Number: L0612485-04	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW24	Prep Method: 415.1	Prep Date: 12/27/2006 12:55
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG230345	Analyst: DIH	Run Date: 12/27/2006 12:55
Collect Date: 12/19/2006 13:35	Dilution: 2	File ID: TC12-27-2006.08
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		18.8		2.00	1.00

Report Number: L0612485

Report Date : January 3, 2007

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Sample Number: L0612485-04
 Client ID: 12WW24
 Matrix: Water
 Workgroup Number: W6230324
 Collect Date: 12/19/2006 13:35
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 12/27/2006 13:55
 Cal Date: 11/28/2006 12:56
 Run Date: 12/27/2006 13:55
 File ID: 11M39126

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	1.31	J	5.00	0.125
1,1-Dichloroethene	75-35-4	0.945	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	113		10.0	0.250
trans-1,2-Dichloroethene	156-60-5	0.425	J	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	5.10		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	1.11	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	15.2		5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3	0.807	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	0.352	J	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	1.12	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	412	I	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4	5.35	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

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Report Number: **L0612485**Report Date : **January 3, 2007**

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Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 13:55**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 13:55**
 File ID: **11M39126**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	91.3	80	120	
Dibromofluoromethane	95.6	86	118	
p-Bromofluorobenzene	91.1	86	115	
Toluene-d8	95.6	88	110	

U Not detected at or above adjusted sample detection limit
 J The analyte was positively identified, but the quantitation was below the RL
 I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **W6230417**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **10**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **12/28/2006 10:13**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/28/2006 10:13**
 File ID: **11M39147**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	50.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	50.0	1.25
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	100	2.50
1,1,2-Trichloroethane	79-00-5		U	50.0	2.50
1,1-Dichloroethane	75-34-3		U	50.0	1.25
1,1-Dichloroethene	75-35-4		U	50.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	50.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	50.0	2.50
1,2-Dichlorobenzene	95-50-1		U	50.0	1.25
1,2-Dichloroethane	107-06-2		U	50.0	2.50
cis-1,2-Dichloroethene	156-59-2	97.5	J	100	2.50
trans-1,2-Dichloroethene	156-60-5		U	50.0	2.50
1,2-Dichloropropane	78-87-5		U	50.0	2.00
1,3-Dichlorobenzene	541-73-1		U	50.0	2.50
1,4-Dichlorobenzene	106-46-7	4.70	J	50.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1		U	100	25.0
Acetone	67-64-1		U	100	25.0
Benzene	71-43-2		U	50.0	1.25
Bromodichloromethane	75-27-4		U	50.0	2.50
Bromoform	75-25-2		U	50.0	5.00
Bromomethane	74-83-9		U	100	5.00
Carbon disulfide	75-15-0		U	50.0	5.00
Carbon tetrachloride	56-23-5		U	50.0	2.50
Chlorobenzene	108-90-7	13.6	J	50.0	1.25
Chloroethane	75-00-3		U	100	5.00
Chloroform	67-66-3		U	50.0	1.25
Chloromethane	74-87-3		U	100	2.50
cis-1,3-Dichloropropene	10061-01-5		U	50.0	2.50
Cyclohexane	110-82-7		U	100	2.50

Report Number: **L0612485**Report Date : **January 3, 2007**

00092783

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **WG230417**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **10**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **12/28/2006 10:13**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/28/2006 10:13**
 File ID: **11M39147**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Dibromochloromethane	124-48-1		U	50.0	2.50
Dichlorodifluoromethane	75-71-8		U	100	2.50
Ethyl benzene	100-41-4		U	50.0	2.50
Isopropylbenzene	98-82-8		U	50.0	2.50
Methyl acetate	79-20-9		U	100	2.50
Methyl tert-butyl ether	1634-04-4		U	50.0	5.00
Methylcyclohexane	108-87-2		U	100	2.50
Methylene chloride	75-09-2		U	50.0	2.50
Styrene	100-42-5		U	50.0	1.25
Tetrachloroethene	127-18-4		U	50.0	2.50
Toluene	108-88-3		U	50.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	50.0	5.00
Trichloroethene	79-01-6	396		50.0	2.50
Trichlorofluoromethane	75-69-4		U	100	2.50
Vinyl chloride	75-01-4	8.24	J	100	2.50
Xylenes, Total	1330-20-7		U	50.0	5.00
Surrogate	% Recovery	Lower	Upper	Qual	
1,2-Dichloroethane-d4	91.2	80	120		
Dibromofluoromethane	95.3	86	118		
p-Bromofluorobenzene	90.4	86	115		
Toluene-d8	92.7	88	110		

U Not detected at or above adjusted sample detection limit

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

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **WG230008**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **01**

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

Instrument: **HP16**
 Prep Date: **12/20/2006 18:46**
 Cal Date: **09/27/2006 15:29**
 Run Date: **12/20/2006 18:46**
 File ID: **16G5690**

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	14.0		0.500	0.250
ethene	74-85-1	0.382	J	0.500	0.250
ethane	74-84-0	0.394	J	0.500	0.250

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

Report Number: **L0612485**Report Date : **January 3, 2007****00092784**

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **2**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 18:34**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 18:34**
 File ID: **I2122006.32**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	234	I	0.400	0.200
Nitrate	14797-55-8	0.386	J	1.20	0.200
Nitrite	14797-65-0		U	0.800	0.200
Sulfate	14808-79-8	201	I	2.00	1.00

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

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL03**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **40**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 18:51**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 18:51**
 File ID: **I2122006.33**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	310		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	208		40.0	20.0

U Not detected at or above adjusted sample detection limit

Sample Number: **L0612485-04**
 Client ID: **12WW24**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 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: **12/20/2006 14:30**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 14:30**
 File ID: **I2122006.18**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	296	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	207		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-05**
 Client ID: **12WW05**
 Matrix: **Water**
 Workgroup Number: **WG230208**
 Collect Date: **12/19/2006 08:45**
 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: **12/27/2006 00:02**
 Cal Date: **01/12/2006 10:36**
 Run Date: **12/27/2006 00:02**
 File ID: **TC12-26-2006.42**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		22.1		1.00	0.500

Report Number: L0612485

Report Date : January 3, 2007

00092785

Sample Number: L0612485-05
 Client ID: 12WW05
 Matrix: Water
 Workgroup Number: WG230208
 Collect Date: 12/19/2006 08:45
 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: 12/27/2006 00:02
 Cal Date: 01/12/2006 10:36
 Run Date: 12/27/2006 00:02
 File ID: TC12-26-2006.42

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		4.67		1.00	0.500

Sample Number: L0612485-05
 Client ID: 12WW05
 Matrix: Water
 Workgroup Number: WG230107
 Collect Date: 12/19/2006 08:45
 Sample Tag: DL02

PrePrep Method: NONE
 Prep Method: 300.0
 Analytical Method: 300.0
 Analyst: JWR
 Dilution: 4
 Units: mg/L

Instrument: IC2
 Prep Date: 12/20/2006 19:43
 Cal Date: 12/08/2006 18:15
 Run Date: 12/20/2006 19:43
 File ID: I2122006.36

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	553	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	291	I	4.00	2.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: L0612485-05
 Client ID: 12WW05
 Matrix: Water
 Workgroup Number: WG230107
 Collect Date: 12/19/2006 08:45
 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: 12/20/2006 20:01
 Cal Date: 12/08/2006 18:15
 Run Date: 12/20/2006 20:01
 File ID: I2122006.37

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	747		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	266		100	50.0

U Not detected at or above adjusted sample detection limit

Sample Number: L0612485-05
 Client ID: 12WW05
 Matrix: Water
 Workgroup Number: WG230107
 Collect Date: 12/19/2006 08:45
 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: 12/20/2006 14:48
 Cal Date: 12/08/2006 18:15
 Run Date: 12/20/2006 14:48
 File ID: I2122006.19

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	663	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	281		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Report Number: **L0612485**Report Date : **January 3, 2007**

00092786

Sample Number: **L0612485-05**
 Client ID: **12WW05**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 08:45**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 14:26**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 14:26**
 File ID: **11M39127**

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

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Report Number: **L0612485**Report Date : **January 3, 2007**

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Sample Number: L0612485-05	PrePrep Method: NONE	Instrument: HPMS11
Client ID: 12WW05	Prep Method: 5030B	Prep Date: 12/27/2006 14:26
Matrix: Water	Analytical Method: 8260B	Cal Date: 11/28/2006 12:56
Workgroup Number: WG230324	Analyst: CMS	Run Date: 12/27/2006 14:26
Collect Date: 12/19/2006 08:45	Dilution: 1	File ID: 11M39127
Sample Tag: 01	Units: ug/L	

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	91.9	80	120	
Dibromofluoromethane	95.3	86	118	
p-Bromofluorobenzene	90.7	86	115	
Toluene-d8	92.9	88	110	

U Not detected at or above adjusted sample detection limit

Sample Number: L0612485-05	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW05	Prep Method: 5021	Prep Date: 12/20/2006 19:00
Matrix: Water	Analytical Method: RSK175	Cal Date: 09/27/2006 15:29
Workgroup Number: WG230008	Analyst: JLS	Run Date: 12/20/2006 19:00
Collect Date: 12/19/2006 08:45	Dilution: 1	File ID: 16G5691
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	1.95		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: L0612485-06	PrePrep Method: NONE	Instrument: HP16
Client ID: 12WW24-QC	Prep Method: 5021	Prep Date: 12/20/2006 19:14
Matrix: Water	Analytical Method: RSK175	Cal Date: 09/27/2006 15:29
Workgroup Number: WG230008	Analyst: JLS	Run Date: 12/20/2006 19:14
Collect Date: 12/19/2006 13:35	Dilution: 1	File ID: 16G5692
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
methane	74-82-8	15.9		0.500	0.250
ethene	74-85-1	0.482	J	0.500	0.250
ethane	74-84-0	0.400	J	0.500	0.250

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

Sample Number: L0612485-06	PrePrep Method: NONE	Instrument: TOC-VWP
Client ID: 12WW24-QC	Prep Method: 415.1	Prep Date: 12/27/2006 13:10
Matrix: Water	Analytical Method: 415.1	Cal Date: 01/12/2006 10:36
Workgroup Number: WG230345	Analyst: DIH	Run Date: 12/27/2006 13:10
Collect Date: 12/19/2006 13:35	Dilution: 2	File ID: TC12-27-2006.09
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Inorganic Carbon		64.0		2.00	1.00

Report Number: **L0612485**Report Date : **January 3, 2007****00092788**

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **WG230345**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **415.1**
 Analytical Method: **415.1**
 Analyst: **DIH**
 Dilution: **2**
 Units: **mg/L**

Instrument: **TOC-VWP**
 Prep Date: **12/27/2006 13:10**
 Cal Date: **01/12/2006 10:36**
 Run Date: **12/27/2006 13:10**
 File ID: **TC12-27-2006.09**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Total Organic Carbon		22.5		2.00	1.00

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 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: **12/20/2006 15:05**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 15:05**
 File ID: **I2122006.20**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	292	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	179		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **2**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 20:18**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 20:18**
 File ID: **I2122006.38**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	235	I	0.400	0.200
Nitrate	14797-55-8	0.364	J	1.20	0.200
Nitrite	14797-65-0		U	0.800	0.200
Sulfate	14808-79-8	177	I	2.00	1.00

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

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **WG230107**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL03**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **JWR**
 Dilution: **40**
 Units: **mg/L**

Instrument: **IC2**
 Prep Date: **12/20/2006 20:36**
 Cal Date: **12/08/2006 18:15**
 Run Date: **12/20/2006 20:36**
 File ID: **I2122006.39**

Analyte	CAS. Number	Result	Qual	PQL	SQL
Chloride	16887-00-6	301		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	187		40.0	20.0

U Not detected at or above adjusted sample detection limit

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Report Number: **L0612485**Report Date : **January 3, 2007**

00092789

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 14:57**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 14:57**
 File ID: **11M39128**

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	1.33	J	5.00	0.125
1,1-Dichloroethene	75-35-4	0.973	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	0.252	J	5.00	0.250
cis-1,2-Dichloroethene	156-59-2	115		10.0	0.250
trans-1,2-Dichloroethene	156-60-5	0.457	J	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	5.15		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	1.12	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	15.5		5.00	0.125
Chloroethane	75-00-3		U	10.0	0.500
Chloroform	67-66-3	0.799	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	0.335	J	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	1.09	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	422	I	5.00	0.250
Trichlorofluoromethane	75-69-4		U	10.0	0.250
Vinyl chloride	75-01-4	5.54	J	10.0	0.250
Xylenes, Total	1330-20-7		U	5.00	0.500

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Report Number: **L0612485**Report Date : **January 3, 2007**

00092790

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **W6230324**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **12/27/2006 14:57**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/27/2006 14:57**
 File ID: **11M39128**

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	92.9	80	120	
Dibromofluoromethane	97.5	86	118	
p-Bromofluorobenzene	92.4	86	115	
Toluene-d8	95.2	88	110	

U Not detected at or above adjusted sample detection limit
 J The analyte was positively identified, but the quantitation was below the RL
 I Semiquantitative result (out of instrument calibration range)

Sample Number: **L0612485-06**
 Client ID: **12WW24-QC**
 Matrix: **Water**
 Workgroup Number: **W6230417**
 Collect Date: **12/19/2006 13:35**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **CMS**
 Dilution: **10**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **12/28/2006 10:43**
 Cal Date: **11/28/2006 12:56**
 Run Date: **12/28/2006 10:43**
 File ID: **11M39148**

Analyte	CAS. Number	Result	Qual	PQL	SQL
1,1,1-Trichloroethane	71-55-6		U	50.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	50.0	1.25
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1		U	100	2.50
1,1,2-Trichloroethane	79-00-5		U	50.0	2.50
1,1-Dichloroethane	75-34-3		U	50.0	1.25
1,1-Dichloroethene	75-35-4		U	50.0	5.00
1,2,4-Trichlorobenzene	120-82-1		U	50.0	2.00
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	50.0	2.50
1,2-Dichlorobenzene	95-50-1		U	50.0	1.25
1,2-Dichloroethane	107-06-2		U	50.0	2.50
cis-1,2-Dichloroethene	156-59-2	98.3	J	100	2.50
trans-1,2-Dichloroethene	156-60-5		U	50.0	2.50
1,2-Dichloropropane	78-87-5		U	50.0	2.00
1,3-Dichlorobenzene	541-73-1		U	50.0	2.50
1,4-Dichlorobenzene	106-46-7	5.12	J	50.0	1.25
2-Butanone	78-93-3		U	100	25.0
2-Hexanone	591-78-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1		U	100	25.0
Acetone	67-64-1		U	100	25.0
Benzene	71-43-2		U	50.0	1.25
Bromodichloromethane	75-27-4		U	50.0	2.50
Bromoform	75-25-2		U	50.0	5.00
Bromomethane	74-83-9		U	100	5.00
Carbon disulfide	75-15-0		U	50.0	5.00
Carbon tetrachloride	56-23-5		U	50.0	2.50
Chlorobenzene	108-90-7	14.1	J	50.0	1.25
Chloroethane	75-00-3		U	100	5.00
Chloroform	67-66-3		U	50.0	1.25
Chloromethane	74-87-3		U	100	2.50
cis-1,3-Dichloropropene	10061-01-5		U	50.0	2.50
Cyclohexane	110-82-7		U	100	2.50

Report Number: L0612485

Report Date : January 3, 2007

00092791

Sample Number: L0612485-06
 Client ID: 12WW24-QC
 Matrix: Water
 Workgroup Number: W6230417
 Collect Date: 12/19/2006 13:35
 Sample Tag: DL01

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: CMS
 Dilution: 10
 Units: ug/L

Instrument: HPMS11
 Prep Date: 12/28/2006 10:43
 Cal Date: 11/28/2006 12:56
 Run Date: 12/28/2006 10:43
 File ID: 11M39148

Analyte	CAS. Number	Result	Qual	PQL	SQL
Dibromochloromethane	124-48-1		U	50.0	2.50
Dichlorodifluoromethane	75-71-8		U	100	2.50
Ethyl benzene	100-41-4		U	50.0	2.50
Isopropylbenzene	98-82-8		U	50.0	2.50
Methyl acetate	79-20-9		U	100	2.50
Methyl tert-butyl ether	1634-04-4		U	50.0	5.00
Methylcyclohexane	108-87-2		U	100	2.50
Methylene chloride	75-09-2		U	50.0	2.50
Styrene	100-42-5		U	50.0	1.25
Tetrachloroethene	127-18-4		U	50.0	2.50
Toluene	108-88-3		U	50.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	50.0	5.00
Trichloroethene	79-01-6	404		50.0	2.50
Trichlorofluoromethane	75-69-4		U	100	2.50
Vinyl chloride	75-01-4	8.26	J	100	2.50
Xylenes, Total	1330-20-7		U	50.0	5.00

Surrogate	% Recovery	Lower	Upper	Qual
1,2-Dichloroethane-d4	94.6	80	120	
Dibromofluoromethane	96.3	86	118	
p-Bromofluorobenzene	90.7	86	115	
Toluene-d8	92.3	88	110	

U Not detected at or above adjusted sample detection limit

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

Sample Number: L0612485-07
 Client ID: 29WW40
 Matrix: Water
 Workgroup Number: W6230415
 Collect Date: 12/19/2006 15:30
 Sample Tag: 01

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

Instrument: HPMS6
 Prep Date: 12/28/2006 11:52
 Cal Date: 11/20/2006 14:29
 Run Date: 12/28/2006 11:52
 File ID: 6M62916

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

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Report Number: L0612485

Report Date : January 3, 2007

00092792

Sample Number: L0612485-07
 Client ID: 29WW40
 Matrix: Water
 Workgroup Number: W6230415
 Collect Date: 12/19/2006 15:30
 Sample Tag: 01

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

Instrument: HPMS6
 Prep Date: 12/28/2006 11:52
 Cal Date: 11/20/2006 14:29
 Run Date: 12/28/2006 11:52
 File ID: 6M62916

Analyte	CAS. Number	Result	Qual	PQL	SQL
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	2.34	J	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	92.7	80	120		
Dibromofluoromethane	98.2	86	118		
p-Bromofluorobenzene	96.4	86	115		
Toluene-d8	100	88	110		

U Not detected at or above adjusted sample detection limit

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

WORKGROUP SUMMARY BY METHOD

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG230008

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01			12/20/06 17:49	01	HP16	JLS
L0612485-02	12WW02			12/20/06 18:04	01	HP16	JLS
L0612485-03	12WW20			12/20/06 18:18	01	HP16	JLS
L0612485-04	12WW24			12/20/06 18:46	01	HP16	JLS
L0612485-05	12WW05			12/20/06 19:00	01	HP16	JLS
L0612485-06	12WW24-QC			12/20/06 19:14	01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG230008

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01				230008	HP16	JLS
L0612485-02	12WW02				230008	HP16	JLS
L0612485-03	12WW20				230008	HP16	JLS
L0612485-04	12WW24				230008	HP16	JLS
L0612485-05	12WW05				230008	HP16	JLS
L0612485-06	12WW24-QC				230008	HP16	JLS

Analysis:Common Anions

Analytical Method:300.0

Workgroup:WG230107

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01			12/20/06 13:38	DL01	IC2	JWR
L0612485-01	12WW01			12/20/06 15:22	DL02	IC2	JWR
L0612485-01	12WW01			12/20/06 15:40	DL03	IC2	JWR
L0612485-02	12WW02			12/20/06 16:32	01	IC2	JWR
L0612485-02	12WW02			12/20/06 17:42	DL01	IC2	JWR
L0612485-03	12WW20			12/20/06 14:13	DL01	IC2	JWR
L0612485-03	12WW20			12/20/06 17:59	DL02	IC2	JWR
L0612485-03	12WW20			12/20/06 18:16	DL03	IC2	JWR
L0612485-04	12WW24			12/20/06 14:30	DL01	IC2	JWR
L0612485-04	12WW24			12/20/06 18:34	DL02	IC2	JWR
L0612485-04	12WW24			12/20/06 18:51	DL03	IC2	JWR
L0612485-05	12WW05			12/20/06 14:48	DL01	IC2	JWR
L0612485-05	12WW05			12/20/06 19:43	DL02	IC2	JWR
L0612485-05	12WW05			12/20/06 20:01	DL03	IC2	JWR
L0612485-06	12WW24-QC			12/20/06 15:05	DL01	IC2	JWR
L0612485-06	12WW24-QC			12/20/06 20:18	DL02	IC2	JWR
L0612485-06	12WW24-QC			12/20/06 20:36	DL03	IC2	JWR

Analysis:Common Anions

Extraction Method:METH0D

Workgroup:WG230107

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01		12/20/06 12:28			FILTER	JWR
L0612485-02	12WW02		12/20/06 12:28			FILTER	JWR
L0612485-03	12WW20		12/20/06 12:28			FILTER	JWR
L0612485-04	12WW24		12/20/06 12:28			FILTER	JWR
L0612485-05	12WW05		12/20/06 12:28			FILTER	JWR
L0612485-06	12WW24-QC		12/20/06 12:28			FILTER	JWR

Analysis:Dissolved Gases

Analytical Method:RSK175

Workgroup:WG230108

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-02	12WW02			12/21/06 17:21	DL01	HP16	JLS

Analysis:Dissolved Gases

Extraction Method:5021

Workgroup:WG230108

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-02	12WW02				230108	HP16	JLS

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG230208

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01			12/26/06 22:34	01	TOC-VWP	DIH
L0612485-01	12WW01			12/26/06 22:34	01	TOC-VWP	DIH
L0612485-03	12WW20			12/26/06 23:07	01	TOC-VWP	DIH
L0612485-03	12WW20			12/26/06 23:07	01	TOC-VWP	DIH
L0612485-05	12WW05			12/27/06 00:02	01	TOC-VWP	DIH
L0612485-05	12WW05			12/27/06 00:02	01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG230208

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01			12/26/06 22:34	01	TOC-VWP	DIH
L0612485-03	12WW20			12/26/06 23:07	01	TOC-VWP	DIH
L0612485-05	12WW05			12/27/06 00:02	01	TOC-VWP	DIH

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG230324

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01			12/27/06 15:58	01	HPMS11	CMS
L0612485-02	12WW02			12/27/06 16:29	01	HPMS11	CMS
L0612485-03	12WW20			12/27/06 13:24	01	HPMS11	CMS
L0612485-04	12WW24			12/27/06 13:55	01	HPMS11	CMS
L0612485-05	12WW05			12/27/06 14:26	01	HPMS11	CMS
L0612485-06	12WW24-QC			12/27/06 14:57	01	HPMS11	CMS

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG230324

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-01	12WW01				230324	HPMS11	CMS
L0612485-02	12WW02				230324	HPMS11	CMS
L0612485-03	12WW20				230324	HPMS11	CMS
L0612485-04	12WW24				230324	HPMS11	CMS
L0612485-05	12WW05				230324	HPMS11	CMS
L0612485-06	12WW24-QC				230324	HPMS11	CMS

Analysis:Total Organic Carbon

Analytical Method:415.1

Workgroup:WG230345

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-02	12WW02			12/27/06 12:39	DL01	TOC-VWP	DIH
L0612485-02	12WW02			12/27/06 12:39	DL01	TOC-VWP	DIH
L0612485-04	12WW24			12/27/06 12:55	DL01	TOC-VWP	DIH
L0612485-04	12WW24			12/27/06 12:55	DL01	TOC-VWP	DIH
L0612485-06	12WW24-QC			12/27/06 13:10	DL01	TOC-VWP	DIH
L0612485-06	12WW24-QC			12/27/06 13:10	DL01	TOC-VWP	DIH

Analysis:Total Organic Carbon

Extraction Method:METH0D

Workgroup:WG230345

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-02	12WW02			12/27/06 12:39	DL01	TOC-VWP	DIH
L0612485-04	12WW24			12/27/06 12:55	DL01	TOC-VWP	DIH
L0612485-06	12WW24-QC			12/27/06 13:10	DL01	TOC-VWP	DIH

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG230415

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-07	29WW40			12/28/06 11:52	01	HPMS6	CMS

Analysis:Special List - 8260

Extraction Method:5030B

Workgroup:WG230415

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-07	29WW40				230415	HPMS6	MES

Analysis:Special List - 8260

Analytical Method:8260B

Workgroup:WG230417

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-04	12WW24			12/28/06 10:13	DL01	HPMS11	CMS
L0612485-06	12WW24-QC			12/28/06 10:43	DL01	HPMS11	CMS

Analysis:Special List - 8260
Extraction Method:5030B
Workgroup:WG230417

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0612485-04	12WW24				230417	HPMS11	CMS
L0612485-06	12WW24-QC				230417	HPMS11	CMS

Kemron Environmental Services
Analyst Listing
January 3, 2007

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
ARA - ADRIAN R. ACHTERMANN	ASP - AARON S. PETRIE	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	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	DSF - DEBRA S. FREDERICK	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	REK - ROBERT E. KYER	RNP - RICK N. PETTY
RWC - RODNEY W. CAMPBELL	SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF
SMH - SHAUNA M. HYDE	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

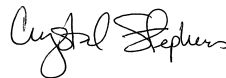
KEMRON Environmental Services Data Checklist

00092802

Date: 20-NOV-2006
Analyst: CMS
Analyst: NA
Method: 8260B/624
Instrument: HPMS6
Curve Workgroup: NA
Runlog ID: 13467
Analytical Workgroups: WG227929;WG228019

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	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	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:
21-NOV-2006



Secondary Reviewer:
22-NOV-2006



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KEMRON Environmental Services

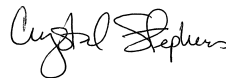
Data Checklist

00092803

Date: 28-NOV-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B/624
 Instrument: HPMS11
 Curve Workgroup: NA
 Runlog ID: 13560
 Analytical Workgroups: WG228336;WG228416

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	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	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:
29-NOV-2006



Secondary Reviewer:
29-NOV-2006



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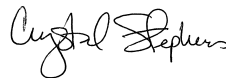
KEMRON Environmental Services Data Checklist

00092804

Date: 27-DEC-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260B
 Instrument: HPMS11
 Curve Workgroup: NA
 Runlog ID: 13959
 Analytical Workgroups: WG230324

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	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	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:
28-DEC-2006



Secondary Reviewer:
02-JAN-2007



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KEMRON Environmental Services

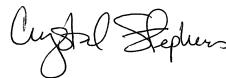
Data Checklist

00092805

Date: 28-DEC-2007
 Analyst: CMS
 Analyst: NA
 Method: 8260B
 Instrument: HPMS6
 Curve Workgroup: NA
 Runlog ID: 14010
 Analytical Workgroups: WG230415

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	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	NA
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:
02-JAN-2007



Secondary Reviewer:
02-JAN-2007



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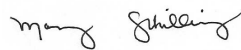
KEMRON Environmental Services Data Checklist

00092806

Date: 28-DEC-2006
 Analyst: CMS
 Analyst: NA
 Method: 8260
 Instrument: HPMS11
 Curve Workgroup: NA
 Runlog ID: 14008
 Analytical Workgroups: WG230417

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	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
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:
02-JAN-2007



Secondary Reviewer:
02-JAN-2007



Generated: JAN-02-2007 14:22:32

KEMRON Environmental Services

Instrument Run Log

00092807

Instrument: HPMS6 Dataset: 112006
 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: 16762

Internal Standard: STD16289 Surrogate Standard: STD16354
 CCV: STD16437 LCS: STD16443 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG227929;WG228019

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M62035	SYSTEM BLANK	NA	1	1		11/20/06 08:03
2	6M62036	SYSTEM BLANK	NA	1	1		11/20/06 08:35
3	6M62037	WG227929-01 BFB 50ng STD 8260	NA	1	1	STD16160	11/20/06 09:10
4	6M62038	WG227929-02 0.30ug/L STD 8260	NA	1	1	STD16437	11/20/06 09:38
5	6M62039	WG227929-03 0.40ug/L STD 8260	NA	1	1	STD16437	11/20/06 10:10
6	6M62040	WG227929-04 1ug/L STD 8260	NA	1	1	STD16437	11/20/06 10:43
7	6M62041	WG227929-05 2ug/L STD 8260	NA	1	1	STD16437	11/20/06 11:15
8	6M62042	WG227929-06 5ug/L STD 8260	NA	1	1	STD16437	11/20/06 11:47
9	6M62043	WG227929-07 20ug/L STD 8260	NA	1	1	STD16437	11/20/06 12:19
10	6M62044	WG227929-08 50ug/L STD 8260	NA	1	1	STD16437	11/20/06 12:52
11	6M62045	WG227929-09 100ug/L STD 8260	NA	1	1	STD16437	11/20/06 13:24
12	6M62046	WG227929-10 150ug/L STD 8260	NA	1	1	STD16437	11/20/06 13:57
13	6M62047	WG227929-11 200ug/L STD 8260	NA	1	1	STD16437	11/20/06 14:29
14	6M62049	SYSTEM BLANK	NA	1	1		11/20/06 15:34
15	6M62050	WG227929-12 20ug/L LCS STD 8260	NA	1	1	STD16443	11/20/06 16:09
16	6M62051	WG227929-12 20ug/L LCS STD 8260	NA	1	1	STD16443	11/20/06 17:01
17	6M62052	WG228018-01 BFB 50ng STD 8260	NA	1	1	STD16160	11/20/06 17:31
18	6M62053	WG228018-01 BFB 50ng STD 8260	NA	1	1	STD16160	11/20/06 18:00
19	6M62054	WG228018-02 50ug/L STD 8260	NA	1	1	STD16437	11/20/06 18:27
20	6M62055	WG228019-01 VBLK1120 BLANK 8260	NA	1	1		11/20/06 18:59
21	6M62056	WG228019-02 20ug/L LCS STD 8260	NA	1	1	STD16443	11/20/06 19:32
22	6M62057	WG228019-03 20ug/L LCSDUP STD 8260	NA	1	1	STD16443	11/20/06 20:04
23	6M62058	WG228019-04 FBLK1113 FLUID BLK	NA	18	1		11/20/06 20:36
24	6M62059	L0611351-11 A 826-SPE	<2	1	1		11/20/06 21:09
25	6M62060	L0611355-07 A 826-SPE	<2	1	1		11/20/06 21:41
26	6M62061	L0611356-08 A 826-SPE	<2	1	1		11/20/06 22:14
27	6M62062	L0611321-09 A 826-SPE	<2	1	1		11/20/06 22:48
28	6M62063	L0611321-01 A 826-SPE/826-LS	=6	1	1		11/20/06 23:21
29	6M62064	L0611321-02 A 826-SPE/826-LS	<2	1	1		11/20/06 23:53
30	6M62065	L0611321-04 A 826-SPE/826-LS	<2	1	1		11/21/06 00:26
31	6M62066	L0611321-06 A 826-SPE/826-LS	<2	1	1		11/21/06 00:58
32	6M62067	L0611321-07 A 826-SPE/826-LS	<2	1	1		11/21/06 01:30

Approved: November 22, 2006

Page: 1 of 2



KEMRON Environmental Services

Instrument Run Log

00092808

Instrument: HPMS6 Dataset: 112006
 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: 16762

Internal Standard: STD16289 Surrogate Standard: STD16354
 CCV: STD16437 LCS: STD16443 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG227929;WG228019

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
33	6M62068	L0611355-01 A 826-SPE	<2	1	1		11/21/06 02:04
34	6M62069	L0611355-02 A 826-SPE	<2	1	1		11/21/06 02:37
35	6M62070	L0611355-03 A 826-SPE	<2	1	1		11/21/06 03:11
36	6M62071	L0611355-04 A 826-SPE	<2	1	1		11/21/06 03:44
37	6M62072	L0611355-05 A 826-SPE	<2	1	1		11/21/06 04:16
38	6M62073	L0611355-06 A 826-SPE	<2	1	1		11/21/06 04:48
39	6M62074	L0611351-08 A 10X 826-SPE/826-LS	=2.5	1	10		11/21/06 05:20
40	6M62075	L0611351-09 A 10X 826-SPE/826-LS D1	<2	1	10		11/21/06 05:53
41	6M62076	SYSTEM BLANK	NA	1	1		11/21/06 06:27
42	6M62077	WG228019-05 624 BLANK	NA	2	1		11/21/06 07:01
43	6M62078	L0611478-01 A 624-SPE	<2	2	1		11/21/06 07:34
44	6M62079	L0611478-02 A 624-SPE	<2	2	1		11/21/06 08:08

Comments

Seq.	Rerun	Dil.	Reason	Analytes
15	X			
File ID: 6M62050				
RR-2-Butanone high-DNR				
17	X			
File ID: 6M62052				
Tune failed/DNR				
40	X	2	Analyzed too dilute	
File ID: 6M62075				
D1 if needed				

Approved: November 22, 2006

Page: 2 of 2



KEMRON Environmental Services

Instrument Run Log

00092809

Instrument: HPMS11 Dataset: 112806
 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: 16856

Internal Standard: STD16509 Surrogate Standard: STD16510
 CCV: STD16549 LCS: STD16525 MS/MSD: NAWG228336;WG22841
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG228336;WG228416

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M38433	SYSTEM BLANK	NA	1	1		11/28/06 07:49
2	11M38434	WG228336-01 BFB 50ng STD 8260	NA	1	1	STD16160	11/28/06 08:17
3	11M38435	WG228336-02 0.30ug/L STD 8260	NA	1	1	STD16549	11/28/06 08:46
4	11M38436	WG228336-03 0.40ug/L STD 8260	NA	1	1	STD16549	11/28/06 09:17
5	11M38437	WG228336-04 1ug/L STD 8260	NA	1	1	STD16549	11/28/06 09:51
6	11M38438	WG228336-05 2ug/L STD 8260	NA	1	1	STD16549	11/28/06 10:22
7	11M38439	WG228336-06 5ug/L STD 8260	NA	1	1	STD16549	11/28/06 10:53
8	11M38440	WG228336-07 20ug/L STD 8260	NA	1	1	STD16549	11/28/06 11:24
9	11M38441	WG228336-08 50ug/L STD 8260	NA	1	1	STD16549	11/28/06 11:54
10	11M38442	WG228336-09 100ug/L STD 8260	NA	1	1	STD16549	11/28/06 12:25
11	11M38443	WG228336-10 200ug/L STD 8260	NA	1	1	STD16549	11/28/06 12:56
12	11M38444	SYSTEM BLANK	NA	1	1		11/28/06 13:27
13	11M38445	SYSTEM BLANK	NA	1	1		11/28/06 13:58
14	11M38446	WG228336-11 20ug/L ALT SOURCE STD 8	NA	1	1	STD16525	11/28/06 14:28
15	11M38447	WG228415-01 BFB 50ng STD 8260	NA	1	1	STD16160	11/28/06 14:59
16	11M38448	WG228415-02 50ug/L STD 8260	NA	1	1	STD16549	11/28/06 15:28
17	11M38449	WG228416-01 VBLK1128 BLANK 8260	NA	1	1		11/28/06 15:59
18	11M38450	WG228416-02 20ug/L LCS STD 8260	NA	1	1	STD16525	11/28/06 16:30
19	11M38451	WG228416-03 20ug/L LCSDUP STD 8260	NA	1	1	STD16525	11/28/06 17:01
20	11M38452	L0611600-07 A 826-SPE	<2	1	1		11/28/06 17:32
21	11M38453	L0611489-04 A 826-SPE	<2	1	1		11/28/06 18:03
22	11M38454	L0611477-11 A 826-SPE1	<2	1	1		11/28/06 18:34
23	11M38455	L0611490-05 A 826-LOW	<2	1	1		11/28/06 19:04
24	11M38456	L0611490-08 A 826-LOW	<2	1	1		11/28/06 19:35
25	11M38457	L0611490-06 A 826-LOW	<2	1	1		11/28/06 20:07
26	11M38458	L0611511-01 A 826-SPE	<2	1	1		11/28/06 20:37
27	11M38459	L0611511-02 A 826-SPE	<2	1	1		11/28/06 21:08
28	11M38460	L0611511-03 A 826-SPE	<2	1	1		11/28/06 21:39
29	11M38461	L0611511-04 A 826-SPE	<2	1	1		11/28/06 22:10
30	11M38462	L0611511-05 A 826-SPE	<2	1	1		11/28/06 22:41
31	11M38463	L0611511-06 A 826-SPE	<2	1	1		11/28/06 23:12
32	11M38464	L0611511-07 A 826-SPE	<2	1	1		11/28/06 23:43

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KEMRON Environmental Services

Instrument Run Log

00092810

Instrument: HPMS11 Dataset: 112806
 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: 16856

Internal Standard: STD16509 Surrogate Standard: STD16510
 CCV: STD16549 LCS: STD16525 MS/MSD: NAWG228336;WG22841
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG228336;WG228416

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
33	11M38465	L0611477-07 A 826-SPE1	<2	1	1		11/29/06 00:13
34	11M38466	L0611477-08 A 826-SPE1	<2	1	1		11/29/06 00:44
35	11M38467	L0611477-09 A 826-SPE1	<2	1	1		11/29/06 01:15
36	11M38468	L0611477-10 A 826-SPE1	<2	1	1		11/29/06 01:45
37	11M38469	L0611588-02 A 100X 8260	<2	1	100		11/29/06 02:16
38	11M38470	L0611588-01 A 100X 8260	NA	12	100		11/29/06 02:47
39	11M38471	SYSTEM BLANK	NA	1	1		11/29/06 03:17

Comments

Seq.	Rerun	Dil.	Reason	Analytes
33	X	5	Over Calibration Range	TCE
File ID: 11M38465				
35	X	10	Over Calibration Range	EB, m+p-Xyl., 1,2,4-TMB
File ID: 11M38467				
36	X		Carry-over contamination	
File ID: 11M38468				
DNR				
37	X		Analyzed too dilute	
File ID: 11M38469				
DNR				
38	X	5	Analyzed too dilute	
File ID: 11M38470				
DNR				

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KEMRON Environmental Services

Instrument Run Log

00092811

Instrument: HPMS11 Dataset: 122706
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 17218

Internal Standard: STD16956 Surrogate Standard: STD16828
 CCV: STD16922 LCS: STD16929 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG230324

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M39115	WG230323-01 50NG BFB STD 8260	NA	1	1	STD16662	12/27/06 08:19
2	11M39116	WG230323-02 50ug/L STD 8260	NA	1	1	STD16922	12/27/06 08:46
3	11M39117	WG230324-01 VBLK1227 BLANK 8260	NA	1	1		12/27/06 09:17
4	11M39118	WG230324-02 20ug/L LCS STD 8260	NA	1	1	STD16929	12/27/06 09:48
5	11M39119	WG230324-03 20ug/L LCSDUP STD 8260	NA	1	1	STD16929	12/27/06 10:19
6	11M39120	L0612487-19 B 50X 8260 D1	<2	1	50		12/27/06 10:50
7	11M39121	L0612487-13 B 8260	<2	1	1		12/27/06 11:21
8	11M39122	L0612487-03 B 8260	<2	1	1		12/27/06 11:52
9	11M39123	L0612487-09 B 8260	<2	1	1		12/27/06 12:23
10	11M39124	L0612487-15 B 8260	<2	1	1		12/27/06 12:53
11	11M39125	L0612485-03 A 826-SPE	<2	1	1		12/27/06 13:24
12	11M39126	L0612485-04 A 826-SPE	<2	1	1		12/27/06 13:55
13	11M39127	L0612485-05 A 826-SPE	<2	1	1		12/27/06 14:26
14	11M39128	L0612485-06 A 826-SPE	=2.2	1	1		12/27/06 14:57
15	11M39129	L0612485-07 A 826-SPE	<2	1	1		12/27/06 15:27
16	11M39130	L0612485-01 A 826-SPE	<2	1	1		12/27/06 15:58
17	11M39131	L0612485-02 A 826-SPE	<2	1	1		12/27/06 16:29
18	11M39132	L0612465-01 A 826-SPE	<2	1	1		12/27/06 16:59
19	11M39133	L0612465-02 A 826-SPE	<2	1	1		12/27/06 17:30
20	11M39134	L0612465-03 A 826-SPE	=4	1	1		12/27/06 18:02
21	11M39135	L0612465-04 A 826-SPE	<2	1	1		12/27/06 18:33
22	11M39136	L0612465-05 A 826-SPE	<2	1	1		12/27/06 19:04
23	11M39137	L0612465-06 A 826-SPE	<2	1	1		12/27/06 19:35
24	11M39138	L0612465-07 A 826-SPE	<2	1	1		12/27/06 20:05
25	11M39139	SYSTEM BLANK	NA	1	1		12/27/06 20:36

Comments

Seq.	Rerun	Dil.	Reason	Analytes
10	X		Carry-over contamination	
File ID: 11M39124				
DNR				
12	X	10	Over Calibration Range	TCE

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KEMRON Environmental Services

Instrument Run Log

00092812

Instrument: HPMS11 Dataset: 122706
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 17218

Internal Standard: STD16956 Surrogate Standard: STD16828
 CCV: STD16922 LCS: STD16929 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG230324

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M39126				
14	X	10	Over Calibration Range	TCE
File ID: 11M39128				
15	X		Carry-over contamination	
File ID: 11M39129				
DNR				
19	X	50	Over Calibration Range	VC
File ID: 11M39133				
20	X	20	Over Calibration Range	VC, 2-Butanone, cis-1,2-DCE
File ID: 11M39134				
21	X		Carry-over contamination	
File ID: 11M39135				
DNR				
22	X	10	Over Calibration Range	VC
File ID: 11M39136				
23	X		Carry-over contamination	
File ID: 11M39137				
DNR				

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KEMRON Environmental Services

Instrument Run Log

00092813

Instrument: <u>HPMS6</u>	Dataset: <u>122806</u>	
Analyst1: <u>CMS</u>	Analyst2: <u>NA</u>	
Method: <u>8260B</u>	SOP: <u>MSV01</u>	Rev: <u>10</u>
Method: <u>5030B</u>	SOP: <u>PAT01</u>	Rev: <u>10</u>

Maintenance Log ID: 17264

Internal Standard: <u>STD16934</u>	Surrogate Standard: <u>STD16935</u>	
CCV: <u>STD16907</u>	LCS: <u>STD16929</u>	MS/MSD: <u>NA</u>
Column 1 ID: <u>RTX502.2</u>	Column 2 ID: <u>NA</u>	
Workgroups: <u>WG230415</u>		

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M62907	WG230414-01 BFB 50ng STD 8260	NA	1	1	STD16662	12/28/06 07:21
2	6M62908	WG230414-01 BFB 50ng STD 8260	NA	1	1	STD16662	12/28/06 07:35
3	6M62909	WG230414-02 50ug/L STD 8260	NA	1	1	STD16907	12/28/06 08:05
4	6M62910	WG230415-01 VBLK1228 BLANK 8260	NA	1	1		12/28/06 08:38
5	6M62911	WG230415-02 20ug/L LCS STD 8260	NA	1	1	STD16929	12/28/06 09:10
6	6M62912	WG230415-03 20ug/L LCSDUP STD 8260	NA	1	1	STD16929	12/28/06 09:43
7	6M62913	L0612533-09 B 5X 826-SPE D1	<2	1	5		12/28/06 10:15
8	6M62914	L0612575-11 B 100X 826-SPE D1	<2	1	100		12/28/06 10:47
9	6M62915	L0612487-15 A 8260	<2	1	1		12/28/06 11:20
10	6M62916	L0612485-07 B 826-SPE	<2	1	1		12/28/06 11:52
11	6M62917	L0612465-06 B 826-SPE	<2	1	1		12/28/06 12:24
12	6M62918	L0612465-04 B 826-SPE	<2	1	1		12/28/06 12:57
13	6M62919	L0612503-05 A 10X 8260	NA	12	10		12/28/06 13:29
14	6M62920	L0612575-03 A 826-SPE	<2	1	1		12/28/06 14:05
15	6M62921	L0612575-05 B 826-SPE	<2	1	1		12/28/06 14:37
16	6M62922	L0612575-09 B 826-SPE	<2	1	1		12/28/06 15:10
17	6M62923	L0612575-10 B 826-SPE	<2	1	1		12/28/06 15:42
18	6M62924	L0612575-12 B 826-SPE	<2	1	1		12/28/06 16:14
19	6M62925	L0612575-01 B 20X 826-SPE	<2	1	20		12/28/06 16:46
20	6M62926	L0612575-02 B 10X 826-SPE	<2	1	10		12/28/06 17:19
21	6M62927	L0612575-04 B 20X 826-SPE	<2	1	20		12/28/06 17:52
22	6M62928	L0612575-07 B 5X 826-SPE	<2	1	5		12/28/06 18:24
23	6M62929	L0612465-08 B 826-SPE	<2	1	1		12/28/06 18:57
24	6M62930	L0612465-09 B 826-SPE	<2	1	1		12/28/06 19:29
25	6M62931	SYSTEM CHECK	NA	1	1		12/28/06 20:01
26	6M62932	SYSTEM CHECK	NA	1	1		12/28/06 20:34

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
File ID: 6M62907				

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Instrument:	HPMS6	Dataset:	122806	
Analyst1:	CMS	Analyst2:	NA	
Method:	8260B	SOP:	MSV01	Rev: 10
Method:	5030B	SOP:	PAT01	Rev: 10

Maintenance Log ID: 17264

Internal Standard: STD16934 Surrogate Standard: STD16935
CCV: STD16907 LCS: STD16929 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG230415

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			Tune failed/DNR	

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KEMRON Environmental Services

Instrument Run Log

00092815

Instrument: HPMS11 Dataset: 122806
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030/5035 SOP: PAT01 Rev: 10

Maintenance Log ID: 17261

Internal Standard: STD16956 Surrogate Standard: STD16828
 CCV: STD16922 LCS: STD16929 MS/MSD: STD16929
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG230417

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M39141	WG230416-01 50NG BFB STD 8260	NA	1	1	STD16662	12/28/06 07:21
2	11M39142	WG230416-01 50NG BFB STD 8260	NA	1	1	STD16662	12/28/06 07:36
3	11M39143	WG230416-02 50ug/L STD 8260	NA	1	1	STD16922	12/28/06 08:09
4	11M39144	WG230417-01 VBLK1228 BLANK 8260	NA	1	1		12/28/06 08:40
5	11M39145	WG230417-02 20ug/L LCS STD 8260	NA	1	1	STD16929	12/28/06 09:11
6	11M39146	L0612412-09 C D1 10X 826-SPE	<2	1	10		12/28/06 09:41
7	11M39147	L0612485-04 B D1 10X 826-SPE	<2	1	10		12/28/06 10:13
8	11M39148	L0612485-06 B D1 10X 826-SPE	<2	1	10		12/28/06 10:43
9	11M39149	L0612465-05 B D1 10X 826-SPE	<2	1	10		12/28/06 11:14
10	11M39150	L0612465-02 B D1 50X 826-SPE	<2	1	50		12/28/06 11:45
11	11M39151	L0612465-03 B D1 20X 826-SPE	5	1	20		12/28/06 12:16
12	11M39152	L0612593-13 A 826-SPE	7	1	1		12/28/06 12:47
13	11M39153	L0612593-01 A 826-SPE	7	1	1		12/28/06 13:18
14	11M39154	L0612593-03 MS A 826-SPE	7	1	1	STD16929	12/28/06 13:49
15	11M39155	L0612593-05 MSD A 826-SPE	7	1	1	STD16929	12/28/06 14:20
16	11M39156	L0612593-07 A 826-SPE	7	1	1		12/28/06 14:51
17	11M39157	L0612593-09 A 826-SPE	7	1	1		12/28/06 15:22
18	11M39158	L0612593-11 A 826-SPE	7	1	1		12/28/06 15:53
19	11M39159	L0612532-01 A 826-LOW	<2	1	1		12/28/06 16:23
20	11M39160	L0612412-06 B D1 10X 826-SPE	<2	1	10		12/28/06 16:54
21	11M39161	L0612532-02 A 826-LOW	<2	1	1		12/28/06 17:25
22	11M39162	L0612532-03 A 826-LOW	7	1	1		12/28/06 17:56
23	11M39163	L0612533-03 A 826-SPE	<2	1	1		12/28/06 18:27
24	11M39164	L0612533-04 A 826-SPE	<2	1	1		12/28/06 18:58
25	11M39165	L0612533-05 A 826-SPE	<2	1	1		12/28/06 19:28
26	11M39166	SYSTEM BLANK	NA	1	1		12/28/06 19:59

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1				
File ID: 11M39141				

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KEMRON Environmental Services

Instrument Run Log

00092816

Instrument: HPMS11 Dataset: 122806
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030/5035 SOP: PAT01 Rev: 10

Maintenance Log ID: 17261

Internal Standard: STD16956 Surrogate Standard: STD16828
 CCV: STD16922 LCS: STD16929 MS/MSD: STD16929
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG230417

Comments

Seq.	Rerun	Dil.	Reason	Analytes
RR-BFB failed.				
11	X	50	Over Calibration Range	vc
File ID: 11M39151				
19	X	50	Over Calibration Range	vc, cis-1,2,1,2-DCB
File ID: 11M39159				
20	X	10		
File ID: 11M39160				
RR to confirm dilution for vinyl chloride. Planning to report D1 from 12/29/06.				
21	X	1	Carry-over contamination	
File ID: 11M39161				
Do not report.				
22	X	1	Carry-over contamination	
File ID: 11M39162				
Do not report.				

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HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092817

Analytical Method: 8260B
Login Number: L0612485

AAB#: WG230417

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
12WW24	12/19/06	12/20/06	12/28/06	14	8.86	12/28/06	14	8.86	
12WW24-QC	12/19/06	12/20/06	12/28/06	14	8.88	12/28/06	14	8.88	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092818

Analytical Method: 8260B
Login Number: L0612485

AAB#: WG230324

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
12WW05	12/19/06	12/20/06	12/27/06	14	8.24	12/27/06	14	8.24	
12WW20	12/19/06	12/20/06	12/27/06	14	8.08	12/27/06	14	8.08	
12WW02	12/19/06	12/20/06	12/27/06	14	8.27	12/27/06	14	8.27	
12WW24-QC	12/19/06	12/20/06	12/27/06	14	8.06	12/27/06	14	8.06	
12WW01	12/19/06	12/20/06	12/27/06	14	8.07	12/27/06	14	8.07	
12WW24	12/19/06	12/20/06	12/27/06	14	8.01	12/27/06	14	8.01	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092819

Analytical Method: 8260B
Login Number: L0612485

AAB#: WG230415

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
29WW40	12/19/06	12/20/06	12/28/06	14	8.85	12/28/06	14	8.85	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00092820

Login Number:L0612485

Method:8260

Instrument Id:HPMS6

CAL ID: HPMS6 - 20-NOV-06

Workgroup (AAB#):WG230415

Matrix:Water

Sample Number	Dilution	Tag	1	2	3	4
L0612485-07	1.00	01	92.7	98.2	96.4	100
WG230415-01	1.00	01	87.5	95.7	91.8	100
WG230415-02	1.00	01	88.8	96.5	93.5	99.9
WG230415-03	1.00	01	88.7	96.7	92.7	100

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

00092821

Login Number:L0612485

Method:8260

Instrument Id:HPMS11

CAL ID: HPMS11 - 28-NOV-06

Workgroup (AAB#):WG230417

Matrix:Water

Sample Number	Dilution	Tag	1	2	3	4
L0612485-04	10.0	DL01	91.2	95.3	90.4	92.7
L0612485-06	10.0	DL01	94.6	96.3	90.7	92.3
WG230417-01	1.00	01	90.0	94.9	91.8	94.5
WG230417-02	1.00	01	91.4	96.0	89.7	92.2

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

SURROGATE STANDARDS

00092822

Login Number: L0612485
 Instrument Id: HPMS11
 Workgroup (AAB#): WG230324

Method: 8260
 CAL ID: HPMS11 - 28-NOV-06
 Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L0612485-01	1.00	01	93.6	95.6	89.7	93.3
L0612485-02	1.00	01	94.1	96.5	90.7	92.5
L0612485-03	1.00	01	89.9	94.0	91.0	92.6
L0612485-04	1.00	01	91.3	95.6	91.1	95.6
L0612485-05	1.00	01	91.9	95.3	90.7	92.9
L0612485-06	1.00	01	92.9	97.5	92.4	95.2
WG230324-01	1.00	01	87.0	91.7	90.1	93.4
WG230324-02	1.00	01	88.3	93.4	87.4	93.5
WG230324-03	1.00	01	88.3	94.3	89.2	93.4

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

00092823

Login Number: L0612485	Work Group: WG230324
Blank File ID: 11M39117	Blank Sample ID: WG230324-01
Prep Date: 12/27/06 09:17	Instrument ID: HPMS11
Analyzed Date: 12/27/06 09:17	Method: 8260B
Analyst: CMS	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG230324-02	11M39118	12/27/06 09:48	01
LCS2	WG230324-03	11M39119	12/27/06 10:19	01
12WW20	L0612485-03	11M39125	12/27/06 13:24	01
12WW24	L0612485-04	11M39126	12/27/06 13:55	01
12WW05	L0612485-05	11M39127	12/27/06 14:26	01
12WW24-QC	L0612485-06	11M39128	12/27/06 14:57	01
12WW01	L0612485-01	11M39130	12/27/06 15:58	01
12WW02	L0612485-02	11M39131	12/27/06 16:29	01

METHOD BLANK SUMMARY

00092824

Login Number: L0612485	Work Group: WG230417
Blank File ID: 11M39144	Blank Sample ID: WG230417-01
Prep Date: 12/28/06 08:40	Instrument ID: HPMS11
Analyzed Date: 12/28/06 08:40	Method: 8260B
Analyst: CMS	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG230417-02	11M39145	12/28/06 09:11	01
12WW24	L0612485-04	11M39147	12/28/06 10:13	DL01
12WW24-QC	L0612485-06	11M39148	12/28/06 10:43	DL01

METHOD BLANK SUMMARY

00092825

Login Number: L0612485 _____ Work Group: WG230415 _____
Blank File ID: 6M62910 _____ Blank Sample ID: WG230415-01 _____
Prep Date: 12/28/06 08:38 _____ Instrument ID: HPMS6 _____
Analyzed Date: 12/28/06 08:38 _____ Method: 8260B _____
Analyst: CMS _____

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG230415-02	6M62911	12/28/06 09:10	01
LCS2	WG230415-03	6M62912	12/28/06 09:43	01
29WW40	L0612485-07	6M62916	12/28/06 11:52	01

METHOD BLANK REPORT

00092826

Login Number: L0612485 Prep Date: 12/27/06 09:17 Sample ID: WG230324-01
 Instrument ID: HPMS11 Run Date: 12/27/06 09:17 Prep Method: 5030B
 File ID: 11M39117 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230324 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 28-NOV-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

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METHOD BLANK REPORT

00092827

Login Number: L0612485 Prep Date: 12/27/06 09:17 Sample ID: WG230324-01
 Instrument ID: HPMS11 Run Date: 12/27/06 09:17 Prep Method: 5030B
 File ID: 11M39117 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230324 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 28-NOV-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	87.0	80 - 120	PASS
Dibromofluoromethane	91.7	86 - 118	PASS
p-Bromofluorobenzene	90.1	86 - 115	PASS
Toluene-d8	93.4	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00092828

Login Number: L0612485 Prep Date: 12/28/06 08:40 Sample ID: WG230417-01
 Instrument ID: HPMS11 Run Date: 12/28/06 08:40 Prep Method: 5030B
 File ID: 11M39144 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230417 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 28-NOV-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

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METHOD BLANK REPORT

00092829

Login Number: L0612485 Prep Date: 12/28/06 08:40 Sample ID: WG230417-01
 Instrument ID: HPMS11 Run Date: 12/28/06 08:40 Prep Method: 5030B
 File ID: 11M39144 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230417 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 28-NOV-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	90.0	80 - 120	PASS
Dibromofluoromethane	94.9	86 - 118	PASS
p-Bromofluorobenzene	91.8	86 - 115	PASS
Toluene-d8	94.5	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

METHOD BLANK REPORT

00092830

Login Number: L0612485 Prep Date: 12/28/06 08:38 Sample ID: WG230415-01
 Instrument ID: HPMS6 Run Date: 12/28/06 08:38 Prep Method: 5030B
 File ID: 6M62910 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230415 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 20-NOV-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

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METHOD BLANK REPORT

00092831

Login Number: L0612485 Prep Date: 12/28/06 08:38 Sample ID: WG230415-01
 Instrument ID: HPMS6 Run Date: 12/28/06 08:38 Prep Method: 5030B
 File ID: 6M62910 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230415 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 20-NOV-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	87.5	80 - 120	PASS
Dibromofluoromethane	95.7	86 - 118	PASS
p-Bromofluorobenzene	91.8	86 - 115	PASS
Toluene-d8	100	88 - 110	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230417-02
 Instrument ID: HPMS11 Run Time: 09:11 Prep Method: 5030B
 File ID: 11M39145 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230417 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 28-NOV-06

Analytes	Expected	Found	% Rec	LCS Limits			Q
1,1,1-Trichloroethane	20.0	24.3	121	80	-	134	
1,1,2,2-Tetrachloroethane	20.0	20.1	100	79	-	125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	21.8	109	80	-	130	
1,1,2-Trichloroethane	20.0	20.9	105	80	-	125	
1,1-Dichloroethane	20.0	20.6	103	80	-	125	
1,1-Dichloroethene	20.0	21.9	110	80	-	132	
1,2,4-Trichlorobenzene	20.0	19.6	97.9	65	-	135	
1,2-Dibromo-3-chloropropane	20.0	18.3	91.4	50	-	130	
1,2-Dibromoethane	20.0	21.2	106	80	-	125	
1,2-Dichlorobenzene	20.0	20.7	103	80	-	125	
1,2-Dichloroethane	20.0	21.9	110	80	-	129	
cis-1,2-Dichloroethene	20.0	21.3	107	70	-	125	
trans-1,2-Dichloroethene	20.0	21.3	106	80	-	127	
1,2-Dichloropropane	20.0	19.5	97.3	80	-	120	
1,3-Dichlorobenzene	20.0	20.6	103	80	-	120	
1,4-Dichlorobenzene	20.0	20.0	100	80	-	120	
2-Butanone	20.0	18.8	93.9	30	-	150	
2-Hexanone	20.0	17.1	85.6	55	-	130	
4-Methyl-2-pentanone	20.0	17.5	87.6	64	-	140	
Acetone	20.0	26.5	132	40	-	142	
Benzene	20.0	20.7	103	80	-	121	
Bromodichloromethane	20.0	24.1	121	80	-	131	
Bromoform	20.0	19.8	99.0	70	-	130	
Bromomethane	20.0	18.7	93.7	30	-	145	
Carbon disulfide	20.0	20.1	101	58	-	138	
Carbon tetrachloride	20.0	25.4	127	65	-	140	
Chlorobenzene	20.0	21.0	105	80	-	120	
Chloroethane	20.0	19.9	99.6	60	-	135	
Chloroform	20.0	22.2	111	80	-	125	
Chloromethane	20.0	21.0	105	40	-	125	
cis-1,3-Dichloropropene	20.0	20.9	104	70	-	130	
Cyclohexane	20.0	19.3	96.5	80	-	130	
Dibromochloromethane	20.0	24.4	122	60	-	135	
Dichlorodifluoromethane	20.0	21.0	105	50	-	133	
Ethyl benzene	20.0	22.4	112	80	-	122	
Isopropylbenzene	20.0	20.3	102	80	-	122	
Methyl acetate	20.0	17.4	86.8	80	-	130	
Methyl tert-butyl ether	20.0	21.9	110	65	-	125	
Methylcyclohexane	20.0	19.9	99.5	80	-	130	
Methylene chloride	20.0	20.5	102	80	-	123	
Styrene	20.0	22.3	111	80	-	123	

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230417-02
 Instrument ID: HPMS11 Run Time: 09:11 Prep Method: 5030B
 File ID: 11M39145 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG230417 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11-28-NOV-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Tetrachloroethene	20.0	22.3	112	80 - 124	
Toluene	20.0	21.2	106	80 - 124	
trans-1,3-Dichloropropene	20.0	19.4	96.8	80 - 130	
Trichloroethene	20.0	21.5	108	80 - 122	
Trichlorofluoromethane	20.0	22.2	111	62 - 151	
Vinyl chloride	20.0	22.8	114	65 - 140	
Xylenes, Total	60.0	65.8	110	80 - 121	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	91.4	80 - 120	PASS
Dibromofluoromethane	96.0	86 - 118	PASS
p-Bromofluorobenzene	89.7	86 - 115	PASS
Toluene-d8	92.2	88 - 110	PASS

* FAILS %REC LIMIT

Login Number: L0612485 Analyst: CMS Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG230415 Units: ug/L
Sample ID: WG230415-02 LCS File ID: 6M62911 Run Date: 12/28/2006 09:10
Sample ID: WG230415-03 LCS2 File ID: 6M62912 Run Date: 12/28/2006 09:43

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	20.1	101	20.0	20.6	103	2.29	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	19.1	95.7	20.0	19.6	98.1	2.50	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	19.8	98.9	20.0	20.5	102	3.40	80 - 130	20	
1,1,2-Trichloroethane	20.0	20.3	102	20.0	20.6	103	1.60	80 - 125	20	
1,1-Dichloroethane	20.0	19.6	98.1	20.0	20.0	100	2.05	80 - 125	20	
1,1-Dichloroethene	20.0	19.4	97.0	20.0	20.3	102	4.60	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	20.3	101	20.0	20.7	104	2.33	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	20.5	102	20.0	19.0	94.9	7.58	50 - 130	20	
1,2-Dibromoethane	20.0	20.6	103	20.0	20.3	101	1.63	80 - 125	20	
1,2-Dichlorobenzene	20.0	19.8	98.9	20.0	20.2	101	2.09	80 - 125	20	
1,2-Dichloroethane	20.0	19.5	97.3	20.0	19.2	96.2	1.08	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.3	101	20.0	20.9	104	2.80	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.8	98.9	20.0	20.8	104	4.91	80 - 127	20	
1,2-Dichloropropane	20.0	18.9	94.7	20.0	19.2	96.1	1.51	80 - 120	20	
1,3-Dichlorobenzene	20.0	19.7	98.7	20.0	20.2	101	2.13	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.4	97.0	20.0	19.8	99.0	2.00	80 - 120	20	
2-Butanone	20.0	24.4	122	20.0	22.8	114	6.51	30 - 150	20	
2-Hexanone	20.0	18.9	94.7	20.0	18.0	89.8	5.28	55 - 130	20	
4-Methyl-2-pentanone	20.0	20.4	102	20.0	19.0	95.0	7.22	64 - 140	20	
Acetone	20.0	24.0	120	20.0	23.3	117	2.78	40 - 142	20	
Benzene	20.0	19.5	97.5	20.0	19.8	99.2	1.74	80 - 121	20	
Bromodichloromethane	20.0	20.8	104	20.0	21.0	105	0.980	80 - 131	20	
Bromoform	20.0	19.5	97.6	20.0	20.0	99.8	2.15	70 - 130	20	
Bromomethane	20.0	19.1	95.3	20.0	19.8	98.8	3.58	30 - 145	20	
Carbon disulfide	20.0	19.4	96.9	20.0	20.3	101	4.52	58 - 138	20	
Carbon tetrachloride	20.0	20.5	102	20.0	21.4	107	4.17	65 - 140	20	
Chlorobenzene	20.0	19.9	99.5	20.0	20.2	101	1.54	80 - 120	20	
Chloroethane	20.0	17.7	88.6	20.0	18.5	92.6	4.43	60 - 135	20	
Chloroform	20.0	19.6	97.9	20.0	20.1	101	2.76	80 - 125	20	
Chloromethane	20.0	19.3	96.5	20.0	20.2	101	4.46	40 - 125	20	
cis-1,3-Dichloropropene	20.0	19.9	99.5	20.0	20.0	100	0.696	70 - 130	20	
Cyclohexane	20.0	19.5	97.5	20.0	20.6	103	5.61	80 - 130	20	
Dibromochloromethane	20.0	21.0	105	20.0	21.3	107	1.40	60 - 135	20	
Dichlorodifluoromethane	20.0	16.7	83.5	20.0	17.4	86.9	4.06	50 - 133	20	
Ethyl benzene	20.0	20.1	101	20.0	20.5	102	1.62	80 - 122	20	
Isopropylbenzene	20.0	18.2	91.0	20.0	18.7	93.4	2.66	80 - 122	20	
Methyl acetate	20.0	19.8	99.0	20.0	19.6	98.2	0.754	80 - 130	20	
Methyl tert-butyl ether	20.0	21.2	106	20.0	21.1	105	0.684	65 - 125	20	
Methylcyclohexane	20.0	20.2	101	20.0	21.3	107	5.29	80 - 130	20	
Methylene chloride	20.0	18.2	91.0	20.0	18.5	92.7	1.83	80 - 123	20	
Styrene	20.0	20.1	101	20.0	20.8	104	3.04	80 - 123	20	
Tetrachloroethene	20.0	20.0	99.9	20.0	20.7	103	3.40	80 - 124	20	

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LABORATORY CONTROL SAMPLE (LCS)

00092835

Login Number: L0612485 Analyst: CMS Prep Method: 5030B
 Instrument ID: HPMS6 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG230415 Units: ug/L
 Sample ID: WG230415-02 LCS File ID: 6M62911 Run Date: 12/28/2006 09:10
 Sample ID: WG230415-03 LCS2 File ID: 6M62912 Run Date: 12/28/2006 09:43

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	19.6	97.9	20.0	20.1	100	2.46	80 - 124	20	
trans-1,3-Dichloropropene	20.0	18.9	94.6	20.0	19.0	94.8	0.262	80 - 130	20	
Trichloroethene	20.0	20.7	103	20.0	21.1	106	2.17	80 - 122	20	
Trichlorofluoromethane	20.0	17.3	86.7	20.0	18.1	90.3	4.05	62 - 151	20	
Vinyl chloride	20.0	23.1	115	20.0	24.4	122	5.47	65 - 140	20	
Xylenes, Total	60.0	58.0	96.6	60.0	60.1	100	3.60	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	96.5	96.7	86 - 118	PASS
1,2-Dichloroethane-d4	88.8	88.7	80 - 120	PASS
Toluene-d8	99.9	100	88 - 110	PASS
p-Bromofluorobenzene	93.5	92.7	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

LABORATORY CONTROL SAMPLE (LCS)

00092836

Login Number: L0612485 Analyst: CMS Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG230324 Units: ug/L
Sample ID: WG230324-02 LCS File ID: 11M39118 Run Date: 12/27/2006 09:48
Sample ID: WG230324-03 LCS2 File ID: 11M39119 Run Date: 12/27/2006 10:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	22.0	110	20.0	22.7	114	3.26	80 - 134	20	
1,1,2,2-Tetrachloroethane	20.0	19.3	96.4	20.0	19.8	99.2	2.89	79 - 125	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	21.5	108	20.0	21.7	108	0.497	80 - 130	20	
1,1,2-Trichloroethane	20.0	20.8	104	20.0	20.8	104	0.112	80 - 125	20	
1,1-Dichloroethane	20.0	19.5	97.4	20.0	20.4	102	4.49	80 - 125	20	
1,1-Dichloroethene	20.0	20.4	102	20.0	21.6	108	5.32	80 - 132	20	
1,2,4-Trichlorobenzene	20.0	18.5	92.3	20.0	19.6	97.9	5.83	65 - 135	20	
1,2-Dibromo-3-chloropropane	20.0	17.8	88.8	20.0	17.8	89.1	0.337	50 - 130	20	
1,2-Dibromoethane	20.0	20.6	103	20.0	20.4	102	0.621	80 - 125	20	
1,2-Dichlorobenzene	20.0	19.4	96.9	20.0	20.4	102	5.03	80 - 125	20	
1,2-Dichloroethane	20.0	20.5	103	20.0	20.7	104	0.915	80 - 129	20	
cis-1,2-Dichloroethene	20.0	20.5	103	20.0	21.6	108	5.24	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.3	101	20.0	21.4	107	5.51	80 - 127	20	
1,2-Dichloropropane	20.0	18.8	93.8	20.0	19.8	99.2	5.57	80 - 120	20	
1,3-Dichlorobenzene	20.0	19.6	97.8	20.0	20.5	102	4.43	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.8	94.1	20.0	19.9	99.5	5.58	80 - 120	20	
2-Butanone	20.0	18.9	94.7	20.0	19.1	95.4	0.803	30 - 150	20	
2-Hexanone	20.0	16.8	83.9	20.0	17.1	85.6	2.01	55 - 130	20	
4-Methyl-2-pentanone	20.0	17.9	89.3	20.0	18.1	90.5	1.33	64 - 140	20	
Acetone	20.0	24.8	124	20.0	26.9	134	7.90	40 - 142	20	
Benzene	20.0	19.7	98.3	20.0	20.7	104	5.14	80 - 121	20	
Bromodichloromethane	20.0	22.5	113	20.0	23.1	116	2.66	80 - 131	20	
Bromoform	20.0	18.8	94.0	20.0	18.7	93.5	0.480	70 - 130	20	
Bromomethane	20.0	18.6	92.8	20.0	20.3	102	8.97	30 - 145	20	
Carbon disulfide	20.0	20.2	101	20.0	21.5	107	6.09	58 - 138	20	
Carbon tetrachloride	20.0	22.8	114	20.0	23.4	117	2.45	65 - 140	20	
Chlorobenzene	20.0	20.2	101	20.0	20.8	104	3.03	80 - 120	20	
Chloroethane	20.0	18.9	94.5	20.0	20.1	100	5.98	60 - 135	20	
Chloroform	20.0	20.5	103	20.0	21.4	107	4.40	80 - 125	20	
Chloromethane	20.0	18.7	93.4	20.0	20.9	104	11.1	40 - 125	20	
cis-1,3-Dichloropropene	20.0	20.1	100	20.0	20.9	104	4.06	70 - 130	20	
Cyclohexane	20.0	18.7	93.7	20.0	19.0	94.9	1.29	80 - 130	20	
Dibromochloromethane	20.0	22.9	115	20.0	23.0	115	0.496	60 - 135	20	
Dichlorodifluoromethane	20.0	20.5	102	20.0	20.1	101	1.72	50 - 133	20	
Ethyl benzene	20.0	21.0	105	20.0	22.0	110	4.60	80 - 122	20	
Isopropylbenzene	20.0	18.9	94.4	20.0	19.6	98.0	3.80	80 - 122	20	
Methyl acetate	20.0	17.2	86.1	20.0	17.0	85.1	1.11	80 - 130	20	
Methyl tert-butyl ether	20.0	22.3	112	20.0	21.8	109	2.32	65 - 125	20	
Methylcyclohexane	20.0	19.3	96.5	20.0	19.6	97.8	1.36	80 - 130	20	
Methylene chloride	20.0	20.2	101	20.0	20.6	103	2.03	80 - 123	20	
Styrene	20.0	21.3	107	20.0	22.2	111	3.96	80 - 123	20	
Tetrachloroethene	20.0	20.8	104	20.0	21.5	108	3.62	80 - 124	20	

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LABORATORY CONTROL SAMPLE (LCS)

00092837

Login Number: L0612485 Analyst: CMS Prep Method: 5030B
 Instrument ID: HPMS11 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG230324 Units: ug/L
 Sample ID: WG230324-02 LCS File ID: 11M39118 Run Date: 12/27/2006 09:48
 Sample ID: WG230324-03 LCS2 File ID: 11M39119 Run Date: 12/27/2006 10:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Toluene	20.0	20.2	101	20.0	21.1	105	4.15	80 - 124	20	
trans-1,3-Dichloropropene	20.0	19.0	94.9	20.0	18.9	94.4	0.485	80 - 130	20	
Trichloroethene	20.0	20.4	102	20.0	21.3	107	4.55	80 - 122	20	
Trichlorofluoromethane	20.0	20.0	100	20.0	20.2	101	1.19	62 - 151	20	
Vinyl chloride	20.0	20.8	104	20.0	21.1	106	1.51	65 - 140	20	
Xylenes, Total	60.0	62.3	104	60.0	65.0	108	4.27	80 - 121	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	93.4	94.3	86 - 118	PASS
1,2-Dichloroethane-d4	88.3	88.3	80 - 120	PASS
Toluene-d8	93.5	93.4	88 - 110	PASS
p-Bromofluorobenzene	87.4	89.2	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092838

BFB

Login Number: L0612485	Tune ID: WG227929-01
Instrument: HPMS6	Run Date: 11/20/2006
Analyst: CMS	Run Time: 09:10
Workgroup: WG227929	File ID: 6M62037
	Cal ID: HPMS6 - 20-NOV-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	16.9	15096	PASS
75.0	95.0	30.0	60.0	46.8	41874	PASS
95.0	95.0	100	100	100	89392	PASS
96.0	95.0	5.00	9.00	6.56	5867	PASS
173	174	0	2.00	0.431	308	PASS
174	95.0	50.0	100	80.0	71482	PASS
175	174	5.00	9.00	7.31	5227	PASS
176	174	95.0	101	97.6	69736	PASS
177	176	5.00	9.00	7.20	5018	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG227929-02	STD	01	11/20/2006 09:38	
WG227929-03	STD	01	11/20/2006 10:10	
WG227929-04	STD	01	11/20/2006 10:43	
WG227929-05	STD	01	11/20/2006 11:15	
WG227929-06	STD	01	11/20/2006 11:47	
WG227929-07	STD	01	11/20/2006 12:19	
WG227929-08	STD-CCV	01	11/20/2006 12:52	
WG227929-09	STD	01	11/20/2006 13:24	
WG227929-10	STD	01	11/20/2006 13:57	
WG227929-11	STD	01	11/20/2006 14:29	
WG227929-12	SSCV	01	11/20/2006 17:01	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092839

BFB

Login Number: L0612485	Tune ID: WG228336-01
Instrument: HPMS11	Run Date: 11/28/2006
Analyst: CMS	Run Time: 08:17
Workgroup: WG228336	File ID: 11M38434
	Cal ID: HPMS11-28-NOV-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	24.4	9619	PASS
75.0	95.0	30.0	60.0	47.3	18658	PASS
95.0	95.0	100	100	100	39434	PASS
96.0	95.0	5.00	9.00	7.22	2849	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	79.9	31501	PASS
175	174	5.00	9.00	7.40	2330	PASS
176	174	95.0	101	95.4	30066	PASS
177	176	5.00	9.00	6.99	2102	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG228336-02	STD	01	11/28/2006 08:46	
WG228336-03	STD	01	11/28/2006 09:17	
WG228336-04	STD	01	11/28/2006 09:51	
WG228336-05	STD	01	11/28/2006 10:22	
WG228336-06	STD	01	11/28/2006 10:53	
WG228336-07	STD	01	11/28/2006 11:24	
WG228336-08	STD-CCV	01	11/28/2006 11:54	
WG228336-09	STD	01	11/28/2006 12:25	
WG228336-10	STD	01	11/28/2006 12:56	
WG228336-11	SSCV	01	11/28/2006 14:28	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092840

BFB

Login Number: L0612485
Instrument: HPMS11
Analyst: CMS
Workgroup: WG230323

Tune ID: WG230323-01
Run Date: 12/27/2006
Run Time: 08:19
File ID: 11M39115

Cal ID: HPMS11-28-NOV-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	24.6	5140	PASS
75.0	95.0	30.0	60.0	48.8	10202	PASS
95.0	95.0	100	100	100	20925	PASS
96.0	95.0	5.00	9.00	7.34	1536	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	83.6	17500	PASS
175	174	5.00	9.00	7.76	1358	PASS
176	174	95.0	101	97.3	17031	PASS
177	176	5.00	9.00	7.65	1303	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG230323-02	CCV	12/27/2006 08:46

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG230324-01	BLANK	01	12/27/2006 09:17	
WG230324-02	LCS	01	12/27/2006 09:48	
WG230324-03	LCS2	01	12/27/2006 10:19	
L0612485-03	12WW20	01	12/27/2006 13:24	
L0612485-04	12WW24	01	12/27/2006 13:55	
L0612485-05	12WW05	01	12/27/2006 14:26	
L0612485-06	12WW24-QC	01	12/27/2006 14:57	
L0612485-01	12WW01	01	12/27/2006 15:58	
L0612485-02	12WW02	01	12/27/2006 16:29	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092841

BFB

Login Number: L0612485
Instrument: HPMS11
Analyst: CMS
Workgroup: WG230416

Tune ID: WG230416-01
Run Date: 12/28/2006
Run Time: 07:36
File ID: 11M39142

Cal ID: HPMS11 -28-NOV-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	26.1	7663	PASS
75.0	95.0	30.0	60.0	47.9	14077	PASS
95.0	95.0	100	100	100	29365	PASS
96.0	95.0	5.00	9.00	6.70	1966	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	79.5	23344	PASS
175	174	5.00	9.00	7.57	1768	PASS
176	174	95.0	101	101	23533	PASS
177	176	5.00	9.00	7.12	1675	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG230416-02	CCV	12/28/2006 08:09

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG230417-01	BLANK	01	12/28/2006 08:40	
WG230417-02	LCS	01	12/28/2006 09:11	
L0612485-04	12WW24	DL01	12/28/2006 10:13	
L0612485-06	12WW24-QC	DL01	12/28/2006 10:43	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092842

BFB

Login Number: L0612485
Instrument: HPMS6
Analyst: CMS
Workgroup: WG230414

Tune ID: WG230414-01
Run Date: 12/28/2006
Run Time: 07:35
File ID: 6M62908

Cal ID: HPMS6 -20-NOV-06

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	16.8	7672	PASS
75.0	95.0	30.0	60.0	45.8	20920	PASS
95.0	95.0	100	100	100	45720	PASS
96.0	95.0	5.00	9.00	6.82	3119	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	85.9	39269	PASS
175	174	5.00	9.00	7.15	2806	PASS
176	174	95.0	101	96.5	37904	PASS
177	176	5.00	9.00	7.69	2914	PASS

This check relates to the following CCV:

Lab ID	Client ID	Date Analyzed
WG230414-02	CCV	12/28/2006 08:05

This check relates to the following samples & batch QC:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG230415-01	BLANK	01	12/28/2006 08:38	
WG230415-02	LCS	01	12/28/2006 09:10	
WG230415-03	LCS2	01	12/28/2006 09:43	
L0612485-07	29WW40	01	12/28/2006 11:52	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00092843

Login Number: L0612485
 Analytical Method: 8260B
 ICAL Workgroup: WG228336

Instrument ID: HPMS11
 Initial Calibration Date: 28-NOV-06 12:56
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.2019	11.3		
1,2-Dichloropropane	CCC	0.2522	3.65		
Chloroform	CCC	0.4299	4.96		
Ethylbenzene	CCC	0.4690	7.86		
Toluene	CCC	1.282	4.57		
Vinyl Chloride	CCC	0.1970	16.4		1.00
1,1,2,2-Tetrachloroethane	SPCC	0.3892	7.04		
1,1-Dichloroethane	SPCC	0.4856	5.73		
Bromoform	SPCC	0.1547	15.1	1.00	
Chlorobenzene	SPCC	0.8716	7.32		
Chloromethane	SPCC	0.2693	10.6		
1,1,1-Trichloroethane		0.3873	8.40		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2217	6.29		
1,1,2-Trichloroethane		0.2039	4.71		
1,2,4-Trichlorobenzene		0.8978	6.07		
1,2-Dibromo-3-Chloropropane		0.07050	16.5	1.00	
1,2-Dibromoethane		0.2039	7.70		
1,2-Dichlorobenzene		1.224	4.40		
1,2-Dichloroethane		0.3402	3.70		
1,3-Dichlorobenzene		1.368	5.30		
1,4-Dichlorobenzene		1.442	7.40		
2-Butanone		0.05724	10.5		
2-Hexanone		0.1286	9.32		
4-Methyl-2-Pentanone		0.05888	9.23		
Acetone		0.03620	6.62		
Benzene		0.8986	4.44		
Bromodichloromethane		0.2938	6.41		
Bromomethane		0.1823	6.23		
Carbon Disulfide		0.6362	5.08		
Carbon Tetrachloride		0.3371	12.1		
Chloroethane		0.1800	7.15		
Cyclohexane		0.4939	7.33		
Dibromochloromethane		0.2512	11.4		
Dichlorodifluoromethane		0.3206	5.00		
Isopropylbenzene		1.439	8.71		
Methyl Tert Butyl Ether		0.4485	12.3		
Methyl acetate		0.1238	7.66		
Methylcyclohexane		0.3547	7.57		
Methylene Chloride		0.2154	2.99		
Styrene		0.9223	12.1		
Tetrachloroethene		0.2631	7.84		
Trichloroethene		0.2411	6.51		
Trichlorofluoromethane		0.4454	5.16		
cis-1,2-Dichloroethene		0.2432	6.00		
cis-1,3-Dichloropropene		0.3434	8.21		

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INITIAL CALIBRATION SUMMARY

00092844

Login Number: L0612485
Analytical Method: 8260B
ICAL Workgroup: WG228336

Instrument ID: HPMS11
Initial Calibration Date: 28-NOV-06 12:56
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
m-, p-Xylene		0.5810	7.47		
o-Xylene		0.5598	7.17		
trans-1,2-Dichloroethene		0.2269	6.54		
trans-1,3-Dichloropropene		0.4062	8.00		

R = Correlation coefficient; 0.995 minimum

R² = Coefficient of determination; 0.99 minimum

INITIAL CALIBRATION SUMMARY

00092845

Login Number: L0612485
 Analytical Method: 8260B
 ICAL Workgroup: WG227929

Instrument ID: HPMS6
 Initial Calibration Date: 20-NOV-06 14:29
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3687	8.53		
1,2-Dichloropropane	CCC	0.2202	3.32		
Chloroform	CCC	0.4926	5.02		
Ethylbenzene	CCC	0.5103	4.71		
Toluene	CCC	1.363	6.40		
Vinyl Chloride	CCC	0.1997	20.0		0.998
1,1,2,2-Tetrachloroethane	SPCC	0.3881	3.61		
1,1-Dichloroethane	SPCC	0.4314	3.44		
Bromoform	SPCC	0.1947	13.0		
Chlorobenzene	SPCC	0.9475	3.45		
Chloromethane	SPCC	0.2482	13.7		
1,1,1-Trichloroethane		0.4614	6.12		
1,1,2-Trichloro-1,2,2-Trifluoroethane		0.2586	6.24		
1,1,2-Trichloroethane		0.2161	3.41		
1,2,4-Trichlorobenzene		0.9889	4.22		
1,2-Dibromo-3-Chloropropane		0.07790	10.6		
1,2-Dibromoethane		0.2319	4.78		
1,2-Dichlorobenzene		1.309	4.19		
1,2-Dichloroethane		0.3374	5.60		
1,3-Dichlorobenzene		1.451	3.00		
1,4-Dichlorobenzene		1.503	6.66		
2-Butanone		0.04788	1.66		
2-Hexanone		0.09810	4.47		
4-Methyl-2-Pentanone		0.04460	5.92		
Acetone		0.03507	9.44		
Benzene		0.9358	4.87		
Bromodichloromethane		0.3451	3.26		
Bromomethane		0.1516	21.0		1.00
Carbon Disulfide		0.6606	8.93		
Carbon Tetrachloride		0.4045	7.51		
Chloroethane		0.1672	7.84		
Cyclohexane		0.3465	13.3		
Dibromochloromethane		0.3004	7.74		
Dichlorodifluoromethane		0.3626	7.52		
Isopropylbenzene		1.605	4.73		
Methyl Tert Butyl Ether		0.5230	3.34		
Methyl acetate		0.08881	7.43		
Methylcyclohexane		0.3874	12.0		
Methylene Chloride		0.2574	12.5		
Styrene		1.026	4.63		
Tetrachloroethene		0.3946	5.46		
Trichloroethene		0.2779	4.40		
Trichlorofluoromethane		0.5346	2.07		
cis-1,2-Dichloroethene		0.2682	2.97		
cis-1,3-Dichloropropene		0.3818	6.85		

KEMRON FORMS - Modified 12/13/2006
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INITIAL CALIBRATION SUMMARY

00092846

Login Number: L0612485
Analytical Method: 8260B
ICAL Workgroup: WG227929

Instrument ID: HPMS6
Initial Calibration Date: 20-NOV-06 14:29
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
m-, p-Xylene		0.6332	4.93		
o-Xylene		0.6121	3.39		
trans-1,2-Dichloroethene		0.2522	6.99		
trans-1,3-Dichloropropene		0.4394	8.37		

R = Correlation coefficient; 0.995 minimum

R² = Coefficient of determination; 0.99 minimum

INITIAL CALIBRATION DATA

00092847

Login Number:L0612485

Instrument ID:HPMS11

Analytical Method:8260B

Initial Calibration Date:28-NOV-06 12:56

Column ID:F

Analyte	WG228336-02			WG228336-03			WG228336-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	2638.00000	0.1722	1.00	6208.00000	0.1617
1,2-Dichloropropane	NA	NA	NA	0.400	4064.00000	0.2653	1.00	8991.00000	0.2342
Chloroform	0.300	5269.00000	0.4327	0.400	7026.00000	0.4587	1.00	14589.0000	0.3801
Ethylbenzene	NA	NA	NA	0.400	5658.00000	0.4909	1.00	12118.0000	0.4248
Toluene	NA	NA	NA	0.400	14925.0000	1.295	1.00	33167.0000	1.163
Vinyl Chloride	NA	NA	NA	0.400	3983.00000	0.2600	1.00	7979.00000	0.2079
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2201.00000	0.3517	1.00	5526.00000	0.3566
1,1-Dichloroethane	NA	NA	NA	0.400	7750.00000	0.5060	1.00	16215.0000	0.4224
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3601.00000	0.1262
Chlorobenzene	NA	NA	NA	0.400	10874.0000	0.9435	1.00	24420.0000	0.8561
Chloromethane	NA	NA	NA	0.400	5142.00000	0.3357	1.00	10659.0000	0.2777
1,1,1-Trichloroethane	NA	NA	NA	0.400	5578.00000	0.3642	1.00	12311.0000	0.3207
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	0.400	3037.00000	0.1983	1.00	7802.00000	0.2033
1,1,2-Trichloroethane	NA	NA	NA	0.400	2099.00000	0.1821	1.00	5772.00000	0.2023
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	6073.00000	0.9703	1.00	13317.0000	0.8594
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	2194.00000	0.1904	1.00	5102.00000	0.1789
1,2-Dichlorobenzene	0.300	6192.00000	1.314	0.400	7700.00000	1.230	1.00	18156.0000	1.172
1,2-Dichloroethane	NA	NA	NA	0.400	5430.00000	0.3545	1.00	12476.0000	0.3250
1,3-Dichlorobenzene	NA	NA	NA	0.400	9160.00000	1.464	1.00	19716.0000	1.272
1,4-Dichlorobenzene	0.300	7554.00000	1.603	0.400	9973.00000	1.593	1.00	22328.0000	1.441
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	14662.0000	0.9572	1.00	31806.0000	0.8286
Bromodichloromethane	NA	NA	NA	0.400	4340.00000	0.2833	1.00	9949.00000	0.2592
Bromomethane	NA	NA	NA	0.400	3106.00000	0.2028	1.00	6838.00000	0.1781
Carbon Disulfide	NA	NA	NA	0.400	9356.00000	0.6108	1.00	22187.0000	0.5780
Carbon Tetrachloride	NA	NA	NA	0.400	4275.00000	0.2791	1.00	10302.0000	0.2684
Chloroethane	NA	NA	NA	0.400	2400.00000	0.1567	1.00	6289.00000	0.1638
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	16138.0000	0.4204
Dibromochloromethane	NA	NA	NA	0.400	2427.00000	0.2106	1.00	6216.00000	0.2179
Dichlorodifluoromethane	NA	NA	NA	0.400	4840.00000	0.3160	1.00	11335.0000	0.2953
Isopropylbenzene	NA	NA	NA	0.400	15319.0000	1.329	1.00	34052.0000	1.194
Methyl Tert Butyl Ether	NA	NA	NA	0.400	5589.00000	0.3649	1.00	14735.0000	0.3839
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	11538.0000	0.3006
Methylene Chloride	NA	NA	NA	0.400	3495.00000	0.2282	1.00	8162.00000	0.2126
Styrene	NA	NA	NA	0.400	8914.00000	0.7734	1.00	21802.0000	0.7643
Tetrachloroethene	NA	NA	NA	0.400	2760.00000	0.2395	1.00	6524.00000	0.2287
Trichloroethene	NA	NA	NA	0.400	3656.00000	0.2387	1.00	7965.00000	0.2075

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Version 1.6 PDF File ID: 659351
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INITIAL CALIBRATION DATA

00092848

Login Number:L0612485

Instrument ID:HPMS11

Analytical Method:8260B

Initial Calibration Date:28-NOV-06 12:56

Column ID:F

Analyte	WG228336-05			WG228336-06			WG228336-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	15100.0000	0.1989	5.00	38380.0000	0.2145	20.0	163025.000	0.2123
1,2-Dichloropropane	2.00	18787.0000	0.2475	5.00	45014.0000	0.2516	20.0	196515.000	0.2559
Chloroform	2.00	32789.0000	0.4320	5.00	75591.0000	0.4225	20.0	337125.000	0.4390
Ethylbenzene	2.00	27250.0000	0.4791	5.00	72787.0000	0.5116	20.0	288028.000	0.4985
Toluene	2.00	73212.0000	1.287	5.00	184739.000	1.298	20.0	770264.000	1.333
Vinyl Chloride	2.00	16395.0000	0.2160	5.00	35010.0000	0.1957	20.0	143504.000	0.1869
1,1,2,2-Tetrachloroethane	2.00	11214.0000	0.3611	5.00	31566.0000	0.4028	20.0	130514.000	0.4085
1,1-Dichloroethane	2.00	35738.0000	0.4709	5.00	88036.0000	0.4920	20.0	382244.000	0.4977
Bromoform	2.00	6920.00000	0.1217	5.00	20790.0000	0.1461	20.0	95514.0000	0.1653
Chlorobenzene	2.00	50737.0000	0.8920	5.00	132574.000	0.9318	20.0	521777.000	0.9030
Chloromethane	2.00	19427.0000	0.2560	5.00	47035.0000	0.2629	20.0	201519.000	0.2624
1,1,1-Trichloroethane	2.00	29867.0000	0.3935	5.00	72717.0000	0.4064	20.0	319296.000	0.4158
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	17800.0000	0.2345	5.00	39441.0000	0.2204	20.0	178364.000	0.2323
1,1,2-Trichloroethane	2.00	11589.0000	0.2038	5.00	29531.0000	0.2076	20.0	120583.000	0.2087
1,2,4-Trichlorobenzene	2.00	27076.0000	0.8719	5.00	72339.0000	0.9230	20.0	300436.000	0.9402
1,2-Dibromo-3-Chloropropane	2.00	1487.00000	0.04790	5.00	5500.00000	0.07020	20.0	22846.0000	0.07150
1,2-Dibromoethane	2.00	10745.0000	0.1889	5.00	29388.0000	0.2066	20.0	123961.000	0.2145
1,2-Dichlorobenzene	2.00	37502.0000	1.208	5.00	98763.0000	1.260	20.0	402550.000	1.260
1,2-Dichloroethane	2.00	25081.0000	0.3305	5.00	61253.0000	0.3423	20.0	269401.000	0.3508
1,3-Dichlorobenzene	2.00	42809.0000	1.379	5.00	111477.000	1.423	20.0	452584.000	1.416
1,4-Dichlorobenzene	2.00	44017.0000	1.418	5.00	114552.000	1.462	20.0	458105.000	1.434
2-Butanone	NA	NA	NA	5.00	8605.00000	0.04810	20.0	42058.0000	0.05480
2-Hexanone	NA	NA	NA	5.00	15357.0000	0.1079	20.0	74171.0000	0.1284
4-Methyl-2-Pentanone	NA	NA	NA	5.00	8927.00000	0.04990	20.0	44317.0000	0.05770
Acetone	NA	NA	NA	5.00	5962.00000	0.03330	20.0	26959.0000	0.03510
Benzene	2.00	67889.0000	0.8945	5.00	163339.000	0.9129	20.0	704597.000	0.9175
Bromodichloromethane	2.00	21066.0000	0.2776	5.00	53466.0000	0.2988	20.0	237386.000	0.3091
Bromomethane	2.00	12920.0000	0.1702	5.00	29842.0000	0.1668	20.0	138637.000	0.1805
Carbon Disulfide	2.00	48832.0000	0.6434	5.00	110617.000	0.6182	20.0	506941.000	0.6601
Carbon Tetrachloride	2.00	25572.0000	0.3369	5.00	63312.0000	0.3538	20.0	278976.000	0.3633
Chloroethane	2.00	14119.0000	0.1860	5.00	32187.0000	0.1799	20.0	141662.000	0.1845
Cyclohexane	2.00	38622.0000	0.5089	5.00	86412.0000	0.4829	20.0	401139.000	0.5223
Dibromochloromethane	2.00	13038.0000	0.2292	5.00	35612.0000	0.2503	20.0	155471.000	0.2691
Dichlorodifluoromethane	2.00	25890.0000	0.3411	5.00	60359.0000	0.3373	20.0	253053.000	0.3295
Isopropylbenzene	2.00	81757.0000	1.437	5.00	216906.000	1.525	20.0	888765.000	1.538
Methyl Tert Butyl Ether	2.00	33844.0000	0.4459	5.00	74360.0000	0.4156	20.0	366717.000	0.4775
Methyl acetate	2.00	8610.00000	0.1134	5.00	19897.0000	0.1112	20.0	95077.0000	0.1238
Methylcyclohexane	2.00	26928.0000	0.3548	5.00	61437.0000	0.3434	20.0	285086.000	0.3712
Methylene Chloride	2.00	15895.0000	0.2094	5.00	39071.0000	0.2184	20.0	164366.000	0.2140
Styrene	2.00	48279.0000	0.8488	5.00	140615.000	0.9883	20.0	593303.000	1.027
Tetrachloroethene	2.00	15538.0000	0.2732	5.00	40266.0000	0.2830	20.0	161643.000	0.2797
Trichloroethene	2.00	18423.0000	0.2427	5.00	46547.0000	0.2601	20.0	191770.000	0.2497

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INITIAL CALIBRATION DATA

00092849

Login Number: L0612485

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 28-NOV-06 12:56

Column ID: F

Analyte	WG228336-08			WG228336-09			WG228336-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	429283.000	0.2202	100	866668.000	0.2204	200	1680620.00	0.2152
1,2-Dichloropropane	50.0	503002.000	0.2580	100	1008619.00	0.2565	200	1943029.00	0.2488
Chloroform	50.0	859106.000	0.4406	100	1718909.00	0.4371	200	3330315.00	0.4264
Ethylbenzene	50.0	710273.000	0.4854	100	1346059.00	0.4548	200	2405553.00	0.4072
Toluene	50.0	1959480.00	1.339	100	3870650.00	1.308	200	7259432.00	1.229
Vinyl Chloride	50.0	351533.000	0.1803	100	703291.000	0.1788	200	1176184.00	0.1506
1,1,2,2-Tetrachloroethane	50.0	337762.000	0.4129	100	687824.000	0.4139	200	1354946.00	0.4057
1,1-Dichloroethane	50.0	982172.000	0.5037	100	1971997.00	0.5014	200	3833893.00	0.4909
Bromoform	50.0	255828.000	0.1748	100	524681.000	0.1773	200	1013566.00	0.1716
Chlorobenzene	50.0	1278788.00	0.8739	100	2451167.00	0.8282	200	4398582.00	0.7445
Chloromethane	50.0	498453.000	0.2556	100	955585.000	0.2430	200	2036386.00	0.2608
1,1,1-Trichloroethane	50.0	811686.000	0.4163	100	1589915.00	0.4043	200	2946476.00	0.3773
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	442955.000	0.2272	100	922344.000	0.2345	200	1740776.00	0.2229
1,1,2-Trichloroethane	50.0	310150.000	0.2119	100	627469.000	0.2120	200	1196453.00	0.2025
1,2,4-Trichlorobenzene	50.0	759685.000	0.9286	100	1480520.00	0.8908	200	2665799.00	0.7981
1,2-Dibromo-3-Chloropropane	50.0	63149.0000	0.07720	100	129130.000	0.07770	200	262251.000	0.07850
1,2-Dibromoethane	50.0	321198.000	0.2195	100	650852.000	0.2199	200	1254606.00	0.2124
1,2-Dichlorobenzene	50.0	1014417.00	1.240	100	1993478.00	1.200	200	3778923.00	1.131
1,2-Dichloroethane	50.0	684594.000	0.3511	100	1357353.00	0.3451	200	2517339.00	0.3223
1,3-Dichlorobenzene	50.0	1137485.00	1.390	100	2224025.00	1.338	200	4207428.00	1.260
1,4-Dichlorobenzene	50.0	1156814.00	1.414	100	2245505.00	1.351	200	4218832.00	1.263
2-Butanone	50.0	114523.000	0.05870	100	242668.000	0.06170	200	491354.000	0.06290
2-Hexanone	50.0	198364.000	0.1356	100	405234.000	0.1369	200	792351.000	0.1341
4-Methyl-2-Pentanone	50.0	120348.000	0.06170	100	248192.000	0.06310	200	484508.000	0.06200
Acetone	50.0	68733.0000	0.03520	100	150514.000	0.03830	200	305163.000	0.03910
Benzene	50.0	1793172.00	0.9196	100	3547769.00	0.9021	200	6688348.00	0.8564
Bromodichloromethane	50.0	609527.000	0.3126	100	1220233.00	0.3103	200	2337045.00	0.2993
Bromomethane	50.0	356214.000	0.1827	100	741380.000	0.1885	200	1471626.00	0.1884
Carbon Disulfide	50.0	1303385.00	0.6684	100	2643400.00	0.6722	200	4984297.00	0.6382
Carbon Tetrachloride	50.0	726360.000	0.3725	100	1450355.00	0.3688	200	2761421.00	0.3536
Chloroethane	50.0	366916.000	0.1882	100	757223.000	0.1925	200	1473217.00	0.1886
Cyclohexane	50.0	1000893.00	0.5133	100	2058577.00	0.5234	200	3795020.00	0.4859
Dibromochloromethane	50.0	411880.000	0.2815	100	831743.000	0.2810	200	1593175.00	0.2697
Dichlorodifluoromethane	50.0	615085.000	0.3154	100	1284532.00	0.3266	200	2370191.00	0.3035
Isopropylbenzene	50.0	2280519.00	1.558	100	4479839.00	1.514	200	8353809.00	1.414
Methyl Tert Butyl Ether	50.0	975076.000	0.5001	100	2013560.00	0.5120	200	3811132.00	0.4880
Methyl acetate	50.0	254043.000	0.1303	100	526592.000	0.1339	200	1016210.00	0.1301
Methylcyclohexane	50.0	716926.000	0.3677	100	1502841.00	0.3821	200	2835811.00	0.3631
Methylene Chloride	50.0	422717.000	0.2168	100	853498.000	0.2170	200	1617339.00	0.2071
Styrene	50.0	1509698.00	1.032	100	2976840.00	1.006	200	5548982.00	0.9393
Tetrachloroethene	50.0	407737.000	0.2786	100	802433.000	0.2711	200	1480234.00	0.2506
Trichloroethene	50.0	489099.000	0.2508	100	963296.000	0.2449	200	1833017.00	0.2347

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INITIAL CALIBRATION DATA

00092850

Login Number: L0612485

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 28-NOV-06 12:56

Column ID: F

Analyte	WG228336-02			WG228336-03			WG228336-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	6382.00000	0.4167	1.00	15472.0000	0.4031
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3741.00000	0.2442	1.00	8140.00000	0.2121
cis-1,3-Dichloropropene	NA	NA	NA	0.400	5035.00000	0.3287	1.00	11340.0000	0.2954
m-,p-Xylene	NA	NA	NA	0.800	13501.0000	0.5857	2.00	30598.0000	0.5363
o-Xylene	NA	NA	NA	0.400	6224.00000	0.5400	1.00	13965.0000	0.4896
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3344.00000	0.2183	1.00	7536.00000	0.1963
trans-1,3-Dichloropropene	NA	NA	NA	0.400	4428.00000	0.3842	1.00	10299.0000	0.3610

INITIAL CALIBRATION DATA

00092851

Login Number: L0612485

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 28-NOV-06 12:56

Column ID: F

Analyte	WG228336-05			WG228336-06			WG228336-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	34565.0000	0.4554	5.00	83303.0000	0.4656	20.0	352824.000	0.4594
cis-1,2-Dichloroethene	2.00	17938.0000	0.2363	5.00	42924.0000	0.2399	20.0	194965.000	0.2539
cis-1,3-Dichloropropene	2.00	23664.0000	0.3118	5.00	63012.0000	0.3522	20.0	280397.000	0.3651
m-,p-Xylene	4.00	67744.0000	0.5955	10.0	178497.000	0.6273	40.0	717656.000	0.6210
o-Xylene	2.00	30641.0000	0.5387	5.00	85979.0000	0.6043	20.0	343917.000	0.5952
trans-1,2-Dichloroethene	2.00	17024.0000	0.2243	5.00	40289.0000	0.2252	20.0	181455.000	0.2363
trans-1,3-Dichloropropene	2.00	21055.0000	0.3702	5.00	56597.0000	0.3978	20.0	250545.000	0.4336

INITIAL CALIBRATION DATA

00092852

Login Number: L0612485

Instrument ID: HPMS11

Analytical Method: 8260B

Initial Calibration Date: 28-NOV-06 12:56

Column ID: F

Analyte	WG228336-08			WG228336-09			WG228336-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	880759.000	0.4517	100	1823583.00	0.4637	200	3496099.00	0.4477
cis-1,2-Dichloroethene	50.0	501174.000	0.2570	100	1002795.00	0.2550	200	1931342.00	0.2473
cis-1,3-Dichloropropene	50.0	720602.000	0.3696	100	1453962.00	0.3697	200	2766914.00	0.3543
m-,p-Xylene	100	1780524.00	0.6084	200	3391514.00	0.5729	400	5918409.00	0.5009
o-Xylene	50.0	875034.000	0.5980	100	1705086.00	0.5761	200	3170069.00	0.5366
trans-1,2-Dichloroethene	50.0	470145.000	0.2411	100	947259.000	0.2409	200	1820442.00	0.2331
trans-1,3-Dichloropropene	50.0	651213.000	0.4450	100	1300794.00	0.4395	200	2469185.00	0.4180

INITIAL CALIBRATION DATA

00092853

Login Number:L0612485

Instrument ID:HPMS6

Analytical Method:8260B

Initial Calibration Date:20-NOV-06 14:29

Column ID:F

Analyte	WG227929-02			WG227929-03			WG227929-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4048.00000	0.3018	1.00	13077.00000	0.3985
1,2-Dichloropropane	NA	NA	NA	0.400	2863.00000	0.2135	1.00	7343.00000	0.2238
Chloroform	0.300	5521.00000	0.5255	0.400	7135.00000	0.5320	1.00	16443.00000	0.5011
Ethylbenzene	NA	NA	NA	0.400	4941.00000	0.4913	1.00	13633.00000	0.5451
Toluene	NA	NA	NA	0.400	14789.00000	1.471	1.00	36300.00000	1.451
Vinyl Chloride	NA	NA	NA	0.400	3541.00000	0.2640	1.00	8103.00000	0.2469
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2260.00000	0.3767	1.00	5327.00000	0.3718
1,1-Dichloroethane	NA	NA	NA	0.400	5514.00000	0.4112	1.00	14026.00000	0.4274
Bromoform	NA	NA	NA	NA	NA	NA	1.00	4007.00000	0.1602
Chlorobenzene	NA	NA	NA	0.400	9890.00000	0.9834	1.00	24062.00000	0.9620
Chloromethane	NA	NA	NA	0.400	4257.00000	0.3174	1.00	9546.00000	0.2909
1,1,1-Trichloroethane	NA	NA	NA	0.400	5880.00000	0.4384	1.00	15242.00000	0.4645
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	NA	NA	NA	1.00	9359.00000	0.2852
1,1,2-Trichloroethane	NA	NA	NA	0.400	1996.00000	0.1985	1.00	5404.00000	0.2161
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	5918.00000	0.9864	1.00	14894.00000	1.040
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	1.00	1031.00000	0.07200
1,2-Dibromoethane	NA	NA	NA	0.400	2151.00000	0.2139	1.00	5333.00000	0.2132
1,2-Dichlorobenzene	0.300	6492.00000	1.435	0.400	7967.00000	1.328	1.00	18940.00000	1.322
1,2-Dichloroethane	NA	NA	NA	0.400	4832.00000	0.3603	1.00	11569.00000	0.3526
1,3-Dichlorobenzene	NA	NA	NA	0.400	9162.00000	1.527	1.00	20630.00000	1.440
1,4-Dichlorobenzene	0.300	7978.00000	1.763	0.400	8977.00000	1.496	1.00	21687.00000	1.514
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	13490.00000	1.006	1.00	32179.00000	0.9806
Bromodichloromethane	NA	NA	NA	0.400	4315.00000	0.3217	1.00	11158.00000	0.3400
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	3451.00000	0.1052
Carbon Disulfide	NA	NA	NA	0.400	9036.00000	0.6738	1.00	17039.00000	0.5192
Carbon Tetrachloride	NA	NA	NA	0.400	4860.00000	0.3624	1.00	13090.00000	0.3989
Chloroethane	NA	NA	NA	0.400	1824.00000	0.1360	1.00	5829.00000	0.1776
Cyclohexane	NA	NA	NA	NA	NA	NA	1.00	7849.00000	0.2392
Dibromochloromethane	NA	NA	NA	0.400	2675.00000	0.2660	1.00	6599.00000	0.2638
Dichlorodifluoromethane	NA	NA	NA	0.400	4751.00000	0.3543	1.00	13414.00000	0.4088
Isopropylbenzene	NA	NA	NA	0.400	15284.00000	1.520	1.00	40298.00000	1.611
Methyl Tert Butyl Ether	NA	NA	NA	NA	NA	NA	1.00	16728.00000	0.5098
Methyl acetate	NA	NA	NA	NA	NA	NA	1.00	3243.00000	0.09880
Methylcyclohexane	NA	NA	NA	NA	NA	NA	1.00	9324.00000	0.2841
Methylene Chloride	NA	NA	NA	0.400	4568.00000	0.3406	1.00	8260.00000	0.2517
Styrene	NA	NA	NA	0.400	9900.00000	0.9844	1.00	24287.00000	0.9710
Tetrachloroethene	NA	NA	NA	0.400	4325.00000	0.4301	1.00	10079.00000	0.4030
Trichloroethene	NA	NA	NA	0.400	3679.00000	0.2743	1.00	9071.00000	0.2764

KEMRON FORMS - Modified 10/13/2006
Version 1.6 PDF File ID: 659351
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INITIAL CALIBRATION DATA

00092854

Login Number:L0612485

Instrument ID:HPMS6

Analytical Method:8260B

Initial Calibration Date:20-NOV-06 14:29

Column ID:F

Analyte	WG227929-05			WG227929-06			WG227929-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	25476.0000	0.3943	5.00	53852.0000	0.3348	20.0	253000.000	0.3883
1,2-Dichloropropane	2.00	14849.0000	0.2298	5.00	32907.0000	0.2046	20.0	143370.000	0.2200
Chloroform	2.00	32490.0000	0.5028	5.00	74860.0000	0.4654	20.0	324804.000	0.4984
Ethylbenzene	2.00	25640.0000	0.5199	5.00	58335.0000	0.4802	20.0	264222.000	0.5378
Toluene	2.00	71235.0000	1.444	5.00	156485.000	1.288	20.0	695076.000	1.415
Vinyl Chloride	2.00	13901.0000	0.2151	5.00	30454.0000	0.1893	20.0	122970.000	0.1887
1,1,2,2-Tetrachloroethane	2.00	10738.0000	0.3722	5.00	28994.0000	0.4058	20.0	117752.000	0.4003
1,1-Dichloroethane	2.00	28615.0000	0.4429	5.00	66697.0000	0.4146	20.0	295110.000	0.4529
Bromoform	2.00	7796.00000	0.1581	5.00	22064.0000	0.1816	20.0	96523.0000	0.1964
Chlorobenzene	2.00	46400.0000	0.9408	5.00	111244.000	0.9157	20.0	489386.000	0.9960
Chloromethane	2.00	16667.0000	0.2580	5.00	36573.0000	0.2274	20.0	146511.000	0.2248
1,1,1-Trichloroethane	2.00	31108.0000	0.4815	5.00	65967.0000	0.4101	20.0	320550.000	0.4919
1,1,2-Trichloro-1,2,2-Trifluoroethane	2.00	17575.0000	0.2720	5.00	42173.0000	0.2622	20.0	172365.000	0.2645
1,1,2-Trichloroethane	2.00	10818.0000	0.2193	5.00	25951.0000	0.2136	20.0	109844.000	0.2236
1,2,4-Trichlorobenzene	2.00	28072.0000	0.9731	5.00	71664.0000	1.003	20.0	305077.000	1.037
1,2-Dibromo-3-Chloropropane	2.00	1829.00000	0.06340	5.00	5243.00000	0.07340	20.0	24866.0000	0.08450
1,2-Dibromoethane	2.00	11671.0000	0.2366	5.00	28567.0000	0.2351	20.0	118753.000	0.2417
1,2-Dichlorobenzene	2.00	37089.0000	1.286	5.00	91157.0000	1.276	20.0	393067.000	1.336
1,2-Dichloroethane	2.00	22840.0000	0.3535	5.00	53373.0000	0.3318	20.0	227527.000	0.3492
1,3-Dichlorobenzene	2.00	42435.0000	1.471	5.00	100683.000	1.409	20.0	438627.000	1.491
1,4-Dichlorobenzene	2.00	43194.0000	1.497	5.00	103244.000	1.445	20.0	449949.000	1.530
2-Butanone	NA	NA	NA	5.00	7587.00000	0.04720	20.0	31572.0000	0.04850
2-Hexanone	NA	NA	NA	5.00	12279.0000	0.1011	20.0	48110.0000	0.09790
4-Methyl-2-Pentanone	NA	NA	NA	5.00	6623.00000	0.04120	20.0	27641.0000	0.04240
Acetone	NA	NA	NA	5.00	6521.00000	0.04050	20.0	24315.0000	0.03730
Benzene	2.00	61674.0000	0.9545	5.00	137930.000	0.8574	20.0	622484.000	0.9553
Bromodichloromethane	2.00	22473.0000	0.3478	5.00	54271.0000	0.3374	20.0	230527.000	0.3538
Bromomethane	2.00	7453.00000	0.1153	5.00	19976.0000	0.1242	20.0	102013.000	0.1565
Carbon Disulfide	2.00	47430.0000	0.7341	5.00	104417.000	0.6491	20.0	449054.000	0.6891
Carbon Tetrachloride	2.00	26826.0000	0.4152	5.00	57961.0000	0.3603	20.0	285144.000	0.4376
Chloroethane	2.00	11586.0000	0.1793	5.00	27684.0000	0.1721	20.0	112133.000	0.1721
Cyclohexane	2.00	25162.0000	0.3894	5.00	56354.0000	0.3503	20.0	241229.000	0.3702
Dibromochloromethane	2.00	14323.0000	0.2904	5.00	35499.0000	0.2922	20.0	155526.000	0.3165
Dichlorodifluoromethane	2.00	24851.0000	0.3846	5.00	59717.0000	0.3712	20.0	244306.000	0.3749
Isopropylbenzene	2.00	81532.0000	1.653	5.00	183968.000	1.514	20.0	841033.000	1.712
Methyl Tert Butyl Ether	2.00	34889.0000	0.5400	5.00	87056.0000	0.5412	20.0	348846.000	0.5353
Methyl acetate	2.00	6273.00000	0.09710	5.00	15003.0000	0.09330	20.0	56158.0000	0.08620
Methylcyclohexane	2.00	28769.0000	0.4453	5.00	63201.0000	0.3929	20.0	264844.000	0.4064
Methylene Chloride	2.00	16907.0000	0.2617	5.00	39115.0000	0.2432	20.0	164467.000	0.2524
Styrene	2.00	49521.0000	1.004	5.00	118334.000	0.9741	20.0	535314.000	1.090
Tetrachloroethene	2.00	20074.0000	0.4070	5.00	43965.0000	0.3619	20.0	202150.000	0.4114
Trichloroethene	2.00	17598.0000	0.2724	5.00	40251.0000	0.2502	20.0	186867.000	0.2868

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INITIAL CALIBRATION DATA

00092855

Login Number: L0612485

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 20-NOV-06 14:29

Column ID: F

Analyte	WG227929-08			WG227929-09			WG227929-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	623539.000	0.3869	100	1221242.00	0.3705	150	1901484.00	0.3733
1,2-Dichloropropane	50.0	363317.000	0.2254	100	728952.000	0.2211	150	1128877.00	0.2216
Chloroform	50.0	800520.000	0.4967	100	1562483.00	0.4740	150	2381690.00	0.4676
Ethylbenzene	50.0	664445.000	0.5306	100	1312282.00	0.5075	150	2015825.00	0.4961
Toluene	50.0	1721109.00	1.375	100	3416101.00	1.321	150	5174612.00	1.274
Vinyl Chloride	50.0	298592.000	0.1853	100	512891.000	0.1556	150	777200.000	0.1526
1,1,2,2-Tetrachloroethane	50.0	302639.000	0.3914	100	648615.000	0.4040	150	1004823.00	0.3950
1,1-Dichloroethane	50.0	727872.000	0.4516	100	1408052.00	0.4271	150	2171005.00	0.4262
Bromoform	50.0	263066.000	0.2101	100	566718.000	0.2192	150	899471.000	0.2214
Chlorobenzene	50.0	1215495.00	0.9707	100	2429466.00	0.9396	150	3737322.00	0.9198
Chloromethane	50.0	364985.000	0.2265	100	728857.000	0.2211	150	1192199.00	0.2341
1,1,1-Trichloroethane	50.0	807193.000	0.5008	100	1533494.00	0.4652	150	2318993.00	0.4553
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.0	417485.000	0.2590	100	812102.000	0.2463	150	1245358.00	0.2445
1,1,2-Trichloroethane	50.0	276512.000	0.2208	100	569480.000	0.2202	150	889886.000	0.2190
1,2,4-Trichlorobenzene	50.0	783852.000	1.014	100	1589038.00	0.9898	150	2411378.00	0.9480
1,2-Dibromo-3-Chloropropane	50.0	67062.0000	0.08670	100	138865.000	0.08650	150	206174.000	0.08110
1,2-Dibromoethane	50.0	300858.000	0.2403	100	619767.000	0.2397	150	967269.000	0.2381
1,2-Dichlorobenzene	50.0	1016740.00	1.315	100	2076131.00	1.293	150	3212209.00	1.263
1,2-Dichloroethane	50.0	547981.000	0.3400	100	1081577.00	0.3281	150	1623053.00	0.3186
1,3-Dichlorobenzene	50.0	1142092.00	1.477	100	2305841.00	1.436	150	3580327.00	1.408
1,4-Dichlorobenzene	50.0	1160747.00	1.501	100	2343203.00	1.460	150	3624768.00	1.425
2-Butanone	50.0	77266.0000	0.04790	100	159307.000	0.04830	150	247953.000	0.04870
2-Hexanone	50.0	122933.000	0.09820	100	261377.000	0.1011	150	409274.000	0.1007
4-Methyl-2-Pentanone	50.0	72557.0000	0.04500	100	155919.000	0.04730	150	243638.000	0.04780
Acetone	50.0	55151.0000	0.03420	100	111125.000	0.03370	150	170185.000	0.03340
Benzene	50.0	1528419.00	0.9483	100	3009771.00	0.9130	150	4631412.00	0.9093
Bromodichloromethane	50.0	580605.000	0.3602	100	1161791.00	0.3524	150	1775690.00	0.3486
Bromomethane	50.0	274956.000	0.1706	100	595971.000	0.1808	150	908161.000	0.1783
Carbon Disulfide	50.0	1122974.00	0.6968	100	2194081.00	0.6656	150	3369176.00	0.6615
Carbon Tetrachloride	50.0	725280.000	0.4500	100	1380995.00	0.4189	150	2060909.00	0.4046
Chloroethane	50.0	282301.000	0.1752	100	548634.000	0.1664	150	839569.000	0.1648
Cyclohexane	50.0	605149.000	0.3755	100	1178689.00	0.3576	150	1761587.00	0.3458
Dibromochloromethane	50.0	399871.000	0.3193	100	831461.000	0.3216	150	1305320.00	0.3213
Dichlorodifluoromethane	50.0	596453.000	0.3701	100	1137480.00	0.3451	150	1712102.00	0.3361
Isopropylbenzene	50.0	2139045.00	1.708	100	4181911.00	1.617	150	6417581.00	1.579
Methyl Tert Butyl Ether	50.0	849168.000	0.5269	100	1724128.00	0.5230	150	2641449.00	0.5186
Methyl acetate	50.0	135608.000	0.08410	100	274020.000	0.08310	150	436818.000	0.08580
Methylcyclohexane	50.0	663205.000	0.4115	100	1286496.00	0.3903	150	1963247.00	0.3854
Methylene Chloride	50.0	397403.000	0.2466	100	791153.000	0.2400	150	1225113.00	0.2405
Styrene	50.0	1366904.00	1.092	100	2745387.00	1.062	150	4246907.00	1.045
Tetrachloroethene	50.0	503873.000	0.4024	100	988300.000	0.3822	150	1540428.00	0.3791
Trichloroethene	50.0	471853.000	0.2928	100	922142.000	0.2797	150	1438686.00	0.2825

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INITIAL CALIBRATION DATA

00092856

Login Number: L0612485
 Analytical Method: 8260B

Instrument ID: HPMS6
 Initial Calibration Date: 20-NOV-06 14:29
 Column ID: F

Analyte	WG227929-11		
	CONC	RESP	RF
1,1-Dichloroethene	200	2582803.00	0.3700
1,2-Dichloropropane	200	1550407.00	0.2221
Chloroform	200	3225209.00	0.4621
Ethylbenzene	200	2742575.00	0.4842
Toluene	200	6985140.00	1.233
Vinyl Chloride	NA	NA	NA
1,1,2,2-Tetrachloroethane	200	1298044.00	0.3759
1,1-Dichloroethane	200	2993928.00	0.4289
Bromoform	200	1194753.00	0.2109
Chlorobenzene	200	5096339.00	0.8998
Chloromethane	200	1629838.00	0.2335
1,1,1-Trichloroethane	200	3104302.00	0.4447
1,1,2-Trichloro-1,2,2-Trifluoroethane	200	1643076.00	0.2354
1,1,2-Trichloroethane	200	1212565.00	0.2141
1,2,4-Trichlorobenzene	200	3140640.00	0.9095
1,2-Dibromo-3-Chloropropane	200	261040.000	0.07560
1,2-Dibromoethane	200	1293982.00	0.2285
1,2-Dichlorobenzene	200	4255874.00	1.232
1,2-Dichloroethane	200	2110473.00	0.3024
1,3-Dichlorobenzene	200	4831417.00	1.399
1,4-Dichlorobenzene	200	4841480.00	1.402
2-Butanone	200	325758.000	0.04670
2-Hexanone	200	507714.000	0.08960
4-Methyl-2-Pentanone	200	306528.000	0.04390
Acetone	200	218196.000	0.03130
Benzene	200	6266343.00	0.8978
Bromodichloromethane	200	2399738.00	0.3438
Bromomethane	200	1267130.00	0.1815
Carbon Disulfide	200	4580747.00	0.6563
Carbon Tetrachloride	200	2741105.00	0.3927
Chloroethane	200	1128989.00	0.1617
Cyclohexane	200	2398900.00	0.3437
Dibromochloromethane	200	1767524.00	0.3121
Dichlorodifluoromethane	200	2221055.00	0.3182
Isopropylbenzene	200	8675145.00	1.532
Methyl Tert Butyl Ether	200	3413049.00	0.4890
Methyl acetate	200	572885.000	0.08210
Methylcyclohexane	200	2672307.00	0.3829
Methylene Chloride	200	1673686.00	0.2398
Styrene	200	5745949.00	1.015
Tetrachloroethene	200	2117860.00	0.3739
Trichloroethene	200	1994814.00	0.2858

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INITIAL CALIBRATION DATA

00092857

Login Number: L0612485

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 20-NOV-06 14:29

Column ID: F

Analyte	WG227929-02			WG227929-03			WG227929-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	NA	NA	NA	0.400	7292.00000	0.5437	1.00	17924.00000	0.5462
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3659.00000	0.2728	1.00	8390.00000	0.2557
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4526.00000	0.3375	1.00	11506.00000	0.3506
m-,p-Xylene	NA	NA	NA	0.800	13433.00000	0.6679	2.00	32377.00000	0.6472
o-Xylene	NA	NA	NA	0.400	5859.00000	0.5826	1.00	15518.00000	0.6204
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3024.00000	0.2255	1.00	9194.00000	0.2802
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3804.00000	0.3783	1.00	9621.00000	0.3847

INITIAL CALIBRATION DATA

00092858

Login Number: L0612485

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 20-NOV-06 14:29

Column ID: F

Analyte	WG227929-05			WG227929-06			WG227929-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	2.00	35356.0000	0.5472	5.00	84329.0000	0.5242	20.0	349261.000	0.5360
cis-1,2-Dichloroethene	2.00	17959.0000	0.2780	5.00	41135.0000	0.2557	20.0	176872.000	0.2714
cis-1,3-Dichloropropene	2.00	23638.0000	0.3658	5.00	59574.0000	0.3703	20.0	261560.000	0.4014
m-,p-Xylene	4.00	63751.0000	0.6463	10.0	144655.000	0.5954	40.0	651621.000	0.6631
o-Xylene	2.00	30370.0000	0.6158	5.00	70276.0000	0.5785	20.0	312813.000	0.6366
trans-1,2-Dichloroethene	2.00	17603.0000	0.2724	5.00	37369.0000	0.2323	20.0	169239.000	0.2597
trans-1,3-Dichloropropene	2.00	21430.0000	0.4345	5.00	53323.0000	0.4389	20.0	235585.000	0.4795

INITIAL CALIBRATION DATA

00092859

Login Number: L0612485

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 20-NOV-06 14:29

Column ID: F

Analyte	WG227929-08			WG227929-09			WG227929-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Trichlorofluoromethane	50.0	870781.000	0.5403	100	1742322.00	0.5285	150	2701650.00	0.5304
cis-1,2-Dichloroethene	50.0	444956.000	0.2761	100	878233.000	0.2664	150	1363338.00	0.2677
cis-1,3-Dichloropropene	50.0	655328.000	0.4066	100	1326138.00	0.4023	150	2046998.00	0.4019
m-,p-Xylene	100	1656592.00	0.6615	200	3235389.00	0.6256	300	4940454.00	0.6080
o-Xylene	50.0	798940.000	0.6380	100	1592423.00	0.6158	150	2504175.00	0.6163
trans-1,2-Dichloroethene	50.0	416473.000	0.2584	100	816129.000	0.2476	150	1246406.00	0.2447
trans-1,3-Dichloropropene	50.0	597204.000	0.4769	100	1200347.00	0.4642	150	1869245.00	0.4600

INITIAL CALIBRATION DATA

00092860

Login Number: L0612485

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 20-NOV-06 14:29

Column ID: F

Analyte	WG227929-11		
	CONC	RESP	RF
Trichlorofluoromethane	200	3591552.00	0.5146
cis-1,2-Dichloroethene	200	1883057.00	0.2698
cis-1,3-Dichloropropene	200	2790457.00	0.3998
m-,p-Xylene	400	6617291.00	0.5841
o-Xylene	200	3426239.00	0.6049
trans-1,2-Dichloroethene	200	1735008.00	0.2486
trans-1,3-Dichloropropene	200	2478857.00	0.4376

Login Number: L0612485 Run Date: 11/28/2006 Sample ID: WG228336-11
Instrument ID: HPMS11 Run Time: 14:28 Method: 8260B
File ID: 11M38446 Analyst: CMS
Ical Workgroup: WG228336 Cal ID: HPMS11 - 28-NOV-06

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	20.0	20.9	ug/L	0.211	4.40	30	
1,2-Dichloropropane	CCC	20.0	21.1	ug/L	0.266	5.40	30	
Chloroform	CCC	20.0	20.0	ug/L	0.431	0.200	30	
Ethylbenzene	CCC	20.0	21.5	ug/L	0.505	7.60	30	
Toluene	CCC	20.0	20.7	ug/L	1.33	3.60	30	
Vinyl Chloride	CCC	20.0	18.1	ug/L	0.175	9.60	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.9	ug/L	0.408	4.70	30	
1,1-Dichloroethane	SPCC	20.0	20.6	ug/L	0.501	3.20	30	
Bromoform	SPCC	20.0	17.9	ug/L	0.154	10.5	30	
Chlorobenzene	SPCC	20.0	20.8	ug/L	0.906	4.00	30	
Chloromethane	SPCC	20.0	17.8	ug/L	0.240	10.8	30	
1,1,1-Trichloroethane		20.0	21.1	ug/L	0.408	5.40	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20.0	20.4	ug/L	0.226	2.00	30	
1,1,2-Trichloroethane		20.0	21.1	ug/L	0.216	5.70	30	
1,2,4-Trichlorobenzene		20.0	21.0	ug/L	0.943	5.00	30	
1,2-Dibromo-3-Chloropropane		20.0	20.2	ug/L	0.0753	0.900	30	
1,2-Dibromoethane		20.0	21.2	ug/L	0.216	6.00	30	
1,2-Dichlorobenzene		20.0	20.7	ug/L	1.27	3.60	30	
1,2-Dichloroethane		20.0	20.0	ug/L	0.341	0.200	30	
cis-1,2-Dichloroethene		20.0	20.8	ug/L	0.253	3.80	30	
trans-1,2-Dichloroethene		20.0	20.6	ug/L	0.233	2.90	30	
1,3-Dichlorobenzene		20.0	20.9	ug/L	1.43	4.60	30	
1,4-Dichlorobenzene		20.0	20.2	ug/L	1.45	0.800	30	
2-Butanone		20.0	19.6	ug/L	0.0560	2.20	30	
2-Hexanone		20.0	18.4	ug/L	0.119	7.80	30	
4-Methyl-2-Pentanone		20.0	19.0	ug/L	0.0558	5.20	30	
Acetone		20.0	21.8	ug/L	0.0394	8.90	30	
Benzene		20.0	20.8	ug/L	0.934	4.00	30	
Bromodichloromethane		20.0	21.4	ug/L	0.315	7.10	30	
Bromomethane		20.0	18.9	ug/L	0.172	5.50	30	
Carbon Disulfide		20.0	20.8	ug/L	0.661	3.90	30	
Carbon Tetrachloride		20.0	20.8	ug/L	0.351	4.10	30	
Chloroethane		20.0	18.6	ug/L	0.168	6.80	30	
cis-1,3-Dichloropropene		20.0	21.5	ug/L	0.370	7.70	30	
Cyclohexane		20.0	21.1	ug/L	0.521	5.50	30	
Dibromochloromethane		20.0	21.5	ug/L	0.270	7.40	30	
Dichlorodifluoromethane		20.0	17.4	ug/L	0.279	13.0	30	
Isopropylbenzene		20.0	19.8	ug/L	1.42	1.20	30	
Methyl acetate		20.0	17.9	ug/L	0.111	10.4	30	
Methyl Tert Butyl Ether		20.0	21.2	ug/L	0.475	5.90	30	
Methylcyclohexane		20.0	21.4	ug/L	0.380	7.10	30	
Methylene Chloride		20.0	19.6	ug/L	0.212	1.80	30	

00092862

Login Number: L0612485 Run Date: 11/28/2006 Sample ID: WG228336-11
Instrument ID: HPMS11 Run Time: 14:28 Method: 8260B
File ID: 11M38446 Analyst: CMS
ICal Workgroup: WG228336 Cal ID: HPMS11 - 28-NOV-06

Analyte	Expected	Found	Units	RF	%D	UCL	Q
Styrene	20.0	22.6	ug/L	1.04	12.8	30	
Tetrachloroethene	20.0	21.3	ug/L	0.281	6.70	30	
trans-1,3-Dichloropropene	20.0	19.4	ug/L	0.395	2.80	30	
Trichloroethene	20.0	21.5	ug/L	0.260	7.60	30	
Trichlorofluoromethane	20.0	18.0	ug/L	0.401	10.0	30	
Xylenes	60.0	64.9	ug/L	0.617	8.10	30	
o-Xylene	20.0	21.7	ug/L	0.606	8.30	30	
1,2-Dichloroethene	40.0	41.3	ug/L	0.243	3.40	30	
m-,p-Xylene	40.0	43.2	ug/L	0.627	8.00	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L0612485 Run Date: 11/20/2006 Sample ID: WG227929-12
Instrument ID: HPMS6 Run Time: 17:01 Method: 8260B
File ID: 6M62051 Analyst: CMS
Ical Workgroup: WG227929 Cal ID: HPMS6 - 20-NOV-06

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	20.0	21.0	ug/L	0.387	5.00	30	
1,2-Dichloropropane	CCC	20.0	20.7	ug/L	0.228	3.30	30	
Chloroform	CCC	20.0	20.2	ug/L	0.497	1.00	30	
Ethylbenzene	CCC	20.0	21.8	ug/L	0.555	8.80	30	
Toluene	CCC	20.0	20.8	ug/L	1.42	4.20	30	
Vinyl Chloride	CCC	20.0	21.3	ug/L	0.195	6.60	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.3	ug/L	0.394	1.50	30	
1,1-Dichloroethane	SPCC	20.0	21.1	ug/L	0.456	5.70	30	
Bromoform	SPCC	20.0	19.8	ug/L	0.193	1.00	30	
Chlorobenzene	SPCC	20.0	20.8	ug/L	0.986	4.00	30	
Chloromethane	SPCC	20.0	20.5	ug/L	0.254	2.30	30	
1,1,1-Trichloroethane		20.0	20.9	ug/L	0.482	4.50	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane		20.0	20.2	ug/L	0.261	0.800	30	
1,1,2-Trichloroethane		20.0	21.2	ug/L	0.229	5.90	30	
1,2,4-Trichlorobenzene		20.0	21.0	ug/L	1.04	5.10	30	
1,2-Dibromo-3-Chloropropane		20.0	21.4	ug/L	0.0834	7.00	30	
1,2-Dibromoethane		20.0	20.8	ug/L	0.241	3.90	30	
1,2-Dichlorobenzene		20.0	20.3	ug/L	1.33	1.70	30	
1,2-Dichloroethane		20.0	20.1	ug/L	0.339	0.400	30	
cis-1,2-Dichloroethene		20.0	20.9	ug/L	0.280	4.30	30	
trans-1,2-Dichloroethene		20.0	20.6	ug/L	0.260	3.20	30	
1,3-Dichlorobenzene		20.0	20.6	ug/L	1.49	3.00	30	
1,4-Dichlorobenzene		20.0	20.2	ug/L	1.52	0.800	30	
2-Butanone		20.0	23.8	ug/L	0.0569	18.8	30	
2-Hexanone		20.0	18.9	ug/L	0.0926	5.60	30	
4-Methyl-2-Pentanone		20.0	19.4	ug/L	0.0433	3.00	30	
Acetone		20.0	23.5	ug/L	0.0412	17.4	30	
Benzene		20.0	20.6	ug/L	0.965	3.10	30	
Bromodichloromethane		20.0	21.2	ug/L	0.365	5.80	30	
Bromomethane		20.0	21.0	ug/L	0.176	5.10	30	
Carbon Disulfide		20.0	19.8	ug/L	0.655	0.900	30	
Carbon Tetrachloride		20.0	21.2	ug/L	0.429	6.10	30	
Chloroethane		20.0	20.9	ug/L	0.175	4.50	30	
cis-1,3-Dichloropropene		20.0	21.1	ug/L	0.402	5.40	30	
Cyclohexane		20.0	19.7	ug/L	0.341	1.50	30	
Dibromochloromethane		20.0	21.2	ug/L	0.318	5.80	30	
Dichlorodifluoromethane		20.0	20.7	ug/L	0.375	3.50	30	
Isopropylbenzene		20.0	19.5	ug/L	1.56	2.70	30	
Methyl acetate		20.0	28.0	ug/L	0.124	39.9	30	*
Methyl Tert Butyl Ether		20.0	19.7	ug/L	0.516	1.40	30	
Methylcyclohexane		20.0	20.3	ug/L	0.393	1.60	30	
Methylene Chloride		20.0	19.8	ug/L	0.255	0.900	30	

00092864

Login Number: L0612485 Run Date: 11/20/2006 Sample ID: WG227929-12
Instrument ID: HPMS6 Run Time: 17:01 Method: 8260B
File ID: 6M62051 Analyst: CMS
ICal Workgroup: WG227929 Cal ID: HPMS6 - 20-NOV-06

Analyte	Expected	Found	Units	RF	%D	UCL	Q
Styrene	20.0	21.3	ug/L	1.09	6.60	30	
Tetrachloroethene	20.0	20.6	ug/L	0.407	3.10	30	
trans-1,3-Dichloropropene	20.0	20.2	ug/L	0.444	1.00	30	
Trichloroethene	20.0	21.6	ug/L	0.300	8.00	30	
Trichlorofluoromethane	20.0	18.4	ug/L	0.491	8.10	30	
Xylenes	60.0	63.5	ug/L	0.657	5.90	30	
1,2-Dichloroethene	40.0	41.5	ug/L	0.270	3.80	30	
o-Xylene	20.0	20.8	ug/L	0.638	4.20	30	
m-,p-Xylene	40.0	42.7	ug/L	0.676	6.70	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00092865

Login Number: L0612485 Run Date: 12/27/2006 Sample ID: WG230323-02
 Instrument ID: HPMS11 Run Time: 08:46 Method: 8260B
 File ID: 11M39116 Analyst: CMS
 Workgroup (AAB#): WG230324 Cal ID: HPMS11 - 28-NOV-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	55.0	ug/L	0.222	9.90	20	
1,2-Dichloropropane	CCC	50.0	46.1	ug/L	0.233	7.80	20	
Chloroform	CCC	50.0	51.4	ug/L	0.442	2.90	20	
Ethylbenzene	CCC	50.0	52.4	ug/L	0.492	4.80	20	
Toluene	CCC	50.0	51.8	ug/L	1.33	3.60	20	
Vinyl Chloride	CCC	50.0	53.0	ug/L	0.198	6.10	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.4	ug/L	0.346	11.1	40	
1,1-Dichloroethane	SPCC	50.0	49.9	ug/L	0.485	0.200	40	
Bromoform	SPCC	50.0	44.7	ug/L	0.154	10.7	40	
Chlorobenzene	SPCC	50.0	49.8	ug/L	0.867	0.500	40	
Chloromethane	SPCC	50.0	49.6	ug/L	0.267	0.800	40	
1,1,1-Trichloroethane		50.0	55.3	ug/L	0.428	10.6	40	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	53.1	ug/L	0.235	6.10	40	
1,1,2-Trichloroethane		50.0	46.2	ug/L	0.188	7.70	40	
1,2,4-Trichlorobenzene		50.0	44.9	ug/L	0.806	10.3	40	
1,2-Dibromo-3-Chloropropane		50.0	40.2	ug/L	0.0617	19.6	40	
1,2-Dibromoethane		50.0	46.8	ug/L	0.191	6.40	40	
1,2-Dichlorobenzene		50.0	48.0	ug/L	1.17	4.00	40	
1,2-Dichloroethane		50.0	47.1	ug/L	0.321	5.80	40	
cis-1,2-Dichloroethene		50.0	51.7	ug/L	0.252	3.50	40	
trans-1,2-Dichloroethene		50.0	53.0	ug/L	0.240	5.90	40	
1,3-Dichlorobenzene		50.0	50.4	ug/L	1.38	0.800	40	
1,4-Dichlorobenzene		50.0	48.5	ug/L	1.40	2.90	40	
2-Butanone		50.0	41.4	ug/L	0.0474	17.1	40	
2-Hexanone		50.0	40.8	ug/L	0.105	18.4	40	
4-Methyl-2-Pentanone		50.0	38.7	ug/L	0.0456	22.6	40	
Acetone		50.0	52.6	ug/L	0.0381	5.10	40	
Benzene		50.0	49.6	ug/L	0.892	0.800	40	
Bromodichloromethane		50.0	50.6	ug/L	0.297	1.20	40	
Bromomethane		50.0	47.6	ug/L	0.174	4.80	40	
Carbon Disulfide		50.0	52.0	ug/L	0.662	4.00	40	
Carbon Tetrachloride		50.0	58.8	ug/L	0.397	17.7	40	
Chloroethane		50.0	51.7	ug/L	0.186	3.50	40	
cis-1,3-Dichloropropene		50.0	48.8	ug/L	0.335	2.30	40	
Cyclohexane		50.0	49.0	ug/L	0.484	1.90	40	
Dibromochloromethane		50.0	51.4	ug/L	0.258	2.80	40	
Dichlorodifluoromethane		50.0	58.5	ug/L	0.375	16.9	40	
Isopropylbenzene		50.0	54.2	ug/L	1.56	8.30	40	
Methyl acetate		50.0	47.6	ug/L	0.118	4.80	40	
Methyl Tert Butyl Ether		50.0	45.4	ug/L	0.407	9.20	40	
Methylcyclohexane		50.0	49.8	ug/L	0.353	0.500	40	
Methylene Chloride		50.0	48.6	ug/L	0.210	2.80	40	

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CONTINUING CALIBRATION VERIFICATION (CCV)

00092866

Login Number: L0612485 Run Date: 12/27/2006 Sample ID: WG230323-02
 Instrument ID: HPMS11 Run Time: 08:46 Method: 8260B
 File ID: 11M39116 Analyst: CMS
 Workgroup (AAB#): WG230324 Cal ID: HPMS11 - 28-NOV-06

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
Styrene	50.0	54.5	ug/L	1.00	8.90	40	
Tetrachloroethene	50.0	53.1	ug/L	0.279	6.10	40	
trans-1,3-Dichloropropene	50.0	49.3	ug/L	0.400	1.50	40	
Trichloroethene	50.0	50.8	ug/L	0.245	1.60	40	
Trichlorofluoromethane	50.0	55.1	ug/L	0.491	10.3	40	
Xylenes	150	158	ug/L	0.602	5.70	40	
1,2-Dichloroethene	100	105	ug/L	0.246	4.70	40	
o-Xylene	50.0	52.7	ug/L	0.590	5.40	40	
m-,p-Xylene	100	106	ug/L	0.615	5.80	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00092867

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230416-02
 Instrument ID: HPMS11 Run Time: 08:09 Method: 8260B
 File ID: 11M39143 Analyst: CMS
 Workgroup (AAB#): WG230417 Cal ID: HPMS11 - 28-NOV-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	56.5	ug/L	0.228	13.0	20	
1,2-Dichloropropane	CCC	50.0	46.9	ug/L	0.237	6.10	20	
Chloroform	CCC	50.0	53.6	ug/L	0.461	7.20	20	
Ethylbenzene	CCC	50.0	54.5	ug/L	0.511	9.00	20	
Toluene	CCC	50.0	53.5	ug/L	1.37	6.90	20	
Vinyl Chloride	CCC	50.0	60.0	ug/L	0.222	20.0	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.0	ug/L	0.342	12.0	40	
1,1-Dichloroethane	SPCC	50.0	51.5	ug/L	0.500	3.00	40	
Bromoform	SPCC	50.0	46.3	ug/L	0.160	7.30	40	
Chlorobenzene	SPCC	50.0	51.2	ug/L	0.892	2.40	40	
Chloromethane	SPCC	50.0	51.9	ug/L	0.279	3.70	40	
1,1,1-Trichloroethane		50.0	59.8	ug/L	0.464	19.7	40	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	55.3	ug/L	0.245	10.5	40	
1,1,2-Trichloroethane		50.0	46.5	ug/L	0.190	7.00	40	
1,2,4-Trichlorobenzene		50.0	45.5	ug/L	0.818	8.90	40	
1,2-Dibromo-3-Chloropropane		50.0	41.0	ug/L	0.0629	18.0	40	
1,2-Dibromoethane		50.0	47.7	ug/L	0.195	4.50	40	
1,2-Dichlorobenzene		50.0	49.5	ug/L	1.21	1.10	40	
1,2-Dichloroethane		50.0	50.6	ug/L	0.345	1.30	40	
cis-1,2-Dichloroethene		50.0	52.4	ug/L	0.255	4.80	40	
trans-1,2-Dichloroethene		50.0	54.6	ug/L	0.248	9.20	40	
1,3-Dichlorobenzene		50.0	52.2	ug/L	1.43	4.40	40	
1,4-Dichlorobenzene		50.0	49.7	ug/L	1.43	0.600	40	
2-Butanone		50.0	43.8	ug/L	0.0502	12.3	40	
2-Hexanone		50.0	43.0	ug/L	0.111	13.9	40	
4-Methyl-2-Pentanone		50.0	40.9	ug/L	0.0481	18.3	40	
Acetone		50.0	56.0	ug/L	0.0405	12.0	40	
Benzene		50.0	51.1	ug/L	0.918	2.20	40	
Bromodichloromethane		50.0	53.6	ug/L	0.315	7.10	40	
Bromomethane		50.0	43.2	ug/L	0.158	13.6	40	
Carbon Disulfide		50.0	54.5	ug/L	0.694	9.10	40	
Carbon Tetrachloride		50.0	62.9	ug/L	0.424	25.8	40	
Chloroethane		50.0	54.7	ug/L	0.197	9.40	40	
cis-1,3-Dichloropropene		50.0	49.9	ug/L	0.343	0.200	40	
Cyclohexane		50.0	50.7	ug/L	0.501	1.40	40	
Dibromochloromethane		50.0	53.0	ug/L	0.266	6.10	40	
Dichlorodifluoromethane		50.0	62.5	ug/L	0.401	25.1	40	
Isopropylbenzene		50.0	56.4	ug/L	1.62	12.8	40	
Methyl acetate		50.0	54.0	ug/L	0.134	8.00	40	
Methyl Tert Butyl Ether		50.0	47.9	ug/L	0.430	4.10	40	
Methylcyclohexane		50.0	51.6	ug/L	0.366	3.10	40	
Methylene Chloride		50.0	51.2	ug/L	0.221	2.40	40	

KEMRON FORMS - Modified 12/11/2006
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 Report generated 01/02/2007 16:01

CONTINUING CALIBRATION VERIFICATION (CCV)

00092868

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230416-02
 Instrument ID: HPMS11 Run Time: 08:09 Method: 8260B
 File ID: 11M39143 Analyst: CMS
 Workgroup (AAB#): WG230417 Cal ID: HPMS11 - 28-NOV-06

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
Styrene	50.0	55.9	ug/L	1.03	11.8	40	
Tetrachloroethene	50.0	56.0	ug/L	0.295	12.0	40	
trans-1,3-Dichloropropene	50.0	50.6	ug/L	0.411	1.10	40	
Trichloroethene	50.0	52.7	ug/L	0.254	5.40	40	
Trichlorofluoromethane	50.0	59.7	ug/L	0.532	19.4	40	
Xylenes	150	165	ug/L	0.625	9.70	40	
o-Xylene	50.0	54.7	ug/L	0.612	9.40	40	
1,2-Dichloroethene	100	107	ug/L	0.251	7.00	40	
m-,p-Xylene	100	110	ug/L	0.639	9.90	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00092869

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230414-02
 Instrument ID: HPMS6 Run Time: 08:05 Method: 8260B
 File ID: 6M62909 Analyst: CMS
 Workgroup (AAB#): WG230415 Cal ID: HPMS6 - 20-NOV-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	51.8	ug/L	0.382	3.50	20	
1,2-Dichloropropane	CCC	50.0	48.8	ug/L	0.215	2.50	20	
Chloroform	CCC	50.0	50.0	ug/L	0.493	0.100	20	
Ethylbenzene	CCC	50.0	52.6	ug/L	0.537	5.20	20	
Toluene	CCC	50.0	51.2	ug/L	1.40	2.40	20	
Vinyl Chloride	CCC	50.0	49.7	ug/L	0.173	0.600	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.6	ug/L	0.362	6.80	40	
1,1-Dichloroethane	SPCC	50.0	51.2	ug/L	0.442	2.40	40	
Bromoform	SPCC	50.0	51.3	ug/L	0.200	2.70	40	
Chlorobenzene	SPCC	50.0	51.8	ug/L	0.982	3.60	40	
Chloromethane	SPCC	50.0	34.9	ug/L	0.173	30.3	40	
1,1,1-Trichloroethane		50.0	52.6	ug/L	0.486	5.20	40	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	48.7	ug/L	0.252	2.70	40	
1,1,2-Trichloroethane		50.0	47.7	ug/L	0.206	4.60	40	
1,2,4-Trichlorobenzene		50.0	50.8	ug/L	1.00	1.60	40	
1,2-Dibromo-3-Chloropropane		50.0	49.8	ug/L	0.0776	0.400	40	
1,2-Dibromoethane		50.0	48.0	ug/L	0.223	4.00	40	
1,2-Dichlorobenzene		50.0	50.8	ug/L	1.33	1.70	40	
1,2-Dichloroethane		50.0	46.3	ug/L	0.313	7.30	40	
cis-1,2-Dichloroethene		50.0	53.0	ug/L	0.284	6.00	40	
trans-1,2-Dichloroethene		50.0	54.0	ug/L	0.272	8.00	40	
1,3-Dichlorobenzene		50.0	52.3	ug/L	1.52	4.60	40	
1,4-Dichlorobenzene		50.0	51.1	ug/L	1.54	2.30	40	
2-Butanone		50.0	43.5	ug/L	0.0417	12.9	40	
2-Hexanone		50.0	43.4	ug/L	0.0851	13.3	40	
4-Methyl-2-Pentanone		50.0	44.1	ug/L	0.0393	11.8	40	
Acetone		50.0	47.4	ug/L	0.0333	5.20	40	
Benzene		50.0	51.0	ug/L	0.955	2.00	40	
Bromodichloromethane		50.0	49.9	ug/L	0.344	0.200	40	
Bromomethane		50.0	41.2	ug/L	0.142	17.6	40	
Carbon Disulfide		50.0	54.2	ug/L	0.716	8.40	40	
Carbon Tetrachloride		50.0	54.8	ug/L	0.443	9.50	40	
Chloroethane		50.0	44.5	ug/L	0.149	11.0	40	
cis-1,3-Dichloropropene		50.0	51.3	ug/L	0.392	2.70	40	
Cyclohexane		50.0	52.3	ug/L	0.362	4.60	40	
Dibromochloromethane		50.0	50.7	ug/L	0.304	1.30	40	
Dichlorodifluoromethane		50.0	22.4	ug/L	0.162	55.2	40	*
Isopropylbenzene		50.0	53.2	ug/L	1.71	6.40	40	
Methyl acetate		50.0	60.9	ug/L	0.108	21.8	40	
Methyl Tert Butyl Ether		50.0	45.1	ug/L	0.472	9.70	40	
Methylcyclohexane		50.0	53.2	ug/L	0.412	6.30	40	
Methylene Chloride		50.0	46.6	ug/L	0.240	6.70	40	

KEMRON FORMS - Modified 12/11/2006
 Version 1.3 PDF File ID: 659359
 Report generated 01/02/2007 16:01

CONTINUING CALIBRATION VERIFICATION (CCV)

00092870

Login Number: L0612485 Run Date: 12/28/2006 Sample ID: WG230414-02
Instrument ID: HPMS6 Run Time: 08:05 Method: 8260B
File ID: 6M62909 Analyst: CMS
Workgroup (AAB#): WG230415 Cal ID: HPMS6 - 20-NOV-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Styrene		50.0	53.2	ug/L	1.09	6.30	40	
Tetrachloroethene		50.0	53.6	ug/L	0.423	7.20	40	
trans-1,3-Dichloropropene		50.0	49.7	ug/L	0.437	0.500	40	
Trichloroethene		50.0	54.2	ug/L	0.301	8.40	40	
Trichlorofluoromethane		50.0	44.7	ug/L	0.478	10.6	40	
Xylenes		150	158	ug/L	0.656	5.50	40	
o-Xylene		50.0	52.5	ug/L	0.643	5.00	40	
1,2-Dichloroethene		100	107	ug/L	0.278	7.00	40	
m-,p-Xylene		100	106	ug/L	0.670	5.70	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

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

00092871

Login Number: L0612485
Instrument ID: HPMS11
Workgroup (AAB#): WG230324

CCV Number: WG230323-02
CAL ID: HPMS11 - 28-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230323-02	NA	NA	344049	625437	855796
Upper Limit	NA	NA	688098	1250874	1711592
Lower Limit	NA	NA	172025	312719	427898
L0612485-01	1.00	01	268054	492130	667231
L0612485-02	1.00	01	265904	489674	653423
L0612485-03	1.00	01	283564	532160	715581
L0612485-04	1.00	01	286246	523260	712514
L0612485-05	1.00	01	278060	512416	684098
L0612485-06	1.00	01	279289	511277	692142
WG230324-01	1.00	01	308958	579257	778875
WG230324-02	1.00	01	329209	583584	780887
WG230324-03	1.00	01	320573	580842	770453

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)

00092872

Login Number: L0612485
Instrument ID: HPMS6
Workgroup (AAB#): WG230415

CCV Number: WG230414-02
CAL ID: HPMS6 - 20-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230414-02	NA	NA	330848	550916	709076
Upper Limit	NA	NA	661696	1101832	1418152
Lower Limit	NA	NA	165424	275458	354538
L0612485-07	1.00	01	271341	468346	603212
WG230415-01	1.00	01	307541	517618	673882
WG230415-02	1.00	01	309210	515193	667041
WG230415-03	1.00	01	302753	510937	657602

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)

00092873

Login Number: L0612485
Instrument ID: HPMS11
Workgroup (AAB#): WG230417

CCV Number: WG230416-02
CAL ID: HPMS11 - 28-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230416-02	NA	NA	318312	573297	777044
Upper Limit	NA	NA	636624	1146594	1554088
Lower Limit	NA	NA	159156	286649	388522
L0612485-04	10.0	DL01	280733	519229	693795
L0612485-06	10.0	DL01	274019	511702	683595
WG230417-01	1.00	01	289518	530620	720675
WG230417-02	1.00	01	309459	550066	727295

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)

00092874

Login Number: L0612485
Instrument ID: HPMS11
Workgroup (AAB#): WG230324

CCV Number: WG230323-02
CAL ID: HPMS11 - 28-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230323-02	NA	NA	16.46	13.66	10.04
Upper Limit	NA	NA	16.96	14.16	10.54
Lower Limit	NA	NA	15.96	13.16	9.54
L0612485-01	1.00	01	16.456	13.654	10.03
L0612485-02	1.00	01	16.456	13.659	10.035
L0612485-03	1.00	01	16.456	13.659	10.03
L0612485-04	1.00	01	16.456	13.659	10.035
L0612485-05	1.00	01	16.456	13.659	10.03
L0612485-06	1.00	01	16.456	13.654	10.035
WG230324-01	1.00	01	16.456	13.654	10.036
WG230324-02	1.00	01	16.456	13.654	10.03
WG230324-03	1.00	01	16.456	13.654	10.03

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)

00092875

Login Number: L0612485
Instrument ID: HPMS6
Workgroup (AAB#): WG230415

CCV Number: WG230414-02
CAL ID: HPMS6 - 20-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230414-02	NA	NA	19.52	15.95	11.45
Upper Limit	NA	NA	20.02	16.45	11.95
Lower Limit	NA	NA	19.02	15.45	10.95
L0612485-07	1.00	01	19.52	15.95	11.45
WG230415-01	1.00	01	19.52	15.95	11.45
WG230415-02	1.00	01	19.51	15.95	11.45
WG230415-03	1.00	01	19.52	15.95	11.45

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)

00092876

Login Number: L0612485
Instrument ID: HPMS11
Workgroup (AAB#): WG230417

CCV Number: WG230416-02
CAL ID: HPMS11 - 28-NOV-06
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG230416-02	NA	NA	16.46	13.66	10.04
Upper Limit	NA	NA	16.96	14.16	10.54
Lower Limit	NA	NA	15.96	13.16	9.54
L0612485-04	10.0	DL01	16.455	13.654	10.03
L0612485-06	10.0	DL01	16.456	13.654	10.03
WG230417-01	1.00	01	16.455	13.654	10.035
WG230417-02	1.00	01	16.456	13.654	10.03

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

Underline = Response outside limits

KEMRON Environmental Services

Data Checklist

00092877

Date: 27-SEP-2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 12513
 Analytical Workgroups: WG223500, WG223502

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:
28-SEP-2006



Secondary Reviewer:
28-SEP-2006



Generated: SEP-29-2006 13:00:04

KEMRON Environmental Services Data Checklist

00092878

Date: 20-DEC-2006
 Analyst: JLS
 Analyst: NA
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 13880
 Analytical Workgroups: WG230008

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:
21-DEC-2006



Secondary Reviewer:
26-DEC-2006



Generated: DEC-26-2006 13:37:50

KEMRON Environmental Services Data Checklist

00092879

Date: 21-DEC-2006
 Analyst: JLS
 Analyst: FB
 Method: RSK175
 Instrument: HP16
 Curve Workgroup: NA
 Runlog ID: 13912
 Analytical Workgroups: WG230108

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	SMH
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:
26-DEC-2006



Secondary Reviewer:
27-DEC-2006



Generated: DEC-27-2006 10:58:43

KEMRON Environmental Services

Instrument Run Log

00092880

Instrument: HP16 Dataset: 092706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15882

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: STD15381
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG223500, WG223502

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G4196	WG223500-01 .1ug/ml STD	NA	1	1	STD15381	09/27/06 13:50
2	16G4197	WG223500-02 1ug/ml STD	NA	1	1	STD15381	09/27/06 14:04
3	16G4198	WG223500-03 10ug/ml STD	NA	1	1	STD15381	09/27/06 14:18
4	16G4199	WG223500-04 20ug/ml STD	NA	1	1	STD15381	09/27/06 14:32
5	16G4200	WG223500-05 50ug/ml STD	NA	1	1	STD15381	09/27/06 14:46
6	16G4201	WG223500-06 100ug/ml STD	NA	1	1	STD15381	09/27/06 15:01
7	16G4202	WG223500-07 200ug/ml STD	NA	1	1	STD15381	09/27/06 15:15
8	16G4203	WG223500-08 300ug/ml STD	NA	1	1	STD15381	09/27/06 15:29
9	16G4204	WG223500-09 50ug/ml STD	NA	1	1	STD15381	09/27/06 15:43
10	16G4205	WG223502-01 BLANK	NA	1	1		09/27/06 16:14
11	16G4206	WG223502-02 20ug/ml LCS	NA	1	1	STD15381	09/27/06 16:28
12	16G4207	WG223502-03 20ug/ml LCS DUP	NA	1	1	STD15381	09/27/06 16:42
13	16G4208	L0609385-08 B 10X	7	1	10		09/27/06 16:56
14	16G4209	L0609387-07 A	7	1	1		09/27/06 17:10
15	16G4210	L0609505-02 A	7	1	1		09/27/06 17:24
16	16G4211	L0609417-01 A	7	1	1		09/27/06 17:38
17	16G4212	L0609417-02 A	7	1	1		09/27/06 17:52
18	16G4213	L0609417-03 A	7	1	1		09/27/06 18:06
19	16G4214	L0609417-04 A MS	7	1	1	STD15381	09/27/06 18:20
20	16G4215	RINSE	NA	1	1		09/27/06 18:34
21	16G4216	RINSE	NA	1	1		09/27/06 18:48
22	16G4217	WG223501-02 50ug/ml STD	NA	1	1	STD15381	09/27/06 19:02
23	16G4218	L0609417-05 A MSD	7	1	1	STD15381	09/27/06 19:16
24	16G4219	L0609417-06 A	7	1	1		09/27/06 19:30
25	16G4220	L0609417-07 A	7	1	1		09/27/06 19:44
26	16G4221	L0609417-08 A	7	1	1		09/27/06 19:58
27	16G4222	L0609417-09 A	7	1	1		09/27/06 20:12
28	16G4223	L0609439-01 A	<2	1	1		09/27/06 20:26
29	16G4224	L0609439-02 A MS	<2	1	1	STD15381	09/27/06 20:40
30	16G4225	L0609439-03 A MSD	<2	1	1	STD15381	09/27/06 20:54
31	16G4226	L0609439-04 A	<2	1	1		09/27/06 21:08
32	16G4227	L0609439-05 A	<2	1	1		09/27/06 21:22

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KEMRON Environmental Services

Instrument Run Log

00092881

Instrument: HP16 Dataset: 092706
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 15882

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: STD15381
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG223500, WG223502

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
33	16G4228	RINSE	NA	1	1		09/27/06 21:36
34	16G4229	RINSE	NA	1	1		09/27/06 21:50
35	16G4230	WG223501-03 50ug/ml STD	NA	1	1	STD15381	09/27/06 22:04
36	16G4231	L0609439-06 A	<2	1	1		09/27/06 22:18
37	16G4232	L0609439-07 A	<2	1	1		09/27/06 22:32
38	16G4233	L0609509-09 A	7	1	1		09/27/06 22:46
39	16G4234	RINSE	NA	1	1		09/27/06 23:00
40	16G4235	RINSE	NA	1	1		09/27/06 23:14
41	16G4236	WG223501-04 50ug/ml STD	NA	1	1	STD15381	09/27/06 23:29

Comments

Seq.	Rerun	Dil.	Reason	Analytes
16	X	100	Over Calibration Range	Methane
File ID: 16G4211				
17	X	100	Over Calibration Range	Methane
File ID: 16G4212				
32	X	10	Over Calibration Range	Methane
File ID: 16G4227				
36	X	100	Over Calibration Range	Methane
File ID: 16G4231				
37	X	100	Over Calibration Range	Methane
File ID: 16G4232				
38	X	100	Over Calibration Range	Methane
File ID: 16G4233				

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KEMRON Environmental Services

Instrument Run Log

00092882

Instrument: HP16 Dataset: 122006
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 17145

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: STD15381
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG230008

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G5670	WG230007-01 50umol/mol STD	NA	1	1	STD15381	12/20/06 11:27
2	16G5671	WG230008-01 BLANK	NA	1	1		12/20/06 11:41
3	16G5672	WG230008-02 20umol/mol LCS	NA	1	1	STD15381	12/20/06 11:55
4	16G5673	WG230008-03 20umol/mol LCS DUP	NA	1	1	STD15381	12/20/06 12:09
5	16G5674	WG230008-02 20umol/mol LCS	NA	1	1	STD15381	12/20/06 13:19
6	16G5675	WG230008-03 20umol/mol LCS DUP	NA	1	1	STD15381	12/20/06 13:33
7	16G5676	WG230008-02 20umol/mol LCS	NA	1	1	STD15381	12/20/06 13:52
8	16G5677	WG230008-03 20umol/mol LCS DUP	NA	1	1	STD15381	12/20/06 14:06
9	16G5678	WG230007-02 50umol/mol STD	NA	1	1	STD15381	12/20/06 15:08
10	16G5679	L0612460-06 B 10X	7	1	10		12/20/06 16:11
11	16G5680	L0612465-02 B 50X	7	1	50		12/20/06 16:25
12	16G5681	L0612465-03 B 100X	7	1	100		12/20/06 16:39
13	16G5682	L0612465-04 B 10X	7	1	10		12/20/06 16:53
14	16G5683	L0612465-05 B 50X	7	1	50		12/20/06 17:07
15	16G5684	L0612471-02 A	<2	1	1		12/20/06 17:21
16	16G5685	L0612471-04 A	<2	1	1		12/20/06 17:35
17	16G5686	L0612485-01 A	7	1	1		12/20/06 17:49
18	16G5687	L0612485-02 A	7	1	1		12/20/06 18:04
19	16G5688	L0612485-03 A	7	1	1		12/20/06 18:18
20	16G5689	WG230007-03 50umol/mol STD	NA	1	1	STD15381	12/20/06 18:32
21	16G5690	L0612485-04 A	7	1	1		12/20/06 18:46
22	16G5691	L0612485-05 A	7	1	1		12/20/06 19:00
23	16G5692	L0612485-06 A	7	1	1		12/20/06 19:14
24	16G5693	WG230007-04 50umol/mol STD	NA	1	1	STD15381	12/20/06 19:28

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		LCS failure	Carbon dioxide
File ID: 16G5672				
4	X		LCS failure	Carbon dioxide

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KEMRON Environmental Services

Instrument Run Log

00092883

Instrument: HP16 Dataset: 122006
 Analyst1: JLS Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 17145

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: STD15381
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG230008

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID:16G5673				
5	X		LCS failure	Carbon dioxide
File ID:16G5674				
6	X		LCS failure	Carbon dioxide
File ID:16G5675				
18	X	10	Over Calibration Range	Methane
File ID:16G5687				

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Instrument Run Log

00092884

Instrument: HP16 Dataset: 122106
 Analyst1: JLS Analyst2: FB
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 17173

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: NA
 Column 1 ID: RTQPLOT Column 2 ID: NA
 Workgroups: WG230108

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G5694	WG230009-01 50umol/mol STD	NA	1	1	STD15381	12/21/06 09:04
2	16G5695	WG230108-01 BLANK	NA	1	1		12/21/06 09:19
3	16G5696	WG230108-02 20umol/mol LCS	NA	1	1	STD15381	12/21/06 09:33
4	16G5697	WG230108-03 20umol/mol LCS DUP	NA	1	1	STD15381	12/21/06 09:47
5	16G5698	L0612274-02 B 50X	7	1	50		12/21/06 12:19
6	16G5699	L0612274-05 B 50X	7	1	50		12/21/06 12:33
7	16G5700	L0612274-06 B 50X	7	1	50		12/21/06 12:54
8	16G5701	L0612274-07 B 50X	7	1	50		12/21/06 13:08
9	16G5702	L0612275-01 B 50X	7	1	50		12/21/06 13:22
10	16G5703	L0612275-02 B 50X	7	1	50		12/21/06 13:36
11	16G5704	L0612275-04 B 50X	7	1	50		12/21/06 13:50
12	16G5705	WG230009-02 50umol/mol STD	NA	1	1	STD15381	12/21/06 14:04
13	16G5706	L0612295-01 B 50X	7	1	50		12/21/06 14:18
14	16G5707	L0612295-03 B 50X	7	1	50		12/21/06 14:32
15	16G5708	L0612296-01 B 50X	7	1	50		12/21/06 14:46
16	16G5709	L0612296-02 B 50X	7	1	50		12/21/06 15:00
17	16G5710	L0612296-04 A 10X	7	1	10		12/21/06 15:14
18	16G5711	L0612336-01 A 10X	7	1	10		12/21/06 15:28
19	16G5712	L0612336-02 A 10X	7	1	10		12/21/06 15:42
20	16G5713	L0612336-03 A 10X	7	1	10		12/21/06 15:56
21	16G5714	L0612368-01 A 10X	7	1	10		12/21/06 16:10
22	16G5715	L0612368-02 A 10X	7	1	10		12/21/06 16:24
23	16G5716	WG230009-03 50umol/mol	NA	1	1	STD15381	12/21/06 16:38
24	16G5717	L0612368-04 A 10X	7	1	10		12/21/06 16:53
25	16G5718	L0612386-01 A 10X	7	1	10		12/21/06 17:07
26	16G5719	L0612485-02 A 10X	7	1	10		12/21/06 17:21
27	16G5720	WG230009-04 50umol/mol	NA	1	1	STD15381	12/21/06 17:35

Comments

Seq.	Rerun	Dil.	Reason	Analytes
17	X	50	Over Calibration Range	CO2

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KEMRON Environmental Services

Instrument Run Log

00092885

Instrument: HP16 Dataset: 122106
 Analyst1: JLS Analyst2: FB
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 17173

Internal Standard: NA Surrogate Standard: NA
 CCV: STD15381 LCS: STD15381 MS/MSD: NA
 Column 1 ID: RTQPLOT Column 2 ID: NA
 Workgroups: WG230108

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G5710				
18	X	50	Over Calibration Range	CO2
File ID: 16G5711				
19	X	50	Over Calibration Range	CO2
File ID: 16G5712				
20	X	50	Over Calibration Range	CO2
File ID: 16G5713				
21	X	100	Over Calibration Range	CO2
File ID: 16G5714				
22	X	50	Over Calibration Range	CO2
File ID: 16G5715				
24	X	50	Over Calibration Range	CO2
File ID: 16G5717				
25	X	100	Over Calibration Range	CO2
File ID: 16G5718				

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KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092886

Analytical Method: RSK175
Login Number: L0612485

AAB#: WG230108

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	12/19/06	12/20/06	12/21/06	14	2.30	12/21/06	14	2.30	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092887

Analytical Method: RSK175
Login Number: L0612485

AAB#: WG230008

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	12/19/06	12/20/06	12/20/06	14	1.29	12/20/06	14	1.29	
12WW01	12/19/06	12/20/06	12/20/06	14	1.15	12/20/06	14	1.15	
12WW24-QC	12/19/06	12/20/06	12/20/06	14	1.24	12/20/06	14	1.24	
12WW24	12/19/06	12/20/06	12/20/06	14	1.22	12/20/06	14	1.22	
12WW02	12/19/06	12/20/06	12/20/06	14	1.33	12/20/06	14	1.33	
12WW05	12/19/06	12/20/06	12/20/06	14	1.43	12/20/06	14	1.43	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00092888

Login Number: L0612485	Work Group: WG230008
Blank File ID: 16G5671	Blank Sample ID: WG230008-01
Prep Date: 12/20/06 11:41	Instrument ID: HP16
Analyzed Date: 12/20/06 11:41	Method: RSK175
Analyst: JLS	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG230008-02	16G5676	12/20/06 13:52	01
LCS2	WG230008-03	16G5677	12/20/06 14:06	01
12WW01	L0612485-01	16G5686	12/20/06 17:49	01
12WW02	L0612485-02	16G5687	12/20/06 18:04	01
12WW20	L0612485-03	16G5688	12/20/06 18:18	01
12WW24	L0612485-04	16G5690	12/20/06 18:46	01
12WW05	L0612485-05	16G5691	12/20/06 19:00	01
12WW24-QC	L0612485-06	16G5692	12/20/06 19:14	01

METHOD BLANK SUMMARY

00092889

Login Number: L0612485 Work Group: WG230108
Blank File ID: 16G5695 Blank Sample ID: WG230108-01
Prep Date: 12/21/06 09:19 Instrument ID: HP16
Analyzed Date: 12/21/06 09:19 Method: RSK175
Analyst: JLS

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG230108-02	16G5696	12/21/06 09:33	01
LCS2	WG230108-03	16G5697	12/21/06 09:47	01
12WW02	L0612485-02	16G5719	12/21/06 17:21	DL01

METHOD BLANK REPORT

00092890

Login Number: L0612485 Prep Date: 12/20/06 11:41 Sample ID: WG230008-01
Instrument ID: HP16 Run Date: 12/20/06 11:41 Prep Method: 5021
File ID: 16G5671 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG230008 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16-27-SEP-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.493	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

00092891

Login Number: L0612485 Prep Date: 12/21/06 09:19 Sample ID: WG230108-01
Instrument ID: HP16 Run Date: 12/21/06 09:19 Prep Method: 5021
File ID: 16G5695 Analyst: JLS Method: RSK175
Workgroup (AAB#): WG230108 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16-27-SEP-06

Analytes	SQL	PQL	Concentration	Dilution	Qualifier
methane	0.250	0.500	0.288	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)

00092892

Login Number: L0612485 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG230008 Units: ug/L
 Sample ID: WG230008-02 LCS File ID: 16G5676 Run Date: 12/20/2006 13:52
 Sample ID: WG230008-03 LCS2 File ID: 16G5677 Run Date: 12/20/2006 14:06

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	35.0	102	34.3	38.1	111	8.58	56 - 140	40	
ethene	59.9	62.2	104	59.9	65.2	109	4.83	56 - 140	40	
ethane	64.2	66.6	104	64.2	71.3	111	6.72	56 - 137	40	

LABORATORY CONTROL SAMPLE (LCS)

00092893

Login Number: L0612485 Analyst: JLS Prep Method: 5021
 Instrument ID: HP16 Matrix: Water Method: RSK175
 Workgroup (AAB#): WG230108 Units: ug/L
 Sample ID: WG230108-02 LCS File ID: 16G5696 Run Date: 12/21/2006 09:33
 Sample ID: WG230108-03 LCS2 File ID: 16G5697 Run Date: 12/21/2006 09:47

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	34.3	31.7	92.7	34.3	32.2	94.1	1.53	56 - 140	40	
ethene	59.9	55.9	93.2	59.9	54.8	91.4	1.97	56 - 140	40	
ethane	64.2	59.3	92.4	64.2	59.4	92.5	0.113	56 - 137	40	

INITIAL CALIBRATION SUMMARY

00092894

Login Number: L0612485
Analytical Method: RSK175
ICAL Workgroup: WG223500

Instrument ID: HP16
Initial Calibration Date: 27-SEP-06 15:29
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
ethane		144300	24.0	1.00	
ethene		145800	30.8	1.00	
methane		88920	57.6	1.00	

R = Correlation coefficient; 0.995 minimum

R² = Coefficient of determination; 0.99 minimum

INITIAL CALIBRATION DATA

00092895

Login Number: L0612485

Instrument ID: HP16

Analytical Method: RSK175

Initial Calibration Date: 27-SEP-06 15:29

Column ID: F

Analyte	WG223500-01			WG223500-02			WG223500-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	0.100	22904.0000	229000	1.00	136942.000	136900	10.0	1240863.00	124100
ethene	0.100	25615.0000	256100	1.00	134565.000	134600	10.0	1208632.00	120900
methane	0.100	21538.0000	215400	1.00	77578.0000	77580	10.0	665937.000	66590

INITIAL CALIBRATION DATA

00092896

Login Number: L0612485

Instrument ID: HP16

Analytical Method: RSK175

Initial Calibration Date: 27-SEP-06 15:29

Column ID: F

Analyte	WG223500-04			WG223500-05			WG223500-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	20.0	2581706.00	129100	50.0	6486536.00	129700	100	13114659.0	131100
ethene	20.0	2544143.00	127200	50.0	6441905.00	128800	100	12874408.0	128700
methane	20.0	1376031.00	68800	50.0	3424931.00	68500	100	6927945.00	69280

INITIAL CALIBRATION DATA

00092897

Login Number: L0612485

Instrument ID: HP16

Analytical Method: RSK175

Initial Calibration Date: 27-SEP-06 15:29

Column ID: F

Analyte	WG223500-07			WG223500-08		
	CONC	RESP	RF	CONC	RESP	RF
ethane	200	27423411.0	137100	300	41100017.0	137000
ethene	200	27055714.0	135300	300	40485879.0	135000
methane	200	14533928.0	72670	300	21776507.0	72590

KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00092898

Login Number: L0612485 Run Date: 09/27/2006 Sample ID: WG223500-09
Instrument ID: HP16 Run Time: 15:43 Method: RSK175
File ID: 16G4204 Analyst: JLS
ICal Workgroup: WG223500 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	Units	RF	%D	UCL	Q
methane		85.6	77.3	ug/L	65300	9.70	30	
ethene		150	135	ug/L	122000	9.60	30	
ethane		160	145	ug/L	123000	9.70	30	

* Exceeds %D Limit

CONTINUING CALIBRATION VERIFICATION (CCV)

00092899

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230007-01
Instrument ID: HP16 Run Time: 11:27 Method: RSK175
File ID: 16G5670 Analvst: JLS
Workgroup (AAB#): WG230008 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	82.2	ug/L	69400	4.00	25	
ethene		150	144	ug/L	129000	3.90	25	
ethane		160	156	ug/L	132000	3.10	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092900

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230007-02
Instrument ID: HP16 Run Time: 15:08 Method: RSK175
File ID: 16G5678 Analvst: JLS
Workgroup (AAB#): WG230008 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	88.0	ug/L	74300	2.80	25	
ethene		150	157	ug/L	141000	4.80	25	
ethane		160	167	ug/L	142000	4.20	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092901

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230007-03
Instrument ID: HP16 Run Time: 18:32 Method: RSK175
File ID: 16G5689 Analvst: JLS
Workgroup (AAB#): WG230008 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	78.6	ug/L	66400	8.20	25	
ethene		150	137	ug/L	123000	8.30	25	
ethane		160	147	ug/L	125000	8.20	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092902

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230007-04
Instrument ID: HP16 Run Time: 19:28 Method: RSK175
File ID: 16G5693 Analyst: JLS
Workgroup (AAB#): WG230008 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	80.7	ug/L	68100	5.80	25	
ethene		150	138	ug/L	124000	7.70	25	
ethane		160	149	ug/L	126000	7.30	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092903

Login Number: L0612485 Run Date: 12/21/2006 Sample ID: WG230009-01
Instrument ID: HP16 Run Time: 09:04 Method: RSK175
File ID: 16G5694 Analvst: JLS
Workgroup (AAB#): WG230108 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	81.5	ug/L	68800	4.80	25	
ethene		150	145	ug/L	130000	3.30	25	
ethane		160	155	ug/L	132000	3.60	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092904

Login Number: L0612485 Run Date: 12/21/2006 Sample ID: WG230009-02
Instrument ID: HP16 Run Time: 14:04 Method: RSK175
File ID: 16G5705 Analyst: JLS
Workgroup (AAB#): WG230108 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	72.9	ug/L	61500	14.9	25	
ethene		150	126	ug/L	114000	15.6	25	
ethane		160	137	ug/L	117000	14.4	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092905

Login Number: L0612485 Run Date: 12/21/2006 Sample ID: WG230009-03
Instrument ID: HP16 Run Time: 16:38 Method: RSK175
File ID: 16G5716 Analyst: JLS
Workgroup (AAB#): WG230108 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	76.3	ug/L	64400	10.9	25	
ethene		150	132	ug/L	119000	11.6	25	
ethane		160	143	ug/L	121000	11.1	25	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092906

Login Number: L0612485 Run Date: 12/21/2006 Sample ID: WG230009-04
Instrument ID: HP16 Run Time: 17:35 Method: RSK175
File ID: 16G5720 Analvst: JLS
Workgroup (AAB#): WG230108 Cal ID: HP16 - 27-SEP-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		85.6	69.6	ug/L	58700	18.8	25	
ethene		150	120	ug/L	107000	20.2	25	
ethane		160	129	ug/L	110000	19.7	25	

* Exceeds %D Criteria

Inorganic QA/QC

KEMRON Environmental Services Data Checklist

00092908

Date: 08-DEC-2006
Analyst: JWR
Analyst: NA
Method: 300/9056
Instrument: IC2
Curve Workgroup: WG229106
Runlog ID: 13746
Analytical Workgroups:

System Performance Check	
Eluent check	
Initial Calibration	X
Average RF	
Linear Reg or Higher Order Curve	12/08/06
Alt Source Check	12/08/06
Continuing Calibration	
Continuing Calibration	
Client Specific Requirements	
Blanks	
Quant Report / Chromatogram	
Spike Compounds	
MS/MSD	
Excel Spreadsheet	
Samples	
TCL Hits	
Manual Integrations	X
Data Package	
Level 2	
Level 3	
Level 4	
Primary Reviewer	JWR
Secondary Reviewer	MDC
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 resonableness of the results	X
Comments:	
Ran Curve and Alternate Source only for DX-320.	

Primary Reviewer:
13-DEC-2006



Secondary Reviewer:
14-DEC-2006



Generated: DEC-14-2006 20:13:47

KEMRON Environmental Services Data Checklist

00092909

Date: 20-DEC-2006
 Analyst: JWR
 Analyst: NA
 Method: 300
 Instrument: IC2
 Curve Workgroup: WG229106
 Runlog ID: 13984
 Analytical Workgroups: WG230107

System Performance Check	
Eluent check	X
Initial Calibration	
Average RF	
Linear Reg or Higher Order Curve	12/08/06
Alt Source Check	12/08/06
Continuing Calibration	
Continuing Calibration	X
Client Specific Requirements	X
Blanks	
Quant Report / Chromatogram	X
Spike Compounds	X
MS/MSD	X
Excel Spreadsheet	X
Samples	
TCL Hits	X
Manual Integrations	X
Data Package	
Level 2	
Level 3	L0612485
Level 4	
Primary Reviewer	JWR
Secondary Reviewer	MDC
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
Comments: L0612485	LAB DUE 12/29/06
Samples L0612485-01, 03, 04, 05, 06 were analyzed for NO2 & NO3 at a dilution due to the levels of Cl and SO4 in them. The Cl levels are too high in order to analyze these samples undiluted for NO2. Cl peaks of this magnitude in size "cover up" any NO2 peak near its RL. These samples were analyzed at a dilution for NO3 due to the total level of Cl and SO4 in them. The analytical column has a tolerance of 200 ppm for a single anion and 400 ppm for all anions before the column becomes overloaded.	
The MS/MSD associated with this analytical batch had % Rec's for Cl below the advisory limit. The parent sample chosen for the MS/MSD had a Cl result greater than the calibration range.	

Primary Reviewer:
29-DEC-2006



Secondary Reviewer:
29-DEC-2006



Generated: DEC-29-2006 15:19:37

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092910

Analytical Method: 300.0
 Login Number: L0612485

AAB#: WG230107

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
12WW05	12/19/06	12/20/06	12/20/06	2	1.25	12/20/06	2	1.25	
12WW24-QC	12/19/06	12/20/06	12/20/06	2	1.28	12/20/06	2	1.28	
12WW20	12/19/06	12/20/06	12/20/06	2	1.12	12/20/06	2	1.12	
12WW20	12/19/06	12/20/06	12/20/06	2	1.27	12/20/06	2	1.27	
12WW05	12/19/06	12/20/06	12/20/06	2	1.46	12/20/06	2	1.46	
12WW01	12/19/06	12/20/06	12/20/06	2	1.05	12/20/06	2	1.05	
12WW20	12/19/06	12/20/06	12/20/06	2	1.29	12/20/06	2	1.29	
12WW01	12/19/06	12/20/06	12/20/06	2	1.06	12/20/06	2	1.06	
12WW24	12/19/06	12/20/06	12/20/06	2	1.04	12/20/06	2	1.04	
12WW24	12/19/06	12/20/06	12/20/06	2	1.22	12/20/06	2	1.22	
12WW24	12/19/06	12/20/06	12/20/06	2	1.21	12/20/06	2	1.21	
12WW24-QC	12/19/06	12/20/06	12/20/06	2	1.29	12/20/06	2	1.29	
12WW05	12/19/06	12/20/06	12/20/06	2	1.47	12/20/06	2	1.47	
12WW24-QC	12/19/06	12/20/06	12/20/06	2	1.06	12/20/06	2	1.06	
12WW01	12/19/06	12/20/06	12/20/06	2	0.974	12/20/06	2	0.974	
12WW02	12/19/06	12/20/06	12/20/06	2	1.32	12/20/06	2	1.32	
12WW02	12/19/06	12/20/06	12/20/06	2	1.27	12/20/06	2	1.27	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00092911

Login Number: L0612485	Work Group: WG230107
Blank File ID: I2122006.13	Blank Sample ID: WG230107-01
Prep Date: 12/20/06 13:03	Instrument ID: IC2
Analyzed Date: 12/20/06 13:03	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	WG230107-02	I2122006.14	12/20/06 13:21	01
12WW01	L0612485-01	I2122006.15	12/20/06 13:38	DL01
12WW20	L0612485-03	I2122006.17	12/20/06 14:13	DL01
12WW24	L0612485-04	I2122006.18	12/20/06 14:30	DL01
12WW05	L0612485-05	I2122006.19	12/20/06 14:48	DL01
12WW24-QC	L0612485-06	I2122006.20	12/20/06 15:05	DL01
12WW01	L0612485-01	I2122006.21	12/20/06 15:22	DL02
12WW01	L0612485-01	I2122006.22	12/20/06 15:40	DL03
12WW02	L0612485-02	I2122006.25	12/20/06 16:32	01
DUP	WG230107-04	I2122006.26	12/20/06 16:49	01
12WW02	L0612485-02	I2122006.29	12/20/06 17:42	DL01
12WW20	L0612485-03	I2122006.30	12/20/06 17:59	DL02
12WW20	L0612485-03	I2122006.31	12/20/06 18:16	DL03
12WW24	L0612485-04	I2122006.32	12/20/06 18:34	DL02
12WW24	L0612485-04	I2122006.33	12/20/06 18:51	DL03
12WW05	L0612485-05	I2122006.36	12/20/06 19:43	DL02
12WW05	L0612485-05	I2122006.37	12/20/06 20:01	DL03
12WW24-QC	L0612485-06	I2122006.38	12/20/06 20:18	DL02
12WW24-QC	L0612485-06	I2122006.39	12/20/06 20:36	DL03

METHOD BLANK REPORT

00092912

Login Number: L0612485 Prep Date: 12/20/06 13:03 Sample ID: WG230107-01
Instrument ID: IC2 Run Date: 12/20/06 13:03 Prep Method: 300.0
File ID: I2122006.13 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG230107 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-08-DEC-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

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230107-02
Instrument ID: IC2 Run Time: 13:21 Prep Method: 300.0
File ID: I2122006.14 Analyst: JWR Method: 300.0
Workgroup (AAB#): WG230107 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-08-DEC-06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.90	98.3	90 - 110	
Nitrate	4.07	4.10	101	90 - 110	
Nitrite	3.65	3.71	101	90 - 110	
Sulfate	30.0	30.6	102	90 - 110	

DUPLICATE (DUP)

00092914

Sample Ref: L0612485-02 Cal ID: IC2 - Worknum: WG230107
Instrument ID: IC2 Method: 9056
Sample ID: WG230107-03 File ID: I2122006.25 Dil: 1 Matrix: WATER
Duplicate ID: WG230107-04 File ID: I2122006.26 Dil: 1 Units: mg/L

Analyte	Sample	Duplicate	RPD	RPD Limit	Q
Chloride	116	115	0.772	20	
Nitrate	ND	ND	0	20	
Nitrite	ND	ND	0	20	
Sulfate	46.9	47.5	1.35	20	

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: L0612485 Cal ID: IC2- Worknum: WG230107
 Instrument ID: IC2 Contract #: DACA56-94-D-0020 Method: 300.0
 Parent ID: WG230107-03 File ID: I2122006.25 Dil: 1 Matrix: WATER
 Sample ID: WG230107-05 MS File ID: I2122006.27 Dil: 1 Units: mg/L
 Sample ID: WG230107-06 MSD File ID: I2122006.28 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Chloride	116	6.00	115	-26.2	6.00	114	-28.3	0.111	90 - 110	20	*
Nitrate	ND	4.07	4.25	105	4.07	4.26	105	0.141	90 - 110	20	
Nitrite	ND	3.65	3.56	97.5	3.65	3.53	96.6	0.902	90 - 110	20	
Sulfate	46.9	30.0	74.3	91.3	30.0	73.9	90.0	0.497	90 - 110	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

CONTINUING CALIBRATION BLANK (CCB)

00092916

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-02
Instrument ID: IC2 Run Time: 12:46 Method: 300.0
File ID: I2122006.12 Analyst: JWR Units: mg/L
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Cl	0.100	0.200	0		U
NO3-N	0.100	0.600	0		U
NO2-N	0.100	0.400	0		U
S04	0.500	1.00	0		U

U = Result is less than MDL
F = Result is between MDL and RL
* = Result is above RL

CONTINUING CALIBRATION BLANK (CCB)

00092917

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-04
Instrument ID: IC2 Run Time: 16:15 Method: 300.0
File ID: I2122006.24 Analyst: JWR Units: mg/L
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Cl	0.100	0.200	0		U
NO3-N	0.100	0.600	0		U
NO2-N	0.100	0.400	0		U
S04	0.500	1.00	0		U

U = Result is less than MDL
F = Result is between MDL and RL
* = Result is above RL

CONTINUING CALIBRATION BLANK (CCB)

00092918

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-06
Instrument ID: IC2 Run Time: 19:26 Method: 300.0
File ID: I2122006.35 Analyst: JWR Units: mg/L
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Cl	0.100	0.200	0		U
NO3-N	0.100	0.600	0		U
NO2-N	0.100	0.400	0		U
S04	0.500	1.00	0		U

U = Result is less than MDL
F = Result is between MDL and RL
* = Result is above RL

CONTINUING CALIBRATION BLANK (CCB)

00092919

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-08
Instrument ID: IC2 Run Time: 21:10 Method: 300.0
File ID: I2122006.41 Analyst: JWR Units: mg/L
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Cl	0.100	0.200	0		U
NO3-N	0.100	0.600	0		U
NO2-N	0.100	0.400	0		U
S04	0.500	1.00	0		U

U = Result is less than MDL
F = Result is between MDL and RL
* = Result is above RL

CONTINUING CALIBRATION VERIFICATION (CCV)

00092920

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-01
Instrument ID: IC2 Run Time: 12:28 Method: 300.0
File ID: I2122006.11 Analvst: JWR
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	6.02	mg/L	8.01	0.300	15	
Nitrate		4.07	4.11	mg/L	3.31	1.10	15	
Nitrite		3.65	3.78	mg/L	3.68	3.50	15	
Sulfate		30.0	30.6	mg/L	10.3	1.90	15	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092921

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-03
Instrument ID: IC2 Run Time: 15:57 Method: 300.0
File ID: I2122006.23 Analvst: JWR
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	6.07	mg/L	7.94	1.10	15	
Nitrate		4.07	4.16	mg/L	3.26	2.40	15	
Nitrite		3.65	3.78	mg/L	3.68	3.60	15	
Sulfate		30.0	30.6	mg/L	10.3	2.00	15	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092922

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-05
Instrument ID: IC2 Run Time: 19:09 Method: 300.0
File ID: I2122006.34 Analvst: JWR
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	6.24	mg/L	7.70	4.00	15	
Nitrate		4.07	4.11	mg/L	3.31	1.10	15	
Nitrite		3.65	3.74	mg/L	3.72	2.40	15	
Sulfate		30.0	30.7	mg/L	10.3	2.40	15	

* Exceeds %D Criteria

CONTINUING CALIBRATION VERIFICATION (CCV)

00092923

Login Number: L0612485 Run Date: 12/20/2006 Sample ID: WG230109-07
Instrument ID: IC2 Run Time: 20:53 Method: 300.0
File ID: I2122006.40 Analvst: JWR
Workgroup (AAB#): WG230107 Cal ID: IC2 - 08-DEC-06

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	6.22	mg/L	7.74	3.60	15	
Nitrate		4.07	4.19	mg/L	3.24	3.00	15	
Nitrite		3.65	3.78	mg/L	3.68	3.60	15	
Sulfate		30.0	30.9	mg/L	10.2	2.90	15	

* Exceeds %D Criteria

KEMRON Environmental Services Data Checklist

00092924

Date: 26-DEC-2006
 Analyst: DIH
 Analyst: NA
 Method: TOC
 Instrument: TOC
 Curve Workgroup: NA
 Runlog ID:
 Analytical Workgroups: WG230207 WG230208

Calibration/Linearity	1/12/06
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	
Comments	

Primary Reviewer:
28-DEC-2006

Secondary Reviewer:



Generated: DEC-28-2006 16:23:51

KEMRON Environmental Services Data Checklist

00092925

Date: 27-DEC-2006
 Analyst: DIH
 Analyst: NA
 Method: TOC
 Instrument: TOC
 Curve Workgroup: NA
 Runlog ID:
 Analytical Workgroups: WG230345 WG230346

Calibration/Linearity	1/12/06
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	
Comments	

Primary Reviewer:
28-DEC-2006

Secondary Reviewer:



Generated: DEC-28-2006 16:22:54

Analytical Method: 415.1
Login Number: L0612485

AAB#: WG230208

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
12WW05	12/19/06	12/20/06	12/27/06	28	7.64	12/27/06	28	7.64	
12WW01	12/19/06	12/20/06	12/26/06	28	7.35	12/26/06	28	7.35	
12WW20	12/19/06	12/20/06	12/26/06	28	7.49	12/26/06	28	7.49	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 415.1
Login Number: L0612485

AAB#: WG230345

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	12/19/06	12/20/06	12/27/06	28	8.11	12/27/06	28	8.11	
12WW24-QC	12/19/06	12/20/06	12/27/06	28	7.98	12/27/06	28	7.98	
12WW24	12/19/06	12/20/06	12/27/06	28	7.97	12/27/06	28	7.97	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

00092928

Login Number: L0612485
Blank File ID: TC12-26-2006.33
Prep Date: 12/26/06 21:53
Analyzed Date: 12/26/06 21:53
Analyst: DIH

Work Group: WG230208
Blank Sample ID: WG230208-01
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	WG230208-02	TC12-26-2006.34	12/26/06 22:06	01
LCS2	WG230208-03	TC12-26-2006.35	12/26/06 22:18	01
12WW01	L0612485-01	TC12-26-2006.36	12/26/06 22:34	01
12WW01	L0612485-01	TC12-26-2006.36	12/26/06 22:34	01
12WW20	L0612485-03	TC12-26-2006.38	12/26/06 23:07	01
12WW20	L0612485-03	TC12-26-2006.38	12/26/06 23:07	01
12WW05	L0612485-05	TC12-26-2006.42	12/27/06 00:02	01
12WW05	L0612485-05	TC12-26-2006.42	12/27/06 00:02	01
DUP	WG230208-05	TC12-26-2006.54	12/27/06 02:43	01

METHOD BLANK SUMMARY

00092929

Login Number: L0612485
 Blank File ID: TC12-27-2006.04
 Prep Date: 12/27/06 11:59
 Analyzed Date: 12/27/06 11:59
 Analyst: DIH

Work Group: WG230345
 Blank Sample ID: WG230345-01
 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	WG230345-02	TC12-27-2006.05	12/27/06 12:12	01
LCS2	WG230345-03	TC12-27-2006.06	12/27/06 12:25	01
12WW02	L0612485-02	TC12-27-2006.07	12/27/06 12:39	DL01
12WW02	L0612485-02	TC12-27-2006.07	12/27/06 12:39	DL01
12WW24	L0612485-04	TC12-27-2006.08	12/27/06 12:55	DL01
12WW24	L0612485-04	TC12-27-2006.08	12/27/06 12:55	DL01
12WW24-QC	L0612485-06	TC12-27-2006.09	12/27/06 13:10	DL01
12WW24-QC	L0612485-06	TC12-27-2006.09	12/27/06 13:10	DL01
DUP	WG230345-05	TC12-27-2006.31	12/27/06 18:26	01

METHOD BLANK REPORT

00092930

Login Number: L0612485 Prep Date: 12/26/06 21:53 Sample ID: WG230208-01
Instrument ID: TOC-VWP Run Date: 12/26/06 21:53 Prep Method: 415.1
File ID: TC12-26-2006.33 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG230208 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

00092931

Login Number: L0612485 Prep Date: 12/27/06 11:59 Sample ID: WG230345-01
Instrument ID: TOC-VWP Run Date: 12/27/06 11:59 Prep Method: 415.1
File ID: TC12-27-2006.04 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG230345 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)

00092932

Login Number: L0612485 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG230208 Units: mg/L
Sample ID: WG230208-02 LCS File ID: TC12-26-2006.34 Run Date: 12/26/2006 22:06
Sample ID: WG230208-03 LCS2 File ID: TC12-26-2006.35 Run Date: 12/26/2006 22:18

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	25.5	102	25.0	25.3	101	0.786	85 - 115	15	

LABORATORY CONTROL SAMPLE (LCS)

00092933

Login Number: L0612485 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG230345 Units: mg/L
Sample ID: WG230345-02 LCS File ID: TC12-27-2006.05 Run Date: 12/27/2006 12:12
Sample ID: WG230345-03 LCS2 File ID: TC12-27-2006.06 Run Date: 12/27/2006 12:25

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	24.7	98.6	25.0	25.4	101	2.80	85 - 115	15	



Shaw® Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10485

Laboratory Name: Kemron		Address: 156 Skarlite Drive		Married Contact: Stephanie (740) 373-4071												
Project Name: LHAP		Project Location: Karnack, Tx		Analysis and Method Desired (Indicate separate containers)												
Project No.: 845714.0483901		Project Contact: Allen Williams		Project Telephone No.: (713) 247-9292												
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastava		Remarks												
Telephone No.: (713) 946-4408																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	D-Gas	TOC	Anions				
1	12 WW 01	12/19	1415		✓	W	12 WW 01	8	3	3	1	1				
2	12 WW 02	12/19	1005		✓	W	12 WW 02	8	3	3	1	1				
3	12 WW 20	12/19	1125		✓	W	12 WW 20	8	3	3	1	1				
4	12 WW 21	12/18	1515			W	12 WW 21	8	3	3	1	1				
5	12 WW 24	12/19	1335		✓	W	12 WW 24	8	3	3	1	1				
6	12 WW 05	12/19	0845		✓	W	12 WW 05	8	3	3	1	1				
7	12 WW 24-QC	12/19	1335		✓	W	12 WW 24	8	3	3	1	1				
8	29 WW 40	12/19	1530		✓	W	29 WW 40	3	3							
9																
10																
Transfers Relinquished By (Signature): <i>[Signature]</i>		Date/Time: 1700 12-19-06		Transfers Accepted By (Signature): UPS		Date/Time: 1700 12-19-06		Special Instructions: Acc dated Sp intact Cool down 2 bgs								
								FedEx Airbill No.: 12667250198794856								
								Sampler's Signature: <i>[Signature]</i>								
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

00092935

Date: 12-20-06 Client: ShAW-TX 1100156 STARLITE DRIVE
MARIETTA, OH
45750
(740) 373-4071Shipped By: () Fed-Ex ☒ UPS () DHL () KEMRON () Client () OtherOpened By: BlgLogged By: Blg Login # L06 12485IR Temp Gun: () D ☒ LG

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	116	2	1266V72501987	94856	
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

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-02 307590 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Samplenum **Container ID** **Products**
L0612485-02 307591 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Samplenum **Container ID** **Products**
L0612485-04 307600 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	02-JAN-2007 07:47	JS	DIH

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-05 307601 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF

Samplenum **Container ID** **Products**
L0612485-03 307593 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF

Samplenum **Container ID** **Products**
L0612485-02 307589 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF
4	ANALYZ	A1	WET	27-DEC-2006 10:19	DIH	JS
5	STORE	WET	A1	02-JAN-2007 07:47	JS	DIH

Samplenum **Container ID** **Products**
L0612485-01 307585 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-01 307587 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Samplenum **Container ID** **Products**
L0612485-05 307604 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	27-DEC-2006 07:21	BRG	DIH

Samplenum **Container ID** **Products**
L0612485-06 307606 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-02 307592 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	27-DEC-2006 07:21	BRG	DIH

Samplenum **Container ID** **Products**
L0612485-03 307596 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	27-DEC-2006 07:21	BRG	DIH

Samplenum **Container ID** **Products**
L0612485-06 307607 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Samplenum **Container ID** **Products**
L0612485-06 307605 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-07 307609 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Samplenum **Container ID** **Products**
L0612485-04 307599 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Samplenum **Container ID** **Products**
L0612485-06 307608 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	02-JAN-2007 07:47	JS	DIH

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-04 307597 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	L1	WET	20-DEC-2006 12:29	DSF	BRG
3	STORE	WET	A1	21-DEC-2006 09:40	JKT	DSF

Samplenum **Container ID** **Products**
L0612485-01 307586 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Samplenum **Container ID** **Products**
L0612485-03 307594 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-04 307598 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Samplenum **Container ID** **Products**
L0612485-01 307588 TIC TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	W1	WET	26-DEC-2006 13:38	DIH	BRG
3	STORE	WET	A1	27-DEC-2006 07:21	BRG	DIH

Samplenum **Container ID** **Products**
L0612485-03 307595 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Login: L0612485
Account: 2773
Project: 2773.025
Samples: 7
Due Date: 29-DEC-2006

Samplenum **Container ID** **Products**
L0612485-05 307602 826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:54	FJB	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	21-DEC-2006 11:55	FJB	JKT

Samplenum **Container ID** **Products**
L0612485-05 307603 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			20-DEC-2006 12:24	BRG	
2	ANALYZ	V1	ORG4	20-DEC-2006 14:32	JLS	JS



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

Laboratory Report Number: L08020032

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

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Kathy Albertson - Team Chemist/Data Specialist

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tlong@kemron-lab.com

This report was reviewed on February 08, 2008.

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 February 08, 2008.

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 55 pages.

Protecting Our Environmental Future



KEMRON REPORT L08020032
PREPARED FOR Shaw E I, Inc.
WORK ID: LONGHORN AAP KARNACK TX

1.0 Introduction	3
2.1 Volatiles Data	9
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2.1.1.1 Summary Data	11
2.1.1.2 QC Summary Data	17
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1.0 Introduction

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L08020032

CHAIN OF CUSTODY: The chain of custody number was 10236.

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: 06-FEB-08

<i>Stephanie Mossburg</i>

Laboratory Data Package Cover Page

00092948

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

February 8, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

KEMRON Environmental Services
Laboratory Review Checklist

Laboratory Name: KEMRON
Laboratory Log Number: L08020032
Project Name: 798-LONGHORN
Method: 8260B
Prep Batch Number(s): 262326
Reviewer Name: MIKE D. ALBERTSON
LRC Date: February 08, 2008

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?			✓		
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?	✓				

00092950

Description	Yes	No	NA(1)	NR(2)	ER(3)
Standards documentation					
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?	✓				

00092951

EXCEPTIONS REPORT

ER# - Description

#1: Dichlorodifluoromethane exceeded the upper advisory limit.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

2.1 Volatiles Data

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data

LABORATORY REPORT

L08020032

00092955

02/08/08 15:14

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 Drive Suite 4N

Houston, TX 77042

Attention: Larry Duty

Project Number: 2773.025

Project: Longhorn AAP

Site: LHAAP

P.O. Number: 322255 OP

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
29WW37-020108	L08020032-01	8260B	1	02-FEB-08
29WW39-020108	L08020032-02	8260B	1	02-FEB-08

Report Number: **L08020032**Report Date : **February 8, 2008**

00092956

Sample Number: **L08020032-01**
 Client ID: **29WW37-020108**
 Matrix: **Water**
 Workgroup Number: **WG262326**
 Collect Date: **02/01/2008 13:35**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **02/05/2008 12:26**
 Cal Date: **12/11/2007 14:48**
 Run Date: **02/05/2008 12:26**
 File ID: **6M72734**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2	1.03	J	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

1 of 4

Report Number: **L08020032**Report Date : **February 8, 2008**

00092957

Sample Number: **L08020032-01**
 Client ID: **29WW37-020108**
 Matrix: **Water**
 Workgroup Number: **WG262326**
 Collect Date: **02/01/2008 13:35**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **02/05/2008 12:26**
 Cal Date: **12/11/2007 14:48**
 Run Date: **02/05/2008 12:26**
 File ID: **6M72734**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	99.6	86	118		
1,2-Dichloroethane-d4	99.8	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	103	86	115		

U Not detected at or above adjusted sample detection limit

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

Report Number: L08020032

Report Date : February 8, 2008

00092958

Sample Number: L08020032-02
 Client ID: 29WW39-020108
 Matrix: Water
 Workgroup Number: WG262326
 Collect Date: 02/01/2008 15:30
 Sample Tag: 01

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

Instrument: HPMS6
 Prep Date: 02/05/2008 11:54
 Cal Date: 12/11/2007 14:48
 Run Date: 02/05/2008 11:54
 File ID: 6M72733

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

3 of 4

Report Number: **L08020032**Report Date : **February 8, 2008**

00092959

Sample Number: **L08020032-02**
 Client ID: **29WW39-020108**
 Matrix: **Water**
 Workgroup Number: **WG262326**
 Collect Date: **02/01/2008 15:30**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **02/05/2008 11:54**
 Cal Date: **12/11/2007 14:48**
 Run Date: **02/05/2008 11:54**
 File ID: **6M72733**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	100	86	118		
1,2-Dichloroethane-d4	98.6	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	102	86	115		

U Not detected at or above adjusted sample detection limit

2.1.1.2 QC Summary Data

Example 8260 Calculations

1.0 Calculating the Response Factor (RF) from the initial calibration (ICAL) data:

$$RF = [(Ax) (Cis)] / [(Ais) (Cx)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured:	3399156
Cis = Concentration of the specific internal standard (ug/mL)	25
Ais = Area of the characteristic ion of the specific internal standard	846471
Cx = Concentration of the compound in the standard being measured (ug/mL)	100

RF = Calculated Response Factor **1.0039**

2.0 Calculating the concentration (C) of a compound in water using the average RF: *

$$Cx = [(Ax) (Cis) (Vn)(D)] / [(Ais) (RF) (Vs)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Vs = Purge volume of sample (mL)	10
Vn = Nominal purge volume of sample (mL) (10.0 mL)	10
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

3.0 Calculating the concentration (C) of a compound in soil using the average RF: *

$$Cx = [(Ax) (Cis) (Wn)(D)] / [(Ais) (RF) (Ws)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Ws = Weight of sample purged (g)	5
Wn = Nominal purge weight (g) (5.0 g)	5
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

Dry weight correction:

Percent solids (PCT_S)	50
Cd = (Cx) (100)/PCT_S	254.4856

* Concentrations appearing on the instrument quantitation reports are on-column results and do not take into account initial volume, final volume, and the dilution factor.

4.0 Concentration from Linear Regression

Step 1: Retrieve Curve Data From Plot, $y = mx + b$

y = response ratio = response of analyte / response of IS = Ax/Ais

x = amount ratio = concentration analyte/concentration internal standard = Cx / Cis

m = slope from curve = 0.213

b = intercept from curve = - 0.00642

Step 2: Calculate y from Quantitation Report

$$y = 86550/593147 = 0.1459$$

Step 3: Solve for x

$$x = (y - b)/m = [(0.1459 - (-0.00642))/0.213] = 0.7152$$

Step 4: Solve for analyte concentration Cx

$$Cx = Cis (x) = (25.0)(0.7152) = 17.88$$

Example Spreadsheet Calculation:

Slope from curve, m:	0.213
Intercept from curve, b:	-0.00642
Area of analyte, Ax:	86550
Area of Internal Standard, Ais:	593147
Concentration of IS, Cis	25.00
Response Ratio:	0.145917
Amount Ratio:	0.715195
Concentration:	17.87988
Units of Internal Standard:	ug/L

5.0 Concentration from Quadratic Regression**Step 1 - Retrieve Curve Data from Plot, $y = Ax^2 + Bx + C$**

Where:

$$Ax^2 + Bx + (C - y) = 0$$

A, B, C = constants from the ICAL quadratic regression

y = Response ratio = Area of analyte/Area of internal standard (IS)

x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

$$y = Ax/Ais$$

Step 3: Solve for x using the quadratic formula

$$Ax^2 + Bx + C - y = 0$$

$$x = \frac{b \pm \sqrt{(b^2 - 4a(c - y))}}{2a} \quad (\text{Two possible solutions})$$

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

Example Spreadsheet Calculation:

Value of A from plot:	-0.00629
Value of B from plot:	0.511
Value of C from plot:	-0.0276
Area of unknown from quantitation report:	293821
Area of IS from quantitation report:	784848
Response ratio, y:	0.374367
C - y:	-0.40197
Root 1 - Computed amount ratio, X1:	80.44567
Root 2 - Computed amount ratio, X2:	0.794396 use this solution
Concentration of IS, Cis:	25.00
Concentration of analyte, Cx:	19.86 ug/L

KEMRON Environmental Services

Instrument Run Log

00092963

Instrument: HPMS6 Dataset: 121107
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 624 SOP: MSV01 Rev: 9
 Method: 5030B SOP: PAT01 Rev: 10
 Maintenance Log ID: 22146

Internal Standard: STD23486 Surrogate Standard: STD23588
 CCV: STD23557 LCS: STD23438 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG258140

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M71590	SYSTEM BLANK	NA	1	1		12/11/07 06:55
2	6M71591	BFB STD CHK	NA	1	1	STD23459	12/11/07 07:26
3	6M71592	50ug/L STD CHECK	NA	1	1	STD23522	12/11/07 07:55
4	6M71593	SYSTEM BLANK	NA	1	1		12/11/07 08:30
5	6M71594	WG258140-01 BFB 50ng STD 8260	NA	1	1	STD23459	12/11/07 09:08
6	6M71595	WG258140-01 BFB 50ng STD 8260	NA	1	1	STD23459	12/11/07 09:24
7	6M71596	WG258140-02 0.30ug/L STD 8260	NA	1	1	STD23557	12/11/07 09:50
8	6M71597	WG258140-03 0.40ug/L STD 8260	NA	1	1	STD23557	12/11/07 10:23
9	6M71598	WG258140-04 1ug/L STD 8260	NA	1	1	STD23557	12/11/07 10:55
10	6M71599	WG258140-05 2ug/L STD 8260	NA	1	1	STD23557	12/11/07 11:29
11	6M71600	WG258140-06 5ug/L STD 8260	NA	1	1	STD23557	12/11/07 12:02
12	6M71601	WG258140-07 20ug/L STD 8260	NA	1	1	STD23557	12/11/07 12:34
13	6M71602	WG258140-08 50ug/L STD 8260	NA	1	1	STD23557	12/11/07 13:09
14	6M71603	WG258140-09 100ug/L STD 8260	NA	1	1	STD23557	12/11/07 13:43
15	6M71604	WG258140-10 200ug/L STD 8260	NA	1	1	STD23557	12/11/07 14:16
16	6M71605	WG258140-11 300ug/L STD 8260	NA	1	1	STD23557	12/11/07 14:48
17	6M71606	SYSTEM BLANK	NA	1	1		12/11/07 15:20
18	6M71607	SYSTEM BLANK	NA	1	1		12/11/07 15:52
19	6M71608	WG258140-12 20ug/L ALT SRC STD 8260	NA	1	1	STD23438	12/11/07 16:24
20	6M71609	SYSTEM BLANK	NA	1	1		12/11/07 16:55
21	6M71610	SYSTEM BLANK	NA	1	1		12/11/07 17:27
22	6M71611	SYSTEM BLANK	NA	1	1		12/11/07 17:59
23	6M71612	SYSTEM BLANK	NA	1	1		12/11/07 18:31
24	6M71613	SYSTEM BLANK	NA	1	1		12/11/07 19:03

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5	X			
File ID: 6M71594				
Tune failed/DNR				
19	X			
File ID: 6M71608				
DNR				

Approved: December 17, 2007

Page: 1



KEMRON Environmental Services

Instrument Run Log

00092964

Instrument: HPMS6 Dataset: 121207
 Analyst1: CMS Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 10
 Method: 5030B SOP: PAT01 Rev: 10

Maintenance Log ID: 22149

Internal Standard: STD23486 Surrogate Standard: STD23588
 CCV: STD23557 LCS: STD23438 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG258140;WG258265

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M71615	SYSTEM BLANK	NA	1	1		12/12/07 08:53
2	6M71616	SYSTEM BLANK	NA	1	1		12/12/07 09:25
3	6M71617	WG258264-01 BFB 50ng STD 8260	NA	1	1	STD23459	12/12/07 09:56
4	6M71618	WG258264-02 50ug/L STD 8260	NA	1	1	STD23557	12/12/07 10:18
5	6M71619	WG258266-01 100ug/L A9FOO STD 8260	NA	1	1	STD23433	12/12/07 10:52
6	6M71620	WG258265-01 VBLK1212 BLANK 8260	NA	1	1		12/12/07 11:24
7	6M71621	WG258140-12 20ug/L ALT SRC STD 8260	NA	1	1	STD23438	12/12/07 11:56
8	6M71622	WG258265-02 20ug/L LCS STD 8260	NA	1	1	STD23438	12/12/07 12:28
9	6M71623	WG258265-03 20ug/L LCSDUP STD 8260	NA	1	1	STD23438	12/12/07 12:59
10	6M71624	WG258265-04 100ug/L A9FOOLCS STD 82	NA	1	1	STD23434	12/12/07 13:31
11	6M71625	WG258265-05 100ug/L A9FOOLCSDUP ST	NA	1	1	STD23434	12/12/07 14:03
12	6M71626	L0712285-01 A 826-SPE	=7	1	1		12/12/07 14:35
13	6M71627	L0712285-10 A 826-SPE	=7	1	1		12/12/07 15:07
14	6M71628	L0712285-11 A 826-SPE	=7	1	1		12/12/07 15:38
15	6M71629	L0712285-02 A 826-SPE	=7	1	1		12/12/07 16:10
16	6M71630	L0712285-03 A 826-SPE	=7	1	1		12/12/07 16:42
17	6M71631	L0712285-04 A 826-SPE	=7	1	1		12/12/07 17:14
18	6M71632	L0712285-05 A 826-SPE	=7	1	1		12/12/07 17:45
19	6M71633	L0712285-06 A 826-SPE	=7	1	1		12/12/07 18:17
20	6M71634	L0712285-07 A 826-SPE	=7	1	1		12/12/07 18:49
21	6M71635	L0712285-09 A 826-SPE	=7	1	1		12/12/07 19:21
22	6M71636	L0712285-12 A 826-SPE	=7	1	1		12/12/07 19:53
23	6M71637	L0712285-13 A 826-SPE	=7	1	1		12/12/07 20:25
24	6M71638	L0712285-14 A 826-SPE	=7	1	1		12/12/07 20:56
25	6M71639	L0712285-08 A 1000X 826-SPE D1	=7	1	1000		12/12/07 21:28
26	6M71640	SYSTEM BLANK	NA	1	1		12/12/07 22:00

Comments

Seq.	Rerun	Dil.	Reason	Analytes
25	X	100	Analyzed too dilute	
File ID: 6M71639				

Approved: December 14, 2007

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KEMRON Environmental Services

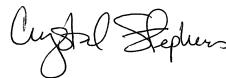
Data Checklist

00092965

Date: 11-DEC-2007
 Analyst: CMS
 Analyst: NA
 Method: 8260B624
 Instrument: HPMS6
 Curve Workgroup: NA
 Runlog ID: 19809
 Analytical Workgroups: WG258140

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	X
Manual Integrations	NA
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:
13-DEC-2007



Secondary Reviewer:
17-DEC-2007



Generated: DEC - 17 - 2007 13:38:04

KEMRON Environmental Services

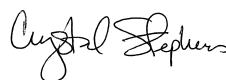
Data Checklist

00092966

Date: 12-DEC-2007
 Analyst: CMS
 Analyst: NA
 Method: 8260B
 Instrument: HPMS6
 Curve Workgroup: NA
 Runlog ID: 19812
 Analytical Workgroups: WG258140;WG258265

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	X
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	NA
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:
13-DEC-2007



Secondary Reviewer:
14-DEC-2007



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KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00092967

Analytical Method: 8260B
Login Number: L08020032

AAB#: WG262326

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
29WW39-020108	02/01/08	02/02/08	02/05/08	14	3.85	02/05/08	14	3.85	
29WW37-020108	02/01/08	02/02/08	02/05/08	14	3.95	02/05/08	14	3.95	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

00092968

Login Number: L08020032

Method: 8260

Instrument Id: HPMS6

CAL ID: HPMS6 - 11-DEC-07

Workgroup (AAB#): WG262326

Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08020032-01	1.00	01	99.8	99.6	103	104
L08020032-02	1.00	01	98.6	100	102	104
WG262326-01	1.00	01	95.7	98.3	103	104
WG262326-02	1.00	01	92.6	99.4	101	102
WG262326-03	1.00	01	93.2	100	101	103

Surrogates	Surrogate Limits		
1 - 1,2-Dichloroethane-d4	80	-	120
2 - Dibromofluoromethane	86	-	118
3 - 4-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

00092969

Login Number: L08020032
Blank File ID: 6M72727
Prep Date: 02/05/08 08:43
Analyzed Date: 02/05/08 08:43
Analyst: CMS

Work Group: WG262326
Blank Sample ID: WG262326-01
Instrument ID: HPMS6
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG262326-02	6M72728	02/05/08 09:14	01
LCS2	WG262326-03	6M72729	02/05/08 09:46	01
29WW39-020108	L08020032-02	6M72733	02/05/08 11:54	01
29WW37-020108	L08020032-01	6M72734	02/05/08 12:26	01

METHOD BLANK REPORT

00092970

Login Number: L08020032 Prep Date: 02/05/08 08:43 Sample ID: WG262326-01
 Instrument ID: HPMS6 Run Date: 02/05/08 08:43 Prep Method: 5030B
 File ID: 6M72727 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG262326 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6-11-DEC-07

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromobenzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.500	1.00	0.500	1	U
Bromomethane	0.500	1.00	0.500	1	U
2-Butanone	2.50	10.0	2.50	1	U
n-Butylbenzene	0.250	1.00	0.250	1	U
sec-Butylbenzene	0.250	1.00	0.250	1	U
tert-Butylbenzene	0.250	1.00	0.250	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chlorodibromomethane	0.250	1.00	0.250	1	U
Chloroethane	0.500	1.00	0.500	1	U
2-Chloroethyl vinyl ether	2.00	10.0	2.00	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.250	1.00	0.250	1	U
2-Chlorotoluene	0.125	1.00	0.125	1	U
4-Chlorotoluene	0.250	1.00	0.250	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
Dibromomethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.200	1.00	0.200	1	U
1,3-Dichloropropane	0.200	1.00	0.200	1	U
2,2-Dichloropropane	0.250	1.00	0.250	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
1,1-Dichloropropene	0.250	1.00	0.250	1	U
Ethylbenzene	0.250	1.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Hexachlorobutadiene	0.250	1.00	0.372	1	J

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 Version 1.5 PDF File ID: 1012417
 Report generated 02/05/2008 15:15

METHOD BLANK REPORT

00092971

Login Number: L08020032 Prep Date: 02/05/08 08:43 Sample ID: WG262326-01
 Instrument ID: HPMS6 Run Date: 02/05/08 08:43 Prep Method: 5030B
 File ID: 6M72727 Analyst: CMS Method: 8260B
 Workgroup (AAB#): WG262326 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 11-DEC-07

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Isopropylbenzene	0.250	1.00	0.250	1	U
p-Isopropyltoluene	0.250	1.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Naphthalene	0.200	1.00	0.318	1	J
n-Propylbenzene	0.125	1.00	0.125	1	U
Styrene	0.125	1.00	0.125	1	U
1,1,1,2-Tetrachloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	1.00	0.125	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.125	1.00	0.465	1	J
1,2,4-Trichlorobenzene	0.200	1.00	0.322	1	J
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
1,2,3-Trichloropropane	0.500	1.00	0.500	1	U
1,2,4-Trimethylbenzene	0.250	1.00	0.250	1	U
1,3,5-Trimethylbenzene	0.250	1.00	0.250	1	U
Vinyl acetate	2.50	10.0	2.50	1	U
Vinyl chloride	0.250	1.00	0.250	1	U
o-Xylene	0.250	1.00	0.250	1	U
m-,p-Xylene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	98.3	86 - 118	PASS
1,2-Dichloroethane-d4	95.7	80 - 120	PASS
Toluene-d8	104	88 - 110	PASS
4-Bromofluorobenzene	103	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* Analyte concentration > RL

LABORATORY CONTROL SAMPLE (LCS)

00092972

Login Number: L08020032 Analyst: CMS Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG262326 Units: ug/L
QC Key: STD Lot #: STD24411

Sample ID: WG262326-02 LCS File ID: 6M72728 Run Date: 02/05/2008 09:14
Sample ID: WG262326-03 LCS2 File ID: 6M72729 Run Date: 02/05/2008 09:46

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	18.4	91.8	20.0	18.1	90.6	1.32	40 - 142	20	
Benzene	20.0	19.7	98.4	20.0	20.9	104	5.96	80 - 121	20	
Bromobenzene	20.0	20.7	104	20.0	22.2	111	6.64	80 - 120	20	
Bromochloromethane	20.0	20.9	104	20.0	21.7	109	4.14	65 - 130	20	
Bromodichloromethane	20.0	23.5	118	20.0	24.3	122	3.25	80 - 131	20	
Bromoform	20.0	21.0	105	20.0	21.9	109	3.89	70 - 130	20	
Bromomethane	20.0	20.8	104	20.0	22.3	112	6.93	30 - 145	20	
2-Butanone	20.0	15.5	77.5	20.0	16.5	82.5	6.21	30 - 150	20	
n-Butylbenzene	20.0	20.1	100	20.0	21.4	107	6.39	80 - 131	20	
sec-Butylbenzene	20.0	20.1	100	20.0	21.3	106	5.89	80 - 127	20	
tert-Butylbenzene	20.0	19.1	95.3	20.0	20.5	103	7.33	80 - 126	20	
Carbon disulfide	20.0	20.9	105	20.0	22.3	112	6.56	58 - 138	20	
Carbon tetrachloride	20.0	21.5	107	20.0	22.8	114	6.24	65 - 140	20	
Chlorobenzene	20.0	19.5	97.4	20.0	20.6	103	5.52	80 - 120	20	
Chlorodibromomethane	20.0	20.7	103	20.0	21.5	108	4.13	60 - 135	20	
Chloroethane	20.0	19.0	95.2	20.0	20.3	101	6.22	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	18.0	90.0	20.0	18.9	94.4	4.71	58 - 151	20	
Chloroform	20.0	20.8	104	20.0	21.7	109	4.59	80 - 125	20	
Chloromethane	20.0	20.3	101	20.0	21.7	108	6.65	40 - 125	20	
2-Chlorotoluene	20.0	19.2	96.2	20.0	21.4	107	10.7	80 - 127	20	
4-Chlorotoluene	20.0	21.0	105	20.0	20.9	104	0.671	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	19.8	98.9	20.0	21.0	105	5.91	50 - 130	20	
1,2-Dibromoethane	20.0	20.4	102	20.0	21.0	105	2.75	80 - 125	20	
Dibromomethane	20.0	21.8	109	20.0	22.5	112	3.20	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.4	97.1	20.0	20.3	102	4.65	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.0	99.9	20.0	21.1	106	5.51	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.9	94.3	20.0	19.9	99.3	5.21	80 - 120	20	
Dichlorodifluoromethane	20.0	25.3	127	20.0	27.1	136	6.72	50 - 133	20	*
1,1-Dichloroethane	20.0	19.3	96.6	20.0	20.5	102	5.75	80 - 125	20	
1,2-Dichloroethane	20.0	19.8	99.2	20.0	20.6	103	3.67	80 - 129	20	
1,1-Dichloroethene	20.0	19.4	97.2	20.0	21.2	106	8.75	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.7	104	20.0	22.0	110	6.18	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.3	96.4	20.0	20.9	104	7.85	80 - 127	20	
1,2-Dichloropropane	20.0	19.3	96.5	20.0	20.2	101	4.48	80 - 120	20	
1,3-Dichloropropane	20.0	20.0	99.9	20.0	20.8	104	4.13	80 - 120	20	
2,2-Dichloropropane	20.0	20.8	104	20.0	21.9	109	5.07	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.0	100	20.0	20.7	103	3.34	70 - 130	20	
trans-1,3-Dichloropropene	20.0	19.3	96.4	20.0	20.0	100	3.95	80 - 130	20	
1,1-Dichloropropene	20.0	19.7	98.3	20.0	21.5	107	8.77	75 - 130	20	
Ethylbenzene	20.0	20.0	100	20.0	21.3	107	6.34	80 - 122	20	

LABORATORY CONTROL SAMPLE (LCS)

00092973

Login Number: L08020032 Analyst: CMS Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG262326 Units: ug/L
QC Key: STD Lot #: STD24411

Sample ID: WG262326-02 LCS File ID: 6M72728 Run Date: 02/05/2008 09:14
Sample ID: WG262326-03 LCS2 File ID: 6M72729 Run Date: 02/05/2008 09:46

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	15.8	79.2	20.0	17.8	88.9	11.5	55 - 130	20	
Hexachlorobutadiene	20.0	17.4	86.9	20.0	18.5	92.7	6.51	72 - 132	20	
Isopropylbenzene	20.0	18.6	92.9	20.0	19.8	99.0	6.38	80 - 122	20	
p-Isopropyltoluene	20.0	19.1	95.3	20.0	20.0	100	5.01	80 - 122	20	
4-Methyl-2-pentanone	20.0	18.1	90.3	20.0	18.1	90.6	0.366	64 - 140	20	
Methylene chloride	20.0	19.2	96.1	20.0	20.2	101	5.12	80 - 123	20	
Naphthalene	20.0	17.5	87.5	20.0	18.4	91.8	4.80	59 - 149	20	
n-Propylbenzene	20.0	20.5	103	20.0	21.8	109	5.92	80 - 129	20	
Styrene	20.0	20.3	101	20.0	21.1	105	3.97	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	22.5	113	20.0	23.7	118	4.91	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	20.6	103	20.0	21.5	107	4.19	79 - 125	20	
Tetrachloroethene	20.0	21.2	106	20.0	22.5	112	5.62	80 - 124	20	
Toluene	20.0	20.3	102	20.0	21.7	109	6.77	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	17.5	87.6	20.0	18.3	91.6	4.54	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	18.3	91.7	20.0	19.2	95.9	4.49	65 - 135	20	
1,1,1-Trichloroethane	20.0	22.0	110	20.0	23.7	118	7.07	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.8	104	20.0	21.3	107	2.58	80 - 125	20	
Trichloroethene	20.0	20.1	100	20.0	21.3	107	6.20	80 - 122	20	
Trichlorofluoromethane	20.0	17.3	86.6	20.0	18.5	92.5	6.61	62 - 151	20	
1,2,3-Trichloropropane	20.0	20.6	103	20.0	21.7	109	5.27	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	20.3	102	20.0	21.3	107	4.92	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	20.2	101	20.0	21.3	106	5.24	80 - 127	20	
Vinyl acetate	20.0	19.3	96.4	20.0	20.0	100	3.78	10 - 150	20	
Vinyl chloride	20.0	23.7	119	20.0	24.9	125	4.84	65 - 140	20	
o-Xylene	20.0	19.6	97.8	20.0	20.7	104	5.92	80 - 122	20	
m-, p-Xylene	40.0	40.2	100	40.0	42.6	107	5.88	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	99.4	100	86 - 118	PASS
1,2-Dichloroethane-d4	92.6	93.2	80 - 120	PASS
Toluene-d8	102	103	88 - 110	PASS
4-Bromofluorobenzene	101	101	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092974

BFB

Login Number: L08020032	Tune ID: WG258140-01
Instrument: HPMS6	Run Date: 12/11/2007
Analyst: CMS	Run Time: 09:24
Workgroup: WG258140	File ID: 6M71595
Cal ID: HPMS6-11-DEC-07	

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	19.2	8080	PASS
75.0	95.0	30.0	60.0	46.3	19450	PASS
95.0	95.0	100	100	100	41984	PASS
96.0	95.0	5.00	9.00	7.31	3070	PASS
173	174	0	2.00	0.326	108	PASS
174	95.0	50.0	100	79.0	33173	PASS
175	174	5.00	9.00	6.90	2288	PASS
176	174	95.0	101	98.0	32520	PASS
177	176	5.00	9.00	6.22	2024	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG258140-02	STD	01	12/11/2007 09:50	
WG258140-03	STD	01	12/11/2007 10:23	
WG258140-04	STD	01	12/11/2007 10:55	
WG258140-05	STD	01	12/11/2007 11:29	
WG258140-06	STD	01	12/11/2007 12:02	
WG258140-07	STD	01	12/11/2007 12:34	
WG258140-08	STD-CCV	01	12/11/2007 13:09	
WG258140-09	STD	01	12/11/2007 13:43	
WG258140-10	STD	01	12/11/2007 14:16	
WG258140-11	STD	01	12/11/2007 14:48	

* Sample past 12 hour tune limit

KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK

00092975

BFB

Login Number: L08020032 _____ Tune ID: WG258264-01 _____
Instrument: HPMS6 _____ Run Date: 12/12/2007 _____
Analyst: CMS _____ Run Time: 09:56 _____
Workgroup: WG258264 _____ File ID: 6M71617 _____
Cal ID: HPMS6-11-DEC-07 _____

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	19.7	4855	PASS
75.0	95.0	30.0	60.0	46.8	11566	PASS
95.0	95.0	100	100	100	24696	PASS
96.0	95.0	5.00	9.00	7.55	1864	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	77.7	19197	PASS
175	174	5.00	9.00	7.27	1396	PASS
176	174	95.0	101	98.1	18831	PASS
177	176	5.00	9.00	6.31	1189	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG258140-12	SSCV	01	12/12/2007 11:56	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

00092976

BFB

Login Number: L08020032	Tune ID: WG262325-01
Instrument: HPMS6	Run Date: 02/05/2008
Analyst: CMS	Run Time: 06:37
Workgroup: WG262325	File ID: 6M72723
	Cal ID: HPMS6-11-DEC-07

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	19.7	7329	PASS
75.0	95.0	30.0	60.0	45.8	17072	PASS
95.0	95.0	100	100	100	37280	PASS
96.0	95.0	5.00	9.00	7.14	2661	PASS
173	174	0	2.00	0.657	193	PASS
174	95.0	50.0	100	78.8	29378	PASS
175	174	5.00	9.00	7.16	2102	PASS
176	174	95.0	101	96.3	28301	PASS
177	176	5.00	9.00	6.77	1917	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG262326-01	BLANK	01	02/05/2008 08:43	
WG262326-02	LCS	01	02/05/2008 09:14	
WG262326-03	LCS2	01	02/05/2008 09:46	
L08020032-02	29WW39-020108	01	02/05/2008 11:54	
L08020032-01	29WW37-020108	01	02/05/2008 12:26	

* Sample past 12 hour tune limit

INITIAL CALIBRATION SUMMARY

00092977

Login Number: L08020032
 Analytical Method: 8260B
 ICAL Workgroup: WG258140

Instrument ID: HPMS6
 Initial Calibration Date: 11-DEC-07 14:48
 Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3147	9.39		
1,2-Dichloropropane	CCC	0.1991	6.38		
Chloroform	CCC	0.4034	5.77		
Ethylbenzene	CCC	0.4468	8.35		
Toluene	CCC	1.170	8.34		
Vinyl Chloride	CCC	0.1551	17.8		1.00
1,1,2,2-Tetrachloroethane	SPCC	0.3344	4.87		
1,1-Dichloroethane	SPCC	0.4014	7.91		
Bromoform	SPCC	0.1213	28.1	0.999	
Chlorobenzene	SPCC	0.8398	8.32		
Chloromethane	SPCC	0.2055	6.85		
1,1,1,2-Tetrachloroethane		0.2693	11.5		
1,1,1-Trichloroethane		0.3459	10.7		
1,1,2-Trichloroethane		0.1872	3.47		
1,1-Dichloropropene		0.2926	10.3		
1,2,3-Trichlorobenzene		0.6424	11.4		
1,2,3-Trichloropropane		0.1081	7.86		
1,2,4-Trichlorobenzene		0.7847	10.1		
1,2,4-Trimethylbenzene		2.200	7.59		
1,2-Dibromo-3-Chloropropane		0.05552	14.4		
1,2-Dibromoethane		0.1904	4.68		
1,2-Dichlorobenzene		1.168	10.2		
1,2-Dichloroethane		0.2651	3.95		
1,3,5-Trimethylbenzene		2.076	7.92		
1,3-Dichlorobenzene		1.282	6.08		
1,3-Dichloropropane		0.3340	3.73		
1,4-Dichlorobenzene		1.376	12.4		
2,2-Dichloropropane		0.3408	12.6		
2-Butanone		0.04477	2.91		
2-Chloroethyl Vinyl Ether		0.08636	12.4		
2-Chlorotoluene		1.874	6.23		
2-Hexanone		0.09032	5.06		
4-Chlorotoluene		1.789	8.03		
4-Methyl-2-Pentanone		0.04007	5.97		
Acetone		0.03092	7.44		
Benzene		0.8377	7.66		
Bromobenzene		0.6123	4.86		
Bromochloromethane		0.1271	8.70		
Bromodichloromethane		0.2591	12.2		
Bromomethane		0.1825	4.60		
Carbon Disulfide		0.6218	5.58		
Carbon Tetrachloride		0.2778	18.0	1.00	
Chloroethane		0.1634	6.39		
Dibromochloromethane		0.2171	19.3		1.00
Dibromomethane		0.09898	13.8		

KEMRON FORMS - Modified 01/18/2007
 Version 1.5 PDF File ID: 1012419
 Report generated 02/05/2008 15:15

INITIAL CALIBRATION SUMMARY

00092978

Login Number: **L08020032**
 Analytical Method: **8260B**
 ICAL Workgroup: **WG258140**

Instrument ID: **HPMS6**
 Initial Calibration Date: **11-DEC-07 14:48**
 Column ID: **F**

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD(R ²)
Dichlorodifluoromethane		0.2795	6.84		
Hexachlorobutadiene		0.4034	9.58		
Isopropylbenzene		1.339	8.77		
Methylene Chloride		0.3226	60.8		1.00
Naphthalene		1.253	10.0		
Styrene		0.9061	7.09		
Tetrachloroethene		0.3112	9.53		
Trichloroethene		0.2301	8.68		
Trichlorofluoromethane		0.4209	7.62		
Vinyl Acetate		0.2166	4.47		
cis-1,2-Dichloroethene		0.2342	7.16		
cis-1,3-Dichloropropene		0.3155	7.78		
m-,p-Xylene		0.5547	9.03		
n-Butylbenzene		2.118	9.22		
n-Propylbenzene		2.858	8.40		
o-Xylene		0.5504	7.75		
p-Isopropyltoluene		2.331	9.13		
sec-Butylbenzene		2.641	9.82		
tert-Butylbenzene		0.4788	8.48		
trans-1,2-Dichloroethene		0.2255	9.92		
trans-1,3-Dichloropropene		0.3529	9.46		

R = Correlation coefficient; 0.995 minimum

R² = Coefficient of determination; 0.99 minimum

INITIAL CALIBRATION DATA

00092979

Login Number: L08020032
 Analytical Method: 8260B

Instrument ID: HPMS6
 Initial Calibration Date: 11-DEC-07 14:48
 Column ID: F

Analyte	WG258140-02			WG258140-03			WG258140-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4318.00000	0.3151	1.00	9541.00000	0.2807
1,2-Dichloropropane	NA	NA	NA	0.400	2592.00000	0.1892	1.00	6219.00000	0.1830
Chloroform	0.300	4273.00000	0.4004	0.400	5845.00000	0.4265	1.00	12830.0000	0.3775
Ethylbenzene	NA	NA	NA	0.400	4945.00000	0.4896	1.00	11122.0000	0.4435
Toluene	NA	NA	NA	0.400	13043.0000	1.291	1.00	29303.0000	1.169
Vinyl Chloride	NA	NA	NA	0.400	2768.00000	0.2020	1.00	6190.00000	0.1821
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	1751.00000	0.3124	1.00	4558.00000	0.3259
1,1-Dichloroethane	NA	NA	NA	0.400	5922.00000	0.4322	1.00	12990.0000	0.3822
Bromoform	NA	NA	NA	NA	NA	NA	1.00	1903.00000	0.07590
Chlorobenzene	NA	NA	NA	0.400	9641.00000	0.9545	1.00	21122.0000	0.8423
Chloromethane	NA	NA	NA	0.400	3008.00000	0.2195	1.00	7240.00000	0.2130
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2549.00000	0.2524	1.00	5764.00000	0.2299
1,1,1-Trichloroethane	NA	NA	NA	0.400	4939.00000	0.3604	1.00	10310.0000	0.3033
1,1,2-Trichloroethane	NA	NA	NA	0.400	1871.00000	0.1852	1.00	4582.00000	0.1827
1,1-Dichloropropene	NA	NA	NA	0.400	4130.00000	0.3014	1.00	8498.00000	0.2500
1,2,3-Trichlorobenzene	NA	NA	NA	0.400	4203.00000	0.7498	1.00	9421.00000	0.6737
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1303.00000	0.09320
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	5121.00000	0.9135	1.00	11122.0000	0.7953
1,2,4-Trimethylbenzene	NA	NA	NA	0.400	13201.0000	2.355	1.00	31282.0000	2.237
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1929.00000	0.1910	1.00	4336.00000	0.1729
1,2-Dichlorobenzene	0.300	5777.00000	1.363	0.400	7525.00000	1.342	1.00	15849.0000	1.133
1,2-Dichloroethane	NA	NA	NA	0.400	3560.00000	0.2598	1.00	9148.00000	0.2691
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	12473.0000	2.225	1.00	27954.0000	1.999
1,3-Dichlorobenzene	NA	NA	NA	0.400	7605.00000	1.357	1.00	17901.0000	1.280
1,3-Dichloropropane	NA	NA	NA	0.400	3279.00000	0.3246	1.00	8506.00000	0.3392
1,4-Dichlorobenzene	0.300	7406.00000	1.747	0.400	8405.00000	1.499	1.00	19139.0000	1.369
2,2-Dichloropropane	NA	NA	NA	0.400	4082.00000	0.2979	1.00	9721.00000	0.2860
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	2219.00000	0.06530
2-Chlorotoluene	NA	NA	NA	0.400	11473.0000	2.047	1.00	26415.0000	1.889
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	11061.0000	1.973	1.00	24699.0000	1.766
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	12819.0000	0.9355	1.00	27564.0000	0.8110
Bromobenzene	0.300	2679.00000	0.6320	0.400	3436.00000	0.6130	1.00	8676.00000	0.6204
Bromochloromethane	NA	NA	NA	0.400	1421.00000	0.1037	1.00	4468.00000	0.1315
Bromodichloromethane	NA	NA	NA	0.400	3027.00000	0.2209	1.00	7736.00000	0.2276
Bromomethane	NA	NA	NA	0.400	2600.00000	0.1897	1.00	6428.00000	0.1891
Carbon Disulfide	NA	NA	NA	0.400	8296.00000	0.6054	1.00	20060.0000	0.5902
Carbon Tetrachloride	NA	NA	NA	0.400	3399.00000	0.2480	1.00	7429.00000	0.2186

KEMRON FORMS - Modified 10/13/2006
 Version 1.6 PDF File ID: 1012419
 Report generated 02/05/2008 15:15

INITIAL CALIBRATION DATA

00092980

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-05			WG258140-06			WG258140-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	20793.0000	0.3127	5.00	44329.0000	0.2637	20.0	233359.000	0.3475
1,2-Dichloropropane	2.00	13745.0000	0.2067	5.00	30498.0000	0.1814	20.0	144121.000	0.2146
Chloroform	2.00	26489.0000	0.3984	5.00	60153.0000	0.3578	20.0	286593.000	0.4268
Ethylbenzene	2.00	22194.0000	0.4448	5.00	49622.0000	0.3926	20.0	247708.000	0.4944
Toluene	2.00	59334.0000	1.189	5.00	129976.000	1.028	20.0	638718.000	1.275
Vinyl Chloride	2.00	11292.0000	0.1698	5.00	23170.0000	0.1378	20.0	102099.000	0.1520
1,1,2,2-Tetrachloroethane	2.00	9351.00000	0.3334	5.00	23257.0000	0.3240	20.0	105851.000	0.3650
1,1-Dichloroethane	2.00	26326.0000	0.3960	5.00	56240.0000	0.3345	20.0	284300.000	0.4234
Bromoform	2.00	4483.00000	0.08980	5.00	11986.0000	0.09480	20.0	65748.0000	0.1312
Chlorobenzene	2.00	42422.0000	0.8501	5.00	94004.0000	0.7437	20.0	449837.000	0.8979
Chloromethane	2.00	14944.0000	0.2248	5.00	30541.0000	0.1817	20.0	140698.000	0.2095
1,1,1,2-Tetrachloroethane	2.00	12503.0000	0.2506	5.00	29885.0000	0.2364	20.0	154488.000	0.3084
1,1,1-Trichloroethane	2.00	22094.0000	0.3323	5.00	47230.0000	0.2809	20.0	258801.000	0.3854
1,1,2-Trichloroethane	2.00	9329.00000	0.1869	5.00	23110.0000	0.1828	20.0	101297.000	0.2022
1,1-Dichloropropene	2.00	18975.0000	0.2854	5.00	41313.0000	0.2458	20.0	219784.000	0.3273
1,2,3-Trichlorobenzene	2.00	19144.0000	0.6826	5.00	45507.0000	0.6340	20.0	200723.000	0.6922
1,2,3-Trichloropropane	2.00	2857.00000	0.1019	5.00	8046.00000	0.1121	20.0	34674.0000	0.1196
1,2,4-Trichlorobenzene	2.00	23030.0000	0.8211	5.00	52727.0000	0.7346	20.0	246339.000	0.8495
1,2,4-Trimethylbenzene	2.00	61956.0000	2.209	5.00	140428.000	1.957	20.0	701435.000	2.419
1,2-Dibromo-3-Chloropropane	2.00	1147.00000	0.04090	5.00	3777.00000	0.05260	20.0	18408.0000	0.06350
1,2-Dibromoethane	2.00	9409.00000	0.1886	5.00	23819.0000	0.1884	20.0	102450.000	0.2045
1,2-Dichlorobenzene	2.00	32194.0000	1.148	5.00	75024.0000	1.045	20.0	353391.000	1.219
1,2-Dichloroethane	2.00	18261.0000	0.2747	5.00	42362.0000	0.2520	20.0	188957.000	0.2814
1,3,5-Trimethylbenzene	2.00	58666.0000	2.092	5.00	130889.000	1.824	20.0	669236.000	2.308
1,3-Dichlorobenzene	2.00	36071.0000	1.286	5.00	83050.0000	1.157	20.0	402221.000	1.387
1,3-Dichloropropane	2.00	16697.0000	0.3346	5.00	41039.0000	0.3247	20.0	180665.000	0.3606
1,4-Dichlorobenzene	2.00	37986.0000	1.354	5.00	85930.0000	1.197	20.0	409479.000	1.412
2,2-Dichloropropane	2.00	23173.0000	0.3485	5.00	48491.0000	0.2885	20.0	257328.000	0.3832
2-Butanone	NA	NA	NA	5.00	7353.00000	0.04370	20.0	30500.0000	0.04540
2-Chloroethyl Vinyl Ether	2.00	5359.00000	0.08060	5.00	14461.0000	0.08600	20.0	62147.0000	0.09250
2-Chlorotoluene	2.00	53244.0000	1.898	5.00	120964.000	1.685	20.0	570476.000	1.967
2-Hexanone	NA	NA	NA	5.00	10750.0000	0.08500	20.0	47725.0000	0.09530
4-Chlorotoluene	2.00	50866.0000	1.814	5.00	111974.000	1.560	20.0	567680.000	1.958
4-Methyl-2-Pentanone	NA	NA	NA	5.00	6247.00000	0.03720	20.0	27806.0000	0.04140
Acetone	NA	NA	NA	5.00	5556.00000	0.03310	20.0	21546.0000	0.03210
Benzene	2.00	57042.0000	0.8580	5.00	121851.000	0.7248	20.0	594781.000	0.8857
Bromobenzene	2.00	17169.0000	0.6122	5.00	39296.0000	0.5475	20.0	190875.000	0.6582
Bromochloromethane	2.00	8612.00000	0.1295	5.00	20212.0000	0.1202	20.0	93498.0000	0.1392
Bromodichloromethane	2.00	16414.0000	0.2469	5.00	38010.0000	0.2261	20.0	192189.000	0.2862
Bromomethane	2.00	12211.0000	0.1837	5.00	27477.0000	0.1634	20.0	120774.000	0.1799
Carbon Disulfide	2.00	41636.0000	0.6262	5.00	98955.0000	0.5886	20.0	453958.000	0.6760
Carbon Tetrachloride	2.00	16235.0000	0.2442	5.00	36731.0000	0.2185	20.0	217782.000	0.3243

KEMRON FORMS - Modified 10/13/2006
Version 1.6 PDF File ID: 1012419
Report generated 02/05/2008 15:15

INITIAL CALIBRATION DATA

00092981

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-08			WG258140-09			WG258140-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	588572.000	0.3452	100	1144549.00	0.3327	200	2316516.00	0.3197
1,2-Dichloropropane	50.0	354087.000	0.2077	100	714158.000	0.2076	200	1469825.00	0.2028
Chloroform	50.0	718557.000	0.4214	100	1427538.00	0.4149	200	2950035.00	0.4071
Ethylbenzene	50.0	601852.000	0.4694	100	1173981.00	0.4393	200	2322523.00	0.4007
Toluene	50.0	1571755.00	1.226	100	3058981.00	1.145	200	6031740.00	1.041
Vinyl Chloride	50.0	246939.000	0.1448	100	459454.000	0.1335	200	858916.000	0.1185
1,1,2,2-Tetrachloroethane	50.0	260970.000	0.3418	100	574163.000	0.3460	200	1108486.00	0.3263
1,1-Dichloroethane	50.0	724530.000	0.4249	100	1430189.00	0.4157	200	2916986.00	0.4026
Bromoform	50.0	181620.000	0.1417	100	430071.000	0.1609	200	898390.000	0.1550
Chlorobenzene	50.0	1100937.00	0.8587	100	2185616.00	0.8178	200	4367891.00	0.7536
Chloromethane	50.0	345282.000	0.2025	100	669772.000	0.1947	200	1435953.00	0.1982
1,1,1,2-Tetrachloroethane	50.0	384824.000	0.3002	100	796068.000	0.2979	200	1615131.00	0.2787
1,1,1-Trichloroethane	50.0	642178.000	0.3766	100	1269986.00	0.3691	200	2602521.00	0.3592
1,1,2-Trichloroethane	50.0	239820.000	0.1871	100	503900.000	0.1885	200	1055723.00	0.1821
1,1-Dichloropropene	50.0	541708.000	0.3177	100	1066950.00	0.3101	200	2197936.00	0.3033
1,2,3-Trichlorobenzene	50.0	469102.000	0.6144	100	949949.000	0.5725	200	1765539.00	0.5197
1,2,3-Trichloropropane	50.0	83204.0000	0.1090	100	187387.000	0.1129	200	367993.000	0.1083
1,2,4-Trichlorobenzene	50.0	598367.000	0.7837	100	1192196.00	0.7185	200	2246156.00	0.6612
1,2,4-Trimethylbenzene	50.0	1763174.00	2.309	100	3531584.00	2.128	200	6751050.00	1.987
1,2-Dibromo-3-Chloropropane	50.0	45326.0000	0.05940	100	98406.0000	0.05930	200	194855.000	0.05740
1,2-Dibromoethane	50.0	247868.000	0.1933	100	524231.000	0.1961	200	1092590.00	0.1885
1,2-Dichlorobenzene	50.0	876761.000	1.148	100	1808745.00	1.090	200	3482201.00	1.025
1,2-Dichloroethane	50.0	454799.000	0.2667	100	914928.000	0.2659	200	1820863.00	0.2513
1,3,5-Trimethylbenzene	50.0	1689693.00	2.213	100	3354498.00	2.022	200	6553352.00	1.929
1,3-Dichlorobenzene	50.0	1016005.00	1.331	100	2100374.00	1.266	200	4056478.00	1.194
1,3-Dichloropropane	50.0	426797.000	0.3329	100	893328.000	0.3343	200	1859356.00	0.3208
1,4-Dichlorobenzene	50.0	1021787.00	1.338	100	2118577.00	1.277	200	4041495.00	1.190
2,2-Dichloropropane	50.0	647976.000	0.3800	100	1293934.00	0.3761	200	2654557.00	0.3663
2-Butanone	50.0	75306.0000	0.04420	100	160037.000	0.04650	200	330981.000	0.04570
2-Chloroethyl Vinyl Ether	50.0	153179.000	0.08980	100	327262.000	0.09510	200	690059.000	0.09520
2-Chlorotoluene	50.0	1470752.00	1.926	100	3039029.00	1.832	200	5937246.00	1.748
2-Hexanone	50.0	111774.000	0.08720	100	257542.000	0.09640	200	509678.000	0.08790
4-Chlorotoluene	50.0	1425888.00	1.867	100	2838569.00	1.711	200	5646685.00	1.662
4-Methyl-2-Pentanone	50.0	65786.0000	0.03860	100	147265.000	0.04280	200	306416.000	0.04230
Acetone	50.0	53664.0000	0.03150	100	110627.000	0.03220	200	216962.000	0.02990
Benzene	50.0	1469473.00	0.8618	100	2880420.00	0.8372	200	5706567.00	0.7875
Bromobenzene	50.0	475188.000	0.6223	100	995736.000	0.6001	200	2053872.00	0.6046
Bromochloromethane	50.0	229697.000	0.1347	100	455145.000	0.1323	200	908088.000	0.1253
Bromodichloromethane	50.0	482644.000	0.2831	100	1000601.00	0.2908	200	2111408.00	0.2914
Bromomethane	50.0	316504.000	0.1856	100	641351.000	0.1864	200	1317698.00	0.1818
Carbon Disulfide	50.0	1132867.00	0.6644	100	2184073.00	0.6348	200	4263886.00	0.5884
Carbon Tetrachloride	50.0	560188.000	0.3285	100	1113583.00	0.3237	200	2296662.00	0.3169

KEMRON FORMS - Modified 10/13/2006
Version 1.6 PDF File ID: 1012419
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INITIAL CALIBRATION DATA

00092982

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-11		
	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA
Chloroform	NA	NA	NA
Ethylbenzene	NA	NA	NA
Toluene	NA	NA	NA
Vinyl Chloride	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA
Bromoform	NA	NA	NA
Chlorobenzene	NA	NA	NA
Chloromethane	NA	NA	NA
1,1,1,2-Tetrachloroethane	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA
1,1-Dichloropropene	NA	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA
1,2,4-Trimethylbenzene	NA	NA	NA
1,2-Dibromo-3-Chloropropane	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA
1,3,5-Trimethylbenzene	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA
1,3-Dichloropropane	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA
2-Butanone	300	457519.000	0.04310
2-Chloroethyl Vinyl Ether	NA	NA	NA
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	718025.000	0.09010
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	404677.000	0.03810
Acetone	300	283471.000	0.02670
Benzene	NA	NA	NA
Bromobenzene	NA	NA	NA
Bromochloromethane	NA	NA	NA
Bromodichloromethane	NA	NA	NA
Bromomethane	NA	NA	NA
Carbon Disulfide	NA	NA	NA
Carbon Tetrachloride	NA	NA	NA

KEMRON FORMS - Modified 10/13/2006

Version 1.6 PDF File ID: 1012419

Report generated 02/05/2008 15:15

INITIAL CALIBRATION DATA

00092983

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-02			WG258140-03			WG258140-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	5661.00000	0.1666
Dibromochloromethane	NA	NA	NA	0.400	1723.00000	0.1706	1.00	4292.00000	0.1712
Dibromomethane	NA	NA	NA	0.400	925.000000	0.06750	1.00	3229.00000	0.09500
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	10186.0000	0.2997
Hexachlorobutadiene	NA	NA	NA	0.400	2405.00000	0.4290	1.00	5166.00000	0.3694
Isopropylbenzene	NA	NA	NA	0.400	14202.0000	1.406	1.00	31034.0000	1.238
Methylene Chloride	NA	NA	NA	0.400	10520.0000	0.7677	1.00	14534.0000	0.4276
Naphthalene	NA	NA	NA	0.400	8086.00000	1.443	1.00	17395.0000	1.244
Styrene	NA	NA	NA	0.400	9096.00000	0.9005	1.00	21596.0000	0.8612
Tetrachloroethene	NA	NA	NA	0.400	3439.00000	0.3405	1.00	7440.00000	0.2967
Trichloroethene	NA	NA	NA	0.400	3117.00000	0.2275	1.00	7083.00000	0.2084
Trichlorofluoromethane	NA	NA	NA	0.400	5152.00000	0.3760	1.00	14539.0000	0.4278
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3040.00000	0.2218	1.00	7512.00000	0.2210
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4150.00000	0.3028	1.00	9874.00000	0.2905
m-,p-Xylene	NA	NA	NA	0.800	12332.0000	0.6104	2.00	27909.0000	0.5565
n-Butylbenzene	NA	NA	NA	0.400	12547.0000	2.238	1.00	27765.0000	1.986
n-Propylbenzene	NA	NA	NA	0.400	17278.0000	3.082	1.00	38638.0000	2.763
o-Xylene	NA	NA	NA	0.400	6067.00000	0.6006	1.00	13510.0000	0.5388
p-Isopropyltoluene	NA	NA	NA	0.400	14071.0000	2.510	1.00	30504.0000	2.181
sec-Butylbenzene	NA	NA	NA	0.400	16332.0000	2.914	1.00	33395.0000	2.388
tert-Butylbenzene	NA	NA	NA	0.400	2876.00000	0.5131	1.00	6110.00000	0.4369
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3486.00000	0.2544	1.00	6699.00000	0.1971
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3394.00000	0.3360	1.00	7552.00000	0.3012

INITIAL CALIBRATION DATA

00092984

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-05			WG258140-06			WG258140-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	10782.0000	0.1622	5.00	23606.0000	0.1404	20.0	112493.000	0.1675
Dibromochloromethane	2.00	9163.00000	0.1836	5.00	23910.0000	0.1892	20.0	123613.000	0.2467
Dibromomethane	2.00	6624.00000	0.09960	5.00	17156.0000	0.1021	20.0	74793.0000	0.1114
Dichlorodifluoromethane	2.00	19670.0000	0.2959	5.00	41712.0000	0.2481	20.0	198954.000	0.2963
Hexachlorobutadiene	2.00	11421.0000	0.4072	5.00	24385.0000	0.3397	20.0	133599.000	0.4607
Isopropylbenzene	2.00	66811.0000	1.339	5.00	144433.000	1.143	20.0	747564.000	1.492
Methylene Chloride	2.00	21217.0000	0.3191	5.00	38371.0000	0.2283	20.0	147621.000	0.2198
Naphthalene	2.00	36261.0000	1.293	5.00	89694.0000	1.250	20.0	401377.000	1.384
Styrene	2.00	44468.0000	0.8911	5.00	102151.000	0.8081	20.0	502986.000	1.004
Tetrachloroethene	2.00	15187.0000	0.3043	5.00	32257.0000	0.2552	20.0	173503.000	0.3463
Trichloroethene	2.00	16013.0000	0.2409	5.00	32315.0000	0.1922	20.0	167595.000	0.2496
Trichlorofluoromethane	2.00	29553.0000	0.4445	5.00	61438.0000	0.3655	20.0	301477.000	0.4490
Vinyl Acetate	2.00	13188.0000	0.1984	5.00	37132.0000	0.2209	20.0	151283.000	0.2253
cis-1,2-Dichloroethene	2.00	15357.0000	0.2310	5.00	34846.0000	0.2073	20.0	170774.000	0.2543
cis-1,3-Dichloropropene	2.00	19738.0000	0.2969	5.00	47611.0000	0.2832	20.0	231639.000	0.3450
m-,p-Xylene	4.00	56030.0000	0.5614	10.0	124614.000	0.4929	40.0	616572.000	0.6153
n-Butylbenzene	2.00	60092.0000	2.143	5.00	129795.000	1.808	20.0	693651.000	2.392
n-Propylbenzene	2.00	82124.0000	2.928	5.00	179860.000	2.506	20.0	924825.000	3.189
o-Xylene	2.00	27105.0000	0.5432	5.00	61079.0000	0.4832	20.0	302579.000	0.6040
p-Isopropyltoluene	2.00	64328.0000	2.294	5.00	143912.000	2.005	20.0	761342.000	2.626
sec-Butylbenzene	2.00	74229.0000	2.647	5.00	162475.000	2.264	20.0	864134.000	2.980
tert-Butylbenzene	2.00	13427.0000	0.4787	5.00	29121.0000	0.4057	20.0	152303.000	0.5252
trans-1,2-Dichloroethene	2.00	14830.0000	0.2231	5.00	31813.0000	0.1892	20.0	160999.000	0.2398
trans-1,3-Dichloropropene	2.00	16579.0000	0.3322	5.00	41375.0000	0.3273	20.0	199307.000	0.3978

INITIAL CALIBRATION DATA

00092985

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-08			WG258140-09			WG258140-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	287544.000	0.1686	100	582366.000	0.1693	200	1226976.00	0.1693
Dibromochloromethane	50.0	321330.000	0.2506	100	704750.000	0.2637	200	1515277.00	0.2614
Dibromomethane	50.0	179931.000	0.1055	100	370169.000	0.1076	200	747402.000	0.1031
Dichlorodifluoromethane	50.0	477616.000	0.2801	100	925591.000	0.2690	200	1939484.00	0.2677
Hexachlorobutadiene	50.0	330478.000	0.4328	100	672593.000	0.4053	200	1300118.00	0.3827
Isopropylbenzene	50.0	1864350.00	1.454	100	3680947.00	1.377	200	7345119.00	1.267
Methylene Chloride	50.0	367478.000	0.2155	100	711085.000	0.2067	200	1421799.00	0.1962
Naphthalene	50.0	931739.000	1.220	100	1910889.00	1.152	200	3538623.00	1.042
Styrene	50.0	1248094.00	0.9735	100	2519913.00	0.9429	200	5026206.00	0.8672
Tetrachloroethene	50.0	427600.000	0.3335	100	840009.000	0.3143	200	1730200.00	0.2985
Trichloroethene	50.0	417282.000	0.2447	100	833454.000	0.2422	200	1703115.00	0.2350
Trichlorofluoromethane	50.0	757390.000	0.4442	100	1488242.00	0.4326	200	3095726.00	0.4272
Vinyl Acetate	50.0	368954.000	0.2164	100	767506.000	0.2231	200	1562419.00	0.2156
cis-1,2-Dichloroethene	50.0	430039.000	0.2522	100	847798.000	0.2464	200	1737390.00	0.2398
cis-1,3-Dichloropropene	50.0	569610.000	0.3341	100	1163528.00	0.3382	200	2414519.00	0.3332
m-,p-Xylene	100	1499849.00	0.5849	200	2871232.00	0.5372	400	5554474.00	0.4792
n-Butylbenzene	50.0	1759252.00	2.304	100	3527443.00	2.126	200	6619809.00	1.949
n-Propylbenzene	50.0	2315444.00	3.032	100	4581905.00	2.761	200	8837594.00	2.601
o-Xylene	50.0	742313.000	0.5790	100	1461851.00	0.5470	200	2942931.00	0.5077
p-Isopropyltoluene	50.0	1933236.00	2.532	100	3879185.00	2.338	200	7354093.00	2.165
sec-Butylbenzene	50.0	2173686.00	2.847	100	4363500.00	2.630	200	8357624.00	2.460
tert-Butylbenzene	50.0	390791.000	0.5118	100	800130.000	0.4822	200	1618862.00	0.4765
trans-1,2-Dichloroethene	50.0	412757.000	0.2421	100	803074.000	0.2334	200	1629482.00	0.2249
trans-1,3-Dichloropropene	50.0	485059.000	0.3783	100	1020737.00	0.3819	200	2136081.00	0.3685

INITIAL CALIBRATION DATA

00092986

Login Number: L08020032

Instrument ID: HPMS6

Analytical Method: 8260B

Initial Calibration Date: 11-DEC-07 14:48

Column ID: F

Analyte	WG258140-11		
	CONC	RESP	RF
Chloroethane	NA	NA	NA
Dibromochloromethane	NA	NA	NA
Dibromomethane	NA	NA	NA
Dichlorodifluoromethane	NA	NA	NA
Hexachlorobutadiene	NA	NA	NA
Isopropylbenzene	NA	NA	NA
Methylene Chloride	NA	NA	NA
Naphthalene	NA	NA	NA
Styrene	NA	NA	NA
Tetrachloroethene	NA	NA	NA
Trichloroethene	NA	NA	NA
Trichlorofluoromethane	NA	NA	NA
Vinyl Acetate	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA
m-,p-Xylene	NA	NA	NA
n-Butylbenzene	NA	NA	NA
n-Propylbenzene	NA	NA	NA
o-Xylene	NA	NA	NA
p-Isopropyltoluene	NA	NA	NA
sec-Butylbenzene	NA	NA	NA
tert-Butylbenzene	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA

Login Number: L08020032 Run Date: 12/12/2007 Sample ID: WG258140-12
Instrument ID: HPMS6 Run Time: 11:56 Method: 8260B
File ID: 6M71621 Analyst: CMS QC Key: STD
Ical Workgroup: WG258140 Cal ID: HPMS6 - 11-DEC-07

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	20.7	ug/L	0.417	3.40	30	
1,1-Dichloroethene	CCC	20.0	22.1	ug/L	0.347	10.4	30	
1,2-Dichloropropane	CCC	20.0	21.1	ug/L	0.210	5.60	30	
Ethylbenzene	CCC	20.0	21.2	ug/L	0.475	6.20	30	
Toluene	CCC	20.0	21.2	ug/L	1.24	5.90	30	
Vinyl Chloride	CCC	20.0	21.5	ug/L	0.159	7.40	30	
Bromoform	SPCC	20.0	18.8	ug/L	0.135	5.80	30	
Chlorobenzene	SPCC	20.0	20.5	ug/L	0.859	2.30	30	
Chloromethane	SPCC	20.0	21.5	ug/L	0.220	7.30	30	
1,1-Dichloroethane	SPCC	20.0	20.9	ug/L	0.419	4.40	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	21.7	ug/L	0.363	8.50	30	
Acetone		20.0	23.1	ug/L	0.0357	15.5	30	
Benzene		20.0	21.3	ug/L	0.894	6.70	30	
Bromobenzene		20.0	20.8	ug/L	0.637	4.00	30	
Bromochloromethane		20.0	22.0	ug/L	0.140	9.90	30	
Bromodichloromethane		20.0	22.9	ug/L	0.296	14.3	30	
Bromomethane		20.0	22.9	ug/L	0.209	14.4	30	
2-Butanone		20.0	22.2	ug/L	0.0497	11.0	30	
n-Butylbenzene		20.0	22.0	ug/L	2.33	9.90	30	
sec-Butylbenzene		20.0	21.5	ug/L	2.84	7.40	30	
tert-Butylbenzene		20.0	21.1	ug/L	0.506	5.60	30	
Carbon Disulfide		20.0	18.8	ug/L	0.585	6.00	30	
Carbon Tetrachloride		20.0	20.6	ug/L	0.328	3.10	30	
Dibromochloromethane		20.0	19.7	ug/L	0.248	1.60	30	
Chloroethane		20.0	21.4	ug/L	0.175	7.00	30	
2-Chloroethyl Vinyl Ether		20.0	20.8	ug/L	0.0897	3.80	30	
2-Chlorotoluene		20.0	21.1	ug/L	1.98	5.70	30	
4-Chlorotoluene		20.0	19.9	ug/L	1.78	0.300	30	
1,2-Dibromo-3-Chloropropane		20.0	23.2	ug/L	0.0643	15.9	30	
1,2-Dibromoethane		20.0	21.4	ug/L	0.204	7.20	30	
Dibromomethane		20.0	22.8	ug/L	0.113	13.9	30	
1,2-Dichlorobenzene		20.0	20.1	ug/L	1.18	0.600	30	
1,3-Dichlorobenzene		20.0	20.4	ug/L	1.31	2.10	30	
1,4-Dichlorobenzene		20.0	19.3	ug/L	1.33	3.50	30	
Dichlorodifluoromethane		20.0	25.3	ug/L	0.353	26.3	30	
1,2-Dichloroethane		20.0	20.5	ug/L	0.272	2.70	30	
cis-1,2-Dichloroethene		20.0	21.9	ug/L	0.256	9.40	30	
trans-1,2-Dichloroethene		20.0	21.0	ug/L	0.237	5.10	30	
1,3-Dichloropropane		20.0	21.0	ug/L	0.351	5.00	30	
2,2-Dichloropropane		20.0	22.0	ug/L	0.376	10.2	30	
cis-1,3-Dichloropropene		20.0	21.5	ug/L	0.339	7.60	30	
trans-1,3-Dichloropropene		20.0	20.3	ug/L	0.358	1.40	30	

Login Number: L08020032 Run Date: 12/12/2007 Sample ID: WG258140-12
Instrument ID: HPMS6 Run Time: 11:56 Method: 8260B
File ID: 6M71621 Analyst: CMS QC Key: STD
Ical Workgroup: WG258140 Cal ID: HPMS6 - 11-DEC-07

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	21.8	ug/L	0.319	9.10	30	
2-Hexanone	20.0	21.2	ug/L	0.0957	5.90	30	
Hexachlorobutadiene	20.0	22.2	ug/L	0.448	11.1	30	
Isopropylbenzene	20.0	19.4	ug/L	1.30	3.20	30	
p-Isopropyltoluene	20.0	21.2	ug/L	2.47	6.00	30	
4-Methyl-2-Pentanone	20.0	20.8	ug/L	0.0418	4.20	30	
Methylene Chloride	20.0	20.5	ug/L	0.228	2.70	30	
Naphthalene	20.0	21.6	ug/L	1.35	8.00	30	
n-Propylbenzene	20.0	21.4	ug/L	3.06	7.10	30	
Styrene	20.0	21.4	ug/L	0.968	6.80	30	
1,1,1,2-Tetrachloroethane	20.0	22.2	ug/L	0.299	10.9	30	
Tetrachloroethene	20.0	21.2	ug/L	0.330	6.20	30	
1,2,3-Trichlorobenzene	20.0	20.8	ug/L	0.669	4.10	30	
1,2,4-Trichlorobenzene	20.0	21.1	ug/L	0.829	5.70	30	
1,1,1-Trichloroethane	20.0	21.8	ug/L	0.378	9.20	30	
1,1,2-Trichloroethane	20.0	21.0	ug/L	0.197	5.00	30	
Trichloroethene	20.0	22.0	ug/L	0.253	10.0	30	
Trichlorofluoromethane	20.0	17.5	ug/L	0.368	12.5	30	
1,2,3-Trichloropropane	20.0	21.9	ug/L	0.118	9.50	30	
1,2,4-Trimethylbenzene	20.0	21.8	ug/L	2.39	8.80	30	
1,3,5-Trimethylbenzene	20.0	21.4	ug/L	2.22	7.10	30	
Vinyl Acetate	20.0	18.4	ug/L	0.199	8.10	40	
o-Xylene	20.0	20.6	ug/L	0.567	3.10	30	
m-,p-Xylene	40.0	42.4	ug/L	0.588	6.10	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CONTINUING CALIBRATION VERIFICATION (CCV)

00092989

Login Number: L08020032 Run Date: 02/05/2008 Sample ID: WG262325-02
 Instrument ID: HPMS6 Run Time: 07:37 Method: 8260B
 File ID: 6M72725 Analvst: CMS QC Key: STD
 Workgroup (AAB#): WG262326 Cal ID: HPMS6 - 11-DEC-07

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	50.4	ug/L	0.407	0.760	20	
1,1-Dichloroethene	CCC	50.0	47.5	ug/L	0.299	4.98	20	
1,2-Dichloropropane	CCC	50.0	47.0	ug/L	0.187	5.97	20	
Ethylbenzene	CCC	50.0	49.0	ug/L	0.438	2.06	20	
Toluene	CCC	50.0	50.1	ug/L	1.17	0.237	20	
Vinyl Chloride	CCC	50.0	55.0	ug/L	0.156	9.90	20	
Bromoform	SPCC	50.0	52.3	ug/L	0.159	4.68	40	
Chlorobenzene	SPCC	50.0	48.0	ug/L	0.806	4.06	40	
Chloromethane	SPCC	50.0	49.8	ug/L	0.205	0.431	40	
1,1-Dichloroethane	SPCC	50.0	47.3	ug/L	0.379	5.50	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	49.2	ug/L	0.329	1.57	40	
Acetone		50.0	48.1	ug/L	0.0297	3.88	40	
Benzene		50.0	48.1	ug/L	0.806	3.78	40	
Bromobenzene		50.0	50.8	ug/L	0.622	1.53	40	
Bromochloromethane		50.0	50.6	ug/L	0.129	1.19	40	
Bromodichloromethane		50.0	55.4	ug/L	0.287	10.8	40	
Bromomethane		50.0	51.8	ug/L	0.189	3.66	40	
2-Butanone		50.0	43.5	ug/L	0.0390	13.0	40	
n-Butylbenzene		50.0	50.0	ug/L	2.12	0.0484	40	
sec-Butylbenzene		50.0	49.7	ug/L	2.63	0.546	40	
tert-Butylbenzene		50.0	48.7	ug/L	0.466	2.66	40	
Carbon Disulfide		50.0	52.6	ug/L	0.655	5.26	40	
Carbon Tetrachloride		50.0	52.2	ug/L	0.332	4.33	40	
Dibromochloromethane		50.0	50.2	ug/L	0.259	0.371	40	
Chloroethane		50.0	48.7	ug/L	0.159	2.55	40	
2-Chloroethyl Vinyl Ether		50.0	49.3	ug/L	0.0852	1.37	40	
2-Chlorotoluene		50.0	49.5	ug/L	1.85	1.02	40	
4-Chlorotoluene		50.0	49.4	ug/L	1.77	1.20	40	
1,2-Dibromo-3-Chloropropane		50.0	47.6	ug/L	0.0529	4.70	40	
1,2-Dibromoethane		50.0	50.5	ug/L	0.192	1.02	40	
Dibromomethane		50.0	51.6	ug/L	0.102	3.15	40	
1,2-Dichlorobenzene		50.0	46.8	ug/L	1.09	6.46	40	
1,3-Dichlorobenzene		50.0	49.7	ug/L	1.28	0.547	40	
1,4-Dichlorobenzene		50.0	46.7	ug/L	1.28	6.66	40	
Dichlorodifluoromethane		50.0	56.9	ug/L	0.318	13.7	40	
1,2-Dichloroethane		50.0	47.0	ug/L	0.249	5.94	40	
cis-1,2-Dichloroethene		50.0	50.5	ug/L	0.237	0.998	40	
trans-1,2-Dichloroethene		50.0	49.6	ug/L	0.224	0.802	40	
1,3-Dichloropropane		50.0	47.8	ug/L	0.320	4.33	40	
2,2-Dichloropropane		50.0	53.2	ug/L	0.362	6.32	40	
cis-1,3-Dichloropropene		50.0	50.1	ug/L	0.316	0.252	40	
trans-1,3-Dichloropropene		50.0	52.2	ug/L	0.368	4.30	40	

KEMRON FORMS - Modified 09/06/2007 - (CCV)
 Version 1.5 PDF File ID: 1012422
 Report generated 02/08/2008 11:55

CONTINUING CALIBRATION VERIFICATION (CCV)

00092990

Login Number: L08020032 Run Date: 02/05/2008 Sample ID: WG262325-02
 Instrument ID: HPMS6 Run Time: 07:37 Method: 8260B
 File ID: 6M72725 Analyst: CMS QC Key: STD
 Workgroup (AAB#): WG262326 Cal ID: HPMS6 - 11-DEC-07

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	49.5	ug/L	0.290	0.932	40	
2-Hexanone	50.0	44.0	ug/L	0.0794	12.1	40	
Hexachlorobutadiene	50.0	43.0	ug/L	0.347	14.0	40	
Isopropylbenzene	50.0	50.9	ug/L	1.36	1.90	40	
p-Isopropyltoluene	50.0	48.9	ug/L	2.28	2.12	40	
4-Methyl-2-Pentanone	50.0	45.1	ug/L	0.0362	9.73	40	
Methylene Chloride	50.0	46.7	ug/L	0.200	6.70	40	
Naphthalene	50.0	41.3	ug/L	1.04	17.4	40	
n-Propylbenzene	50.0	50.8	ug/L	2.91	1.68	40	
Styrene	50.0	50.2	ug/L	0.910	0.423	40	
1,1,1,2-Tetrachloroethane	50.0	55.3	ug/L	0.298	10.6	40	
Tetrachloroethene	50.0	52.5	ug/L	0.327	4.93	40	
1,2,3-Trichlorobenzene	50.0	40.7	ug/L	0.523	18.6	40	
1,2,4-Trichlorobenzene	50.0	44.2	ug/L	0.694	11.6	40	
1,1,1-Trichloroethane	50.0	54.1	ug/L	0.375	8.26	40	
1,1,2-Trichloroethane	50.0	48.7	ug/L	0.183	2.53	40	
Trichloroethene	50.0	50.2	ug/L	0.231	0.333	40	
Trichlorofluoromethane	50.0	54.2	ug/L	0.456	8.35	40	
1,2,3-Trichloropropane	50.0	50.0	ug/L	0.108	0.0686	40	
1,2,4-Trimethylbenzene	50.0	49.5	ug/L	2.18	0.923	40	
1,3,5-Trimethylbenzene	50.0	50.6	ug/L	2.10	1.20	40	
Vinyl Acetate	50.0	53.7	ug/L	0.232	7.31	40	
o-Xylene	50.0	49.6	ug/L	0.546	0.821	40	
m-, p-Xylene	100	99.7	ug/L	0.553	0.284	40	
1,2-Dichloroethene	100	100	ug/L	0.230	0.0977	40	
Xylenes	150	149	ug/L	0.550	0.463	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
 SPCC System Performance Check Compounds

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

00092991

Login Number: L08020032
Instrument ID: HPMS6
Workgroup (AAB#): WG262326

CCV Number: WG262325-02
CAL ID: HPMS6 - 11-DEC-07
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG262325-02	NA	NA	361655	614977	832153
Upper Limit	NA	NA	723310	1229954	1664306
Lower Limit	NA	NA	180828	307489	416077
L08020032-01	1.00	01	266405	468629	641762
L08020032-02	1.00	01	275495	479416	651853
WG262326-01	1.00	01	303665	542924	743815
WG262326-02	1.00	01	328672	563928	751372
WG262326-03	1.00	01	328103	561213	750589

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)

00092992

Login Number: L08020032
Instrument ID: HPMS6
Workgroup (AAB#): WG262326

CCV Number: WG262325-02
CAL ID: HPMS6 - 11-DEC-07
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG262325-02	NA	NA	18.86	15.3	10.83
Upper Limit	NA	NA	19.36	15.8	11.33
Lower Limit	NA	NA	18.36	14.8	10.33
L08020032-01	1.00	01	18.86	15.3	10.83
L08020032-02	1.00	01	18.86	15.3	10.83
WG262326-01	1.00	01	18.86	15.3	10.83
WG262326-02	1.00	01	18.86	15.31	10.82
WG262326-03	1.00	01	18.86	15.3	10.83

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

Underline = Response outside limits

3.0 Attachments

Kemron Environmental Services
Analyst Listing
February 8, 2008

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN	AML - ANTHONY M. LONG
ARA - ADRIAN R. ACHTERMANN	ASP - AARON S. PETRIE	BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN	CAF - CHERYL A. FLOWERS	CAH - CHARLES A. HALL
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD	CLW - CHARISSA L. WINTERS
CM - CHARLIE MARTIN	CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS
CSH - CHRIS S. HILL	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
DSF - DEBRA S. FREDERICK	ECL - ERIC C. LAWSON	ED - EMILY E. DECKER
ERE - ERIN R. ELDER	FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR
HJR - HOLLY J. REED	JAB - JUANITA A. BECKER	JAL - JOHN A. LENT
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON	JKP - JACQUELINE K. PARSONS
JKT - JANE K. THOMPSON	JLK - JUSTEN L. KNOPP	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KCZ - KEVIN C. ZUMBRO
KEB - KATHRYN E. BARNES	KHR - KIM H. RHODES	KJW - KATIE J. WIEFERICH
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	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	NJB - NATALIE J. BOOTH
NPM - NATHANIEL P. MILLER	PJM - PAUL J. MILLER	RAH - ROY A. HALSTEAD
RB - ROBERT BUCHANAN	REK - ROBERT E. KYER	RLF - RACHEL L. FRYE
RLK - ROBIN L. KLINGER	RNP - RICK N. PETTY	RWC - RODNEY W. CAMPBELL
SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE
TDH - TRICIA D. HUCK	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%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
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
ND,L	Not detected; sample reporting limit (RL) elevated due to interference
ND,S	Not detected; analyzed by method of standard addition (MSA)
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 (MSA)
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
X, S	Exceeds regulatory limit; method of standard additions (MSA)
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.

00092996

NO. 10236



Shaw® Shaw Environmental & Infrastructure, Inc.
 3010 Briarpark Drive, Suite 400
 Houston, TX 77042
 (713) 996-4400

Chain of Custody

Laboratory Name: Kemron		Address: 156 Starlite Dr. Marietta, OH		Contact: Stephanie Mossburg													
Project Name: LHAAP		Project Location: Karnack, Tx.		Analysis and Method Desired (Indicate separate containers)													
Project No.: 117591.0009B800		Project Contact: Kay Everett		Project Telephone No.: 713-996-4421													
Point of Contact: Kay Everett		Project Manager/Supervisor: Praveen Srivastav		Telephone No.: 713-996-4421													
Item No.	Sample Telephone Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC								
1	29WW37-020108	2/1/08	1:35		✓	W	Groundwater, Site 29	3	3								
2	29WW39-020108	2/1/08	3:30		✓	W	Groundwater, Site 29	3	3								
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Transfers Relinquished By (signature)		Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions									
Scott Beesinger		2/1/08 4:00						24 HR. TAT									
								FedEx Airbill No.:									
								Sampler's Signature Scott Beesinger									
TAT: _____ Standard _____ Rush Date _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☒ Cold													

White - Lab Copy Canary - Field Copy Pink - File Copy

Form Number: 433_1

Rev. 03-19-07

Client:	Shaw-		
Workorder Number:	B —		
Date Received:	2-2-08		
Delivered by:	() Fedx	(X) UPS	() Client () Courier Time: 1030
Opened by:	RLK		
IR Temp Gun:	() D	(X) G	
Logged by:	GJ L 2.32		

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
532	3	17-166V7254496146158	10236	under 24 hr TAT

Inspection Checklist

	Y	N	NA	Discrepancy ID
Were shipping coolers sealed?	✓			
Were custody seals intact?	✓			
Were cooler temperatures in range of 0 - 6?	✓			
Was ice present?	✓			
Were COC's received/ information complete/signed and dated?	✓			
Were sample containers and labels intact and match COC?	✓			
Were the correct containers and volumes received?	✓			
Were correct preservatives used? (water only)			✓	
Were pH ranges acceptable? (voa's excluded)			✓	
Were VOA samples free of headspace?	✓			
Were samples received within EPA hold times?	✓			

Discrepancy/Comments/Other Problems

* Stored Cooler in walk in over weekend.

Distribution

Name of KEMRON representative
Client/Company:
Person Contacted:
Date contacted:

Resolution/other comments:

Login: L08020032
Account: 2773
Project: 2773.025
Samples: 2
Due Date: 05-FEB-2008

Samplenum **Container ID** **Products**
L08020032-01 422149 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

Samplenum **Container ID** **Products**
L08020032-02 422150 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-FEB-2008 10:47	BRG	
2	ANALYZ	V1	ORG4	05-FEB-2008 08:26	CMS	RLK

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login



05/08/08

Technical Report for

Shaw E & I, Inc.

Longhorn Army Ammunition Plant

117591

Accutest Job Number: T16432

Sampling Date: 02/21/07

Report to:

Shaw E & I, Inc.

jennifer.hoang@shawgrp.com

ATTN: Jennifer Hoang

Total number of pages in report: 143



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Agnes Vicknair 713-271-4700

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

Shaw E & I, Inc.

Job No: T16432

Longhorn Army Ammunition Plant
Project No: 117591

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T16432-1	02/21/07	10:20 SM	02/23/07	AQ	Ground Water	LHSMW06-FEB2007
T16432-2	02/21/07	14:58 SM	02/23/07	AQ	Ground Water	17WW10-FEB2007
T16432-3	02/21/07	11:05 SM	02/23/07	AQ	Ground Water	17WW12-FEB2007
T16432-4	02/21/07	13:15 SM	02/23/07	AQ	Ground Water	LHSM07-FEB2007
T16432-5	02/21/07	14:22 SM	02/23/07	AQ	Ground Water	47WW09-FEB2007
T16432-6	02/21/07	15:15 SM	02/23/07	AQ	Ground Water	29WW36-FEB2007
T16432-7	02/21/07	00:00 SM	02/23/07	AQ	Trip Blank Water	TRIP BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc.

Job No T16432

Site: Longhorn Army Ammunition Plant

Report Date 3/9/2007 4:18:09 PM

6 Samples and 1 Trip Blank were collected on 02/21/2007 and were received at Accutest on 02/23/2007 properly preserved, at 4.8 Deg. C and intact. These Samples received an Accutest job number of T16432. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VF2306

- All samples were analyzed within the recommended method holding time.
- Sample(s) T16411-10MS, T16411-10MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Styrene are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Styrene are outside control limits. Probable cause due to matrix interference.

Matrix AQ	Batch ID: VY1139

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- T16432-1 for 4-Bromofluorobenzene: Outside of control limits biased high. There were no target compounds associated with this surrogate.
- T16432-7 for 4-Bromofluorobenzene: Outside of control limits biased high. There were no target compounds associated with this surrogate.
- VY1139-MB for 4-Bromofluorobenzene: Outside control limits biased high. There are no target compounds associated with this surrogate.

Matrix AQ	Batch ID: VY1140

- All samples were analyzed within the recommended method holding time.
- Sample(s) T16437-6MS, T16437-6MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- T16432-2 for 4-Bromofluorobenzene: Outside of control limits biased high. There were no target compounds associated with this surrogate.
- T16432-3 for 4-Bromofluorobenzene: Outside of control limits biased high. There were no target compounds associated with this surrogate.

Volatiles by GC By Method RSKSOP-147/175

Matrix AQ	Batch ID: F:GXY995

- Gasses Analysis performed at Accutest Laboratories, Orlando, FL.

Extractables by GC By Method SW846 8330A

Matrix AQ	Batch ID: F:OP19677

- T16432-2: Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.
- T16432-3: Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 120.1

Matrix AQ	Batch ID: F:R17941

- Specific Conductivity: Analysis performed at Accutest Laboratories, Orlando, FL.

Matrix AQ	Batch ID: GN11341

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16411-10DUP were used as the QC samples for Specific Conductivity.

Wet Chemistry By Method EPA 150.1/9040

Matrix AQ	Batch ID: GN11306

- Sample(s) T16432-4DUP were used as the QC samples for pH.

Wet Chemistry By Method EPA 310.1

Matrix AQ	Batch ID: GN11336

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16411-10DUP, T16411-10MS were used as the QC samples for Alkalinity, Total as CaCO₃.

Wet Chemistry By Method EPA 314

Matrix AQ	Batch ID: F:GP9043

- Perchlorate Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 325.3

Matrix AQ	Batch ID: GN11331

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 353.2

Matrix AQ	Batch ID: GN11288

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16432-1DUP, T16432-1MS were used as the QC samples for Nitrogen, Nitrite.

Matrix AQ	Batch ID: GN11291

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16411-10DUP, T16411-10MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Wet Chemistry By Method EPA 375.3

Matrix AQ	Batch ID: GN11356

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16411-10DUP, T16411-10MS were used as the QC samples for Sulfate.

Wet Chemistry By Method EPA 376.1**Matrix** AQ**Batch ID:** GN11286

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16432-6DUP were used as the QC samples for Sulfide.

Wet Chemistry By Method EPA 415.1/9060**Matrix** AQ**Batch ID:** GN11304

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SM18 4500CO2D**Matrix** AQ**Batch ID:** GN11382

- Co2 was calculated from the pH and Alkalinity results.

Wet Chemistry By Method SM18 4500NO3E/NO2B**Matrix** AQ**Batch ID:** R15449

- Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T16432

Site: ITTXHO: Longhorn Army Ammunition Plant

Report Date: 3/9/2007 10:35:36 AM

6 Samples were collected on 02/21/2007 and were received at Accutest SE on 02/28/2007 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of T16432. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method RSKSOP-147/175

Matrix: AQ

Batch ID: GXY995

All method blanks for this batch meet method specific criteria.

Samples T16432-4DUP, T16432-6MS were used as the QC samples indicated.

The following samples were run outside of holding time for method RSKSOP-147/175: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6.

Extractables by GC by Method SW846 8330A

Matrix: AQ

Batch ID: OP19677

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47539-3MS, F47539-3MSD were used as the QC samples indicated.

The following samples were extracted outside of holding time for method SW846 8330A: T16432-2, T16432-3. Samples extracted beyond hold time.

T16432-2, T16432-3: Sample extracted beyond hold time.

Wet Chemistry by Method EPA 314

Matrix: AQ

Batch ID: GP9043

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16411-10DUP, T16411-10MS were used as the QC samples for Perchlorate.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ellen Pampel, Inorganic QA (signature on file)

Date: March 9, 2007

Friday, March 09, 2007



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LHSMW06-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-1	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010444.D	1	02/27/07	JH	n/a	n/a	VY1139
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	1.7	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.1	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.77	2.0	0.63	ug/l	J

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW06-FEB2007**Lab Sample ID:** T16432-1**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		73-139%
17060-07-0	1,2-Dichloroethane-D4	117%		66-139%
2037-26-5	Toluene-D8	133%		77-148%
460-00-4	4-Bromofluorobenzene	158% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: LHSMW06-FEB2007							
Lab Sample ID: T16432-1				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025312.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	17.0	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW06-FEB2007

Lab Sample ID: T16432-1

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:59	AFL	EPA 314
Alkalinity, Total as CaCO ₃	407	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	510	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	513	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.020 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	2800	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	398	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	5.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.2			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW10-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-2	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010452.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW10-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-2	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	124%		73-139%
17060-07-0	1,2-Dichloroethane-D4	122%		66-139%
2037-26-5	Toluene-D8	129%		77-148%
460-00-4	4-Bromofluorobenzene	153% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW10-FEB2007		
Lab Sample ID:	T16432-2	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025313.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	20.9	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW10-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-2	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020210.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	95%		70-136%

(a) Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW10-FEB2007

Lab Sample ID: T16432-2

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 19:14	AFL	EPA 314
Alkalinity, Total as CaCO ₃	140	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	280	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	1030	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.30	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.30	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	2670	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	142	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.0			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW12-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-3	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010453.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW12-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-3	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		73-139%
17060-07-0	1,2-Dichloroethane-D4	118%		66-139%
2037-26-5	Toluene-D8	132%		77-148%
460-00-4	4-Bromofluorobenzene	154% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	17WW12-FEB2007		
Lab Sample ID:	T16432-3	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025314.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	57.1	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW12-FEB2007		
Lab Sample ID:	T16432-3	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020211.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.059 U	0.20	0.059	ug/l	
121-82-4	RDX	0.074 U	0.20	0.074	ug/l	
99-65-0	1,3-Dinitrobenzene	0.069 U	0.20	0.069	ug/l	
606-20-2	2,6-Dinitrotoluene	0.064 U	0.20	0.064	ug/l	
121-14-2	2,4-Dinitrotoluene	0.074 U	0.20	0.074	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.069 U	0.20	0.069	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.079 U	0.20	0.079	ug/l	
98-95-3	Nitrobenzene	0.059 U	0.20	0.059	ug/l	
88-72-2	o-Nitrotoluene	0.059 U	0.20	0.059	ug/l	
99-08-1	m-Nitrotoluene	0.074 U	0.20	0.074	ug/l	
99-99-0	p-Nitrotoluene	0.074 U	0.20	0.074	ug/l	
479-45-8	Tetryl	0.074 U	0.20	0.074	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.094 U	0.20	0.094	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.079 U	0.20	0.079	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	97%		70-136%

(a) Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW12-FEB2007

Lab Sample ID: T16432-3

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 19:28	AFL	EPA 314
Alkalinity, Total as CaCO ₃	34.0	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	170	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	305	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.20	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	1240	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	144	10	2.6	mg/l	1	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	5.6			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSM07-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-4	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010454.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2	F0079010.D	10	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	40.9	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	394 ^a	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.6	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	1.1	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	15.8	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	LHSM07-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-4	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	3.0	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	127%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	117%	96%	66-139%
2037-26-5	Toluene-D8	128%	106%	77-148%
460-00-4	4-Bromofluorobenzene	150%	125%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSM07-FEB2007		
Lab Sample ID:	T16432-4	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025315.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.88	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSM07-FEB2007

Lab Sample ID: T16432-4

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:11	AFL	EPA 314
Alkalinity, Total as CaCO ₃	619	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	620	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	2750	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	10600	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	2070	200	2.6	mg/l	20	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	6.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.3			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: 47WW09-FEB2007

Lab Sample ID: T16432-5

Date Sampled: 02/21/07

Matrix: AQ - Ground Water

Date Received: 02/23/07

Method: SW846 8260B

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010455.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2	F0079011.D	100	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	4.6	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	144	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	12.2	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	2230 ^a	200	63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	47WW09-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-5	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	125%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	122%	98%	66-139%
2037-26-5	Toluene-D8	129%	106%	77-148%
460-00-4	4-Bromofluorobenzene	146%	123%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	47WW09-FEB2007		
Lab Sample ID:	T16432-5	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025316.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.30 U	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW09-FEB2007

Lab Sample ID: T16432-5

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:26	AFL	EPA 314
Alkalinity, Total as CaCO ₃	459	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	73.0	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	585	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	3750	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	946	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	6.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	7.1			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW36-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-6	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079005.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: 29WW36-FEB2007**Lab Sample ID:** T16432-6**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		73-139%
17060-07-0	1,2-Dichloroethane-D4	95%		66-139%
2037-26-5	Toluene-D8	109%		77-148%
460-00-4	4-Bromofluorobenzene	127%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW36-FEB2007		
Lab Sample ID:	T16432-6	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025318.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.94	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW36-FEB2007

Lab Sample ID: T16432-6

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:40	AFL	EPA 314
Alkalinity, Total as CaCO ₃	1040	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	830	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	565	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.30	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.30	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	4150	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	1000	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	10.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.4			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/21/07
Lab Sample ID:	T16432-7	Date Received:	02/23/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010443.D	1	02/27/07	JH	n/a	n/a	VY1139
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/21/07
Lab Sample ID:	T16432-7	Date Received:	02/23/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		73-139%
17060-07-0	1,2-Dichloroethane-D4	114%		66-139%
2037-26-5	Toluene-D8	130%		77-148%
460-00-4	4-Bromofluorobenzene	151% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form



Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10497

Laboratory Name: Accutest		Address: 10165 HARWIN DR. #150		Contact: Agnes											
		Houston, TX 77036		713-271-4700											
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)											
Project No. 117591		Project Contact: Kay Everett		Project Telephone No. 713-996-4421											
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastava		Remarks											
Telephone No. 713-996-4408															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	Anions	Sulfides	Perchlorate	Gases-G02	Alkalinity	TOC
1	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3	✓						
2	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3					✓		
3	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3							✓
4	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1		✓					
5	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1			✓				
6	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1						✓	
7	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1				✓			
8															
9															
10															
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions							
<i>Sherry McPhee</i>		2-21-07		<i>Scott Belsing</i>		2/22/07		UPS FedEx Airbill No.: 12606725019281685							
<i>Scott Belsing</i>		2/22/07 0830													
				Laboratory <i>A. Rodriguez</i>		2/23/07 10:00		Sampler's Signature <i>Sherry McPhee</i>							
TAT: ☐ Standard ☐ Rush Due: ☐		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☒ Cold											

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T16432: Chain of Custody

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CHAIN-OF-CUSTODY

No. 10942

00093038

Laboratory Name: Accutest		Address: 10165 Harwin #150 Houston TX 77036		Contact: Agnes (713) 271 4700													
Project Name: LHAAP		Project Location: Karnack, TX		Analysis and Method Desired (Indicate separate containers)													
Project No.: 117591		Project Contact: K. Everette		Project Telephone No.: (713) 996 4421													
Point of contact: Diane Meyer		Project Manager/Supervisor: P. Srivastav		Remarks													
Telephone No.: (713) 996-4408																	
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	NOC	Anions 300	Sulfides 316	Perchlorates 314	Gases 175	Alkalinity 310.1	TOC 415.1	Explosives 833	
2	17WW10-Feb 2007	2/21/07	14:58		X		Groundwater	15	3	1	1	1	3	1	3	2	
3	17WW12-Feb 2007	2/21/07	11:05		X		Groundwater	15	3	1	1	1	3	1	3	2	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions									
<i>Susan Oller</i>		2/21/07 17:00		<i>Scott Bessinger</i>		2/22/07 07:50		Need CO ₂ for gases.									
<i>Scott Bessinger</i>		2/22/07 08:30						UPS									
								FedEx Airbill No.: 12162V 39501 9988 1685									
				Laboratory		<i>A. Rodriguez</i>		Samples Signature <i>Susan Oller</i>									
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☐ Cold													

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00093039



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CHAIN-OF-CUSTODY

No. 10496

Laboratory Name: Accutest		Address: 10165 HARWIN DR. # 150		Contact: Agnes											
		Houston, TX 77036		713-271-4700											
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)											
Project No.: 117591		Project Contact: KAY EVERETT		Project Telephone No.: 713-996-4421											
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastava		Remarks											
Telephone No.: 713-996-4408															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	ANIONS	SULFIDES	PERCHLORATE	GASES, CO2	ALKALINITY	TOC
4	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3	✓						
5	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3					✓		
6	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3							✓
7	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1		✓					
8	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1			✓				
9	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1				✓			
10															
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions							
<i>Sherry McAdoo</i>		2-21-07		<i>Scott Brannen</i>		2/22/07		UPS							
<i>Scott Brannen</i>		2/22/07 0830						FedEx Airbill No.: 17166V7250199281685							
				Laboratory		<i>A. Rodriguez</i>		Sampler's Signature		<i>Sherry McAdoo</i>					
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☐ Cold											

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T16432

00093040



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CHAIN-OF-CUSTODY

No. 10916

Laboratory Name: Accutest		Address: 10165 Harwin Dr. #150 Houston, TX 77036		Contact: Agnes: 713-271-4700													
Project Name: Longhorn Army Ammunition Plant		Project Location: Karnack, TX		Analysis and Method Desired (Indicate separate containers)													
Project No. 17591		Project Contact: Kay EVERETTE		Project Telephone No. 713-996-4421													
Point of contact: Diane Meyer		Project Manager/Supervisor: SRIVASTAV		Remarks													
Telephone No. 713-996-4408																	
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOCs 8260	PAHs 300	Sulfides 376.2	Pachlorate 314	Gases 175	Alkalinity 310.1	TOC 415.1	VOCs 8260	
5	47WW09-FEB2007	2/21/07	1422		X	W	47WW09	13	X	X	X	X	X	X	X	X	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions									
[Signature]		2/21/07 1800		[Signature]		2/22/07 07:50		WBS									
Scott Beesinger		2/22/07 0830						FedEx Airbill No. 1266V725019928 11685									
				Laboratory A. Rodriguez		2/23/07 10:00		Sampler's Signature [Signature]									
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☒ Cold													

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T16432: Chain of Custody

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CHAIN-OF-CUSTODY

No. 10495

Laboratory Name: Accutest				Address: 10165 HARWIN DR. #150				Contact: Agnes								
				HOUSTON, TX 77036				713-271-4700								
Project Name: Loughorn Army Ammunition Plant				Project Location: KARNACK, TX				Analysis and Method Desired (Indicate separate containers)								
Project No.: 117591				Project Contact: KAY EVERETTE				Project Telephone No.: 713-996-4421								
Point of contact: DIANE MEYER				Project Manager/Supervisor: RAVEEN SRIVASTAV				Remarks								
Telephone No.: 713-996-4408																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	ANIONS	SULFIDES	PERCHLORATE	GASES, CO ₂	ALKALINITY	TOC	EXPLOSIVES
1	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3	✓							
2	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3					✓			
3	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3							✓	
4	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1		✓						
5	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1			✓					
6	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1				✓				
7	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1						✓		
8	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	2								✓
9	t.p. - AR-223-07															
10	I															
Transfers Relinquished By (Signature)				Date/Time		Transfers Accepted By (Signature)				Date/Time		Special Instructions				
<i>Sherry McAdoo</i>				2-21-07		<i>Scott Belsinger</i>				2/22/07 07:50		UPS				
<i>Scott Belsinger</i>				2/22/07 0830								FedEx Airbill No. 750199281085				
						Laboratory <i>A. Rodin</i>				2/23/07 10:00		Sampler's Signature <i>Sherry McAdoo</i>				

TAT: _____ Standard _____ Rush Due: _____

Seals Intact? ☒ Y ☐ N

Received Good Condition ☒ Y ☐ N ☒ Cold

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T16432: Chain of Custody

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ACCUTEST.
**VARIANCE MEMO
SAMPLE LOG-IN**

SAMPLE(S) Various DATE 2/23/07
 PROJECT HAAP
 FILED BY AR LAB NO. T16432

VARIANCE - Check applicable item(s):

- ☐ Insufficient sample sent for proper analysis; received approx. _____
☐ Sample bottle received broken and/or cap not intact.
☐ Samples received without paperwork; paperwork received without samples.
☐ Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: _____
☐ Illegible sample number or label missing from bottle.
☐ Numbers on sample not the same as numbers on paper work.
☐ Incomplete instructions received with sample(s) ie., no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____
☐ Samples received in improper container or lacking proper preservation.
☐ Physical characteristics different than those on sampling sheets; Describe: _____
☐ Rush samples on hold because of incomplete paperwork.
☐ Other (specify) SX#2 - was rec'd. w/ 14 Containers, not 15.
SX#6 - was rec'd. without any containers for
Explosives.
SX#1 and #3 - Rec'd. Samples too close to holding times.

CORRECTIVE ACTION TAKEN

- ☒ DRAVE & MEYER Person Contacted _____ By phone.
☐ Client informed verbally. _____ Samples processed for information only and noted on report.
☐ Client informed by ~~memo~~ letter EMAIL _____ Samples processed with higher detection limits accepted.
☐ Samples processed as is. _____ Samples rejected.
☐ Samples preserved by lab.
☐ Client will resample and resubmit.

Notes: _____

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:			
Project Manager:	<u>2/23/07</u>	<u>AS</u>	
Comments:			

Form: SM006

T16432: Chain of Custody
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00093043



ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T16432

DATE/TIME RECEIVED: 2/23/07/10:00

CLIENT: Shaw Env.

INITIALS: AR

- Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):
1. ☒ N Sample received in undamaged condition.
 2. ☒ N Samples received within temp. range.
 3. ☒ N Sample received with proper pH.
 4. ☒ N Sample received in proper containers.
 5. ☒ N Sample volume sufficient for analysis.
 6. ☒ N Sample received with chain of custody.
 7. ☒ N Chain of Custody matches sample IDs and analysis on containers.
 8. ☒ N Samples Headspace acceptable
 9. ☒ N NA Custody seal received intact and tamper not evident on cooler.
 10. ☒ Y N NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1,4,5,6	1-3	2/21	AQ	40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	4-6				SUB	1,2,3,4,5,6	U, <2, >12, NA
	7-9				2J	1,2,3,4,5,6	U, <2, >12, NA
	10-12			P1000		1,2,3,4,5,6	U, <2, >12, NA
	13			P500		1,2,3,4,5,6	U, <2, >12, NA
2,3	1-3			40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	4-6				SUB	1,2,3,4,5,6	U, <2, >12, NA
	7-9				2J	1,2,3,4,5,6	U, <2, >12, NA
	10-11			P1000		1,2,3,4,5,6	U, <2, >12, NA
	12			P500		1,2,3,4,5,6	U, <2, >12, NA
	13-14			SUB	SUB	1,2,3,4,5,6	U, <2, >12, NA
3	12			P500	2J	1,2,3,4,5,6	U, <2, >12, NA
	13					1,2,3,4,5,6	U, <2, >12, NA
	14-15			A1000	SUB	1,2,3,4,5,6	U, <2, >12, NA
(+b) 7,8	1-2	N/A		40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
		AR 2-23-07				1,2,3,4,5,6	U, <2, >12, NA

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

pH of soils N/A

Delivery method: Courier: UPS

COOLER TEMP: 3.6

COOLER TEMP: 3.0

COOLER TEMP: 4.8

COOLER TEMP: 4.8

Form: SM012, Rev.07/28/06, QAO

T16432: Chain of Custody

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Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, 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), 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 amounts,
 - 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 %Rs 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 exception reports. By me 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.

Ron Martino



Lab Director

3/9/2007

Name (Printed)

Signature

Official Title (printed)

Date

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 3/9/2007				
Project Name: Longhorn Army Ammunition Plant			Laboratory Job Number: T16432				
Reviewer Name: Ron Martino			Prep Batch Number(s):				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				

2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast

LRC Date: 3/9/2007

Project Name: Longhorn Army Ammunition Plant

Laboratory Job Number: T16432

Reviewer Name: Ron Martino

Prep Batch Number(s):

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
	I	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?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	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?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Name: Accutest Laboratories Gulf Coast		LRC Date: 3/9/2007
Project Name: Longhorn Army Ammunition Plant		Laboratory Job Number: T16432
Reviewer Name: Ron Martino		Prep Batch Number(s):
ER #¹	DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SQL/MDL is defined in the report as the MDL.	
2	All anomalies are discussed in the case narrative.	

RG-366/TRRP-13 December 2002



GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-MB	Y0010442.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-MB	Y0010442.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	118% 73-139%
17060-07-0	1,2-Dichloroethane-D4	119% 66-139%
2037-26-5	Toluene-D8	131% 77-148%
460-00-4	4-Bromofluorobenzene	154%* a 84-150%

(a) Outside control limits biased high. There are no target compounds associated with this surrogate.

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-MB	Y0010450.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-MB	Y0010450.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	124% 73-139%
17060-07-0	1,2-Dichloroethane-D4	119% 66-139%
2037-26-5	Toluene-D8	130% 77-148%
460-00-4	4-Bromofluorobenzene	150% 84-150%

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 73-139%
17060-07-0	1,2-Dichloroethane-D4	94% 66-139%
2037-26-5	Toluene-D8	110% 77-148%
460-00-4	4-Bromofluorobenzene	119% 84-150%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-BS	Y0010439.D	1	02/27/07	JH	n/a	n/a	VY1139
VY1139-BSD	Y0010440.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	125	121	97	139	111	14	31-158/30
71-43-2	Benzene	25	24.3	97	24.9	100	2	67-118/30
75-27-4	Bromodichloromethane	25	22.4	90	22.3	89	0	66-115/30
75-25-2	Bromoform	25	22.0	88	22.2	89	1	57-119/30
108-90-7	Chlorobenzene	25	22.3	89	23.3	93	4	72-116/30
75-00-3	Chloroethane	25	23.6	94	22.7	91	4	61-135/30
67-66-3	Chloroform	25	25.3	101	24.6	98	3	66-117/30
75-15-0	Carbon disulfide	25	23.7	95	24.3	97	3	39-136/30
56-23-5	Carbon tetrachloride	25	27.6	110	26.9	108	3	67-131/30
75-34-3	1,1-Dichloroethane	25	25.3	101	25.9	104	2	63-125/30
75-35-4	1,1-Dichloroethylene	25	25.8	103	25.8	103	0	52-143/30
107-06-2	1,2-Dichloroethane	25	25.0	100	25.0	100	0	61-120/30
78-87-5	1,2-Dichloropropane	25	23.4	94	23.6	94	1	64-118/30
124-48-1	Dibromochloromethane	25	22.0	88	23.0	92	4	67-117/30
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	24.0	96	4	65-116/30
10061-01-5	cis-1,3-Dichloropropene	25	24.1	96	24.7	99	2	67-118/30
156-60-5	trans-1,2-Dichloroethylene	25	25.5	102	24.4	98	4	66-128/30
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	25.0	100	0	73-126/30
100-41-4	Ethylbenzene	25	23.6	94	24.1	96	2	71-119/30
591-78-6	2-Hexanone	125	109	87	126	101	14	45-132/30
108-10-1	4-Methyl-2-pentanone	125	114	91	123	98	8	46-127/30
74-83-9	Methyl bromide	25	21.1	84	20.7	83	2	51-126/30
74-87-3	Methyl chloride	25	23.1	92	23.6	94	2	47-130/30
75-09-2	Methylene chloride	25	22.1	88	22.2	89	0	53-130/30
78-93-3	Methyl ethyl ketone	125	125	100	131	105	5	47-128/30
100-42-5	Styrene	25	19.0	76	19.7	79	4	69-115/30
71-55-6	1,1,1-Trichloroethane	25	25.1	100	26.0	104	4	67-128/30
79-34-5	1,1,2,2-Tetrachloroethane	25	23.1	92	23.5	94	2	57-121/30
79-00-5	1,1,2-Trichloroethane	25	22.9	92	23.7	95	3	62-117/30
127-18-4	Tetrachloroethylene	25	25.2	101	26.4	106	5	72-128/30
108-88-3	Toluene	25	24.5	98	25.4	102	4	70-121/30
79-01-6	Trichloroethylene	25	24.2	97	25.0	100	3	69-120/30
75-01-4	Vinyl chloride	25	24.6	98	25.1	100	2	59-145/30
1330-20-7	Xylene (total)	75	71.5	95	74.3	99	4	72-120/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-BS	Y0010439.D	1	02/27/07	JH	n/a	n/a	VY1139
VY1139-BSD	Y0010440.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	121%	120%	73-139%
17060-07-0	1,2-Dichloroethane-D4	117%	120%	66-139%
2037-26-5	Toluene-D8	122%	129%	77-148%
460-00-4	4-Bromofluorobenzene	132%	136%	84-150%

Blank Spike Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-BS	Y0010448.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	136	109	31-158
71-43-2	Benzene	25	24.0	96	67-118
75-27-4	Bromodichloromethane	25	22.7	91	66-115
75-25-2	Bromoform	25	22.1	88	57-119
108-90-7	Chlorobenzene	25	22.8	91	72-116
75-00-3	Chloroethane	25	26.4	106	61-135
67-66-3	Chloroform	25	24.3	97	66-117
75-15-0	Carbon disulfide	25	23.2	93	39-136
56-23-5	Carbon tetrachloride	25	27.4	110	67-131
75-34-3	1,1-Dichloroethane	25	25.0	100	63-125
75-35-4	1,1-Dichloroethylene	25	24.3	97	52-143
107-06-2	1,2-Dichloroethane	25	24.7	99	61-120
78-87-5	1,2-Dichloropropane	25	22.5	90	64-118
124-48-1	Dibromochloromethane	25	22.7	91	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	65-116
10061-01-5	cis-1,3-Dichloropropene	25	23.8	95	67-118
156-60-5	trans-1,2-Dichloroethylene	25	23.7	95	66-128
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	73-126
100-41-4	Ethylbenzene	25	24.0	96	71-119
591-78-6	2-Hexanone	125	115	92	45-132
108-10-1	4-Methyl-2-pentanone	125	113	90	46-127
74-83-9	Methyl bromide	25	25.1	100	51-126
74-87-3	Methyl chloride	25	24.1	96	47-130
75-09-2	Methylene chloride	25	21.0	84	53-130
78-93-3	Methyl ethyl ketone	125	122	98	47-128
100-42-5	Styrene	25	18.7	75	69-115
71-55-6	1,1,1-Trichloroethane	25	26.4	106	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	23.4	94	57-121
79-00-5	1,1,2-Trichloroethane	25	22.2	89	62-117
127-18-4	Tetrachloroethylene	25	25.5	102	72-128
108-88-3	Toluene	25	23.9	96	70-121
79-01-6	Trichloroethylene	25	24.3	97	69-120
75-01-4	Vinyl chloride	25	24.1	96	59-145
1330-20-7	Xylene (total)	75	71.4	95	72-120

Blank Spike Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-BS	Y0010448.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	124%	73-139%
17060-07-0	1,2-Dichloroethane-D4	119%	66-139%
2037-26-5	Toluene-D8	128%	77-148%
460-00-4	4-Bromofluorobenzene	130%	84-150%

Blank Spike Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-BS2	F0078998.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	73-139%
17060-07-0	1,2-Dichloroethane-D4	93%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	106%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16437-6MS	Y0010469.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6MSD	Y0010470.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010467.D	5	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010468.D	50	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	T16437-6 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		6250	7100	114	6910	111	3	39-130/26
71-43-2	Benzene	ND		1250	1350	108	1370	110	1	65-122/15
75-27-4	Bromodichloromethane	ND		1250	1210	97	1270	102	5	64-119/22
75-25-2	Bromoform	ND		1250	1100	88	1160	93	5	50-123/28
108-90-7	Chlorobenzene	ND		1250	1090	87	1190	95	9	72-118/20
75-00-3	Chloroethane	ND		1250	1460	117	1280	102	13	60-136/25
67-66-3	Chloroform	ND		1250	1370	110	1420	114	4	65-120/20
75-15-0	Carbon disulfide	ND		1250	1350	108	1370	110	1	37-140/24
56-23-5	Carbon tetrachloride	ND		1250	1480	118	1520	122	3	64-135/23
75-34-3	1,1-Dichloroethane	46.8		1250	1450	112	1510	117	4	65-126/21
75-35-4	1,1-Dichloroethylene	3760 ^a		1250	5190	114	5080	106	2	55-140/25
107-06-2	1,2-Dichloroethane	ND		1250	1370	110	1440	115	5	57-125/25
78-87-5	1,2-Dichloropropane	ND		1250	1250	100	1300	104	4	63-121/22
124-48-1	Dibromochloromethane	ND		1250	1070	86	1160	93	8	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		1250	1230	98	1260	101	2	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1090	87	1200	96	10	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		1250	1330	106	1370	110	3	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1100	88	1210	97	10	65-129/23
100-41-4	Ethylbenzene	ND		1250	1130	90	1290	103	13	70-123/18
591-78-6	2-Hexanone	ND		6250	5090	81	5330	85	5	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		6250	5280	84	5260	84	0	41-133/22
74-83-9	Methyl bromide	ND		1250	1340	107	1170	94	14	47-129/27
74-87-3	Methyl chloride	ND		1250	1100	88	1200	96	9	45-133/24
75-09-2	Methylene chloride	ND		1250	1250	100	1270	102	2	49-128/21
78-93-3	Methyl ethyl ketone	ND		6250	5420	87	5510	88	2	43-125/29
100-42-5	Styrene	ND		1250	921	74	1040	83	12	65-120/21
71-55-6	1,1,1-Trichloroethane	5.8	J	1250	1400	112	1380	110	1	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1100	88	1220	98	10	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		1250	1120	90	1210	97	8	58-120/22
127-18-4	Tetrachloroethylene	ND		1250	1260	101	1320	106	5	69-132/21
108-88-3	Toluene	ND		1250	1200	96	1310	105	9	70-123/18
79-01-6	Trichloroethylene	8.7	J	1250	1230	98	1310	104	6	70-120/19
75-01-4	Vinyl chloride	ND		1250	1220	98	1270	102	4	51-147/24
1330-20-7	Xylene (total)	ND		3750	3530	94	3850	103	9	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16437-6MS	Y0010469.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6MSD	Y0010470.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010467.D	5	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010468.D	50	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	MS	MSD	T16437-6	T16437-6	Limits
1868-53-7	Dibromofluoromethane	124%	122%	129%	128%	73-139%
17060-07-0	1,2-Dichloroethane-D4	126%	117%	125%	126%	66-139%
2037-26-5	Toluene-D8	120%	119%	129%	128%	77-148%
460-00-4	4-Bromofluorobenzene	123%	129%	142%	155%* b	84-150%

- (a) Result is from Run #2.
(b) Outside of control limits biased high. There were no target compounds associated with this surrogate

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: T16432**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16411-10 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	96.7	77	84.7	68	13	39-130/26
71-43-2	Benzene	2.0 U		25	24.3	97	24.5	98	1	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.3	89	22.3	89	0	64-119/22
75-25-2	Bromoform	2.0 U		25	20.9	84	19.9	80	5	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	23.5	94	23.6	94	0	72-118/20
75-00-3	Chloroethane	2.0 U		25	26.6	106	25.2	101	5	60-136/25
67-66-3	Chloroform	2.0 U		25	24.8	99	24.9	100	0	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	22.6	90	22.7	91	0	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	27.1	108	27.3	109	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0 U		25	25.5	102	25.1	100	2	65-126/21
75-35-4	1,1-Dichloroethylene	2.0 U		25	25.6	102	24.8	99	3	55-140/25
107-06-2	1,2-Dichloroethane	2.0 U		25	24.2	97	22.4	90	8	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.9	96	23.7	95	1	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.6	86	21.0	84	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	1.5	J	25	23.8	89	24.4	92	2	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	19.7	79	20.0	80	2	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U		25	24.2	97	24.2	97	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	19.8	79	19.5	78	2	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.8	91	22.9	92	0	70-123/18
591-78-6	2-Hexanone	10 U		125	102	82	97.3	78	5	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	109	87	103	82	6	41-133/22
74-83-9	Methyl bromide	2.0 U		25	23.4	94	21.9	88	7	47-129/27
74-87-3	Methyl chloride	2.0 U		25	25.8	103	23.3	93	10	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.7	91	22.2	89	2	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	98.2	79	90.5	72	8	43-125/29
100-42-5	Styrene	2.0 U		25	1.8	7*	2.0	8*	11	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	27.0	108	27.0	108	0	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	19.8	79	19.0	76	4	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U		25	21.3	85	20.8	83	2	58-120/22
127-18-4	Tetrachloroethylene	2.0 U		25	24.8	99	25.2	101	2	69-132/21
108-88-3	Toluene	2.0 U		25	23.3	93	23.9	96	3	70-123/18
79-01-6	Trichloroethylene	4.8		25	29.4	98	29.6	99	1	70-120/19
75-01-4	Vinyl chloride	2.0 U		25	26.8	107	24.9	100	7	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	69.9	93	69.3	92	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Surrogate Recoveries	MS	MSD	T16411-10	Limits
1868-53-7	Dibromofluoromethane	104%	104%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	99%	97%	97%	66-139%
2037-26-5	Toluene-D8	105%	103%	107%	77-148%
460-00-4	4-Bromofluorobenzene	100%	101%	119%	84-150%

Instrument Performance Check (BFB)

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-BFB	Injection Date: 02/12/07
Lab File ID: F0078488.D	Injection Time: 17:39
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10313	15.8	Pass
75	30.0 - 60.0% of mass 95	24771	38.0	Pass
95	Base peak, 100% relative abundance	65123	100.0	Pass
96	5.0 - 9.0% of mass 95	4343	6.7	Pass
173	Less than 2.0% of mass 174	344	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	51261	78.7	Pass
175	5.0 - 9.0% of mass 174	3763	5.8 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	49896	76.6 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3355	5.2 (6.7) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2276-IC2276	F0078490.D	02/12/07	18:42	01:03	Initial cal 200
VF2276-IC2276	F0078491.D	02/12/07	19:14	01:35	Initial cal 400
VF2276-ICC2276	F0078492.D	02/12/07	19:46	02:07	Initial cal 1000
VF2276-IC2276	F0078493.D	02/12/07	20:18	02:39	Initial cal 2000
VF2276-IC2276	F0078494.D	02/12/07	20:49	03:10	Initial cal 4000
VF2276-IC2276	F0078495.D	02/12/07	21:21	03:42	Initial cal 10000

Instrument Performance Check (BFB)

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-BFB
Lab File ID: F0078963.D
Instrument ID: GCMSF
Injection Date: 02/28/07
Injection Time: 14:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7281	16.0	Pass
75	30.0 - 60.0% of mass 95	18364	40.3	Pass
95	Base peak, 100% relative abundance	45541	100.0	Pass
96	5.0 - 9.0% of mass 95	2793	6.1	Pass
173	Less than 2.0% of mass 174	107	0.23 (0.27) ^a	Pass
174	50.0 - 100.0% of mass 95	39123	85.9	Pass
175	5.0 - 9.0% of mass 174	3023	6.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	37355	82.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2802	6.2 (7.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2305-IC2305	F0078964.D	02/28/07	15:10	00:34	Initial cal 2
VF2305-IC2305	F0078965.D	02/28/07	15:41	01:05	Initial cal 5
VF2305-IC2305	F0078966.D	02/28/07	16:12	01:36	Initial cal 20
VF2305-ICC2305	F0078967.D	02/28/07	16:44	02:08	Initial cal 40
VF2305-IC2305	F0078968.D	02/28/07	17:16	02:40	Initial cal 70
VF2305-IC2305	F0078969.D	02/28/07	17:46	03:10	Initial cal 100
VF2305-IC2305	F0078970.D	02/28/07	18:18	03:42	Initial cal 200
VF2305-BS	F0078972.D	02/28/07	19:21	04:45	Blank Spike
VF2305-MB	F0078974.D	02/28/07	20:24	05:48	Method Blank
ZZZZZZ	F0078975.D	02/28/07	20:55	06:19	(unrelated sample)
ZZZZZZ	F0078976.D	02/28/07	21:26	06:50	(unrelated sample)
ZZZZZZ	F0078977.D	02/28/07	21:58	07:22	(unrelated sample)
T16395-2	F0078978.D	02/28/07	22:30	07:54	(used for QC only; not part of job T16432)
T16395-2MS	F0078979.D	02/28/07	23:00	08:24	Matrix Spike
T16395-2MSD	F0078980.D	02/28/07	23:32	08:56	Matrix Spike Duplicate
ZZZZZZ	F0078981.D	03/01/07	00:03	09:27	(unrelated sample)
ZZZZZZ	F0078982.D	03/01/07	00:35	09:59	(unrelated sample)
ZZZZZZ	F0078983.D	03/01/07	01:06	10:30	(unrelated sample)
ZZZZZZ	F0078984.D	03/01/07	01:38	11:02	(unrelated sample)
ZZZZZZ	F0078989.D	03/01/07	04:15	13:39	(unrelated sample)
ZZZZZZ	F0078990.D	03/01/07	04:47	14:11	(unrelated sample)
ZZZZZZ	F0078991.D	03/01/07	05:19	14:43	(unrelated sample)
ZZZZZZ	F0078992.D	03/01/07	05:50	15:14	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-BFB
Lab File ID: F0078994.D
Instrument ID: GCMSF
Injection Date: 03/01/07
Injection Time: 07:50

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6679	18.1	Pass
75	30.0 - 60.0% of mass 95	15417	41.8	Pass
95	Base peak, 100% relative abundance	36917	100.0	Pass
96	5.0 - 9.0% of mass 95	2620	7.1	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	32187	87.2	Pass
175	5.0 - 9.0% of mass 174	2345	6.4 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	31168	84.4 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2163	5.9 (6.9) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2306-CC2305	F0078995.D	03/01/07	08:23	00:33	Continuing cal 20
VF2306-CC2276	F0078996.D	03/01/07	08:55	01:05	Continuing cal 1000
VF2306-BS1	F0078997.D	03/01/07	09:31	01:41	Blank Spike
VF2306-BS2	F0078998.D	03/01/07	10:02	02:12	Blank Spike
VF2306-MB	F0078999.D	03/01/07	10:34	02:44	Method Blank
ZZZZZZ	F0079000.D	03/01/07	11:06	03:16	(unrelated sample)
ZZZZZZ	F0079001.D	03/01/07	11:37	03:47	(unrelated sample)
ZZZZZZ	F0079002.D	03/01/07	12:09	04:19	(unrelated sample)
ZZZZZZ	F0079003.D	03/01/07	12:41	04:51	(unrelated sample)
ZZZZZZ	F0079004.D	03/01/07	13:12	05:22	(unrelated sample)
T16432-6	F0079005.D	03/01/07	13:44	05:54	29WW36-FEB2007
ZZZZZZ	F0079006.D	03/01/07	14:16	06:26	(unrelated sample)
ZZZZZZ	F0079007.D	03/01/07	14:47	06:57	(unrelated sample)
ZZZZZZ	F0079008.D	03/01/07	15:18	07:28	(unrelated sample)
ZZZZZZ	F0079009.D	03/01/07	15:50	08:00	(unrelated sample)
T16432-4	F0079010.D	03/01/07	16:22	08:32	LHSM07-FEB2007
T16432-5	F0079011.D	03/01/07	16:54	09:04	47WW09-FEB2007
ZZZZZZ	F0079012.D	03/01/07	17:26	09:36	(unrelated sample)
ZZZZZZ	F0079013.D	03/01/07	17:57	10:07	(unrelated sample)
T16411-10	F0079014.D	03/01/07	18:28	10:38	(used for QC only; not part of job T16432)
T16411-10MS	F0079015.D	03/01/07	19:01	11:11	Matrix Spike
T16411-10MSD	F0079016.D	03/01/07	19:33	11:43	Matrix Spike Duplicate
ZZZZZZ	F0079020.D	03/01/07	21:39	13:49	(unrelated sample)
ZZZZZZ	F0079021.D	03/01/07	22:12	14:22	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-BFB
Lab File ID: Y0010427.D
Instrument ID: GCMSY

Injection Date: 02/27/07
Injection Time: 12:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	18328	22.3	Pass
75	30.0 - 60.0% of mass 95	48184	58.6	Pass
95	Base peak, 100% relative abundance	82280	100.0	Pass
96	5.0 - 9.0% of mass 95	5435	6.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	66136	80.4	Pass
175	5.0 - 9.0% of mass 174	5281	6.4 (8.0) ^a	Pass
176	95.0 - 101.0% of mass 174	63408	77.1 (95.9) ^a	Pass
177	5.0 - 9.0% of mass 176	3916	4.8 (6.2) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1139-IC1139	Y0010431.D	02/27/07	14:37	01:58	Initial cal 20
VY1139-ICC1139	Y0010432.D	02/27/07	15:06	02:27	Initial cal 40
VY1139-IC1139	Y0010433.D	02/27/07	15:36	02:57	Initial cal 70
VY1139-IC1139	Y0010434.D	02/27/07	16:05	03:26	Initial cal 100
VY1139-IC1139	Y0010435.D	02/27/07	16:35	03:56	Initial cal 200
VY1139-IC1139	Y0010437.D	02/27/07	17:33	04:54	Initial cal 5
VY1139-IC1139	Y0010438.D	02/27/07	18:03	05:24	Initial cal 2
VY1139-BS	Y0010439.D	02/27/07	18:32	05:53	Blank Spike
VY1139-BSD	Y0010440.D	02/27/07	19:02	06:23	Blank Spike Duplicate
VY1139-MB	Y0010442.D	02/27/07	20:01	07:22	Method Blank
T16432-7	Y0010443.D	02/27/07	20:30	07:51	TRIP BLANK
T16432-1	Y0010444.D	02/27/07	21:00	08:21	LHSMW06-FEB2007

Instrument Performance Check (BFB)

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-BFB
Lab File ID: Y0010446.D
Instrument ID: GCMSY
Injection Date: 02/28/07
Injection Time: 10:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22976	24.0	Pass
75	30.0 - 60.0% of mass 95	54920	57.5	Pass
95	Base peak, 100% relative abundance	95552	100.0	Pass
96	5.0 - 9.0% of mass 95	5753	6.0	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	67168	70.3	Pass
175	5.0 - 9.0% of mass 174	5842	6.1 (8.7) ^a	Pass
176	95.0 - 101.0% of mass 174	66456	69.5 (98.9) ^a	Pass
177	5.0 - 9.0% of mass 176	5395	5.6 (8.1) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1140-CC1139	Y0010447.D	02/28/07	10:57	00:27	Continuing cal 20
VY1140-BS	Y0010448.D	02/28/07	11:25	00:55	Blank Spike
VY1140-MB	Y0010450.D	02/28/07	12:20	01:50	Method Blank
ZZZZZZ	Y0010451.D	02/28/07	12:47	02:17	(unrelated sample)
T16432-2	Y0010452.D	02/28/07	13:15	02:45	17WW10-FEB2007
T16432-3	Y0010453.D	02/28/07	13:42	03:12	17WW12-FEB2007
T16432-4	Y0010454.D	02/28/07	14:09	03:39	LHSM07-FEB2007
T16432-5	Y0010455.D	02/28/07	14:35	04:05	47WW09-FEB2007
ZZZZZZ	Y0010457.D	02/28/07	15:32	05:02	(unrelated sample)
ZZZZZZ	Y0010458.D	02/28/07	16:00	05:30	(unrelated sample)
ZZZZZZ	Y0010459.D	02/28/07	16:27	05:57	(unrelated sample)
ZZZZZZ	Y0010460.D	02/28/07	16:54	06:24	(unrelated sample)
ZZZZZZ	Y0010461.D	02/28/07	17:22	06:52	(unrelated sample)
ZZZZZZ	Y0010462.D	02/28/07	17:49	07:19	(unrelated sample)
ZZZZZZ	Y0010463.D	02/28/07	18:17	07:47	(unrelated sample)
ZZZZZZ	Y0010464.D	02/28/07	18:44	08:14	(unrelated sample)
ZZZZZZ	Y0010465.D	02/28/07	19:12	08:42	(unrelated sample)
ZZZZZZ	Y0010466.D	02/28/07	19:39	09:09	(unrelated sample)
T16437-6	Y0010467.D	02/28/07	20:07	09:37	(used for QC only; not part of job T16432)
T16437-6	Y0010468.D	02/28/07	20:35	10:05	(used for QC only; not part of job T16432)
T16437-6MS	Y0010469.D	02/28/07	21:02	10:32	Matrix Spike
T16437-6MSD	Y0010470.D	02/28/07	21:29	10:59	Matrix Spike Duplicate
VY1140-ECC1139	Y0010472.D	02/28/07	22:24	11:54	Ending cal 20

Volatile Internal Standard Area Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2306-CC2305	Injection Date: 03/01/07
Lab File ID: F0078995.D	Injection Time: 08:23
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	699201	11.94	525986	16.02	192418	19.30
Upper Limit ^a	1398402	12.44	1051972	16.52	384836	19.80
Lower Limit ^b	349601	11.44	262993	15.52	96209	18.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2306-BS1	777387	11.94	579705	16.01	219016	19.30
VF2306-BS2	816000	11.93	591535	16.01	206818	19.28
VF2306-MB	806821	11.93	553209	16.02	163421	19.28
ZZZZZZ	782363	11.93	537014	16.01	147308	19.28
ZZZZZZ	758389	11.93	519002	16.01	140295	19.27
ZZZZZZ	730503	11.92	505963	16.01	133214	19.28
ZZZZZZ	713902	11.93	493376	16.00	130066	19.28
ZZZZZZ	709648	11.93	489247	16.02	126540	19.28
T16432-6	697001	11.93	477711	16.00	126547	19.28
ZZZZZZ	693179	11.93	488543	16.01	121877	19.29
ZZZZZZ	684656	11.93	471501	16.01	114404	19.28
ZZZZZZ	670434	11.93	467470	16.00	117612	19.28
ZZZZZZ	610736	11.91	425298	16.00	114844	19.26
T16432-4	638047	11.92	449783	15.99	118479	19.26
T16432-5	598577	11.91	425000	16.00	114851	19.27
ZZZZZZ	618266	11.91	428138	16.00	108080	19.26
ZZZZZZ	597863	11.91	425430	15.99	116121	19.25
T16411-10	617663	11.91	436613	15.99	122528	19.25
T16411-10MS	620696	11.90	469833	15.98	178265	19.24
T16411-10MSD	655046	11.90	491723	15.97	183495	19.25
ZZZZZZ	625983	11.89	448435	15.97	117429	19.24
ZZZZZZ	617306	11.89	441010	15.97	117597	19.24

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VY1139-ICC1139	Injection Date: 02/27/07
Lab File ID: Y0010432.D	Injection Time: 15:06
Instrument ID: GCMSY	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	528585	9.58	416756	12.71	213134	15.11
Upper Limit ^a	1057170	10.08	833512	13.21	426268	15.61
Lower Limit ^b	264293	9.08	208378	12.21	106567	14.61

Lab Sample ID	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
VY1139-BS	598294	9.58	460129	12.71	231226	15.11
VY1139-BSD	610038	9.58	454509	12.71	235602	15.11
VY1139-MB	535914	9.58	377022	12.71	139892	15.11
T16432-7	529138	9.58	362047	12.71	130297	15.11
T16432-1	516276	9.58	349440	12.71	123643	15.11

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VY1140-CC1139	Injection Date: 02/28/07
Lab File ID: Y0010447.D	Injection Time: 10:57
Instrument ID: GCMSY	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	514168	9.58	390760	12.71	197760	15.11
Upper Limit ^a	1028336	10.08	781520	13.21	395520	15.61
Lower Limit ^b	257084	9.08	195380	12.21	98880	14.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VY1140-BS	528114	9.58	398199	12.71	212159	15.11
VY1140-MB	477732	9.58	342871	12.71	132949	15.11
ZZZZZZ	464413	9.58	327103	12.71	124680	15.11
T16432-2	464350	9.58	318565	12.71	120370	15.11
T16432-3	470453	9.58	315840	12.71	112791	15.11
T16432-4	461116	9.58	314727	12.71	113535	15.11
T16432-5	431337	9.59	309610	12.71	127372	15.11
ZZZZZZ	405017	9.58	275190	12.71	102766	15.11
ZZZZZZ	407320	9.58	285074	12.71	101688	15.11
ZZZZZZ	403367	9.58	270362	12.71	98390*	15.11
ZZZZZZ	392945	9.58	270524	12.71	97126*	15.11
ZZZZZZ	408609	9.58	279258	12.71	99061	15.11
ZZZZZZ	402576	9.58	276931	12.71	102897	15.11
ZZZZZZ	405732	9.58	280078	12.71	95538*	15.11
ZZZZZZ	416787	9.58	275004	12.71	99665	15.11
ZZZZZZ	393479	9.58	274001	12.71	99599	15.11
ZZZZZZ	391388	9.58	271169	12.71	102103	15.11
T16437-6	392973	9.58	275722	12.71	106578	15.11
T16437-6	396432	9.58	280504	12.71	96800*	15.11
T16437-6MS	418911	9.58	340300	12.71	177835	15.11
T16437-6MSD	471794	9.58	366048	12.71	183943	15.11
VY1140-ECC1139	442011	9.58	342239	12.71	177981	15.11

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: T16432**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant**Method:** SW846 8260B**Matrix:** AQ**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3	S4
T16432-1	Y0010444.D	121.0	117.0	133.0	158.0* a
T16432-2	Y0010452.D	124.0	122.0	129.0	153.0* a
T16432-3	Y0010453.D	121.0	118.0	132.0	154.0* a
T16432-4	F0079010.D	102.0	96.0	106.0	125.0
T16432-4	Y0010454.D	127.0	117.0	128.0	150.0
T16432-5	F0079011.D	104.0	98.0	106.0	123.0
T16432-5	Y0010455.D	125.0	122.0	129.0	146.0
T16432-6	F0079005.D	102.0	95.0	109.0	127.0
T16432-7	Y0010443.D	117.0	114.0	130.0	151.0* a
T16411-10MS	F0079015.D	104.0	99.0	105.0	100.0
T16411-10MSD	F0079016.D	104.0	97.0	103.0	101.0
T16437-6MS	Y0010469.D	124.0	126.0	120.0	123.0
T16437-6MSD	Y0010470.D	122.0	117.0	119.0	129.0
VF2306-BS2	F0078998.D	98.0	93.0	103.0	106.0
VF2306-MB	F0078999.D	101.0	94.0	110.0	119.0
VY1139-BS	Y0010439.D	121.0	117.0	122.0	132.0
VY1139-BSD	Y0010440.D	120.0	120.0	129.0	136.0
VY1139-MB	Y0010442.D	118.0	119.0	131.0	154.0* b
VY1140-BS	Y0010448.D	124.0	119.0	128.0	130.0
VY1140-MB	Y0010450.D	124.0	119.0	130.0	150.0

**Surrogate
Compounds****Recovery
Limits**

S1 = Dibromofluoromethane	73-139%
S2 = 1,2-Dichloroethane-D4	66-139%
S3 = Toluene-D8	77-148%
S4 = 4-Bromofluorobenzene	84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

(b) Outside control limits biased high. There are no target compounds associated with this surrogate.

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-ICC2276
Lab FileID: F0078492.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2276GW.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Tue Feb 13 07:54:50 2007
 Response via : Initial Calibration

Calibration Files

200 =F0078490.D 400 =F0078491.D 1000 =F0078492.D
 2000 =F0078493.D 4000 =F0078494.D 9000 =F0078495.D

	Compound	200	400	1000	2000	4000	9000	Avg	%RSD
1) I	Fluorobenzene	-----ISTD-----							
2) S	Dibromofluoromethan	0.287	0.281	0.280	0.278	0.270	0.256	0.275	4.06
3) S	1,2-Dichloroethane-	0.212	0.207	0.211	0.211	0.212	0.209	0.210	0.87
4) I	Chlorobenzene-d5	-----ISTD-----							
5) S	Toluene-d8	1.047	1.037	1.041	1.022	1.035	1.039	1.037	0.83
6) I	1,4-Dichlorobenzene-d	-----ISTD-----							
7) S	4-Bromofluorobenzen	0.808	0.807	0.790	0.802	0.804	0.865	0.813	3.25
8) I	1,4-Dichlorobenzene-d	-----ISTD-----							
9) H	TPH-GRO (C6-C10)	1.214	0.770	0.582	0.475	0.429	0.392	0.644	E1 48.27
	----- Linear regression ----- Coefficient = 0.9997								
	Response Ratio = 37.35716 + 3.74928 *A								

 (#) = Out of Range

VF2276GW.M

Tue Feb 13 09:27:02 2007

Initial Calibration Summary

Job Number: T16432
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Initial Calibration

Calibration Files

1 =F0078964.D 2 =F0078965.D 3 =F0078966.D
 4 =F0078967.D 5 =F0078968.D 6 =F0078969.D 7 =F0078970.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.157	0.162	0.153	0.171	0.181	0.178	0.196	0.171	8.89
3)P Chloromethane	0.353	0.368	0.326	0.309	0.319	0.297	0.331	0.329	7.50
4)C Vinyl Chloride	0.279	0.316	0.268	0.280	0.287	0.269	0.300	0.286	6.01
5) Bromomethane	0.275	0.253	0.223	0.215	0.216	0.204	0.190	0.225	12.95
6) Chloroethane	0.203	0.232	0.219	0.222	0.222	0.210	0.211	0.217	4.37
7) Trichlorofluorome	0.137	0.154	0.142	0.159	0.166	0.162	0.164	0.155	7.23
8) Acrolein	0.030	0.030	0.031	0.036	0.036	0.033	0.033	0.033	8.00
9)C 1,1-Dichloroethen	0.287	0.299	0.298	0.320	0.322	0.306	0.312	0.306	4.04
10) Freon 113	0.174	0.190	0.191	0.225	0.225	0.213	0.216	0.205	9.65
11) Acetone	0.065	0.062	0.057	0.052	0.053	0.053	0.052	0.056	9.61
12) Iodomethane	0.405	0.432	0.438	0.436	0.447	0.434	0.445	0.434	3.22
13) Methyl acetate	0.199	0.203	0.197	0.179	0.188	0.186	0.185	0.191	4.56
14) Carbon Disulfide	0.833	0.878	0.869	0.908	0.930	0.885	0.918	0.889	3.74
15) Methylene Chlorid	0.410	0.424	0.407	0.404	0.396	0.378	0.376	0.399	4.34
16) Tert Butyl Alchoh	0.015	0.018	0.018	0.015	0.017	0.018	0.018	0.017	8.14
17) trans-1,2-Dichlor	0.328	0.340	0.340	0.344	0.351	0.337	0.344	0.341	2.11
18) Acrylonitrile	0.086	0.099	0.097	0.091	0.097	0.098	0.097	0.095	4.82
19) Methyl Tert Butyl	0.577	0.603	0.572	0.555	0.578	0.587	0.594	0.581	2.70
20) Hexane	0.300	0.281	0.283	0.341	0.346	0.320	0.315	0.312	8.32
21)P 1,1-Dichloroethan	0.428	0.457	0.436	0.445	0.450	0.430	0.435	0.440	2.44
22) Vinyl acetate	0.513	0.554	0.582	0.564	0.569	0.552	0.517	0.550	4.74
23) Di-isopropyl ethe	0.944	1.012	0.992	0.981	0.988	0.943	0.934	0.971	3.09
24) Ethyl tert-butyl	0.721	0.735	0.733	0.737	0.753	0.739	0.749	0.738	1.43
25) 2,2-Dichloropropa	0.208	0.200	0.197	0.210	0.209	0.202	0.195	0.203	2.91
26) cis-1,2-Dichloroe	0.282	0.305	0.302	0.308	0.307	0.302	0.307	0.302	3.03
27) 2-Butanone	0.113	0.118	0.120	0.105	0.111	0.112	0.109	0.113	4.48
28) Bromochloromethan	0.124	0.142	0.145	0.146	0.147	0.149	0.150	0.143	6.13
29)C Chloroform	0.343	0.363	0.358	0.362	0.364	0.353	0.362	0.358	2.09
30) Tetrahydrofuran	0.048	0.035	0.033	0.030	0.031	0.031	0.029	0.034	19.44
----- Linear regression ----- Coefficient = 0.9988									
Response Ratio = 0.00148 + 0.02898 *A									
31) 1,1,1-Trichloroet	0.196	0.201	0.204	0.213	0.218	0.210	0.215	0.208	3.79
32)S Dibromofluorometh	0.211	0.221	0.210	0.217	0.221	0.221	0.226	0.218	2.61
33) Cyclohexane	0.390	0.405	0.413	0.479	0.485	0.453	0.447	0.439	8.43
34) 1,1-Dichloropropo	0.283	0.279	0.292	0.313	0.321	0.312	0.316	0.302	5.61
35) Carbon Tetrachlor	0.142	0.161	0.164	0.176	0.181	0.177	0.183	0.169	8.57
36)S 1,2-Dichloroethan	0.159	0.173	0.166	0.161	0.165	0.162	0.166	0.165	2.76
37) Benzene	1.089	1.108	1.092	1.113	1.134	1.098	1.119	1.108	1.43
38) 1,2-Dichloroethan	0.181	0.193	0.200	0.205	0.200	0.204	0.201	0.198	4.13
39) tert-amyl methyl	0.712	0.774	0.759	0.736	0.767	0.769	0.782	0.757	3.26
40) Trichloroethene	0.212	0.223	0.218	0.229	0.233	0.229	0.236	0.226	3.78
41) Methylcyclohexane	0.318	0.332	0.335	0.391	0.401	0.384	0.388	0.364	9.38
42)C 1,2-Dichloropropa	0.320	0.304	0.310	0.316	0.320	0.310	0.318	0.314	1.90
43) Dibromomethane	0.129	0.147	0.169	0.160	0.166	0.165	0.170	0.158	9.61

Initial Calibration Summary

Job Number: T16432
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	17.15
	----- Linear regression -----	Coefficient = 0.9989								
	Response Ratio =	-0.00341 + 0.00271 *A								
45)	Bromodichlorometh	0.287	0.300	0.298	0.307	0.311	0.306	0.317	0.304	3.19
46)	2-Nitropropane	0.046	0.042	0.041	0.037	0.038	0.039	0.038	0.040	7.95
47)	2-Chloroethyl vin	0.094	0.104	0.122	0.125	0.136	0.143	0.152	0.125	16.72
	----- Linear regression -----	Coefficient = 0.9983								
	Response Ratio =	-0.06248 + 0.15260 *A								
48)	4-Methyl-2-pentan	0.229	0.239	0.249	0.234	0.246	0.246	0.237	0.240	3.06
49)	cis-1,3-Dichlorop	0.369	0.397	0.420	0.427	0.443	0.439	0.454	0.421	6.95
50)	I Chlorobenzene-d5	-----ISTD-----								
51)	S Toluene-d8	1.147	1.122	1.060	1.073	1.083	1.079	1.120	1.098	2.89
52)	C Toluene	1.382	1.408	1.358	1.387	1.384	1.367	1.417	1.386	1.51
53)	trans-1,3-Dichlor	0.340	0.364	0.391	0.402	0.406	0.409	0.428	0.391	7.65
54)	1,1,2-Trichloroet	0.263	0.295	0.289	0.279	0.283	0.284	0.289	0.283	3.62
55)	Tetrachloroethene	0.272	0.280	0.293	0.302	0.309	0.299	0.307	0.294	4.70
56)	2-hexanone	0.170	0.180	0.203	0.194	0.206	0.211	0.208	0.196	8.04
57)	1,3-Dichloropropa	0.605	0.605	0.602	0.593	0.592	0.591	0.602	0.599	1.05
58)	Dibromochlorometh	0.254	0.312	0.303	0.296	0.299	0.304	0.315	0.298	6.92
59)	1,2-Dibromoethane	0.283	0.310	0.305	0.302	0.314	0.320	0.331	0.309	4.87
60)	1-Chlorohexane	0.464	0.467	0.465	0.505	0.517	0.509	0.535	0.495	5.83
61)	P Chlorobenzene	0.877	0.857	0.851	0.870	0.877	0.867	0.897	0.871	1.73
62)	1,1,1,2-Tetrachlo	0.264	0.284	0.283	0.282	0.281	0.279	0.288	0.280	2.74
63)	C Ethylbenzene	1.475	1.458	1.433	1.493	1.499	1.470	1.518	1.478	1.90
64)	m,p-Xylene	0.970	0.990	1.008	1.040	1.057	1.039	1.067	1.025	3.51
65)	o-Xylene	1.021	1.033	1.058	1.084	1.107	1.077	1.111	1.070	3.23
66)	Styrene	0.796	0.855	0.910	0.960	0.983	0.978	1.013	0.928	8.44
67)	P Bromoform	0.142	0.077	0.184	0.179	0.195	0.199	0.205	0.169	26.85
	----- Linear regression -----	Coefficient = 0.9995								
	Response Ratio =	-0.01246 + 0.20679 *A								
68)	I 1,4-Dichlorobenze	-----ISTD-----								
69)	Isopropylbenzene	3.394	3.422	2.803	2.838	2.780	2.731	2.618	2.941	11.11
70)	Cyclohexanone	0.023	0.030	0.027	0.025	0.026	0.029	0.027	0.027	8.23
71)	S 4-Bromofluorobenz	1.169	1.004	0.864	0.853	0.853	0.860	0.845	0.921	13.32
72)	Bromobenzene	0.997	0.963	0.842	0.837	0.823	0.822	0.788	0.867	9.15
73)	P 1,1,2,2-Tetrachlo	1.339	1.320	1.146	1.011	1.011	1.030	0.983	1.120	13.59
74)	Trans-1,4-Dichlor	0.143	0.182	0.177	0.182	0.188	0.192	0.192	0.179	9.42
75)	1,2,3-Trichloropr	0.257	0.296	0.253	0.232	0.230	0.236	0.225	0.247	10.10
76)	n-Propylbenzene	4.567	4.426	4.010	4.105	4.023	3.954	3.865	4.136	6.29
77)	2-Chlorotoluene	3.164	2.888	2.531	2.500	2.416	2.351	2.285	2.591	12.31
78)	4-Chlorotoluene	2.569	2.376	2.183	2.187	2.133	2.116	2.076	2.234	7.90
79)	1,3,5-Trimethylbe	2.668	2.535	2.320	2.351	2.287	2.250	2.168	2.368	7.33
80)	sec-Butylbenzene	3.329	3.252	3.038	3.232	3.150	3.042	2.937	3.140	4.47
81)	1,3-Dichlorobenze	1.316	1.426	1.364	1.413	1.441	1.419	1.422	1.400	3.16
82)	4-Isopropyltoluen	2.408	2.304	2.224	2.403	2.346	2.277	2.220	2.312	3.37
83)	1,4-Dichlorobenze	1.528	1.430	1.389	1.429	1.420	1.423	1.424	1.435	3.04
84)	tert-Butylbenzene	0.533	0.438	0.430	0.445	0.436	0.429	0.410	0.446	8.90
85)	n-Butylbenzene	1.465	1.572	1.892	2.173	2.149	2.132	2.214	1.942	15.91
	----- Linear regression -----	Coefficient = 0.9997								
	Response Ratio =	-0.08322 + 2.22219 *A								
86)	1,2-Dichlorobenze	1.206	1.332	1.314	1.336	1.345	1.359	1.369	1.323	4.14
87)	1,2,4-Trimethylbe	2.566	2.449	2.311	2.410	2.354	2.310	2.242	2.377	4.53
88)	1,2-Dibromo-3-Chl	0.068	0.106	0.082	0.072	0.077	0.089	0.088	0.083	15.22
	----- Linear regression -----	Coefficient = 0.9968								

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Ratio = -0.00467 + 0.08863 *A										
89)	1,2,4-Trichlorobe	0.166	0.135	0.302	0.403	0.468	0.530	0.585	0.370	47.33
----- Linear regression -----		Coefficient = 0.9944								
		Response Ratio = -0.09820 + 0.59565 *A								
90)	Hexachlorobutadie	0.058	0.088	0.170	0.207	0.204	0.208	0.202	0.162	38.83
----- Linear regression -----		Coefficient = 0.9993								
		Response Ratio = -0.00579 + 0.20548 *A								
91)	Naphthalene	0.526	0.280	0.475	0.606	0.781	0.975	1.125	0.681	43.48
----- Quadratic regression -----		Coefficient = 0.9974								
		Response Ratio = -0.07686 + 0.74236 *A + 0.10172 *A^2								
92)	1,2,3-Trichlorobe	0.167	0.113	0.217	0.276	0.334	0.389	0.421	0.274	41.95
----- Linear regression -----		Coefficient = 0.9938								
		Response Ratio = -0.07169 + 0.43007 *A								

(#) = Out of Range										
VF2305C.M					Thu Mar 01 07:44:03 2007					

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
Lab FileID: F0078995.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078995.D Vial: 3
 Acq On : 1 Mar 2007 8:23 am Operator: lydiaj
 Sample : cc2305-20 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	88	-0.01
2	Dichlorodifluoromethane	0.171	0.152	11.1	88	0.00
3 P	Chloromethane	0.329	0.325	1.2	88	0.00
4 C	Vinyl Chloride	0.286	0.274	4.2	90	-0.01
5	Bromomethane	0.225	0.219	2.7	86	-0.01
6	Chloroethane	0.217	0.214	1.4	86	0.00
7	Trichlorofluoromethane	0.155	0.152	1.9	94	0.00
8	Acrolein	0.033	0.032	3.0	92	-0.01
9 C	1,1-Dichloroethene	0.306	0.283	7.5	83	0.00
10	Freon 113	0.205	0.189	7.8	87	0.00
11	Acetone	0.056	0.048	14.3	74	0.00
12	Iodomethane	0.434	0.403	7.1	81	0.00
13	Methyl acetate	0.191	0.170	11.0	76	0.00
14	Carbon Disulfide	0.889	0.799	10.1	81	0.00
15	Methylene Chloride	0.399	0.393	1.5	85	0.00
16	Tert Butyl Alcohol	0.017	0.014	17.6	67	-0.01
17	trans-1,2-Dichloroethene	0.341	0.314	7.9	81	-0.01
18	Acrylonitrile	0.095	0.081	14.7	73	0.00
19	Methyl Tert Butyl Ether	0.581	0.533	8.3	82	0.00
20	Hexane	0.312	0.302	3.2	94	-0.01
21 P	1,1-Dichloroethane	0.440	0.438	0.5	88	0.00
22	Vinyl acetate	0.550	0.534	2.9	81	0.00
23	Di-isopropyl ether	0.971	0.992	-2.2	88	0.00
24	Ethyl tert-butyl ether	0.738	0.716	3.0	86	0.00
25	2,2-Dichloropropane	0.203	0.207	-2.0	92	0.00
26	cis-1,2-Dichloroethene	0.302	0.289	4.3	84	-0.01
27	2-Butanone	0.113	0.098	13.3	72	-0.01
28	Bromochloromethane	0.143	0.139	2.8	84	0.00
29 C	Chloroform	0.358	0.357	0.3	88	-0.01
30	Tetrahydrofuran	0.034	0.031	8.8	84	0.00
31	1,1,1-Trichloroethane	0.208	0.200	3.8	86	0.00
32 S	Dibromofluoromethane	0.218	0.214	1.8	90	0.00
33	Cyclohexane	0.439	0.415	5.5	88	0.00
34	1,1-Dichloropropene	0.302	0.283	6.3	85	-0.01
35	Carbon Tetrachloride	0.169	0.164	3.0	88	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.162	1.8	86	-0.01
37	Benzene	1.108	1.070	3.4	86	0.00
38	1,2-Dichloroethane	0.198	0.207	-4.5	91	0.00
39	tert-amyl methyl ether	0.757	0.696	8.1	81	0.00
40	Trichloroethene	0.226	0.213	5.8	86	0.00
41	Methylcyclohexane	0.364	0.329	9.6	87	0.00
42 C	1,2-Dichloropropane	0.314	0.306	2.5	87	0.00

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
Lab FileID: F0078995.D

43	Dibromomethane	0.158	0.161	-1.9	84	-0.01
44	1,4-Dioxane	0.002	0.002	0.0	79	-0.02
45	Bromodichloromethane	0.304	0.296	2.6	87	0.00
46	2-Nitropropane	0.040	0.035	12.5	75	0.00
47	2-Chloroethyl vinyl ether	0.125	0.095	24.0#	69	0.00
48	4-Methyl-2-pentanone	0.240	0.215	10.4	76	-0.01
49	cis-1,3-Dichloropropene	0.421	0.416	1.2	87	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
51 S	Toluene-d8	1.098	1.054	4.0	90	0.00
52 C	Toluene	1.386	1.315	5.1	87	0.00
53	trans-1,3-Dichloropropene	0.391	0.366	6.4	85	0.00
54	1,1,2-Trichloroethane	0.283	0.265	6.4	83	0.00
55	Tetrachloroethene	0.294	0.285	3.1	88	-0.01
56	2-hexanone	0.196	0.165	15.8	73	0.00
57	1,3-Dichloropropane	0.599	0.560	6.5	84	0.00
58	Dibromochloromethane	0.298	0.283	5.0	84	0.00
59	1,2-Dibromoethane	0.309	0.278	10.0	82	0.00
60	1-Chlorohexane	0.495	0.444	10.3	86	-0.01
61 P	Chlorobenzene	0.871	0.844	3.1	90	-0.01
62	1,1,1,2-Tetrachloroethane	0.280	0.275	1.8	88	-0.01
63 C	Ethylbenzene	1.478	1.399	5.3	88	-0.01
64	m,p-Xylene	1.025	0.993	3.1	89	-0.01
65	o-Xylene	1.070	1.039	2.9	89	-0.01
66	Styrene	0.928	0.889	4.2	88	0.00
67 P	Bromoform	0.169	0.154	8.9	76	-0.01
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
69	Isopropylbenzene	2.941	2.895	1.6	88	0.00
70	Cyclohexanone	0.027	0.049	-81.5#	155	-0.02
71 S	4-Bromofluorobenzene	0.921	0.906	1.6	89	0.00
72	Bromobenzene	0.867	0.893	-3.0	90	0.00
73 P	1,1,2,2-Tetrachloroethane	1.120	1.016	9.3	75	0.00
74	Trans-1,4-Dichloro-2-Butene	0.179	0.156	12.8	75	-0.01
75	1,2,3-Trichloropropane	0.247	0.237	4.0	80	-0.01
76	n-Propylbenzene	4.136	4.044	2.2	86	0.00
77	2-Chlorotoluene	2.591	2.595	-0.2	87	0.00
78	4-Chlorotoluene	2.234	2.210	1.1	86	-0.01
79	1,3,5-Trimethylbenzene	2.368	2.371	-0.1	87	0.00
80	sec-Butylbenzene	3.140	3.061	2.5	86	0.00
81	1,3-Dichlorobenzene	1.400	1.423	-1.6	89	0.00
82	4-Isopropyltoluene	2.312	2.227	3.7	85	0.00
83	1,4-Dichlorobenzene	1.435	1.395	2.8	85	0.00
84	tert-Butylbenzene	0.446	0.416	6.7	82	-0.01
85	n-Butylbenzene	1.942	1.782	8.2	80	0.00
86	1,2-Dichlorobenzene	1.323	1.297	2.0	84	-0.01
87	1,2,4-Trimethylbenzene	2.377	2.379	-0.1	88	0.00
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	71	-0.02
89	1,2,4-Trichlorobenzene	0.370	0.253	31.6#	71	0.00
90	Hexachlorobutadiene	0.162	0.147	9.3	74	-0.02
91	Naphthalene	0.681	0.379	44.3#	68	0.00
92	1,2,3-Trichlorobenzene	0.274	0.174	36.5#	68	0.00

Average % D = 7.6

(#) = Out of Range
F0078966.D VF2305CG.M

SPCC's out = 0 CCC's out = 0
Fri Mar 02 07:49:36 2007

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2276
Lab FileID: F0078996.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078996.D Vial: 4
 Acq On : 1 Mar 2007 8:55 am Operator: lydiaj
 Sample : cc2276-1000 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	92	-0.01
32 S	Dibromofluoromethane	0.218	0.547	-150.9#	239#	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.404	-144.8#	223#	-0.01
50 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51 S	Toluene-d8	1.098	2.827	-157.5#	244#	0.00
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
71 S	4-Bromofluorobenzene	0.921	2.369	-157.2#	233#	-0.01
93 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	0.02
94 H	TPH-GRO (C6-C10)	6.436	7.083	-10.1	73	0.49

Average % D = 87.6

(#) = Out of Range
 F0078996.D VF2305CG.M

SPCC's out = 5 CCC's out = 5
 Fri Mar 02 07:49:41 2007

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

Response Factor Report GCMS_Y

Method : C:\MSDCHEM\1\METHODS\VY1139.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Wed Feb 28 14:32:23 2007
 Response via : Initial Calibration

Calibration Files

1 =Y0010438.D 2 =Y0010437.D 3 =Y0010431.D 4 =Y0010432.D
 5 =Y0010433.D 6 =Y0010434.D 7 =Y0010435.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.204	0.236	0.383	0.364	0.360	0.388	0.328	0.323	22.77
---- Linear regression ----	Coefficient = 0.9916								
Response Ratio =	0.02002 + 0.33494 *A								
3)P Chloromethane	0.539	0.497	0.538	0.515	0.513	0.509	0.415	0.504	8.32
4)C Vinyl Chloride	0.627	0.675	0.721	0.674	0.643	0.666	0.565	0.653	7.45
5) Bromomethane	0.308	0.292	0.384	0.357	0.315	0.304	0.279	0.320	11.68
6) Chloroethane	0.303	0.322	0.415	0.371	0.333	0.315	0.281	0.334	13.50
7) Trichlorofluorome	0.242	0.308	0.449	0.428	0.405	0.403	0.372	0.373	19.60
---- Linear regression ----	Coefficient = 0.9972								
Response Ratio =	0.02213 + 0.37411 *A								
8) Acrolein	0.010	0.014	0.015	0.014	0.013	0.012	0.013	14.38	
9)C 1,1-Dichloroethen	0.229	0.179	0.220	0.245	0.240	0.257	0.250	0.231	11.45
10) Freon 113	0.258	0.174	0.278	0.279	0.255	0.260	0.249	0.250	14.18
11) Acetone	0.056	0.061	0.075	0.074	0.067	0.062	0.058	0.065	11.57
12) Iodomethane	0.343	0.342	0.340	0.353	0.352	0.376	0.374	0.354	4.28
13) Methyl acetate	0.174	0.150	0.198	0.200	0.183	0.178	0.168	0.179	9.73
14) Carbon Disulfide	1.107	0.951	1.065	1.058	1.002	1.050	1.031	1.038	4.80
15) Methylene Chlorid	0.414	0.352	0.381	0.348	0.358	0.343	0.354	0.364	6.93
16) Tert Butyl Alcoh	0.017	0.018	0.023	0.023	0.023	0.024	0.024	0.022	13.25
17) trans-1,2-Dichlor	0.324	0.256	0.287	0.293	0.293	0.300	0.293	0.292	6.81
18) Acrylonitrile	0.089	0.092	0.121	0.121	0.113	0.113	0.108	0.108	11.97
19) Hexane	0.234	0.239	0.353	0.398	0.397	0.427	0.411	0.351	23.24
---- Linear regression ----	Coefficient = 0.9992								
Response Ratio =	-0.01439 + 0.41738 *A								
20) Methyl Tert Butyl	0.524	0.568	0.647	0.736	0.761	0.779	0.797	0.688	15.78
---- Linear regression ----	Coefficient = 0.9997								
Response Ratio =	-0.04096 + 0.80371 *A								
21)P 1,1-Dichloroethan	0.751	0.627	0.754	0.726	0.726	0.726	0.708	0.717	5.98
22) Vinyl acetate	0.376	0.420	0.585	0.622	0.611	0.576	0.551	0.534	18.14
---- Linear regression ----	Coefficient = 0.9977								
Response Ratio =	0.11344 + 0.55357 *A								
23) Di-isopropyl ethe	0.648	0.660	0.830	0.899	0.933	0.921	0.916	0.829	15.03
---- Linear regression ----	Coefficient = 0.9998								
Response Ratio =	-0.01640 + 0.92309 *A								
24) Ethyl tert-butyl	0.795	0.827	0.961	1.072	1.153	1.190	1.233	1.033	16.98
---- Linear regression ----	Coefficient = 0.9992								
Response Ratio =	-0.08463 + 1.24409 *A								
25) 2,2-Dichloropropa	0.358	0.369	0.384	0.403	0.399	0.384	0.382	0.383	4.08

Initial Calibration Summary

Job Number: T16432
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
 Lab FileID: Y0010432.D

26)	cis-1,2-Dichloroe	0.298	0.323	0.338	0.347	0.361	0.353	0.345	0.338	6.26
27)	2-Butanone	0.020	0.022	0.030	0.032	0.032	0.030	0.031	0.028	18.27
---- Linear regression ---- Coefficient = 0.9988										
Response Ratio = -0.00264 + 0.03144 *A										
28)	Bromochloromethan	0.133	0.119	0.136	0.143	0.138	0.135	0.137	0.134	5.57
29)C	Chloroform	0.603	0.533	0.596	0.583	0.587	0.576	0.576	0.579	3.91
30)	Tetrahydrofuran	0.049	0.033	0.054	0.056	0.063	0.060	0.059	0.053	18.67
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.00105 + 0.05985 *A										
31)	1,1,1-Trichloroet	0.444	0.358	0.434	0.443	0.432	0.443	0.434	0.427	7.20
32)S	Dibromofluorometh	0.229	0.249	0.281	0.278	0.268	0.269	0.268	0.263	6.90
33)	Cyclohexane	0.357	0.295	0.503	0.600	0.602	0.627	0.617	0.515	26.44
---- Linear regression ---- Coefficient = 0.9996										
Response Ratio = -0.02592 + 0.62605 *A										
34)	1,1-Dichloroprope	0.276	0.320	0.386	0.417	0.417	0.430	0.433	0.383	16.00
---- Linear regression ---- Coefficient = 0.9999										
Response Ratio = -0.01460 + 0.43570 *A										
35)	Carbon Tetrachlor	0.290	0.239	0.314	0.329	0.322	0.324	0.321	0.305	10.51
36)S	1,2-Dichloroethan	0.410	0.388	0.478	0.474	0.459	0.457	0.460	0.446	7.60
37)	Benzene	1.384	1.212	1.407	1.445	1.410	1.460	1.406	1.389	5.92
38)	1,2-Dichloroethan	0.545	0.453	0.591	0.568	0.563	0.540	0.525	0.541	8.20
39)	tert-amyl methyl	0.560	0.595	0.755	0.873	0.896	0.927	0.958	0.795	20.38
---- Linear regression ---- Coefficient = 0.9995										
Response Ratio = -0.06051 + 0.96643 *A										
40)	Trichloroethene	0.273	0.242	0.256	0.278	0.299	0.296	0.310	0.279	8.75
41)	Methylcyclohexane	0.255	0.209	0.345	0.410	0.411	0.423	0.440	0.356	25.50
---- Linear regression ---- Coefficient = 0.9995										
Response Ratio = -0.02902 + 0.44428 *A										
42)C	1,2-Dichloropropa	0.435	0.382	0.437	0.441	0.440	0.443	0.441	0.431	5.09
43)	Dibromomethane	0.169	0.187	0.216	0.219	0.206	0.204	0.207	0.201	8.75
44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	11.60
45)	Bromodichlorometh	0.399	0.380	0.463	0.473	0.479	0.484	0.487	0.452	9.67
46)	2-Nitropropane	0.042	0.044	0.073	0.075	0.069	0.066	0.061	0.062	21.81
---- Linear regression ---- Coefficient = 0.9957										
Response Ratio = 0.02259 + 0.06144 *A										
47)	2-Chloroethyl vin	0.076	0.097	0.167	0.187	0.190	0.201	0.217	0.162	33.39
---- Linear regression ---- Coefficient = 0.9982										
Response Ratio = -0.10189 + 0.21830 *A										
48)	4-Methyl-2-pentan	0.018	0.021	0.031	0.032	0.032	0.031	0.032	0.028	21.39
---- Linear regression ---- Coefficient = 0.9998										
Response Ratio = -0.00272 + 0.03194 *A										
49)	cis-1,3-Dichlorop	0.407	0.398	0.460	0.523	0.536	0.561	0.578	0.495	14.74
50) I	Chlorobenzene-d5	-----ISTD-----								
51)S	Toluene-d8	1.210	1.311	1.388	1.414	1.434	1.481	1.463	1.386	6.89
52)C	Toluene	0.907	0.873	1.001	1.075	1.081	1.094	1.055	1.012	8.81
53)	trans-1,3-Dichlor	0.436	0.431	0.481	0.549	0.592	0.607	0.626	0.532	15.42
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.04063 + 0.63175 *A										
54)	1,1,2-Trichloroet	0.393	0.358	0.361	0.374	0.373	0.374	0.369	0.372	3.04

Initial Calibration Summary

Job Number: T16432
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
 Lab FileID: Y0010432.D

55)	Tetrachloroethene	0.227	0.242	0.260	0.251	0.262	0.261	0.254	0.251	5.07
56)	2-hexanone	0.097	0.105	0.192	0.197	0.190	0.189	0.177	0.164	26.38
---- Linear regression ---- Coefficient = 0.9979										
Response Ratio = 0.02704 + 0.17877 *A										
57)	1,3-Dichloropropa	0.725	0.670	0.758	0.736	0.738	0.728	0.706	0.723	3.89
58)	Dibromochlorometh	0.336	0.293	0.334	0.346	0.376	0.378	0.388	0.350	9.46
59)	1,2-Dibromoethane	0.323	0.287	0.336	0.352	0.372	0.377	0.385	0.348	10.07
60)	1-Chlorohexane	0.272	0.253	0.352	0.440	0.486	0.540	0.532	0.411	29.02
---- Linear regression ---- Coefficient = 0.9981										
Response Ratio = -0.04776 + 0.54357 *A										
61)P	Chlorobenzene	1.306	1.011	1.106	1.061	1.107	1.140	1.086	1.117	8.32
62)	1,1,1,2-Tetrachlo	0.354	0.299	0.359	0.344	0.347	0.352	0.347	0.343	5.86
63)C	Ethylbenzene	1.601	1.566	1.867	1.931	1.953	2.100	2.042	1.866	11.11
64)	m,p-Xylene	0.614	0.585	0.748	0.773	0.788	0.829	0.751	0.727	12.58
65)	o-Xylene	0.512	0.499	0.624	0.743	0.752	0.831	0.785	0.678	19.68
---- Linear regression ---- Coefficient = 0.9983										
Response Ratio = -0.03174 + 0.79995 *A										
66)	Styrene	0.660	0.682	0.998	1.210	1.272	1.345	1.319	1.069	27.55
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.07570 + 1.34311 *A										
67)P	Bromoform	0.163	0.156	0.211	0.219	0.224	0.235	0.247	0.208	16.93
---- Linear regression ---- Coefficient = 0.9989										
Response Ratio = -0.01623 + 0.24771 *A										
68) I	1,4-Dichlorobenzene-d	-----ISTD-----								
69)	Isopropylbenzene	2.181	2.307	2.489	2.886	2.996	3.118	3.352	2.761	15.95
---- Linear regression ---- Coefficient = 0.9981										
Response Ratio = -0.28399 + 3.36931 *A										
70)	Cyclohexanone	0.023	0.048	0.060	0.056	0.056	0.057	0.056	0.051	25.05
---- Linear regression ---- Coefficient = 0.9997										
Response Ratio = 0.00045 + 0.05573 *A										
71)S	4-Bromofluorobenz	0.877	0.910	0.980	1.034	0.983	1.042	1.108	0.991	8.02
72)	Bromobenzene	1.003	0.949	0.921	0.890	0.871	0.886	0.846	0.910	5.85
73)P	1,1,2,2-Tetrachlo	1.328	1.049	1.200	1.203	1.097	1.080	1.133	1.156	8.28
74)	Trans-1,4-Dichlor	0.100	0.193	0.299	0.288	0.294	0.301	0.319	0.256	31.35
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.01901 + 0.31993 *A										
75)	1,2,3-Trichloropr	1.420	1.301	1.448	1.377	1.333	1.348	1.370	1.371	3.67
76)	n-Propylbenzene	3.107	3.260	3.892	4.230	4.372	4.568	4.785	4.030	15.95
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.32667 + 4.81397 *A										
77)	2-Chlorotoluene	2.740	2.773	2.961	2.975	3.071	3.124	3.255	2.986	6.19
78)	4-Chlorotoluene	2.055	2.184	2.316	2.585	2.638	2.713	2.910	2.486	12.40
79)	1,3,5-Trimethylbe	2.086	2.075	2.537	2.701	2.910	2.956	3.085	2.621	15.65
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.19399 + 3.10648 *A										
80)	sec-Butylbenzene	2.181	2.435	2.953	3.271	3.422	3.667	3.805	3.105	19.77
---- Linear regression ---- Coefficient = 0.9988										
Response Ratio = -0.29966 + 3.84128 *A										

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

81)	1,3-Dichlorobenze	1.432	1.437	1.513	1.523	1.578	1.565	1.596	1.521	4.32
82)	4-Isopropyltoluen	1.210	1.571	1.959	2.247	2.406	2.567	2.617	2.082	25.49
	---- Linear regression ----	Coefficient = 0.9991								
	Response Ratio =	-0.20374 + 2.65246 *A								
83)	1,4-Dichlorobenze	1.888	1.480	1.591	1.609	1.596	1.547	1.577	1.613	8.00
84)	tert-Butylbenzene	1.067	1.098	1.349	1.428	1.495	1.587	1.697	1.389	17.06
	---- Linear regression ----	Coefficient = 0.9980								
	Response Ratio =	-0.14547 + 1.70580 *A								
85)	n-Butylbenzene	1.383	1.578	2.013	2.356	2.578	2.650	2.871	2.204	25.59
	---- Linear regression ----	Coefficient = 0.9980								
	Response Ratio =	-0.28821 + 2.89630 *A								
86)	1,2-Dichlorobenze	1.434	1.299	1.465	1.486	1.483	1.527	1.566	1.466	5.78
87)	1,2,4-Trimethylbe	1.871	2.205	2.648	2.818	3.001	3.097	3.255	2.699	18.55
	---- Linear regression ----	Coefficient = 0.9990								
	Response Ratio =	-0.23086 + 3.27702 *A								
88)	1,2-Dibromo-3-Chl	0.092	0.120	0.118	0.124	0.118	0.128	0.117		10.75
89)	1,2,4-Trichlorobe	0.475	0.475	0.477	0.544	0.637	0.664	0.749	0.574	19.13
	---- Linear regression ----	Coefficient = 0.9949								
	Response Ratio =	-0.09714 + 0.75368 *A								
90)	Hexachlorobutadie	0.266	0.228	0.238	0.269	0.264	0.278	0.288	0.262	8.16
91)	Naphthalene	0.925	0.827	0.817	1.050	1.250	1.404	1.653	1.132	27.97
	---- Quadratic regression ----	Coefficient = 0.9993								
	Response Ratio =	-0.06789 + 1.11655 *A + 0.13943 *A^2								
92)	1,2,3-Trichlorobe	0.421	0.427	0.446	0.469	0.526	0.532	0.605	0.489	13.81

(#) = Out of Range										

VY1139.M

Wed Feb 28 15:59:16 2007

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VY1140\Y0010447.D Vial: 2
 Acq On : 28 Feb 2007 10:57 am Operator: jennifer
 Sample : cc1139-20 Inst : GCMS_Y
 Misc : ms3870,vy1140,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\VY1139.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Wed Feb 28 14:32:23 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00	9.58
2	Dichlorodifluoromethane	20.000	18.794	6.0	101	0.00	3.82
3 P	Chloromethane	0.504	0.569	-12.9	113	0.00	4.18
4 C	Vinyl Chloride	0.653	0.773	-18.4	114	0.00	4.40
5	Bromomethane	0.320	0.405	-26.6#	112	0.00	4.98
6	Chloroethane	0.334	0.427	-27.8#	109	0.00	5.14
7	Trichlorofluoromethane	20.000	24.290	-21.4#	121	0.00	5.49
8	Acrolein	0.013	0.015	-15.4	115	0.00	6.16
9 C	1,1-Dichloroethene	0.231	0.256	-10.8	124	0.00	6.25
10	Freon 113	0.250	0.274	-9.6	105	0.01	6.18
11	Acetone	0.065	0.071	-9.2	100	0.00	6.34
12	Iodomethane	0.354	0.348	1.7	109	0.00	6.51
13	Methyl acetate	0.179	0.199	-11.2	107	0.00	6.70
14	Carbon Disulfide	1.038	1.100	-6.0	110	0.00	6.59
15	Methylene Chloride	0.364	0.371	-1.9	103	0.00	6.91
16	Tert Butyl Alcohol	0.022	0.024	-9.1	110	0.00	6.93
17	trans-1,2-Dichloroethene	0.292	0.300	-2.7	111	0.00	7.19
18	Acrylonitrile	0.108	0.117	-8.3	102	0.00	7.25
19	Hexane	20.000	20.438	-2.2	118	0.00	7.41
20	Methyl Tert Butyl Ether	20.000	20.038	-0.2	116	0.00	7.13
21 P	1,1-Dichloroethane	0.717	0.750	-4.6	106	0.00	7.74
22	Vinyl acetate	100.000	101.221	-1.2	112	0.00	7.70
23	Di-isopropyl ether	20.000	20.175	-0.9	114	0.00	7.64
24	Ethyl tert-butyl ether	20.000	20.339	-1.7	117	0.00	8.05
25	2,2-Dichloropropane	0.383	0.405	-5.7	112	0.00	8.36
26	cis-1,2-Dichloroethene	0.338	0.355	-5.0	111	0.00	8.38

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

		Amount	Calc.	%Drift			
27	2-Butanone	100.000	99.629	0.4	107	0.00	8.35
		AvgRF	CCRF	%Dev			
28	Bromochloromethane	0.134	0.139	-3.7	109	0.00	8.65
29 C	Chloroform	0.579	0.611	-5.5	109	0.00	8.70
		Amount	Calc.	%Drift			
30	Tetrahydrofuran	20.000	21.464	-7.3	122	0.00	8.66
		AvgRF	CCRF	%Dev			
31	1,1,1-Trichloroethane	0.427	0.456	-6.8	112	0.00	8.90
32 S	Dibromofluoromethane	0.263	0.309	-17.5	117	0.00	8.87
		Amount	Calc.	%Drift			
33	Cyclohexane	20.000	20.267	-1.3	121	0.00	8.92
34	1,1-Dichloropropene	20.000	19.942	0.3	110	0.00	9.07
		AvgRF	CCRF	%Dev			
35	Carbon Tetrachloride	0.305	0.343	-12.5	116	-0.01	9.05
36 S	1,2-Dichloroethane-d4	0.446	0.544	-22.0#	121	0.00	9.28
37	Benzene	1.389	1.520	-9.4	115	0.00	9.30
38	1,2-Dichloroethane	0.541	0.601	-11.1	108	0.00	9.37
		Amount	Calc.	%Drift			
39	tert-amyl methyl ether	20.000	20.501	-2.5	118	0.00	9.30
		AvgRF	CCRF	%Dev			
40	Trichloroethene	0.279	0.276	1.1	115	0.00	9.95
		Amount	Calc.	%Drift			
41	Methylcyclohexane	20.000	19.084	4.6	108	0.00	10.11
		AvgRF	CCRF	%Dev			
42 C	1,2-Dichloropropane	0.431	0.443	-2.8	108	0.00	10.24
43	Dibromomethane	0.201	0.215	-7.0	106	0.00	10.37
44	1,4-Dioxane	0.003	0.002	33.3#	118	0.00	10.31
45	Bromodichloromethane	0.452	0.483	-6.9	111	0.00	10.48
		Amount	Calc.	%Drift			
46	2-Nitropropane	100.000	97.454	2.5	104	0.00	10.75
47	2-Chloroethyl vinyl ether	100.000	99.196	0.8	106	0.00	10.72
48	4-Methyl-2-pentanone	100.000	103.359	-3.4	108	0.00	11.02
		AvgRF	CCRF	%Dev			
49	cis-1,3-Dichloropropene	0.495	0.493	0.4	114	0.00	10.93
50 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	12.71
51 S	Toluene-d8	1.386	1.568	-13.1	121	0.00	11.18
52 C	Toluene	1.012	1.057	-4.4	113	0.00	11.25
		Amount	Calc.	%Drift			
53	trans-1,3-Dichloropropene	20.000	20.042	-0.2	118	0.00	11.49
		AvgRF	CCRF	%Dev			
54	1,1,2-Trichloroethane	0.372	0.370	0.5	109	0.00	11.70
55	Tetrachloroethene	0.251	0.255	-1.6	104	0.00	11.81
		Amount	Calc.	%Drift			

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

56	2-hexanone	100.000	96.252	3.7	103	0.00	11.86
		AvgRF	CCRF	%Dev			
57	1,3-Dichloropropane	0.723	0.771	-6.6	108	0.00	11.89
58	Dibromochloromethane	0.350	0.355	-1.4	113	0.00	12.12
59	1,2-Dibromoethane	0.348	0.345	0.9	109	0.00	12.29
		Amount	Calc.	%Drift			
60	1-Chlorohexane	20.000	18.439	7.8	116	0.00	12.60
		AvgRF	CCRF	%Dev			
61 P	Chlorobenzene	1.117	1.080	3.3	104	0.00	12.74
62	1,1,1,2-Tetrachloroethane	0.343	0.355	-3.5	106	0.00	12.80
63 C	Ethylbenzene	1.866	1.890	-1.3	108	0.00	12.77
64	m,p-Xylene	0.727	0.755	-3.9	108	0.00	12.89
		Amount	Calc.	%Drift			
65	o-Xylene	20.000	18.731	6.3	114	0.00	13.32
66	Styrene	20.000	19.452	2.7	119	0.00	13.34
67 P	Bromoform	20.000	19.980	0.1	104	0.00	13.61
		AvgRF	CCRF	%Dev			
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	15.11
		Amount	Calc.	%Drift			
69	Isopropylbenzene	20.000	20.248	-1.2	120	0.00	13.66
70	Cyclohexanone	100.000	115.407	-15.4	118	0.00	13.89
		AvgRF	CCRF	%Dev			
71 S	4-Bromofluorobenzene	0.991	1.121	-13.1	126	0.00	13.90
72	Bromobenzene	0.910	0.923	-1.4	110	0.00	14.10
73 P	1,1,2,2-Tetrachloroethane	1.156	1.151	0.4	106	0.00	14.02
		Amount	Calc.	%Drift			
74	Trans-1,4-Dichloro-2-Bute	20.000	21.874	-9.4	111	0.00	14.08
		AvgRF	CCRF	%Dev			
75	1,2,3-Trichloropropane	1.371	1.379	-0.6	105	0.00	14.11
		Amount	Calc.	%Drift			
76	n-Propylbenzene	20.000	19.755	1.2	112	0.00	14.08
		AvgRF	CCRF	%Dev			
77	2-Chlorotoluene	2.986	2.940	1.5	109	0.00	14.25
78	4-Chlorotoluene	2.486	2.390	3.9	114	0.00	14.37
		Amount	Calc.	%Drift			
79	1,3,5-Trimethylbenzene	20.000	19.461	2.7	110	0.00	14.25
80	sec-Butylbenzene	20.000	19.267	3.7	110	0.00	14.82
		AvgRF	CCRF	%Dev			
81	1,3-Dichlorobenzene	1.521	1.465	3.7	107	0.00	15.04
		Amount	Calc.	%Drift			
82	4-Isopropyltoluene	20.000	18.548	7.3	110	0.00	14.95
		AvgRF	CCRF	%Dev			
83	1,4-Dichlorobenzene	1.613	1.513	6.2	105	0.00	15.14

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

	-----	Amount	Calc.	%Drift	-----		
84	tert-Butylbenzene	20.000	20.118	-0.6	110	0.00	14.60
85	n-Butylbenzene	20.000	19.118	4.4	112	0.00	15.38
	-----	AvgRF	CCRF	%Dev	-----		
86	1,2-Dichlorobenzene	1.466	1.489	-1.6	112	0.00	15.53
	-----	Amount	Calc.	%Drift	-----		
87	1,2,4-Trimethylbenzene	20.000	19.202	4.0	107	0.00	14.66
	-----	AvgRF	CCRF	%Dev	-----		
88	1,2-Dibromo-3-Chloropropa	0.117	0.132	-12.8	122	0.00	16.33
	-----	Amount	Calc.	%Drift	-----		
89	1,2,4-Trichlorobenzene	20.000	20.887	-4.4	126	0.00	17.16
	-----	AvgRF	CCRF	%Dev	-----		
90	Hexachlorobutadiene	0.262	0.238	9.2	110	0.00	17.24
	-----	Amount	Calc.	%Drift	-----		
91	Naphthalene	20.000	19.286	3.6	129	0.00	17.46
	-----	AvgRF	CCRF	%Dev	-----		
92	1,2,3-Trichlorobenzene	0.489	0.458	6.3	113	0.00	17.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y0010431.D VY1139.M Wed Feb 28 16:30:54 2007

5.8
5

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-ECC1139
Lab FileID: Y0010472.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VY1140\Y0010472.D Vial: 27
 Acq On : 28 Feb 2007 10:24 pm Operator: jennifer
 Sample : ecc1139-20 Inst : GCMS_Y
 Misc : ms3870,vy1140,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\VY1139.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Wed Feb 28 07:50:18 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	91	0.00	9.58
2	Dichlorodifluoromethane	20.000	21.824	-9.1	99	0.00	3.82
3 P	Chloromethane	0.504	0.509	-1.0	86	0.00	4.18
4 C	Vinyl Chloride	0.653	0.677	-3.7	86	0.00	4.39
5	Bromomethane	0.320	0.354	-10.6	84	0.00	4.98
6	Chloroethane	0.334	0.352	-5.4	78	0.00	5.14
7	Trichlorofluoromethane	20.000	20.202	-1.0	88	0.00	5.49
8	Acrolein	0.013	0.011	15.4	73	0.01	6.16
9 C	1,1-Dichloroethene	0.231	0.271	-17.3	113	0.00	6.25
10	Freon 113	0.250	0.324	-29.6#	107	0.01	6.18
11	Acetone	0.065	0.078	-20.0	94	0.00	6.33
12	Iodomethane	0.354	0.388	-9.6	104	0.00	6.50
13	Methyl acetate	0.179	0.219	-22.3#	101	0.00	6.70
14	Carbon Disulfide	1.038	1.253	-20.7#	108	0.00	6.60
15	Methylene Chloride	0.364	0.418	-14.8	100	0.00	6.91
16	Tert Butyl Alcohol	0.022	0.024	-9.1	96	0.00	6.93
17	trans-1,2-Dichloroethene	0.292	0.320	-9.6	102	0.00	7.19
18	Acrylonitrile	0.108	0.131	-21.3#	99	0.00	7.26
19	Hexane	20.000	23.081	-15.4	115	0.00	7.40
20	Methyl Tert Butyl Ether	20.000	21.092	-5.5	105	0.00	7.13
21 P	1,1-Dichloroethane	0.717	0.837	-16.7	102	0.00	7.73
22	Vinyl acetate	100.000	107.570	-7.6	102	0.00	7.70
23	Di-isopropyl ether	20.000	21.514	-7.6	105	0.00	7.64
24	Ethyl tert-butyl ether	20.000	21.374	-6.9	106	0.00	8.05
25	2,2-Dichloropropane	0.383	0.424	-10.7	101	0.00	8.37
26	cis-1,2-Dichloroethene	0.338	0.392	-16.0	106	0.00	8.38

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-ECC1139
Lab FileID: Y0010472.D

		Amount	Calc.	%Drift			
27	2-Butanone	100.000	99.920	0.1	92	0.00	8.36
		AvgRF	CCRF	%Dev			
28	Bromochloromethane	0.134	0.149	-11.2	100	0.00	8.67
29 C	Chloroform	0.579	0.677	-16.9	104	0.00	8.70
		Amount	Calc.	%Drift			
30	Tetrahydrofuran	20.000	21.564	-7.8	106	0.00	8.67
		AvgRF	CCRF	%Dev			
31	1,1,1-Trichloroethane	0.427	0.496	-16.2	105	0.00	8.91
32 S	Dibromofluoromethane	0.263	0.273	-3.8	89	0.00	8.87
		Amount	Calc.	%Drift			
33	Cyclohexane	20.000	22.378	-11.9	116	0.00	8.92
34	1,1-Dichloropropene	20.000	21.222	-6.1	101	0.00	9.07
		AvgRF	CCRF	%Dev			
35	Carbon Tetrachloride	0.305	0.362	-18.7	106	0.00	9.06
36 S	1,2-Dichloroethane-d4	0.446	0.464	-4.0	89	0.00	9.28
37	Benzene	1.389	1.627	-17.1	106	0.00	9.29
38	1,2-Dichloroethane	0.541	0.626	-15.7	97	0.00	9.37
		Amount	Calc.	%Drift			
39	tert-amyl methyl ether	20.000	21.494	-7.5	108	0.00	9.30
		AvgRF	CCRF	%Dev			
40	Trichloroethene	0.279	0.301	-7.9	108	0.00	9.94
		Amount	Calc.	%Drift			
41	Methylcyclohexane	20.000	21.726	-8.6	109	0.00	10.11
		AvgRF	CCRF	%Dev			
42 C	1,2-Dichloropropane	0.431	0.477	-10.7	100	0.00	10.23
43	Dibromomethane	0.201	0.239	-18.9	101	0.00	10.37
44	1,4-Dioxane	0.003	0.002	33.3#	100	0.00	10.31
45	Bromodichloromethane	0.452	0.516	-14.2	102	0.00	10.48
		Amount	Calc.	%Drift			
46	2-Nitropropane	100.000	111.492	-11.5	100	0.00	10.75
47	2-Chloroethyl vinyl ether	100.000	117.053	-17.1	112	0.00	10.72
48	4-Methyl-2-pentanone	100.000	103.926	-3.9	93	0.00	11.02
		AvgRF	CCRF	%Dev			
49	cis-1,3-Dichloropropene	0.495	0.542	-9.5	108	0.00	10.93
50 I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00	12.71
51 S	Toluene-d8	1.386	1.298	6.3	87	0.00	11.18
52 C	Toluene	1.012	1.153	-13.9	108	0.00	11.25
		Amount	Calc.	%Drift			
53	trans-1,3-Dichloropropene	20.000	20.492	-2.5	106	0.00	11.49
		AvgRF	CCRF	%Dev			
54	1,1,2-Trichloroethane	0.372	0.402	-8.1	104	0.00	11.70
55	Tetrachloroethene	0.251	0.265	-5.6	95	0.00	11.80
		Amount	Calc.	%Drift			

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-ECC1139
Lab FileID: Y0010472.D

56	2-hexanone	100.000	98.090	1.9	92	0.00	11.86
	----- AvgRF	CCRF	%Dev	-----			
57	1,3-Dichloropropane	0.723	0.825	-14.1	102	0.00	11.89
58	Dibromochloromethane	0.350	0.363	-3.7	102	0.00	12.12
59	1,2-Dibromoethane	0.348	0.354	-1.7	98	0.00	12.29
	----- Amount	Calc.	%Drift	-----			
60	1-Chlorohexane	20.000	19.912	0.4	112	0.00	12.60
	----- AvgRF	CCRF	%Dev	-----			
61 P	Chlorobenzene	1.117	1.132	-1.3	96	0.00	12.74
62	1,1,1,2-Tetrachloroethane	0.343	0.396	-15.5	103	0.00	12.80
63 C	Ethylbenzene	1.866	1.980	-6.1	99	0.00	12.77
64	m,p-Xylene	0.727	0.805	-10.7	100	0.00	12.88
	----- Amount	Calc.	%Drift	-----			
65	o-Xylene	20.000	20.021	-0.1	108	0.00	13.31
66	Styrene	20.000	20.943	-4.7	114	0.00	13.34
67 P	Bromoform	20.000	21.538	-7.7	100	0.00	13.61
	----- AvgRF	CCRF	%Dev	-----			
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	15.11
	----- Amount	Calc.	%Drift	-----			
69	Isopropylbenzene	20.000	20.957	-4.8	112	0.00	13.66
70	Cyclohexanone	100.000	46.375	53.6#	43	0.00	13.88
	----- AvgRF	CCRF	%Dev	-----			
71 S	4-Bromofluorobenzene	0.991	0.838	15.4	85	0.00	13.91
72	Bromobenzene	0.910	0.987	-8.5	106	0.00	14.10
73 P	1,1,2,2-Tetrachloroethane	1.156	1.270	-9.9	105	0.00	14.02
	----- Amount	Calc.	%Drift	-----			
74	Trans-1,4-Dichloro-2-Bute	20.000	21.516	-7.6	98	0.00	14.08
	----- AvgRF	CCRF	%Dev	-----			
75	1,2,3-Trichloropropane	1.371	1.514	-10.4	104	0.00	14.11
	----- Amount	Calc.	%Drift	-----			
76	n-Propylbenzene	20.000	20.935	-4.7	108	0.00	14.08
	----- AvgRF	CCRF	%Dev	-----			
77	2-Chlorotoluene	2.986	3.165	-6.0	106	0.00	14.25
78	4-Chlorotoluene	2.486	2.523	-1.5	108	0.00	14.37
	----- Amount	Calc.	%Drift	-----			
79	1,3,5-Trimethylbenzene	20.000	20.204	-1.0	104	0.00	14.25
80	sec-Butylbenzene	20.000	19.667	1.7	102	0.00	14.82
	----- AvgRF	CCRF	%Dev	-----			
81	1,3-Dichlorobenzene	1.521	1.565	-2.9	103	0.00	15.04
	----- Amount	Calc.	%Drift	-----			
82	4-Isopropyltoluene	20.000	19.629	1.9	106	0.00	14.95
	----- AvgRF	CCRF	%Dev	-----			
83	1,4-Dichlorobenzene	1.613	1.661	-3.0	104	0.00	15.14

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-ECC1139
Lab FileID: Y0010472.D

	-----	Amount	Calc.	%Drift	-----		
84	tert-Butylbenzene	20.000	20.328	-1.6	101	0.00	14.59
85	n-Butylbenzene	20.000	19.781	1.1	106	0.00	15.38
	-----	AvgRF	CCRF	%Dev	-----		
86	1,2-Dichlorobenzene	1.466	1.586	-8.2	107	0.00	15.54
	-----	Amount	Calc.	%Drift	-----		
87	1,2,4-Trimethylbenzene	20.000	20.433	-2.2	104	0.00	14.66
	-----	AvgRF	CCRF	%Dev	-----		
88	1,2-Dibromo-3-Chloropropa	0.117	0.123	-5.1	102	0.00	16.33
	-----	Amount	Calc.	%Drift	-----		
89	1,2,4-Trichlorobenzene	20.000	20.041	-0.2	106	0.00	17.15
	-----	AvgRF	CCRF	%Dev	-----		
90	Hexachlorobutadiene	0.262	0.281	-7.3	117	0.00	17.24
	-----	Amount	Calc.	%Drift	-----		
91	Naphthalene	20.000	20.017	-0.1	122	0.00	17.46
	-----	AvgRF	CCRF	%Dev	-----		
92	1,2,3-Trichlorobenzene	0.489	0.466	4.7	104	0.00	17.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y0010431.D VY1139.M Thu Mar 01 09:40:04 2007

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN11336	5.0	<5.0	mg/l	xxxxxxx	2500	100.0	80-120%
Chloride	GN11331	1.0	<1.0	mg/l	xxxxxxx	1030	103.0	92-107%
Nitrogen, Nitrate + Nitrite	GN11291	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrite	GN11288	0.050	<0.050	mg/l	0.500	0.54	108.0	89-117%
Sulfate	GN11356	10	<10	mg/l	100	95.0	95.0	80-120%
Sulfate	GN11356			mg/l	xxxxxxx		*	80-120%
Sulfide	GN11286	0.20	<0.20	mg/l	1600	1370	86.0	80-120%
Total Organic Carbon	GN11304	1.0	<1.0	mg/l	25.0	26.0	104.0	83-110%

Associated Samples:

Batch GN11286: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN11336	T16411-10	mg/l	158	165	4.3	0-10%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.20	0.0	0-10%
Nitrogen, Nitrite	GN11288	T16432-1	mg/l	0.0030 U	<0.050	0.0	0-10%
Sulfate	GN11356	T16411-10	mg/l	1260	1200	4.7	0-20%
Sulfide	GN11286	T16432-6	mg/l	U	<0.20	0.0	0-20%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	6.0	0.0	0-11%
pH	GN11306	T16432-4	su	6.3	6.3	0.0	0-6.8%

Associated Samples:

Batch GN11286: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11306: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN11336	T16411-10	mg/l	158	xxxxxxx	215	116.0	79-122%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrite	GN11288	T16432-1	mg/l	0.0030 U	0.100	0.090	90.0	75-134%
Sulfate	GN11356	T16411-10	mg/l	1260	250	1470	87.0	75-125%
Sulfate	GN11356	T16411-10	mg/l	1260	xxxxxxx		*	75-125%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	10.0	16.0	100.0	74-121%

Associated Samples:

Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit

Associated Samples:
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits



IT'S ALL IN THE CHEMISTRY

Section 7

Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # T16432

Requested Analyses										Matrix Codes	
re (RSK147)										DW - Drinking Water	
										GW - Ground Water	
										WW - Wastewater	
										SO - Soil	
										SL - Sludge	
										OI - Oil	
										LIQ - Other Liquid	
										SOL - Other Solid	

[illegible][illegible]

Comments / Remarks	

COURIER DELIVERY		Received By:	
Date Time:	2	Received By:	2
Date Time:	4	Received By:	4
☐ served where Applicable		☐ Cooler Temp.	

7.1

T16432: Chain of Custody

Page 1 of 2

Accutest Laboratories Southeast, Inc.

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

00093099

ACCUTEST'S JOB NUMBER: T16432 CLIENT: AL 6C PROJECT: T16432
 DATE/TIME RECEIVED: 02-28-07 - 09:30 # OF COOLERS RECEIVED: 4 COOLER TEMPS: 20, 2.4, 1.8, 3.0
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7986 1726 3857

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 2
 NUMBER OF 5035 FIELD KITS ? 2
 NUMBER OR LAB FILTERED METALS ? 2

SAMPLE INFORMATION

- ☐ SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
 - ☐ CORRECT NUMBER OF CONTAINERS USED
 - ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
 - ☐ INSUFFICIENT VOLUME FOR ANALYSIS
 - ☐ TIMES ON COC DOES NOT MATCH LABEL(S)
 - ☐ ID'S ON COC DOES NOT MATCH LABEL(S)
 - ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
 - ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
 - ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
 - ☐ UNCLEAR FILTERING INSTRUCTIONS
 - ☐ UNCLEAR COMPOSITING INSTRUCTIONS
 - ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
 - ☐ % SOLIDS JAR NOT RECEIVED
 - ☐ 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
 - ☐ RESIDUAL CHLORINE PRESENT
- (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: * RECEIVED TWO 8330 AMBER, 3 MCL VIALS AND ONE
250 ML BOTTLE FOR SAMPLES #2 AND #3. * RECEIVED 3 MCL VIALS AND
ONE 250 ML BOTTLE FOR SAMPLES #1, #4 - #6.

TECHNICIAN SIGNATURE/DATE W. H. V. 02/28/07 TECHNICIAN SIGNATURE/DATE [Signature] 02-28-07 ASD 10/03/06

T16432: Chain of Custody

Page 2 of 2



GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY995-MB	XY025310.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.30	ug/l	
74-84-0	Ethane	ND	1.0	0.60	ug/l	
74-85-1	Ethene	ND	1.0	0.80	ug/l	

Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY995-BS	XY025311.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	108	90.3	84	54-149
74-84-0	Ethane	219	187	85	57-143
74-85-1	Ethene	290	234	81	57-143

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Matrix Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16432-6MS	XY025319.D	1	03/07/07	TD	n/a	n/a	GXY995
T16432-6	XY025318.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16432-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	0.94	108	110	101	54-149
74-84-0	Ethane	1.0 U	219	225	103	57-143
74-85-1	Ethene	1.0 U	290	291	100	57-143



Duplicate Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16432-4DUP	XY025317.D	1	03/07/07	TD	n/a	n/a	GXY995
T16432-4	XY025315.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16432-4 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	2.88	3.21		11	24
74-84-0	Ethane	1.0 U	ND		nc	23
74-85-1	Ethene	1.0 U	ND		nc	10

8.4
8

Initial Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICC995
Lab FileID: XY025305.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Mar 08 08:31:33 2007
Response via : Initial Calibration

Calibration Files

1 =XY025301.D 2 =XY025302.D 3 =XY025304.D 4 =XY025303.D
 5 =XY025305.D 6 =XY025306.D 7 =XY025307.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)c Methane	1.256	2.507	1.576	0.832	1.293	0.961	1.016	1.349 E4	42.09#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9983									
Response Ratio = 0.00000 + 10071.12721 *A									
2)c Ethylene	2.402	4.239	2.629	1.419	2.516	1.854	1.947	2.429 E4	37.22#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9982									
Response Ratio = 0.00000 + 19323.23175 *A									
3)c Ethane	2.241	3.960	2.584	1.355	2.483	1.825	1.918	2.338 E4	35.47#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9981									
Response Ratio = 0.00000 + 19028.53933 *A									

 (#) = Out of Range

RSK147XY.M

Thu Mar 08 08:36:38 2007

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICV995
Lab FileID: XY025308.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030707\XY025308.D Vial: 100
 Acq On : 7 Mar 2007 2:55 pm Operator: Trangd
 Sample : ICV995-1000 Inst : VOA5
 Misc : gc7128,gxy995,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Mar 08 08:31:33 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	950.295	5.0	74	-0.06	1.13	1.73
2 c Ethylene	1000.000	962.910	3.7	74	-0.03	2.85	3.65
3 c Ethane	1000.000	991.839	0.8	76	-0.03	3.48	4.28

(#) = Out of Range
 XY025305.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 08 08:35:31 2007

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ECC995
Lab FileID: XY025320.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030707\XY025320.D Vial: 100
 Acq On : 7 Mar 2007 5:27 pm Operator: Trangd
 Sample : ECC995-10000 Inst : VOA5
 Misc : gc7128,gxy995,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Mar 08 08:31:33 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	10000.000	8882.087	11.2	88	-0.15	1.13-	1.73
2 c Ethylene	10000.000	9414.704	5.9	93	-0.15	2.85-	3.65
3 c Ethane	10000.000	9571.545	4.3	95	-0.15	3.48-	4.28

(#) = Out of Range
 XY025307.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 08 08:36:20 2007



GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020203.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	102% 70-136%

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020233.D 1		03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	80% 70-136%

Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020202.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.3	106	74-152
121-82-4	RDX	5	5.4	108	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.3	106	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	5.5	110	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.2	104	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.3	106	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.3	106	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	124%	70-136%

Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020232.D	1	03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.9	118	74-152
121-82-4	RDX	5	5.5	110	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.1	102	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	6.4	128	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.3	106	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.5	110	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.7	114	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	70-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MS	GG020207.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
OP19677-MSD	GG020208.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
F47539-3	GG020206.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	F47539-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	ND	10	11.0	110	11.8	118	7	74-152/21
121-82-4	RDX	ND	10	10.3	103	10.7	107	4	80-124/20
99-65-0	1,3-Dinitrobenzene	ND	10	10.3	103	10.9	109	6	84-123/23
606-20-2	2,6-Dinitrotoluene	ND	10	9.9	99	10.6	106	7	84-133/23
121-14-2	2,4-Dinitrotoluene	ND	10	9.7	97	10.3	103	6	77-116/26
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	10	9.4	94	10.5	105	11	78-117/28
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	10	9.1	91	10.2	102	11	84-123/27
98-95-3	Nitrobenzene	ND	10	10.5	105	11.1	111	6	76-128/28
88-72-2	o-Nitrotoluene	ND	10	9.3	93	10.2	102	9	76-120/30
99-08-1	m-Nitrotoluene	ND	10	9.5	95	10.6	106	11	74-124/32
99-99-0	p-Nitrotoluene	ND	10	9.7	97	10.7	107	10	81-125/34
479-45-8	Tetryl	ND	10	7.4	74	7.9	79	7	62-117/28
99-35-4	1,3,5-Trinitrobenzene	ND	10	9.8	98	10.4	104	6	85-127/21
118-96-7	2,4,6-Trinitrotoluene	ND	10	9.8	98	10.4	104	6	71-128/21

CAS No.	Surrogate Recoveries	MS	MSD	F47539-3	Limits
610-39-9	3,4-Dinitrotoluene	94%	98%	102%	70-136%

Semivolatile Surrogate Recovery Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Method: SW846 8330A	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
T16432-2	GG020210.D	95.0
T16432-3	GG020211.D	97.0
OP19677-BS	GG020202.D	124.0
OP19677-BS	GG020232.D	100.0
OP19677-MB	GG020203.D	102.0
OP19677-MB	GG020233.D	80.0
OP19677-MS	GG020207.D	94.0
OP19677-MSD	GG020208.D	98.0

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020201.D	Injection Time:	16:17
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP19677-BS	GG020202.D	03/02/07	16:45	13.49
OP19677-MB	GG020203.D	03/02/07	17:12	13.50
ZZZZZZ	GG020204.D	03/02/07	17:27	13.50
ZZZZZZ	GG020205.D	03/02/07	17:54	13.50
F47539-3	GG020206.D	03/02/07	18:22	13.49
OP19677-MS	GG020207.D	03/02/07	18:50	13.47
OP19677-MSD	GG020208.D	03/02/07	19:17	13.46
ZZZZZZ	GG020209.D	03/02/07	19:45	13.47
T16432-2	GG020210.D	03/02/07	20:12	13.44
T16432-3	GG020211.D	03/02/07	20:40	13.43

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

9.5
6

GC Surrogate Retention Time Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG907-CC827	Injection Date:	03/05/07
Lab File ID:	GG020231.D	Injection Time:	13:23
Instrument ID:	GCGG	Method:	SW846 8330A

S1^a S1^b
RT RT

Check Std	10.72	10.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP19677-BS	GG020232.D	03/05/07	13:43	10.72	
OP19677-MB	GG020233.D	03/05/07	14:02	10.72	
ZZZZZZ	GG020234.D	03/05/07	14:22	10.72	
ZZZZZZ	GG020236.D	03/05/07	15:01	10.71	
GGG907-ECC827	GG020238.D	03/05/07	15:40	10.72	10.72

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

9.5
6

Initial Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICC825
Lab FileID: GG018282.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Initial Calibration

Calibration Files

20 =GG018279.D 100 =GG018280.D 250 =GG018281.D 500 =GG018282.D
 750 =GG018283.D 1000=GG018284.D 2000=GG018285.D ICV =GG018286.D

Compound	20	100	250	500	750	1000	2000	ICV	Avg	%RSD
1) HMX	2.870	2.789	2.757	2.694	2.719	2.735	2.786		2.764	E3 2.09
2) TNX	5.916	6.424	6.486	6.331	6.453	6.468	6.587		6.381	E3 3.43
3) DNX	4.900	5.156	5.125	4.986	5.037	5.057	5.155		5.059	E3 1.88
4) MNX	4.909	4.991	4.972	4.807	4.886	4.901	4.995		4.923	E3 1.38
5) RDX	3.185	3.565	3.625	3.500	3.554	3.547	3.609		3.512	E3 4.27
6) 1,3,5-Trinit	7.763	7.813	7.689	7.436	7.595	7.612	7.763		7.667	E3 1.70
7) 1,3-Dinitrob	1.069	1.070	1.060	1.029	1.047	1.051	1.071		1.057	E4 1.49
8) Tetryl	6.130	6.168	6.180	6.004	6.091	6.096	6.221		6.127	E3 1.17
9) Nitrobenzene	7.057	7.032	7.019	6.708	6.915	6.920	7.082		6.962	E3 1.85
10) 3,4-Dinitrot	4.667	4.752	4.687	4.537	4.621	4.631	4.731		4.661	E3 1.56
11) 2,4,6-Trinit	7.275	7.409	7.373	7.143	7.282	7.301	7.456		7.320	E3 1.42
12) 4-Amino-2,6-	5.266	5.304	5.264	5.117	5.194	5.220	5.330		5.242	E3 1.37
13) 2-Amino-4,6-	7.249	7.203	7.187	7.006	7.130	7.155	7.311		7.177	E3 1.35
14) 2,6-Dinitrot	5.524	5.133	5.010	4.844	4.942	4.954	5.071		5.068	E3 4.37
15) 2,4-Dinitrot	1.149	1.009	0.992	0.958	0.976	0.978	0.999		1.009	E4 6.36
16) o-Nitrotolue	5.044	4.558	4.542	4.244	4.403	4.414	4.516		4.532	E3 5.53
17) p-Nitrotolue	4.102	3.815	3.790	3.596	3.734	3.734	3.831		3.800	E3 4.06
18) m-Nitrotolue	4.959	4.808	4.856	4.629	4.803	4.812	4.942		4.830	E3 2.26

Signal #2

1) HMX	8.151	8.148	8.190	8.012	8.090	8.092	8.238		8.132	E3 0.91
2) TNX	0.956	0.980	0.995	0.969	0.984	0.985	1.001		0.981	E4 1.55
3) DNX	7.525	8.044	8.332	7.974	7.996	7.991	8.136		8.000	E3 3.05
4) MNX	7.756	7.781	7.940	7.696	7.742	7.746	7.895		7.794	E3 1.14
5) RDX	4.720	5.727	5.947	5.855	5.997	5.944	6.042		5.748	E3 8.08
6) 1,3,5-Trinit	1.479	1.619	1.553	1.513	1.538	1.540	1.572		1.545	E4 2.85
7) 1,3-Dinitrob	1.225	1.286	1.279	1.246	1.265	1.272	1.295		1.267	E4 1.91
8) Tetryl	1.037	1.106	1.123	1.092	1.106	1.105	1.129		1.100	E4 2.76
9) Nitrobenzene	3.263	3.394	3.343	3.176	3.205	3.190	3.274		3.264	E3 2.50
10) 3,4-Dinitrot	6.324	6.522	6.468	6.218	6.242	6.243	6.394		6.344	E3 1.89
11) 2,4,6-Trinit	1.070	1.106	1.085	1.048	1.060	1.064	1.089		1.075	E4 1.85
12) 4-Amino-2,6-	1.430	1.457	1.434	1.391	1.407	1.413	1.444		1.425	E4 1.62
13) 2-Amino-4,6-	1.240	1.240	1.201	1.171	1.189	1.194	1.223		1.208	E4 2.20
14) 2,6-Dinitrot	8.005	7.244	6.878	6.645	6.758	6.778	6.958		7.038	E3 6.64
15) 2,4-Dinitrot	1.102	0.930	0.906	0.880	0.888	0.892	0.911		0.930	E4 8.36
16) o-Nitrotolue	5.194	4.804	4.848	4.493	4.691	4.697	4.799		4.789	E3 4.46
17) p-Nitrotolue	7.934	7.544	7.631	7.143	7.472	7.477	7.640		7.549	E3 3.15
18) m-Nitrotolue	6.835	7.097	7.192	6.782	7.103	7.117	7.290		7.060	E3 2.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

8330_EX.M

Fri Oct 20 16:25:52 2006

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1A.ch
 Acq On : 18-Oct-2006, 17:39:03 Operator: MIKEE
 Sample : ICV825-500 Inst : G1315B
 Misc : OP18202,ggg825,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Oct 19 11:32:41 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	531.119	-6.2	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	507.091	-1.4	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.853	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	523.924	-4.8	0	0.00	10.38-	11.38
8	Tetryl	500.000	484.365	3.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.046	-6.2	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	507.486	-1.5	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	515.885	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.846	3.8	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	496.634	0.7	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	502.401	-0.5	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	501.204	-0.2	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	520.375	-4.1	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	509.118	-1.8	0	0.00	22.61-	23.61

***** Signal #2 *****

1	HMX	500.000	537.899	-7.6	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	525.299	-5.1	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.889	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	529.524	-5.9	0	0.00	10.38-	11.38
8	Tetryl	500.000	489.295	2.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.782	-6.4	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	505.844	-1.2	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	516.203	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.458	3.9	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	493.423	1.3	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	499.987	0.0	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	503.639	-0.7	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	523.730	-4.7	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	512.492	-2.5	0	0.00	22.61-	23.61

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:26:22 2006

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1B.ch Vial: 4
Signal #2 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1A.ch
Acq On : 19-Oct-2006, 13:44:13 Operator: MIKEE
Sample : ICV825-500 Inst : G1315B
Misc : OP18222,ggg826,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX				NA			
2	TNX	500.000	514.364	-2.9	0	0.00	4.15-	5.15
3	DNX	500.000	511.166	-2.2	0	0.00	4.58-	5.58
4	MXN	500.000	518.059	-3.6	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

***** Signal #2 *****

1	HMX				NA			
2	TNX	500.000	509.991	-2.0	0	0.00	4.15-	5.15
3	DNX	500.000	523.209	-4.6	0	0.00	4.58-	5.58
4	MXN	500.000	527.451	-5.5	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:54:56 2006

Initial Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICC827
Lab FileID: GG018316.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Initial Calibration

Calibration Files

20 =GG018313.D 100 =GG018314.D 250 =GG018315.D 500 =GG018316.D
 750 =GG018317.D 1000=GG018318.D 2000=GG018319.D

	Compound	20	100	250	500	750	1000	2000	Avg	%RSD
1)	TNX	6.022	6.861	7.022	6.686	6.915	6.925	7.121	6.793	E3 5.38
2)	HMX	2.976	2.856	2.642	2.478	2.489	2.481	2.586	2.644	E3 7.51
3)	DNX	5.820	5.904	5.816	5.437	5.628	5.545	5.823	5.710	E3 3.05
4)	MXN	4.717	4.981	5.224	5.007	5.063	4.976	5.294	5.037	E3 3.73
5)	1,3,5-Trinitroben	7.302	7.899	8.123	7.797	7.946	7.847	8.236	7.879	E3 3.78
6)	RDX	3.327	3.935	3.881	3.729	3.710	3.686	3.841	3.730	E3 5.39
7)	1,3-Dinitrobenzen	1.122	1.117	1.144	1.096	1.117	1.113	1.146	1.122	E4 1.56
8)	Nitrobenzene	6.720	7.206	7.440	7.104	7.286	7.290	7.513	7.223	E3 3.61
9)	2,4,6-Trinitrotol	7.126	7.674	7.812	7.517	7.651	7.587	7.941	7.615	E3 3.39
10)	Tetryl	5.119	5.755	6.124	6.105	6.006	5.862	6.470	5.920	E3 7.10
11)	S 3,4-Dinitrotoluen	4.973	4.941	4.969	4.829	4.912	4.883	5.055	4.938	E3 1.46
12)	2,6-Dinitrotoluen	6.023	5.649	5.657	5.415	5.544	5.538	5.672	5.643	E3 3.38
13)	2,4-Dinitrotoluen	1.200	1.036	1.034	0.995	1.012	1.007	1.038	1.046	E4 6.68
14)	o-Nitrotoluene	5.021	4.648	4.729	4.526	4.679	4.666	4.837	4.729	E3 3.36
15)	p-Nitrotoluene	4.036	3.890	3.967	3.762	3.919	3.914	4.051	3.934	E3 2.49
16)	4-Amino-2,6-Dinit	5.109	5.368	5.518	5.300	5.406	5.380	5.621	5.386	E3 3.01
17)	m-Nitrotoluene	4.743	4.946	5.173	4.937	5.131	5.119	5.324	5.053	E3 3.79
18)	2-Amino-4,6-Dinit	7.249	7.503	7.692	7.547	7.548	7.525	7.845	7.558	E3 2.42

Signal #2

1)	TNX	0.828	1.032	1.066	1.024	1.037	1.032	1.073	1.013	E4 8.25
2)	HMX	8.967	9.716	9.270	8.345	8.192	8.095	8.326	8.702	E3 7.15
3)	DNX	0.786	1.108	1.019	0.937	0.919	0.897	0.935	0.943	E4 10.65
4)	MXN	7.457	8.346	8.580	8.147	8.087	7.895	8.399	8.130	E3 4.58
5)	1,3,5-Trinitroben	1.449	1.617	1.667	1.594	1.616	1.593	1.673	1.601	E4 4.64
6)	RDX	6.077	6.386	6.563	6.283	6.229	6.181	6.460	6.311	E3 2.67
7)	1,3-Dinitrobenzen	1.294	1.326	1.427	1.333	1.365	1.364	1.397	1.358	E4 3.31
8)	Nitrobenzene	3.190	3.096	3.823	3.281	3.391	3.385	3.476	3.378	E3 6.96
9)	2,4,6-Trinitrotol	1.098	1.109	1.152	1.104	1.122	1.113	1.169	1.124	E4 2.37
10)	Tetryl	0.953	1.028	1.114	1.113	1.085	1.059	1.177	1.075	E4 6.67
11)	S 3,4-Dinitrotoluen	6.832	6.775	6.813	6.648	6.692	6.629	6.906	6.756	E3 1.53
12)	2,6-Dinitrotoluen	8.344	7.760	7.758	7.423	7.578	7.556	7.765	7.740	E3 3.83
13)	2,4-Dinitrotoluen	1.104	0.941	0.942	0.911	0.927	0.919	0.952	0.957	E4 6.94
14)	o-Nitrotoluene	3.189	2.755	2.867	2.791	2.895	2.880	3.025	2.915	E3 5.09
15)	p-Nitrotoluene	2.114	1.879	1.907	1.825	1.916	1.926	1.998	1.938	E3 4.82
16)	4-Amino-2,6-Dinit	1.431	1.486	1.522	1.459	1.490	1.484	1.552	1.489	E4 2.66
17)	m-Nitrotoluene	2.353	2.391	2.516	2.444	2.546	2.567	2.681	2.500	E3 4.52
18)	2-Amino-4,6-Dinit	1.233	1.258	1.276	1.258	1.253	1.255	1.311	1.263	E4 1.92

(#) = Out of Range

8330_RP.M

Mon Oct 23 13:34:29 2006

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1A.ch
 Acq On : 20-Oct-2006, 14:03:23 Operator: MIKEE
 Sample : ICV827-250 Inst : G1315B
 Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Oct 20 14:03:32 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	250.000	258.384	-3.4	100	0.00	4.21-	5.21
2	HMX	250.000	260.989	-4.4	104	0.00	4.69-	5.69
3	DNX	250.000	254.013	-1.6	100	0.00	4.83-	5.83
4	MXN	250.000	255.142	-2.1	98	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	264.789	-5.9	103	0.00	6.12-	7.12
6	RDX	250.000	252.023	-0.8	97	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	257.308	-2.9	101	0.00	7.70-	8.70
8	Nitrobenzene	250.000	266.121	-6.4	103	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	268.228	-7.3	105	0.00	8.71-	9.71
10	Tetryl	250.000	205.504	17.8#	79	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	254.196	-1.7	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	244.946	2.0	99	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	248.278	0.7	99	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	258.872	-3.5	103	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	250.000	255.921	-2.4	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	252.478	-1.0	99	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	250.000	236.039	5.6	93	0.00	14.31-	15.31

***** Signal #2 *****

1	TNX	250.000	262.147	-4.9	100	0.00	4.22-	5.22
2	HMX	250.000	276.033	-10.4	104	0.00	4.69-	5.69
3	DNX	250.000	263.149	-5.3	97	0.00	4.83-	5.83
4	MXN	250.000	255.967	-2.4	97	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	265.613	-6.2	102	0.00	6.12-	7.12
6	RDX	250.000	248.723	0.5	96	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	276.649	-10.7	105	0.00	7.70-	8.70
8	Nitrobenzene	250.000	301.148	-20.5#	106	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	269.121	-7.6	105	0.00	8.71-	9.71
10	Tetryl	250.000	203.173	18.7#	78	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	252.008	-0.8	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	241.694	3.3	98	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	241.466	3.4	98	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	250.555	-0.2	102	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	250.000	255.253	-2.1	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	250.572	-0.2	100	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	250.000	234.881	6.0	93	0.00	14.31-	15.31

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018315.D 8330_RP.M Mon Oct 23 13:35:35 2006

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1B.ch Vial: 100
Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1A.ch
Acq On : 20-Oct-2006, 15:10:45 Operator: MIKEE
Sample : ICV827-500 Inst : G1315B
Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	565.302	-13.1	115	0.00	4.21-	5.21
2	HMX	500.000	543.872	-8.8	116	0.00	4.69-	5.69
3	DNX	500.000	551.643	-10.3	116	-0.01	4.83-	5.83
4	MXN	500.000	572.618	-14.5	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	538.163	-7.6	109	0.00	6.12-	7.12
6	RDX	500.000	498.936	0.2	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	510.060	-2.0	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	533.993	-6.8	109	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.178	-9.8	111	0.00	8.71-	9.71
10	Tetryl	500.000	475.586	4.9	92	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	498.834	0.2	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	493.011	1.4	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	510.083	-2.0	107	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	530.499	-6.1	111	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	500.000	518.182	-3.6	105	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	521.475	-4.3	107	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	500.000	479.808	4.0	96	-0.01	14.31-	15.31

***** Signal #2 *****

1	TNX	500.000	637.256	-27.5#	126	-0.01	4.22-	5.22
2	HMX	500.000	581.600	-16.3#	121	0.00	4.69-	5.69
3	DNX	500.000	552.258	-10.5	111	-0.01	4.83-	5.83
4	MXN	500.000	573.858	-14.8	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	539.558	-7.9	108	0.00	6.12-	7.12
6	RDX	500.000	495.496	0.9	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	512.019	-2.4	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	545.924	-9.2	112	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.800	-10.0	112	0.00	8.71-	9.71
10	Tetryl	500.000	472.605	5.5	91	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	496.402	0.7	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	494.458	1.1	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	518.803	-3.8	108	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	534.408	-6.9	114	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	500.000	519.292	-3.9	106	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	532.272	-6.5	109	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	500.000	479.037	4.2	96	-0.01	14.31-	15.31

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Mon Oct 23 13:35:18 2006

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020201.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\03020DS\GG020201.D\dad1A.ch
Acq On : 02-Mar-2007, 16:17:48 Operator: MIKEE
Sample : CC825-500 Inst : G1315B
Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Mar 01 11:02:09 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	490.559	1.9	101	0.00	3.86-	4.86
2	TNX	500.000	512.293	-2.5	103	-0.01	4.20-	5.20
3	DNX	500.000	511.151	-2.2	104	0.00	4.60-	5.60
4	MXN	500.000	508.598	-1.7	104	0.01	5.37-	6.37
5	RDX	500.000	518.998	-3.8	104	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	498.455	0.3	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	498.190	0.4	102	0.02	10.43-	11.43
8	Tetryl	500.000	498.475	0.3	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	503.313	-0.7	104	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	496.619	0.7	102	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	503.597	-0.7	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	496.441	0.7	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	500.727	-0.1	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	510.258	-2.1	107	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	480.817	3.8	101	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	497.302	0.5	106	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	500.449	-0.1	106	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	506.087	-1.2	106	0.07	22.76-	23.76

***** Signal #2 *****

1	HMX	500.000	500.092	-0.0	102	0.00	3.86-	4.86
2	TNX	500.000	509.529	-1.9	103	0.00	4.18-	5.18
3	DNX	500.000	520.538	-4.1	104	0.00	4.60-	5.60
4	MXN	500.000	521.239	-4.2	106	0.01	5.37-	6.37
5	RDX	500.000	566.452	-13.3	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	505.722	-1.1	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	502.475	-0.5	102	0.02	10.43-	11.43
8	Tetryl	500.000	507.037	-1.4	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	499.803	0.0	103	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	495.718	0.9	101	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	500.992	-0.2	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	497.188	0.6	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	499.032	0.2	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	496.978	0.6	105	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	472.110	5.6	100	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	489.795	2.0	104	0.05	19.73-	20.73
17	p-Nitrotoluene	500.000	496.698	0.7	105	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	503.963	-0.8	105	0.07	22.77-	23.77

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Mon Mar 05 11:42:29 2007

Continuing Calibration Summary

Job Number: T16432
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
 Lab FileID: GG020212.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020212.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\03020DS\GG020212.D\dad1A.ch
 Acq On : 02-Mar-2007, 21:07:57 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	969.184	3.1	98	0.00	3.86- 4.86
2	TNX	1000.000	1012.847	-1.3	100	-0.02	4.20- 5.20
3	DNX	1000.000	1011.041	-1.1	101	0.00	4.60- 5.60
4	MXN	1000.000	1001.768	-0.2	101	0.00	5.37- 6.37
5	RDX	1000.000	1012.522	-1.3	100	-0.01	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	982.133	1.8	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	981.873	1.8	99	0.00	10.43-11.43
8	Tetryl	1000.000	979.286	2.1	98	0.00	11.21-12.21
9	Nitrobenzene	1000.000	995.199	0.5	100	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	971.158	2.9	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	991.752	0.8	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	975.490	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	987.191	1.3	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	995.657	0.4	102	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	946.550	5.3	98	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.637	3.8	99	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	975.200	2.5	99	-0.01	21.06-22.06
18	m-Nitrotoluene	1000.000	997.451	0.3	100	0.00	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	984.283	1.6	99	0.00	3.86- 4.86
2	TNX	1000.000	1002.891	-0.3	100	0.00	4.18- 5.18
3	DNX	1000.000	1012.877	-1.3	101	0.00	4.60- 5.60
4	MXN	1000.000	1004.320	-0.4	101	0.00	5.37- 6.37
5	RDX	1000.000	1044.793	-4.5	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	984.579	1.5	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.010	1.1	99	0.00	10.43-11.43
8	Tetryl	1000.000	997.573	0.2	99	0.00	11.21-12.21
9	Nitrobenzene	1000.000	992.439	0.8	102	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	962.803	3.7	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	983.229	1.7	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	974.885	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	978.179	2.2	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	974.861	2.5	101	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	935.023	6.5	97	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.820	3.8	98	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	982.213	1.8	99	0.00	21.06-22.06
18	m-Nitrotoluene	1000.000	1002.440	-0.2	99	-0.01	22.77-23.77

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020212.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020231.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\0305RP\GG020231.D\dad1A.ch
 Acq On : 05-Mar-2007, 13:23:34 Operator: MIKEE
 Sample : CC827-500 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	551.245	-10.2	112	0.02	4.24-	5.24
2	HMX	500.000	527.482	-5.5	113	0.00	4.75-	5.75
3	DNX	500.000	526.884	-5.4	111	0.01	4.87-	5.87
4	MXN	500.000	525.950	-5.2	106	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	507.541	-1.5	103	0.00	6.17-	7.17
6	RDX	500.000	498.345	0.3	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	495.147	1.0	101	0.00	7.78-	8.78
8	Nitrobenzene	500.000	509.807	-2.0	104	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	506.824	-1.4	103	-0.01	8.80-	9.80
10	Tetryl	500.000	535.862	-7.2	104	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	492.695	1.5	101	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	489.618	2.1	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.678	3.3	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	502.970	-0.6	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	503.359	-0.7	105	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	500.000	502.155	-0.4	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	523.547	-4.7	107	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	500.000	503.929	-0.8	101	-0.03	14.45-	15.45

***** Signal #2 *****

1	TNX	500.000	539.038	-7.8	107	0.02	4.24-	5.24
2	HMX	500.000	501.388	-0.3	105	0.00	4.75-	5.75
3	DNX	500.000	520.169	-4.0	105	0.01	4.87-	5.87
4	MXN	500.000	520.287	-4.1	104	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	508.259	-1.7	102	0.00	6.17-	7.17
6	RDX	500.000	496.557	0.7	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	499.335	0.1	102	0.00	7.78-	8.78
8	Nitrobenzene	500.000	521.041	-4.2	107	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	510.092	-2.0	104	-0.01	8.80-	9.80
10	Tetryl	500.000	533.664	-6.7	103	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	488.383	2.3	99	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	487.517	2.5	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.800	3.2	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	519.246	-3.8	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	515.868	-3.2	110	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	500.000	499.988	0.0	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	538.963	-7.8	110	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	500.000	499.905	0.0	100	-0.03	14.45-	15.45

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Tue Mar 06 10:57:51 2007

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020238.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\0305RP\GG020238.D\dad1A.ch
 Acq On : 05-Mar-2007, 15:40:35 Operator: MIKEE
 Sample : ECC827-1000 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	1000.000	1064.078	-6.4	104	0.02	4.24-	5.24
2	HMX	1000.000	1064.872	-6.5	113	0.00	4.75-	5.75
3	DNX	1000.000	1029.858	-3.0	106	0.00	4.87-	5.87
4	MXN	1000.000	1052.110	-5.2	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1020.840	-2.1	102	0.00	6.17-	7.17
6	RDX	1000.000	1020.894	-2.1	103	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1005.302	-0.5	101	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1031.078	-3.1	102	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1033.117	-3.3	104	-0.01	8.80-	9.80
10	Tetryl	1000.000	1104.790	-10.5	112	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1016.218	-1.6	103	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	998.411	0.2	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	987.663	1.2	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1040.619	-4.1	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1034.751	-3.5	104	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	1000.000	1018.262	-1.8	102	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1063.626	-6.4	105	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	1000.000	1018.025	-1.8	102	-0.02	14.45-	15.45

***** Signal #2 *****

1	TNX	1000.000	1065.753	-6.6	105	0.02	4.24-	5.24
2	HMX	1000.000	959.987	4.0	103	0.00	4.75-	5.75
3	DNX	1000.000	1023.085	-2.3	108	0.01	4.87-	5.87
4	MXN	1000.000	1036.881	-3.7	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1018.352	-1.8	102	0.00	6.17-	7.17
6	RDX	1000.000	995.036	0.5	102	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1003.575	-0.4	100	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1035.575	-3.6	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1043.825	-4.4	105	-0.01	8.80-	9.80
10	Tetryl	1000.000	1097.433	-9.7	111	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1002.293	-0.2	102	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	991.509	0.8	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	990.702	0.9	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1071.751	-7.2	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1073.626	-7.4	108	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	1000.000	1006.760	-0.7	101	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1093.803	-9.4	107	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	1000.000	1006.963	-0.7	101	-0.02	14.45-	15.45

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018318.D 8330_RP.M Tue Mar 06 10:58:20 2007



General Chemistry

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Perchlorate	GP9043/GN24390	10	<10	ug/l	50	48.0	96.0	85-115%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	<10	0.0	0-15%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	50	48.4	96.8	80-120%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

10.3
10

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT
Analyst: MP
Parameters: Perchlorate

Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:57	GN24390-CCV1	1		
14:11	GN24390-CCB1	1		
14:25	GP9043-MB1	1		
14:40	GP9043-B1	1		
14:54	GN24390-CRI1	1		
15:09	GN24390-IPC1	1		
15:23	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:52	ZZZZZZ	1		
16:06	T16411-1	1		(sample used for QC only; not part of login T16432)
16:21	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:50	GN24390-CCV2	1		
17:04	GN24390-CCB2	1		
17:18	ZZZZZZ	1		
17:33	ZZZZZZ	1		
17:47	ZZZZZZ	1		
18:02	ZZZZZZ	1		
18:16	ZZZZZZ	1		
18:30	ZZZZZZ	1		
18:45	T16411-10	1		(sample used for QC only; not part of login T16432)
18:59	T16432-1	1		
19:14	T16432-2	1		
19:28	T16432-3	1		
19:42	GN24390-CCV3	1		
19:57	GN24390-CCB3	1		
20:11	T16432-4	1		
20:26	T16432-5	1		
20:40	T16432-6	1		
20:54	GP9043-D1	1		
21:09	GP9043-S1	1		
21:23	GP9043-D2	1		
21:38	GP9043-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Analyst: MP Run ID: GN24390
Parameters: Perchlorate

Time	Sample Description	Dilution Factor	PS Recov	Comments

21:52 GN24390-CCV4 1

22:06 GN24390-CCB4 1

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24390-CCV1	Perchlorate	48.0	10	4.0	50	96.0	85-115
GN24390-CCB1	Perchlorate	4.0 U	10	4.0			
GN24390-CRI1	Perchlorate	4.0 U	10	4.0	3	100.0	75-125
GN24390-IPC1	Perchlorate	22.0	10	4.0	25	88.0	80-120
GN24390-CCV2	Perchlorate	51.3	10	4.0	50	103.0	85-115
GN24390-CCB2	Perchlorate	4.0 U	10	4.0			
GN24390-CCV3	Perchlorate	53.1	10	4.0	50	106.0	85-115
GN24390-CCB3	Perchlorate	4.0 U	10	4.0			
GN24390-CCV4	Perchlorate	51.6	10	4.0	50	103.0	85-115
GN24390-CCB4	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

10.4
10



IT'S ALL IN THE CHEMISTRY

05/08/08



Technical Report for

Shaw E & I, Inc.

Longhorn Army Ammunition Plant

PROJECT #117591

Accutest Job Number: T16445

Sampling Dates: 02/22/07 - 02/23/07

Report to:

Shaw E & I, Inc.

jennifer.hoang@shawgrp.com

ATTN: Jennifer Hoang

Total number of pages in report: **189**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Agnes Vicknair 713-271-4700

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

Shaw E & I, Inc.

Job No: T16445

Longhorn Army Ammunition Plant
Project No: PROJECT #117591

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T16445-1	02/22/07	09:30 SMC	02/24/07	AQ	Ground Water	29WW38-FEB2007
T16445-2	02/22/07	09:41 SMC	02/24/07	AQ	Ground Water	47WW30-FEB2007
T16445-3	02/22/07	11:00 SMC	02/24/07	AQ	Ground Water	LHSMW43-FEB2007
T16445-4	02/22/07	15:36 SMC	02/24/07	AQ	Ground Water	50WW06-FEB2007
T16445-5	02/23/07	10:46 SMC	02/24/07	AQ	Ground Water	50WW05-FEB2007
T16445-5D	02/23/07	10:46 SMC	02/24/07	AQ	Water Dup/MSD	50WW05-FEB2007 MSD
T16445-5S	02/23/07	10:46 SMC	02/24/07	AQ	Water Matrix Spike	50WW05-FEB2007 MS
T16445-6	02/23/07	14:53 SMC	02/24/07	AQ	Ground Water	50WW02-FEB2007
T16445-7	02/22/07	10:30 SMC	02/24/07	AQ	Ground Water	17WW16-FEB2007
T16445-8	02/22/07	14:18 SMC	02/24/07	AQ	Ground Water	17WW02-FEB2007
T16445-9	02/22/07	14:18 SMC	02/24/07	AQ	Ground Water	17WW02-FEB2007 FD
T16445-10	02/22/07	12:45 SMC	02/24/07	AQ	Ground Water	29WW35-FEB2007
T16445-11	02/22/07	12:45 SMC	02/24/07	AQ	Ground Water	29WW35-FEB2007 FD



Accutest LabLink@31214 11:24 08-May-2008

Sample Summary
(continued)

Shaw E & I, Inc.

Job No: T16445

Longhorn Army Ammunition Plant
Project No: PROJECT #117591

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T16445-12	02/22/07	15:00 SMC	02/24/07	AQ	Ground Water	29WW06-FEB2007
T16445-13	02/23/07	15:33 SMC	02/24/07	AQ	Ground Water	17WW05-FEB2007
T16445-14	02/23/07	16:30 SMC	02/24/07	AQ	Ground Water	7WW06-FEB2007
T16445-15	02/22/07	00:00 SMC	02/24/07	AQ	Trip Blank Water	TRIP BLANK
T16445-18	02/23/07	10:47 SMC	02/24/07	AQ	Ground Water	17WW130-FEB2007



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc.

Job No T16445

Site: Longhorn Army Ammunition Plant

Report Date 3/19/2007 4:57:35 PM

15 Samples and 1 Trip Blank were collected on between 02/22/2007 and 02/23/2007 and were received at Accutest on 02/24/2007 properly preserved, at 11 Deg. C and intact. These Samples received an Accutest job number of T16445. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VF2314

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5MS, T16445-5MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Trichloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix AQ	Batch ID: VF2315

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-3MS, T16445-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for cis-1,2-Dichloroethylene, Trichloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- T16445-3: For QC only.

Matrix AQ	Batch ID: VF2318

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-4MS, T16445-4MSD were used as the QC samples indicated.

Volatiles by GC By Method RSKSOP-147/175

Matrix AQ	Batch ID: F:GXY992

- Analysis performed at Accutest Laboratories, Orlando, FL.

Extractables by GC By Method SW846 8330A

Matrix AQ	Batch ID: F:OP19677

- All hits confirmed by reanalysis on a dissimilar column. Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 120.1

Matrix AQ	Batch ID: F:R17941

- Specific Conductivity: Analysis performed at Accutest Laboratories, Orlando, FL.

Matrix AQ	Batch ID: GN11355

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP were used as the QC samples for Specific Conductivity.

Wet Chemistry By Method EPA 150.1/9040

Matrix AQ	Batch ID: GN11323

- Sample(s) T16445-18DUP, T16445-5DUP, T16445-7DUP were used as the QC samples for pH.

Wet Chemistry By Method EPA 310.1

Matrix AQ	Batch ID: GN11375

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Alkalinity, Total as CaCO₃.

Wet Chemistry By Method EPA 314

Matrix AQ	Batch ID: F:GP9044

- Perchlorate: Analysis performed at Accutest Laboratories, Orlando, FL.
- Estimated value, above calibration range. Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 325.3

Matrix AQ	Batch ID: GN11343

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Chloride.

Wet Chemistry By Method EPA 353.2

Matrix AQ	Batch ID: GN11290

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Nitrogen, Nitrite.

Matrix AQ	Batch ID: GN11291

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Matrix AQ	Batch ID: GN11300

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Nitrogen, Nitrite.

Matrix AQ	Batch ID: GN11301

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- The following samples were run outside of holding time for method EPA 353.2: T16445-18

Wet Chemistry By Method EPA 375.3**Matrix** AQ**Batch ID:** GN11356

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Sulfate.

Wet Chemistry By Method EPA 376.1**Matrix** AQ**Batch ID:** GN11313

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP were used as the QC samples for Sulfide.

Wet Chemistry By Method EPA 415.1/9060**Matrix** AQ**Batch ID:** GN11304

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Total Organic Carbon.

Matrix AQ**Batch ID:** GN11311

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Total Organic Carbon.

Matrix AQ**Batch ID:** GN11317

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-8DUP, T16445-8MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SM18 4500NO3E/NO2B**Matrix** AQ**Batch ID:** R15434

- Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T16445

Site: ITTXHO: Longhorn Army Ammunition Plant

Report Date: 3/19/2007 10:48:45

16 Samples were collected on between 02/22/2007 and 02/23/2007 and were received at Accutest SE on 02/28/2007 properly preserved, at 1.8 Deg. C and intact. These Samples had an Accutest job number of T16445. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method RSKSOP-147/175

Matrix: AQ

Batch ID: GXY992

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16445-5DUP, T16445-5MS were used as the QC samples indicated.

Extractables by GC by Method SW846 8330A

Matrix: AQ

Batch ID: OP19677

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47539-3MS, F47539-3MSD were used as the QC samples indicated.

T16445-12: Confirmation run.

T16445-12: All hits confirmed by reanalysis on a dissimilar column.

Wet Chemistry by Method EPA 314

Matrix: AQ

Batch ID: GP9044

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16445-5DUP, T16445-5MS, T16445-6DUP, T16445-6MS were used as the QC samples for Perchlorate.

T16445-12 for Perchlorate: Dilution required due to matrix interference.

T16445-6 for Perchlorate: Estimated value, above calibration range. Results confirmed by re-analysis.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ellen Pampel, Inorganic QA (signature on file)

Date: March 19, 2007

Monday, March 19, 2007



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	29WW38-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-1	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079178.D	1	03/07/07	LJ	n/a	n/a	VF2314
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW38-FEB2007**Lab Sample ID:** T16445-1**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		73-139%
17060-07-0	1,2-Dichloroethane-D4	103%		66-139%
2037-26-5	Toluene-D8	109%		77-148%
460-00-4	4-Bromofluorobenzene	129%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: 29WW38-FEB2007							
Lab Sample ID: T16445-1				Date Sampled: 02/22/07			
Matrix: AQ - Ground Water				Date Received: 02/24/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025255.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.46	0.50	0.30	ug/l	J
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW38-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-1	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020214.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.057 U	0.19	0.057	ug/l	
121-82-4	RDX	0.071 U	0.19	0.071	ug/l	
99-65-0	1,3-Dinitrobenzene	0.067 U	0.19	0.067	ug/l	
606-20-2	2,6-Dinitrotoluene	0.062 U	0.19	0.062	ug/l	
121-14-2	2,4-Dinitrotoluene	0.071 U	0.19	0.071	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.067 U	0.19	0.067	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.076 U	0.19	0.076	ug/l	
98-95-3	Nitrobenzene	0.057 U	0.19	0.057	ug/l	
88-72-2	o-Nitrotoluene	0.057 U	0.19	0.057	ug/l	
99-08-1	m-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
99-99-0	p-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
479-45-8	Tetryl	0.071 U	0.19	0.071	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.090 U	0.19	0.090	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.076 U	0.19	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	82%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW38-FEB2007

Lab Sample ID: T16445-1

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 16:00	AFL	EPA 314
Alkalinity, Total as CaCO ₃	132	10	0.30	mg/l	2	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	83.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	9.0	1.0	0.57	mg/l	1	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.030 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	408	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	126	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	1.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	6.5			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	47WW30-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-2	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079173.D	1	03/07/07	LJ	n/a	n/a	VF2314
Run #2	F0079179.D	10	03/07/07	LJ	n/a	n/a	VF2314

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	1.9	2.0	0.68	ug/l	J
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	6.8	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	1060 ^a	20	6.3	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID:	47WW30-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-2	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	66-139%
2037-26-5	Toluene-D8	106%	107%	77-148%
460-00-4	4-Bromofluorobenzene	118%	128%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	47WW30-FEB2007		
Lab Sample ID:	T16445-2	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025256.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.68	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW30-FEB2007

Lab Sample ID: T16445-2

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 16:15	AFL	EPA 314
Alkalinity, Total as CaCO ₃	752	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	150	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	726	20	0.57	mg/l	20	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	4130	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	637	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	2.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	7.1			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSMW43-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-3	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079232.D	1	03/08/07	LJ	n/a	n/a	VF2318
Run #2 ^a	F0079190.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #3	F0079233.D	100	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	1.8	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	10.3	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	605 ^b	200	83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	1.9	2.0	0.75	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	1.8	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	82.0	2.0	0.74	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSMW43-FEB2007		
Lab Sample ID:	T16445-3	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	11600 ^b	200	63	ug/l	
75-01-4	Vinyl chloride	3.7	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	107%	106%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	102%	106%	94%	66-139%
2037-26-5	Toluene-D8	100%	102%	104%	77-148%
460-00-4	4-Bromofluorobenzene	112%	123%	111%	84-150%

(a) For QC only.

(b) Result is from Run# 3

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSMW43-FEB2007	
Lab Sample ID:	T16445-3	Date Sampled: 02/22/07
Matrix:	AQ - Ground Water	Date Received: 02/24/07
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Longhorn Army Ammunition Plant	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025257.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	7.07	0.50	0.30	ug/l	
74-84-0	Ethane	0.62	1.0	0.60	ug/l	J
74-85-1	Ethene	2.7	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW43-FEB2007

Lab Sample ID: T16445-3

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 16:29	AFL	EPA 314
Alkalinity, Total as CaCO ₃	295	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	93.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	290	33	0.57	mg/l	33.3	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	2920	0.50	0.50	umhos/cm	1	03/27/07	AFL	EPA 120.1
Sulfate	756	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	6.8			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	50WW06-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-4	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079226.D	1	03/08/07	LJ	n/a	n/a	VF2318
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	2.0	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	50WW06-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-4	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		73-139%
17060-07-0	1,2-Dichloroethane-D4	98%		66-139%
2037-26-5	Toluene-D8	106%		77-148%
460-00-4	4-Bromofluorobenzene	119%		84-150%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: 50WW06-FEB2007							
Lab Sample ID: T16445-4				Date Sampled: 02/22/07			
Matrix: AQ - Ground Water				Date Received: 02/24/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025258.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.50	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 50WW06-FEB2007

Lab Sample ID: T16445-4

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 16:43	AFL	EPA 314
Alkalinity, Total as CaCO ₃	278	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	44.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	209	20	0.57	mg/l	20	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.040 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	1260	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	203	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	7.1			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	50WW05-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-5	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079169.D	1	03/07/07	LJ	n/a	n/a	VF2314
Run #2	F0079180.D	20	03/07/07	LJ	n/a	n/a	VF2314

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	1.3	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	12.9	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	13.5	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	48.2	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	5.1	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	1460 ^a	40	13	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 50WW05-FEB2007**Lab Sample ID:** T16445-5**Date Sampled:** 02/23/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	2.5	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	66-139%
2037-26-5	Toluene-D8	105%	108%	77-148%
460-00-4	4-Bromofluorobenzene	114%	129%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	50WW05-FEB2007		
Lab Sample ID:	T16445-5	Date Sampled:	02/23/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025259.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.93	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 50WW05-FEB2007	Date Sampled: 02/23/07
Lab Sample ID: T16445-5	Date Received: 02/24/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Longhorn Army Ammunition Plant	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	27.8	10	4.0	ug/l	1	03/02/07 16:58	AFL	EPA 314
Alkalinity, Total as CaCO ₃	457	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	73.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	253	20	0.57	mg/l	20	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	1800	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	286	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	2.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	7.1			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	50WW02-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-6	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079194.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079234.D	100	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.46	2.0	0.23	ug/l	J
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	4.2	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	5.4	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	6.5	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	18.8	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	855 ^a	200	83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.6	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.92	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	9.3	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	5420 ^a	200	63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: 50WW02-FEB2007**Lab Sample ID:** T16445-6**Date Sampled:** 02/23/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	15.2	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	103%	73-139%
17060-07-0	1,2-Dichloroethane-D4	109%	98%	66-139%
2037-26-5	Toluene-D8	109%	105%	77-148%
460-00-4	4-Bromofluorobenzene	133%	115%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	50WW02-FEB2007		
Lab Sample ID:	T16445-6	Date Sampled:	02/23/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025260.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.87	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 50WW02-FEB2007

Lab Sample ID: T16445-6

Matrix: AQ - Ground Water

Date Sampled: 02/23/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	532	10	4.0	ug/l	1	03/02/07 17:12	AFL	EPA 314
Alkalinity, Total as CaCO3	138	5.0	0.30	mg/l	1	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	140	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	219	10	0.57	mg/l	10	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.020 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^c	1400	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	198	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	6.3			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Estimated value, above calibration range. Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(c) Analysis performed at Accutest Laboratories, Orlando, FL.

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW16-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-7	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079229.D	1	03/08/07	LJ	n/a	n/a	VF2318
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.6	50	2.8	ug/l	J
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW16-FEB2007**Lab Sample ID:** T16445-7**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		73-139%
17060-07-0	1,2-Dichloroethane-D4	94%		66-139%
2037-26-5	Toluene-D8	104%		77-148%
460-00-4	4-Bromofluorobenzene	106%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW16-FEB2007		
Lab Sample ID:	T16445-7	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025261.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	804	0.50	0.30	ug/l	
74-84-0	Ethane	1.7	1.0	0.60	ug/l	
74-85-1	Ethene	2.1	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW16-FEB2007		
Lab Sample ID:	T16445-7	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020215.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW16-FEB2007

Lab Sample ID: T16445-7

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 17:55	AFL	EPA 314
Alkalinity, Total as CaCO ₃	457	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	0.0 B	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	216	10	0.57	mg/l	10	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.30	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.30	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	1700	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	44.0	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	14.0	1.0	0.092	mg/l	1	02/27/07 15:10	LN	EPA 415.1/9060
pH	11.2			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW02-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-8	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079196.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079235.D	5	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	5.3	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	40.7	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.5	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.85	2.0	0.75	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	479 ^a	10	3.2	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW02-FEB2007**Lab Sample ID:** T16445-8**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	100%	103%	66-139%
2037-26-5	Toluene-D8	106%	107%	77-148%
460-00-4	4-Bromofluorobenzene	113%	118%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW02-FEB2007		
Lab Sample ID:	T16445-8	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025264.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	7.48	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW02-FEB2007		
Lab Sample ID:	T16445-8	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020216.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW02-FEB2007

Lab Sample ID: T16445-8

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 18:10	AFL	EPA 314
Alkalinity, Total as CaCO ₃	347	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	110	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	994	50	0.57	mg/l	50	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.060	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	3450	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	123	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	6.8			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW02-FEB2007 FD	Date Sampled:	02/22/07
Lab Sample ID:	T16445-9	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079197.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079236.D	5	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	5.2	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	42.1	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.2	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.88	2.0	0.75	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	468 ^a	10	3.2	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW02-FEB2007 FD
Lab Sample ID: T16445-9
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Longhorn Army Ammunition Plant

Date Sampled: 02/22/07
Date Received: 02/24/07
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	66-139%
2037-26-5	Toluene-D8	109%	107%	77-148%
460-00-4	4-Bromofluorobenzene	117%	117%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW02-FEB2007 FD		
Lab Sample ID:	T16445-9	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025265.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	5.95	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW02-FEB2007 FD

Lab Sample ID: T16445-9

Date Sampled: 02/22/07

Matrix: AQ - Ground Water

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 18:24	AFL	EPA 314
Alkalinity, Total as CaCO ₃	336	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	110	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	969	50	0.57	mg/l	50	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.050	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	3540	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	130	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	6.8			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW35-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-10	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079198.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079237.D	5	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	3.7	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	237 ^a	25	3.4	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	25.6	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW35-FEB2007**Lab Sample ID:** T16445-10**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	107%	100%	66-139%
2037-26-5	Toluene-D8	108%	104%	77-148%
460-00-4	4-Bromofluorobenzene	116%	115%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.10
3

Client Sample ID: 29WW35-FEB2007							
Lab Sample ID: T16445-10				Date Sampled: 02/22/07			
Matrix: AQ - Ground Water				Date Received: 02/24/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025266.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	5.08	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	29WW35-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-10	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020217.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.057 U	0.19	0.057	ug/l	
121-82-4	RDX	0.071 U	0.19	0.071	ug/l	
99-65-0	1,3-Dinitrobenzene	0.067 U	0.19	0.067	ug/l	
606-20-2	2,6-Dinitrotoluene	0.062 U	0.19	0.062	ug/l	
121-14-2	2,4-Dinitrotoluene	0.071 U	0.19	0.071	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.067 U	0.19	0.067	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.076 U	0.19	0.076	ug/l	
98-95-3	Nitrobenzene	0.057 U	0.19	0.057	ug/l	
88-72-2	o-Nitrotoluene	0.057 U	0.19	0.057	ug/l	
99-08-1	m-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
99-99-0	p-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
479-45-8	Tetryl	0.071 U	0.19	0.071	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.090 U	0.19	0.090	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.076 U	0.19	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	98%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW35-FEB2007

Lab Sample ID: T16445-10

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	21.5	10	4.0	ug/l	1	03/02/07 18:39	AFL	EPA 314
Alkalinity, Total as CaCO ₃	295	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	19.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride ^b	77.0	2.0	0.57	mg/l	2	04/04/07 13:20	EB	EPA 325.3
Nitrogen, Nitrate ^c	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	618	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	49.0	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	0.70 B	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	7.5			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Confirmation Sample. Analyzed outside of hold time.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW35-FEB2007 FD	Date Sampled:	02/22/07
Lab Sample ID:	T16445-11	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079199.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	2.8	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	168	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	23.4	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: 29WW35-FEB2007 FD
Lab Sample ID: T16445-11
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Longhorn Army Ammunition Plant

Date Sampled: 02/22/07
Date Received: 02/24/07
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		73-139%
17060-07-0	1,2-Dichloroethane-D4	99%		66-139%
2037-26-5	Toluene-D8	108%		77-148%
460-00-4	4-Bromofluorobenzene	118%		84-150%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.11
3

Client Sample ID:	29WW35-FEB2007 FD		
Lab Sample ID:	T16445-11	Date Sampled:	02/22/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025267.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	5.70	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	29WW35-FEB2007 FD	Date Sampled:	02/22/07
Lab Sample ID:	T16445-11	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020218.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.057 U	0.19	0.057	ug/l	
121-82-4	RDX	0.071 U	0.19	0.071	ug/l	
99-65-0	1,3-Dinitrobenzene	0.067 U	0.19	0.067	ug/l	
606-20-2	2,6-Dinitrotoluene	0.062 U	0.19	0.062	ug/l	
121-14-2	2,4-Dinitrotoluene	0.071 U	0.19	0.071	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.067 U	0.19	0.067	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.076 U	0.19	0.076	ug/l	
98-95-3	Nitrobenzene	0.057 U	0.19	0.057	ug/l	
88-72-2	o-Nitrotoluene	0.057 U	0.19	0.057	ug/l	
99-08-1	m-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
99-99-0	p-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
479-45-8	Tetryl	0.071 U	0.19	0.071	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.090 U	0.19	0.090	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.076 U	0.19	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	117%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW35-FEB2007 FD**Lab Sample ID:** T16445-11**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	5.1 B	10	4.0	ug/l	1	03/02/07 18:53	AFL	EPA 314
Alkalinity, Total as CaCO ₃	303	10	0.30	mg/l	2	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	15.0	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride ^b	77.0	2.0	0.57	mg/l	2	04/04/07 13:20	EB	EPA 325.3
Nitrogen, Nitrate ^c	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	796	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	36.0	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	0.90 B	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	7.6			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Confirmation Sample. Analyzed outside of hold time.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW06-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-12	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079230.D	1	03/08/07	LJ	n/a	n/a	VF2318
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW06-FEB2007**Lab Sample ID:** T16445-12**Date Sampled:** 02/22/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		73-139%
17060-07-0	1,2-Dichloroethane-D4	98%		66-139%
2037-26-5	Toluene-D8	104%		77-148%
460-00-4	4-Bromofluorobenzene	105%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW06-FEB2007							
Lab Sample ID: T16445-12				Date Sampled: 02/22/07			
Matrix: AQ - Ground Water				Date Received: 02/24/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025268.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.30 U	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW06-FEB2007	Date Sampled:	02/22/07
Lab Sample ID:	T16445-12	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020219.D	1	03/03/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2 ^b	GG020236.D	1	03/05/07	AFL	03/01/07	F:OP19677	F:GGG907

	Initial Volume	Final Volume
Run #1	1050 ml	10.0 ml
Run #2	1050 ml	10.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.057 U	0.19	0.057	ug/l	
121-82-4	RDX	0.071 U	0.19	0.071	ug/l	
99-65-0	1,3-Dinitrobenzene	0.067 U	0.19	0.067	ug/l	
606-20-2	2,6-Dinitrotoluene	0.062 U	0.19	0.062	ug/l	
121-14-2	2,4-Dinitrotoluene	0.16	0.19	0.071	ug/l	J
35572-78-2	2-amino-4,6-Dinitrotoluene	0.067 U	0.19	0.067	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.17	0.19	0.076	ug/l	J
98-95-3	Nitrobenzene	0.057 U	0.19	0.057	ug/l	
88-72-2	o-Nitrotoluene	0.057 U	0.19	0.057	ug/l	
99-08-1	m-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
99-99-0	p-Nitrotoluene	0.071 U	0.19	0.071	ug/l	
479-45-8	Tetryl	0.071 U	0.19	0.071	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.090 U	0.19	0.090	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.076 U	0.19	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	103%	90%	70-136%

(a) All hits confirmed by reanalysis on a dissimilar column. Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Confirmation run. Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW06-FEB2007

Lab Sample ID: T16445-12

Matrix: AQ - Ground Water

Date Sampled: 02/22/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	20 U	50	20	ug/l	5	03/07/07 18:35	AFL	EPA 314
Alkalinity, Total as CaCO ₃	856	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	270	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	298	20	0.57	mg/l	20	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	1.3	0.25	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	1.3	0.20	0.0050	mg/l	4	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^c	2640	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	726	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	38.0	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	6.8			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Dilution required due to matrix interference. Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(c) Analysis performed at Accutest Laboratories, Orlando, FL.

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW05-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-13	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079231.D	1	03/08/07	LJ	n/a	n/a	VF2318
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: 17WW05-FEB2007**Lab Sample ID:** T16445-13**Date Sampled:** 02/23/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		73-139%
17060-07-0	1,2-Dichloroethane-D4	100%		66-139%
2037-26-5	Toluene-D8	103%		77-148%
460-00-4	4-Bromofluorobenzene	109%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.13
3

Client Sample ID:	17WW05-FEB2007		
Lab Sample ID:	T16445-13	Date Sampled:	02/23/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025269.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	349	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	17WW05-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-13	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020220.D	1	03/03/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW05-FEB2007

Lab Sample ID: T16445-13

Matrix: AQ - Ground Water

Date Sampled: 02/23/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 19:22	AFL	EPA 314
Alkalinity, Total as CaCO ₃	422	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	5.2	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	174	20	0.57	mg/l	20	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	1170	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	34.0	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	8.2			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	7WW06-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-14	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079202.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079238.D	5	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	1.5	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	6.9	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	8.0	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	9.5	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	2.6	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	205 ^a	10	3.2	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	7WW06-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-14	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	105%	97%	66-139%
2037-26-5	Toluene-D8	106%	105%	77-148%
460-00-4	4-Bromofluorobenzene	117%	123%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.14
3

Client Sample ID: 7WW06-FEB2007							
Lab Sample ID: T16445-14				Date Sampled: 02/23/07			
Matrix: AQ - Ground Water				Date Received: 02/24/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025270.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.79	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	7WW06-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-14	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020221.D	1	03/03/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	102%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	7WW06-FEB2007	Date Sampled:	02/23/07
Lab Sample ID:	T16445-14	Date Received:	02/24/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 19:36	AFL	EPA 314
Alkalinity, Total as CaCO ₃	336	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	4.8 B	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	1110	50	0.57	mg/l	50	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/24/07 14:28	LN	EPA 353.2
Specific Conductivity ^a	3240	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	92.0	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/28/07 09:08	LN	EPA 415.1/9060
pH	8.2			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/22/07
Lab Sample ID:	T16445-15	Date Received:	02/24/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079185.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: TRIP BLANK
Lab Sample ID: T16445-15
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: Longhorn Army Ammunition Plant

Date Sampled: 02/22/07**Date Received:** 02/24/07**Percent Solids:** n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		73-139%
17060-07-0	1,2-Dichloroethane-D4	102%		66-139%
2037-26-5	Toluene-D8	112%		77-148%
460-00-4	4-Bromofluorobenzene	131%		84-150%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW130-FEB2007

Lab Sample ID: T16445-18

Date Sampled: 02/23/07

Matrix: AQ - Ground Water

Date Received: 02/24/07

Method: SW846 8260B

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079203.D	1	03/08/07	LJ	n/a	n/a	VF2315
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	4.9	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83	2.0	0.83	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	25.1	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 2

Client Sample ID: 17WW130-FEB2007**Lab Sample ID:** T16445-18**Date Sampled:** 02/23/07**Matrix:** AQ - Ground Water**Date Received:** 02/24/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		73-139%
17060-07-0	1,2-Dichloroethane-D4	102%		66-139%
2037-26-5	Toluene-D8	106%		77-148%
460-00-4	4-Bromofluorobenzene	116%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.16
3

Client Sample ID:	17WW130-FEB2007			Date Sampled:	02/23/07					
Lab Sample ID:	T16445-18			Date Received:	02/24/07					
Matrix:	AQ - Ground Water			Percent Solids:	n/a					
Method:	RSKSOP-147/175									
Project:	Longhorn Army Ammunition Plant									

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025271.D	1	03/01/07	AFL	n/a	n/a	F:GXY992
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.51	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	17WW130-FEB2007		
Lab Sample ID:	T16445-18	Date Sampled:	02/23/07
Matrix:	AQ - Ground Water	Date Received:	02/24/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020222.D	1	03/03/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.058 U	0.19	0.058	ug/l	
121-82-4	RDX	0.073 U	0.19	0.073	ug/l	
99-65-0	1,3-Dinitrobenzene	0.068 U	0.19	0.068	ug/l	
606-20-2	2,6-Dinitrotoluene	0.063 U	0.19	0.063	ug/l	
121-14-2	2,4-Dinitrotoluene	0.073 U	0.19	0.073	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.068 U	0.19	0.068	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.078 U	0.19	0.078	ug/l	
98-95-3	Nitrobenzene	0.058 U	0.19	0.058	ug/l	
88-72-2	o-Nitrotoluene	0.058 U	0.19	0.058	ug/l	
99-08-1	m-Nitrotoluene	0.073 U	0.19	0.073	ug/l	
99-99-0	p-Nitrotoluene	0.073 U	0.19	0.073	ug/l	
479-45-8	Tetryl	0.073 U	0.19	0.073	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.092 U	0.19	0.092	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.078 U	0.19	0.078	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW130-FEB2007

Lab Sample ID: T16445-18

Matrix: AQ - Ground Water

Date Sampled: 02/23/07

Date Received: 02/24/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 19:51	AFL	EPA 314
Alkalinity, Total as CaCO ₃	567	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	228	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	1030	50	0.57	mg/l	50	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	2.7	0.55	0.0050	mg/l	1	02/26/07 14:00	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	2.7	0.50	0.0050	mg/l	10	02/26/07 13:03	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/26/07 14:00	LN	EPA 353.2
Specific Conductivity ^a	4140	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	173	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	6.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.7			su	1	03/01/07 13:00	TW	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

T16445

00093224



Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10494

Laboratory Name: Accutest		Address: 10165 HARWIN DR. #150		Contact: Agnes														
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK, TX		Project Telephone No.: 713-996-4421														
Project No.: 117591		Project Contact: KAY EVERETTE		Project Manager/Supervisor: Praveen Srivastav														
Point of contact: DIANE MEYER		Telephone No.: 713-996-4408		Analysis and Method Desired (Indicate separate containers)														
				8018 VOC SK-50-2175 ANIONS 376.2 SULFIDES 314.0 PERCHLORATE SOPI75 GASES, CD2 310.1 ALKALINITY TOC 415.1 EXPLOSIVES														
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers										
1	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	3	✓									
2	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	3					✓					
3	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	3								✓		
4	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	1		✓								
5	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	1			✓							
6	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	1				✓						
7	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	1						✓				
8	29WW38-Feb2007	2-22-07	0930		✓	W	Site 29, GW	2									✓	
9																		
10																		
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions										
<i>Sherry M. Adoo</i>		2-22-07 17:00		<i>Scott Beesinger</i>		2/22/07 17:00		up										
<i>Scott Beesinger</i>		2/23/07 08:30						FedEx Airbill No.:										
				Laboratory		A. Roden 2/24/07/11:15		Sampler's Signature <i>Sherry M. Adoo</i>										
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☐ Y ☐ N ☐ Cold														

White - Lab Copy Canary - Field Copy Pink - File Copy

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00093225



Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10928

Laboratory Name: Accutest		Address: 10165 Harwin DR #150 Houston, TX 77036		Contact: AGNES: 713-271-4700											
Project Name: LONGHORN ARMY AMMUNITION PLANT		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)											
Project No.: 117591		Project Contact: KAY EVERETTE		Project Telephone No.: 713-996-4421											
Point of contact: DIANE MOYER		Project Manager/Supervisor: SRIVASTAV		Remarks											
Telephone No.: 713-996-4408															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOCs 8260	PHIONS ANIONS 300	SULFIDES 3762 314	Perchlorate	Gases 175	BIKALINITY 310	TOC 415.1
2	47WW30-FEB2007	2/22/07	0941		X	GW	47WW30	13	X	X	X	X	X	X	X
3	LHS MW43-FEB2007	2/22/07	1100		X	GW	LHS MW43	13	X	X	X	X	X	X	X
4	SDWW06-FEB2007	2/22/07	1530		X	GW	SDWW06	13	X	X	X	X	X	X	X
4															
5															
6															
7															
8															
9															
10															
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions							
<i>J. Paul</i>		2/22/07 @ 1800		<i>Scott Beesigen</i>		2/22/07 18:00		URS FedEx Airbill No.: Sampler's Signature: <i>J. Paul</i>							
<i>Scott Beesigen</i>		2/23/07 08:30													
				Laboratory: <i>A. Rodriguez</i>		2/22/07 11:15									
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☐ Y ☐ N ☐ Cold											

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T16445

00093226



Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10918

Laboratory Name: <u>Accutest</u>		Address: <u>10105 Harwin dr, #150</u>		Contact: <u>Agnes - 713-271-4700</u>												
Project Name: <u>Longhorn Army Ammunition Plant</u>		Project Location: <u>Karnack, TX</u>		Analysis and Method Desired (Indicate separate containers)												
Project No.: <u>117591</u>		Project Contact: <u>Kay Bierette</u>		Project Telephone No.: <u>713-996-4421</u>												
Point of contact: <u>Diane Meyer</u>		Project Manager/Supervisor: <u>PRABEN SRIVASTAV</u>		Remarks												
Telephone No.: <u>713-996-4408</u>																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	Vols	ANIONS	Sulfides	Perchlorate	Gases	Alkalinity	TOC	Remarks
5	SDWW05-FEB2007	2/23/07	1046		X	GW	SDWW05	13	X	X	X	X	X	X	X	ms/msp Included
6	SDWW02-FEB2007	2/23/07	1153		X	GW	SDWW02	13	X	X	X	X	X	X	X	
3																
4																
5																
6																
7																
8																
9																
10																
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions								
<u>J. B. L.</u>		2/23/07 1800		<u>Scott Beezinger</u>		2/23/07 1800		HPS								
<u>Scott Beezinger</u>		2/23/07 1800						FedEx Airbill No.:								
				Laboratory		<u>A. Rodriguez</u>		Sampler's Signature: <u>J. B. L.</u>								
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? <u>Y</u> N		Received Good Condition <u>Y</u> N Cold												

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T16445

00093227



Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10930

Laboratory Name: <u>Accutest</u>				Address: <u>10165 Harwin #150</u> <u>Houston TX 77036</u>				Contact: <u>Agnes (713) 271 4700</u>																
Project Name: <u>LHAAP</u>				Project Location: <u>Karnack, TX</u>				Analysis and Method Desired (Indicate separate containers)																
Project No.: <u>117591</u>				Project Contact: <u>K. Everette</u>		Project Telephone No.: <u>(713) 996 4421</u>		Remarks																
Point of contact: <u>D. Meyers</u>				Project Manager/Supervisor: <u>P. Srivastav</u>																				
Telephone No.: <u>(713) 996-4408</u>																								
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	8260	Anions	300	Sulfides	376.2	Perchlorate	314	Cases	175	Alkalinity	3101	TOC	4151	EXPLOSIVES	8330
1	17WW16-Feb2007	2-22-07	1030		✓	W	GW, Site 17	15	3	1	1	1	1	1	3	1	3	1	3	2				
2	17WW02-Feb2007	2-22-07	1418	5m	✓	W	GW, Site 17	15	3	1	1	1	1	1	3	1	3	1	3	2				
3	17WW02-Feb2007	2-22-07	1418		✓	W	GW, Site 17	15	3	1	1	1	1	1	3	1	3	1	3	2	FD			
4																								
5																								
6																								
7																								
8																								
9																								
10																								
Transfers Relinquished By (Signature): <u>[Signature]</u>				Date/Time: <u>2/23/07 8:22</u>		Transfers Accepted By (Signature): <u>[Signature]</u>				Date/Time: <u>2/23/07 08:22</u>		Special Instructions												
Transfers Relinquished By (Signature): <u>[Signature]</u>				Date/Time: <u>2/23/07 8:30</u>		Transfers Accepted By (Signature): <u>[Signature]</u>				Date/Time: <u>2/23/07 08:22</u>		Special Instructions												
						Laboratory: <u>A. Rader</u>				FedEX Airbill No.: <u>UPS</u>														
						Sampler's Signature: <u>[Signature]</u>																		
TAT: <u>X</u> Standard <u> </u> Rush Due: <u> </u>				Seals Intact? <u>Y</u> <u> </u> N <u> </u>		Received Good Condition <u> </u> Y <u> </u> N <u> </u> Cold <u> </u>																		

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T16445: Chain of Custody

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Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10957

Laboratory Name: Accutest		Address: 10165 Harwin Dr #150		Contact: Agnes															
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK TX		Contact: 713-271-4700															
Project No.: 117591		Project Contact: Kay Everette		Project Telephone No.: 713-996-4421															
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastav		Analysis and Method Desired (Indicate separate containers)															
Telephone No.: 713-996-4408				Number of Containers: VOC 8240 B, SP175, GASES-CD2 415.1, TOC 300.0, ANIONS 324.2, Sulfides 314.0, Perchlorate 310.1, ALKALINITY, Explosives															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location												
10	29WW35-Feb2007	2-22-07	1245		✓	W	Site 29, BW (15)	3	3	3	1	1	1	1	2	15 containers			
11	29WW35-Feb2007-FD	2-22-07	1245		✓	W	Site 29, GW (4)	3	3	3	1	1	1	1	2	FDs			
12	29WW06-Feb2007	2-22-07	1500		✓	W	Site 29, GW (15)	3	3	3	1	1	1	1	2	15 containers			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions											
<i>Sherry McAllen</i>		2-22-07 17:00		<i>Scott Bessinger</i>		2/22/07 17:00													
<i>Scott Bessinger</i>		2/23/07 08:30																	
								FedEx Airbill No.:											
								Sampler's Signature: <i>Sherry McAllen</i>											
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N		Certi													

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T16445: Chain of Custody

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Shaw Environmental, Inc.

3010 Briarpark Drive, Suite 4N
Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10956

T16445 00093229

Laboratory Name: Accutest Address: 10165 HARWIN DR. #150 Agnes
Houston, TX 77036 Contact: 713-271-4700

Project Name: Loughorn Army Ammunition Plant Project Location: HARNACK, TX Analysis and Method Desired (Indicate separate containers):
Project No.: 117591 Project Contact: Kay Everette Project Telephone No.: 713-996-4421 Remarks:
Point of contact: Diane Meyer Project Manager/Supervisor: Praveen Srivastav
Telephone No.: 713-996-4408

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	SOP 175	GASES-QD2	TOC 415.1	ANIONS 300.0	370.2	Sulfides 314.0	Perchlorate	EXPLOSIVES	ALKALINITY
13	17WW05-FEB2007	2/23/07	15:35	✓	W	GW	17WW05	15	3	3	3	1	1	1	1	1	1	1
14	17WW06-FEB2007	2/23/07	16:38	✓	W	GW	17WW06	14	3	3	3	1	1	1	1	1	1	1
15	3	17	15															
16	4	17	15															
17	5	17	15															
18	17WW130-FEB2007	2/23/07	10:47				AR-27607											
9																		
10																		

Transfers Relinquished By (Signature): [Signature] Date/Time: 2/23/07 17:00
Transfers Accepted By (Signature): [Signature] Date/Time: 2/23/07 17:00
Special Instructions: UR
Federal Airbill No.: [Blank]
Laboratory: A. Rodin 2/24/07/11:15
Sampler's Signature: [Signature]
TAT: _____ Standard _____ Rush Due: _____
Seals Intact? ✓ N _____ Received Good Condition ✓ N _____

White - Lab Copy Canary - Field Copy Pink - File Copy

T16445: Chain of Custody

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**VARIANCE MEMO
SAMPLE LOG-IN**

SAMPLE(S) VARIOUS
PROJECT LHAAP
FILED BY AR

DATE 2/24/07LAB NO. T16445**VARIANCE - Check applicable item(s):**

- Insufficient sample sent for proper analysis; _____ received approx. _____
- Sample bottle received broken and/or cap not intact. _____
- Samples received without paperwork; paperwork received without samples. _____
- ☒ Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: 11.0° - 1 cooler
- Illegible sample number or label missing from bottle. _____
- Numbers on sample not the same as numbers on paper work. _____
- Incomplete instructions received with sample(s) ie., no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____
- Samples received in improper container or lacking proper preservation. _____
- Physical characteristics different than those on sampling sheets; Describe: _____
- Rush samples on hold because of incomplete paperwork. _____
- Other (specify) #11 - rec'd. w/ one explosive container not two.
- #9 - Had NO Explosive Containers.
- #18 - 17 WU130 FEB 2007 was an extra sample rec'd. & not on the COL.
- See attached list of samples received out of temp.

CORRECTIVE ACTION TAKEN

DIANE M. Person Contacted _____ By phone. _____

Client informed verbally. _____ Samples processed for information only and noted on report. _____

Client informed by memo/letter. EMAIL _____ Samples processed with higher detection limits accepted. _____

Samples processed as is. _____ Samples rejected. _____

Samples preserved by lab. _____

Client will resample and resubmit. _____

Notes: Analyze all SAMPLES OUT OF TEMP. -11) OK, -9) OK

18) Analyze all SHORT HOLDS. PLACE ON HOLD.

Analyze 5x18 PER DIANE 2/26/A AVS

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:			
Project Manager:	<u>2/26/A</u>	<u>AVS</u>	
Comments:			

Form: SM006

T16445: Chain of Custody
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Sampled out of temp.: 11.0°

- #2 - 47 WW30 - FEB 2007 - 2/28/07 @ 09:41
2 - Plastic 1000 ml's unpreserved.
- #7 - 17 WW16 - FEB 2007 - 2/28/07 @ 10:30.
1 - Plastic 1000 ml unpreserved
- #8 - 17 WW02 - FEB 2007 2/28/07 @ 14:18.
2 - Plastic 1000 ml's unpreserved
1 - Plastic 500 ml w/ NaOH & Zinc Acetate
- #9 - 17 WW02 - FEB 2007 2/28/07 @ 14:18 - FD
2 - Plastic 1000 ml unpreserved.
- #10 - 29 WW35 - FEB 2007 2/28/07 @ 12:45.
2 - Plastic 1000 ml's unpreserved.
1 - Plastic 500 ml unpreserved.
- #11 29 WW35 - FEB 2007 - FD 2/28/07 @ 12:45.
2 - Plastic 1000 ml's unpreserved.
1 - Plastic 500 ml w/ NaOH & Zinc Acetate
- #12 - 29 WW06 - FEB 2007 2/28/07 @ 15:00.
2 - Plastic 1000 ml's unpreserved.
1 - Plastic 500 ml. w/ NaOH & Zinc Acetate.

00093232



ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T16445DATE/TIME RECEIVED: 2/24/07 11:15CLIENT: ShawINITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. ☒ N Sample received in undamaged condition. 2. ☒ N Samples received within temp. range.
 3. ☒ N Sample received with proper pH. 4. ☒ N Sample received in proper containers.
 5. ☒ N Sample volume sufficient for analysis. 6. ☒ N Sample received with chain of custody.
 7. ☒ N Chain of Custody matches sample IDs and analysis on containers.
 8. ☒ N Samples Headspace acceptable
 9. ☒ N NA Custody seal received intact and tamper not evident on cooler.
 10. Y N ☒ NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1,2,3,4,7,8,9,10,11	1-3	2/22	AD	40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
1	4-6				SUB	1,2,3,4,5,6	U, <2, >12, NA
1	7-9				2K, 2L	1,2,3,4,5,6	U, <2, >12, NA
1	10-12			P1000		1,2,3,4,5,6	U, <2, >12, NA
1,2,3,4,10,11	13			P500		1,2,3,4,5,6	U, <2, >12, NA
1,8,18	14-15			81000	SUB	1,2,3,4,5,6	U, <2, >12, NA
5	1-9	2/23		40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	10-18				SUB	1,2,3,4,5,6	U, <2, >12, NA
	19-27				2K, 2L	1,2,3,4,5,6	U, <2, >12, NA
	28-32			P1000		1,2,3,4,5,6	U, <2, >12, NA
	33-35			P500		1,2,3,4,5,6	U, <2, >12, NA
	36-38					1,2,3,4,5,6	U, <2, >12, NA
U	1-3			40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	4-6				SUB	1,2,3,4,5,6	U, <2, >12, NA
	7-9				2K, 2L	1,2,3,4,5,6	U, <2, >12, NA
	10-11			P1000		1,2,3,4,5,6	U, <2, >12, NA

LOCATION: WI: Walk-in VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles
pH of soils N/ADelivery method: Courier: FE
 COOLER TEMP: 11.0 COOLER TEMP: 3.6
 COOLER TEMP: 3.0 COOLER TEMP: 3.0
 Form: SM012, Rev.07/28/06, QAO

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ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T16445

DATE/TIME RECEIVED: 2/24/07/11:15

CLIENT: Shaw

INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. ☒ N Sample received in undamaged condition.
2. ☒ N Samples received within temp. range.
3. ☒ N Sample received with proper pH.
4. ☒ N Sample received in proper containers.
5. ☒ N Sample volume sufficient for analysis.
6. ☒ N Sample received with chain of custody.
7. ☒ N Chain of Custody matches sample IDs and analysis on containers.
8. ☒ N Samples Headspace acceptable
9. ☒ N NA Custody seal received intact and tamper not evident on cooler.
10. Y N ☒ NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
6	12	2/23	AR	P500	2K, 2L	2,3,4,5,6	☒ <2, >12, NA
6	13	1		1	1	1,2,3,4,5,6	U, ☒ <2, >12, NA
7	10	2/22		P1000	2K, 2L	2,3,4,5,6	☒ <2, >12, NA
7	11			P500	1	2,3,4,5,6	☒ <2, >12, NA
7	12			1	1	1,2,3,4,5,6	U, ☒ <2, >12, NA
7	13-15			A1000	SUB	2,3,4,5,6	☒ <2, >12, NA
10	10-12			P1000	2K, 2L	2,3,4,5,6	☒ <2, >12, NA
10	13			P500	1	2,3,4,5,6	☒ <2, >12, NA
10	14-15			A1000	SUB	2,3,4,5,6	U, <2, >12, NA
11	14			1	1	2,3,4,5,6	☒ <2, >12, NA
13	10			P1000	2K, 2L	2,3,4,5,6	☒ <2, >12, NA
1	11-12			P500	1	2,3,4,5,6	☒ <2, >12, NA
1	13			1	1	1,2,3,4,5,6	U, <2, >12, NA
1	14-15			A1000	SUB	2,3,4,5,6	☒ <2, >12, NA
14	14			A1000	SUB	2,3,4,5,6	☒ <2, >12, NA
15-17	1-2	N/A	AR	some	VREF	1,2,3,4,5,6	U, <2, >12, NA

LOCATION: Wt: Walk-in VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles
pH of soils N/A

Delivery method: Courier: FE

COOLER TEMP: 2.4

COOLER TEMP: 2.1

COOLER TEMP:

COOLER TEMP:

Form: SM012, Rev.07/28/06, QAO

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Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, 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), 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 amounts,
 - 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 %Rs 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 exception reports. By me 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.

Ron Martino



Lab Director

3/19/2007

Name (Printed)

Signature

Official Title (printed)

Date

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 3/19/2007				
Project Name: Longhorn			Laboratory Job Number: T16445				
Reviewer Name: Ron Martino			Prep Batch Number(s):				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				

2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast

LRC Date: 3/19/2007

Project Name: Longhorn

Laboratory Job Number: T16445

Reviewer Name: Ron Martino

Prep Batch Number(s):

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
	I	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?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	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?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

[illegible]

RG-366/TRRP-13 December 2002



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2314-MB	F0079164.D	1	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2314-MB	F0079164.D	1	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 73-139%
17060-07-0	1,2-Dichloroethane-D4	100% 66-139%
2037-26-5	Toluene-D8	106% 77-148%
460-00-4	4-Bromofluorobenzene	113% 84-150%

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-MB	F0079184.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-MB	F0079184.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 73-139%
17060-07-0	1,2-Dichloroethane-D4	98% 66-139%
2037-26-5	Toluene-D8	109% 77-148%
460-00-4	4-Bromofluorobenzene	129% 84-150%

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-MB	F0079225.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-MB	F0079225.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 73-139%
17060-07-0	1,2-Dichloroethane-D4	97% 66-139%
2037-26-5	Toluene-D8	108% 77-148%
460-00-4	4-Bromofluorobenzene	121% 84-150%

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2314-BS	F0079163.D	1	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	109	87	31-158
71-43-2	Benzene	25	22.8	91	67-118
75-27-4	Bromodichloromethane	25	21.5	86	66-115
75-25-2	Bromoform	25	22.4	90	57-119
108-90-7	Chlorobenzene	25	22.3	89	72-116
75-00-3	Chloroethane	25	24.7	99	61-135
67-66-3	Chloroform	25	23.2	93	66-117
75-15-0	Carbon disulfide	25	19.0	76	39-136
56-23-5	Carbon tetrachloride	25	25.0	100	67-131
75-34-3	1,1-Dichloroethane	25	23.1	92	63-125
75-35-4	1,1-Dichloroethylene	25	22.3	89	52-143
107-06-2	1,2-Dichloroethane	25	23.6	94	61-120
78-87-5	1,2-Dichloropropane	25	22.6	90	64-118
124-48-1	Dibromochloromethane	25	21.7	87	67-117
156-59-2	cis-1,2-Dichloroethylene	25	21.9	88	65-116
10061-01-5	cis-1,3-Dichloropropene	25	21.9	88	67-118
156-60-5	trans-1,2-Dichloroethylene	25	22.2	89	66-128
10061-02-6	trans-1,3-Dichloropropene	25	22.9	92	73-126
100-41-4	Ethylbenzene	25	22.1	88	71-119
591-78-6	2-Hexanone	125	115	92	45-132
108-10-1	4-Methyl-2-pentanone	125	121	97	46-127
74-83-9	Methyl bromide	25	21.3	85	51-126
74-87-3	Methyl chloride	25	20.7	83	47-130
75-09-2	Methylene chloride	25	20.5	82	53-130
78-93-3	Methyl ethyl ketone	125	115	92	47-128
100-42-5	Styrene	25	18.5	74	69-115
71-55-6	1,1,1-Trichloroethane	25	24.1	96	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	21.7	87	57-121
79-00-5	1,1,2-Trichloroethane	25	22.9	92	62-117
127-18-4	Tetrachloroethylene	25	23.7	95	72-128
108-88-3	Toluene	25	22.4	90	70-121
79-01-6	Trichloroethylene	25	23.1	92	69-120
75-01-4	Vinyl chloride	25	23.0	92	59-145
1330-20-7	Xylene (total)	75	67.8	90	72-120

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2314-BS	F0079163.D	1	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	102%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	98%	84-150%

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-BS	F0079183.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	103	82	31-158
71-43-2	Benzene	25	25.1	100	67-118
75-27-4	Bromodichloromethane	25	23.8	95	66-115
75-25-2	Bromoform	25	22.2	89	57-119
108-90-7	Chlorobenzene	25	24.3	97	72-116
75-00-3	Chloroethane	25	26.6	106	61-135
67-66-3	Chloroform	25	25.7	103	66-117
75-15-0	Carbon disulfide	25	21.7	87	39-136
56-23-5	Carbon tetrachloride	25	27.6	110	67-131
75-34-3	1,1-Dichloroethane	25	26.2	105	63-125
75-35-4	1,1-Dichloroethylene	25	25.4	102	52-143
107-06-2	1,2-Dichloroethane	25	24.1	96	61-120
78-87-5	1,2-Dichloropropane	25	25.2	101	64-118
124-48-1	Dibromochloromethane	25	22.4	90	67-117
156-59-2	cis-1,2-Dichloroethylene	25	24.3	97	65-116
10061-01-5	cis-1,3-Dichloropropene	25	25.0	100	67-118
156-60-5	trans-1,2-Dichloroethylene	25	25.2	101	66-128
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	73-126
100-41-4	Ethylbenzene	25	23.9	96	71-119
591-78-6	2-Hexanone	125	101	81	45-132
108-10-1	4-Methyl-2-pentanone	125	111	89	46-127
74-83-9	Methyl bromide	25	23.0	92	51-126
74-87-3	Methyl chloride	25	23.0	92	47-130
75-09-2	Methylene chloride	25	23.5	94	53-130
78-93-3	Methyl ethyl ketone	125	107	86	47-128
100-42-5	Styrene	25	20.0	80	69-115
71-55-6	1,1,1-Trichloroethane	25	26.2	105	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	21.4	86	57-121
79-00-5	1,1,2-Trichloroethane	25	22.9	92	62-117
127-18-4	Tetrachloroethylene	25	26.4	106	72-128
108-88-3	Toluene	25	24.3	97	70-121
79-01-6	Trichloroethylene	25	26.1	104	69-120
75-01-4	Vinyl chloride	25	25.2	101	59-145
1330-20-7	Xylene (total)	75	74.2	99	72-120

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-BS	F0079183.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	101%	66-139%
2037-26-5	Toluene-D8	102%	77-148%
460-00-4	4-Bromofluorobenzene	99%	84-150%

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-BS	F0079224.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	87.0	70	31-158
71-43-2	Benzene	25	24.3	97	67-118
75-27-4	Bromodichloromethane	25	22.4	90	66-115
75-25-2	Bromoform	25	20.6	82	57-119
108-90-7	Chlorobenzene	25	24.0	96	72-116
75-00-3	Chloroethane	25	24.1	96	61-135
67-66-3	Chloroform	25	24.6	98	66-117
75-15-0	Carbon disulfide	25	20.1	80	39-136
56-23-5	Carbon tetrachloride	25	27.0	108	67-131
75-34-3	1,1-Dichloroethane	25	24.3	97	63-125
75-35-4	1,1-Dichloroethylene	25	23.0	92	52-143
107-06-2	1,2-Dichloroethane	25	22.7	91	61-120
78-87-5	1,2-Dichloropropane	25	24.3	97	64-118
124-48-1	Dibromochloromethane	25	21.1	84	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	65-116
10061-01-5	cis-1,3-Dichloropropene	25	23.6	94	67-118
156-60-5	trans-1,2-Dichloroethylene	25	23.3	93	66-128
10061-02-6	trans-1,3-Dichloropropene	25	22.2	89	73-126
100-41-4	Ethylbenzene	25	23.9	96	71-119
591-78-6	2-Hexanone	125	87.1	70	45-132
108-10-1	4-Methyl-2-pentanone	125	95.6	76	46-127
74-83-9	Methyl bromide	25	21.3	85	51-126
74-87-3	Methyl chloride	25	22.5	90	47-130
75-09-2	Methylene chloride	25	21.8	87	53-130
78-93-3	Methyl ethyl ketone	125	87.5	70	47-128
100-42-5	Styrene	25	19.3	77	69-115
71-55-6	1,1,1-Trichloroethane	25	26.5	106	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	19.4	78	57-121
79-00-5	1,1,2-Trichloroethane	25	20.9	84	62-117
127-18-4	Tetrachloroethylene	25	26.1	104	72-128
108-88-3	Toluene	25	23.9	96	70-121
79-01-6	Trichloroethylene	25	25.5	102	69-120
75-01-4	Vinyl chloride	25	22.5	90	59-145
1330-20-7	Xylene (total)	75	72.3	96	72-120

Blank Spike Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-BS	F0079224.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	97%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	101%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16445**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-5MS	F0079170.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5MSD	F0079171.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5	F0079169.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5	F0079180.D	20	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Compound	T16445-5 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	121	97	121	97	0	39-130/26
71-43-2	Benzene	2.0 U		25	23.6	94	22.9	92	3	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.6	90	21.7	87	4	64-119/22
75-25-2	Bromoform	2.0 U		25	23.7	95	22.9	92	3	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	22.8	91	22.4	90	2	72-118/20
75-00-3	Chloroethane	2.0 U		25	26.5	106	25.7	103	3	60-136/25
67-66-3	Chloroform	2.0 U		25	24.0	96	23.6	94	2	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	19.4	78	19.7	79	2	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	25.3	101	25.0	100	1	64-135/23
75-34-3	1,1-Dichloroethane	1.3	J	25	25.7	98	25.0	95	3	65-126/21
75-35-4	1,1-Dichloroethylene	12.9		25	35.8	92	36.0	92	1	55-140/25
107-06-2	1,2-Dichloroethane	13.5		25	39.1	102	38.0	98	3	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.8	95	23.2	93	3	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.9	88	22.0	88	0	60-123/23
156-59-2	cis-1,2-Dichloroethylene	48.2		25	72.1	96	72.9	99	1	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	22.2	89	22.2	89	0	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U		25	24.0	96	23.5	94	2	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	22.6	90	22.5	90	0	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.4	90	22.2	89	1	70-123/18
591-78-6	2-Hexanone	10 U		125	126	101	124	99	2	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	133	106	132	106	1	41-133/22
74-83-9	Methyl bromide	2.0 U		25	23.2	93	22.1	88	5	47-129/27
74-87-3	Methyl chloride	2.0 U		25	23.7	95	22.5	90	5	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.3	89	21.5	86	4	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	126	101	125	100	1	43-125/29
100-42-5	Styrene	2.0 U		25	18.7	75	18.4	74	2	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	24.8	99	24.5	98	1	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	22.1	88	22.7	91	3	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U		25	22.9	92	23.0	92	0	58-120/22
127-18-4	Tetrachloroethylene	5.1		25	28.7	94	29.1	96	1	69-132/21
108-88-3	Toluene	2.0 U		25	22.7	91	22.3	89	2	70-123/18
79-01-6	Trichloroethylene	1460 ^b		25	1680	200* ^a	1680	200* ^a	0	70-120/19
75-01-4	Vinyl chloride	2.5		25	28.3	103	27.3	99	4	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	68.6	91	67.6	90	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-5MS	F0079170.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5MSD	F0079171.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5	F0079169.D	1	03/07/07	LJ	n/a	n/a	VF2314
T16445-5	F0079180.D	20	03/07/07	LJ	n/a	n/a	VF2314

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-1, T16445-2, T16445-5

CAS No.	Surrogate Recoveries	MS	MSD	T16445-5	T16445-5	Limits
1868-53-7	Dibromofluoromethane	110%	112%	107%	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	109%	108%	105%	104%	66-139%
2037-26-5	Toluene-D8	107%	107%	105%	108%	77-148%
460-00-4	4-Bromofluorobenzene	102%	103%	114%	129%	84-150%

- (a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-3MS	F0079191.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3MSD	F0079192.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3 ^a	F0079190.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Compound	T16445-3 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	103	82	98.2	79	5	39-130/26
71-43-2	Benzene	2.0 U		25	23.6	94	24.0	96	2	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.5	90	22.3	89	1	64-119/22
75-25-2	Bromoform	2.0 U		25	20.5	82	20.7	83	1	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	22.8	91	23.3	93	2	72-118/20
75-00-3	Chloroethane	2.0 U		25	24.6	98	23.8	95	3	60-136/25
67-66-3	Chloroform	2.0 U		25	24.9	100	25.4	102	2	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	20.2	81	19.9	80	1	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	25.6	102	25.8	103	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0		25	27.3	101	26.7	99	2	65-126/21
75-35-4	1,1-Dichloroethylene	10.9		25	34.9	96	33.5	90	4	55-140/25
107-06-2	1,2-Dichloroethane	2.0		25	24.5	90	24.1	88	2	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.2	93	24.2	97	4	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.4	86	22.0	88	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	699	E	25	685	-56* ^b	690	-36* ^b	1	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	23.5	94	23.8	95	1	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.1		25	26.1	96	26.0	96	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	24.4	98	24.1	96	1	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.8	91	23.5	94	3	70-123/18
591-78-6	2-Hexanone	10 U		125	105	84	101	81	4	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	114	91	110	88	4	41-133/22
74-83-9	Methyl bromide	2.0 U		25	21.6	86	20.8	83	4	47-129/27
74-87-3	Methyl chloride	2.0 U		25	23.2	93	22.1	88	5	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.8	91	22.5	90	1	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	108	86	105	84	3	43-125/29
100-42-5	Styrene	2.0 U		25	18.9	76	19.0	76	1	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	25.2	101	24.8	99	2	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	20.8	83	21.4	86	3	50-128/22
79-00-5	1,1,2-Trichloroethane	1.7	J	25	23.7	88	24.0	89	1	58-120/22
127-18-4	Tetrachloroethylene	83.1		25	107	96	106	92	1	69-132/21
108-88-3	Toluene	2.0 U		25	22.8	91	23.4	94	3	70-123/18
79-01-6	Trichloroethylene	6520	E	25	6200	-1280* ^b	6140	-1520* ^b	1	70-120/19
75-01-4	Vinyl chloride	3.8		25	28.3	98	27.1	93	4	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	69.8	93	70.7	94	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-3MS	F0079191.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3MSD	F0079192.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3 ^a	F0079190.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples: Method: SW846 8260B

T16445-3, T16445-6, T16445-8, T16445-9, T16445-10, T16445-11, T16445-14, T16445-15, T16445-18

CAS No.	Surrogate Recoveries	MS	MSD	T16445-3	Limits
1868-53-7	Dibromofluoromethane	106%	107%	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	106%	107%	106%	66-139%
2037-26-5	Toluene-D8	101%	104%	102%	77-148%
460-00-4	4-Bromofluorobenzene	99%	103%	123%	84-150%

- (a) For QC only.
- (b) Outside control limits due to high level in sample relative to spike amount.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16445**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-4MS	F0079227.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4MSD	F0079228.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4	F0079226.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Compound	T16445-4 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U	125	98.5	79	107	86	8	39-130/26
71-43-2	Benzene	2.0 U	25	23.2	93	23.1	92	0	65-122/15
75-27-4	Bromodichloromethane	2.0 U	25	22.0	88	22.2	89	1	64-119/22
75-25-2	Bromoform	2.0 U	25	21.7	87	22.1	88	2	50-123/28
108-90-7	Chlorobenzene	2.0 U	25	23.0	92	22.8	91	1	72-118/20
75-00-3	Chloroethane	2.0 U	25	26.1	104	24.8	99	5	60-136/25
67-66-3	Chloroform	2.0 U	25	24.0	96	23.5	94	2	65-120/20
75-15-0	Carbon disulfide	2.0 U	25	19.5	78	18.9	76	3	37-140/24
56-23-5	Carbon tetrachloride	2.0 U	25	25.6	102	25.4	102	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0 U	25	24.3	97	23.5	94	3	65-126/21
75-35-4	1,1-Dichloroethylene	2.0 U	25	23.0	92	22.0	88	4	55-140/25
107-06-2	1,2-Dichloroethane	2.0 U	25	23.0	92	22.6	90	2	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U	25	23.4	94	23.3	93	0	63-121/22
124-48-1	Dibromochloromethane	2.0 U	25	21.2	85	22.2	89	5	60-123/23
156-59-2	cis-1,2-Dichloroethylene	2.0 U	25	22.3	89	22.2	89	0	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U	25	23.2	93	23.0	92	1	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U	25	23.1	92	22.1	88	4	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U	25	22.6	90	23.5	94	4	65-129/23
100-41-4	Ethylbenzene	2.0 U	25	22.8	91	22.7	91	0	70-123/18
591-78-6	2-Hexanone	10 U	125	101	81	112	90	10	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U	125	112	90	118	94	5	41-133/22
74-83-9	Methyl bromide	2.0 U	25	23.1	92	22.6	90	2	47-129/27
74-87-3	Methyl chloride	2.0 U	25	24.9	100	23.5	94	6	45-133/24
75-09-2	Methylene chloride	5.0 U	25	21.8	87	21.4	86	2	49-128/21
78-93-3	Methyl ethyl ketone	10 U	125	104	83	112	90	7	43-125/29
100-42-5	Styrene	2.0 U	25	19.1	76	19.1	76	0	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U	25	25.0	100	24.2	97	3	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U	25	20.8	83	21.6	86	4	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U	25	22.0	88	22.4	90	2	58-120/22
127-18-4	Tetrachloroethylene	2.0 U	25	25.0	100	24.9	100	0	69-132/21
108-88-3	Toluene	2.0 U	25	23.0	92	23.1	92	0	70-123/18
79-01-6	Trichloroethylene	2.0	25	26.3	97	25.9	96	2	70-120/19
75-01-4	Vinyl chloride	2.0 U	25	25.9	104	23.5	94	10	51-147/24
1330-20-7	Xylene (total)	6.0 U	75	70.3	94	69.8	93	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-4MS	F0079227.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4MSD	F0079228.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4	F0079226.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples:

Method: SW846 8260B

T16445-3, T16445-4, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-12, T16445-13, T16445-14

CAS No.	Surrogate Recoveries	MS	MSD	T16445-4	Limits
1868-53-7	Dibromofluoromethane	106%	105%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	98%	66-139%
2037-26-5	Toluene-D8	103%	105%	106%	77-148%
460-00-4	4-Bromofluorobenzene	99%	99%	119%	84-150%

Instrument Performance Check (BFB)

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-BFB
Lab File ID: F0078963.D
Instrument ID: GCMSF
Injection Date: 02/28/07
Injection Time: 14:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7281	16.0	Pass
75	30.0 - 60.0% of mass 95	18364	40.3	Pass
95	Base peak, 100% relative abundance	45541	100.0	Pass
96	5.0 - 9.0% of mass 95	2793	6.1	Pass
173	Less than 2.0% of mass 174	107	0.23 (0.27) ^a	Pass
174	50.0 - 100.0% of mass 95	39123	85.9	Pass
175	5.0 - 9.0% of mass 174	3023	6.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	37355	82.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2802	6.2 (7.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2305-IC2305	F0078964.D	02/28/07	15:10	00:34	Initial cal 2
VF2305-IC2305	F0078965.D	02/28/07	15:41	01:05	Initial cal 5
VF2305-IC2305	F0078966.D	02/28/07	16:12	01:36	Initial cal 20
VF2305-ICC2305	F0078967.D	02/28/07	16:44	02:08	Initial cal 40
VF2305-IC2305	F0078968.D	02/28/07	17:16	02:40	Initial cal 70
VF2305-IC2305	F0078969.D	02/28/07	17:46	03:10	Initial cal 100
VF2305-IC2305	F0078970.D	02/28/07	18:18	03:42	Initial cal 200
VF2305-BS	F0078972.D	02/28/07	19:21	04:45	Blank Spike
VF2305-MB	F0078974.D	02/28/07	20:24	05:48	Method Blank
ZZZZZZ	F0078975.D	02/28/07	20:55	06:19	(unrelated sample)
ZZZZZZ	F0078976.D	02/28/07	21:26	06:50	(unrelated sample)
ZZZZZZ	F0078977.D	02/28/07	21:58	07:22	(unrelated sample)
T16395-2	F0078978.D	02/28/07	22:30	07:54	(used for QC only; not part of job T16445)
T16395-2MS	F0078979.D	02/28/07	23:00	08:24	Matrix Spike
T16395-2MSD	F0078980.D	02/28/07	23:32	08:56	Matrix Spike Duplicate
ZZZZZZ	F0078981.D	03/01/07	00:03	09:27	(unrelated sample)
ZZZZZZ	F0078982.D	03/01/07	00:35	09:59	(unrelated sample)
ZZZZZZ	F0078983.D	03/01/07	01:06	10:30	(unrelated sample)
ZZZZZZ	F0078984.D	03/01/07	01:38	11:02	(unrelated sample)
ZZZZZZ	F0078989.D	03/01/07	04:15	13:39	(unrelated sample)
ZZZZZZ	F0078990.D	03/01/07	04:47	14:11	(unrelated sample)
ZZZZZZ	F0078991.D	03/01/07	05:19	14:43	(unrelated sample)
ZZZZZZ	F0078992.D	03/01/07	05:50	15:14	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2314-BFB
Lab File ID: F0079161.D
Instrument ID: GCMSF
Injection Date: 03/07/07
Injection Time: 02:16

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7377	17.5	Pass
75	30.0 - 60.0% of mass 95	17646	41.8	Pass
95	Base peak, 100% relative abundance	42171	100.0	Pass
96	5.0 - 9.0% of mass 95	2522	6.0	Pass
173	Less than 2.0% of mass 174	89	0.21 (0.25) ^a	Pass
174	50.0 - 100.0% of mass 95	36285	86.0	Pass
175	5.0 - 9.0% of mass 174	2662	6.3 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	34632	82.1 (95.4) ^a	Pass
177	5.0 - 9.0% of mass 176	2164	5.1 (6.2) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2314-CC2305	F0079162.D	03/07/07	02:47	00:31	Continuing cal 40
VF2314-BS	F0079163.D	03/07/07	03:18	01:02	Blank Spike
VF2314-MB	F0079164.D	03/07/07	03:50	01:34	Method Blank
ZZZZZZ	F0079165.D	03/07/07	04:21	02:05	(unrelated sample)
ZZZZZZ	F0079166.D	03/07/07	04:53	02:37	(unrelated sample)
ZZZZZZ	F0079167.D	03/07/07	05:24	03:08	(unrelated sample)
T16445-5	F0079169.D	03/07/07	06:26	04:10	50WW05-FEB2007
T16445-5MS	F0079170.D	03/07/07	06:58	04:42	Matrix Spike
T16445-5MSD	F0079171.D	03/07/07	07:29	05:13	Matrix Spike Duplicate
T16445-2	F0079173.D	03/07/07	08:32	06:16	47WW30-FEB2007
ZZZZZZ	F0079174.D	03/07/07	09:03	06:47	(unrelated sample)
ZZZZZZ	F0079175.D	03/07/07	09:35	07:19	(unrelated sample)
ZZZZZZ	F0079176.D	03/07/07	10:06	07:50	(unrelated sample)
ZZZZZZ	F0079177.D	03/07/07	10:37	08:21	(unrelated sample)
T16445-1	F0079178.D	03/07/07	11:10	08:54	29WW38-FEB2007
T16445-2	F0079179.D	03/07/07	11:41	09:25	47WW30-FEB2007
T16445-5	F0079180.D	03/07/07	12:12	09:56	50WW05-FEB2007

Instrument Performance Check (BFB)

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-BFB
Lab File ID: F0079181.D
Instrument ID: GCMSF
Injection Date: 03/07/07
Injection Time: 12:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7668	19.2	Pass
75	30.0 - 60.0% of mass 95	16756	42.0	Pass
95	Base peak, 100% relative abundance	39853	100.0	Pass
96	5.0 - 9.0% of mass 95	2768	6.9	Pass
173	Less than 2.0% of mass 174	96	0.24 (0.28) ^a	Pass
174	50.0 - 100.0% of mass 95	34109	85.6	Pass
175	5.0 - 9.0% of mass 174	2473	6.2 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	33421	83.9 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	2339	5.9 (7.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2315-CC2305	F0079182.D	03/07/07	13:19	00:35	Continuing cal 40
VF2315-BS	F0079183.D	03/07/07	13:54	01:10	Blank Spike
VF2315-MB	F0079184.D	03/07/07	14:26	01:42	Method Blank
T16445-15	F0079185.D	03/07/07	14:58	02:14	TRIP BLANK
ZZZZZZ	F0079186.D	03/07/07	15:28	02:44	(unrelated sample)
ZZZZZZ	F0079187.D	03/07/07	15:59	03:15	(unrelated sample)
ZZZZZZ	F0079188.D	03/07/07	16:30	03:46	(unrelated sample)
ZZZZZZ	F0079189.D	03/07/07	17:01	04:17	(unrelated sample)
T16445-3	F0079190.D	03/07/07	17:32	04:48	LHSMW43-FEB2007
T16445-3MS	F0079191.D	03/07/07	18:04	05:20	Matrix Spike
T16445-3MSD	F0079192.D	03/07/07	18:35	05:51	Matrix Spike Duplicate
T16445-6	F0079194.D	03/07/07	19:38	06:54	50WW02-FEB2007
T16445-8	F0079196.D	03/07/07	20:41	07:57	17WW02-FEB2007
T16445-9	F0079197.D	03/07/07	21:12	08:28	17WW02-FEB2007 FD
T16445-10	F0079198.D	03/07/07	21:44	09:00	29WW35-FEB2007
T16445-11	F0079199.D	03/07/07	22:15	09:31	29WW35-FEB2007 FD
T16445-14	F0079202.D	03/07/07	23:49	11:05	7WW06-FEB2007
T16445-18	F0079203.D	03/08/07	00:20	11:36	17WW130-FEB2007

Instrument Performance Check (BFB)

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-BFB
Lab File ID: F0079222.D
Instrument ID: GCMSF
Injection Date: 03/08/07
Injection Time: 10:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6198	16.4	Pass
75	30.0 - 60.0% of mass 95	15579	41.3	Pass
95	Base peak, 100% relative abundance	37709	100.0	Pass
96	5.0 - 9.0% of mass 95	2320	6.2	Pass
173	Less than 2.0% of mass 174	83	0.22 (0.26) ^a	Pass
174	50.0 - 100.0% of mass 95	32211	85.4	Pass
175	5.0 - 9.0% of mass 174	2369	6.3 (7.4) ^a	Pass
176	95.0 - 101.0% of mass 174	31824	84.4 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2216	5.9 (7.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2318-CC2305	F0079223.D	03/08/07	10:59	00:34	Continuing cal 40
VF2318-BS	F0079224.D	03/08/07	11:33	01:08	Blank Spike
VF2318-MB	F0079225.D	03/08/07	12:05	01:40	Method Blank
T16445-4	F0079226.D	03/08/07	12:37	02:12	50WW06-FEB2007
T16445-4MS	F0079227.D	03/08/07	13:09	02:44	Matrix Spike
T16445-4MSD	F0079228.D	03/08/07	14:05	03:40	Matrix Spike Duplicate
T16445-7	F0079229.D	03/08/07	14:36	04:11	17WW16-FEB2007
T16445-12	F0079230.D	03/08/07	15:08	04:43	29WW06-FEB2007
T16445-13	F0079231.D	03/08/07	15:39	05:14	17WW05-FEB2007
T16445-3	F0079232.D	03/08/07	16:11	05:46	LHSMW43-FEB2007
T16445-3	F0079233.D	03/08/07	16:42	06:17	LHSMW43-FEB2007
T16445-6	F0079234.D	03/08/07	17:14	06:49	50WW02-FEB2007
T16445-8	F0079235.D	03/08/07	17:45	07:20	17WW02-FEB2007
T16445-9	F0079236.D	03/08/07	18:17	07:52	17WW02-FEB2007 FD
T16445-10	F0079237.D	03/08/07	18:49	08:24	29WW35-FEB2007
T16445-14	F0079238.D	03/08/07	19:21	08:56	7WW06-FEB2007
ZZZZZZ	F0079239.D	03/08/07	19:53	09:28	(unrelated sample)
ZZZZZZ	F0079240.D	03/08/07	20:24	09:59	(unrelated sample)
ZZZZZZ	F0079241.D	03/08/07	20:56	10:31	(unrelated sample)
ZZZZZZ	F0079242.D	03/08/07	21:28	11:03	(unrelated sample)
ZZZZZZ	F0079243.D	03/08/07	22:00	11:35	(unrelated sample)

Volatile Internal Standard Area Summary

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Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2314-CC2305	Injection Date: 03/07/07
Lab File ID: F0079162.D	Injection Time: 02:47
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	671218	11.87	539776	15.94	225030	19.21
Upper Limit ^a	1342436	12.37	1079552	16.44	450060	19.71
Lower Limit ^b	335609	11.37	269888	15.44	112515	18.71

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT
VF2314-BS	763258	11.87	585053	15.95	230789	19.20
VF2314-MB	761236	11.87	554989	15.95	171804	19.22
ZZZZZZ	715869	11.87	528018	15.95	164528	19.21
ZZZZZZ	713777	11.87	527108	15.95	157669	19.22
ZZZZZZ	714014	11.87	515957	15.94	155677	19.21
T16445-5	696275	11.87	518491	15.94	157926	19.21
T16445-5MS	690323	11.87	531735	15.95	212449	19.21
T16445-5MSD	718441	11.88	554101	15.95	216829	19.21
T16445-2	673074	11.86	503844	15.94	144956	19.20
ZZZZZZ	676854	11.85	489839	15.93	140401	19.20
ZZZZZZ	668299	11.86	481794	15.94	136958	19.20
ZZZZZZ	668450	11.86	482234	15.94	127852	19.20
ZZZZZZ	650403	11.86	471126	15.94	137112	19.20
T16445-1	665672	11.86	484146	15.93	130143	19.20
T16445-2	676833	11.87	486651	15.94	127880	19.21
T16445-5	675974	11.87	487525	15.95	126817	19.21

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

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Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2315-CC2305	Injection Date: 03/07/07
Lab File ID: F0079182.D	Injection Time: 13:19
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	698014	11.87	549946	15.95	231402	19.21
Upper Limit ^a	1396028	12.37	1099892	16.45	462804	19.71
Lower Limit ^b	349007	11.37	274973	15.45	115701	18.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2315-BS	751267	11.87	582464	15.95	220558	19.22
VF2315-MB	739731	11.88	521309	15.96	135288	19.23
T16445-15	709635	11.88	498169	15.96	130636	19.23
ZZZZZZ	713511	11.89	505249	15.96	133789	19.22
ZZZZZZ	670598	11.89	482656	15.97	127882	19.23
ZZZZZZ	692002	11.89	498481	15.96	134149	19.23
ZZZZZZ	694603	11.89	509623	15.97	139087	19.23
T16445-3 ^c	692901	11.89	523917	15.96	140544	19.22
T16445-3MS	703380	11.89	542581	15.97	203275	19.23
T16445-3MSD	721789	11.88	551007	15.96	199926	19.23
T16445-6	701179	11.88	509297	15.96	124874	19.22
T16445-8	672132	11.88	483654	15.95	147428	19.22
T16445-9	655210	11.87	474247	15.95	142235	19.21
T16445-10	658250	11.88	479882	15.95	141112	19.22
T16445-11	645297	11.88	465709	15.95	134763	19.22
T16445-14	633357	11.87	461754	15.95	129759	19.21
T16445-18	630021	11.88	455820	15.95	129210	19.21

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

(c) For QC only.

Volatile Internal Standard Area Summary

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Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2318-CC2305	Injection Date: 03/08/07
Lab File ID: F0079223.D	Injection Time: 10:59
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	698975	11.87	551152	15.94	223338	19.21
Upper Limit ^a	1397950	12.37	1102304	16.44	446676	19.71
Lower Limit ^b	349488	11.37	275576	15.44	111669	18.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2318-BS	746410	11.87	580582	15.94	210100	19.21
VF2318-MB	745444	11.88	531800	15.96	140552	19.22
T16445-4	739935	11.88	531107	15.96	143733	19.22
T16445-4MS	707673	11.88	540763	15.95	204404	19.22
T16445-4MSD	763469	11.88	578582	15.95	218177	19.22
T16445-7	721619	11.89	534862	15.97	175880	19.23
T16445-12	648782	11.89	490210	15.97	162557	19.23
T16445-13	701074	11.89	520078	15.96	161875	19.23
T16445-3	671762	11.90	510964	15.97	157114	19.24
T16445-3	661266	11.89	484654	15.96	144861	19.24
T16445-6	650121	11.89	473895	15.97	134032	19.23
T16445-8	642529	11.89	461686	15.97	128039	19.23
T16445-9	627515	11.89	448085	15.96	125224	19.23
T16445-10	623811	11.88	456759	15.96	122979	19.22
T16445-14	620723	11.89	447599	15.96	114685	19.22
ZZZZZZ	612552	11.89	445736	15.96	121452	19.23
ZZZZZZ	570298	11.88	412673	15.95	110551*	19.22
ZZZZZZ	579619	11.87	421291	15.95	109077*	19.22
ZZZZZZ	599201	11.87	424322	15.95	107464*	19.21
ZZZZZZ	591981	11.87	425080	15.95	108784*	19.21

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary**Job Number:** T16445**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant**Method:** SW846 8260B**Matrix:** AQ**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3	S4
T16445-1	F0079178.D	109.0	103.0	109.0	129.0
T16445-2	F0079179.D	104.0	101.0	107.0	128.0
T16445-2	F0079173.D	107.0	104.0	106.0	118.0
T16445-3	F0079232.D	107.0	102.0	100.0	112.0
T16445-3	F0079233.D	102.0	94.0	104.0	111.0
T16445-3	F0079190.D	106.0	106.0	102.0	123.0
T16445-4	F0079226.D	102.0	98.0	106.0	119.0
T16445-5	F0079180.D	105.0	104.0	108.0	129.0
T16445-5	F0079169.D	107.0	105.0	105.0	114.0
T16445-6	F0079234.D	103.0	98.0	105.0	115.0
T16445-6	F0079194.D	108.0	109.0	109.0	133.0
T16445-7	F0079229.D	104.0	94.0	104.0	106.0
T16445-8	F0079235.D	105.0	103.0	107.0	118.0
T16445-8	F0079196.D	102.0	100.0	106.0	113.0
T16445-9	F0079236.D	105.0	101.0	107.0	117.0
T16445-9	F0079197.D	107.0	104.0	109.0	117.0
T16445-10	F0079237.D	104.0	100.0	104.0	115.0
T16445-10	F0079198.D	109.0	107.0	108.0	116.0
T16445-11	F0079199.D	105.0	99.0	108.0	118.0
T16445-12	F0079230.D	105.0	98.0	104.0	105.0
T16445-13	F0079231.D	105.0	100.0	103.0	109.0
T16445-14	F0079238.D	104.0	97.0	105.0	123.0
T16445-14	F0079202.D	105.0	105.0	106.0	117.0
T16445-15	F0079185.D	106.0	102.0	112.0	131.0
T16445-18	F0079203.D	105.0	102.0	106.0	116.0
T16445-3MS	F0079191.D	106.0	106.0	101.0	99.0
T16445-3MSD	F0079192.D	107.0	107.0	104.0	103.0
T16445-4MS	F0079227.D	106.0	104.0	103.0	99.0
T16445-4MSD	F0079228.D	105.0	102.0	105.0	99.0
T16445-5MS	F0079170.D	110.0	109.0	107.0	102.0
T16445-5MSD	F0079171.D	112.0	108.0	107.0	103.0
VF2314-BS	F0079163.D	105.0	102.0	103.0	98.0
VF2314-MB	F0079164.D	104.0	100.0	106.0	113.0
VF2315-BS	F0079183.D	104.0	101.0	102.0	99.0
VF2315-MB	F0079184.D	103.0	98.0	109.0	129.0
VF2318-BS	F0079224.D	106.0	97.0	103.0	101.0
VF2318-MB	F0079225.D	103.0	97.0	108.0	121.0

Volatile Surrogate Recovery Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Method: SW846 8260B	Matrix: AQ

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits

Surrogate Compounds	Recovery Limits

S1 = Dibromofluoromethane	73-139%
S2 = 1,2-Dichloroethane-D4	66-139%
S3 = Toluene-D8	77-148%
S4 = 4-Bromofluorobenzene	84-150%

5.6
5

Initial Calibration Summary

Job Number: T16445
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Initial Calibration

Calibration Files

1 =F0078964.D 2 =F0078965.D 3 =F0078966.D
 4 =F0078967.D 5 =F0078968.D 6 =F0078969.D 7 =F0078970.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.157	0.162	0.153	0.171	0.181	0.178	0.196	0.171	8.89
3)P Chloromethane	0.353	0.368	0.326	0.309	0.319	0.297	0.331	0.329	7.50
4)C Vinyl Chloride	0.279	0.316	0.268	0.280	0.287	0.269	0.300	0.286	6.01
5) Bromomethane	0.275	0.253	0.223	0.215	0.216	0.204	0.190	0.225	12.95
6) Chloroethane	0.203	0.232	0.219	0.222	0.222	0.210	0.211	0.217	4.37
7) Trichlorofluorome	0.137	0.154	0.142	0.159	0.166	0.162	0.164	0.155	7.23
8) Acrolein	0.030	0.030	0.031	0.036	0.036	0.033	0.033	0.033	8.00
9)C 1,1-Dichloroethen	0.287	0.299	0.298	0.320	0.322	0.306	0.312	0.306	4.04
10) Freon 113	0.174	0.190	0.191	0.225	0.225	0.213	0.216	0.205	9.65
11) Acetone	0.065	0.062	0.057	0.052	0.053	0.053	0.052	0.056	9.61
12) Iodomethane	0.405	0.432	0.438	0.436	0.447	0.434	0.445	0.434	3.22
13) Methyl acetate	0.199	0.203	0.197	0.179	0.188	0.186	0.185	0.191	4.56
14) Carbon Disulfide	0.833	0.878	0.869	0.908	0.930	0.885	0.918	0.889	3.74
15) Methylene Chlorid	0.410	0.424	0.407	0.404	0.396	0.378	0.376	0.399	4.34
16) Tert Butyl Alchoh	0.015	0.018	0.018	0.015	0.017	0.018	0.018	0.017	8.14
17) trans-1,2-Dichlor	0.328	0.340	0.340	0.344	0.351	0.337	0.344	0.341	2.11
18) Acrylonitrile	0.086	0.099	0.097	0.091	0.097	0.098	0.097	0.095	4.82
19) Methyl Tert Butyl	0.577	0.603	0.572	0.555	0.578	0.587	0.594	0.581	2.70
20) Hexane	0.300	0.281	0.283	0.341	0.346	0.320	0.315	0.312	8.32
21)P 1,1-Dichloroethan	0.428	0.457	0.436	0.445	0.450	0.430	0.435	0.440	2.44
22) Vinyl acetate	0.513	0.554	0.582	0.564	0.569	0.552	0.517	0.550	4.74
23) Di-isopropyl ethe	0.944	1.012	0.992	0.981	0.988	0.943	0.934	0.971	3.09
24) Ethyl tert-butyl	0.721	0.735	0.733	0.737	0.753	0.739	0.749	0.738	1.43
25) 2,2-Dichloropropa	0.208	0.200	0.197	0.210	0.209	0.202	0.195	0.203	2.91
26) cis-1,2-Dichloroe	0.282	0.305	0.302	0.308	0.307	0.302	0.307	0.302	3.03
27) 2-Butanone	0.113	0.118	0.120	0.105	0.111	0.112	0.109	0.113	4.48
28) Bromochloromethan	0.124	0.142	0.145	0.146	0.147	0.149	0.150	0.143	6.13
29)C Chloroform	0.343	0.363	0.358	0.362	0.364	0.353	0.362	0.358	2.09
30) Tetrahydrofuran	0.048	0.035	0.033	0.030	0.031	0.031	0.029	0.034	19.44
----- Linear regression ----- Coefficient = 0.9988									
Response Ratio = 0.00148 + 0.02898 *A									
31) 1,1,1-Trichloroet	0.196	0.201	0.204	0.213	0.218	0.210	0.215	0.208	3.79
32)S Dibromofluorometh	0.211	0.221	0.210	0.217	0.221	0.221	0.226	0.218	2.61
33) Cyclohexane	0.390	0.405	0.413	0.479	0.485	0.453	0.447	0.439	8.43
34) 1,1-Dichloropropo	0.283	0.279	0.292	0.313	0.321	0.312	0.316	0.302	5.61
35) Carbon Tetrachlor	0.142	0.161	0.164	0.176	0.181	0.177	0.183	0.169	8.57
36)S 1,2-Dichloroethan	0.159	0.173	0.166	0.161	0.165	0.162	0.166	0.165	2.76
37) Benzene	1.089	1.108	1.092	1.113	1.134	1.098	1.119	1.108	1.43
38) 1,2-Dichloroethan	0.181	0.193	0.200	0.205	0.200	0.204	0.201	0.198	4.13
39) tert-amyl methyl	0.712	0.774	0.759	0.736	0.767	0.769	0.782	0.757	3.26
40) Trichloroethene	0.212	0.223	0.218	0.229	0.233	0.229	0.236	0.226	3.78
41) Methylcyclohexane	0.318	0.332	0.335	0.391	0.401	0.384	0.388	0.364	9.38
42)C 1,2-Dichloropropa	0.320	0.304	0.310	0.316	0.320	0.310	0.318	0.314	1.90
43) Dibromomethane	0.129	0.147	0.169	0.160	0.166	0.165	0.170	0.158	9.61

Initial Calibration Summary

Job Number: T16445
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	17.15
	----- Linear regression -----	Coefficient = 0.9989								
	Response Ratio =	-0.00341 + 0.00271 *A								
45)	Bromodichlorometh	0.287	0.300	0.298	0.307	0.311	0.306	0.317	0.304	3.19
46)	2-Nitropropane	0.046	0.042	0.041	0.037	0.038	0.039	0.038	0.040	7.95
47)	2-Chloroethyl vin	0.094	0.104	0.122	0.125	0.136	0.143	0.152	0.125	16.72
	----- Linear regression -----	Coefficient = 0.9983								
	Response Ratio =	-0.06248 + 0.15260 *A								
48)	4-Methyl-2-pentan	0.229	0.239	0.249	0.234	0.246	0.246	0.237	0.240	3.06
49)	cis-1,3-Dichlorop	0.369	0.397	0.420	0.427	0.443	0.439	0.454	0.421	6.95
50)	I Chlorobenzene-d5	-----ISTD-----								
51)	S Toluene-d8	1.147	1.122	1.060	1.073	1.083	1.079	1.120	1.098	2.89
52)	C Toluene	1.382	1.408	1.358	1.387	1.384	1.367	1.417	1.386	1.51
53)	trans-1,3-Dichlor	0.340	0.364	0.391	0.402	0.406	0.409	0.428	0.391	7.65
54)	1,1,2-Trichloroet	0.263	0.295	0.289	0.279	0.283	0.284	0.289	0.283	3.62
55)	Tetrachloroethene	0.272	0.280	0.293	0.302	0.309	0.299	0.307	0.294	4.70
56)	2-hexanone	0.170	0.180	0.203	0.194	0.206	0.211	0.208	0.196	8.04
57)	1,3-Dichloropropa	0.605	0.605	0.602	0.593	0.592	0.591	0.602	0.599	1.05
58)	Dibromochlorometh	0.254	0.312	0.303	0.296	0.299	0.304	0.315	0.298	6.92
59)	1,2-Dibromoethane	0.283	0.310	0.305	0.302	0.314	0.320	0.331	0.309	4.87
60)	1-Chlorohexane	0.464	0.467	0.465	0.505	0.517	0.509	0.535	0.495	5.83
61)	P Chlorobenzene	0.877	0.857	0.851	0.870	0.877	0.867	0.897	0.871	1.73
62)	1,1,1,2-Tetrachlo	0.264	0.284	0.283	0.282	0.281	0.279	0.288	0.280	2.74
63)	C Ethylbenzene	1.475	1.458	1.433	1.493	1.499	1.470	1.518	1.478	1.90
64)	m,p-Xylene	0.970	0.990	1.008	1.040	1.057	1.039	1.067	1.025	3.51
65)	o-Xylene	1.021	1.033	1.058	1.084	1.107	1.077	1.111	1.070	3.23
66)	Styrene	0.796	0.855	0.910	0.960	0.983	0.978	1.013	0.928	8.44
67)	P Bromoform	0.142	0.077	0.184	0.179	0.195	0.199	0.205	0.169	26.85
	----- Linear regression -----	Coefficient = 0.9995								
	Response Ratio =	-0.01246 + 0.20679 *A								
68)	I 1,4-Dichlorobenzene-d	-----ISTD-----								
69)	Isopropylbenzene	3.394	3.422	2.803	2.838	2.780	2.731	2.618	2.941	11.11
70)	Cyclohexanone	0.023	0.030	0.027	0.025	0.026	0.029	0.027	0.027	8.23
71)	S 4-Bromofluorobenz	1.169	1.004	0.864	0.853	0.853	0.860	0.845	0.921	13.32
72)	Bromobenzene	0.997	0.963	0.842	0.837	0.823	0.822	0.788	0.867	9.15
73)	P 1,1,2,2-Tetrachlo	1.339	1.320	1.146	1.011	1.011	1.030	0.983	1.120	13.59
74)	Trans-1,4-Dichlor	0.143	0.182	0.177	0.182	0.188	0.192	0.192	0.179	9.42
75)	1,2,3-Trichloropr	0.257	0.296	0.253	0.232	0.230	0.236	0.225	0.247	10.10
76)	n-Propylbenzene	4.567	4.426	4.010	4.105	4.023	3.954	3.865	4.136	6.29
77)	2-Chlorotoluene	3.164	2.888	2.531	2.500	2.416	2.351	2.285	2.591	12.31
78)	4-Chlorotoluene	2.569	2.376	2.183	2.187	2.133	2.116	2.076	2.234	7.90
79)	1,3,5-Trimethylbe	2.668	2.535	2.320	2.351	2.287	2.250	2.168	2.368	7.33
80)	sec-Butylbenzene	3.329	3.252	3.038	3.232	3.150	3.042	2.937	3.140	4.47
81)	1,3-Dichlorobenze	1.316	1.426	1.364	1.413	1.441	1.419	1.422	1.400	3.16
82)	4-Isopropyltoluen	2.408	2.304	2.224	2.403	2.346	2.277	2.220	2.312	3.37
83)	1,4-Dichlorobenze	1.528	1.430	1.389	1.429	1.420	1.423	1.424	1.435	3.04
84)	tert-Butylbenzene	0.533	0.438	0.430	0.445	0.436	0.429	0.410	0.446	8.90
85)	n-Butylbenzene	1.465	1.572	1.892	2.173	2.149	2.132	2.214	1.942	15.91
	----- Linear regression -----	Coefficient = 0.9997								
	Response Ratio =	-0.08322 + 2.22219 *A								
86)	1,2-Dichlorobenze	1.206	1.332	1.314	1.336	1.345	1.359	1.369	1.323	4.14
87)	1,2,4-Trimethylbe	2.566	2.449	2.311	2.410	2.354	2.310	2.242	2.377	4.53
88)	1,2-Dibromo-3-Chl	0.068	0.106	0.082	0.072	0.077	0.089	0.088	0.083	15.22
	----- Linear regression -----	Coefficient = 0.9968								

Initial Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Ratio = -0.00467 + 0.08863 *A										
89)	1,2,4-Trichlorobe	0.166	0.135	0.302	0.403	0.468	0.530	0.585	0.370	47.33
----- Linear regression -----		Coefficient = 0.9944								
		Response Ratio = -0.09820 + 0.59565 *A								
90)	Hexachlorobutadie	0.058	0.088	0.170	0.207	0.204	0.208	0.202	0.162	38.83
----- Linear regression -----		Coefficient = 0.9993								
		Response Ratio = -0.00579 + 0.20548 *A								
91)	Naphthalene	0.526	0.280	0.475	0.606	0.781	0.975	1.125	0.681	43.48
----- Quadratic regression -----		Coefficient = 0.9974								
		Response Ratio = -0.07686 + 0.74236 *A + 0.10172 *A^2								
92)	1,2,3-Trichlorobe	0.167	0.113	0.217	0.276	0.334	0.389	0.421	0.274	41.95
----- Linear regression -----		Coefficient = 0.9938								
		Response Ratio = -0.07169 + 0.43007 *A								

(#) = Out of Range										
VF2305C.M					Thu Mar 01 07:44:03 2007					

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2314-CC2305
Lab FileID: F0079162.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2313\F0079162.D Vial: 2
 Acq On : 7 Mar 2007 2:47 am Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3885,vf2314,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	82	-0.08
2	Dichlorodifluoromethane	0.171	0.149	12.9	72	-0.05
3 P	Chloromethane	0.329	0.336	-2.1	90	-0.06
4 C	Vinyl Chloride	0.286	0.303	-5.9	89	-0.06
5	Bromomethane	0.225	0.230	-2.2	88	-0.07
6	Chloroethane	0.217	0.235	-8.3	87	-0.07
7	Trichlorofluoromethane	0.155	0.171	-10.3	89	-0.06
8	Acrolein	0.033	0.030	9.1	69	-0.08
9 C	1,1-Dichloroethene	0.306	0.310	-1.3	80	-0.07
10	Freon 113	0.205	0.205	0.0	75	-0.07
11	Acetone	0.056	0.058	-3.6	93	-0.07
12	Iodomethane	0.434	0.433	0.2	82	-0.07
13	Methyl acetate	0.191	0.220	-15.2	101	-0.07
14	Carbon Disulfide	0.889	0.861	3.1	78	-0.07
15	Methylene Chloride	0.399	0.417	-4.5	85	-0.07
16	Tert Butyl Alcohol	0.017	0.020	-17.6	106	-0.08
17	trans-1,2-Dichloroethene	0.341	0.353	-3.5	85	-0.07
18	Acrylonitrile	0.095	0.108	-13.7	97	-0.07
19	Methyl Tert Butyl Ether	0.581	0.615	-5.9	91	-0.08
20	Hexane	0.312	0.282	9.6	68	-0.08
21 P	1,1-Dichloroethane	0.440	0.464	-5.5	86	-0.08
22	Vinyl acetate	0.550	0.626	-13.8	92	-0.08
23	Di-isopropyl ether	0.971	1.067	-9.9	90	-0.07
24	Ethyl tert-butyl ether	0.738	0.798	-8.1	89	-0.07
25	2,2-Dichloropropane	0.203	0.181	10.8	71	-0.07
26	cis-1,2-Dichloroethene	0.302	0.321	-6.3	86	-0.08
27	2-Butanone	0.113	0.129	-14.2	101	-0.08
28	Bromochloromethane	0.143	0.153	-7.0	87	-0.08
29 C	Chloroform	0.358	0.376	-5.0	86	-0.08
30	Tetrahydrofuran	0.034	0.036	-5.9	99	-0.08
31	1,1,1-Trichloroethane	0.208	0.219	-5.3	85	-0.08
32 S	Dibromofluoromethane	0.218	0.250	-14.7	95	-0.07
33	Cyclohexane	0.439	0.461	-5.0	79	-0.08
34	1,1-Dichloropropene	0.302	0.319	-5.6	84	-0.08
35	Carbon Tetrachloride	0.169	0.180	-6.5	84	-0.08
36 S	1,2-Dichloroethane-d4	0.165	0.192	-16.4	98	-0.08
37	Benzene	1.108	1.171	-5.7	87	-0.08
38	1,2-Dichloroethane	0.198	0.218	-10.1	88	-0.08
39	tert-amyl methyl ether	0.757	0.810	-7.0	91	-0.08
40	Trichloroethene	0.226	0.238	-5.3	85	-0.08
41	Methylcyclohexane	0.364	0.363	0.3	76	-0.08
42 C	1,2-Dichloropropane	0.314	0.342	-8.9	89	-0.08

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2314-CC2305
Lab FileID: F0079162.D

43		Dibromomethane	0.158	0.173	-9.5	89	-0.09
44		1,4-Dioxane	0.002	0.003	-50.0#	100	-0.08
45		Bromodichloromethane	0.304	0.328	-7.9	88	-0.08
46		2-Nitropropane	0.040	0.045	-12.5	99	-0.09
47		2-Chloroethyl vinyl ether	0.125	0.133	-6.4	88	-0.08
48		4-Methyl-2-pentanone	0.240	0.290	-20.8#	102	-0.09
49		cis-1,3-Dichloropropene	0.421	0.442	-5.0	85	-0.08
50	I	Chlorobenzene-d5	1.000	1.000	0.0	89	-0.08
51	S	Toluene-d8	1.098	1.140	-3.8	94	-0.08
52	C	Toluene	1.386	1.356	2.2	87	-0.08
53		trans-1,3-Dichloropropene	0.391	0.395	-1.0	87	-0.08
54		1,1,2-Trichloroethane	0.283	0.288	-1.8	91	-0.08
55		Tetrachloroethene	0.294	0.293	0.3	86	-0.09
56		2-hexanone	0.196	0.223	-13.8	102	-0.08
57		1,3-Dichloropropane	0.599	0.605	-1.0	90	-0.08
58		Dibromochloromethane	0.298	0.306	-2.7	92	-0.08
59		1,2-Dibromoethane	0.309	0.320	-3.6	94	-0.09
60		1-Chlorohexane	0.495	0.458	7.5	80	-0.09
61	P	Chlorobenzene	0.871	0.866	0.6	88	-0.09
62		1,1,1,2-Tetrachloroethane	0.280	0.283	-1.1	89	-0.09
63	C	Ethylbenzene	1.478	1.455	1.6	86	-0.09
64		m,p-Xylene	1.025	1.024	0.1	87	-0.09
65		o-Xylene	1.070	1.091	-2.0	89	-0.09
66		Styrene	0.928	0.947	-2.0	87	-0.08
67	P	Bromoform	0.169	0.201	-18.9	100	-0.09
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	-0.09
69		Isopropylbenzene	2.941	2.700	8.2	86	-0.08
70		Cyclohexanone	0.027	0.042	-55.6#	149	-0.10
71	S	4-Bromofluorobenzene	0.921	0.903	2.0	96	-0.09
72		Bromobenzene	0.867	0.837	3.5	90	-0.10
73	P	1,1,2,2-Tetrachloroethane	1.120	1.088	2.9	97	-0.09
74		Trans-1,4-Dichloro-2-Butene	0.179	0.171	4.5	85	-0.09
75		1,2,3-Trichloropropane	0.247	0.252	-2.0	99	-0.10
76		n-Propylbenzene	4.136	3.884	6.1	86	-0.09
77		2-Chlorotoluene	2.591	2.414	6.8	87	-0.09
78		4-Chlorotoluene	2.234	2.100	6.0	87	-0.10
79		1,3,5-Trimethylbenzene	2.368	2.226	6.0	86	-0.09
80		sec-Butylbenzene	3.140	3.014	4.0	84	-0.09
81		1,3-Dichlorobenzene	1.400	1.412	-0.9	90	-0.10
82		4-Isopropyltoluene	2.312	2.210	4.4	83	-0.09
83		1,4-Dichlorobenzene	1.435	1.389	3.2	88	-0.09
84		tert-Butylbenzene	0.446	0.422	5.4	86	-0.10
85		n-Butylbenzene	1.942	1.915	1.4	80	-0.10
86		1,2-Dichlorobenzene	1.323	1.344	-1.6	91	-0.09
87		1,2,4-Trimethylbenzene	2.377	2.293	3.5	86	-0.09
88		1,2-Dibromo-3-Chloropropane	0.083	0.075	9.6	94	-0.09
89		1,2,4-Trichlorobenzene	0.370	0.387	-4.6	87	-0.10
90		Hexachlorobutadiene	0.162	0.189	-16.7	83	-0.11
91		Naphthalene	0.681	0.633	7.0	94	-0.11
92		1,2,3-Trichlorobenzene	0.274	0.283	-3.3	93	-0.12

Average % D = 7.3

(#) = Out of Range
 F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
 Wed Mar 07 10:06:33 2007

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-CC2305
Lab FileID: F0079182.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2315-1\F0079182.D Vial: 2
 Acq On : 7 Mar 2007 1:19 pm Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3885,vf2315,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	86	-0.08
2	Dichlorodifluoromethane	0.171	0.148	13.5	74	-0.04
3 P	Chloromethane	0.329	0.330	-0.3	92	-0.05
4 C	Vinyl Chloride	0.286	0.292	-2.1	90	-0.06
5	Bromomethane	0.225	0.223	0.9	89	-0.07
6	Chloroethane	0.217	0.226	-4.1	88	-0.06
7	Trichlorofluoromethane	0.155	0.162	-4.5	87	-0.06
8	Acrolein	0.033	0.034	-3.0	81	-0.08
9 C	1,1-Dichloroethene	0.306	0.297	2.9	80	-0.07
10	Freon 113	0.205	0.193	5.9	73	-0.07
11	Acetone	0.056	0.051	8.9	84	-0.07
12	Iodomethane	0.434	0.399	8.1	78	-0.07
13	Methyl acetate	0.191	0.208	-8.9	100	-0.07
14	Carbon Disulfide	0.889	0.797	10.3	75	-0.07
15	Methylene Chloride	0.399	0.419	-5.0	89	-0.07
16	Tert Butyl Alcohol	0.017	0.019	-11.8	103	-0.08
17	trans-1,2-Dichloroethene	0.341	0.339	0.6	84	-0.07
18	Acrylonitrile	0.095	0.092	3.2	86	-0.07
19	Methyl Tert Butyl Ether	0.581	0.574	1.2	89	-0.07
20	Hexane	0.312	0.316	-1.3	79	-0.08
21 P	1,1-Dichloroethane	0.440	0.453	-3.0	87	-0.08
22	Vinyl acetate	0.550	0.609	-10.7	93	-0.08
23	Di-isopropyl ether	0.971	1.066	-9.8	93	-0.07
24	Ethyl tert-butyl ether	0.738	0.773	-4.7	90	-0.07
25	2,2-Dichloropropane	0.203	0.210	-3.4	86	-0.07
26	cis-1,2-Dichloroethene	0.302	0.307	-1.7	86	-0.08
27	2-Butanone	0.113	0.108	4.4	88	-0.08
28	Bromochloromethane	0.143	0.147	-2.8	86	-0.08
29 C	Chloroform	0.358	0.370	-3.4	88	-0.08
30	Tetrahydrofuran	0.034	0.032	5.9	91	-0.08
31	1,1,1-Trichloroethane	0.208	0.210	-1.0	84	-0.08
32 S	Dibromofluoromethane	0.218	0.227	-4.1	90	-0.08
33	Cyclohexane	0.439	0.451	-2.7	81	-0.08
34	1,1-Dichloropropene	0.302	0.317	-5.0	87	-0.08
35	Carbon Tetrachloride	0.169	0.174	-3.0	85	-0.08
36 S	1,2-Dichloroethane-d4	0.165	0.176	-6.7	94	-0.08
37	Benzene	1.108	1.127	-1.7	87	-0.08
38	1,2-Dichloroethane	0.198	0.213	-7.6	89	-0.08
39	tert-amyl methyl ether	0.757	0.777	-2.6	91	-0.08
40	Trichloroethene	0.226	0.232	-2.7	87	-0.08
41	Methylcyclohexane	0.364	0.371	-1.9	81	-0.08
42 C	1,2-Dichloropropane	0.314	0.336	-7.0	91	-0.09

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-CC2305
Lab FileID: F0079182.D

43	Dibromomethane	0.158	0.169	-7.0	91	-0.09
44	1,4-Dioxane	0.002	0.003	-50.0#	106	-0.09
45	Bromodichloromethane	0.304	0.321	-5.6	90	-0.08
46	2-Nitropropane	0.040	0.042	-5.0	98	-0.08
47	2-Chloroethyl vinyl ether	0.125	0.124	0.8	85	-0.08
48	4-Methyl-2-pentanone	0.240	0.236	1.7	87	-0.09
49	cis-1,3-Dichloropropene	0.421	0.461	-9.5	93	-0.08
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	-0.08
51 S	Toluene-d8	1.098	1.096	0.2	92	-0.08
52 C	Toluene	1.386	1.363	1.7	89	-0.08
53	trans-1,3-Dichloropropene	0.391	0.405	-3.6	91	-0.07
54	1,1,2-Trichloroethane	0.283	0.289	-2.1	93	-0.08
55	Tetrachloroethene	0.294	0.299	-1.7	89	-0.09
56	2-hexanone	0.196	0.182	7.1	85	-0.08
57	1,3-Dichloropropane	0.599	0.606	-1.2	92	-0.08
58	Dibromochloromethane	0.298	0.306	-2.7	94	-0.08
59	1,2-Dibromoethane	0.309	0.310	-0.3	93	-0.08
60	1-Chlorohexane	0.495	0.501	-1.2	90	-0.09
61 P	Chlorobenzene	0.871	0.876	-0.6	91	-0.09
62	1,1,1,2-Tetrachloroethane	0.280	0.286	-2.1	92	-0.08
63 C	Ethylbenzene	1.478	1.474	0.3	89	-0.09
64	m,p-Xylene	1.025	1.039	-1.4	90	-0.08
65	o-Xylene	1.070	1.102	-3.0	92	-0.09
66	Styrene	0.928	0.964	-3.9	91	-0.08
67 P	Bromoform	0.169	0.198	-17.2	100	-0.09
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	-0.09
69	Isopropylbenzene	2.941	2.758	6.2	90	-0.08
70	Cyclohexanone	0.027	0.039	-44.4#	142	-0.10
71 S	4-Bromofluorobenzene	0.921	0.840	8.8	92	-0.09
72	Bromobenzene	0.867	0.840	3.1	93	-0.09
73 P	1,1,2,2-Tetrachloroethane	1.120	1.065	4.9	98	-0.09
74	Trans-1,4-Dichloro-2-Butene	0.179	0.176	1.7	90	-0.09
75	1,2,3-Trichloropropane	0.247	0.240	2.8	96	-0.09
76	n-Propylbenzene	4.136	4.041	2.3	92	-0.09
77	2-Chlorotoluene	2.591	2.463	4.9	92	-0.09
78	4-Chlorotoluene	2.234	2.117	5.2	90	-0.10
79	1,3,5-Trimethylbenzene	2.368	2.281	3.7	90	-0.09
80	sec-Butylbenzene	3.140	3.101	1.2	89	-0.09
81	1,3-Dichlorobenzene	1.400	1.439	-2.8	95	-0.09
82	4-Isopropyltoluene	2.312	2.294	0.8	89	-0.09
83	1,4-Dichlorobenzene	1.435	1.431	0.3	93	-0.09
84	tert-Butylbenzene	0.446	0.438	1.8	91	-0.10
85	n-Butylbenzene	1.942	2.030	-4.5	87	-0.10
86	1,2-Dichlorobenzene	1.323	1.352	-2.2	94	-0.09
87	1,2,4-Trimethylbenzene	2.377	2.379	-0.1	92	-0.09
88	1,2-Dibromo-3-Chloropropane	0.083	0.071	14.5	92	-0.10
89	1,2,4-Trichlorobenzene	0.370	0.343	7.3	79	-0.09
90	Hexachlorobutadiene	0.162	0.192	-18.5	86	-0.11
91	Naphthalene	0.681	0.550	19.2	84	-0.12
92	1,2,3-Trichlorobenzene	0.274	0.247	9.9	83	-0.12

Average % D = 5.5

(#) = Out of Range
F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
Thu Mar 08 11:48:42 2007

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-CC2305
Lab FileID: F0079223.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2318-1\F0079223.D Vial: 2
 Acq On : 8 Mar 2007 10:59 am Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3889,vf2318,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	86	-0.08
2	Dichlorodifluoromethane	0.171	0.134	21.6#	68	-0.04
3 P	Chloromethane	0.329	0.313	4.9	87	-0.05
4 C	Vinyl Chloride	0.286	0.273	4.5	84	-0.06
5	Bromomethane	0.225	0.222	1.3	89	-0.07
6	Chloroethane	0.217	0.229	-5.5	89	-0.06
7	Trichlorofluoromethane	0.155	0.168	-8.4	91	-0.07
8	Acrolein	0.033	0.033	0.0	81	-0.07
9 C	1,1-Dichloroethene	0.306	0.303	1.0	81	-0.07
10	Freon 113	0.205	0.207	-1.0	79	-0.07
11	Acetone	0.056	0.042	25.0#	70	-0.07
12	Iodomethane	0.434	0.423	2.5	83	-0.07
13	Methyl acetate	0.191	0.176	7.9	84	-0.07
14	Carbon Disulfide	0.889	0.841	5.4	80	-0.08
15	Methylene Chloride	0.399	0.413	-3.5	88	-0.07
16	Tert Butyl Alcohol	0.017	0.017	0.0	92	-0.07
17	trans-1,2-Dichloroethene	0.341	0.350	-2.6	87	-0.07
18	Acrylonitrile	0.095	0.078	17.9	73	-0.07
19	Methyl Tert Butyl Ether	0.581	0.562	3.3	87	-0.07
20	Hexane	0.312	0.315	-1.0	79	-0.08
21 P	1,1-Dichloroethane	0.440	0.464	-5.5	89	-0.07
22	Vinyl acetate	0.550	0.547	0.5	83	-0.07
23	Di-isopropyl ether	0.971	1.060	-9.2	93	-0.07
24	Ethyl tert-butyl ether	0.738	0.774	-4.9	90	-0.07
25	2,2-Dichloropropane	0.203	0.232	-14.3	95	-0.07
26	cis-1,2-Dichloroethene	0.302	0.324	-7.3	90	-0.08
27	2-Butanone	0.113	0.090	20.4#	74	-0.08
28	Bromochloromethane	0.143	0.149	-4.2	88	-0.08
29 C	Chloroform	0.358	0.387	-8.1	92	-0.08
30	Tetrahydrofuran	0.034	0.028	17.6	80	-0.08
31	1,1,1-Trichloroethane	0.208	0.224	-7.7	90	-0.08
32 S	Dibromofluoromethane	0.218	0.236	-8.3	93	-0.07
33	Cyclohexane	0.439	0.472	-7.5	85	-0.08
34	1,1-Dichloropropene	0.302	0.328	-8.6	90	-0.08
35	Carbon Tetrachloride	0.169	0.187	-10.7	91	-0.07
36 S	1,2-Dichloroethane-d4	0.165	0.169	-2.4	90	-0.08
37	Benzene	1.108	1.177	-6.2	91	-0.07
38	1,2-Dichloroethane	0.198	0.206	-4.0	86	-0.08
39	tert-amyl methyl ether	0.757	0.767	-1.3	90	-0.08
40	Trichloroethene	0.226	0.248	-9.7	93	-0.08
41	Methylcyclohexane	0.364	0.394	-8.2	87	-0.08
42 C	1,2-Dichloropropane	0.314	0.345	-9.9	94	-0.08

Continuing Calibration Summary

Job Number: T16445
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-CC2305
Lab FileID: F0079223.D

43	Dibromomethane	0.158	0.163	-3.2	88	-0.08
44	1,4-Dioxane	0.002	0.002	0.0	89	-0.08
45	Bromodichloromethane	0.304	0.332	-9.2	93	-0.08
46	2-Nitropropane	0.040	0.036	10.0	84	-0.08
47	2-Chloroethyl vinyl ether	0.125	0.110	12.0	76	-0.08
48	4-Methyl-2-pentanone	0.240	0.206	14.2	76	-0.08
49	cis-1,3-Dichloropropene	0.421	0.471	-11.9	95	-0.08
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	-0.08
51 S	Toluene-d8	1.098	1.138	-3.6	96	-0.08
52 C	Toluene	1.386	1.437	-3.7	94	-0.08
53	trans-1,3-Dichloropropene	0.391	0.405	-3.6	91	-0.07
54	1,1,2-Trichloroethane	0.283	0.284	-0.4	92	-0.08
55	Tetrachloroethene	0.294	0.324	-10.2	97	-0.09
56	2-hexanone	0.196	0.157	19.9	73	-0.08
57	1,3-Dichloropropane	0.599	0.582	2.8	89	-0.08
58	Dibromochloromethane	0.298	0.305	-2.3	93	-0.08
59	1,2-Dibromoethane	0.309	0.301	2.6	90	-0.08
60	1-Chlorohexane	0.495	0.527	-6.5	94	-0.08
61 P	Chlorobenzene	0.871	0.923	-6.0	96	-0.09
62	1,1,1,2-Tetrachloroethane	0.280	0.299	-6.8	96	-0.09
63 C	Ethylbenzene	1.478	1.578	-6.8	96	-0.09
64	m,p-Xylene	1.025	1.080	-5.4	94	-0.08
65	o-Xylene	1.070	1.152	-7.7	96	-0.08
66	Styrene	0.928	0.989	-6.6	93	-0.08
67 P	Bromoform	0.169	0.180	-6.5	91	-0.09
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	-0.09
69	Isopropylbenzene	2.941	3.019	-2.7	95	-0.08
70	Cyclohexanone	0.027	0.046	-70.4#	163	-0.10
71 S	4-Bromofluorobenzene	0.921	0.912	1.0	96	-0.09
72	Bromobenzene	0.867	0.917	-5.8	98	-0.09
73 P	1,1,2,2-Tetrachloroethane	1.120	1.007	10.1	89	-0.09
74	Trans-1,4-Dichloro-2-Butene	0.179	0.160	10.6	79	-0.10
75	1,2,3-Trichloropropane	0.247	0.233	5.7	90	-0.09
76	n-Propylbenzene	4.136	4.335	-4.8	95	-0.09
77	2-Chlorotoluene	2.591	2.658	-2.6	95	-0.09
78	4-Chlorotoluene	2.234	2.314	-3.6	95	-0.10
79	1,3,5-Trimethylbenzene	2.368	2.500	-5.6	95	-0.08
80	sec-Butylbenzene	3.140	3.327	-6.0	92	-0.09
81	1,3-Dichlorobenzene	1.400	1.523	-8.8	97	-0.09
82	4-Isopropyltoluene	2.312	2.458	-6.3	92	-0.09
83	1,4-Dichlorobenzene	1.435	1.494	-4.1	94	-0.09
84	tert-Butylbenzene	0.446	0.456	-2.2	92	-0.10
85	n-Butylbenzene	1.942	2.065	-6.3	85	-0.10
86	1,2-Dichlorobenzene	1.323	1.387	-4.8	93	-0.09
87	1,2,4-Trimethylbenzene	2.377	2.512	-5.7	94	-0.09
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	85	-0.09
89	1,2,4-Trichlorobenzene	0.370	0.322	13.0	72	-0.09
90	Hexachlorobutadiene	0.162	0.201	-24.1#	87	-0.10
91	Naphthalene	0.681	0.464	31.9#	69	-0.11
92	1,2,3-Trichlorobenzene	0.274	0.216	21.2#	70	-0.11

Average % D = 8.2

(#) = Out of Range
F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
Fri Mar 09 16:10:50 2007



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO ₃	GN11375	5.0	<5.0	mg/l	2500	2500	100.0	80-120%
Chloride	GN11343	1.0	<1.0	mg/l	xxxxxxx	1020	102.0	92-107%
Nitrogen, Nitrate + Nitrite	GN11291	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrate + Nitrite	GN11301	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrite	GN11290	0.050	<0.050	mg/l	0.500	0.49	98.0	89-117%
Nitrogen, Nitrite	GN11300	0.050	<0.050	mg/l	0.500	0.49	98.0	89-117%
Sulfate	GN11356	10	<10	mg/l	100	95.0	95.0	80-120%
Sulfate	GN11356			mg/l	xxxxxxx		*	80-120%
Sulfide	GN11313	0.20	<0.20	mg/l	1600	1380	85.0	80-120%
Total Organic Carbon	GN11304	1.0	<1.0	mg/l	25.0	26.0	104.0	83-110%
Total Organic Carbon	GN11311	1.0	<1.0	mg/l	25.0	25.0	100.0	83-110%
Total Organic Carbon	GN11317	1.0	<1.0	mg/l	25.0	25.0	100.0	83-110%

Associated Samples:

Batch GN11290: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 Batch GN11291: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 Batch GN11300: T16445-18
 Batch GN11301: T16445-18
 Batch GN11304: T16445-18
 Batch GN11311: T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7
 Batch GN11313: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 Batch GN11317: T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-8, T16445-9
 Batch GN11343: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 Batch GN11356: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 Batch GN11375: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN11375	T16445-5	mg/l	457	457	0.0	0-10%
Chloride	GN11343	T16445-5	mg/l	253	258	2.0	0-5%
Nitrogen, Nitrate + Nitrite	GN11291	T16445-5	mg/l	0.0050 U	<0.050	0.0	0-10%
Nitrogen, Nitrate + Nitrite	GN11301	T16445-18	mg/l	2.7	2.7	0.0	0-10%
Nitrogen, Nitrite	GN11290	T16445-5	mg/l	0.0030 U	<0.050	0.0	0-10%
Nitrogen, Nitrite	GN11300	T16445-18	mg/l	0.0030 U	<0.050	0.0	0-10%
Sulfate	GN11356	T16445-5	mg/l	286	291	1.7	0-20%
Sulfide	GN11313	T16445-5	mg/l	0.0 B	<0.20	0.0	0-20%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	6.0	0.0	0-11%
Total Organic Carbon	GN11311	T16445-5	mg/l	2.0	2.0	0.0	0-11%
Total Organic Carbon	GN11317	T16445-8	mg/l	3.0	3.0	0.0	0-11%
pH	GN11323	T16445-5	su	7.1	7.1	0.0	0-6.8%
pH	GN11323	T16445-7	su	11.2	11.1	1.8	0-6.8%
pH	GN11323	T16445-18	su	6.7	7.0	3.5	0-6.8%

Associated Samples:

Batch GN11290: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11291: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11300: T16445-18

Batch GN11301: T16445-18

Batch GN11304: T16445-18

Batch GN11311: T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7

Batch GN11313: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11317: T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-8, T16445-9

Batch GN11323: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11343: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11356: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11375: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN11375	T16445-5	mg/l	457	125	590	106.0	79-122%
Chloride	GN11343	T16445-5	mg/l	253	xxxxxxx	462	104.0	81-119%
Nitrogen, Nitrate + Nitrite	GN11291	T16445-5	mg/l	0.0050 U	0.100	0.097	97.0	80-119%
Nitrogen, Nitrate + Nitrite	GN11291	T16445-5	mg/l	0.0050 U	0.100	0.10	100.0	80-119%
Nitrogen, Nitrate + Nitrite	GN11301	T16445-18	mg/l	2.7	1.00	3.7	100.0	80-119%
Nitrogen, Nitrite	GN11290	T16445-5	mg/l	0.0030 U	0.100	0.096	96.0	75-134%
Nitrogen, Nitrite	GN11290	T16445-5	mg/l	0.0030 U	0.100	0.096	96.0	75-134%
Nitrogen, Nitrite	GN11300	T16445-18	mg/l	0.0030 U	0.100	0.094	94.0	75-134%
Sulfate	GN11356	T16445-5	mg/l	286	100	296	100.0	75-125%
Sulfate	GN11356	T16445-5	mg/l	286	xxxxxxx		*	75-125%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	10.0	16.0	100.0	74-121%
Total Organic Carbon	GN11311	T16445-5	mg/l	2.0	10.0	13.0	110.0	74-121%
Total Organic Carbon	GN11311	T16445-5	mg/l	2.0	10.0	12.0	100.0	74-121%
Total Organic Carbon	GN11317	T16445-8	mg/l	3.0	10.0	14.0	110.0	74-121%

Associated Samples:

Batch GN11290: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11291: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11300: T16445-18

Batch GN11301: T16445-18

Batch GN11304: T16445-18

Batch GN11311: T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7

Batch GN11317: T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-8, T16445-9

Batch GN11343: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11356: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

Batch GN11375: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody



ACCUTEST
Laboratories

T16445

CHAIN OF CUSTODY

00093280

Page 1 of 2

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

Subcontract Information		Project Information		FED-EX Tracking #		Bottle Order Control #												
Company Name ALSE-ORLANDO		Send Report to: Agnsv@accutest.com		Accutest Quote #		Accutest Job # T16445												
Project Contact		Bill to		Requested Analyses		Matrix Codes												
Address		Address				DW - Drinking Water GW - Ground Water WW - Wastewater SD - Soil SL - Sludge OL - Oil LIQ - Other Liquid SOL - Other Solid												
City ORLANDO	State FL	City Houston, TX	State TX															
Zip 32801		Zip 77036																
Phone No.	Fax No.	Phone No.	Fax No.															
		713-271-4700 / 713-271-4770																
		Accutest Purchase Order #																
Accutest Sample ID	Collection		Matrix	# of bottles	Number of preserved bottles										LAB USE ONLY			
	Date	Time			1	2	3	4	5	6	7	8	9	10				
T16445-1	2/22/2007	930	GW	5	2													
T16445-2	2/22/2007	941	GW	3	2													
T16445-3	2/22/2007	1538	GW	3	2													
T16445-5 + MS/MSD	2/23/2007	1048	GW	9	8													
T16445-6	2/23/2007	1453	GW	3	2													
T16445-7	2/22/2007	1030	GW	5	2													
T16445-8	2/22/2007	1418	GW	5	2													
T16445-9	2/22/2007	1418	GW	3	2													
T16445-10	2/22/2007	1245	GW	5	2													
T16445-11	2/22/2007	1245	GW	5	2													FD, Only 1-1L Amber
Turnaround Time (Business days)		Date Deliverable Information		Comments / Remarks														
☒ 10 Day STANDARD ☐ 8 Day RUSH ☐ 4 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ Other		Approved By / Date: _____ ☐ Commercial "A" ☐ Commercial "B" ☒ TRRP 13 ☒ Reduced Tier1 Commercial "A" = Results Only Commercial "B" = Results & Standard QC		☐ State Forms ☐ EDD Format ☐ Other														
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																		
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:													
1		1	2		2													
Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:													
3		3	4		4													
Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:													
5		5	5		5													
Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:													
Fx	02-28-07	wfired	Kodm	02-28-07	Fx													
		Custom Seal #		Preserved where applicable		On Ice Cooler Temp.												

T16445: Chain of Custody

Page 1 of 3

Accutest Laboratories Southeast, Inc.



00093281

Page 2 of 2

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

[illegible]

T16445: Chain of Custody

Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

00093282

ACCUTEST'S JOB NUMBER: T16445 CLIENT: AL6C PROJECT: T16445
 DATE/TIME RECEIVED: 02-28-07 09:30 # OF COOLERS RECEIVED: 4 COOLER TEMPS: 2.0, 2.4, 1.8, 3.0
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7986 1726 3879

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 6
 NUMBER OF 5035 FIELD KITS ? 2
 NUMBER OR LAB FILTERED METALS ? 2

SUMMARY OF COMMENTS:

SAMPLE INFORMATION

- ☐ SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
 - ☐ CORRECT NUMBER OF CONTAINERS USED
 - ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
 - ☐ INSUFFICIENT VOLUME FOR ANALYSIS
 - ☐ TIMES ON COC DOES NOT MATCH LABEL(S)
 - ☐ ID'S ON COC DOES NOT MATCH LABEL(S)
 - ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
 - ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
 - ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
 - ☐ UNCLEAR FILTERING INSTRUCTIONS
 - ☐ UNCLEAR COMPOSITING INSTRUCTIONS
 - ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
 - ☐ % SOLIDS JAR NOT RECEIVED
 - ☐ 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
 - ☐ RESIDUAL CHLORINE PRESENT
- (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE W. J. V. 02-28-07 TECHNICIAN SIGNATURE/DATE [Signature] 2-28-07 ASBD 10/03/06

T16445: Chain of Custody

Page 3 of 3



GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY992-MB	XY025253.D	1	03/01/07	TD	n/a	n/a	GXY992

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.30	ug/l	
74-84-0	Ethane	ND	1.0	0.60	ug/l	
74-85-1	Ethene	ND	1.0	0.80	ug/l	

Blank Spike Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY992-BS	XY025254.D	1	03/01/07	TD	n/a	n/a	GXY992

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	108	123	114	54-149
74-84-0	Ethane	219	245	112	57-143
74-85-1	Ethene	290	319	110	57-143



Matrix Spike Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-5MS	XY025273.D 1		03/01/07	TD	n/a	n/a	GXY992
T16445-5	XY025259.D 1		03/01/07	TD	n/a	n/a	GXY992

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	T16445-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	2.93	108	144	131	54-149
74-84-0	Ethane	1.0 U	219	286	131	57-143
74-85-1	Ethene	1.0 U	290	371	128	57-143



Duplicate Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-5DUP	XY025272.D 1		03/01/07	TD	n/a	n/a	GXY992
T16445-5	XY025259.D 1		03/01/07	TD	n/a	n/a	GXY992

The QC reported here applies to the following samples:

Method: RSKSOP-147/175

T16445-1, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	T16445-5 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	2.93	3.38		14	24
74-84-0	Ethane	1.0 U	ND		nc	23
74-85-1	Ethene	1.0 U	ND		nc	10

8.4
8

Initial Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY989-ICC989
Lab FileID: XY025202.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Feb 22 15:36:18 2007
Response via : Initial Calibration

Calibration Files

1 =XY025194.D 2 =XY025195.D 3 =XY025201.D 4 =XY025197.D
5 =XY025202.D 6 =XY025199.D 7 =XY025200.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)c Methane	1.442	0.904	1.128	1.220	0.672	0.793	0.957	1.017	E4 26.02
2)c Ethylene	2.415	1.896	1.964	2.128	1.306	1.522	1.817	1.864	E4 19.76
3)c Ethane	2.311	1.873	1.880	2.068	1.280	1.499	1.798	1.816	E4 18.87

(#) = Out of Range

RSK147XY.M

Thu Feb 22 15:38:10 2007

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY989-ICV989
Lab FileID: XY025203.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\022207\XY025203.D Vial: 100
Acq On : 22 Feb 2007 1:27 pm Operator: Trangd
Sample : ICV989-1000 Inst : VOA5
Misc : gc7062,gxy989,,,, Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Feb 22 15:36:18 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	1154.410	-15.4	175	0.20	0.88-	1.48
2 c	Ethylene	1000.000	1202.152	-20.2	172	0.31	2.54-	3.34
3 c	Ethane	1000.000	1245.774	-24.6	177	0.32	3.14-	3.94

(#) = Out of Range
XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
Thu Feb 22 15:37:53 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY992-CC989
Lab FileID: XY025251.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030107\XY025251.D Vial: 100
Acq On : 1 Mar 2007 9:53 am Operator: Trangd
Sample : CC989-1000 Inst : VOA5
Misc : gc7109,gxy992,,,,, Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Fri Mar 02 09:28:32 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	1006.127	-0.6	152	-0.11	1.16-	1.76
2 c	Ethylene	1000.000	1069.950	-7.0	153	-0.09	2.96-	3.76
3 c	Ethane	1000.000	1082.186	-8.2	153	-0.08	3.58-	4.38

(#) = Out of Range
XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
Fri Mar 02 10:53:27 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY992-CC989
Lab FileID: XY025262.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030107\XY025262.D Vial: 100
Acq On : 1 Mar 2007 1:50 pm Operator: Trangd
Sample : CC989-500 Inst : VOA5
Misc : gc7128,gxy992,,,,, Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Fri Mar 02 09:28:32 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	500.000	411.874	17.6	69	0.09	1.16-	1.76
2 c	Ethylene	500.000	450.472	9.9	79	0.14	2.96-	3.76
3 c	Ethane	500.000	453.565	9.3	80	0.15	3.58-	4.38

(#) = Out of Range
XY025197.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
Fri Mar 02 09:55:28 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY992-ECC989
Lab FileID: XY025274.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030107\XY025274.D Vial: 100
Acq On : 1 Mar 2007 4:48 pm Operator: Trangd
Sample : ECC989-1000 Inst : VOA5
Misc : gc7128,gxy992,,,,, Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Fri Mar 02 09:28:32 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	1171.434	-17.1	177	0.00	1.16-	1.76
2 c	Ethylene	1000.000	1277.743	-27.8	182	0.00	2.96-	3.76
3 c	Ethane	1000.000	1297.361	-29.7	184	0.00	3.58-	4.38

(#) = Out of Range
XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
Fri Mar 02 09:55:08 2007



GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020203.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16445-1, T16445-7, T16445-8, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	102% 70-136%

Method Blank Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020233.D 1		03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16445-1, T16445-7, T16445-8, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	80% 70-136%

Blank Spike Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020202.D1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16445-1, T16445-7, T16445-8, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.3	106	74-152
121-82-4	RDX	5	5.4	108	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.3	106	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	5.5	110	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.2	104	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.3	106	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.3	106	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	124%	70-136%

Blank Spike Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020232.D 1		03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16445-1, T16445-7, T16445-8, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.9	118	74-152
121-82-4	RDX	5	5.5	110	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.1	102	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	6.4	128	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.3	106	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.5	110	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.7	114	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	70-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MS	GG020207.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
OP19677-MSD	GG020208.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
F47539-3	GG020206.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16445-1, T16445-7, T16445-8, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18

CAS No.	Compound	F47539-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	ND	10	11.0	110	11.8	118	7	74-152/21
121-82-4	RDX	ND	10	10.3	103	10.7	107	4	80-124/20
99-65-0	1,3-Dinitrobenzene	ND	10	10.3	103	10.9	109	6	84-123/23
606-20-2	2,6-Dinitrotoluene	ND	10	9.9	99	10.6	106	7	84-133/23
121-14-2	2,4-Dinitrotoluene	ND	10	9.7	97	10.3	103	6	77-116/26
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	10	9.4	94	10.5	105	11	78-117/28
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	10	9.1	91	10.2	102	11	84-123/27
98-95-3	Nitrobenzene	ND	10	10.5	105	11.1	111	6	76-128/28
88-72-2	o-Nitrotoluene	ND	10	9.3	93	10.2	102	9	76-120/30
99-08-1	m-Nitrotoluene	ND	10	9.5	95	10.6	106	11	74-124/32
99-99-0	p-Nitrotoluene	ND	10	9.7	97	10.7	107	10	81-125/34
479-45-8	Tetryl	ND	10	7.4	74	7.9	79	7	62-117/28
99-35-4	1,3,5-Trinitrobenzene	ND	10	9.8	98	10.4	104	6	85-127/21
118-96-7	2,4,6-Trinitrotoluene	ND	10	9.8	98	10.4	104	6	71-128/21

CAS No.	Surrogate Recoveries	MS	MSD	F47539-3	Limits
610-39-9	3,4-Dinitrotoluene	94%	98%	102%	70-136%

Semivolatile Surrogate Recovery Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Method: SW846 8330A	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
T16445-1	GG020214.D	82.0
T16445-7	GG020215.D	109.0
T16445-8	GG020216.D	107.0
T16445-10	GG020217.D	98.0
T16445-11	GG020218.D	117.0
T16445-12	GG020236.D	90.0
T16445-12	GG020219.D	103.0
T16445-13	GG020220.D	107.0
T16445-14	GG020221.D	102.0
T16445-18	GG020222.D	106.0
OP19677-BS	GG020202.D	124.0
OP19677-BS	GG020232.D	100.0
OP19677-MB	GG020203.D	102.0
OP19677-MB	GG020233.D	80.0
OP19677-MS	GG020207.D	94.0
OP19677-MSD	GG020208.D	98.0

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020201.D	Injection Time:	16:17
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP19677-BS	GG020202.D	03/02/07	16:45	13.49
OP19677-MB	GG020203.D	03/02/07	17:12	13.50
ZZZZZZ	GG020204.D	03/02/07	17:27	13.50
ZZZZZZ	GG020205.D	03/02/07	17:54	13.50
F47539-3	GG020206.D	03/02/07	18:22	13.49
OP19677-MS	GG020207.D	03/02/07	18:50	13.47
OP19677-MSD	GG020208.D	03/02/07	19:17	13.46
ZZZZZZ	GG020209.D	03/02/07	19:45	13.47
ZZZZZZ	GG020210.D	03/02/07	20:12	13.44
ZZZZZZ	GG020211.D	03/02/07	20:40	13.43

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020212.D	Injection Time:	21:07
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
T16445-1	GG020214.D	03/02/07	22:03	13.44
T16445-7	GG020215.D	03/02/07	22:30	13.42
T16445-8	GG020216.D	03/02/07	22:58	13.43
T16445-10	GG020217.D	03/02/07	23:25	13.43
T16445-11	GG020218.D	03/02/07	23:53	13.43
T16445-12	GG020219.D	03/03/07	00:20	13.40
T16445-13	GG020220.D	03/03/07	00:48	13.42
T16445-14	GG020221.D	03/03/07	01:16	13.43
T16445-18	GG020222.D	03/03/07	01:43	13.41
ZZZZZZ	GG020223.D	03/03/07	02:11	13.42

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG907-CC827	Injection Date:	03/05/07
Lab File ID:	GG020231.D	Injection Time:	13:23
Instrument ID:	GCGG	Method:	SW846 8330A

	S1 ^a	S1 ^b
	RT	RT
Check Std	10.72	10.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP19677-BS	GG020232.D	03/05/07	13:43	10.72	
OP19677-MB	GG020233.D	03/05/07	14:02	10.72	
ZZZZZZ	GG020234.D	03/05/07	14:22	10.72	
T16445-12	GG020236.D	03/05/07	15:01	10.71	
GGG907-ECC827	GG020238.D	03/05/07	15:40	10.72	10.72

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICC825
Lab FileID: GG018282.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Initial Calibration

Calibration Files

20 =GG018279.D 100 =GG018280.D 250 =GG018281.D 500 =GG018282.D
 750 =GG018283.D 1000=GG018284.D 2000=GG018285.D ICV =GG018286.D

Compound	20	100	250	500	750	1000	2000	ICV	Avg	%RSD
1) HMX	2.870	2.789	2.757	2.694	2.719	2.735	2.786		2.764	E3 2.09
2) TNX	5.916	6.424	6.486	6.331	6.453	6.468	6.587		6.381	E3 3.43
3) DNX	4.900	5.156	5.125	4.986	5.037	5.057	5.155		5.059	E3 1.88
4) MNX	4.909	4.991	4.972	4.807	4.886	4.901	4.995		4.923	E3 1.38
5) RDX	3.185	3.565	3.625	3.500	3.554	3.547	3.609		3.512	E3 4.27
6) 1,3,5-Trinit	7.763	7.813	7.689	7.436	7.595	7.612	7.763		7.667	E3 1.70
7) 1,3-Dinitrob	1.069	1.070	1.060	1.029	1.047	1.051	1.071		1.057	E4 1.49
8) Tetryl	6.130	6.168	6.180	6.004	6.091	6.096	6.221		6.127	E3 1.17
9) Nitrobenzene	7.057	7.032	7.019	6.708	6.915	6.920	7.082		6.962	E3 1.85
10) 3,4-Dinitrot	4.667	4.752	4.687	4.537	4.621	4.631	4.731		4.661	E3 1.56
11) 2,4,6-Trinit	7.275	7.409	7.373	7.143	7.282	7.301	7.456		7.320	E3 1.42
12) 4-Amino-2,6-	5.266	5.304	5.264	5.117	5.194	5.220	5.330		5.242	E3 1.37
13) 2-Amino-4,6-	7.249	7.203	7.187	7.006	7.130	7.155	7.311		7.177	E3 1.35
14) 2,6-Dinitrot	5.524	5.133	5.010	4.844	4.942	4.954	5.071		5.068	E3 4.37
15) 2,4-Dinitrot	1.149	1.009	0.992	0.958	0.976	0.978	0.999		1.009	E4 6.36
16) o-Nitrotolue	5.044	4.558	4.542	4.244	4.403	4.414	4.516		4.532	E3 5.53
17) p-Nitrotolue	4.102	3.815	3.790	3.596	3.734	3.734	3.831		3.800	E3 4.06
18) m-Nitrotolue	4.959	4.808	4.856	4.629	4.803	4.812	4.942		4.830	E3 2.26

Signal #2

1) HMX	8.151	8.148	8.190	8.012	8.090	8.092	8.238		8.132	E3 0.91
2) TNX	0.956	0.980	0.995	0.969	0.984	0.985	1.001		0.981	E4 1.55
3) DNX	7.525	8.044	8.332	7.974	7.996	7.991	8.136		8.000	E3 3.05
4) MNX	7.756	7.781	7.940	7.696	7.742	7.746	7.895		7.794	E3 1.14
5) RDX	4.720	5.727	5.947	5.855	5.997	5.944	6.042		5.748	E3 8.08
6) 1,3,5-Trinit	1.479	1.619	1.553	1.513	1.538	1.540	1.572		1.545	E4 2.85
7) 1,3-Dinitrob	1.225	1.286	1.279	1.246	1.265	1.272	1.295		1.267	E4 1.91
8) Tetryl	1.037	1.106	1.123	1.092	1.106	1.105	1.129		1.100	E4 2.76
9) Nitrobenzene	3.263	3.394	3.343	3.176	3.205	3.190	3.274		3.264	E3 2.50
10) 3,4-Dinitrot	6.324	6.522	6.468	6.218	6.242	6.243	6.394		6.344	E3 1.89
11) 2,4,6-Trinit	1.070	1.106	1.085	1.048	1.060	1.064	1.089		1.075	E4 1.85
12) 4-Amino-2,6-	1.430	1.457	1.434	1.391	1.407	1.413	1.444		1.425	E4 1.62
13) 2-Amino-4,6-	1.240	1.240	1.201	1.171	1.189	1.194	1.223		1.208	E4 2.20
14) 2,6-Dinitrot	8.005	7.244	6.878	6.645	6.758	6.778	6.958		7.038	E3 6.64
15) 2,4-Dinitrot	1.102	0.930	0.906	0.880	0.888	0.892	0.911		0.930	E4 8.36
16) o-Nitrotolue	5.194	4.804	4.848	4.493	4.691	4.697	4.799		4.789	E3 4.46
17) p-Nitrotolue	7.934	7.544	7.631	7.143	7.472	7.477	7.640		7.549	E3 3.15
18) m-Nitrotolue	6.835	7.097	7.192	6.782	7.103	7.117	7.290		7.060	E3 2.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

8330_EX.M

Fri Oct 20 16:25:52 2006

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1B.ch Vial: 10
Signal #2 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1A.ch
Acq On : 18-Oct-2006, 17:39:03 Operator: MIKEE
Sample : ICV825-500 Inst : G1315B
Misc : OP18202,ggg825,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	531.119	-6.2	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	507.091	-1.4	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.853	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	523.924	-4.8	0	0.00	10.38-	11.38
8	Tetryl	500.000	484.365	3.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.046	-6.2	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	507.486	-1.5	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	515.885	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.846	3.8	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	496.634	0.7	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	502.401	-0.5	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	501.204	-0.2	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	520.375	-4.1	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	509.118	-1.8	0	0.00	22.61-	23.61

***** Signal #2 *****

1	HMX	500.000	537.899	-7.6	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	525.299	-5.1	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.889	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	529.524	-5.9	0	0.00	10.38-	11.38
8	Tetryl	500.000	489.295	2.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.782	-6.4	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	505.844	-1.2	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	516.203	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.458	3.9	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	493.423	1.3	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	499.987	0.0	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	503.639	-0.7	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	523.730	-4.7	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	512.492	-2.5	0	0.00	22.61-	23.61

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:26:22 2006

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1B.ch Vial: 4
Signal #2 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1A.ch
Acq On : 19-Oct-2006, 13:44:13 Operator: MIKEE
Sample : ICV825-500 Inst : G1315B
Misc : OP18222,ggg826,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX			-----NA-----				
2	TNX	500.000	514.364	-2.9	0	0.00	4.15-	5.15
3	DNX	500.000	511.166	-2.2	0	0.00	4.58-	5.58
4	MXN	500.000	518.059	-3.6	0	-0.01	5.34-	6.34
5	RDX			-----NA-----				
6	1,3,5-Trinitrobenzene			-----NA-----				
7	1,3-Dinitrobenzene			-----NA-----				
8	Tetryl			-----NA-----				
9	Nitrobenzene			-----NA-----				
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene			-----NA-----				
12	4-Amino-2,6-Dinitrotoluen			-----NA-----				
13	2-Amino-4,6-Dinitrotoluen			-----NA-----				
14	2,6-Dinitrotoluene			-----NA-----				
15	2,4-Dinitrotoluene			-----NA-----				
16	o-Nitrotoluene			-----NA-----				
17	p-Nitrotoluene			-----NA-----				
18	m-Nitrotoluene			-----NA-----				

***** Signal #2 *****

1	HMX			-----NA-----				
2	TNX	500.000	509.991	-2.0	0	0.00	4.15-	5.15
3	DNX	500.000	523.209	-4.6	0	0.00	4.58-	5.58
4	MXN	500.000	527.451	-5.5	0	-0.01	5.34-	6.34
5	RDX			-----NA-----				
6	1,3,5-Trinitrobenzene			-----NA-----				
7	1,3-Dinitrobenzene			-----NA-----				
8	Tetryl			-----NA-----				
9	Nitrobenzene			-----NA-----				
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene			-----NA-----				
12	4-Amino-2,6-Dinitrotoluen			-----NA-----				
13	2-Amino-4,6-Dinitrotoluen			-----NA-----				
14	2,6-Dinitrotoluene			-----NA-----				
15	2,4-Dinitrotoluene			-----NA-----				
16	o-Nitrotoluene			-----NA-----				
17	p-Nitrotoluene			-----NA-----				
18	m-Nitrotoluene			-----NA-----				

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:54:56 2006

Initial Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICC827
Lab FileID: GG018316.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Initial Calibration

Calibration Files

20 =GG018313.D 100 =GG018314.D 250 =GG018315.D 500 =GG018316.D
 750 =GG018317.D 1000=GG018318.D 2000=GG018319.D

	Compound	20	100	250	500	750	1000	2000	Avg	%RSD
1)	TNX	6.022	6.861	7.022	6.686	6.915	6.925	7.121	6.793	E3 5.38
2)	HMX	2.976	2.856	2.642	2.478	2.489	2.481	2.586	2.644	E3 7.51
3)	DNX	5.820	5.904	5.816	5.437	5.628	5.545	5.823	5.710	E3 3.05
4)	MXN	4.717	4.981	5.224	5.007	5.063	4.976	5.294	5.037	E3 3.73
5)	1,3,5-Trinitroben	7.302	7.899	8.123	7.797	7.946	7.847	8.236	7.879	E3 3.78
6)	RDX	3.327	3.935	3.881	3.729	3.710	3.686	3.841	3.730	E3 5.39
7)	1,3-Dinitrobenzen	1.122	1.117	1.144	1.096	1.117	1.113	1.146	1.122	E4 1.56
8)	Nitrobenzene	6.720	7.206	7.440	7.104	7.286	7.290	7.513	7.223	E3 3.61
9)	2,4,6-Trinitrotol	7.126	7.674	7.812	7.517	7.651	7.587	7.941	7.615	E3 3.39
10)	Tetryl	5.119	5.755	6.124	6.105	6.006	5.862	6.470	5.920	E3 7.10
11)	S 3,4-Dinitrotoluen	4.973	4.941	4.969	4.829	4.912	4.883	5.055	4.938	E3 1.46
12)	2,6-Dinitrotoluen	6.023	5.649	5.657	5.415	5.544	5.538	5.672	5.643	E3 3.38
13)	2,4-Dinitrotoluen	1.200	1.036	1.034	0.995	1.012	1.007	1.038	1.046	E4 6.68
14)	o-Nitrotoluene	5.021	4.648	4.729	4.526	4.679	4.666	4.837	4.729	E3 3.36
15)	p-Nitrotoluene	4.036	3.890	3.967	3.762	3.919	3.914	4.051	3.934	E3 2.49
16)	4-Amino-2,6-Dinit	5.109	5.368	5.518	5.300	5.406	5.380	5.621	5.386	E3 3.01
17)	m-Nitrotoluene	4.743	4.946	5.173	4.937	5.131	5.119	5.324	5.053	E3 3.79
18)	2-Amino-4,6-Dinit	7.249	7.503	7.692	7.547	7.548	7.525	7.845	7.558	E3 2.42

Signal #2

1)	TNX	0.828	1.032	1.066	1.024	1.037	1.032	1.073	1.013	E4 8.25
2)	HMX	8.967	9.716	9.270	8.345	8.192	8.095	8.326	8.702	E3 7.15
3)	DNX	0.786	1.108	1.019	0.937	0.919	0.897	0.935	0.943	E4 10.65
4)	MXN	7.457	8.346	8.580	8.147	8.087	7.895	8.399	8.130	E3 4.58
5)	1,3,5-Trinitroben	1.449	1.617	1.667	1.594	1.616	1.593	1.673	1.601	E4 4.64
6)	RDX	6.077	6.386	6.563	6.283	6.229	6.181	6.460	6.311	E3 2.67
7)	1,3-Dinitrobenzen	1.294	1.326	1.427	1.333	1.365	1.364	1.397	1.358	E4 3.31
8)	Nitrobenzene	3.190	3.096	3.823	3.281	3.391	3.385	3.476	3.378	E3 6.96
9)	2,4,6-Trinitrotol	1.098	1.109	1.152	1.104	1.122	1.113	1.169	1.124	E4 2.37
10)	Tetryl	0.953	1.028	1.114	1.113	1.085	1.059	1.177	1.075	E4 6.67
11)	S 3,4-Dinitrotoluen	6.832	6.775	6.813	6.648	6.692	6.629	6.906	6.756	E3 1.53
12)	2,6-Dinitrotoluen	8.344	7.760	7.758	7.423	7.578	7.556	7.765	7.740	E3 3.83
13)	2,4-Dinitrotoluen	1.104	0.941	0.942	0.911	0.927	0.919	0.952	0.957	E4 6.94
14)	o-Nitrotoluene	3.189	2.755	2.867	2.791	2.895	2.880	3.025	2.915	E3 5.09
15)	p-Nitrotoluene	2.114	1.879	1.907	1.825	1.916	1.926	1.998	1.938	E3 4.82
16)	4-Amino-2,6-Dinit	1.431	1.486	1.522	1.459	1.490	1.484	1.552	1.489	E4 2.66
17)	m-Nitrotoluene	2.353	2.391	2.516	2.444	2.546	2.567	2.681	2.500	E3 4.52
18)	2-Amino-4,6-Dinit	1.233	1.258	1.276	1.258	1.253	1.255	1.311	1.263	E4 1.92

(#) = Out of Range

8330_RP.M

Mon Oct 23 13:34:29 2006

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1A.ch
 Acq On : 20-Oct-2006, 14:03:23 Operator: MIKEE
 Sample : ICV827-250 Inst : G1315B
 Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Oct 20 14:03:32 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	250.000	258.384	-3.4	100	0.00	4.21-	5.21
2	HMX	250.000	260.989	-4.4	104	0.00	4.69-	5.69
3	DNX	250.000	254.013	-1.6	100	0.00	4.83-	5.83
4	MXN	250.000	255.142	-2.1	98	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	264.789	-5.9	103	0.00	6.12-	7.12
6	RDX	250.000	252.023	-0.8	97	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	257.308	-2.9	101	0.00	7.70-	8.70
8	Nitrobenzene	250.000	266.121	-6.4	103	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	268.228	-7.3	105	0.00	8.71-	9.71
10	Tetryl	250.000	205.504	17.8#	79	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	254.196	-1.7	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	244.946	2.0	99	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	248.278	0.7	99	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	258.872	-3.5	103	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	250.000	255.921	-2.4	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	252.478	-1.0	99	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	250.000	236.039	5.6	93	0.00	14.31-	15.31

***** Signal #2 *****

1	TNX	250.000	262.147	-4.9	100	0.00	4.22-	5.22
2	HMX	250.000	276.033	-10.4	104	0.00	4.69-	5.69
3	DNX	250.000	263.149	-5.3	97	0.00	4.83-	5.83
4	MXN	250.000	255.967	-2.4	97	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	265.613	-6.2	102	0.00	6.12-	7.12
6	RDX	250.000	248.723	0.5	96	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	276.649	-10.7	105	0.00	7.70-	8.70
8	Nitrobenzene	250.000	301.148	-20.5#	106	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	269.121	-7.6	105	0.00	8.71-	9.71
10	Tetryl	250.000	203.173	18.7#	78	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	252.008	-0.8	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	241.694	3.3	98	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	241.466	3.4	98	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	250.555	-0.2	102	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	250.000	255.253	-2.1	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	250.572	-0.2	100	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	250.000	234.881	6.0	93	0.00	14.31-	15.31

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018315.D 8330_RP.M Mon Oct 23 13:35:35 2006

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1B.ch Vial: 100
Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1A.ch
Acq On : 20-Oct-2006, 15:10:45 Operator: MIKEE
Sample : ICV827-500 Inst : G1315B
Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	565.302	-13.1	115	0.00	4.21-	5.21
2	HMX	500.000	543.872	-8.8	116	0.00	4.69-	5.69
3	DNX	500.000	551.643	-10.3	116	-0.01	4.83-	5.83
4	MXN	500.000	572.618	-14.5	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	538.163	-7.6	109	0.00	6.12-	7.12
6	RDX	500.000	498.936	0.2	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	510.060	-2.0	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	533.993	-6.8	109	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.178	-9.8	111	0.00	8.71-	9.71
10	Tetryl	500.000	475.586	4.9	92	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	498.834	0.2	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	493.011	1.4	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	510.083	-2.0	107	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	530.499	-6.1	111	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	500.000	518.182	-3.6	105	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	521.475	-4.3	107	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	500.000	479.808	4.0	96	-0.01	14.31-	15.31

***** Signal #2 *****

1	TNX	500.000	637.256	-27.5#	126	-0.01	4.22-	5.22
2	HMX	500.000	581.600	-16.3#	121	0.00	4.69-	5.69
3	DNX	500.000	552.258	-10.5	111	-0.01	4.83-	5.83
4	MXN	500.000	573.858	-14.8	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	539.558	-7.9	108	0.00	6.12-	7.12
6	RDX	500.000	495.496	0.9	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	512.019	-2.4	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	545.924	-9.2	112	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.800	-10.0	112	0.00	8.71-	9.71
10	Tetryl	500.000	472.605	5.5	91	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	496.402	0.7	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	494.458	1.1	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	518.803	-3.8	108	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	534.408	-6.9	114	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	500.000	519.292	-3.9	106	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	532.272	-6.5	109	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	500.000	479.037	4.2	96	-0.01	14.31-	15.31

Initial Calibration Verification

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Mon Oct 23 13:35:18 2006

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020201.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\03020DS\GG020201.D\dad1A.ch
Acq On : 02-Mar-2007, 16:17:48 Operator: MIKEE
Sample : CC825-500 Inst : G1315B
Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Mar 01 11:02:09 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	490.559	1.9	101	0.00	3.86-	4.86
2	TNX	500.000	512.293	-2.5	103	-0.01	4.20-	5.20
3	DNX	500.000	511.151	-2.2	104	0.00	4.60-	5.60
4	MXN	500.000	508.598	-1.7	104	0.01	5.37-	6.37
5	RDX	500.000	518.998	-3.8	104	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	498.455	0.3	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	498.190	0.4	102	0.02	10.43-	11.43
8	Tetryl	500.000	498.475	0.3	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	503.313	-0.7	104	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	496.619	0.7	102	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	503.597	-0.7	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	496.441	0.7	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	500.727	-0.1	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	510.258	-2.1	107	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	480.817	3.8	101	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	497.302	0.5	106	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	500.449	-0.1	106	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	506.087	-1.2	106	0.07	22.76-	23.76

***** Signal #2 *****

1	HMX	500.000	500.092	-0.0	102	0.00	3.86-	4.86
2	TNX	500.000	509.529	-1.9	103	0.00	4.18-	5.18
3	DNX	500.000	520.538	-4.1	104	0.00	4.60-	5.60
4	MXN	500.000	521.239	-4.2	106	0.01	5.37-	6.37
5	RDX	500.000	566.452	-13.3	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	505.722	-1.1	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	502.475	-0.5	102	0.02	10.43-	11.43
8	Tetryl	500.000	507.037	-1.4	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	499.803	0.0	103	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	495.718	0.9	101	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	500.992	-0.2	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	497.188	0.6	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	499.032	0.2	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	496.978	0.6	105	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	472.110	5.6	100	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	489.795	2.0	104	0.05	19.73-	20.73
17	p-Nitrotoluene	500.000	496.698	0.7	105	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	503.963	-0.8	105	0.07	22.77-	23.77

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Mon Mar 05 11:42:29 2007

Continuing Calibration Summary

Job Number: T16445
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
 Lab FileID: GG020212.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020212.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\03020DS\GG020212.D\dad1A.ch
 Acq On : 02-Mar-2007, 21:07:57 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	969.184	3.1	98	0.00	3.86- 4.86
2	TNX	1000.000	1012.847	-1.3	100	-0.02	4.20- 5.20
3	DNX	1000.000	1011.041	-1.1	101	0.00	4.60- 5.60
4	MXN	1000.000	1001.768	-0.2	101	0.00	5.37- 6.37
5	RDX	1000.000	1012.522	-1.3	100	-0.01	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	982.133	1.8	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	981.873	1.8	99	0.00	10.43-11.43
8	Tetryl	1000.000	979.286	2.1	98	0.00	11.21-12.21
9	Nitrobenzene	1000.000	995.199	0.5	100	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	971.158	2.9	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	991.752	0.8	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	975.490	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	987.191	1.3	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	995.657	0.4	102	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	946.550	5.3	98	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.637	3.8	99	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	975.200	2.5	99	-0.01	21.06-22.06
18	m-Nitrotoluene	1000.000	997.451	0.3	100	0.00	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	984.283	1.6	99	0.00	3.86- 4.86
2	TNX	1000.000	1002.891	-0.3	100	0.00	4.18- 5.18
3	DNX	1000.000	1012.877	-1.3	101	0.00	4.60- 5.60
4	MXN	1000.000	1004.320	-0.4	101	0.00	5.37- 6.37
5	RDX	1000.000	1044.793	-4.5	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	984.579	1.5	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.010	1.1	99	0.00	10.43-11.43
8	Tetryl	1000.000	997.573	0.2	99	0.00	11.21-12.21
9	Nitrobenzene	1000.000	992.439	0.8	102	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	962.803	3.7	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	983.229	1.7	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	974.885	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	978.179	2.2	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	974.861	2.5	101	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	935.023	6.5	97	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.820	3.8	98	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	982.213	1.8	99	0.00	21.06-22.06
18	m-Nitrotoluene	1000.000	1002.440	-0.2	99	-0.01	22.77-23.77

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020212.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020224.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020224.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\03020DS\GG020224.D\dad1A.ch
 Acq On : 03-Mar-2007, 02:38:33 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	963.991	3.6	97	0.00	3.86- 4.86
2	TNX	1000.000	1010.267	-1.0	100	-0.02	4.20- 5.20
3	DNX	1000.000	1005.452	-0.5	101	0.00	4.60- 5.60
4	MXN	1000.000	1000.098	-0.0	100	0.00	5.37- 6.37
5	RDX	1000.000	1025.240	-2.5	102	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	993.055	0.7	100	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	980.619	1.9	99	-0.01	10.43-11.43
8	Tetryl	1000.000	974.910	2.5	98	-0.02	11.21-12.21
9	Nitrobenzene	1000.000	982.824	1.7	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	957.890	4.2	96	-0.01	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	980.868	1.9	98	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	962.421	3.8	97	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	1009.138	-0.9	101	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	1335.440	-33.5#	137	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	1096.840	-9.7	113	-0.01	16.60-17.60
16	o-Nitrotoluene	1000.000	979.988	2.0	101	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	1001.774	-0.2	102	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1009.574	-1.0	101	-0.02	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	940.821	5.9	95	0.00	3.86- 4.86
2	TNX	1000.000	949.976	5.0	95	0.00	4.18- 5.18
3	DNX	1000.000	962.122	3.8	96	0.00	4.60- 5.60
4	MXN	1000.000	1000.037	-0.0	101	0.00	5.37- 6.37
5	RDX	1000.000	1048.505	-4.9	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	992.257	0.8	100	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.715	1.0	99	-0.01	10.43-11.43
8	Tetryl	1000.000	995.610	0.4	99	-0.02	11.21-12.21
9	Nitrobenzene	1000.000	966.310	3.4	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	952.955	4.7	97	-0.01	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	974.813	2.5	98	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	968.590	3.1	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	981.214	1.9	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	1062.649	-6.3	110	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	991.035	0.9	103	-0.01	16.60-17.60
16	o-Nitrotoluene	1000.000	973.475	2.7	99	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	993.006	0.7	100	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1007.492	-0.7	100	-0.03	22.77-23.77

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020224.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020231.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\0305RP\GG020231.D\dad1A.ch
 Acq On : 05-Mar-2007, 13:23:34 Operator: MIKEE
 Sample : CC827-500 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	551.245	-10.2	112	0.02	4.24-	5.24
2	HMX	500.000	527.482	-5.5	113	0.00	4.75-	5.75
3	DNX	500.000	526.884	-5.4	111	0.01	4.87-	5.87
4	MXN	500.000	525.950	-5.2	106	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	507.541	-1.5	103	0.00	6.17-	7.17
6	RDX	500.000	498.345	0.3	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	495.147	1.0	101	0.00	7.78-	8.78
8	Nitrobenzene	500.000	509.807	-2.0	104	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	506.824	-1.4	103	-0.01	8.80-	9.80
10	Tetryl	500.000	535.862	-7.2	104	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	492.695	1.5	101	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	489.618	2.1	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.678	3.3	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	502.970	-0.6	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	503.359	-0.7	105	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	500.000	502.155	-0.4	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	523.547	-4.7	107	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	500.000	503.929	-0.8	101	-0.03	14.45-	15.45

***** Signal #2 *****

1	TNX	500.000	539.038	-7.8	107	0.02	4.24-	5.24
2	HMX	500.000	501.388	-0.3	105	0.00	4.75-	5.75
3	DNX	500.000	520.169	-4.0	105	0.01	4.87-	5.87
4	MXN	500.000	520.287	-4.1	104	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	508.259	-1.7	102	0.00	6.17-	7.17
6	RDX	500.000	496.557	0.7	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	499.335	0.1	102	0.00	7.78-	8.78
8	Nitrobenzene	500.000	521.041	-4.2	107	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	510.092	-2.0	104	-0.01	8.80-	9.80
10	Tetryl	500.000	533.664	-6.7	103	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	488.383	2.3	99	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	487.517	2.5	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.800	3.2	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	519.246	-3.8	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	515.868	-3.2	110	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	500.000	499.988	0.0	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	538.963	-7.8	110	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	500.000	499.905	0.0	100	-0.03	14.45-	15.45

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Tue Mar 06 10:57:51 2007

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020238.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\0305RP\GG020238.D\dad1A.ch
 Acq On : 05-Mar-2007, 15:40:35 Operator: MIKEE
 Sample : ECC827-1000 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	1000.000	1064.078	-6.4	104	0.02	4.24-	5.24
2	HMX	1000.000	1064.872	-6.5	113	0.00	4.75-	5.75
3	DNX	1000.000	1029.858	-3.0	106	0.00	4.87-	5.87
4	MXN	1000.000	1052.110	-5.2	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1020.840	-2.1	102	0.00	6.17-	7.17
6	RDX	1000.000	1020.894	-2.1	103	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1005.302	-0.5	101	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1031.078	-3.1	102	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1033.117	-3.3	104	-0.01	8.80-	9.80
10	Tetryl	1000.000	1104.790	-10.5	112	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1016.218	-1.6	103	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	998.411	0.2	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	987.663	1.2	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1040.619	-4.1	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1034.751	-3.5	104	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	1000.000	1018.262	-1.8	102	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1063.626	-6.4	105	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	1000.000	1018.025	-1.8	102	-0.02	14.45-	15.45

***** Signal #2 *****

1	TNX	1000.000	1065.753	-6.6	105	0.02	4.24-	5.24
2	HMX	1000.000	959.987	4.0	103	0.00	4.75-	5.75
3	DNX	1000.000	1023.085	-2.3	108	0.01	4.87-	5.87
4	MXN	1000.000	1036.881	-3.7	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1018.352	-1.8	102	0.00	6.17-	7.17
6	RDX	1000.000	995.036	0.5	102	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1003.575	-0.4	100	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1035.575	-3.6	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1043.825	-4.4	105	-0.01	8.80-	9.80
10	Tetryl	1000.000	1097.433	-9.7	111	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1002.293	-0.2	102	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	991.509	0.8	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	990.702	0.9	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1071.751	-7.2	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1073.626	-7.4	108	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	1000.000	1006.760	-0.7	101	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1093.803	-9.4	107	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	1000.000	1006.963	-0.7	101	-0.02	14.45-	15.45

Continuing Calibration Summary

Job Number: T16445
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018318.D 8330_RP.M Tue Mar 06 10:58:20 2007



General Chemistry

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Perchlorate	GP9044/GN24408	10	<10	ug/l	50	50.1	100.2	85-115%

Associated Samples:
Batch GP9044: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Perchlorate	GP9044/GN24408	T16445-5	ug/l	27.8	29.4	5.6	0-15%
Perchlorate	GP9044/GN24408	T16445-6	ug/l	532	550	3.3	0-15%

Associated Samples:
Batch GP9044: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
(*) Outside of QC limits

10.2
10

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Perchlorate	GP9044/GN24408	T16445-5	ug/l	27.8	50	79.8	104.0	80-120%
Perchlorate	GP9044/GN24408	T16445-6	ug/l	532	50	583	102.0	80-120%

Associated Samples:
Batch GP9044: T16445-1, T16445-10, T16445-11, T16445-12, T16445-13, T16445-14, T16445-18, T16445-2, T16445-3, T16445-4, T16445-5, T16445-6, T16445-7, T16445-8, T16445-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

10.3
10

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030201.TXT
Analyst: MP
Parameters: Perchlorate

Date Analyzed: 03/02/07 Methods: EPA 314
Run ID: GN24408

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:05	GN24408-CCV1	1		
14:20	GN24408-CCB1	1		
14:34	GP9044-MB1	1		
14:49	GP9044-B1	1		
15:31	GN24408-CRI1	1		
15:46	GN24408-IPC1	1		
16:00	T16445-1	1		
16:15	T16445-2	1		
16:29	T16445-3	1		
16:43	T16445-4	1		
16:58	T16445-5	1		
17:12	T16445-6	1		
17:27	GN24408-CCV2	1		
17:41	GN24408-CCB2	1		
17:55	T16445-7	1		
18:10	T16445-8	1		
18:24	T16445-9	1		
18:39	T16445-10	1		
18:53	T16445-11	1		
19:22	T16445-13	1		
19:36	T16445-14	1		
19:51	T16445-18	1		
20:05	ZZZZZZ	1		
20:19	GN24408-CCV3	1		
20:34	GN24408-CCB3	1		
20:48	GP9044-D1	1		
21:03	GP9044-S1	1		
21:17	GP9044-D2	1		
21:32	GP9044-S2	1		
21:46	GN24408-CCV4	1		
22:00	GN24408-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030201.TXT Date Analyzed: 03/02/07 Methods: EPA 314
Run ID: GN24408 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24408-CCV1	Perchlorate	52.1	10	4.0	50	104.2	85-115
GN24408-CCB1	Perchlorate	4.0 U	10	4.0			
GN24408-CRI1	Perchlorate	4.0 U	10	4.0	3	86.6	75-125
GN24408-IPC1	Perchlorate	23.2	10	4.0	25	92.8	80-120
GN24408-CCV2	Perchlorate	50.4	10	4.0	50	100.8	85-115
GN24408-CCB2	Perchlorate	4.0 U	10	4.0			
GN24408-CCV3	Perchlorate	52.6	10	4.0	50	105.2	85-115
GN24408-CCB3	Perchlorate	4.0 U	10	4.0			
GN24408-CCV4	Perchlorate	53.4	10	4.0	50	106.8	85-115
GN24408-CCB4	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

10.4
10

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030701.TXT Date Analyzed: 03/07/07 Methods: EPA 314
Analyst: MP Run ID: GN24437
Parameters: Perchlorate

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:09	GN24437-CCV1	1		
17:23	GN24437-CCB1	1		
18:35	T16445-12	5		
18:50	GN24437-CCV2	1		
19:04	GN24437-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: T16445
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030701.TXT Date Analyzed: 03/07/07 Methods: EPA 314
Run ID: GN24437 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24437-CCV1	Perchlorate	52.5	10	4.0	50	105.0	85-115
GN24437-CCB1	Perchlorate	4.0 U	10	4.0			
GN24437-CCV2	Perchlorate	46.7	10	4.0	50	93.4	85-115
GN24437-CCB2	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

10.5
10



IT'S ALL IN THE CHEMISTRY

05/08/08



Technical Report for

Shaw E & I, Inc.

Longhorn Army Ammunition Plant

PROJECT #117591

Accutest Job Number: T16448

Sampling Date: 02/24/07

Report to:

Shaw E & I, Inc.

jennifer.hoang@shawgrp.com

ATTN: Jennifer Hoang

Total number of pages in report: **126**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Agnes Vicknair 713-271-4700

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Accutest LabLink@31214 11:30 08-May-2008

Sample Summary

Shaw E & I, Inc.

Job No: T16448

Longhorn Army Ammunition Plant
Project No: PROJECT #117591

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T16448-1	02/24/07	10:46	02/26/07	AQ	Ground Water	50WW03
T16448-2	02/24/07	10:38	02/26/07	AQ	Ground Water	29WW15
T16448-3	02/24/07	10:00	02/26/07	AQ	Ground Water	12WW24



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc.

Job No T16448

Site: Longhorn Army Ammunition Plant

Report Date 3/13/2007 5:05:01 PM

3 Samples were collected on 02/24/2007 and were received at Accutest on 02/26/2007 properly preserved, at 2.3 Deg. C and intact. These Samples received an Accutest job number of T16448. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VF2315

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-3MS, T16445-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for cis-1,2-Dichloroethylene, Trichloroethylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix AQ	Batch ID: VF2318

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-4MS, T16445-4MSD were used as the QC samples indicated.

Volatiles by GC By Method RSKSOP-147/175

Matrix AQ	Batch ID: F:GXY996

- Analysis performed at Accutest Laboratories, Orlando, FL.

Metals By Method SW846 6010B

Matrix AQ	Batch ID: MP5804

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16414-1DUP, T16414-1MS, T16414-1MSD, T16414-1SDL were used as the QC samples for metals.

Wet Chemistry By Method EPA 120.1

Matrix AQ	Batch ID: F:R17947

- T16448-1 for Specific Conductivity: Analysis performed at Accutest Laboratories, Orlando, FL.

Matrix AQ	Batch ID: GN11355

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP were used as the QC samples for Specific Conductivity.

Wet Chemistry By Method EPA 150.1/9040**Matrix** AQ**Batch ID:** GN11334

- Sample(s) T16448-1DUP were used as the QC samples for pH.
- The following samples were run outside of holding time for method EPA 150.1/9040: T16448-1

Wet Chemistry By Method EPA 310.1**Matrix** AQ**Batch ID:** GN11375

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Alkalinity, Total as CaCO₃.

Wet Chemistry By Method EPA 314**Matrix** AQ**Batch ID:** F:GP9044

- Perchlorate Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 325.3**Matrix** AQ**Batch ID:** GN11343

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP, T16445-5MS were used as the QC samples for Chloride.

Wet Chemistry By Method EPA 353.2**Matrix** AQ**Batch ID:** GN11300

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Nitrogen, Nitrite.

Matrix AQ**Batch ID:** GN11301

- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Wet Chemistry By Method EPA 375.3**Matrix** AQ**Batch ID:** GN11356

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16448-1DUP, T16448-1MS were used as the QC samples for Sulfate.

Wet Chemistry By Method EPA 376.1**Matrix** AQ**Batch ID:** GN11313

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-5DUP were used as the QC samples for Sulfide.

Wet Chemistry By Method EPA 415.1/9060

Matrix	AQ	Batch ID:	GN11304

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16445-18DUP, T16445-18MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SM18 4500NO3E/NO2B

Matrix	AQ	Batch ID:	R15469

- Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T16448

Site: ITTXHO: Longhorn Army Ammunition Plant

Report Date: 3/13/2007 11:35:47

2 Samples were collected on 02/24/2007 and were received at Accutest SE on 02/28/2007 properly preserved, at 1.8 Deg. C and intact. These Samples had an Accutest job number of T16448. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method RSKSOP-147/175

Matrix: AQ

Batch ID: GXY996

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47731-7MS, F47769-9DUP were used as the QC samples indicated.

Matrix Spike Recoverys for Ethane, Ethene are outside control limits. Probable cause: due to matrix interference.

Extractables by GC by Method SW846 8330A

Matrix: AQ

Batch ID: OP19677

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47539-3MS, F47539-3MSD were used as the QC samples indicated.

Wet Chemistry by Method EPA 314

Matrix: AQ

Batch ID: GP9044

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16445-5DUP, T16445-5MS were used as the QC samples for Perchlorate.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ellen Pampel, Inorganic QA (signature on file)

Date: March 13, 2007

Tuesday, March 13, 2007



IT'S ALL IN THE CHEMISTRY

Section 3



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	50WW03	Date Sampled:	02/24/07
Lab Sample ID:	T16448-1	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079188.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	50WW03	Date Sampled:	02/24/07
Lab Sample ID:	T16448-1	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		73-139%
17060-07-0	1,2-Dichloroethane-D4	102%		66-139%
2037-26-5	Toluene-D8	106%		77-148%
460-00-4	4-Bromofluorobenzene	121%		84-150%

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID:	50WW03		
Lab Sample ID:	T16448-1	Date Sampled:	02/24/07
Matrix:	AQ - Ground Water	Date Received:	02/26/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025336.D	1	03/08/07	AFL	n/a	n/a	F:GXY996
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.56	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 50WW03	Date Sampled: 02/24/07
Lab Sample ID: T16448-1	Date Received: 02/26/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Longhorn Army Ammunition Plant	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/02/07 20:05	AFL	EPA 314
Alkalinity, Total as CaCO ₃	417	25	0.30	mg/l	5	03/08/07 12:50	EB	EPA 310.1
Carbon Dioxide	416	5.0		mg/l	1	03/12/07	RM	SM18 4500CO2D
Chloride	944	50	0.57	mg/l	50	03/05/07 12:15	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 14:00	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.010 B	0.050	0.0050	mg/l	1	02/26/07 13:03	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/26/07 14:00	LN	EPA 353.2
Specific Conductivity ^a	3340	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	403	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	0.0 B	0.20		mg/l	1	03/01/07 12:10	LN	EPA 376.1
Total Organic Carbon	2.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	7.1			su	1	03/02/07 08:10	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW15	Date Sampled:	02/24/07
Lab Sample ID:	T16448-2	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079189.D	1	03/07/07	LJ	n/a	n/a	VF2315
Run #2	F0079239.D	50	03/08/07	LJ	n/a	n/a	VF2318

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.47	2.0	0.23	ug/l	J
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	5.3	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	3.4	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	7.5	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	5520 ^a	100	27	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.8	2.0	0.83	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	15.6	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	3.0	5.0	0.67	ug/l	J
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	1.9	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	344 ^a	100	32	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW15	Date Sampled:	02/24/07
Lab Sample ID:	T16448-2	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	105%	100%	66-139%
2037-26-5	Toluene-D8	106%	105%	77-148%
460-00-4	4-Bromofluorobenzene	122%	118%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW15		
Lab Sample ID:	T16448-2	Date Sampled:	02/24/07
Matrix:	AQ - Ground Water	Date Received:	02/26/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025337.D	1	03/08/07	AFL	n/a	n/a	F:GXY996
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.27	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW15		
Lab Sample ID:	T16448-2	Date Sampled:	02/24/07
Matrix:	AQ - Ground Water	Date Received:	02/26/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020223.D	1	03/03/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	600 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.10 U	0.33	0.10	ug/l	
121-82-4	RDX	0.13 U	0.33	0.13	ug/l	
99-65-0	1,3-Dinitrobenzene	0.12 U	0.33	0.12	ug/l	
606-20-2	2,6-Dinitrotoluene	0.11 U	0.33	0.11	ug/l	
121-14-2	2,4-Dinitrotoluene	0.13 U	0.33	0.13	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.12 U	0.33	0.12	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.13 U	0.33	0.13	ug/l	
98-95-3	Nitrobenzene	0.10 U	0.33	0.10	ug/l	
88-72-2	o-Nitrotoluene	0.10 U	0.33	0.10	ug/l	
99-08-1	m-Nitrotoluene	0.13 U	0.33	0.13	ug/l	
99-99-0	p-Nitrotoluene	0.13 U	0.33	0.13	ug/l	
479-45-8	Tetryl	0.13 U	0.33	0.13	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.16 U	0.33	0.16	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.13 U	0.33	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	95%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW15	Date Sampled:	02/24/07
Lab Sample ID:	T16448-2	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	12WW24	Date Sampled:	02/24/07
Lab Sample ID:	T16448-3	Date Received:	02/26/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Chromium	2.0 B	10	1.8	ug/l	1	02/27/07	02/28/07 NS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA2815
(2) Prep QC Batch: MP5804

RL = Reporting Limit
MDL = Method Detection Limit
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

CHAIN-OF-CUSTODY

No. 10921

00093351
T16448

Laboratory Name: Accutest		Address: 10165 Harwin Dr. #150		Contact: Agnes	
Project Name: Longhorn Army Ammunition Plant		Project Location: Karnack, TX		Analysis and Method Desired (Indicate separate containers)	
Project No. 117591		Project Contact: Kay Everett		Project Telephone No. 713-996-4421	
Point of contact: DIANE Meyer		Project Manager/Supervisor: Praveen SRIVASTAV		Remarks	
Telephone No. 713-996-4408					

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	NO2	ANIONS	Sulfides 316.2	Peroxide 314	Chloride 315	EXPLOSIVES	Alkalinity 316.1	TOC 415.1	Chromium (Total)	Remarks
1	50WW03	2/24/07	10:46		X	GW	50WW03	13	X	X	X	X	X	X	X	X	X	
2	29WW15	2/24/07	10:35		X	GW	29WW15	10	X				X	X	X	X	X	Incomplete Suite
3	12WW24	2/24/07	10:00		X	GW	12WW24	2					X	X	X	X	X	1 Filtered 1 Unfiltered
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Transfers Relinquished By (Signature): <i>J. P. [Signature]</i>	Date/Time: <i>2/24/07 @ 1000</i>	Transfers Accepted By (Signature): <i>[Signature]</i>	Date/Time: <i>02-26-07 0910</i>	Special Instructions: Please hold Filtered sample pending further instruction. If any ?'s Please call Allen W @ 713 996-4586
Laboratory			FedEx Airbill No.:	Sampler's Signature: <i>J. P. [Signature]</i>

TAT: ☒ Standard ☐ Rush Due: _____

Seals Intact? ☐ Y ☐ N Received Good Condition ☒ Y ☐ N ☐ Cold **2.3 °C**

White - Lab Copy Canary - Field Copy Pink - File Copy

T16448: Chain of Custody

Page 1 of 3

00093352

**ACCUTEST.**
**VARIANCE MEMO
SAMPLE LOG-IN**

SAMPLE(S) # - 50WW03 - 2/24/07 @ 10:40 DATE 2/26/07
 PROJECT LHAAP
 FILED BY AK LAB NO. T16448

VARIANCE - Check applicable item(s):

- ☐ Insufficient sample sent for proper analysis; received approx. _____
☐ Sample bottle received broken and/or cap not intact.
☐ Samples received without paperwork; paperwork received without samples.
☐ Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: _____
☐ Illegible sample number or label missing from bottle.
☐ Numbers on sample not the same as numbers on paper work.
☐ Incomplete instructions received with sample(s) ie., no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____
☐ Samples received in improper container or lacking proper preservation.
☐ Physical characteristics different than those on sampling sheets; Describe: _____
☐ Rush samples on hold because of incomplete paperwork.
☐ Other (specify) u

Sx. time on Containers is 08:56. Time on Coc is different.
 Sx. 1 may be out of hold. Forward to Agnes.
 Sx. 1 was received without an Explosive Container.
 Sx. 2 - The Explosive Container is only half full. May be limited Sx. volume.

CORRECTIVE ACTION TAKEN

DIANE m Person Contacted ☒ By phone.
☐ Client informed verbally. ☐ Samples processed for information only and noted on report.
☐ Client informed by memo/letter. ☐ Samples processed with higher detection limits accepted.
☐ Samples processed as is. ☐ Samples rejected.
☐ Samples preserved by lab.
☐ Client will resample and resubmit.

Notes: Sx TIME IS 1046 AS PER Coc. NO Explosives Needed

Sx #2 - Limited Sx Volume

ROUTING

TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:			
Project Manager:	2/26/07	AKS	
Comments:			

Form: SM006

T16448: Chain of Custody
 Page 2 of 3

00093353



ACCUTEST

SAMPLE RECEIPT LOG

JOB #: T16448

DATE/TIME RECEIVED: 2/26/07 09:10

CLIENT: Shaw

INITIALS: AR

- Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):
- ☒ N Sample received in undamaged condition.
 - ☒ N Samples received within temp. range.
 - ☒ N Sample received with proper pH.
 - ☒ N Sample received in proper containers.
 - ☒ N Sample volume sufficient for analysis.
 - ☒ N Sample received with chain of custody.
 - ☒ N Chain of Custody matches sample IDs and analysis on containers.
 - ☒ N Samples Headspace acceptable
 - ☒ N Custody seal received intact and tamper not evident on cooler.
 - ☒ N Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1,2	1-3	2/24	AD	40 ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
1	4-6				SUB	1,2,3,4,5,6	U, <2, >12, NA
1	7-9				2L	1,2,3,4,5,6	U, <2, >12, NA
1	10-11			P1000		1,2,3,4,5,6	U, <2, >12, NA
1	12			P500		1,2,3,4,5,6	U, <2, >12, NA
1	13					1,2,3,4,5,6	U, <2, >12, NA
2	10			A1000	SUB	1,2,3,4,5,6	U, <2, >12, NA
3	1-2			P500	2L	1,2,3,4,5,6	U, <2, >12, NA
AR 2-26-07 <i>(Signature)</i>							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA
							1,2,3,4,5,6 U, <2, >12, NA

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

pH of soils N/A

Delivery method: Courier: Client

COOLER TEMP: 2.3 COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Form: SM012, Rev.07/28/06, QAO

T16448: Chain of Custody

Page 3 of 3

Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, 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), 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 amounts,
 - 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 %Rs 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 exception reports. By me 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.

Ron Martino



Lab Director

3/13/2007

Name (Printed)

Signature

Official Title (printed)

Date

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 3/13/2007				
Project Name: Longhorn			Laboratory Job Number: T16448				
Reviewer Name: Ron Martino			Prep Batch Number(s):				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				

2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast

LRC Date: 3/13/2007

Project Name: Longhorn

Laboratory Job Number: T16448

Reviewer Name: Ron Martino

Prep Batch Number(s):

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
	I	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?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	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?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Name: Accutest Laboratories Gulf Coast		LRC Date: 3/13/2007
Project Name: Longhorn		Laboratory Job Number: T16448
Reviewer Name: Ron Martino		Prep Batch Number(s):
ER # ¹	DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SQL/MDL is defined in the report as the MDL.	
2	All anomalies are discussed in the case narrative.	

RG-366/TRRP-13 December 2002



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-MB	F0079184.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-MB	F0079184.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 73-139%
17060-07-0	1,2-Dichloroethane-D4	98% 66-139%
2037-26-5	Toluene-D8	109% 77-148%
460-00-4	4-Bromofluorobenzene	129% 84-150%

Method Blank Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-MB	F0079225.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-2

CAS No.	Compound	Result	RL	MDL	Units	Q
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 73-139%
17060-07-0	1,2-Dichloroethane-D4	97% 66-139%
2037-26-5	Toluene-D8	108% 77-148%
460-00-4	4-Bromofluorobenzene	121% 84-150%

Blank Spike Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-BS	F0079183.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	103	82	31-158
71-43-2	Benzene	25	25.1	100	67-118
75-27-4	Bromodichloromethane	25	23.8	95	66-115
75-25-2	Bromoform	25	22.2	89	57-119
108-90-7	Chlorobenzene	25	24.3	97	72-116
75-00-3	Chloroethane	25	26.6	106	61-135
67-66-3	Chloroform	25	25.7	103	66-117
75-15-0	Carbon disulfide	25	21.7	87	39-136
56-23-5	Carbon tetrachloride	25	27.6	110	67-131
75-34-3	1,1-Dichloroethane	25	26.2	105	63-125
75-35-4	1,1-Dichloroethylene	25	25.4	102	52-143
107-06-2	1,2-Dichloroethane	25	24.1	96	61-120
78-87-5	1,2-Dichloropropane	25	25.2	101	64-118
124-48-1	Dibromochloromethane	25	22.4	90	67-117
156-59-2	cis-1,2-Dichloroethylene	25	24.3	97	65-116
10061-01-5	cis-1,3-Dichloropropene	25	25.0	100	67-118
156-60-5	trans-1,2-Dichloroethylene	25	25.2	101	66-128
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	73-126
100-41-4	Ethylbenzene	25	23.9	96	71-119
591-78-6	2-Hexanone	125	101	81	45-132
108-10-1	4-Methyl-2-pentanone	125	111	89	46-127
74-83-9	Methyl bromide	25	23.0	92	51-126
74-87-3	Methyl chloride	25	23.0	92	47-130
75-09-2	Methylene chloride	25	23.5	94	53-130
78-93-3	Methyl ethyl ketone	125	107	86	47-128
100-42-5	Styrene	25	20.0	80	69-115
71-55-6	1,1,1-Trichloroethane	25	26.2	105	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	21.4	86	57-121
79-00-5	1,1,2-Trichloroethane	25	22.9	92	62-117
127-18-4	Tetrachloroethylene	25	26.4	106	72-128
108-88-3	Toluene	25	24.3	97	70-121
79-01-6	Trichloroethylene	25	26.1	104	69-120
75-01-4	Vinyl chloride	25	25.2	101	59-145
1330-20-7	Xylene (total)	75	74.2	99	72-120

Blank Spike Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2315-BS	F0079183.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	101%	66-139%
2037-26-5	Toluene-D8	102%	77-148%
460-00-4	4-Bromofluorobenzene	99%	84-150%

Blank Spike Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2318-BS	F0079224.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples: Method: SW846 8260B

T16448-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
107-06-2	1,2-Dichloroethane	25	22.7	91	61-120
79-01-6	Trichloroethylene	25	25.5	102	69-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	97%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	101%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-3MS	F0079191.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3MSD	F0079192.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3 ^a	F0079190.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Compound	T16445-3 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	103	82	98.2	79	5	39-130/26
71-43-2	Benzene	2.0 U		25	23.6	94	24.0	96	2	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.5	90	22.3	89	1	64-119/22
75-25-2	Bromoform	2.0 U		25	20.5	82	20.7	83	1	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	22.8	91	23.3	93	2	72-118/20
75-00-3	Chloroethane	2.0 U		25	24.6	98	23.8	95	3	60-136/25
67-66-3	Chloroform	2.0 U		25	24.9	100	25.4	102	2	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	20.2	81	19.9	80	1	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	25.6	102	25.8	103	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0		25	27.3	101	26.7	99	2	65-126/21
75-35-4	1,1-Dichloroethylene	10.9		25	34.9	96	33.5	90	4	55-140/25
107-06-2	1,2-Dichloroethane	2.0		25	24.5	90	24.1	88	2	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.2	93	24.2	97	4	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.4	86	22.0	88	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	699	E	25	685	-56* ^b	690	-36* ^b	1	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	23.5	94	23.8	95	1	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.1		25	26.1	96	26.0	96	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	24.4	98	24.1	96	1	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.8	91	23.5	94	3	70-123/18
591-78-6	2-Hexanone	10 U		125	105	84	101	81	4	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	114	91	110	88	4	41-133/22
74-83-9	Methyl bromide	2.0 U		25	21.6	86	20.8	83	4	47-129/27
74-87-3	Methyl chloride	2.0 U		25	23.2	93	22.1	88	5	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.8	91	22.5	90	1	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	108	86	105	84	3	43-125/29
100-42-5	Styrene	2.0 U		25	18.9	76	19.0	76	1	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	25.2	101	24.8	99	2	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	20.8	83	21.4	86	3	50-128/22
79-00-5	1,1,2-Trichloroethane	1.7	J	25	23.7	88	24.0	89	1	58-120/22
127-18-4	Tetrachloroethylene	83.1		25	107	96	106	92	1	69-132/21
108-88-3	Toluene	2.0 U		25	22.8	91	23.4	94	3	70-123/18
79-01-6	Trichloroethylene	6520	E	25	6200	-1280* ^b	6140	-1520* ^b	1	70-120/19
75-01-4	Vinyl chloride	3.8		25	28.3	98	27.1	93	4	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	69.8	93	70.7	94	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-3MS	F0079191.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3MSD	F0079192.D	1	03/07/07	LJ	n/a	n/a	VF2315
T16445-3 ^a	F0079190.D	1	03/07/07	LJ	n/a	n/a	VF2315

The QC reported here applies to the following samples:

Method: SW846 8260B

T16448-1, T16448-2

CAS No.	Surrogate Recoveries	MS	MSD	T16445-3	Limits
1868-53-7	Dibromofluoromethane	106%	107%	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	106%	107%	106%	66-139%
2037-26-5	Toluene-D8	101%	104%	102%	77-148%
460-00-4	4-Bromofluorobenzene	99%	103%	123%	84-150%

- (a) For QC only.
(b) Outside control limits due to high level in sample relative to spike amount.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16445-4MS	F0079227.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4MSD	F0079228.D	1	03/08/07	LJ	n/a	n/a	VF2318
T16445-4	F0079226.D	1	03/08/07	LJ	n/a	n/a	VF2318

The QC reported here applies to the following samples: Method: SW846 8260B

T16448-2

CAS No.	Compound	T16445-4 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
107-06-2	1,2-Dichloroethane	2.0 U	25	23.0	92	22.6	90	2	57-125/25
79-01-6	Trichloroethylene	2.0	25	26.3	97	25.9	96	2	70-120/19

CAS No.	Surrogate Recoveries	MS	MSD	T16445-4	Limits
1868-53-7	Dibromofluoromethane	106%	105%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	104%	102%	98%	66-139%
2037-26-5	Toluene-D8	103%	105%	106%	77-148%
460-00-4	4-Bromofluorobenzene	99%	99%	119%	84-150%

Instrument Performance Check (BFB)

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-BFB
Lab File ID: F0078963.D
Instrument ID: GCMSF
Injection Date: 02/28/07
Injection Time: 14:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7281	16.0	Pass
75	30.0 - 60.0% of mass 95	18364	40.3	Pass
95	Base peak, 100% relative abundance	45541	100.0	Pass
96	5.0 - 9.0% of mass 95	2793	6.1	Pass
173	Less than 2.0% of mass 174	107	0.23 (0.27) ^a	Pass
174	50.0 - 100.0% of mass 95	39123	85.9	Pass
175	5.0 - 9.0% of mass 174	3023	6.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	37355	82.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2802	6.2 (7.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2305-IC2305	F0078964.D	02/28/07	15:10	00:34	Initial cal 2
VF2305-IC2305	F0078965.D	02/28/07	15:41	01:05	Initial cal 5
VF2305-IC2305	F0078966.D	02/28/07	16:12	01:36	Initial cal 20
VF2305-ICC2305	F0078967.D	02/28/07	16:44	02:08	Initial cal 40
VF2305-IC2305	F0078968.D	02/28/07	17:16	02:40	Initial cal 70
VF2305-IC2305	F0078969.D	02/28/07	17:46	03:10	Initial cal 100
VF2305-IC2305	F0078970.D	02/28/07	18:18	03:42	Initial cal 200
VF2305-BS	F0078972.D	02/28/07	19:21	04:45	Blank Spike
VF2305-MB	F0078974.D	02/28/07	20:24	05:48	Method Blank
ZZZZZZ	F0078975.D	02/28/07	20:55	06:19	(unrelated sample)
ZZZZZZ	F0078976.D	02/28/07	21:26	06:50	(unrelated sample)
ZZZZZZ	F0078977.D	02/28/07	21:58	07:22	(unrelated sample)
T16395-2	F0078978.D	02/28/07	22:30	07:54	(used for QC only; not part of job T16448)
T16395-2MS	F0078979.D	02/28/07	23:00	08:24	Matrix Spike
T16395-2MSD	F0078980.D	02/28/07	23:32	08:56	Matrix Spike Duplicate
ZZZZZZ	F0078981.D	03/01/07	00:03	09:27	(unrelated sample)
ZZZZZZ	F0078982.D	03/01/07	00:35	09:59	(unrelated sample)
ZZZZZZ	F0078983.D	03/01/07	01:06	10:30	(unrelated sample)
ZZZZZZ	F0078984.D	03/01/07	01:38	11:02	(unrelated sample)
ZZZZZZ	F0078989.D	03/01/07	04:15	13:39	(unrelated sample)
ZZZZZZ	F0078990.D	03/01/07	04:47	14:11	(unrelated sample)
ZZZZZZ	F0078991.D	03/01/07	05:19	14:43	(unrelated sample)
ZZZZZZ	F0078992.D	03/01/07	05:50	15:14	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-BFB
Lab File ID: F0079181.D
Instrument ID: GCMSF
Injection Date: 03/07/07
Injection Time: 12:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7668	19.2	Pass
75	30.0 - 60.0% of mass 95	16756	42.0	Pass
95	Base peak, 100% relative abundance	39853	100.0	Pass
96	5.0 - 9.0% of mass 95	2768	6.9	Pass
173	Less than 2.0% of mass 174	96	0.24 (0.28) ^a	Pass
174	50.0 - 100.0% of mass 95	34109	85.6	Pass
175	5.0 - 9.0% of mass 174	2473	6.2 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	33421	83.9 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	2339	5.9 (7.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2315-CC2305	F0079182.D	03/07/07	13:19	00:35	Continuing cal 40
VF2315-BS	F0079183.D	03/07/07	13:54	01:10	Blank Spike
VF2315-MB	F0079184.D	03/07/07	14:26	01:42	Method Blank
ZZZZZZ	F0079185.D	03/07/07	14:58	02:14	(unrelated sample)
ZZZZZZ	F0079186.D	03/07/07	15:28	02:44	(unrelated sample)
ZZZZZZ	F0079187.D	03/07/07	15:59	03:15	(unrelated sample)
T16448-1	F0079188.D	03/07/07	16:30	03:46	50WW03
T16448-2	F0079189.D	03/07/07	17:01	04:17	29WW15
T16445-3	F0079190.D	03/07/07	17:32	04:48	(used for QC only; not part of job T16448)
T16445-3MS	F0079191.D	03/07/07	18:04	05:20	Matrix Spike
T16445-3MSD	F0079192.D	03/07/07	18:35	05:51	Matrix Spike Duplicate
ZZZZZZ	F0079194.D	03/07/07	19:38	06:54	(unrelated sample)
ZZZZZZ	F0079196.D	03/07/07	20:41	07:57	(unrelated sample)
ZZZZZZ	F0079197.D	03/07/07	21:12	08:28	(unrelated sample)
ZZZZZZ	F0079198.D	03/07/07	21:44	09:00	(unrelated sample)
ZZZZZZ	F0079199.D	03/07/07	22:15	09:31	(unrelated sample)
ZZZZZZ	F0079202.D	03/07/07	23:49	11:05	(unrelated sample)
ZZZZZZ	F0079203.D	03/08/07	00:20	11:36	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-BFB
Lab File ID: F0079222.D
Instrument ID: GCMSF
Injection Date: 03/08/07
Injection Time: 10:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6198	16.4	Pass
75	30.0 - 60.0% of mass 95	15579	41.3	Pass
95	Base peak, 100% relative abundance	37709	100.0	Pass
96	5.0 - 9.0% of mass 95	2320	6.2	Pass
173	Less than 2.0% of mass 174	83	0.22 (0.26) ^a	Pass
174	50.0 - 100.0% of mass 95	32211	85.4	Pass
175	5.0 - 9.0% of mass 174	2369	6.3 (7.4) ^a	Pass
176	95.0 - 101.0% of mass 174	31824	84.4 (98.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2216	5.9 (7.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2318-CC2305	F0079223.D	03/08/07	10:59	00:34	Continuing cal 40
VF2318-BS	F0079224.D	03/08/07	11:33	01:08	Blank Spike
VF2318-MB	F0079225.D	03/08/07	12:05	01:40	Method Blank
T16445-4	F0079226.D	03/08/07	12:37	02:12	(used for QC only; not part of job T16448)
T16445-4MS	F0079227.D	03/08/07	13:09	02:44	Matrix Spike
T16445-4MSD	F0079228.D	03/08/07	14:05	03:40	Matrix Spike Duplicate
ZZZZZZ	F0079229.D	03/08/07	14:36	04:11	(unrelated sample)
ZZZZZZ	F0079230.D	03/08/07	15:08	04:43	(unrelated sample)
ZZZZZZ	F0079231.D	03/08/07	15:39	05:14	(unrelated sample)
ZZZZZZ	F0079232.D	03/08/07	16:11	05:46	(unrelated sample)
ZZZZZZ	F0079233.D	03/08/07	16:42	06:17	(unrelated sample)
ZZZZZZ	F0079234.D	03/08/07	17:14	06:49	(unrelated sample)
ZZZZZZ	F0079235.D	03/08/07	17:45	07:20	(unrelated sample)
ZZZZZZ	F0079236.D	03/08/07	18:17	07:52	(unrelated sample)
ZZZZZZ	F0079237.D	03/08/07	18:49	08:24	(unrelated sample)
ZZZZZZ	F0079238.D	03/08/07	19:21	08:56	(unrelated sample)
T16448-2	F0079239.D	03/08/07	19:53	09:28	29WW15
ZZZZZZ	F0079240.D	03/08/07	20:24	09:59	(unrelated sample)
ZZZZZZ	F0079241.D	03/08/07	20:56	10:31	(unrelated sample)
ZZZZZZ	F0079242.D	03/08/07	21:28	11:03	(unrelated sample)
ZZZZZZ	F0079243.D	03/08/07	22:00	11:35	(unrelated sample)

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2315-CC2305	Injection Date: 03/07/07
Lab File ID: F0079182.D	Injection Time: 13:19
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	698014	11.87	549946	15.95	231402	19.21
Upper Limit ^a	1396028	12.37	1099892	16.45	462804	19.71
Lower Limit ^b	349007	11.37	274973	15.45	115701	18.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2315-BS	751267	11.87	582464	15.95	220558	19.22
VF2315-MB	739731	11.88	521309	15.96	135288	19.23
ZZZZZZ	709635	11.88	498169	15.96	130636	19.23
ZZZZZZ	713511	11.89	505249	15.96	133789	19.22
ZZZZZZ	670598	11.89	482656	15.97	127882	19.23
T16448-1	692002	11.89	498481	15.96	134149	19.23
T16448-2	694603	11.89	509623	15.97	139087	19.23
T16445-3	692901	11.89	523917	15.96	140544	19.22
T16445-3MS	703380	11.89	542581	15.97	203275	19.23
T16445-3MSD	721789	11.88	551007	15.96	199926	19.23
ZZZZZZ	701179	11.88	509297	15.96	124874	19.22
ZZZZZZ	672132	11.88	483654	15.95	147428	19.22
ZZZZZZ	655210	11.87	474247	15.95	142235	19.21
ZZZZZZ	658250	11.88	479882	15.95	141112	19.22
ZZZZZZ	645297	11.88	465709	15.95	134763	19.22
ZZZZZZ	633357	11.87	461754	15.95	129759	19.21
ZZZZZZ	630021	11.88	455820	15.95	129210	19.21

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2318-CC2305	Injection Date: 03/08/07
Lab File ID: F0079223.D	Injection Time: 10:59
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	698975	11.87	551152	15.94	223338	19.21
Upper Limit ^a	1397950	12.37	1102304	16.44	446676	19.71
Lower Limit ^b	349488	11.37	275576	15.44	111669	18.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2318-BS	746410	11.87	580582	15.94	210100	19.21
VF2318-MB	745444	11.88	531800	15.96	140552	19.22
T16445-4	739935	11.88	531107	15.96	143733	19.22
T16445-4MS	707673	11.88	540763	15.95	204404	19.22
T16445-4MSD	763469	11.88	578582	15.95	218177	19.22
ZZZZZZ	721619	11.89	534862	15.97	175880	19.23
ZZZZZZ	648782	11.89	490210	15.97	162557	19.23
ZZZZZZ	701074	11.89	520078	15.96	161875	19.23
ZZZZZZ	671762	11.90	510964	15.97	157114	19.24
ZZZZZZ	661266	11.89	484654	15.96	144861	19.24
ZZZZZZ	650121	11.89	473895	15.97	134032	19.23
ZZZZZZ	642529	11.89	461686	15.97	128039	19.23
ZZZZZZ	627515	11.89	448085	15.96	125224	19.23
ZZZZZZ	623811	11.88	456759	15.96	122979	19.22
ZZZZZZ	620723	11.89	447599	15.96	114685	19.22
T16448-2	612552	11.89	445736	15.96	121452	19.23
ZZZZZZ	570298	11.88	412673	15.95	110551*	19.22
ZZZZZZ	579619	11.87	421291	15.95	109077*	19.22
ZZZZZZ	599201	11.87	424322	15.95	107464*	19.21
ZZZZZZ	591981	11.87	425080	15.95	108784*	19.21

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Method: SW846 8260B	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
T16448-1	F0079188.D	106.0	102.0	106.0	121.0
T16448-2	F0079239.D	106.0	100.0	105.0	118.0
T16448-2	F0079189.D	108.0	105.0	106.0	122.0
T16445-3MS	F0079191.D	106.0	106.0	101.0	99.0
T16445-3MSD	F0079192.D	107.0	107.0	104.0	103.0
T16445-4MS	F0079227.D	106.0	104.0	103.0	99.0
T16445-4MSD	F0079228.D	105.0	102.0	105.0	99.0
VF2315-BS	F0079183.D	104.0	101.0	102.0	99.0
VF2315-MB	F0079184.D	103.0	98.0	109.0	129.0
VF2318-BS	F0079224.D	106.0	97.0	103.0	101.0
VF2318-MB	F0079225.D	103.0	97.0	108.0	121.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	73-139%
S2 = 1,2-Dichloroethane-D4	66-139%
S3 = Toluene-D8	77-148%
S4 = 4-Bromofluorobenzene	84-150%

5.6
5

Initial Calibration Summary

Job Number: T16448
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Initial Calibration

Calibration Files

1 =F0078964.D 2 =F0078965.D 3 =F0078966.D
 4 =F0078967.D 5 =F0078968.D 6 =F0078969.D 7 =F0078970.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.157	0.162	0.153	0.171	0.181	0.178	0.196	0.171	8.89
3)P Chloromethane	0.353	0.368	0.326	0.309	0.319	0.297	0.331	0.329	7.50
4)C Vinyl Chloride	0.279	0.316	0.268	0.280	0.287	0.269	0.300	0.286	6.01
5) Bromomethane	0.275	0.253	0.223	0.215	0.216	0.204	0.190	0.225	12.95
6) Chloroethane	0.203	0.232	0.219	0.222	0.222	0.210	0.211	0.217	4.37
7) Trichlorofluorome	0.137	0.154	0.142	0.159	0.166	0.162	0.164	0.155	7.23
8) Acrolein	0.030	0.030	0.031	0.036	0.036	0.033	0.033	0.033	8.00
9)C 1,1-Dichloroethen	0.287	0.299	0.298	0.320	0.322	0.306	0.312	0.306	4.04
10) Freon 113	0.174	0.190	0.191	0.225	0.225	0.213	0.216	0.205	9.65
11) Acetone	0.065	0.062	0.057	0.052	0.053	0.053	0.052	0.056	9.61
12) Iodomethane	0.405	0.432	0.438	0.436	0.447	0.434	0.445	0.434	3.22
13) Methyl acetate	0.199	0.203	0.197	0.179	0.188	0.186	0.185	0.191	4.56
14) Carbon Disulfide	0.833	0.878	0.869	0.908	0.930	0.885	0.918	0.889	3.74
15) Methylene Chlorid	0.410	0.424	0.407	0.404	0.396	0.378	0.376	0.399	4.34
16) Tert Butyl Alchoh	0.015	0.018	0.018	0.015	0.017	0.018	0.018	0.017	8.14
17) trans-1,2-Dichlor	0.328	0.340	0.340	0.344	0.351	0.337	0.344	0.341	2.11
18) Acrylonitrile	0.086	0.099	0.097	0.091	0.097	0.098	0.097	0.095	4.82
19) Methyl Tert Butyl	0.577	0.603	0.572	0.555	0.578	0.587	0.594	0.581	2.70
20) Hexane	0.300	0.281	0.283	0.341	0.346	0.320	0.315	0.312	8.32
21)P 1,1-Dichloroethan	0.428	0.457	0.436	0.445	0.450	0.430	0.435	0.440	2.44
22) Vinyl acetate	0.513	0.554	0.582	0.564	0.569	0.552	0.517	0.550	4.74
23) Di-isopropyl ethe	0.944	1.012	0.992	0.981	0.988	0.943	0.934	0.971	3.09
24) Ethyl tert-butyl	0.721	0.735	0.733	0.737	0.753	0.739	0.749	0.738	1.43
25) 2,2-Dichloropropa	0.208	0.200	0.197	0.210	0.209	0.202	0.195	0.203	2.91
26) cis-1,2-Dichloroe	0.282	0.305	0.302	0.308	0.307	0.302	0.307	0.302	3.03
27) 2-Butanone	0.113	0.118	0.120	0.105	0.111	0.112	0.109	0.113	4.48
28) Bromochloromethan	0.124	0.142	0.145	0.146	0.147	0.149	0.150	0.143	6.13
29)C Chloroform	0.343	0.363	0.358	0.362	0.364	0.353	0.362	0.358	2.09
30) Tetrahydrofuran	0.048	0.035	0.033	0.030	0.031	0.031	0.029	0.034	19.44
----- Linear regression ----- Coefficient = 0.9988									
Response Ratio = 0.00148 + 0.02898 *A									
31) 1,1,1-Trichloroet	0.196	0.201	0.204	0.213	0.218	0.210	0.215	0.208	3.79
32)S Dibromofluorometh	0.211	0.221	0.210	0.217	0.221	0.221	0.226	0.218	2.61
33) Cyclohexane	0.390	0.405	0.413	0.479	0.485	0.453	0.447	0.439	8.43
34) 1,1-Dichloropropo	0.283	0.279	0.292	0.313	0.321	0.312	0.316	0.302	5.61
35) Carbon Tetrachlor	0.142	0.161	0.164	0.176	0.181	0.177	0.183	0.169	8.57
36)S 1,2-Dichloroethan	0.159	0.173	0.166	0.161	0.165	0.162	0.166	0.165	2.76
37) Benzene	1.089	1.108	1.092	1.113	1.134	1.098	1.119	1.108	1.43
38) 1,2-Dichloroethan	0.181	0.193	0.200	0.205	0.200	0.204	0.201	0.198	4.13
39) tert-amyl methyl	0.712	0.774	0.759	0.736	0.767	0.769	0.782	0.757	3.26
40) Trichloroethene	0.212	0.223	0.218	0.229	0.233	0.229	0.236	0.226	3.78
41) Methylcyclohexane	0.318	0.332	0.335	0.391	0.401	0.384	0.388	0.364	9.38
42)C 1,2-Dichloropropa	0.320	0.304	0.310	0.316	0.320	0.310	0.318	0.314	1.90
43) Dibromomethane	0.129	0.147	0.169	0.160	0.166	0.165	0.170	0.158	9.61

Initial Calibration Summary

Job Number: T16448
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	17.15
	----- Linear regression -----	Coefficient = 0.9989								
	Response Ratio =	-0.00341 + 0.00271 *A								
45)	Bromodichlorometh	0.287	0.300	0.298	0.307	0.311	0.306	0.317	0.304	3.19
46)	2-Nitropropane	0.046	0.042	0.041	0.037	0.038	0.039	0.038	0.040	7.95
47)	2-Chloroethyl vin	0.094	0.104	0.122	0.125	0.136	0.143	0.152	0.125	16.72
	----- Linear regression -----	Coefficient = 0.9983								
	Response Ratio =	-0.06248 + 0.15260 *A								
48)	4-Methyl-2-pentan	0.229	0.239	0.249	0.234	0.246	0.246	0.237	0.240	3.06
49)	cis-1,3-Dichlorop	0.369	0.397	0.420	0.427	0.443	0.439	0.454	0.421	6.95
50)	I Chlorobenzene-d5	-----ISTD-----								
51)	S Toluene-d8	1.147	1.122	1.060	1.073	1.083	1.079	1.120	1.098	2.89
52)	C Toluene	1.382	1.408	1.358	1.387	1.384	1.367	1.417	1.386	1.51
53)	trans-1,3-Dichlor	0.340	0.364	0.391	0.402	0.406	0.409	0.428	0.391	7.65
54)	1,1,2-Trichloroet	0.263	0.295	0.289	0.279	0.283	0.284	0.289	0.283	3.62
55)	Tetrachloroethene	0.272	0.280	0.293	0.302	0.309	0.299	0.307	0.294	4.70
56)	2-hexanone	0.170	0.180	0.203	0.194	0.206	0.211	0.208	0.196	8.04
57)	1,3-Dichloropropa	0.605	0.605	0.602	0.593	0.592	0.591	0.602	0.599	1.05
58)	Dibromochlorometh	0.254	0.312	0.303	0.296	0.299	0.304	0.315	0.298	6.92
59)	1,2-Dibromoethane	0.283	0.310	0.305	0.302	0.314	0.320	0.331	0.309	4.87
60)	1-Chlorohexane	0.464	0.467	0.465	0.505	0.517	0.509	0.535	0.495	5.83
61)	P Chlorobenzene	0.877	0.857	0.851	0.870	0.877	0.867	0.897	0.871	1.73
62)	1,1,1,2-Tetrachlo	0.264	0.284	0.283	0.282	0.281	0.279	0.288	0.280	2.74
63)	C Ethylbenzene	1.475	1.458	1.433	1.493	1.499	1.470	1.518	1.478	1.90
64)	m,p-Xylene	0.970	0.990	1.008	1.040	1.057	1.039	1.067	1.025	3.51
65)	o-Xylene	1.021	1.033	1.058	1.084	1.107	1.077	1.111	1.070	3.23
66)	Styrene	0.796	0.855	0.910	0.960	0.983	0.978	1.013	0.928	8.44
67)	P Bromoform	0.142	0.077	0.184	0.179	0.195	0.199	0.205	0.169	26.85
	----- Linear regression -----	Coefficient = 0.9995								
	Response Ratio =	-0.01246 + 0.20679 *A								
68)	I 1,4-Dichlorobenze	-----ISTD-----								
69)	Isopropylbenzene	3.394	3.422	2.803	2.838	2.780	2.731	2.618	2.941	11.11
70)	Cyclohexanone	0.023	0.030	0.027	0.025	0.026	0.029	0.027	0.027	8.23
71)	S 4-Bromofluorobenz	1.169	1.004	0.864	0.853	0.853	0.860	0.845	0.921	13.32
72)	Bromobenzene	0.997	0.963	0.842	0.837	0.823	0.822	0.788	0.867	9.15
73)	P 1,1,2,2-Tetrachlo	1.339	1.320	1.146	1.011	1.011	1.030	0.983	1.120	13.59
74)	Trans-1,4-Dichlor	0.143	0.182	0.177	0.182	0.188	0.192	0.192	0.179	9.42
75)	1,2,3-Trichloropr	0.257	0.296	0.253	0.232	0.230	0.236	0.225	0.247	10.10
76)	n-Propylbenzene	4.567	4.426	4.010	4.105	4.023	3.954	3.865	4.136	6.29
77)	2-Chlorotoluene	3.164	2.888	2.531	2.500	2.416	2.351	2.285	2.591	12.31
78)	4-Chlorotoluene	2.569	2.376	2.183	2.187	2.133	2.116	2.076	2.234	7.90
79)	1,3,5-Trimethylbe	2.668	2.535	2.320	2.351	2.287	2.250	2.168	2.368	7.33
80)	sec-Butylbenzene	3.329	3.252	3.038	3.232	3.150	3.042	2.937	3.140	4.47
81)	1,3-Dichlorobenze	1.316	1.426	1.364	1.413	1.441	1.419	1.422	1.400	3.16
82)	4-Isopropyltoluen	2.408	2.304	2.224	2.403	2.346	2.277	2.220	2.312	3.37
83)	1,4-Dichlorobenze	1.528	1.430	1.389	1.429	1.420	1.423	1.424	1.435	3.04
84)	tert-Butylbenzene	0.533	0.438	0.430	0.445	0.436	0.429	0.410	0.446	8.90
85)	n-Butylbenzene	1.465	1.572	1.892	2.173	2.149	2.132	2.214	1.942	15.91
	----- Linear regression -----	Coefficient = 0.9997								
	Response Ratio =	-0.08322 + 2.22219 *A								
86)	1,2-Dichlorobenze	1.206	1.332	1.314	1.336	1.345	1.359	1.369	1.323	4.14
87)	1,2,4-Trimethylbe	2.566	2.449	2.311	2.410	2.354	2.310	2.242	2.377	4.53
88)	1,2-Dibromo-3-Chl	0.068	0.106	0.082	0.072	0.077	0.089	0.088	0.083	15.22
	----- Linear regression -----	Coefficient = 0.9968								

Initial Calibration Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Ratio = -0.00467 + 0.08863 *A										
89)	1,2,4-Trichlorobe	0.166	0.135	0.302	0.403	0.468	0.530	0.585	0.370	47.33
----- Linear regression -----		Coefficient = 0.9944								
		Response Ratio = -0.09820 + 0.59565 *A								
90)	Hexachlorobutadie	0.058	0.088	0.170	0.207	0.204	0.208	0.202	0.162	38.83
----- Linear regression -----		Coefficient = 0.9993								
		Response Ratio = -0.00579 + 0.20548 *A								
91)	Naphthalene	0.526	0.280	0.475	0.606	0.781	0.975	1.125	0.681	43.48
----- Quadratic regression -----		Coefficient = 0.9974								
		Response Ratio = -0.07686 + 0.74236 *A + 0.10172 *A^2								
92)	1,2,3-Trichlorobe	0.167	0.113	0.217	0.276	0.334	0.389	0.421	0.274	41.95
----- Linear regression -----		Coefficient = 0.9938								
		Response Ratio = -0.07169 + 0.43007 *A								

(#) = Out of Range										
VF2305C.M					Thu Mar 01 07:44:03 2007					

Continuing Calibration Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-CC2305
Lab FileID: F0079182.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2315-1\F0079182.D Vial: 2
 Acq On : 7 Mar 2007 1:19 pm Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3885,vf2315,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	86	-0.08
2	Dichlorodifluoromethane	0.171	0.148	13.5	74	-0.04
3 P	Chloromethane	0.329	0.330	-0.3	92	-0.05
4 C	Vinyl Chloride	0.286	0.292	-2.1	90	-0.06
5	Bromomethane	0.225	0.223	0.9	89	-0.07
6	Chloroethane	0.217	0.226	-4.1	88	-0.06
7	Trichlorofluoromethane	0.155	0.162	-4.5	87	-0.06
8	Acrolein	0.033	0.034	-3.0	81	-0.08
9 C	1,1-Dichloroethene	0.306	0.297	2.9	80	-0.07
10	Freon 113	0.205	0.193	5.9	73	-0.07
11	Acetone	0.056	0.051	8.9	84	-0.07
12	Iodomethane	0.434	0.399	8.1	78	-0.07
13	Methyl acetate	0.191	0.208	-8.9	100	-0.07
14	Carbon Disulfide	0.889	0.797	10.3	75	-0.07
15	Methylene Chloride	0.399	0.419	-5.0	89	-0.07
16	Tert Butyl Alcohol	0.017	0.019	-11.8	103	-0.08
17	trans-1,2-Dichloroethene	0.341	0.339	0.6	84	-0.07
18	Acrylonitrile	0.095	0.092	3.2	86	-0.07
19	Methyl Tert Butyl Ether	0.581	0.574	1.2	89	-0.07
20	Hexane	0.312	0.316	-1.3	79	-0.08
21 P	1,1-Dichloroethane	0.440	0.453	-3.0	87	-0.08
22	Vinyl acetate	0.550	0.609	-10.7	93	-0.08
23	Di-isopropyl ether	0.971	1.066	-9.8	93	-0.07
24	Ethyl tert-butyl ether	0.738	0.773	-4.7	90	-0.07
25	2,2-Dichloropropane	0.203	0.210	-3.4	86	-0.07
26	cis-1,2-Dichloroethene	0.302	0.307	-1.7	86	-0.08
27	2-Butanone	0.113	0.108	4.4	88	-0.08
28	Bromochloromethane	0.143	0.147	-2.8	86	-0.08
29 C	Chloroform	0.358	0.370	-3.4	88	-0.08
30	Tetrahydrofuran	0.034	0.032	5.9	91	-0.08
31	1,1,1-Trichloroethane	0.208	0.210	-1.0	84	-0.08
32 S	Dibromofluoromethane	0.218	0.227	-4.1	90	-0.08
33	Cyclohexane	0.439	0.451	-2.7	81	-0.08
34	1,1-Dichloropropene	0.302	0.317	-5.0	87	-0.08
35	Carbon Tetrachloride	0.169	0.174	-3.0	85	-0.08
36 S	1,2-Dichloroethane-d4	0.165	0.176	-6.7	94	-0.08
37	Benzene	1.108	1.127	-1.7	87	-0.08
38	1,2-Dichloroethane	0.198	0.213	-7.6	89	-0.08
39	tert-amyl methyl ether	0.757	0.777	-2.6	91	-0.08
40	Trichloroethene	0.226	0.232	-2.7	87	-0.08
41	Methylcyclohexane	0.364	0.371	-1.9	81	-0.08
42 C	1,2-Dichloropropane	0.314	0.336	-7.0	91	-0.09

Continuing Calibration Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2315-CC2305
Lab FileID: F0079182.D

43	Dibromomethane	0.158	0.169	-7.0	91	-0.09
44	1,4-Dioxane	0.002	0.003	-50.0#	106	-0.09
45	Bromodichloromethane	0.304	0.321	-5.6	90	-0.08
46	2-Nitropropane	0.040	0.042	-5.0	98	-0.08
47	2-Chloroethyl vinyl ether	0.125	0.124	0.8	85	-0.08
48	4-Methyl-2-pentanone	0.240	0.236	1.7	87	-0.09
49	cis-1,3-Dichloropropene	0.421	0.461	-9.5	93	-0.08
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	-0.08
51 S	Toluene-d8	1.098	1.096	0.2	92	-0.08
52 C	Toluene	1.386	1.363	1.7	89	-0.08
53	trans-1,3-Dichloropropene	0.391	0.405	-3.6	91	-0.07
54	1,1,2-Trichloroethane	0.283	0.289	-2.1	93	-0.08
55	Tetrachloroethene	0.294	0.299	-1.7	89	-0.09
56	2-hexanone	0.196	0.182	7.1	85	-0.08
57	1,3-Dichloropropane	0.599	0.606	-1.2	92	-0.08
58	Dibromochloromethane	0.298	0.306	-2.7	94	-0.08
59	1,2-Dibromoethane	0.309	0.310	-0.3	93	-0.08
60	1-Chlorohexane	0.495	0.501	-1.2	90	-0.09
61 P	Chlorobenzene	0.871	0.876	-0.6	91	-0.09
62	1,1,1,2-Tetrachloroethane	0.280	0.286	-2.1	92	-0.08
63 C	Ethylbenzene	1.478	1.474	0.3	89	-0.09
64	m,p-Xylene	1.025	1.039	-1.4	90	-0.08
65	o-Xylene	1.070	1.102	-3.0	92	-0.09
66	Styrene	0.928	0.964	-3.9	91	-0.08
67 P	Bromoform	0.169	0.198	-17.2	100	-0.09
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	-0.09
69	Isopropylbenzene	2.941	2.758	6.2	90	-0.08
70	Cyclohexanone	0.027	0.039	-44.4#	142	-0.10
71 S	4-Bromofluorobenzene	0.921	0.840	8.8	92	-0.09
72	Bromobenzene	0.867	0.840	3.1	93	-0.09
73 P	1,1,2,2-Tetrachloroethane	1.120	1.065	4.9	98	-0.09
74	Trans-1,4-Dichloro-2-Butene	0.179	0.176	1.7	90	-0.09
75	1,2,3-Trichloropropane	0.247	0.240	2.8	96	-0.09
76	n-Propylbenzene	4.136	4.041	2.3	92	-0.09
77	2-Chlorotoluene	2.591	2.463	4.9	92	-0.09
78	4-Chlorotoluene	2.234	2.117	5.2	90	-0.10
79	1,3,5-Trimethylbenzene	2.368	2.281	3.7	90	-0.09
80	sec-Butylbenzene	3.140	3.101	1.2	89	-0.09
81	1,3-Dichlorobenzene	1.400	1.439	-2.8	95	-0.09
82	4-Isopropyltoluene	2.312	2.294	0.8	89	-0.09
83	1,4-Dichlorobenzene	1.435	1.431	0.3	93	-0.09
84	tert-Butylbenzene	0.446	0.438	1.8	91	-0.10
85	n-Butylbenzene	1.942	2.030	-4.5	87	-0.10
86	1,2-Dichlorobenzene	1.323	1.352	-2.2	94	-0.09
87	1,2,4-Trimethylbenzene	2.377	2.379	-0.1	92	-0.09
88	1,2-Dibromo-3-Chloropropane	0.083	0.071	14.5	92	-0.10
89	1,2,4-Trichlorobenzene	0.370	0.343	7.3	79	-0.09
90	Hexachlorobutadiene	0.162	0.192	-18.5	86	-0.11
91	Naphthalene	0.681	0.550	19.2	84	-0.12
92	1,2,3-Trichlorobenzene	0.274	0.247	9.9	83	-0.12

Average % D = 5.5

(#) = Out of Range
F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
Thu Mar 08 11:48:42 2007

Continuing Calibration Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-CC2305
Lab FileID: F0079223.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2318-1\F0079223.D Vial: 2
 Acq On : 8 Mar 2007 10:59 am Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3889,vf2318,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	86	-0.08
2	Dichlorodifluoromethane	0.171	0.134	21.6#	68	-0.04
3 P	Chloromethane	0.329	0.313	4.9	87	-0.05
4 C	Vinyl Chloride	0.286	0.273	4.5	84	-0.06
5	Bromomethane	0.225	0.222	1.3	89	-0.07
6	Chloroethane	0.217	0.229	-5.5	89	-0.06
7	Trichlorofluoromethane	0.155	0.168	-8.4	91	-0.07
8	Acrolein	0.033	0.033	0.0	81	-0.07
9 C	1,1-Dichloroethene	0.306	0.303	1.0	81	-0.07
10	Freon 113	0.205	0.207	-1.0	79	-0.07
11	Acetone	0.056	0.042	25.0#	70	-0.07
12	Iodomethane	0.434	0.423	2.5	83	-0.07
13	Methyl acetate	0.191	0.176	7.9	84	-0.07
14	Carbon Disulfide	0.889	0.841	5.4	80	-0.08
15	Methylene Chloride	0.399	0.413	-3.5	88	-0.07
16	Tert Butyl Alcohol	0.017	0.017	0.0	92	-0.07
17	trans-1,2-Dichloroethene	0.341	0.350	-2.6	87	-0.07
18	Acrylonitrile	0.095	0.078	17.9	73	-0.07
19	Methyl Tert Butyl Ether	0.581	0.562	3.3	87	-0.07
20	Hexane	0.312	0.315	-1.0	79	-0.08
21 P	1,1-Dichloroethane	0.440	0.464	-5.5	89	-0.07
22	Vinyl acetate	0.550	0.547	0.5	83	-0.07
23	Di-isopropyl ether	0.971	1.060	-9.2	93	-0.07
24	Ethyl tert-butyl ether	0.738	0.774	-4.9	90	-0.07
25	2,2-Dichloropropane	0.203	0.232	-14.3	95	-0.07
26	cis-1,2-Dichloroethene	0.302	0.324	-7.3	90	-0.08
27	2-Butanone	0.113	0.090	20.4#	74	-0.08
28	Bromochloromethane	0.143	0.149	-4.2	88	-0.08
29 C	Chloroform	0.358	0.387	-8.1	92	-0.08
30	Tetrahydrofuran	0.034	0.028	17.6	80	-0.08
31	1,1,1-Trichloroethane	0.208	0.224	-7.7	90	-0.08
32 S	Dibromofluoromethane	0.218	0.236	-8.3	93	-0.07
33	Cyclohexane	0.439	0.472	-7.5	85	-0.08
34	1,1-Dichloropropene	0.302	0.328	-8.6	90	-0.08
35	Carbon Tetrachloride	0.169	0.187	-10.7	91	-0.07
36 S	1,2-Dichloroethane-d4	0.165	0.169	-2.4	90	-0.08
37	Benzene	1.108	1.177	-6.2	91	-0.07
38	1,2-Dichloroethane	0.198	0.206	-4.0	86	-0.08
39	tert-amyl methyl ether	0.757	0.767	-1.3	90	-0.08
40	Trichloroethene	0.226	0.248	-9.7	93	-0.08
41	Methylcyclohexane	0.364	0.394	-8.2	87	-0.08
42 C	1,2-Dichloropropane	0.314	0.345	-9.9	94	-0.08

Continuing Calibration Summary

Job Number: T16448
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2318-CC2305
Lab FileID: F0079223.D

43	Dibromomethane	0.158	0.163	-3.2	88	-0.08
44	1,4-Dioxane	0.002	0.002	0.0	89	-0.08
45	Bromodichloromethane	0.304	0.332	-9.2	93	-0.08
46	2-Nitropropane	0.040	0.036	10.0	84	-0.08
47	2-Chloroethyl vinyl ether	0.125	0.110	12.0	76	-0.08
48	4-Methyl-2-pentanone	0.240	0.206	14.2	76	-0.08
49	cis-1,3-Dichloropropene	0.421	0.471	-11.9	95	-0.08
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	-0.08
51 S	Toluene-d8	1.098	1.138	-3.6	96	-0.08
52 C	Toluene	1.386	1.437	-3.7	94	-0.08
53	trans-1,3-Dichloropropene	0.391	0.405	-3.6	91	-0.07
54	1,1,2-Trichloroethane	0.283	0.284	-0.4	92	-0.08
55	Tetrachloroethene	0.294	0.324	-10.2	97	-0.09
56	2-hexanone	0.196	0.157	19.9	73	-0.08
57	1,3-Dichloropropane	0.599	0.582	2.8	89	-0.08
58	Dibromochloromethane	0.298	0.305	-2.3	93	-0.08
59	1,2-Dibromoethane	0.309	0.301	2.6	90	-0.08
60	1-Chlorohexane	0.495	0.527	-6.5	94	-0.08
61 P	Chlorobenzene	0.871	0.923	-6.0	96	-0.09
62	1,1,1,2-Tetrachloroethane	0.280	0.299	-6.8	96	-0.09
63 C	Ethylbenzene	1.478	1.578	-6.8	96	-0.09
64	m,p-Xylene	1.025	1.080	-5.4	94	-0.08
65	o-Xylene	1.070	1.152	-7.7	96	-0.08
66	Styrene	0.928	0.989	-6.6	93	-0.08
67 P	Bromoform	0.169	0.180	-6.5	91	-0.09
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	-0.09
69	Isopropylbenzene	2.941	3.019	-2.7	95	-0.08
70	Cyclohexanone	0.027	0.046	-70.4#	163	-0.10
71 S	4-Bromofluorobenzene	0.921	0.912	1.0	96	-0.09
72	Bromobenzene	0.867	0.917	-5.8	98	-0.09
73 P	1,1,2,2-Tetrachloroethane	1.120	1.007	10.1	89	-0.09
74	Trans-1,4-Dichloro-2-Butene	0.179	0.160	10.6	79	-0.10
75	1,2,3-Trichloropropane	0.247	0.233	5.7	90	-0.09
76	n-Propylbenzene	4.136	4.335	-4.8	95	-0.09
77	2-Chlorotoluene	2.591	2.658	-2.6	95	-0.09
78	4-Chlorotoluene	2.234	2.314	-3.6	95	-0.10
79	1,3,5-Trimethylbenzene	2.368	2.500	-5.6	95	-0.08
80	sec-Butylbenzene	3.140	3.327	-6.0	92	-0.09
81	1,3-Dichlorobenzene	1.400	1.523	-8.8	97	-0.09
82	4-Isopropyltoluene	2.312	2.458	-6.3	92	-0.09
83	1,4-Dichlorobenzene	1.435	1.494	-4.1	94	-0.09
84	tert-Butylbenzene	0.446	0.456	-2.2	92	-0.10
85	n-Butylbenzene	1.942	2.065	-6.3	85	-0.10
86	1,2-Dichlorobenzene	1.323	1.387	-4.8	93	-0.09
87	1,2,4-Trimethylbenzene	2.377	2.512	-5.7	94	-0.09
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	85	-0.09
89	1,2,4-Trichlorobenzene	0.370	0.322	13.0	72	-0.09
90	Hexachlorobutadiene	0.162	0.201	-24.1#	87	-0.10
91	Naphthalene	0.681	0.464	31.9#	69	-0.11
92	1,2,3-Trichlorobenzene	0.274	0.216	21.2#	70	-0.11

Average % D = 8.2

(#) = Out of Range
 F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 09 16:10:50 2007



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
Analyst: NS
Parameters: Cr

Date Analyzed: 02/28/07 Methods: SW846 6010B
Run ID: MA2815

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:29	MA2815-STD1	1		STDA
10:36	MA2815-STD2	1		STDC
10:42	MA2815-STD3	1		STDE
10:47	MA2815-STD4	1		STDB
10:53	MA2815-STD5	1		STDD
11:53	MA2815-HSTD1	1		
12:00	MA2815-ICV1	1		
12:06	MA2815-ICB1	1		
12:13	MA2815-CRIB1	1		
12:29	MA2815-ICSA1	1		
12:36	MA2815-ICSAB1	1		
12:44	MA2815-CCV1	1		
12:51	MA2815-CCB1	1		
12:57	MP5805-MB1	1		
13:04	MP5805-LC1	1		
13:11	T16368-10	1		(sample used for QC only; not part of login T16448)
13:17	MP5805-D1	1		
13:24	MP5805-SD1	5		
13:30	MP5805-S1	1		
13:37	MP5805-S2	1		
13:44	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:57	ZZZZZZ	1		
14:04	MA2815-CCV2	1		
14:10	MA2815-CCB2	1		
14:26	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:39	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:12	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
Analyst: NS
Parameters: Cr

Date Analyzed: 02/28/07 Methods: SW846 6010B
Run ID: MA2815

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:19	ZZZZZZ	1		
15:26	ZZZZZZ	1		
15:34	MA2815-CCV3	1		
15:42	MA2815-CCB3	1		
15:49	ZZZZZZ	1		
15:56	ZZZZZZ	1		
16:02	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:31	MA2815-CCV4	1		
16:39	MA2815-CCB4	1		
16:46	MP5797-MB1	1		
16:52	MP5797-B1	1		
16:59	T16390-1	1		(sample used for QC only; not part of login T16448)
17:05	MP5797-D1	1		
17:12	MP5797-SD1	5		
17:19	MP5797-S1	1		
17:25	MP5797-S2	1		
17:39	ZZZZZZ	1		
17:45	ZZZZZZ	1		
17:54	MA2815-CCV5	1		
18:02	MA2815-CCB5	1		
18:17	MA2815-CCV6	1		
18:25	MA2815-CCB6	1		
18:32	MP5798-MB1	1		
18:39	MP5798-B1	1		
18:45	T16386-1	1		(sample used for QC only; not part of login T16448)
18:52	MP5798-D1	1		
18:59	MP5798-SD1	5		
19:05	MP5798-S1	1		
19:12	MP5798-S2	1		
19:20	MA2815-CCV7	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
Analyst: NS Run ID: MA2815
Parameters: Cr

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:29	MA2815-CCB7	1		
19:35	ZZZZZZ	5		
19:42	ZZZZZZ	5		
19:50	MA2815-CCV8	1		
19:59	MA2815-CCB8	1		
20:05	MP5804-MB1	1		
20:12	MP5804-B1	1		
20:19	T16414-1	1		(sample used for QC only; not part of login T16448)
20:25	MP5804-D1	1		
20:32	MP5804-SD1	5		
20:38	MP5804-S1	1		
20:45	MP5804-S2	1		
20:52	T16448-3	1		
----->	Last reportable sample/			
20:58	ZZZZZZ	1		
21:05	ZZZZZZ	1		
21:13	MA2815-CCV9	1		
21:22	MA2815-CCB9	1		
----->	Last reportable CCB for job T16448			
21:28	ZZZZZZ	1		
21:37	MA2815-CCV10	1		
21:45	MA2815-CCB10	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
Analyst: NS
Parameters: Cr

Date Analyzed: 02/28/07 Methods: SW846 6010B
Run ID: MA2815

Time	Sample Description	Istd#1
10:29	MA2815-STD1	35191 R
10:36	MA2815-STD2	35110
10:42	MA2815-STD3	34622
10:47	MA2815-STD4	35248
10:53	MA2815-STD5	35473
11:53	MA2815-HSTD1	34726
12:00	MA2815-ICV1	35160
12:06	MA2815-ICB1	35577
12:13	MA2815-CRIB1	35176
12:29	MA2815-ICSA1	33297
12:36	MA2815-ICSAB1	32873
12:44	MA2815-CCV1	33774
12:51	MA2815-CCB1	33955
12:57	MP5805-MB1	34090
13:04	MP5805-LC1	38051
13:11	T16368-10	36813
13:17	MP5805-D1	36865
13:24	MP5805-SD1	34542
13:30	MP5805-S1	36557
13:37	MP5805-S2	36279
13:44	ZZZZZZ	36543
13:50	ZZZZZZ	36660
13:57	ZZZZZZ	36149
14:04	MA2815-CCV2	33600
14:10	MA2815-CCB2	33939
14:26	ZZZZZZ	36687
14:33	ZZZZZZ	36158
14:39	ZZZZZZ	36313
14:46	ZZZZZZ	36401
14:52	ZZZZZZ	37023
14:59	ZZZZZZ	36200
15:06	ZZZZZZ	35974
15:12	ZZZZZZ	36687

INTERNAL STANDARD SUMMARY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
Analyst: NS
Parameters: Cr

Date Analyzed: 02/28/07 Methods: SW846 6010B
Run ID: MA2815

Time	Sample Description	Istd#1
15:19	ZZZZZZ	36421
15:26	ZZZZZZ	33854
15:34	MA2815-CCV3	33805
15:42	MA2815-CCB3	34060
15:49	ZZZZZZ	34845
15:56	ZZZZZZ	35690
16:02	ZZZZZZ	36145
16:09	ZZZZZZ	35959
16:16	ZZZZZZ	35680
16:22	ZZZZZZ	34030
16:31	MA2815-CCV4	33871
16:39	MA2815-CCB4	34086
16:46	MP5797-MB1	34090
16:52	MP5797-B1	33470
16:59	T16390-1	33848
17:05	MP5797-D1	33681
17:12	MP5797-SD1	33959
17:19	MP5797-S1	33487
17:25	MP5797-S2	33229
17:39	ZZZZZZ	42590
17:45	ZZZZZZ	51777 !
17:54	MA2815-CCV5	33659
18:02	MA2815-CCB5	33977
18:17	MA2815-CCV6	33458
18:25	MA2815-CCB6	33868
18:32	MP5798-MB1	33829
18:39	MP5798-B1	33568
18:45	T16386-1	33446
18:52	MP5798-D1	33730
18:59	MP5798-SD1	33887
19:05	MP5798-S1	33609
19:12	MP5798-S2	33372
19:20	MA2815-CCV7	33902

INTERNAL STANDARD SUMMARY

Login Number: T16448
 Account: ITTXH0 - Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
 Analyst: NS
 Parameters: Cr

Date Analyzed: 02/28/07 Methods: SW846 6010B
 Run ID: MA2815

Time	Sample Description	Istd#1
19:29	MA2815-CCB7	34221
19:35	ZZZZZZ	34116
19:42	ZZZZZZ	33707
19:50	MA2815-CCV8	33395
19:59	MA2815-CCB8	33978
20:05	MP5804-MB1	33772
20:12	MP5804-B1	33325
20:19	T16414-1	34128
20:25	MP5804-D1	34110
20:32	MP5804-SD1	34179
20:38	MP5804-S1	33498
20:45	MP5804-S2	33745
20:52	T16448-3	33928
20:58	ZZZZZZ	33803
21:05	ZZZZZZ	33697
21:13	MA2815-CCV9	33632
21:22	MA2815-CCB9	33875
21:28	ZZZZZZ	33538
21:37	MA2815-CCV10	33698
21:45	MA2815-CCB10	33813

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
QC Limits: result < RL

Date Analyzed: 02/28/07
Run ID: MA2815

Methods: SW846 6010B
Units: ug/l

Time: Sample ID:			12:06 ICB1	12:51 CCB1		14:10 CCB2	15:42 CCB3			
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	51								
Antimony	5.0	1.8								
Arsenic	5.0	1.4	anr							
Barium	200	.1	anr							
Beryllium	5.0	.06								
Boron	100	1.4								
Cadmium	4.0	.5	anr							
Calcium	5000	8								
Chromium	10	.9	0.52	<10	-0.080	<10	-0.30	<10	-0.25	<10
Cobalt	50	.99								
Copper	25	1.4	anr							
Iron	100	16								
Lead	3.0	.7	anr							
Magnesium	5000	8								
Manganese	15	.2	anr							
Molybdenum	10	.45								
Nickel	40	1	anr							
Potassium	5000	80	anr							
Selenium	5.0	1.7	anr							
Silver	10	.5	anr							
Sodium	5000	160								
Strontium	20	.5								
Thallium	10	1.5								
Tin	20	1.5								
Titanium	20	.5								
Vanadium	50	.4	anr							
Zinc	20	.8	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
QC Limits: result < RL

Date Analyzed: 02/28/07
Run ID: MA2815

Methods: SW846 6010B
Units: ug/l

Time: Sample ID:			16:39 CCB4	18:02 CCB5		18:25 CCB6	19:29 CCB7			
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	51								
Antimony	5.0	1.8								
Arsenic	5.0	1.4	anr							
Barium	200	.1	anr							
Beryllium	5.0	.06								
Boron	100	1.4								
Cadmium	4.0	.5	anr							
Calcium	5000	8								
Chromium	10	.9	-0.11	<10	-0.79	<10	-0.67	<10	-0.090	<10
Cobalt	50	.99								
Copper	25	1.4	anr							
Iron	100	16								
Lead	3.0	.7	anr							
Magnesium	5000	8								
Manganese	15	.2	anr							
Molybdenum	10	.45								
Nickel	40	1	anr							
Potassium	5000	80	anr							
Selenium	5.0	1.7	anr							
Silver	10	.5	anr							
Sodium	5000	160								
Strontium	20	.5								
Thallium	10	1.5								
Tin	20	1.5								
Titanium	20	.5								
Vanadium	50	.4	anr							
Zinc	20	.8	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
QC Limits: result < RL

Date Analyzed: 02/28/07
Run ID: MA2815

Methods: SW846 6010B
Units: ug/l

Time: Sample ID:	RL	IDL	19:59 CCB8 raw	final	21:22 CCB9 raw	final
Metal						
Aluminum	200	51				
Antimony	5.0	1.8				
Arsenic	5.0	1.4	anr			
Barium	200	.1	anr			
Beryllium	5.0	.06				
Boron	100	1.4				
Cadmium	4.0	.5	anr			
Calcium	5000	8				
Chromium	10	.9	0.080	<10	-0.42	<10
Cobalt	50	.99				
Copper	25	1.4	anr			
Iron	100	16				
Lead	3.0	.7	anr			
Magnesium	5000	8				
Manganese	15	.2	anr			
Molybdenum	10	.45				
Nickel	40	1	anr			
Potassium	5000	80	anr			
Selenium	5.0	1.7	anr			
Silver	10	.5	anr			
Sodium	5000	160				
Strontium	20	.5				
Thallium	10	1.5				
Tin	20	1.5				
Titanium	20	.5				
Vanadium	50	.4	anr			
Zinc	20	.8	anr			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA2815 Units: ug/l

Time:		12:00		12:44		14:04	
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True
Aluminum							
Antimony							
Arsenic	anr						
Barium	anr						
Beryllium							
Boron							
Cadmium	anr						
Calcium							
Chromium	1000	997	99.7	2000	1980	99.0	2000
Cobalt							
Copper	anr						
Iron							
Lead	anr						
Magnesium							
Manganese	anr						
Molybdenum							
Nickel	anr						
Potassium	anr						
Selenium	anr						
Silver	anr						
Sodium							
Strontium							
Thallium							
Tin							
Titanium							
Vanadium	anr						
Zinc	anr						

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3
6

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA2815 Units: ug/l

Time: Sample ID:		15:34 CCV3		16:31 CCV4		17:54 CCV5				
Metal	CCV	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum										
Antimony										
Arsenic	anr									
Barium	anr									
Beryllium										
Boron										
Cadmium	anr									
Calcium										
Chromium	2000	1970	98.5	2000	1970	98.5	2000	1980	99.0	
Cobalt										
Copper	anr									
Iron										
Lead	anr									
Magnesium										
Manganese	anr									
Molybdenum										
Nickel	anr									
Potassium	anr									
Selenium	anr									
Silver	anr									
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium	anr									
Zinc	anr									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 02/28/07
Run ID: MA2815

Methods: SW846 6010B
Units: ug/l

Time: Sample ID:	CCV	18:17 CCV6		CCV	19:20 CCV7		CCV	19:50 CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	2000	1980	99.0	2000	1980	99.0	2000	1980	99.0
Cobalt									
Copper	anr								
Iron									
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA2815 Units: ug/l

Time:		21:13	
Sample ID:		CCV9	
Metal	CCV	Results	% Rec
Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Boron			
Cadmium	anr		
Calcium			
Chromium	2000	1990	99.5
Cobalt			
Copper	anr		
Iron			
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3
6

HIGH STANDARD CHECK SUMMARY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
QC Limits: 95 to 105 % Recovery Run ID: MA2815 Units: ug/l

Time:		11:53		
Sample ID:		HSTD	HSTD1	
Metal	True	Results	% Rec	
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	4000	4000	100.0	
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

(*) Outside of QC limits
(anr) Analyte not requested

6.1.4
6

INITIAL LOW CALIBRATION CHECK STANDARD SUMMARY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC Date Analyzed: 02/28/07 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA2815 Units: ug/l

Time: Sample ID: CRIB		12:13 CRIB1		
Metal	True	Results	% Rec	
Aluminum	400			
Antimony	10			
Arsenic	10			
Barium	400			
Beryllium	10			
Boron	200			
Cadmium	8.0			
Calcium	5000			
Chromium	20	20.3	101.5	
Cobalt	100			
Copper	50			
Iron	200			
Lead	6.0			
Magnesium	5000			
Manganese	30			
Molybdenum	10			
Nickel	80			
Potassium	5000			
Selenium	10			
Silver	20			
Sodium	5000			
Strontium	20			
Thallium	20			
Tin	20			
Titanium	20			
Vanadium	100			
Zinc	40			

(*) Outside of QC limits
(anr) Analyte not requested

6.1.5
6

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

File ID: IR022807.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 02/28/07
Run ID: MA2815

Methods: SW846 6010B
Units: ug/l

Time: Sample ID:	ICSA True	ICSAB True	12:29 ICSA1 Results	% Rec	12:36 ICSAB1 Results	% Rec
Metal						
Aluminum	500000	500000	455000	91.0	455000	91.0
Antimony		1000	0.31		1030	103.0
Arsenic		500	1.3		526	105.2
Barium		500	4.2		555	111.0
Beryllium		500	-0.34		510	102.0
Boron			-41		-40	
Cadmium		1000	-1.2		959	95.9
Calcium	500000	500000	482000	96.4	475000	95.0
Chromium		500	1.3		520	104.0
Cobalt		500	-0.86		504	100.8
Copper		500	1.4		574	114.8
Iron	200000	200000	189000	94.5	186000	93.0
Lead		500	2.7		515	103.0
Magnesium	500000	500000	459000	91.8	456000	91.2
Manganese		500	-7.1		517	103.4
Molybdenum		500	0.36		496	99.2
Nickel		1000	1.7		966	96.6
Potassium			511		492	
Selenium		500	-3.0		505	101.0
Silver		1000	0.16		1100	110.0
Sodium			-340		-350	
Strontium			0.53		0.44	
Thallium		500	-1.3		500	100.0
Tin			-8.9		-9.3	
Titanium			0.020		-0.11	
Vanadium		500	3.8		519	103.8
Zinc		1000	-3.3		1060	106.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

QC Batch ID: MP5804
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 02/27/07

Metal	RL	IDL	MB raw	final
Aluminum	200	51		
Antimony	5.0	1.8		
Arsenic	5.0	1.4	anr	
Barium	200	.1	anr	
Beryllium	5.0	.06		
Boron	100	1.4		
Cadmium	4.0	.5	anr	
Calcium	5000	8		
Chromium	10	.9	-0.12	<10
Cobalt	50	.99		
Copper	25	1.4	anr	
Iron	100	16		
Lead	3.0	.7	anr	
Magnesium	5000	8		
Manganese	15	.2	anr	
Molybdenum	10	.45		
Nickel	40	1	anr	
Potassium	5000	80		
Selenium	5.0	1.7	anr	
Silver	10	.5	anr	
Sodium	5000	160		
Strontium	20	.5		
Thallium	10	1.5		
Tin	20	1.5		
Titanium	20	.5		
Vanadium	50	.4	anr	
Zinc	20	.8	anr	

Associated samples MP5804: T16448-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T16448
 Account: ITTXH0 - Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

QC Batch ID: MP5804
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date:

02/27/07

02/27/07

Metal	T16414-1 Original	DUP	RPD	QC Limits	T16414-1 Original	MS	Spikelot MPTW3	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	0.0	0.0	NC	0-20	0.0	397	400	99.3	75-125
Cobalt									
Copper	anr								
Iron									
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP5804: T16448-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T16448
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

QC Batch ID: MP5804
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 02/27/07

Metal	BSP Result	Spikelot MPTW3	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	407	400	101.8	80-120
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5804: T16448-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN11375	5.0	<5.0	mg/l	2500	2500	100.0	80-120%
Chloride	GN11343	1.0	<1.0	mg/l	xxxxxxx	1020	102.0	92-107%
Nitrogen, Nitrate + Nitrite	GN11301	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrite	GN11300	0.050	<0.050	mg/l	0.500	0.49	98.0	89-117%
Sulfate	GN11356	10	<10	mg/l	100	95.0	95.0	80-120%
Sulfate	GN11356			mg/l	xxxxxxx		*	80-120%
Sulfide	GN11313	0.20	<0.20	mg/l	1600	1380	85.0	80-120%
Total Organic Carbon	GN11304	1.0	<1.0	mg/l	25.0	26.0	104.0	83-110%

Associated Samples:
Batch GN11300: T16448-1
Batch GN11301: T16448-1
Batch GN11304: T16448-1, T16448-2
Batch GN11313: T16448-1
Batch GN11343: T16448-1
Batch GN11356: T16448-1
Batch GN11375: T16448-1
(*) Outside of QC limits

7.1
7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN11375	T16445-5	mg/l	457	457	0.0	0-10%
Chloride	GN11343	T16445-5	mg/l	253	258	2.0	0-5%
Nitrogen, Nitrate + Nitrite	GN11301	T16445-18	mg/l	2.7	2.7	0.0	0-10%
Nitrogen, Nitrite	GN11300	T16445-18	mg/l	0.0030 U	<0.050	0.0	0-10%
Sulfate	GN11356	T16448-1	mg/l	403	436	7.8	0-20%
Sulfide	GN11313	T16445-5	mg/l	0.0 B	<0.20	0.0	0-20%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	6.0	0.0	0-11%
pH	GN11334	T16448-1	su	7.1	7.1	0.0	0-6.8%
pH	GN11334	T16448-1	su	7.1	7.1	0.0	0-20%

Associated Samples:
Batch GN11300: T16448-1
Batch GN11301: T16448-1
Batch GN11304: T16448-1, T16448-2
Batch GN11313: T16448-1
Batch GN11334: T16448-1
Batch GN11343: T16448-1
Batch GN11356: T16448-1
Batch GN11375: T16448-1
(*) Outside of QC limits

7.2
7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16448
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN11375	T16445-5	mg/l	457	125	590	106.0	79-122%
Chloride	GN11343	T16445-5	mg/l	253	xxxxxxx	462	104.0	81-119%
Nitrogen, Nitrate + Nitrite	GN11301	T16445-18	mg/l	2.7	1.00	3.7	100.0	80-119%
Nitrogen, Nitrite	GN11300	T16445-18	mg/l	0.0030 U	0.100	0.094	94.0	75-134%
Sulfate	GN11356	T16448-1	mg/l	403	250	641	96.0	75-125%
Sulfate	GN11356	T16448-1	mg/l	403	xxxxxxx		*	75-125%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	10.0	16.0	100.0	74-121%

Associated Samples:
Batch GN11300: T16448-1
Batch GN11301: T16448-1
Batch GN11304: T16448-1, T16448-2
Batch GN11343: T16448-1
Batch GN11356: T16448-1
Batch GN11375: T16448-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.3
7



IT'S ALL IN THE CHEMISTRY

Section 8

Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody



00093408

Page 1 of 1

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # T16448

[illegible]

Accutest Laboratories Southeast, Inc.

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

00093409

ACCUTEST'S JOB NUMBER: T16448 CLIENT: ALGC PROJECT: T16448
 DATE/TIME RECEIVED: 02-28-07 09:30 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 1.8
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7986 1726 3905

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OR LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS: FOR SAMPLE #2 FOR 8330 ANALYSIS BOTTLE RECEIVED
ONLY 500ML

SAMPLE INFORMATION

- ☐ SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
 - ☐ CORRECT NUMBER OF CONTAINERS USED
 - ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
 - ☐ INSUFFICIENT VOLUME FOR ANALYSIS
 - ☐ TIMES ON COC DOES NOT MATCH LABEL(S)
 - ☐ ID'S ON COC DOES NOT MATCH LABEL(S)
 - ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
 - ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
 - ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
 - ☐ UNCLEAR FILTERING INSTRUCTIONS
 - ☐ UNCLEAR COMPOSITING INSTRUCTIONS
 - ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
 - ☐ % SOLIDS JAR NOT RECEIVED
 - ☐ 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
 - ☐ RESIDUAL CHLORINE PRESENT
- (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE W. J. V. 02-28-07 TECHNICIAN SIGNATURE/DATE [Signature] 02-28-07 ASD 10/03/06

T16448: Chain of Custody

Page 2 of 2



GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY996-MB	XY025325.D	1	03/08/07	TD	n/a	n/a	GXY996

The QC reported here applies to the following samples: Method: RSKSOP-147/175
T16448-1, T16448-2

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.30	ug/l	
74-84-0	Ethane	ND	1.0	0.60	ug/l	
74-85-1	Ethene	ND	1.0	0.80	ug/l	

Blank Spike Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY996-BS	XY025326.D	1	03/08/07	TD	n/a	n/a	GXY996

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16448-1, T16448-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	108	137	127	54-149
74-84-0	Ethane	219	273	125	57-143
74-85-1	Ethene	290	353	122	57-143

Matrix Spike Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F47731-7MS	XY025345.D 1		03/08/07	TD	n/a	n/a	GXY996
F47731-7 ^a	XY025344.D 1		03/08/07	TD	n/a	n/a	GXY996

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16448-1, T16448-2

CAS No.	Compound	F47731-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	9.31	108	166	145	54-149
74-84-0	Ethane	ND	219	334	153*	57-143
74-85-1	Ethene	ND	290	435	150*	57-143

(a) Confirmation run.

Duplicate Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F47769-9DUP	XY025351.D 1		03/08/07	TD	n/a	n/a	GXY996
F47769-9	XY025350.D 1		03/08/07	TD	n/a	n/a	GXY996

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16448-1, T16448-2

CAS No.	Compound	F47769-9 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	ND	ND		nc	24
74-84-0	Ethane	ND	ND		nc	23
74-85-1	Ethene	ND	ND		nc	10

Initial Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICC995
Lab FileID: XY025305.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Mar 08 08:31:33 2007
Response via : Initial Calibration

Calibration Files

1 =XY025301.D 2 =XY025302.D 3 =XY025304.D 4 =XY025303.D
 5 =XY025305.D 6 =XY025306.D 7 =XY025307.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)c Methane	1.256	2.507	1.576	0.832	1.293	0.961	1.016	1.349 E4	42.09#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9983									
Response Ratio = 0.00000 + 10071.12721 *A									
2)c Ethylene	2.402	4.239	2.629	1.419	2.516	1.854	1.947	2.429 E4	37.22#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9982									
Response Ratio = 0.00000 + 19323.23175 *A									
3)c Ethane	2.241	3.960	2.584	1.355	2.483	1.825	1.918	2.338 E4	35.47#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9981									
Response Ratio = 0.00000 + 19028.53933 *A									

 (#) = Out of Range

RSK147XY.M

Thu Mar 08 08:36:38 2007

Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICV995
Lab FileID: XY025308.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030707\XY025308.D Vial: 100
 Acq On : 7 Mar 2007 2:55 pm Operator: Trangd
 Sample : ICV995-1000 Inst : VOA5
 Misc : gc7128,gxy995,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Mar 08 08:31:33 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	950.295	5.0	74	-0.06	1.13	1.73
2 c Ethylene	1000.000	962.910	3.7	74	-0.03	2.85	3.65
3 c Ethane	1000.000	991.839	0.8	76	-0.03	3.48	4.28

(#) = Out of Range
 XY025305.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 08 08:35:31 2007

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY996-CC995
Lab FileID: XY025323.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030807\XY025323.D Vial: 100
 Acq On : 8 Mar 2007 8:42 am Operator: Trangd
 Sample : CC995-1000 Inst : VOA5
 Misc : gc7128,gxy996,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Fri Mar 09 08:55:16 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	957.766	4.2	75	0.04	1.09	1.69
2 c Ethylene	1000.000	988.131	1.2	76	0.07	2.80	3.60
3 c Ethane	1000.000	983.846	1.6	75	0.08	3.43	4.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 XY025305.D RSK147XY.M Fri Mar 09 09:33:39 2007

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY996-CC995
Lab FileID: XY025334.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030807\XY025334.D Vial: 100
 Acq On : 8 Mar 2007 11:32 am Operator: Trangd
 Sample : CC995-500 Inst : VOA5
 Misc : gc7128,gxy996,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Fri Mar 09 08:55:16 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	500.000	435.207	13.0	105	0.00	1.09-	1.69
2 c Ethylene	500.000	443.798	11.2	121	0.00	2.80-	3.60
3 c Ethane	500.000	437.136	12.6	123	0.00	3.43-	4.23

(#) = Out of Range
 XY025303.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 09 09:34:49 2007

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY996-CC995
Lab FileID: XY025346.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030807\XY025346.D Vial: 100
 Acq On : 8 Mar 2007 4:17 pm Operator: Trangd
 Sample : CC995-1000 Inst : VOA5
 Misc : gc7142,gxy996,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Fri Mar 09 08:55:16 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	1110.796	-11.1	87	0.00	1.09-	1.69
2 c Ethylene	1000.000	1155.448	-15.5	89	0.00	2.80-	3.60
3 c Ethane	1000.000	1156.356	-15.6	89	0.00	3.43-	4.23

(#) = Out of Range
 XY025305.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 09 09:33:39 2007

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY996-ECC995
Lab FileID: XY025352.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030807\XY025352.D Vial: 100
 Acq On : 8 Mar 2007 5:34 pm Operator: Trangd
 Sample : ECC995-1000 Inst : VOA5
 Misc : gc7142,gxy996,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Fri Mar 09 08:55:16 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	1104.999	-10.5	86	0.00	1.09-	1.69
2 c Ethylene	1000.000	1148.251	-14.8	88	0.01	2.80-	3.60
3 c Ethane	1000.000	1151.972	-15.2	88	0.01	3.43-	4.23

(#) = Out of Range
 XY025305.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 09 09:33:40 2007



GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020203.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16448-2

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	102% 70-136%

10.1
10

Method Blank Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020233.D 1		03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16448-2

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	80% 70-136%

10.1
10

Blank Spike Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020202.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16448-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.3	106	74-152
121-82-4	RDX	5	5.4	108	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.3	106	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	5.5	110	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.2	104	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.3	106	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.3	106	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	124%	70-136%

Blank Spike Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020232.D	1	03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16448-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.9	118	74-152
121-82-4	RDX	5	5.5	110	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.1	102	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	6.4	128	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.3	106	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.5	110	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.7	114	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	70-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MS	GG020207.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
OP19677-MSD	GG020208.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
F47539-3	GG020206.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16448-2

CAS No.	Compound	F47539-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	ND	10	11.0	110	11.8	118	7	74-152/21
121-82-4	RDX	ND	10	10.3	103	10.7	107	4	80-124/20
99-65-0	1,3-Dinitrobenzene	ND	10	10.3	103	10.9	109	6	84-123/23
606-20-2	2,6-Dinitrotoluene	ND	10	9.9	99	10.6	106	7	84-133/23
121-14-2	2,4-Dinitrotoluene	ND	10	9.7	97	10.3	103	6	77-116/26
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	10	9.4	94	10.5	105	11	78-117/28
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	10	9.1	91	10.2	102	11	84-123/27
98-95-3	Nitrobenzene	ND	10	10.5	105	11.1	111	6	76-128/28
88-72-2	o-Nitrotoluene	ND	10	9.3	93	10.2	102	9	76-120/30
99-08-1	m-Nitrotoluene	ND	10	9.5	95	10.6	106	11	74-124/32
99-99-0	p-Nitrotoluene	ND	10	9.7	97	10.7	107	10	81-125/34
479-45-8	Tetryl	ND	10	7.4	74	7.9	79	7	62-117/28
99-35-4	1,3,5-Trinitrobenzene	ND	10	9.8	98	10.4	104	6	85-127/21
118-96-7	2,4,6-Trinitrotoluene	ND	10	9.8	98	10.4	104	6	71-128/21

CAS No.	Surrogate Recoveries	MS	MSD	F47539-3	Limits
610-39-9	3,4-Dinitrotoluene	94%	98%	102%	70-136%

10.3
10

Semivolatile Surrogate Recovery Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Method: SW846 8330A	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
T16448-2	GG020223.D	95.0
OP19677-BS	GG020202.D	124.0
OP19677-BS	GG020232.D	100.0
OP19677-MB	GG020203.D	102.0
OP19677-MB	GG020233.D	80.0
OP19677-MS	GG020207.D	94.0
OP19677-MSD	GG020208.D	98.0

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

10.4
10

GC Surrogate Retention Time Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020201.D	Injection Time:	16:17
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP19677-BS	GG020202.D	03/02/07	16:45	13.49
OP19677-MB	GG020203.D	03/02/07	17:12	13.50
ZZZZZZ	GG020204.D	03/02/07	17:27	13.50
ZZZZZZ	GG020205.D	03/02/07	17:54	13.50
F47539-3	GG020206.D	03/02/07	18:22	13.49
OP19677-MS	GG020207.D	03/02/07	18:50	13.47
OP19677-MSD	GG020208.D	03/02/07	19:17	13.46
ZZZZZZ	GG020209.D	03/02/07	19:45	13.47
ZZZZZZ	GG020210.D	03/02/07	20:12	13.44
ZZZZZZ	GG020211.D	03/02/07	20:40	13.43

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

10.5
10

GC Surrogate Retention Time Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020212.D	Injection Time:	21:07
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
ZZZZZZ	GG020214.D	03/02/07	22:03	13.44
ZZZZZZ	GG020215.D	03/02/07	22:30	13.42
ZZZZZZ	GG020216.D	03/02/07	22:58	13.43
ZZZZZZ	GG020217.D	03/02/07	23:25	13.43
ZZZZZZ	GG020218.D	03/02/07	23:53	13.43
ZZZZZZ	GG020219.D	03/03/07	00:20	13.40
ZZZZZZ	GG020220.D	03/03/07	00:48	13.42
ZZZZZZ	GG020221.D	03/03/07	01:16	13.43
ZZZZZZ	GG020222.D	03/03/07	01:43	13.41
T16448-2	GG020223.D	03/03/07	02:11	13.42

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

10.5
10

GC Surrogate Retention Time Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG907-CC827	Injection Date:	03/05/07
Lab File ID:	GG020231.D	Injection Time:	13:23
Instrument ID:	GCGG	Method:	SW846 8330A

S1^a S1^b
RT RT

Check Std	10.72	10.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP19677-BS	GG020232.D	03/05/07	13:43	10.72	
OP19677-MB	GG020233.D	03/05/07	14:02	10.72	
ZZZZZZ	GG020234.D	03/05/07	14:22	10.72	
ZZZZZZ	GG020236.D	03/05/07	15:01	10.71	
GGG907-ECC827	GG020238.D	03/05/07	15:40	10.72	10.72

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

10.5
10

Initial Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICC825
Lab FileID: GG018282.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Initial Calibration

Calibration Files

20 =GG018279.D 100 =GG018280.D 250 =GG018281.D 500 =GG018282.D
 750 =GG018283.D 1000=GG018284.D 2000=GG018285.D ICV =GG018286.D

Compound	20	100	250	500	750	1000	2000	ICV	Avg	%RSD
1) HMX	2.870	2.789	2.757	2.694	2.719	2.735	2.786		2.764	E3 2.09
2) TNX	5.916	6.424	6.486	6.331	6.453	6.468	6.587		6.381	E3 3.43
3) DNX	4.900	5.156	5.125	4.986	5.037	5.057	5.155		5.059	E3 1.88
4) MNX	4.909	4.991	4.972	4.807	4.886	4.901	4.995		4.923	E3 1.38
5) RDX	3.185	3.565	3.625	3.500	3.554	3.547	3.609		3.512	E3 4.27
6) 1,3,5-Trinit	7.763	7.813	7.689	7.436	7.595	7.612	7.763		7.667	E3 1.70
7) 1,3-Dinitrob	1.069	1.070	1.060	1.029	1.047	1.051	1.071		1.057	E4 1.49
8) Tetryl	6.130	6.168	6.180	6.004	6.091	6.096	6.221		6.127	E3 1.17
9) Nitrobenzene	7.057	7.032	7.019	6.708	6.915	6.920	7.082		6.962	E3 1.85
10) 3,4-Dinitrot	4.667	4.752	4.687	4.537	4.621	4.631	4.731		4.661	E3 1.56
11) 2,4,6-Trinit	7.275	7.409	7.373	7.143	7.282	7.301	7.456		7.320	E3 1.42
12) 4-Amino-2,6-	5.266	5.304	5.264	5.117	5.194	5.220	5.330		5.242	E3 1.37
13) 2-Amino-4,6-	7.249	7.203	7.187	7.006	7.130	7.155	7.311		7.177	E3 1.35
14) 2,6-Dinitrot	5.524	5.133	5.010	4.844	4.942	4.954	5.071		5.068	E3 4.37
15) 2,4-Dinitrot	1.149	1.009	0.992	0.958	0.976	0.978	0.999		1.009	E4 6.36
16) o-Nitrotolue	5.044	4.558	4.542	4.244	4.403	4.414	4.516		4.532	E3 5.53
17) p-Nitrotolue	4.102	3.815	3.790	3.596	3.734	3.734	3.831		3.800	E3 4.06
18) m-Nitrotolue	4.959	4.808	4.856	4.629	4.803	4.812	4.942		4.830	E3 2.26

Signal #2

1) HMX	8.151	8.148	8.190	8.012	8.090	8.092	8.238		8.132	E3 0.91
2) TNX	0.956	0.980	0.995	0.969	0.984	0.985	1.001		0.981	E4 1.55
3) DNX	7.525	8.044	8.332	7.974	7.996	7.991	8.136		8.000	E3 3.05
4) MNX	7.756	7.781	7.940	7.696	7.742	7.746	7.895		7.794	E3 1.14
5) RDX	4.720	5.727	5.947	5.855	5.997	5.944	6.042		5.748	E3 8.08
6) 1,3,5-Trinit	1.479	1.619	1.553	1.513	1.538	1.540	1.572		1.545	E4 2.85
7) 1,3-Dinitrob	1.225	1.286	1.279	1.246	1.265	1.272	1.295		1.267	E4 1.91
8) Tetryl	1.037	1.106	1.123	1.092	1.106	1.105	1.129		1.100	E4 2.76
9) Nitrobenzene	3.263	3.394	3.343	3.176	3.205	3.190	3.274		3.264	E3 2.50
10) 3,4-Dinitrot	6.324	6.522	6.468	6.218	6.242	6.243	6.394		6.344	E3 1.89
11) 2,4,6-Trinit	1.070	1.106	1.085	1.048	1.060	1.064	1.089		1.075	E4 1.85
12) 4-Amino-2,6-	1.430	1.457	1.434	1.391	1.407	1.413	1.444		1.425	E4 1.62
13) 2-Amino-4,6-	1.240	1.240	1.201	1.171	1.189	1.194	1.223		1.208	E4 2.20
14) 2,6-Dinitrot	8.005	7.244	6.878	6.645	6.758	6.778	6.958		7.038	E3 6.64
15) 2,4-Dinitrot	1.102	0.930	0.906	0.880	0.888	0.892	0.911		0.930	E4 8.36
16) o-Nitrotolue	5.194	4.804	4.848	4.493	4.691	4.697	4.799		4.789	E3 4.46
17) p-Nitrotolue	7.934	7.544	7.631	7.143	7.472	7.477	7.640		7.549	E3 3.15
18) m-Nitrotolue	6.835	7.097	7.192	6.782	7.103	7.117	7.290		7.060	E3 2.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

8330_EX.M

Fri Oct 20 16:25:52 2006

Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1A.ch
 Acq On : 18-Oct-2006, 17:39:03 Operator: MIKEE
 Sample : ICV825-500 Inst : G1315B
 Misc : OP18202,ggg825,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Oct 19 11:32:41 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	531.119	-6.2	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	507.091	-1.4	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.853	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	523.924	-4.8	0	0.00	10.38-	11.38
8	Tetryl	500.000	484.365	3.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.046	-6.2	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	507.486	-1.5	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	515.885	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.846	3.8	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	496.634	0.7	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	502.401	-0.5	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	501.204	-0.2	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	520.375	-4.1	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	509.118	-1.8	0	0.00	22.61-	23.61

***** Signal #2 *****

1	HMX	500.000	537.899	-7.6	0	0.00	3.83-	4.83
2	TNX			-----NA-----				
3	DNX			-----NA-----				
4	MXN			-----NA-----				
5	RDX	500.000	525.299	-5.1	0	0.00	6.10-	7.10
6	1,3,5-Trinitrobenzene	500.000	533.889	-6.8	0	0.00	8.41-	9.41
7	1,3-Dinitrobenzene	500.000	529.524	-5.9	0	0.00	10.38-	11.38
8	Tetryl	500.000	489.295	2.1	0	0.00	11.18-	12.18
9	Nitrobenzene	500.000	531.782	-6.4	0	0.00	11.86-	12.86
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene	500.000	505.844	-1.2	0	0.00	13.56-	14.56
12	4-Amino-2,6-Dinitrotol	500.000	516.203	-3.2	0	0.00	14.25-	15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.458	3.9	0	0.00	15.03-	16.03
14	2,6-Dinitrotoluene	500.000	493.423	1.3	0	0.00	16.01-	17.01
15	2,4-Dinitrotoluene	500.000	499.987	0.0	0	0.00	16.52-	17.52
16	o-Nitrotoluene	500.000	503.639	-0.7	0	0.00	19.59-	20.59
17	p-Nitrotoluene	500.000	523.730	-4.7	0	0.00	20.92-	21.92
18	m-Nitrotoluene	500.000	512.492	-2.5	0	0.00	22.61-	23.61

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Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:26:22 2006

10.6
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Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1B.ch Vial: 4
Signal #2 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1A.ch
Acq On : 19-Oct-2006, 13:44:13 Operator: MIKEE
Sample : ICV825-500 Inst : G1315B
Misc : OP18222,ggg826,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX			-----NA-----				
2	TNX	500.000	514.364	-2.9	0	0.00	4.15-	5.15
3	DNX	500.000	511.166	-2.2	0	0.00	4.58-	5.58
4	MXN	500.000	518.059	-3.6	0	-0.01	5.34-	6.34
5	RDX			-----NA-----				
6	1,3,5-Trinitrobenzene			-----NA-----				
7	1,3-Dinitrobenzene			-----NA-----				
8	Tetryl			-----NA-----				
9	Nitrobenzene			-----NA-----				
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene			-----NA-----				
12	4-Amino-2,6-Dinitrotoluen			-----NA-----				
13	2-Amino-4,6-Dinitrotoluen			-----NA-----				
14	2,6-Dinitrotoluene			-----NA-----				
15	2,4-Dinitrotoluene			-----NA-----				
16	o-Nitrotoluene			-----NA-----				
17	p-Nitrotoluene			-----NA-----				
18	m-Nitrotoluene			-----NA-----				

***** Signal #2 *****

1	HMX			-----NA-----				
2	TNX	500.000	509.991	-2.0	0	0.00	4.15-	5.15
3	DNX	500.000	523.209	-4.6	0	0.00	4.58-	5.58
4	MXN	500.000	527.451	-5.5	0	-0.01	5.34-	6.34
5	RDX			-----NA-----				
6	1,3,5-Trinitrobenzene			-----NA-----				
7	1,3-Dinitrobenzene			-----NA-----				
8	Tetryl			-----NA-----				
9	Nitrobenzene			-----NA-----				
10 S	3,4-Dinitrotoluene			-----NA-----				
11	2,4,6-Trinitrotoluene			-----NA-----				
12	4-Amino-2,6-Dinitrotoluen			-----NA-----				
13	2-Amino-4,6-Dinitrotoluen			-----NA-----				
14	2,6-Dinitrotoluene			-----NA-----				
15	2,4-Dinitrotoluene			-----NA-----				
16	o-Nitrotoluene			-----NA-----				
17	p-Nitrotoluene			-----NA-----				
18	m-Nitrotoluene			-----NA-----				

10.6 10

Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:54:56 2006

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Initial Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICC827
Lab FileID: GG018316.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Initial Calibration

Calibration Files

20 =GG018313.D 100 =GG018314.D 250 =GG018315.D 500 =GG018316.D
750 =GG018317.D 1000=GG018318.D 2000=GG018319.D

Compound	20	100	250	500	750	1000	2000	Avg	%RSD
1) TNX	6.022	6.861	7.022	6.686	6.915	6.925	7.121	6.793 E3	5.38
2) HMX	2.976	2.856	2.642	2.478	2.489	2.481	2.586	2.644 E3	7.51
3) DNx	5.820	5.904	5.816	5.437	5.628	5.545	5.823	5.710 E3	3.05
4) MNX	4.717	4.981	5.224	5.007	5.063	4.976	5.294	5.037 E3	3.73
5) 1,3,5-Trinitroben	7.302	7.899	8.123	7.797	7.946	7.847	8.236	7.879 E3	3.78
6) RDX	3.327	3.935	3.881	3.729	3.710	3.686	3.841	3.730 E3	5.39
7) 1,3-Dinitrobenzen	1.122	1.117	1.144	1.096	1.117	1.113	1.146	1.122 E4	1.56
8) Nitrobenzene	6.720	7.206	7.440	7.104	7.286	7.290	7.513	7.223 E3	3.61
9) 2,4,6-Trinitrotol	7.126	7.674	7.812	7.517	7.651	7.587	7.941	7.615 E3	3.39
10) Tetryl	5.119	5.755	6.124	6.105	6.006	5.862	6.470	5.920 E3	7.10
11)S 3,4-Dinitrotoluen	4.973	4.941	4.969	4.829	4.912	4.883	5.055	4.938 E3	1.46
12) 2,6-Dinitrotoluen	6.023	5.649	5.657	5.415	5.544	5.538	5.672	5.643 E3	3.38
13) 2,4-Dinitrotoluen	1.200	1.036	1.034	0.995	1.012	1.007	1.038	1.046 E4	6.68
14) o-Nitrotoluene	5.021	4.648	4.729	4.526	4.679	4.666	4.837	4.729 E3	3.36
15) p-Nitrotoluene	4.036	3.890	3.967	3.762	3.919	3.914	4.051	3.934 E3	2.49
16) 4-Amino-2,6-Dinit	5.109	5.368	5.518	5.300	5.406	5.380	5.621	5.386 E3	3.01
17) m-Nitrotoluene	4.743	4.946	5.173	4.937	5.131	5.119	5.324	5.053 E3	3.79
18) 2-Amino-4,6-Dinit	7.249	7.503	7.692	7.547	7.548	7.525	7.845	7.558 E3	2.42

Signal #2

1) TNX	0.828	1.032	1.066	1.024	1.037	1.032	1.073	1.013 E4	8.25
2) HMX	8.967	9.716	9.270	8.345	8.192	8.095	8.326	8.702 E3	7.15
3) DNx	0.786	1.108	1.019	0.937	0.919	0.897	0.935	0.943 E4	10.65
4) MNX	7.457	8.346	8.580	8.147	8.087	7.895	8.399	8.130 E3	4.58
5) 1,3,5-Trinitroben	1.449	1.617	1.667	1.594	1.616	1.593	1.673	1.601 E4	4.64
6) RDX	6.077	6.386	6.563	6.283	6.229	6.181	6.460	6.311 E3	2.67
7) 1,3-Dinitrobenzen	1.294	1.326	1.427	1.333	1.365	1.364	1.397	1.358 E4	3.31
8) Nitrobenzene	3.190	3.096	3.823	3.281	3.391	3.385	3.476	3.378 E3	6.96
9) 2,4,6-Trinitrotol	1.098	1.109	1.152	1.104	1.122	1.113	1.169	1.124 E4	2.37
10) Tetryl	0.953	1.028	1.114	1.113	1.085	1.059	1.177	1.075 E4	6.67
11)S 3,4-Dinitrotoluen	6.832	6.775	6.813	6.648	6.692	6.629	6.906	6.756 E3	1.53
12) 2,6-Dinitrotoluen	8.344	7.760	7.758	7.423	7.578	7.556	7.765	7.740 E3	3.83
13) 2,4-Dinitrotoluen	1.104	0.941	0.942	0.911	0.927	0.919	0.952	0.957 E4	6.94
14) o-Nitrotoluene	3.189	2.755	2.867	2.791	2.895	2.880	3.025	2.915 E3	5.09
15) p-Nitrotoluene	2.114	1.879	1.907	1.825	1.916	1.926	1.998	1.938 E3	4.82
16) 4-Amino-2,6-Dinit	1.431	1.486	1.522	1.459	1.490	1.484	1.552	1.489 E4	2.66
17) m-Nitrotoluene	2.353	2.391	2.516	2.444	2.546	2.567	2.681	2.500 E3	4.52
18) 2-Amino-4,6-Dinit	1.233	1.258	1.276	1.258	1.253	1.255	1.311	1.263 E4	1.92

(#) = Out of Range

8330_RP.M

Mon Oct 23 13:34:29 2006

Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1B.ch Vial: 10
Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1A.ch
Acq On : 20-Oct-2006, 14:03:23 Operator: MIKEE
Sample : ICV827-250 Inst : G1315B
Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	250.000	258.384	-3.4	100	0.00	4.21-	5.21
2	HMX	250.000	260.989	-4.4	104	0.00	4.69-	5.69
3	DNX	250.000	254.013	-1.6	100	0.00	4.83-	5.83
4	MXN	250.000	255.142	-2.1	98	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	264.789	-5.9	103	0.00	6.12-	7.12
6	RDX	250.000	252.023	-0.8	97	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	257.308	-2.9	101	0.00	7.70-	8.70
8	Nitrobenzene	250.000	266.121	-6.4	103	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	268.228	-7.3	105	0.00	8.71-	9.71
10	Tetryl	250.000	205.504	17.8#	79	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	254.196	-1.7	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	244.946	2.0	99	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	248.278	0.7	99	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	258.872	-3.5	103	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	250.000	255.921	-2.4	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	252.478	-1.0	99	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	250.000	236.039	5.6	93	0.00	14.31-	15.31

***** Signal #2 *****

1	TNX	250.000	262.147	-4.9	100	0.00	4.22-	5.22
2	HMX	250.000	276.033	-10.4	104	0.00	4.69-	5.69
3	DNX	250.000	263.149	-5.3	97	0.00	4.83-	5.83
4	MXN	250.000	255.967	-2.4	97	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	265.613	-6.2	102	0.00	6.12-	7.12
6	RDX	250.000	248.723	0.5	96	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	276.649	-10.7	105	0.00	7.70-	8.70
8	Nitrobenzene	250.000	301.148	-20.5#	106	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	269.121	-7.6	105	0.00	8.71-	9.71
10	Tetryl	250.000	203.173	18.7#	78	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	252.008	-0.8	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	241.694	3.3	98	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	241.466	3.4	98	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	250.555	-0.2	102	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	250.000	255.253	-2.1	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	250.572	-0.2	100	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	250.000	234.881	6.0	93	0.00	14.31-	15.31

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Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018315.D 8330_RP.M Mon Oct 23 13:35:35 2006

10.6
10

Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1B.ch Vial: 100
Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018321.D\dad1A.ch
Acq On : 20-Oct-2006, 15:10:45 Operator: MIKEE
Sample : ICV827-500 Inst : G1315B
Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	565.302	-13.1	115	0.00	4.21-	5.21
2	HMX	500.000	543.872	-8.8	116	0.00	4.69-	5.69
3	DNX	500.000	551.643	-10.3	116	-0.01	4.83-	5.83
4	MXN	500.000	572.618	-14.5	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	538.163	-7.6	109	0.00	6.12-	7.12
6	RDX	500.000	498.936	0.2	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	510.060	-2.0	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	533.993	-6.8	109	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.178	-9.8	111	0.00	8.71-	9.71
10	Tetryl	500.000	475.586	4.9	92	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	498.834	0.2	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	493.011	1.4	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	510.083	-2.0	107	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	530.499	-6.1	111	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	500.000	518.182	-3.6	105	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	521.475	-4.3	107	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	500.000	479.808	4.0	96	-0.01	14.31-	15.31

***** Signal #2 *****

1	TNX	500.000	637.256	-27.5#	126	-0.01	4.22-	5.22
2	HMX	500.000	581.600	-16.3#	121	0.00	4.69-	5.69
3	DNX	500.000	552.258	-10.5	111	-0.01	4.83-	5.83
4	MXN	500.000	573.858	-14.8	115	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	500.000	539.558	-7.9	108	0.00	6.12-	7.12
6	RDX	500.000	495.496	0.9	100	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	500.000	512.019	-2.4	104	0.00	7.70-	8.70
8	Nitrobenzene	500.000	545.924	-9.2	112	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	500.000	549.800	-10.0	112	0.00	8.71-	9.71
10	Tetryl	500.000	472.605	5.5	91	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	500.000	496.402	0.7	104	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	500.000	494.458	1.1	104	0.00	10.95-	11.95
14	o-Nitrotoluene	500.000	518.803	-3.8	108	0.00	11.79-	12.79
15	p-Nitrotoluene	500.000	534.408	-6.9	114	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	500.000	519.292	-3.9	106	-0.01	12.83-	13.83
17	m-Nitrotoluene	500.000	532.272	-6.5	109	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	500.000	479.037	4.2	96	-0.01	14.31-	15.31

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Initial Calibration Verification

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018321.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Mon Oct 23 13:35:18 2006

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020201.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\03020DS\GG020201.D\dad1A.ch
 Acq On : 02-Mar-2007, 16:17:48 Operator: MIKEE
 Sample : CC825-500 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	490.559	1.9	101	0.00	3.86-	4.86
2	TNX	500.000	512.293	-2.5	103	-0.01	4.20-	5.20
3	DNX	500.000	511.151	-2.2	104	0.00	4.60-	5.60
4	MXN	500.000	508.598	-1.7	104	0.01	5.37-	6.37
5	RDX	500.000	518.998	-3.8	104	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	498.455	0.3	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	498.190	0.4	102	0.02	10.43-	11.43
8	Tetryl	500.000	498.475	0.3	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	503.313	-0.7	104	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	496.619	0.7	102	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	503.597	-0.7	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	496.441	0.7	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	500.727	-0.1	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	510.258	-2.1	107	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	480.817	3.8	101	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	497.302	0.5	106	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	500.449	-0.1	106	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	506.087	-1.2	106	0.07	22.76-	23.76

***** Signal #2 *****

1	HMX	500.000	500.092	-0.0	102	0.00	3.86-	4.86
2	TNX	500.000	509.529	-1.9	103	0.00	4.18-	5.18
3	DNX	500.000	520.538	-4.1	104	0.00	4.60-	5.60
4	MXN	500.000	521.239	-4.2	106	0.01	5.37-	6.37
5	RDX	500.000	566.452	-13.3	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	505.722	-1.1	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	502.475	-0.5	102	0.02	10.43-	11.43
8	Tetryl	500.000	507.037	-1.4	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	499.803	0.0	103	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	495.718	0.9	101	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	500.992	-0.2	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	497.188	0.6	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	499.032	0.2	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	496.978	0.6	105	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	472.110	5.6	100	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	489.795	2.0	104	0.05	19.73-	20.73
17	p-Nitrotoluene	500.000	496.698	0.7	105	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	503.963	-0.8	105	0.07	22.77-	23.77

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Mon Mar 05 11:42:29 2007

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020212.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020212.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\03020DS\GG020212.D\dad1A.ch
Acq On : 02-Mar-2007, 21:07:57 Operator: MIKEE
Sample : CC825-1000 Inst : G1315B
Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Mar 01 11:02:09 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	969.184	3.1	98	0.00	3.86- 4.86
2	TNX	1000.000	1012.847	-1.3	100	-0.02	4.20- 5.20
3	DNX	1000.000	1011.041	-1.1	101	0.00	4.60- 5.60
4	MXN	1000.000	1001.768	-0.2	101	0.00	5.37- 6.37
5	RDX	1000.000	1012.522	-1.3	100	-0.01	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	982.133	1.8	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	981.873	1.8	99	0.00	10.43-11.43
8	Tetryl	1000.000	979.286	2.1	98	0.00	11.21-12.21
9	Nitrobenzene	1000.000	995.199	0.5	100	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	971.158	2.9	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	991.752	0.8	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	975.490	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	987.191	1.3	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	995.657	0.4	102	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	946.550	5.3	98	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.637	3.8	99	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	975.200	2.5	99	-0.01	21.06-22.06
18	m-Nitrotoluene	1000.000	997.451	0.3	100	0.00	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	984.283	1.6	99	0.00	3.86- 4.86
2	TNX	1000.000	1002.891	-0.3	100	0.00	4.18- 5.18
3	DNX	1000.000	1012.877	-1.3	101	0.00	4.60- 5.60
4	MXN	1000.000	1004.320	-0.4	101	0.00	5.37- 6.37
5	RDX	1000.000	1044.793	-4.5	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	984.579	1.5	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.010	1.1	99	0.00	10.43-11.43
8	Tetryl	1000.000	997.573	0.2	99	0.00	11.21-12.21
9	Nitrobenzene	1000.000	992.439	0.8	102	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	962.803	3.7	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	983.229	1.7	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	974.885	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	978.179	2.2	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	974.861	2.5	101	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	935.023	6.5	97	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.820	3.8	98	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	982.213	1.8	99	0.00	21.06-22.06
18	m-Nitrotoluene	1000.000	1002.440	-0.2	99	-0.01	22.77-23.77

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020212.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020224.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020224.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\03020DS\GG020224.D\dad1A.ch
 Acq On : 03-Mar-2007, 02:38:33 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	963.991	3.6	97	0.00	3.86- 4.86
2	TNX	1000.000	1010.267	-1.0	100	-0.02	4.20- 5.20
3	DNX	1000.000	1005.452	-0.5	101	0.00	4.60- 5.60
4	MXN	1000.000	1000.098	-0.0	100	0.00	5.37- 6.37
5	RDX	1000.000	1025.240	-2.5	102	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	993.055	0.7	100	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	980.619	1.9	99	-0.01	10.43-11.43
8	Tetryl	1000.000	974.910	2.5	98	-0.02	11.21-12.21
9	Nitrobenzene	1000.000	982.824	1.7	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	957.890	4.2	96	-0.01	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	980.868	1.9	98	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	962.421	3.8	97	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	1009.138	-0.9	101	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	1335.440	-33.5#	137	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	1096.840	-9.7	113	-0.01	16.60-17.60
16	o-Nitrotoluene	1000.000	979.988	2.0	101	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	1001.774	-0.2	102	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1009.574	-1.0	101	-0.02	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	940.821	5.9	95	0.00	3.86- 4.86
2	TNX	1000.000	949.976	5.0	95	0.00	4.18- 5.18
3	DNX	1000.000	962.122	3.8	96	0.00	4.60- 5.60
4	MXN	1000.000	1000.037	-0.0	101	0.00	5.37- 6.37
5	RDX	1000.000	1048.505	-4.9	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	992.257	0.8	100	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.715	1.0	99	-0.01	10.43-11.43
8	Tetryl	1000.000	995.610	0.4	99	-0.02	11.21-12.21
9	Nitrobenzene	1000.000	966.310	3.4	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	952.955	4.7	97	-0.01	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	974.813	2.5	98	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	968.590	3.1	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	981.214	1.9	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	1062.649	-6.3	110	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	991.035	0.9	103	-0.01	16.60-17.60
16	o-Nitrotoluene	1000.000	973.475	2.7	99	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	993.006	0.7	100	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1007.492	-0.7	100	-0.03	22.77-23.77

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020224.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

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Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020231.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\0305RP\GG020231.D\dad1A.ch
 Acq On : 05-Mar-2007, 13:23:34 Operator: MIKEE
 Sample : CC827-500 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	551.245	-10.2	112	0.02	4.24-	5.24
2	HMX	500.000	527.482	-5.5	113	0.00	4.75-	5.75
3	DNX	500.000	526.884	-5.4	111	0.01	4.87-	5.87
4	MXN	500.000	525.950	-5.2	106	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	507.541	-1.5	103	0.00	6.17-	7.17
6	RDX	500.000	498.345	0.3	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	495.147	1.0	101	0.00	7.78-	8.78
8	Nitrobenzene	500.000	509.807	-2.0	104	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	506.824	-1.4	103	-0.01	8.80-	9.80
10	Tetryl	500.000	535.862	-7.2	104	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	492.695	1.5	101	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	489.618	2.1	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.678	3.3	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	502.970	-0.6	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	503.359	-0.7	105	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	500.000	502.155	-0.4	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	523.547	-4.7	107	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	500.000	503.929	-0.8	101	-0.03	14.45-	15.45

***** Signal #2 *****

1	TNX	500.000	539.038	-7.8	107	0.02	4.24-	5.24
2	HMX	500.000	501.388	-0.3	105	0.00	4.75-	5.75
3	DNX	500.000	520.169	-4.0	105	0.01	4.87-	5.87
4	MXN	500.000	520.287	-4.1	104	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	508.259	-1.7	102	0.00	6.17-	7.17
6	RDX	500.000	496.557	0.7	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	499.335	0.1	102	0.00	7.78-	8.78
8	Nitrobenzene	500.000	521.041	-4.2	107	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	510.092	-2.0	104	-0.01	8.80-	9.80
10	Tetryl	500.000	533.664	-6.7	103	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	488.383	2.3	99	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	487.517	2.5	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.800	3.2	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	519.246	-3.8	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	515.868	-3.2	110	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	500.000	499.988	0.0	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	538.963	-7.8	110	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	500.000	499.905	0.0	100	-0.03	14.45-	15.45

10.6 10

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Tue Mar 06 10:57:51 2007

10.6
10

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020238.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\0305RP\GG020238.D\dad1A.ch
 Acq On : 05-Mar-2007, 15:40:35 Operator: MIKEE
 Sample : ECC827-1000 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	1000.000	1064.078	-6.4	104	0.02	4.24-	5.24
2	HMX	1000.000	1064.872	-6.5	113	0.00	4.75-	5.75
3	DNX	1000.000	1029.858	-3.0	106	0.00	4.87-	5.87
4	MXN	1000.000	1052.110	-5.2	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1020.840	-2.1	102	0.00	6.17-	7.17
6	RDX	1000.000	1020.894	-2.1	103	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1005.302	-0.5	101	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1031.078	-3.1	102	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1033.117	-3.3	104	-0.01	8.80-	9.80
10	Tetryl	1000.000	1104.790	-10.5	112	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1016.218	-1.6	103	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	998.411	0.2	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	987.663	1.2	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1040.619	-4.1	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1034.751	-3.5	104	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	1000.000	1018.262	-1.8	102	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1063.626	-6.4	105	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	1000.000	1018.025	-1.8	102	-0.02	14.45-	15.45

***** Signal #2 *****

1	TNX	1000.000	1065.753	-6.6	105	0.02	4.24-	5.24
2	HMX	1000.000	959.987	4.0	103	0.00	4.75-	5.75
3	DNX	1000.000	1023.085	-2.3	108	0.01	4.87-	5.87
4	MXN	1000.000	1036.881	-3.7	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1018.352	-1.8	102	0.00	6.17-	7.17
6	RDX	1000.000	995.036	0.5	102	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1003.575	-0.4	100	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1035.575	-3.6	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1043.825	-4.4	105	-0.01	8.80-	9.80
10	Tetryl	1000.000	1097.433	-9.7	111	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1002.293	-0.2	102	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	991.509	0.8	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	990.702	0.9	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1071.751	-7.2	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1073.626	-7.4	108	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	1000.000	1006.760	-0.7	101	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1093.803	-9.4	107	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	1000.000	1006.963	-0.7	101	-0.02	14.45-	15.45

Continuing Calibration Summary

Job Number: T16448
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018318.D 8330_RP.M Tue Mar 06 10:58:20 2007

10.6
10



General Chemistry

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY
Login Number: T16448
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Perchlorate	GP9044/GN24408	10	<10	ug/l	50	50.1	100.2	85-115%

Associated Samples:
Batch GP9044: T16448-1
(*) Outside of QC limits

11.1
11

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16448
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Perchlorate	GP9044/GN24408	T16445-5	ug/l	27.8	29.4	5.6	0-15%

Associated Samples:
Batch GP9044: T16448-1
(*) Outside of QC limits

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11

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16448
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Perchlorate	GP9044/GN24408	T16445-5	ug/l	27.8	50	79.8	104.0	80-120%

Associated Samples:
Batch GP9044: T16448-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16448
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030201.TXT Date Analyzed: 03/02/07 Methods: EPA 314
Analyst: MP Run ID: GN24408
Parameters: Perchlorate

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:05	GN24408-CCV1	1		
14:20	GN24408-CCB1	1		
14:34	GP9044-MB1	1		
14:49	GP9044-B1	1		
15:31	GN24408-CRI1	1		
15:46	GN24408-IPC1	1		
16:00	ZZZZZZ	1		
16:15	ZZZZZZ	1		
16:29	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:58	T16445-5	1		(sample used for QC only; not part of login T16448)
17:12	T16445-6	1		(sample used for QC only; not part of login T16448)
17:27	GN24408-CCV2	1		
17:41	GN24408-CCB2	1		
17:55	ZZZZZZ	1		
18:10	ZZZZZZ	1		
18:24	ZZZZZZ	1		
18:39	ZZZZZZ	1		
18:53	ZZZZZZ	1		
19:22	ZZZZZZ	1		
19:36	ZZZZZZ	1		
19:51	ZZZZZZ	1		
20:05	T16448-1	1		
20:19	GN24408-CCV3	1		
20:34	GN24408-CCB3	1		
20:48	GP9044-D1	1		
21:03	GP9044-S1	1		
21:17	GP9044-D2	1		
21:32	GP9044-S2	1		
21:46	GN24408-CCV4	1		
22:00	GN24408-CCB4	1		

Refer to raw data for calibration curve and standards.

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11

Instrument QC Summary
Inorganics Analyses

Login Number: T16448
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030201.TXT Date Analyzed: 03/02/07 Methods: EPA 314
Run ID: GN24408 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24408-CCV1	Perchlorate	52.1	10	4.0	50	104.2	85-115
GN24408-CCB1	Perchlorate	4.0 U	10	4.0			
GN24408-CRI1	Perchlorate	4.0 U	10	4.0	3	86.6	75-125
GN24408-IPC1	Perchlorate	23.2	10	4.0	25	92.8	80-120
GN24408-CCV2	Perchlorate	50.4	10	4.0	50	100.8	85-115
GN24408-CCB2	Perchlorate	4.0 U	10	4.0			
GN24408-CCV3	Perchlorate	52.6	10	4.0	50	105.2	85-115
GN24408-CCB3	Perchlorate	4.0 U	10	4.0			
GN24408-CCV4	Perchlorate	53.4	10	4.0	50	106.8	85-115
GN24408-CCB4	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

Appendix C

LHAAP-29 Natural Attenuation Evaluation

**APPENDIX C
NATURAL ATTENUATION EVALUATION**

***FINAL*
FEASIBILITY STUDY
LHAAP-29, FORMER TNT PRODUCTION AREA, GROUP 2
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS**



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

**Prepared by
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1401 Enclave Parkway, Suite 250
Houston, Texas 77077**

**MARC No. W912QR-04-D-0027
Task Order No. DS02**

April 2010

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Acronyms and Abbreviations

2-A-4,6-DNT	2-amino-4,6-dinitrotoluene
4-A-2,6-DNT	4-amino-2,6-dinitrotoluene
µg/L	micrograms per liter
bgs	below ground surface
CO ₂	carbon dioxide
COC	chemicals of concern
Cl ⁻	chloride
ClO ₂ ⁻	chlorite
ClO ₃ ⁻	chlorate
ClO ₄ ⁻	perchlorate
DCA	dichloroethane
DCE	dichloroethene
DHC	<i>Dehalococcoides</i>
DO	dissolved oxygen
DNAPL	dense non-aqueous phase liquid
DNT	dinitrotoluene
Fe ⁺³	ferric iron
FS	Feasibility Study
g/L	grams per liter
GW-Ind	Groundwater Industrial standard
GWRTAC	Ground-Water Remediation Technologies Analysis Center
INCHEM	International Program on Chemical Safety
LHAAP	Longhorn Army Ammunition Plant
MARC	Multiple Award Remediation Contract
MC	methylene chloride
MCL	maximum contaminant level
mg/L	milligrams per liter
MNA	monitored natural attenuation
mV	millivolts
NO ₃ ⁻	nitrate
NT	nitrotoluene
O ₂	oxygen
ORP	oxidation-reduction potential
PCE	tetrachloroethene

Acronyms and Abbreviations (continued)

Shaw	Shaw Environmental, Inc.
SO ₄ ⁻²	sulfate
TAT	triaminotoluene
TCA	trichloroethane
TCE	trichloroethene
TCEQ	Texas Commission on Environmental Quality
TNT	trinitrotoluene
TOC	total organic carbon
USACEERD	U.S. Army Corp Engineers Engineer Research and Development Center
USAFCEE	U.S. Air Force Center for Environmental Excellence
USEPA	U.S. Environmental Protection Agency
VC	vinyl chloride

1.0 Introduction

The U.S. Army Corps of Engineers, Tulsa District, contracted Shaw Environmental, Inc. (Shaw), under Louisville District's Multiple Award Remediation Contract (MARC) No. W912QR-04-D-0027, Task Order No. DS02, 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 Former Trinitrotoluene (TNT) Production Area, designated as LHAAP-29. The general location of this site is shown on **Figure C-1**.

LHAAP-29, known as the Former TNT Production Area, encompasses 85 acres. The site includes the area of the former production lines and an associated bulk toluene storage area that was located adjacent to the production area (**Figure C-2**). The TNT production plant at LHAAP-29 operated from 1942 to 1945 as a six-line plant with a supporting acid plant. The plant produced approximately 400 million pounds of flake TNT during its period of operation. Wastewater from the production of TNT was conveyed through a pipeline to a storage tank and pump house. Cooling water from the production area was collected by a separate vitrified clay pipe drainage system and discharged to an open ditch. Most of the aboveground structures were removed down to the foundations in 1959. The underground lines and the foundations at the former TNT production area are generally considered potential sources of explosives-related contamination at LHAAP-29. A portion of the site was also used to wash rocket motor casings. This process included the use of a methylene chloride (MC)-based organic solvent.

The subsurface is composed of medium plastic sandy silt, fine sands, and clay. The clay layers tend to separate this groundwater zone into shallow, intermediate, and deep groundwater zones. The groundwater flow direction is east-northeast toward Caddo Lake (**Figure C-2**), based on the November/December 2007 groundwater elevation measurements.

The groundwater at LHAAP-29 is contaminated with volatile organic compounds including MC and trichloroethene (TCE) as the primary chemicals of concern (COC). Other COCs include 1,1-dichloroethene (DCE), 1,2-dichloroethane (DCA), vinyl chloride (VC), perchlorate and dinitrotoluene (DNT) and nitrotoluene (NT) isomers. The sample results through June 2009 are used in the evaluation of monitored natural attenuation (MNA).

2.0 Description of Natural Attenuation

Natural attenuation is defined as the reduction of contaminants from the combined effect of intrinsic biodegradation, advection, dispersion, dilution, volatilization, and absorption mechanisms. Generally, intrinsic biodegradation is the most important natural attenuation mechanism to result in contaminant destruction. Intrinsic biodegradation can occur in any environment that supports microbial activity. The 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, subsurface conditions characterization, and contaminant migration determination are critical for defining the contribution of intrinsic biodegradation to concentration reduction, for evaluating the effectiveness of natural attenuation, and for establishing regulatory support for use of natural attenuation at a site. MNA entails the use of natural attenuation within the context of a monitoring plan to demonstrate reductions in contaminant concentrations and achievement of remedial action objectives.

2.1 Natural Attenuation Lines of Evidence

The U.S. Environmental Protection Agency (USEPA) guidance, *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater* (USEPA, 1998), will be used as guidance for the natural attenuation evaluation. The USEPA guidance specifies a tiered approach of recommended lines of evidence required for demonstrating that MNA is an effective remedy.

There are three lines of evidence according to the USEPA guidance document based on the Office of Solid Waste and Emergency Response Directive 9200.4-17 (USEPA, 1999), which are described as follows:

1. **First line of evidence.** Observed Reduction in Contaminant Mass and Concentration. Relies on use of historical groundwater data that demonstrate a clear trend of stable or decreasing COC concentrations over time at appropriate monitoring or sampling points.
2. **Second line of evidence.** Identified and Quantified Natural Attenuation Processes. 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 site and the rate at which such processes will reduce COCs to the maximum contaminant levels (MCLs) or groundwater medium specific concentration for industrial use (GW-Ind) levels established by the Texas Commission on Environmental Quality (TCEQ).

3. **Third line of evidence.** Microcosm Studies. Most often consists of predictive modeling studies and other laboratory/field studies that demonstrate the occurrence of natural attenuation process(es) at the site and its ability to degrade the COCs.

All three lines of evidence were evaluated for LHAAP-29 to demonstrate the occurrence of natural attenuation of groundwater COCs.

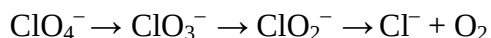
2.2 *Biodegradation*

Biodegradation occurs when bacteria use contaminants as carbon sources or electron acceptors. The COCs at LHAAP-29 include perchlorate, explosive compounds and chlorinated solvents exceeding their MCLs or GW-Ind. All contaminants can be degraded through microbial activity in the subsurface. Under the right conditions, all site COCs are amenable to biodegradation. A brief description of the various biodegradation pathways and mechanisms is described in the subsequent sections.

2.2.1 *Perchlorate*

Perchlorate is the soluble anion associated with ammonium, potassium, and sodium perchlorate. Perchlorate is used as an energetic booster or oxidant in solid propellant for rockets and missiles, and likely leached into the groundwater during the disposal of explosive materials and solid rocket fuel. The perchlorate anion is very mobile in aqueous systems, and can persist in the environment for many decades under aerobic conditions because of its resistance to react with other available constituents. However, perchlorate can be reduced to chlorite and chloride in the presence of indigenous perchlorate-reducing microbes under anaerobic conditions (Ground-Water Remediation Technologies Analysis Center [GWRTAC], 2001). The reduction in perchlorate concentration can be direct evidence for the occurrence of biodegradation supporting the first line of evidence.

Perchlorate-reducing organisms couple the oxidation of an organic or inorganic electron donor to the reduction of perchlorate in a form of anaerobic respiration. Perchlorate (ClO_4^-) reduction produces chlorate (ClO_3^-), which can be further reduced to chlorite (ClO_2^-), then to the innocuous final product as chloride (Cl^-) and oxygen (O_2) (Rikken et al., 1996), as indicated in the following pathway:



2.2.2 *Chlorinated Solvents*

The chlorinated solvents at this site are classified as chlorinated ethenes, ethanes, and methane. The most abundant chlorinated solvent at the site is MC. Chlorinated ethenes and ethanes include either parent compounds (tetrachloroethene [PCE], TCE, 1,1,1-trichloroethane [TCA] and 1,1,2-TCA) that biodegrade via multiple pathways and generate a variety of 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. Observing a decreasing trend of parent compounds and generation of daughter products are direct evidence for the occurrence of biodegradation supporting the first line of evidence.

The technical protocol for evaluating natural attenuation of chlorinated solvents in groundwater (USEPA, 1998) has a preliminary screening worksheet for evaluating whether anaerobic biodegradation is occurring. The worksheet assigns points for geochemistry and the presence of daughter products. A point total of 5 or less, denotes inadequate evidence of anaerobic degradation. A point total of 15 or more is adequate evidence for anaerobic biodegradation. In between 5 and 15, the score represents limited evidence for anaerobic degradation. The preliminary screening worksheet only addresses anaerobic degradation, not any of the other pathways for natural attenuation (aerobic biodegradation, diffusion, adsorption, etc.).

2.2.2.1 *Chlorinated Ethenes and Ethanes*

One of the most prevalent pathways for biodegradation of chlorinated solvents 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 biodegradation of TCE primarily produces cis-1,2-DCE, with a trace amount of trans-1,2-DCE. 1,2-DCE isomers undergo reductive dechlorination resulting in the formation of VC, and subsequently the innocuous product ethene. When the 1,2-DCE isomers are generated, the cis-isomer is produced 10 to 100 times more often than the trans-isomer (Bouwer, 1994 and USEPA, 1998). 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, and then further reduced to VC via reductive dechlorination.

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 chlorinated solvents can degrade via multiple biodegradation pathways, reductive dechlorination is typically the most common pathway observed. Chlorinated solvent can also undergo the biogeochemical reductive dechlorination under high sulfate and iron level (U.S. Air Force Center for Environmental Excellence [USAFCEE], 2003). During this degradation pathway, sulfate reducing bacteria produces sulfite and mineral iron without VC generation.

2.2.2.2 *Methylene Chloride*

An MC-based industrial solvent was used at LHAAP-29 from 1959 to mid-1970s, which has resulted in MC migrating into groundwater. In a plume under steady-state, MC is usually only present in the immediate source area, while other coexistent COCs, such as TCA, TCE, DCA, and DCE, usually migrate much farther downgradient of the source zone (Dehghi et al., 2001).

The primary factor that prohibits the widespread presence of MC is due to its readily degradable characteristics under both aerobic and anaerobic conditions (Leisinger and Braus-Stromeyer, 1995). MC degradation by aerobic methylotrophic bacteria results in the formation of formaldehyde (Leisinger and Braus-Stromeyer, 1995), which can be further converted to formate (Best, et al., 2000). Under reducing conditions, MC is metabolized to acetate and formate (organic acid) (Magli et al., 1997). Acetate can be utilized by anaerobic organisms as a substrate in the degradation of highly chlorinated COCs such as TCE (Löffler et al., 2000). Acetate can also be utilized by methanogens to produce methane and CO₂ in reducing conditions. Acetate and formate can serve as effective carbon sources to enhance the degradation of other coexistent COCs.

MC is a relatively soluble organic compound in water exhibiting a solubility of approximately 13 to 20 grams per liter (g/L) according to different literature references (International Program on Chemical Safety [INCHEM], 1996). Although MC is readily biodegradable, it exhibits stronger toxicity to anaerobic bacteria than aerobic bacteria. MC concentrations up to 1,000 milligrams per liter (mg/L) would inhibit growth of aerobic bacteria *Pseudomonas putida*, meanwhile the growth of a mixed bacterial population from an anaerobic digester was inhibited by 50% under MC concentration at 93 mg/L (INCHEM, 1996). MC presenting at high concentrations can be toxic to microorganism activity, thus extensively high concentrations of MC can be persistent at a localized area in the groundwater.

2.2.3 Explosives

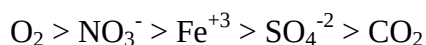
During the manufacture of TNT, successive nitrating of toluene was conducted in the buildings previously located at LHAAP-29. As a result of the historical TNT manufacture activity, contamination by nitroaromatic chemicals including TNT, DNT, and NT has been detected at this site. There are two general mechanisms for the biological transformation of nitroaromatic compounds, namely oxidation and reduction. In oxidative reaction, oxygen is the required reactant, and oxygenase or peroxidase enzymes mediate the cleavage of the aromatic ring (Noguera and Freedman, 1996). Reduction is a more common degradation pathway that can occur under aerobic and anaerobic conditions (McFarlan, 2006; Noguera and Freedman, 1996; and He and Spain, 2000). During biotic or abiotic reduction of TNT under aerobic and anaerobic conditions, nitro groups are reduced to amino groups, creating 2-amino-4,6-DNT (2-A-4,6-DNT) and 4-amino-2,6-DNT (4-A-2,6-DNT) (McFarlan, 2006). The amino-DNTs would subsequently be reduced to diaminonitrotoluene. The final product of TNT reduction is the formation of triaminotoluene (TAT). This compound absorbs to soil irreversibly and therefore is not detected in the groundwater (Downey et al., 2005).

Two sources, TNT manufacturing wastewater and TNT degradation may have contributed to the DNT and NT isomers present in the site groundwater. During the first nitrification, p-NT and

o-NT are equally produced from toluene, while the second nitrification produced 2,4-DNT and 2,6-DNT which sequentially form TNT during the nitrification steps. The wastewater from production processes could contain the incomplete nitrification products DNT and NT isomers which may have contributed to groundwater contaminants. Meanwhile, DNT and NT can also be produced through the sequential removal of nitro groups from TNT via aerobic reduction, and the end product is toluene which is biodegradable and does not accumulate in groundwater (U.S. Army Corp Engineers Engineer Research and Development Center [USACEERD], 1999). This pathway only occurs in the absence of nitrate/nitrite in the groundwater and aquifer matrix, because microbes use the nitro- group as a nitrogen source. o-NT and p-NT are the most abundant explosive chemicals detected in the groundwater at LHAAP-29, while TNT and DNT are present at very low concentrations. NT can be mineralized via multiple pathways. Under aerobic conditions, p-NT and o-NT undergo initial attack by a monooxygenase enzyme which results in the release of nitrite and formation of the corresponding dihydroxyl compound, which can be further degraded through oxidative or reductive pathways (Haigler et al., 1996 and He, 2000). Under anaerobic conditions, NT can undergo denitrification to produce toluene or be reduced to aminotoluene. During the mineralization of TNT, although 2,4- and 2,6- DNT produced equally, para- nitro group from DNT is more susceptible to microbial activities; therefore, o-NT is produced preferentially over p-NT (Duque et al, 1993). In summary, the biodegradation of nitroaromatics can occur via multiple pathways under various conditions and involves various microorganisms, leading to the production of multiple daughter products.

2.3 *Geomicrobiology*

Biological monitoring parameters are indicators of microbiological activity in the subsurface and are evaluated in support of the second line of evidence. Microbial respiration is the biochemical process that leads to the oxidation of reduced organic carbon. Frequently encountered respiratory substrates (or electron acceptors) include O₂, nitrate (NO₃⁻), ferric iron (Fe⁺³), sulfate (SO₄⁻²), and CO₂. 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:



Biodegradation of perchlorate can occur under anaerobic nitrate-reducing conditions (GWRTAC, 2001). Reductive dechlorination of chlorinated solvents occurs under anaerobic (reducing) conditions such as sulfate-reducing and methanogenic conditions (USEPA, 1998). Nitrate-reducing conditions provide more energy to microorganisms than iron-, sulfate-reducing condition, and methanogenic conditions. Sulfate reduction and methanogenesis are inhibited until oxygen, nitrate, and ferric iron have been depleted (USAFCEE, 2004). When perchlorate contaminants are co-mingled with chlorinated solvents in groundwater, microbes derive more

energy from perchlorate degradation, thus chlorinated solvents will typically persist in groundwater until perchlorate is depleted.

The reduction of highly chlorinated compounds like PCE, TCE, and TCA may occur under sulfate-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 sulfate concentrations near depletion.

As TNT is reduced, the electron-donating character of amino constituents weakens the electron deficiency originally present in TNT (Downey et al., 2005). Therefore, reaction rates for anaerobic reduction decrease with the number of nitro groups being converted into amino groups. Consequently, the complete abiotic reduction of TNT into TAT requires reducing conditions which occurs at oxidation-reduction potential (ORP) levels less than -200 millivolts (mV) (Esteve-Núñez et al., 2001). In the occasion of extremely low nitrate/nitrite levels present in groundwater, the denitrification pathway can be formed as nitro groups on aromatic rings are utilized as a nitrogen source.

As discussed above, the concentrations of microbial respiratory substrates and products can be used to demonstrate intrinsic biodegradation. Expected changes include depressed concentrations of dissolved oxygen (DO) and negative ORP values within and downgradient of actively degrading contaminant plumes. The concentrations of anaerobic respiratory substrates, such as nitrate and sulfate, should decrease in groundwater located within and downgradient of a contaminant plume that is actively undergoing intrinsic anaerobic biodegradation. Similarly, the products of anaerobic microbial respiration, specifically ferrous iron and methane, should increase under similar circumstances.

The biodegradation of perchlorate and 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 perchlorate and chlorinated solvents. However, high background chloride concentrations were observed at LHAAP, up to 1,416,000 micrograms per liter (µg/L) noted in the Remedial Investigation Report (Jacobs, 2002). Thus, the slight contribution of chloride into the groundwater through biodegradation is not quantifiable.

2.4 Microbial Analysis

Microbial analysis can provide evidence to support the third line of evidence. A number of bacteria that contain nitrate reductases are capable of reducing perchlorate, such as *Staphylococcus epidermidis* and *Bacillus cereus* et al (GWRTAC, 2001). Perchlorate-reducing bacteria appear to be nearly ubiquitous in natural environments such as soils, sediments, surface

water, and groundwater aquifers. The most documented microbes for degradation of nitroaromatic explosive compounds are *Pseudomonas sp*, which can utilize explosive under aerobic and anaerobic conditions (Noguera and Freedman, 1996). There are multiple strains that can dechlorinate TCE and TCA under anaerobic reductive conditions, but only one strain *Dehalococcoides* (DHC) can completely reduce the DCE isomers and VC to ethene. The presence of DHC in the groundwater can be used as evidence to support the third line of evidence.

3.0 *Natural Attenuation Evaluation Results*

This section presents the results of the natural attenuation evaluation in accordance with the three lines of evidence. For the purposes of this evaluation, the USEPA MCLs for drinking water and the GW-Ind under TCEQ guidelines (Standard No. 2 Medium Specific Concentrations) were used as the cleanup levels for LHAAP-29. COCs that exceed their MCLs include MC, TCE, 1,1-DCE, 1,2-DCA and VC. The GW-Ind was used for the evaluation of the COCs without MCLs. The COCs at this site exceeding the GW-Ind are perchlorate, DNT and NT isomers.

Current data along with historical data used in this evaluation are summarized in **Tables C-1, C-2, and C-3** at the end of this report for the shallow, intermediate, and deep groundwater zones, respectively. The last round of samples used for this report was June 2009. **Figures C-3 through C-11** present concentration trends in the individual groundwater zones and natural attenuation rate estimates for the COCs. The figures are presented at the end of the report following the tables. The groundwater sample forms and laboratory reports associated with the February 2007, October 2008 and June 2009 groundwater sample rounds for this natural attenuation evaluation are presented in Appendices B and D of the Feasibility Study (FS).

The preliminary screening worksheet was used to evaluate the occurrence of anaerobic degradation for multiple well locations in the chlorinated solvent plume at LHAAP-29. Twenty-seven various parameters are used in the preliminary worksheet. Monitoring wells 29WW15, 29WW16 and 29WW35 had available data for 19 to 24 parameters. The screening totals for these three monitoring wells were 10 or 11, showing limited evidence of anaerobic degradation. **Table C-4** shows the preliminary screening scores for these wells. Because the preliminary screening shows limited evidence for anaerobic biodegradation, additional evaluation needs to be conducted to determine if natural attenuation can meet the cleanup objectives.

The evaluation of the lines of evidence for shallow, intermediate, and deep groundwater zones at LHAAP-29 is presented below.

3.1 *Shallow Groundwater Zone*

The shallow groundwater zone extends 50 feet below ground surface (bgs). The groundwater flow direction is towards the east-northeast in the shallow groundwater zone (**Figure C-2**).

3.1.1 *First Line of Evidence - Change Over Time and with Distance*

The change in groundwater COC concentrations over time and with distance was evaluated in the shallow groundwater at LHAAP-29. **Figure C-3** shows concentration trends for COCs at monitoring well 29WW15, where the highest COC concentrations in the shallow groundwater zone have been found.

3.1.1.1 Perchlorate

Perchlorate was detected in the northeast part of LHAAP-29. Six monitoring wells, 116, 29WW05, 29WW06, 29WW15, 29WW17 and 29WW18 located in the northeastern part of this site had detections of perchlorate concentration above the GW-Ind of 72 µg/L (**Table C-1**). The perchlorate concentrations in these six wells exhibited a decreasing concentration trend over time, with the most dramatic reduction from 3,800 µg/L in February 2001 to below the detection limit (20 µg/L) in February 2007 in 29WW06. 29WW07, located downgradient of 29WW15 where the highest concentrations of perchlorate were detected, exhibited no detection of perchlorate. The most recent results are currently above the GW-Ind at 116, 29WW05 and 29WW15. The current perchlorate plume map is located in the main text of the FS. The historical analytical results suggest that perchlorate has been attenuated effectively over time and with distance. **Figure C-4** shows perchlorate concentrations over time in wells 116, 29WW05, 29WW06, and 29WW15.

3.1.1.2 Explosives

TNT was detected infrequently during past monitoring events, and its concentrations were under laboratory detection limits site-wide during the most recent sampling event (**Table C-1**). In monitoring well 29WW05 where TNT was historically detected at concentrations below the GW-Ind of 52 µg/L, daughter products 2-A-4,6-DNT and 4A-2,6-DNT were observed (**Table C-1**), suggesting the occurrence of TNT degradation. The products of TNT reduction, 2-A-4,6-DNT and 4-A-2,6-DNT, and TAT are absorbed to soil particles, and lose their mobility in the groundwater zone.

2,4-DNT was detected above the GW-Ind of 0.42 µg/L in monitoring wells 116, 29WW03, 29WW05, 29WW06 and 29WW20. Monitoring wells 116, 29WW03, and 29WW06 showed only a single result exceeding the GW-Ind, and the latest 2,4-DNT results in those wells are undetectable. Monitoring wells 29WW05 and 29WW20 both exhibited significant reduction of 2,4-DNT concentrations, but 2,4-DNT was detected above GW-Ind during the May 2005 sampling event in these two wells. Nevertheless, 2,4-DNT was never detected in the down gradient well 29WW10, suggesting DNT has been attenuated with distance. **Figure C-5** shows 2,4-DNT concentrations over time at wells 29WW05 and 29WW20.

2,6-DNT was detected above the GW-Ind of 0.42 µg/L in monitoring wells 116, 29WW03, 29WW05 and 29WW20. Significant reductions of DNT concentrations were observed in monitoring wells 29WW03 and 29WW20. The other two monitoring wells, 116 and 29WW05 show no decreasing concentration trend. Nevertheless, 2,6-DNT was never detected in the down gradient well 29WW10, suggesting DNT has been attenuated with distance. The historical analytical results suggest that 2,6-DNT has been attenuated effectively over time in some wells

and with distance. **Figure C-6** shows 2,6-DNT concentrations over time at wells 29WW03 and 29WW20.

The isomers o-NT and p-NT are the most abundant nitro-group explosive chemicals detected in the shallow groundwater zone, but the GW-Ind of 1,000 µg/L for NTs, indicates they are less toxic toward environments than DNTs. The origin of NT contaminants can be the primer of TNT production or the products of TNT and DNT degradation. NT isomers were detected at the four monitoring wells, 116, 29WW03, 29WW05, and 29WW20 located near the TNT waste lines (**Table C-1**). Decreasing trends of NT isomers were observed at three monitoring wells 29WW03, 29WW05 and 29WW20. At monitoring well 116, where elevated perchlorate concentrations were observed, concentrations were not decreasing. Perchlorate degradation occurs under nitrate-reducing conditions; NT reduction can be induced under similar conditions, thus perchlorate and NT reduction can compete when the two contaminants coexistent. Nevertheless, the presence of NT isomers was never detected in down gradient well 29WW10. At monitoring wells 116 and 29WW05 where nitrate and nitrite levels were under the detection limit 100 µg/L, the ratios o-NT to p-NT were more than 5:1; meanwhile the ratio of NT isomer were close to 1:1 in 29WW03 and 29WW20, in which elevated nitrate concentrations were observed. The different ratios observed in these monitoring wells appear to be the result of DNT dinitrification to preferentially produce o-NT under nitrate and nitrite depletion conditions (Duque et al., 1993). **Figure C-7** shows o-NT concentrations over time at well 29WW05.

The elimination of TNT, decreasing trends of DNT and NT isomers, and the lack of explosives in the downgradient wells suggest that natural attenuation is effectively controlling nitroaromatic explosives in the shallow groundwater zone. The current explosives plume map is located in the main text of the FS.

3.1.1.3 Chlorinated Ethene

According to historical and current data, TCE and 1,1-DCE were detected above their respective MCLs. The daughter products of TCE, 1,2-DCE and VC, are also discussed in this section.

TCE: TCE was detected exceeding its MCL (5 µg/L) in eight monitoring wells, 29WW15, 29WW18, 29WW20, 29WW23, 29WW25, 29WW26, 29WW29, and 29WW32. Seven monitoring wells, 29WW18, 29WW20, 29WW23, 29WW25, 29WW26, 29WW29 and 29WW32, had only one TCE concentration exceeding MCL, ranging from 7.1 to 89 µg/L, and the most recent TCE concentrations at those wells were undetectable. Meanwhile, MC decreased from as high as 8,900 µg/L at 29WW32 to undetectable over the same monitoring period at the same wells (**Table C-1**), suggesting MC degradation enhanced TCE reduction. In well 29WW15, where the most elevated TCE concentration was observed, TCE concentrations decreased from 1,200 µg/L in July 1998 to 344 µg/L in February 2007. The coexistence of perchlorate at 29WW15 may decrease the degradation rate of TCE reduction. Following the

depletion of perchlorate, the TCE concentration is expected to be continuously degraded at a more rapid rate. Based on the analytical results, natural attenuation is effectively controlling TCE in the shallow groundwater zone. **Figure C-8** shows TCE concentrations over time at well 29WW15.

1,2-DCE: As TCE is degraded via reductive dechlorination, the next lower chlorinated daughter products formed are cis-1,2-DCE and trans-1,2-DCE at approximately a 100:1 to 10:1 ratio. For the four samples with detectable cis-1,2-DCE, the average cis/trans ratio was 0.44 (**Table C-1**). These ratios indicate the detected DCE is unlikely to be a daughter product of TCE. Concentrations of cis-1,2-DCE do not exceed its MCL (70 µg/L). Concentrations of trans-1,2-DCE do not exceed its MCL (100 µg/L). Furthermore, the reduction of TCE is significantly higher than the concentration of DCE isomers. The analytical results of DCE suggest that the dominant TCE degradation at this site is unlikely to be via the reductive dechlorination pathway, through which DCE is normally produced as the daughter products of TCE.

1,1-DCE: The abiotic hydrolysis of 1,1,1-TCA produces 1,1-DCE which can undergo reductive dechlorination to VC and ethene or degrade via alternate pathways to CO₂ and chloride. According to the historical data, 29WW15 is the only well that exhibited 1,1-DCE concentrations above its MCL (7 µg/L) in the shallow groundwater zone (**Table C-1**). A decrease of 1,1-DCE from 19.2 to 7.5 µg/L was observed between May 2005 and February 2007, suggesting the occurrence of biodegradation.

VC: As the parent compounds TCE or TCA are reduced, VC is the final chlorinated daughter product during reductive dechlorination. In February 2007, VC was not observed in any monitoring wells. The lack of elevated 1,2-DCE and VC suggests that reductive dechlorination is unlikely to be the dominant biodegradation pathway of natural attenuation under current conditions. Other pathways, such as biogeochemical degradation may be present. TCE can be degraded via this process without producing VC.

Well 29WW17 located downgradient of 29WW15, where maximum chlorinated ethenes concentrations were detected, has exhibited no detection of chlorinated ethenes, suggesting that chlorinated ethenes have been attenuated effectively over distance. Based the historical analytical results, the combined effects of biodegradation, dispersion, dilution, volatilization, and sorption mechanisms are effectively controlling chlorinated ethene present in shallow groundwater zone.

3.1.1.4 Chlorinated Ethane

The only chlorinated ethane above its MCL is 1,2-DCA at LHAAP-29. TCA can also undergo reductive dechlorination, resulting in the formation of DCA isomers, followed by chloroethane,

and then the harmless product ethane. 1,2-DCA was observed to exceed the MCL (5 µg/L) at monitoring well 29WW15 (**Table C-1**). In 29WW15, 1,2-DCA concentrations decreased from 14,000 µg/L in July 1998 to 5,520 µg/L in February 2007. The daughter product of 1,2-DCA reductive dechlorination, chloroethane, was only detected in monitoring well 29WW15 at very low concentrations, suggesting that reductive dechlorination is not the dominant pathway. **Figure C-9** shows 1,2-DCA concentrations over time at well 29WW15.

3.1.1.5 Methylene Chloride

MC was the most widely distributed contaminant at elevated concentrations in the July 1998 sampling event, as indicated by the 12 monitoring wells with MC concentrations above the MCL of 5 µg/L and the maximum detection of 74,000 µg/L in 29WW17 (**Table C-1**) in July 1998. Because of its ready degradability, MC is not persistent in groundwater, as is proven by the historical well trend of the MC concentrations. In addition, MC has been attenuated effectively with distance, demonstrated by the lack of detection of MC in 29WW07 located downgradient of 29WW17. MC decreased to below the MCL throughout the shallow groundwater zone during the sampling events conducted in 2005, 2006, and 2007. MC degradation products under anaerobic and aerobic conditions are acetate and formate, which can be utilized as carbon source and electron donors in other microbial mediated reactions, thus the degradation of other COCs may be enhanced by MC degradation. The beneficial influence of MC coexistent with other COCs is illustrated by the rapid removal of TCE in 29WW32.

3.1.1.6 Summary

The evaluation of changes in COCs concentrations with time has shown evidence of natural attenuation. The historical and current COCs data indicate clear decreasing trends in COC concentrations over time. Undetectable concentrations of COCs in downgradient wells indicate that the COCs are effectively attenuated with distance. The COC plumes in shallow groundwater are shrinking and attenuated effectively over time and with distance in the shallow groundwater zone.

3.1.2 Second Line of Evidence - Geochemical Indicators

Groundwater field parameters, including DO, ORP, pH, temperature, and conductivity, were analyzed in the field during the 2007 sampling event. In addition, laboratory analyses for the following natural attenuation parameters were performed during the same sampling event: gases (methane, ethane, and ethene), anions (sulfate, nitrate, nitrite, and chloride), and total organic carbon (TOC). The geochemical indicator results of the February 2007 sampling event and previous sampling events at LHAAP-29 are presented in **Table C-1**.

Dissolved Oxygen: Oxygen is the preferred terminal electron acceptor during aerobic microbial respiration. A DO level less than 0.5 mg/L is the most favorable condition for anaerobic reductive dechlorination, and anaerobic microbial activity would not tolerate DO levels above

5 mg/L (USEPA, 1998). DO levels ranged from 0.94 mg/L (29WW36) to 1.51 mg/L (29WW06) during the February 2007 sampling event (**Table C-1**). For all sampling events, DO levels ranged from 0.35 to 94.2 mg/L. The range of DO levels is for the most part appropriate for anaerobic microbial activity (46 of 61 readings <5 mg/L), and most favorable (< 0.5 µg/L) at monitoring well 29WW31.

Oxidative-Reduction Potential: ORP often correlates with the dominant type of microbial activity. The more negative the measurement, the more likely that sulfate-reducing or methanogenic conditions can occur in the subsurface. Reductive dechlorination could occur under an ORP level of less than 50 mV (USEPA, 1998). The ORP measurements in the shallow groundwater at LHAAP-29 ranged from 268.7 mV (29WW06) to 307.1 mV (29WW38) in February 2007, indicating the groundwater was under oxidative conditions. The 2007 ORP and DO readings were not available for well 29WW15, the most contaminated well in the shallow groundwater zone, because the well was bailed completely dry during the sampling activity and field crew could not measure the field parameters. Historical readings of ORP ranged from -92.7 to 307.8 mV, suggesting aerobic to anaerobic conditions (**Table C-1**). 29WW15 also exhibited negative ORP readings and the low DO levels during the sampling events of July 2004 and May 2005 (**Table C-1**) indicate that groundwater in the vicinity of 29WW15 probably maintained anaerobic conditions.

The elevated DO and ORP values in 2007 suggest that the groundwater is not favorable for complete reductive dechlorination at every well location. However, due to the presence of microbial degradation products which require anaerobic and reductive conditions, and historical samples with lower DO and ORP levels, the elevated DO and ORP values in 2007 may not be completely representative of long term groundwater conditions.

Nitrate: Following oxygen, microorganisms preferentially use nitrate as a terminal electron acceptor. Concentrations of nitrate less than 1 mg/L are not expected to interfere with anaerobic reductive dechlorination (USEPA, 1998) of chlorinated ethanes and ethanes, but nitrate concentrations have no significant influence over MC and explosive degradation. Active nitrate-reducing conditions are often indicated by a depletion of nitrate in groundwater and a possible increase in nitrite, which is favorable for perchlorate degradation. In February 2007, nitrate concentrations ranged from non detect to 1.3 mg/L, and nitrite was not detected (**Table C-1**). Previous nitrate and nitrite results indicated concentrations of nitrate ranging from non detect to 12.1 mg/L and nitrite mostly below the detection limit. Thus, nitrate reduction is a potential mode of microbial respiration at the site.

Ferrous Iron: Once nitrate has been depleted, microorganisms use ferric iron as the next terminal electron acceptor. As a measurement of reduced ferric iron, and accumulation of ferrous iron may be observed. Ferrous iron levels above 1 mg/L suggest the iron-reducing conditions are

likely established (USEPA, 1998). Reductive dechlorination cannot occur under iron-reducing conditions, which are favorable for perchlorate and MC degradation. During the February 2007 sampling event, ferrous iron levels ranged from 0 mg/L at 29WW06 to 2.33 mg/L at 29WW15 (**Table C-1**). COCs were not detected in 29WW06 historically, while 29WW15 has exhibited elevated COCs since 1998. The results of ferrous iron suggest that iron reducing conditions are established in the areas of shallow groundwater impacted with contaminants.

Sulfate: 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 oxygen, nitrate, and bioavailable ferric iron are depleted, leaving sulfate as the primary acceptor. Active sulfate reduction is often indicated by a depletion of sulfate in groundwater and a possible increase in sulfide. Concentrations of sulfate greater than 20 mg/L may cause competitive exclusion of reductive dechlorination (USEPA, 1998), but no significant effect on perchlorate, explosive, and MC degradation. Perchlorate degradation occurs under nitrate-reducing conditions which could not be interfered by sulfate reduction; explosive and MC can undergo multiple degradation pathways mediated by multiple microbes which rely on various respiration modes, suggesting their degradation is unlikely to be hindered by the concentrations of a single respirator. Furthermore, TCE can be transformed via biogeochemical pathway under elevated iron and sulfate concentrations (USAFCEE, 2003). **Table C-1** indicates that the sulfate concentrations at LHAAP-29 ranged from 1,000 mg/L in 29WW36 to 126 mg/L in 29WW38; meanwhile sulfide was undetectable (0.2 mg/L) in monitoring wells 29WW06, 29WW36, and 29WW38. Historical results for sulfate ranged from 10 to 1,700 mg/L. This data suggest that the site groundwater is not under sulfate-reducing conditions, and the elevated sulfate levels may limit biodegradation of DCE and VC.

Methane: Methanogenesis occurs in highly reducing conditions and an accumulation of methane above 500 µg/L is considered to be methanogenic conditions (USEPA, 1998). During the February 2007 sampling event, methane concentrations above non detect to 1.27 µg/L. Thus methanogenic conditions were not observed in the shallow groundwater zone (**Table C-1**).

Ethane and Ethene: Ethane and ethene are the end products of reductive dechlorination of chlorinated ethenes. The lack of detection of ethane and ethene suggest that complete reductive dechlorination is not occurring in the shallow groundwater zone (**Table C-1**).

Chloride: Elevated chloride levels more than two times above the background concentrations may be evidence that degradation of chlorinated compounds are occurring. During the February 2007 sampling, chloride concentrations in the MNA wells ranged from 9 mg/L to 565 mg/L. Historically, chloride concentrations ranged from 40.4 mg/L to 3,040 µg/L (**Table C-1**). The background chloride level calculated for the Group 4 Remedial Investigation was 1,416 mg/L

(Jacobs, 2002). Therefore, the background chloride concentration is too high to determine any influence by the degradation of the COCs.

Total Organic Carbon: Regardless of the electron acceptor being used, organic carbon is a required source of reduced carbon and energy to sustain microbial activity. TOC concentrations greater than 20 mg/L are considered adequate to support microbial activity (USEPA, 1998). In the wells sampled in February 2007, TOC ranged from 1.0 mg/L in 29WW38 to 38 mg/L in 29WW06 in the shallow groundwater zone (**Table C-1**). This data suggests that TOC levels are in the optimal range at a localized area, and adequate to stimulate microbial activity in the impacted area of the shallow groundwater zone.

pH: Optimal pH range for microbial activity is between 6 and 8 standard units. The pH within the shallow groundwater zone ranged from 6.31 to 6.80 standard units during the February 2007 sampling event (**Table C-1**). Historical values for pH ranged from 0.46 to 7.28 standard units. The pH values at LHAAP-29 are generally within the optimal range (80 of 87 readings) to support biodegradation.

The qualitative assessment of the geochemical indicators in the shallow groundwater zone at LHAAP-29 presents evidence that geochemical conditions are favorable for explosive and MC degradation; favorable conditions for perchlorate and chlorinated ethenes and ethanes degradation was established at localized areas. The DO and ORP values suggest that the groundwater conditions are varying from anaerobic to aerobic conditions. The absence of nitrate in areas impacted with contaminants indicate that conditions are favorable for the reduction of perchlorate and explosive. Elevated sulfate and the absence of methane suggest that the conditions favorable for complete dechlorination have not yet been established in the shallow groundwater zone as expected; therefore, the reductive chlorinated ethenes are degraded via mechanisms other than reductive dechlorination.

3.1.3 Third Line of Evidence –Attenuation Rates and Microbial Analysis

Natural attenuation rate estimation and microbial analysis provide evidence supporting the third line of evidence for the shallow groundwater zone.

3.1.3.1 Natural Attenuation Rate Estimation

Attenuation rates were computed and evaluated in accordance with the USEPA guidance material (USEPA, 1998). Time-dependent attenuation rate constants and estimated in-well cleanup times were determined based on COC concentration data over time from individual wells assuming first order degradation kinetics. Attenuation rates were calculated for the monitoring wells with the highest concentrations for which the available data allow such a calculation. This attenuation rate estimation incorporates all of the attenuation pathways, but cannot determine which pathway accounts for what portion of the attenuation.

Perchlorate: Perchlorate concentrations at selected monitoring wells are depicted on **Figure C-4**.

A time-dependent attenuation rate constant for perchlorate was calculated for well 116 with a 2005 concentration of 1,130 µg/L and available sequential data. The time-dependent attenuation rate at 116 is 0.000239 per day. The cleanup time to achieve the GW-Ind for perchlorate (72 µg/L) at monitoring well 116 is 32 years (**Table C-5**) based on the attenuation half-life of 7.9 years.

A time-dependent attenuation rate constant for perchlorate was calculated for well 29WW05 with a 2005 concentration of 76.8 µg/L and available sequential data. The time-dependent attenuation rate at 29WW05 is 0.000480 per day. The cleanup time to achieve the GW-Ind for perchlorate (72 µg/L) at monitoring well 29WW05 is 0.37 years (**Table C-5**) based on the attenuation half-life of 4.0 years.

A time-dependent attenuation rate constant for perchlorate was calculated for well 29WW15 with a 2005 concentration of 16,700 µg/L and available sequential data. The time-dependent attenuation rate at 29WW15 is 0.000835 per day. The cleanup time to achieve the GW-Ind for perchlorate (72 µg/L) at monitoring well 29WW15 is 18 years (**Table C-5**) based on the attenuation half-life of 2.3 years.

Perchlorate was not detected in the most recent samples from wells 29WW06, 29WW17 and 29WW18, but these wells had elevated perchlorate concentrations in the past and time-dependent attenuation rate constants were calculated. The time-dependent attenuation rates ranged from 0.00786 to 0.00107 per day. Equivalent half-lives are 0.24 and 1.8 years (**Table C-5**).

2,4-DNT: 2,4-DNT concentrations at selected monitoring wells are depicted on **Figure C-5**.

A time-dependent attenuation rate constant for 2,4-DNT was calculated for well 29WW05 with a 2005 concentration of 46.9 µg/L and available sequential data. The time-dependent attenuation rate at 29WW05 is 0.000796 per day. The cleanup time to achieve the GW-Ind for 2,4-DNT (0.42 µg/L) at monitoring well 29WW05 is 17 years (**Table C-5**) based on the attenuation half-life of 2.3 years.

A time-dependent attenuation rate constant for 2,4-DNT was calculated for well 29WW20 with a 2005 concentration of 32.4 µg/L and available sequential data. The time-dependent attenuation rate at 29WW20 is 0.00133 per day. The cleanup time to achieve the GW-Ind for 2,4-DNT (0.42 µg/L) at monitoring well 29WW20 is 9.0 years (**Table C-5**) based on the attenuation half-life of 1.4 years.

2,4-DNT was not detected in the most recent sample from well 29WW03, but this well had elevated 2,4-DNT concentrations in the past, and a time-dependent attenuation rate constant was

calculated. The time-dependent attenuation rate was 0.00204 per day, and the equivalent half-life is 0.93 years (**Table C-5**).

2,6-DNT: 2,6-DNT concentrations at selected monitoring wells are depicted on **Figure C-6**.

A time-dependent attenuation rate constant for 2,6-DNT was calculated for well 29WW03 with a 2005 concentration of 9.32 µg/L and available sequential data. The time-dependent attenuation rate at 29WW03 is 0.000384 per day. The cleanup time to achieve the GW-Ind for 2,6-DNT (0.42 µg/L) at monitoring well 29WW03 is 22 years (**Table C-5**) based on the attenuation half-life of 4.9 years.

A time-dependent attenuation rate constant for 2,6-DNT was calculated for well 29WW20 with a 2005 concentration of 112 µg/L and available sequential data. The time-dependent attenuation rate at 29WW20 is 0.00810 per day. The cleanup time to achieve the GW-Ind for 2,6-DNT (0.42 µg/L) at monitoring well 29WW20 is 19 years (**Table C-5**) based on the attenuation half-life of 2.3 years.

o-NT: o-NT concentrations at monitoring well 29WW05 are depicted on **Figure C-7**.

A time-dependent attenuation rate constant for o-NT was calculated for well 29WW05 with a 2005 concentration of 11,230 µg/L and available sequential data. The time-dependent attenuation rate at 29WW05 is 0.000554 per day. The cleanup time to achieve the GW-Ind for o-NT (1,000 µg/L) at monitoring well 29WW05 is 1.0 years (**Table C-5**) based on the attenuation half-life of 3.4 years.

o-NT was not detected in the most recent samples from wells 29WW03 and 29WW20, but these wells had elevated o-NT concentrations in the past and time-dependent attenuation rate constants were calculated. The time-dependent attenuation rates were 0.00124 and 0.000926 per day, respectively. Equivalent half-lives are 1.5 and 2.1 years (**Table C-5**).

p-NT: p-NT was not detected in the most recent samples from wells 29WW03, 29WW05 and 29WW20, but these wells had elevated p-NT concentrations in the past and time-dependent attenuation rate constants were calculated. The time-dependent attenuation rates ranged from 0.00256 to 0.00134 per day. Equivalent half-lives are 0.74 to 1.4 years (**Table C-5**).

TCE: TCE concentrations at monitoring well 29WW15 are depicted on **Figure C-8**.

A time-dependent attenuation rate constant for TCE was calculated for well 29WW15 with a 2007 concentration of 344 µg/L and available sequential data. The time-dependent attenuation rate at 29WW15 is 0.000420 per day. The cleanup time to achieve the MCL for TCE (5 µg/L) at monitoring well 29WW15 is 28 years (**Table C-5**) based on the attenuation half-life of 4.5 years.

TCE was not detected in the most recent samples from seven wells, but these wells had elevated TCE concentrations in the past and time-dependent attenuation rate constants were calculated. The time-dependent attenuation rates ranged from 0.00177 to 0.000717 per day. Equivalent half-lives are 1.1 to 2.6 years (**Table C-5**).

1,2-DCA: 1,2-DCA concentrations at monitoring well 29WW15 are depicted on **Figure C-9**.

A time-dependent attenuation rate constant for 1,2-DCA was calculated for well 29WW15 with a 2007 concentration of 5,520 µg/L and available sequential data. The time-dependent attenuation rate at 29WW15 is 0.000283 per day. The cleanup time to achieve the MCL for 1,2-DCA (5 µg/L) at monitoring well 29WW15 is 68 years (**Table C-5**) based on the attenuation half-life of 6.7 years.

MC: MC was not detected in the most recent samples from 17 wells, but these wells had elevated MC concentrations in the past and time-dependent attenuation rate constants were calculated. The time-dependent attenuation rates ranged from 0.0175 to 0.00115 per day. Equivalent half-lives are 0.11 to 1.7 years (**Table C-5**).

According to the estimated natural attenuation rates, cleanup time via natural attenuation in the shallow groundwater zone will be approximately 68 years, with 1,2-DCA at 29WW15 as the COC and well with the longest estimated time to cleanup levels. However, there are several COCs in shallow wells that do not show decreasing concentrations (2,6-DNT at 116, 29WW03 and 29WW05), and no reliable time estimates can be made in those cases. Further monitoring results over time should provide necessary information to verify the estimated attenuation rates and corresponding cleanup times.

3.1.3.2 Microbial Analysis

An important indicator of reductive dechlorination is the presence of DHC the only known species capable of complete dechlorination of TCE and its daughter products to innocuous ethene via reductive dechlorination. During the most recent sampling event in February 2007, DHC was not detected in any of the samples (**Table C-1**). The absence of dechlorinating microorganisms suggests that shallow groundwater of LHAAP-29 is unlikely to support reductive dechlorination; furthermore cometabolic degradation is likely the main pathway for chlorinated ethenes and ethanes reduction.

3.2 Intermediate Groundwater Zone

The intermediate groundwater zone extends from 50 to 100 feet bgs, separated from the shallow and deep groundwater zones by clay layers. The interconnection between different groundwater zones varies with locations, so contaminants could migrate from shallow to intermediate groundwater zone at certain locations. MC and chlorinated ethenes and ethanes were detected in

the intermediate groundwater zone, while explosive compounds were not detected. Perchlorate was present at levels below its GW-Ind (**Table C-2**).

3.2.1 *First Line of Evidence - Change over Time and with Distance*

The change in groundwater COC concentrations over time and with distance was evaluated in the intermediate groundwater at LHAAP-29. **Figure C-10** shows concentration trends for COCs at monitoring well 29WW16, where the highest COC concentrations in the intermediate groundwater zone have been found.

3.2.1.1 *Chlorinated Ethenes*

According to historical and current data, TCE was detected above its MCL. The daughter products of TCE, 1,2-DCE and VC, are also discussed in this section.

TCE: TCE was detected exceeding its MCL (5 µg/L) in three monitoring wells, 29WW16, 29WW21, and 29WW35 (**Table C-2**). Monitoring well 29WW21 had only one TCE concentration exceeding MCL, 8 µg/L, and the most recent TCE concentration was undetectable. In the association with TCE reduction in 29WW21, MC decreased from 120 µg/L to undetectable over the same monitoring period, suggesting MC degradation enhanced TCE reduction. In well 29WW35, the TCE concentration decreased from 123 µg/L in September 2006 to an estimated 0.685 µg/L in October 2008, concurrent with MC reduction from 8,770 µg/L to undetectable. In well 29WW16, where the most elevated TCE concentration was observed, TCE concentrations decreased from 8,800 µg/L in July 1998 to 4,340 µg/L in September 2006. Monitoring wells 29WW15 (shallow zone) and 29WW16 (intermediate zone) are screened at different depths at the same location, and both exhibited maximum TCE concentrations. **Figure C-11** shows TCE concentrations over time at wells 29WW16 and 29WW35.

1,2-DCE: Only one estimated concentration, 305 µg/L at 29WW16 in May 2005, exceeded the MCL for cis-1,2-DCE (70 µg/L). As TCE is degraded via reductive dechlorination, the next lower chlorinated daughter products formed are cis-1,2-DCE and trans-1,2-DCE at approximately a 100:1 to 10:1 ratio. Trace levels of cis-1,2-DCE and trans-1,2-DCE were detected at estimated concentrations of 2.27 µg/L and 0.328 µg/L in well 29WW35, for a ratio of 6.3:1. The most recent sampling event in October 2008 found no detectable DCE isomers (**Table C-2**). Furthermore, the reduction of TCE is more significant than the presence of DCE isomers. The analytical results of DCE suggest that the degradation of TCE at this site is likely via a cometabolic pathway with MC, rather than via reductive dechlorination.

VC: As the parent compounds TCE or TCA are reduced, VC is the final chlorinated daughter product during reductive dechlorination. In February 2007, VC was not observed in 29WW35.

Historical VC results show only one VC concentration exceeding the MCL, 22.4 µg/L at 29WW16 in September 2006.

The detection of DCE isomers indicates that biodegradation is occurring at this site under the first line of evidence, however the lack of elevated 1,2-DCE and VC suggests that reductive dechlorination is unlikely the dominant biodegradation pathway of natural attenuation under current conditions.

Monitoring well 29WW37 is located downgradient of 29WW16; no chlorinated ethenes were detected in this well. Based on the historical analytical result of chlorinated ethenes over time and with distance, natural attenuation is effectively controlling chlorinated ethenes in the intermediate groundwater zone.

3.2.1.2 Chlorinated Ethane

The chlorinated ethane 1,2-DCA was detected at concentrations exceeding its MCL (5 µg/L) at 29WW16 where 14.3 µg/L was observed in September 2006 (**Table C-2**). High detection limits prevented any other meaningful 1,2-DCA results at the location. TCA can also undergo reductive dechlorination, resulting in the formation of DCA isomers, followed by chloroethane, and then the harmless product ethane. The daughter product of 1,2-DCA, chloroethane, was detected in monitoring well 29WW16 at very low concentrations, suggesting that reductive dechlorination is not the dominant pathway.

3.2.1.3 Methylene Chloride

MC was the most widely distributed contaminant present in the intermediate zone at elevated concentrations, evidenced by MC exceeding its MCL (5 µg/L) in six monitoring wells, 29WW16, 29WW21, 29WW35, 29WW37, 29WW38 and 29WW39 (**Table C-2**). The most recent concentrations of MC at five of these wells has fallen below the MCL, most dramatically at 29WW35, where MC was reduced from 8,770 µg/L to undetectable between September 2006 and October 2008. The degradation of other COCs may be enhanced by MC degradation, as evidenced by the rapid removal of TCE in 29WW35 (**Figure C-10**) and limited distribution of other COCs. As a readily degradable chemical, a significant reduction was observed in all wells during the course of monitoring, except for 29WW16 where the MC concentration was observed as high as 10,300,000 µg/L in October 2008. The documented MC solubility ranges from 13 g/L to 20 g/L (INCHEM, 1996). When chemical concentration reaches 1% of its solubility in subsurface, dense non-aqueous phase liquid (DNAPL) is possibly present in the groundwater zone. The MC concentration in 29WW16 is approximately 50% of solubility; therefore, MC DNAPL is potentially present in the intermediate groundwater zone. Furthermore, MC concentrations exceeding 93,000 µg/L can be toxic for indigenous microbes (INCHEM, 1996). The current MC concentration in 29WW16 inhibits the microbial activity, thus no significant reduction of MC has been observed in this monitoring well. Attenuation mechanisms for MC in

the vicinity of 29WW16 include abiotic processes such as dispersion, dilution, volatilization and sorption. **Figure C-12** shows MC concentrations over time at wells 29WW35, 29WW37, and 29WW39.

The evaluation of changes in COC concentrations with time has shown evidence of natural attenuation. The historical and current COC data indicate a clear decreasing trend in COC concentrations over time except for the MC trend in 29WW16. Furthermore, during the sampling event in October 2008, MC concentration decreased from 10,300,000 µg/L in 29WW16 to an estimated 1.03 µg/L in the downgradient well 29WW37, suggesting that MC is effectively attenuated with distance. Thus, the area of the COC plumes is shrinking and COCs have been attenuated effectively over time and with distance.

3.2.2 *Second Line of Evidence - Geochemical Indicators*

Groundwater field parameters, including DO, ORP, pH, temperature, and conductivity, were analyzed in the field during the 2007 sampling event. In addition, laboratory analyses for the following natural attenuation parameters were performed during the same sampling event: gases (methane, ethane, and ethene), anions (sulfate, nitrate, nitrite, and chloride), and TOC. These geochemical indicators are presented in **Table C-2**.

Dissolved Oxygen: Oxygen is the preferred terminal electron acceptor during aerobic microbial respiration. A DO level less than 0.5 mg/L is the most favorable condition for anaerobic reductive dechlorination, and anaerobic microbial would not tolerate DO level above 5 mg/L (USEPA, 1998). A DO reading of 0.8 mg/L was detected in well 29WW35 during the February 2007 sampling event (**Table C-2**). Historical DO levels ranged from 0.3 to 81 mg/L in the intermediate groundwater. The range of DO levels is for the most part appropriate for anaerobic microbial activity (19 of 24 readings <5 mg/L). Comparing historical DO levels of different groundwater zones, the DO reading from intermediate wells were lower than the shallow wells, suggesting a more anaerobic condition established in the intermediate groundwater zone (**Tables C-1** and **C-2**).

Oxidative-Reduction Potential: ORP often correlates with the dominant type of microbial activity. Reductive dechlorination could occur under an ORP level of less than 50 mV (USEPA, 1998). The more negative the measurement, the more likely that sulfate-reducing or methanogenic conditions can occur in the subsurface. In well 29WW35, the ORP measurement is -106.5 mV in February 2007. Historical ORP levels ranged from -219 to 309 mg/L in the intermediate groundwater. Comparing historical ORP levels of different groundwater zones, ORP measurements in the intermediate zone were lower than those in the shallow zone, suggesting a more anaerobic condition.

Nitrate, Ferrous Iron, and Sulfate: Following oxygen, microorganisms preferentially use nitrate, ferrous iron, and sulfate in a sequential order as terminal electron acceptors. In 29WW35, nitrate and nitrite were both under the detection limits in February 2007 (**Table C-2**). During the February 2007 sampling event, the ferrous iron level was 1.23 mg/L in 29WW35, suggesting that iron-reducing conditions were present (**Table C-2**). 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. Concentrations of sulfate greater than 20 mg/L may cause competitive exclusion of reductive dechlorination (USEPA, 1998). The sulfate concentration at 29WW35 in February 2007 was 49 mg/L, and historical sulfate results ranged from 25 to 110 mg/L, which is lower than the levels measured from the shallow groundwater zone. These analytical results suggest that sulfate-reducing conditions could occur in the intermediate groundwater zone.

Methane: Methanogenesis occurs in highly reducing conditions and an accumulation of methane above 500 µg/L are considered to suggest methanogenic conditions (USEPA, 1998). During the February 2007 sampling event, elevated methane concentrations above 500 µg/L were not observed in the intermediate groundwater zone (**Table C-2**).

Ethane and Ethene: Ethane and ethene are the end products of reductive dechlorination. The lack of detection of ethane and ethene suggest that complete dechlorination is not occurring in the intermediate groundwater zone (**Table C-2**).

Total Organic Carbon: Regardless of the electron acceptor being used, organic carbon is a required source of carbon and energy to sustain microbial activity. TOC concentrations greater than 20,000 µg/L are considered adequate to support microbial activity (USEPA, 1998). TOC was an estimated 700 µg/L in 29WW35 during the sampling event of February 2007.

pH: Optimal pH range for microbial activity is between 6 and 8 standard unit. The pH at 29WW35 was 7.38 in 29WW35 during the February 2007 sampling event (**Table C-2**). The historical pH results ranged from 3.98 to 10.73, but most of the readings (19 of 26) were within the optimal range to support biodegradation.

The qualitative assessment of the geochemical indicators in the intermediate groundwater zone at LHAAP-29 presents evidence that geochemical conditions are favorable for contaminant reduction. The DO and ORP values suggest that the intermediate zone groundwater is under anaerobic conditions. The absence of nitrate at the area impacted with contaminant indicates conditions favorable for the reduction of perchlorate. Elevated ferrous iron and less elevated sulfate suggest the intermediate zone groundwater is likely under iron-reducing and sulfate-reducing conditions, which are favorable for MC and TCE degradation. In the vicinity of 29WW16, the high levels of MC prohibited the occurrence of biodegradation; therefore, dilution,

advection, dispersion, dilution, volatilization, and absorption mechanisms are likely controlling the COC attenuation in 29WW16.

3.2.3 *Third Line of Evidence - Attenuation Rates and Microbial Analysis*

Natural attenuation rate estimation and microbial analysis provide evidence supporting the third line of evidence for the intermediate groundwater zone at LHAAP-29.

3.2.3.1 *Natural Attenuation Rate Estimation*

Attenuation rates were computed and evaluated in accordance with the USEPA guidance material (USEPA, 1998). Time-dependent attenuation rate constants and estimated in-well cleanup times were determined based on TCE and MC concentration data over time from individual wells assuming first order degradation kinetics. Attenuation rates were calculated for the monitoring wells with the highest concentrations for which the available data allow such a calculation. This attenuation rate estimation incorporates all of the attenuation pathways, but cannot determine which pathway accounts for what portion of the attenuation.

TCE: TCE concentrations at selected intermediate monitoring wells are depicted on **Figure C-11**.

A time-dependent attenuation rate constant for TCE was calculated for well 29WW16 with a 2006 concentration of 4,340 µg/L and available sequential data. A 2008 result was undetectable, but the detection limit was much higher than the MCL (5 µg/L). The time-dependent attenuation rate at 29WW16 is 0.000209 per day. The cleanup time to achieve the MCL for TCE (5 µg/L) at monitoring well 29WW16 is 89 years (**Table C-6**) based on the attenuation half-life of 9.1 years.

TCE was below the MCL in the most recent sample from well 29WW35, but this well had elevated TCE concentrations in the past and a time-dependent attenuation rate constant was calculated. The time-dependent attenuation rate was 0.00635 per day. The equivalent half-life is 0.30 years (**Table C-6**).

MC: MC concentrations at selected intermediate monitoring wells are depicted on **Figure C-12**.

MC was not detected or below the MCL (5 µg/L) in the most recent samples from five wells, but these wells had elevated MC concentrations in the past and time-dependent attenuation rate constants were calculated for three of them (29WW35, 29WW37 and 29WW39). The time-dependent attenuation rates ranged from 0.0128 to 0.00744 per day. Equivalent half-lives are 0.15 to 0.28 years (**Table C-6**).

According to the estimated natural attenuation rate, cleanup via natural attenuation in the intermediate groundwater zone will be approximately 89 years for TCE reduction at 29WW16. The cleanup time for MC is unknown under current conditions. Historical MC concentrations suggest that unless the MC concentration is so high that it prevents biodegradation entirely, MC

will degrade quickly with a half-life of less than 2 years for concentrations up to 74,000 µg/L (29WW17). The MC concentration at 29WW16 is more than 100 times larger, and shows no decreasing concentration trend. Further monitoring will provide additional information on the TCE and MC concentration trends at 29WW16.

3.2.3.2 *Microbial Analysis*

An important indicator of reductive dechlorination is the presence of DHC, the only known species capable of complete dechlorination of TCE and its daughter products to innocuous ethene via reductive dechlorination. During the recent sampling event in February 2007, DHC was not detected in 29WW35 (**Table C-2**). The absence of dechlorinating microorganisms suggests that intermediate groundwater in 29WW35 is unlikely to support reductive dechlorination and metabolic degradation is likely the main pathway for chlorinated solvent reduction.

3.3 *Deep Groundwater Zone*

The deep groundwater zone extends from 120 to 160 feet bgs. Samples from monitoring wells in the deep groundwater zone (29WW04, 29WW08, 29WW40 and 29WW41) were collected between 1995 and 2009.

Past samples from 29WW08 and 29WW40 contained MC concentrations that exceeded the MCL (5 µg/L) and attenuation rates were calculated for those wells. The time-dependent attenuation rates ranged were 0.00192 and 0.0650 per day, respectively. Equivalent half-lives are 0.99 and 0.03 years (**Table C-7**).

The most recent samples from these deep zone wells contained no COC concentrations that exceeded the cleanup levels. Natural attenuation has succeeded in reducing MC concentrations that previously exceeded the MCL (5 µg/L) to undetectable levels. This supports the first line of evidence. The second line of evidence and third line of evidence were not examined for the deep groundwater zone.

4.0 Summary of Results and Conclusions

Historical perchlorate, explosives and chlorinated solvents data and geochemical indicators were evaluated for the groundwater at LHAAP-29 to determine if MNA can be used as a feasible remedy for perchlorate, explosives and chlorinated solvents present in the groundwater. Preliminary screening of multiple wells at LHAAP-29 indicated limited evidence for anaerobic biodegradation, and a more detailed evaluation was made. A tiered approach using three lines of evidence was used to demonstrate the occurrence of natural attenuation in site groundwater. The first line of evidence evaluated reductions in COC concentrations over time and with distance, the second line of evidence evaluated geochemical indicators, while the third line of evidence entailed estimation of natural attenuation rates and microbial analysis. The results of the tiered evaluation and the conclusions are summarized below.

The COCs exceeding MCLs or GW-Ind at LHAAP-29 are TCE, 1,2-DCA, perchlorate, 2,4-DNT, 2,6-DNT, o-NT, and p-NT in the shallow groundwater zone, and TCE and MC in the intermediate groundwater zone. These COCs were present in wells designated as shallow/lower shallow (called shallow zone), and intermediate zone wells. These zones are separated by layers of clay that may prevent or slow migration from one zone to the next. Wells designated as deep are not affected by COCs, although MC was present in the deep zone in past samples.

First line of evidence: Historical analytical trends indicate the occurrence of perchlorate biodegradation at LHAAP-29. In the shallow groundwater zone, perchlorate, TCE, 1,2-DCA, DNTs and NTs exhibited decreasing trends, suggesting natural attenuation is effectively controlling the contaminants. In particular, MC concentrations in the shallow zone have attenuated completely to below the MCL. In the intermediate groundwater zone, significant reductions of MC and TCE were also observed in the monitoring wells exhibiting historical high values. Furthermore, MC was detected at approximately half of solubility in one intermediate well 29WW16, where MC concentration fluctuated at elevated levels. In the deep groundwater zone, MC has been reduced to below the MCL.

MC degradation produces acetate and formate, which can be used as electron acceptors and carbon sources for other COCs degradations mediated by microbial activities. The presence of readily degradable MC may enhance TCE and 1,2-DCA reduction via a cometabolic pathway, instead of reductive dechlorination. Furthermore, the lack of DCE and VC suggest that chlorinated solvents cannot achieve complete dechlorination under current conditions, thus the reductions of TCE and 1,2-DCA is via a cometabolic pathway. In the shallow, intermediate and deep groundwater zones, natural attenuation is effectively controlling contaminant plume migration and reducing the COCs concentrations, except for MC in the intermediate zone around monitoring well 29WW16.

Second line of evidence: The qualitative assessment of the geochemical indicators in the shallow and intermediate groundwater zones at LHAAP-29 presents evidence that geochemical conditions are adequate for perchlorate, MC, and explosives reduction; however, only a localized area is suitable for reductive dechlorination of chlorinated solvents such as TCE. In the comparison of different groundwater zones, the shallow groundwater zone is more aerobic than the intermediate groundwater zone. The elevated sulfate concentrations are at levels capable of inhibiting reductive dechlorination in the shallow groundwater zones, but the adequate TOC present at the same location suggest the possible alternative pathway as cometabolic degradation.

Third line of evidence: An important indicator of reductive dechlorination is the presence of DHC which is the only known species capable of complete dechlorination of TCE. During the February 2007 sampling event, DHC was not observed in groundwater at LHAAP-29.

Time-dependent in-well natural attenuation rates were calculated for perchlorate, explosives, TCE, 1,2-DCA, and MC. Perchlorate attenuation rates ranged from 0.00786 to 0.000239 per day in the shallow groundwater zone, and the estimated time to achieve GW-Ind ranged from already completed to 32 years. Explosives attenuation rates ranged from 0.00256 to 0.000384 per day in the shallow groundwater zone, and the estimated time to achieve GW-Ind ranged from already completed to 22 years. In shallow and intermediate groundwater zones, TCE attenuation rates ranging from 0.0100 to 0.000209 per day, and the estimated time to achieve MCL ranged from already completed to 89 years. The 1,2-DCA attenuation rate was calculated as 0.000283 per day in the shallow groundwater zone, and the estimated time to achieve MCL was 68 years. In shallow, intermediate and deep groundwater zones, MC attenuation rates ranged from 0.0650 to 0.00115 per day, and for these wells, natural attenuation has already achieved the MCL. One monitoring well, 29WW16, still exhibits substantial MC concentrations and a time-dependent attenuation rate for this well is not currently available.

Conclusion: The historical sample results do not indicate that the COC plumes are expanding. Thus, the extent of the plumes appears to be stable. Additional monitoring results over time will serve to confirm or contradict that determination. Reductions in concentrations of perchlorate, explosives, TCE, 1,2-DCA and MC demonstrate that natural attenuation is occurring and is effectively controlling COCs in the shallow, intermediate and deep groundwater zones of LHAAP-29. The natural attenuation of COCs has been observed in nearly all wells, except for well 29WW16 where MC concentrations exceed the tolerant range for microorganism's activities. It is expected that conditions in the intermediate groundwater zone at 29WW16 will be more conducive to MNA if the concentrations are reduced over time by a treatment or extraction remedy.

5.0 References

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Tables

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		114					114					114					114					114				
	SAMPLE NO		PM-MW114-930515					PM-MW114-950501					PM-MW114-980714					PM-MW114-990315					PM-MW114-050514				
	SAMPLE DATE		15-May-93					1-May-95					14-Jul-98					15-Mar-99					14-May-05				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																						3.24				
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																						118.7				
pH	STD UNIT		6.61																				6.56				
Specific Conductivity	µS/cm		1,400																				2,379				
Temperature	Deg C		20																				22.26				
Turbidity	NTU																						3				
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		107,000				2						161,000				1										
Nitrate	µg/L	10,000	100	<	U		2																				
Nitrate / Nitrite	µg/L												100	<	U		1										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L																										
Sulfate	µg/L		298,000				2						400,000				1						2	U	U		4
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	<	U		1	5	<	U		1	10	<	U		10	1	<	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	5	<	U		1	5	<	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	5	<	U		1						10	<	U		10	1	<	U		1	0.25	U	U		1
Chloroethane	µg/L		10	<	U		1	10	<	U		1	20	<	U		10	2	<	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	5	<	U		1	10	<	U		1	610				10	1	<	U		1	0.25	U	U		1
trans-1,2-Dichloroethene	µg/L	100	5	<	U		1						10	<	U		10	1	<	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	5	<	U		1	5	<	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1
Vinyl chloride	µg/L	2	10	<	U		1	10	<	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.11	<	UJ		1	0.7	<	UJ (R)		1	0.26	<	U		1						0.258	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.035	<	U		1	0.5	<	UJ (R)		1	0.13	<	U		1						0.258	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.06	<	U		1	0.6	<	UJ (R)		1	0.13	<	U		1						0.258	U	U		1
2,4-Dinitrotoluene	µg/L		0.02	<	U		1	0.5	<	UJ (R)		1	0.26	<	U		1						0.258	U	U		1
2,6-Dinitrotoluene	µg/L		0.31	<	U		1	0.5	<	UJ (R)		1	0.26	<	U		1						0.258	U	U		1
o-Nitrotoluene	µg/L		0.25	<	UJ		1	0.6	<	UJ (R)		1	0.26	<	U		1						0.258	U	U		1
p-Nitrotoluene	µg/L		0.25	<	U		1	0.4	<	UJ (R)		1	0.26	<	U		1						0.258	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		115					115					115					115					116				
	SAMPLE NO		PM-MW115-930531					PM-MW115-950502					PM-MW115-980709					PM-MW115-050515					PM-MW116-930515				
	SAMPLE DATE		31-May-93					2-May-95					9-Jul-98					15-May-05					15-May-93				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																	NR									
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																	-71.1									
pH	STD UNIT		6.38															6.43					6.44				
Specific Conductivity	µS/cm		2,700															3,055					4,500				
Temperature	Deg C		19.2															22.33					18.5				
Turbidity	NTU																	0.9									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		584,300				50						640,000				1						642,000				2
Nitrate	µg/L	10,000	100 <	U			50																280				2
Nitrate / Nitrite	µg/L												100 <	U			1										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L																	2 U	U			4					
Sulfate	µg/L		28,700				50						34,000				1						1,520,000				2
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5 <	U			1	5 <	U			1	1 <	U			1	0.5 U	U			1	5 <	U			1
1,2-Dichloroethane	µg/L	5	5 <	U			1	5 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
cis-1,2-Dichloroethene	µg/L	70	5 <	U			1						1 <	U			1	0.25 U	U			1	5 <	U			1
Chloroethane	µg/L		10 <	U			1	10 <	U			1	2 <	U			1	0.5 U	U			1	10 <	U			1
Methylene chloride	µg/L	5	5 <	U			1	10 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
trans-1,2-Dichloroethene	µg/L	100	5 <	U			1						1 <	U			1	0.25 U	U			1	5 <	U			1
Trichloroethene	µg/L	5	5 <	U			1	5 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
Vinyl chloride	µg/L	2	10 <	U			1	10 <	U			1	1 <	U			1	0.25 U	U			1	10 <	U			1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.11 <	U			1	0.7 <	UJ (R)			1	0.26 <	U			1	0.25 U	U			1	22 <	UJ			1
2-Amino-4,6-dinitrotoluene	µg/L		0.035 <	U			1	0.5 <	UJ (R)			1	0.13 <	U			1	0.25 U	U			1	7 <	U			1
4-Amino-2,6-dinitrotoluene	µg/L		0.06 <	U			1	0.6 <	UJ (R)			1	0.13 <	U			1	0.25 U	U			1	12 <	U			1
2,4-Dinitrotoluene	µg/L		0.02 <	U			1	0.5 <	UJ (R)			1	0.26 <	U			1	0.25 U	U			1	4 <	U			1
2,6-Dinitrotoluene	µg/L		0.31 <	UJ			1	0.5 <	UJ (R)			1	0.26 <	U			1	0.25 U	U			1	160				1
o-Nitrotoluene	µg/L		0.25 <	UJ			1	0.6 <	UJ (R)			1	0.26 <	U			1	0.25 U	U			1	4400	J			1
p-Nitrotoluene	µg/L		0.25 <	U			1	0.4 <	UJ (R)			1	0.26 <	U			1	0.25 U	U			1	670				1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		116					116					116					116					116				
	SAMPLE NO		PM-MW116-950502					PM-MW116-980709					PM-MW116-000916					PM-MW116-010208					PM-MW116-020312				
	SAMPLE DATE		2-May-95					9-Jul-98					16-Sep-00					8-Feb-01					12-Mar-02				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																										
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	µS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							517,000				1															
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							100	<	U		1															
Nitrite	µg/L	1,000																									
Perchlorate	µg/L												2,010				25	1,600				20	665				20
Sulfate	µg/L							1,000,000				1															
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	<	U		1	1	<	U		1															
1,2-Dichloroethane	µg/L	5	5	<	U		1	1	<	U		1															
cis-1,2-Dichloroethene	µg/L	70						1	<	U		1															
Chloroethane	µg/L		10	<	U		1	2	<	U		1															
Methylene chloride	µg/L	5	10	<	U		1	1	<	U		1															
trans-1,2-Dichloroethene	µg/L	100						1	<	U		1															
Trichloroethene	µg/L	5	5	<	U		1	1	<	U		1															
Vinyl chloride	µg/L	2	10	<	U		1	1	<	U		1															
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		350	<	UJ (R)		500	0.26	<	U		1															
2-Amino-4,6-dinitrotoluene	µg/L		250	<	UJ (R)		500	0.13	<	U		1															
4-Amino-2,6-dinitrotoluene	µg/L		300	<	UJ (R)		500	0.13	<	U		1															
2,4-Dinitrotoluene	µg/L		250	<	UJ (R)		500	48		J		1															
2,6-Dinitrotoluene	µg/L		250	<	UJ (R)		500	48		J		1															
o-Nitrotoluene	µg/L		4600		J (R)		500	3900				1															
p-Nitrotoluene	µg/L		200	<	UJ (R)		500	480				1															

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		116					116					117					117					117				
	SAMPLE NO		PM-MW116-020922					PM-MW116-050514					PM-MW117-930515					PM-MW117-950501					PM-MW117-980709				
	SAMPLE DATE		22-Sep-02					14-May-05					15-May-93					1-May-95					9-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							1.56																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							129.8																			
pH	STD UNIT							6.24					6.78														
Specific Conductivity	µS/cm							3,839					3,000														
Temperature	Deg C							20.26					19.5														
Turbidity	NTU							0																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L												822,000				2						1,220,000				1
Nitrate	µg/L	10,000											140				2										
Nitrate / Nitrite	µg/L																					100	<	U			1
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1,830				100	1,130			40																
Sulfate	µg/L												10,000				2						39,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7						0.5	U	U		1	5	<	U		1	5	<	U		1	1	<	U		1
1,2-Dichloroethane	µg/L	5						0.25	U	U		1	5	<	U		1	5	<	U		1	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70						0.25	U	U		1	5	<	U		1					1	<	U			1
Chloroethane	µg/L							0.5	U	U		1	10	<	U		1	10	<	U		1	2	<	U		1
Methylene chloride	µg/L	5						0.25	U	U		1	5	<	U		1	10	<	U		1	1	<	U		1
trans-1,2-Dichloroethene	µg/L	100						0.25	U	U		1	5	<	U		1						1	<	U		1
Trichloroethene	µg/L	5						0.25	U	U		1	5	<	U		1	5	<	U		1	1	<	U		1
Vinyl chloride	µg/L	2						0.25	U	U		1	10	<	U		1	10	<	U		1	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L							0.25	U	U		1	0.11	<	UJ		1	0.7	<	UJ (R)		1	0.26	<	UJ		1
2-Amino-4,6-dinitrotoluene	µg/L							0.25	U	U		1	0.035	<	U		1	0.5	<	UJ (R)		1	0.13	<	UJ		1
4-Amino-2,6-dinitrotoluene	µg/L							0.25	U	U		1	0.06	<	U		1	0.6	<	UJ (R)		1	0.13	<	UJ		1
2,4-Dinitrotoluene	µg/L							0.25	U	U		1	0.02	<	U		1	0.5	<	UJ (R)		1	0.26	<	UJ		1
2,6-Dinitrotoluene	µg/L							239			100		0.31	<	U		1	0.5	<	UJ (R)		1	0.26	<	UJ		1
o-Nitrotoluene	µg/L							8,140		JH	08A	2,000	0.25	<	UJ		1	0.6	<	UJ (R)		1	0.26	<	UJ		1
p-Nitrotoluene	µg/L							1,400				500	0.25	<	U		1	0.4	<	UJ (R)		1	0.26	<	UJ		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		117					117					117					118					118				
	SAMPLE NO		PM-MW117-020312					PM-MW117-020921					PM-MW117-050514					PM-MW118-930514					PM-MW118-930514FD				
	SAMPLE DATE		12-Mar-02					21-Sep-02					14-May-05					14-May-93					14-May-93				
	SAMPLE PURPOSE		REG					REG					REG					REG					FD				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L												2.15														
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV												307.8														
pH	STD UNIT												6.47					6.56									
Specific Conductivity	µS/cm												5,396					5,200									
Temperature	Deg C												19.99					19.9									
Turbidity	NTU												0														
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																	914,000				20	920,000				20
Nitrate	µg/L	10,000																1,000				20	1,100				20
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		0.958	U	U		1	1.45	U	U		1	2.5	U	U		1										
Sulfate	µg/L																	910,000				20	884,000				20
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7											0.5	U	U		1	5	<	U		1	5	<	U		1
1,2-Dichloroethane	µg/L	5											0.25	U	U		1	5	<	U		1	5	<	U		1
cis-1,2-Dichloroethene	µg/L	70											0.25	U	U		1	5	<	U		1	5	<	U		1
Chloroethane	µg/L												0.5	U	U		1	10	<	U		1	10	<	U		1
Methylene chloride	µg/L	5											0.25	U	U		1	5	<	U		1	5	<	U		1
trans-1,2-Dichloroethene	µg/L	100											0.25	U	U		1	5	<	U		1	5	<	U		1
Trichloroethene	µg/L	5											0.25	U	U		1	5	<	U		1	5	<	U		1
Vinyl chloride	µg/L	2											0.25	U	U		1	10	<	U		1	10	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L												0.25	U	U		1	0.11	<	U		1					
2-Amino-4,6-dinitrotoluene	µg/L												0.25	U	U		1	0.035	<	U		1					
4-Amino-2,6-dinitrotoluene	µg/L												0.25	U	U		1	0.06	<	U		1					
2,4-Dinitrotoluene	µg/L												0.25	U	U		1	0.02	<	U		1					
2,6-Dinitrotoluene	µg/L												0.25	U	U		1	0.31	<	U		1					
o-Nitrotoluene	µg/L												0.25	U	U		1	0.25	<	U		1					
p-Nitrotoluene	µg/L												0.25	U	U		1	0.25	<	U		1					

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		118					118					118					119				
	SAMPLE NO		PM-MW118-950501					PM-MW118-980709					PM-MW118-050515					PM-MW119-930514				
	SAMPLE DATE		1-May-95					9-Jul-98					15-May-05					14-May-93				
	SAMPLE PURPOSE		REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L												86.2									
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV												204									
pH	STD UNIT												6.84					6.87				
Specific Conductivity	µS/cm												2,288					6,100				
Temperature	Deg C												19.39					19.3				
Turbidity	NTU												-4.2									
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L							463,000				1						1,560,000				20
Nitrate	µg/L	10,000																850				20
Nitrate / Nitrite	µg/L							453				1										
Nitrite	µg/L	1,000																				
Perchlorate	µg/L												2 U	U			4					
Sulfate	µg/L							710,000				1						557,000				20
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	5 <	U			1	1 <	U			1	0.5 U	U			1	5 <	U			1
1,2-Dichloroethane	µg/L	5	5 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
cis-1,2-Dichloroethene	µg/L	70						1 <	U			1	0.25 U	U			1	5 <	U			1
Chloroethane	µg/L		10 <	U			1	2 <	U			1	0.5 U	U			1	10 <	U			1
Methylene chloride	µg/L	5	10 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
trans-1,2-Dichloroethene	µg/L	100						1 <	U			1	0.25 U	U			1	5 <	U			1
Trichloroethene	µg/L	5	5 <	U			1	1 <	U			1	0.25 U	U			1	5 <	U			1
Vinyl chloride	µg/L	2	10 <	U			1	1 <	U			1	0.25 U	U			1	10 <	U			1
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.7 <	UJ (R)			1	0.26 <	U			1	0.255 U	U			1	0.11 <	UJ			1
2-Amino-4,6-dinitrotoluene	µg/L		0.5 <	UJ (R)			1	0.13 <	U			1	0.255 U	U			1	0.035 <	U			1
4-Amino-2,6-dinitrotoluene	µg/L		0.6 <	UJ (R)			1	0.13 <	U			1	0.255 U	U			1	0.06 <	U			1
2,4-Dinitrotoluene	µg/L		0.5 <	UJ (R)			1	0.26 <	U			1	0.255 U	U			1	0.02 <	U			1
2,6-Dinitrotoluene	µg/L		0.5 <	UJ (R)			1	0.26 <	U			1	0.255 U	U			1	0.31 <	UJ			1
o-Nitrotoluene	µg/L		0.6 <	UJ (R)			1	0.26 <	U			1	0.255 U	U			1	0.25 <	UJ			1
p-Nitrotoluene	µg/L		0.4 <	UJ (R)			1	0.26 <	U			1	0.255 U	U			1	0.25 <	U			1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		119					119					119					119					29WW01				
	SAMPLE NO		PM-MW119-950502					PM-MW119-980713					PM-MW119-990315					PM-MW119-050515					29WW01-950430				
	SAMPLE DATE		2-May-95					13-Jul-98					15-Mar-99					15-May-05					30-Apr-95				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																	4.32									
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																	195.9									
pH	STD UNIT																	6.68									
Specific Conductivity	µS/cm																	4,100									
Temperature	Deg C																	18.86									
Turbidity	NTU																	3.6									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							3,040,000				1															
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							100	<	U		1															
Nitrite	µg/L	1,000																									
Perchlorate	µg/L																	5	U	U		10					
Sulfate	µg/L							1,400,000				1															
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	<	U		1	1	<	U		1	1	<	U		1	0.5	U	U		1	5	<	U		1
1,2-Dichloroethane	µg/L	5	5	<	U		1	1	<	U		1	1	<	U		1	0.25	U	U		1	5	<	U		1
cis-1,2-Dichloroethene	µg/L	70						1	<	U		1	1	<	U		1	0.25	U	U		1					
Chloroethane	µg/L		10	<	U		1	2	<	U		1	2	<	U		1	0.5	U	U		1	10	<	U		1
Methylene chloride	µg/L	5	10	<	U		1	67				1	1	<	U		1	0.25	U	U		1	10	<	U		1
trans-1,2-Dichloroethene	µg/L	100						1	<	U		1	1	<	U		1	0.25	U	U		1					
Trichloroethene	µg/L	5	5	<	U		1	1	<	U		1	1	<	U		1	0.25	U	U		1	5	<	U		1
Vinyl chloride	µg/L	2	10	<	U		1	1	<	U		1	1	<	U		1	0.25	U	U		1	10	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.7	<	UJ (R)		1	0.26	<	U		1						0.266	U	U		1	0.7	<	UJ (R)		1
2-Amino-4,6-dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.13	<	U		1						0.266	U	U		1	0.5	<	UJ (R)		1
4-Amino-2,6-dinitrotoluene	µg/L		0.6	<	UJ (R)		1	0.13	<	U		1						0.266	U	U		1	0.6	<	UJ (R)		1
2,4-Dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.26	<	U		1						0.266	U	U		1	0.5	<	UJ (R)		1
2,6-Dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.26	<	U		1						0.266	U	U		1	0.5	<	UJ (R)		1
o-Nitrotoluene	µg/L		0.6	<	UJ (R)		1	0.26	<	U		1						0.266	U	U		1	0.6	<	UJ (R)		1
p-Nitrotoluene	µg/L		0.4	<	UJ (R)		1	0.26	<	U		1						0.266	U	U		1	0.4	<	UJ (R)		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW01					29WW01					29WW02					29WW02					29WW02				
	SAMPLE NO		29WW01-980714					29WW01-050513					29WW02-950501					29WW02-980714					29WW02-990315				
	SAMPLE DATE		14-Jul-98					13-May-05					1-May-95					14-Jul-98					15-Mar-99				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							3.15																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							100																			
pH	STD UNIT							6.6																			
Specific Conductivity	µS/cm							2,204																			
Temperature	Deg C							20.64																			
Turbidity	NTU							17.9																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		179,000				1											926,000				1					
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L		183				1											100	<	U		1					
Nitrite	µg/L	1,000																									
Perchlorate	µg/L							1	U	U		2															
Sulfate	µg/L		260,000				1											1,300,000				1					
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	1	<	U		1	0.5	U	U		1	5	<	U		1	5	<	U		5	1	<	U		1
1,2-Dichloroethane	µg/L	5	1	<	U		1	0.25	U	U		1	5	<	U		1	5	<	U		5	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70	1	<	U		1	0.25	U	U		1						5	<	U		5	1	<	U		1
Chloroethane	µg/L		2	<	U		1	0.5	U	U		1	10	<	U		1	10	<	U		5	2	<	U		1
Methylene chloride	µg/L	5	1	<	U		1	0.25	U	U		1	10	<	U		1	270				5	0.69		UJ		1
trans-1,2-Dichloroethene	µg/L	100	1	<	U		1	0.25	U	U		1						5	<	U		5	1	<	U		1
Trichloroethene	µg/L	5	1	<	U		1	0.25	U	U		1	5	<	U		1	3.6		J		5	1	<	U		1
Vinyl chloride	µg/L	2	1	<	U		1	0.25	U	U		1	10	<	U		1	5	<	U		5	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.26	<	U		1	0.258	U	U		1	0.7	<	UJ (R)		1	0.26	<	U		1					
2-Amino-4,6-dinitrotoluene	µg/L		0.13	<	U		1	0.258	U	U		1	0.5	<	UJ (R)		1	0.13	<	U		1					
4-Amino-2,6-dinitrotoluene	µg/L		0.13	<	U		1	0.258	U	U		1	0.6	<	UJ (R)		1	0.13	<	U		1					
2,4-Dinitrotoluene	µg/L		0.26	<	U		1	0.258	U	U		1	0.5	<	UJ (R)		1	0.26	<	U		1					
2,6-Dinitrotoluene	µg/L		0.26	<	U		1	0.258	U	U		1	0.5	<	UJ (R)		1	0.26	<	U		1					
o-Nitrotoluene	µg/L		0.26	<	U		1	0.258	U	U		1	0.6	<	UJ (R)		1	0.26	<	U		1					
p-Nitrotoluene	µg/L		0.26	<	U		1	0.258	U	U		1	0.4	<	UJ (R)		1	0.26	<	U		1					

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW02					29WW02					29WW03					29WW03					29WW03				
	SAMPLE NO		29WW02-040831					29WW02-050514					29WW03-950504					29WW03-980714					29WW03-980714FD				
	SAMPLE DATE		31-Aug-04					14-May-05					4-May-95					14-Jul-98					14-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					FD				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		0.99					1.08																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		149.3					118.7																			
pH	STD UNIT		6.96					6.39																			
Specific Conductivity	µS/cm		4,982					4,815																			
Temperature	Deg C		24.1					23.09																			
Turbidity	NTU		5.7					5.7																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																	40,400				1	42,900				1
Nitrate	µg/L	10,000																1,360				1	1,370				1
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1	U	U		1	2.5	U	U		5															
Sulfate	µg/L																	93,000				1	95,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	U	U		1	0.5	U	U		1	5	<	U		1	1	<	U		1	1	<	U		1
1,2-Dichloroethene	µg/L	5	5	U	U		1	0.25	U	U		1	5	<	U		1	1	<	U		1	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70	5	U	UJL	11A	1	0.25	U	U		1					1	1	<	U		1	1	<	U		1
Chloroethane	µg/L		5	U	U		1	0.5	U	U		1	10	<	U		1	2	<	U		1	2	<	U		1
Methylene chloride	µg/L	5	5	U	U		1	0.25	U	U		1	10	<	U		1	1	<	U		1	1	<	U		1
trans-1,2-Dichloroethene	µg/L	100	5	U	U		1	0.25	U	U		1					1	1	<	U		1	1	<	U		1
Trichloroethene	µg/L	5	5	U	UJ	05B	1	0.25	U	U		1	5	<	U		1	1	<	U		1	1	<	U		1
Vinyl chloride	µg/L	2	5	U	U		1	0.25	U	U		1	10	<	U		1	1	<	U		1	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	35	<	UJ (R)		1	0.26	<	U		1	0.26	<	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	25	<	UJ (R)		1	0.13	<	U		1	0.13	<	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	30	<	UJ (R)		1	0.13	<	U		1	0.13	<	U		1
2,4-Dinitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	25	<	UJ (R)		1	30				1	55				1
2,6-Dinitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	79.6		J (R)		1	30				1	55				1
o-Nitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	300		J (R)		1	1700				1	510				25
p-Nitrotoluene	µg/L		0.2	U	UJ	02B	1	0.25	U	U		1	20	<	UJ (R)		1	1900				1	560				25

Table C-1
Summary of Shallow Groundwater Analytical Results
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	LOCATION CODE		29WW03					29WW03					29WW05					29WW05					29WW05				
	SAMPLE NO		29WW03-040830					29WW03-050517					29WW05-950319					29WW05-950429					29WW05-980709				
	SAMPLE DATE		30-Aug-04					17-May-05					19-Mar-95					29-Apr-95					9-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		2.31					6.6																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		135.4					166.6																			
pH	STD UNIT		6.83					6.7																			
Specific Conductivity	µS/cm		1,194					1,313																			
Temperature	Deg C		26.91					19.63																			
Turbidity	NTU		10.6					2.8																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																						87,300				1
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																						100	<	U		1
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1	U	U		1	0.5	U	U		1															
Sulfate	µg/L																						200,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	U	U		1	0.5	U	U		1						5	<	U		1	1	<	U		1
1,2-Dichloroethane	µg/L	5	5	U	UJ	05B	1	0.25	U	U		1						5	<	U		1	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70	5	U	U		1	0.25	U	U		1											1	<	U		1
Chloroethane	µg/L		5	U	UJ	05B	1	0.5	U	U		1						10	<	U		1	2	<	U		1
Methylene chloride	µg/L	5	5	U	U		1	0.25	U	U		1						10	<	U		1	1	<	U		1
trans-1,2-Dichloroethene	µg/L	100	5	U	U		1	0.25	U	U		1											1	<	U		1
Trichloroethene	µg/L	5	5	U	U		1	0.25	U	U		1						5	<	U		1	1	<	U		1
Vinyl chloride	µg/L	2	5	U	U		1	0.25	U	U		1						10	<	U		1	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	10				1	350	<	UJ (R)		500	0.26	<	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	11				1	250	<	UJ (R)		500	5.9				1
4-Amino-2,6-dinitrotoluene	µg/L		0.21	P	J	18	1	0.25	U	U		1	24				1	300	<	UJ (R)		500	5.9				1
2,4-Dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	3000				1	165		J (R)		500	110				1
2,6-Dinitrotoluene	µg/L		17				1	9.32	J	J	15	10						250	<	UJ (R)		500	110				1
o-Nitrotoluene	µg/L		120	D			1	71.3				10	18000				1	1900		J (R)		500	3700				1
p-Nitrotoluene	µg/L		0.2	U	U		1	37.2				10	2900				1	200	<	UJ (R)		500	900				1

Table C-1
Summary of Shallow Groundwater Analytical Results
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	LOCATION CODE		29WW05					29WW05					29WW05					29WW05					29WW05				
	SAMPLE NO		29WW05-000916					29WW05-010208					29WW05-020312					29WW05-020921					29WW05-040826				
	SAMPLE DATE		16-Sep-00					8-Feb-01					12-Mar-02					21-Sep-02					26-Aug-04				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																						0.85				
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																						270.1				
pH	STD UNIT																						6.1				
Specific Conductivity	µS/cm																						1,185				
Temperature	Deg C																						24.77				
Turbidity	NTU																						3				
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		130				2	130				2	77.1				1	65.7				1	42				5
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7																					5 U	U			1
1,2-Dichloroethane	µg/L	5																					5 U	U			1
cis-1,2-Dichloroethene	µg/L	70																					5 U	U			1
Chloroethane	µg/L																						5 U	U			1
Methylene chloride	µg/L	5																					5 U	U			1
trans-1,2-Dichloroethene	µg/L	100																					5 U	U			1
Trichloroethene	µg/L	5																					5 U	U			1
Vinyl chloride	µg/L	2																					5 U	U			1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																						4 U	U			20
2-Amino-4,6-dinitrotoluene	µg/L																						4 U	U			20
4-Amino-2,6-dinitrotoluene	µg/L																						15 P	J	18		20
2,4-Dinitrotoluene	µg/L																						160 P	J	18		20
2,6-Dinitrotoluene	µg/L																						280 P	J	18		20
o-Nitrotoluene	µg/L																						3100 D				200
p-Nitrotoluene	µg/L																						16 P	J	18		20

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW05					29WW06					29WW06					29WW06				
	SAMPLE NO		29WW05-050516					29WW06-950429					29WW06-980710					29WW06-000522				
	SAMPLE DATE		16-May-05					29-Apr-95					10-Jul-98					22-May-00				
	SAMPLE PURPOSE		REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L		1.1																			
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV		96.3																			
pH	STD UNIT		6.91																			
Specific Conductivity	µS/cm		1,198																			
Temperature	Deg C		19.82																			
Turbidity	NTU		0																			
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L												498,000				10					
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L												12,100				10					
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		76.8				1											620				50
Sulfate	µg/L												1,500,000				10					
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	5	<	U		1	1	<	U		1					
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	5	<	U		1	0.52		J		1					
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1						1	<	U		1					
Chloroethane	µg/L		0.5	U	U		1	10	<	U		1	2	<	U		1					
Methylene chloride	µg/L	5	0.25	U	U		1	10	<	U		1	1		U		1					
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1						1	<	U		1					
Trichloroethene	µg/L	5	0.25	U	U		1	5	<	U		1	1	<	U		1					
Vinyl chloride	µg/L	2	0.25	U	U		1	10	<	U		1	1	<	U		1					
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.258	U	U		1	0.7	<	UJ (R)		1	0.26	<	UJ		1					
2-Amino-4,6-dinitrotoluene	µg/L		0.258	U	U		1	0.5	<	UJ (R)		1	0.13	<	UJ		1					
4-Amino-2,6-dinitrotoluene	µg/L		16.3				5	0.6	<	UJ (R)		1	0.13	<	UJ		1					
2,4-Dinitrotoluene	µg/L		50.9				5	0.5	<	UJ (R)		1	0.26	<	UJ		1					
2,6-Dinitrotoluene	µg/L		224				50	0.5	<	UJ (R)		1	0.26	<	UJ		1					
o-Nitrotoluene	µg/L		1,230				250	0.6	<	UJ (R)		1	0.26	<	UJ		1					
p-Nitrotoluene	µg/L		42.7				5	0.4	<	UJ (R)		1	0.26	<	UJ		1					

[illegible]

	LOCATION CODE		29WW06					29WW07					29WW07					29WW07					29WW07				
	SAMPLE NO		29WW06-FEB2007					29WW07-950501					29WW07-980713					29WW07-000522					29WW07-000918				
	SAMPLE DATE		22-Feb-07					1-May-95					13-Jul-98					22-May-00					18-Sep-00				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml		10	U	U		1																				
FIELD TESTS																											
Dissolved Oxygen	mg/L		1.51																								
Ferrous iron	µg/L		0																								
Oxygen Reduction Potential	mV		268.7																								
pH	STD UNIT		6.5																								
Specific Conductivity	µS/cm		3,517																								
Temperature	Deg C		20.22																								
Turbidity	NTU		0.7																								
GASES																											
Ethane	µg/L		0.6	U	U		1																				
Ethylene	µg/L		0.8	U	U		1																				
Methane	µg/L		0.3	U	U		1																				
GEN CHEMISTRY																											
Chloride	µg/L		298,000				20						570,000				1										
Nitrate	µg/L	10000	1,300				1																				
Nitrate / Nitrite	µg/L		1,300				4						100	<	U		1										
Nitrite	µg/L	1000	3	U	U		1																				
Perchlorate	µg/L		20	U	U		5											1	<	U		1		1.7	<	U	2
Sulfate	µg/L		726,000				4						910,000				1										
Sulfide	µg/L		200	UB	U		1																				
Total Alkalinity	µg/L		856,000				5																				
Total Organic Carbon	µg/L		38,000				1																				
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.68	U	U		1	5	<	U		1	1	<	U		1										
1,2-Dichloroethane	µg/L	5	0.53	U	U		1	5	<	U		1	1	<	U		1										
cis-1,2-Dichloroethene	µg/L	70	0.83	U	U		1						1	<	U		1										
Chloroethane	µg/L		0.46	U	U		1	10	<	U		1					2	<	U		1						
Methylene chloride	µg/L	5	0.67	U	U		1	10	<	U		1	1	<	U		1										
trans-1,2-Dichloroethene	µg/L	100	0.75	U	U		1										1	<	U		1						
Trichloroethene	µg/L	5	0.63	U	U		1	5	<	U		1	1	<	U		1										
Vinyl chloride	µg/L	2	0.32	U	U		1	10	<	U		1					1	<	U		1						
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.076	U	U		1	0.7	<	UJ (R)		1	0.26	<	U		1										
2-Amino-4,6-dinitrotoluene	µg/L		0.067	U	U		1	0.5	<	UJ (R)		1	0.13	<	U		1										
4-Amino-2,6-dinitrotoluene	µg/L		0.17	J	J	15	1	0.6	<	UJ (R)		1	0.13	<	U		1										
2,4-Dinitrotoluene	µg/L		0.16	J	J	15	1	0.5	<	UJ (R)		1	0.26	<	U		1										
2,6-Dinitrotoluene	µg/L		0.062	U	U		1	0.5	<	UJ (R)		1	0.26	<	U		1										
o-Nitrotoluene	µg/L		0.057	U	U		1	0.6	<	UJ (R)		1	0.26	<	U		1										
p-Nitrotoluene	µg/L		0.071	U	U		1	0.4	<	UJ (R)		1	0.26	<	U		1										

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW07					29WW07					29WW07					29WW07					29WW09				
	SAMPLE NO		29WW07-020313					29WW07-020923					29WW07-040825					29WW07-050514					29WW09-950429				
	SAMPLE DATE		13-Mar-02					23-Sep-02					25-Aug-04					14-May-05					29-Apr-95				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L												0.7					0.55									
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV												173.5					70									
pH	STD UNIT												6.25					6.31									
Specific Conductivity	µS/cm												33,995					3,752									
Temperature	Deg C												22.73					24.57									
Turbidity	NTU												2.2					5.2									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1000																									
Perchlorate	µg/L		0.958	U	U		1	1.45	U	U		1	1	U	U		1	2	U	U		4					
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7											5	U	U		1	0.5	U	U		1	5	<	U		1
1,2-Dichloroethane	µg/L	5											5	U	U		1	0.25	U	U		1	5	<	U		1
cis-1,2-Dichloroethene	µg/L	70											5	U	U		1	0.25	U	U		1					
Chloroethane	µg/L												5	U	U		1	0.5	U	U		1	10	<	U		1
Methylene chloride	µg/L	5											5	U	U		1	0.25	U	U		1	10	<	U		1
trans-1,2-Dichloroethene	µg/L	100											5	U	U		1	0.25	U	U		1					
Trichloroethene	µg/L	5											5	U	U		1	0.25	U	U		1	5	<	U		1
Vinyl chloride	µg/L	2											5	U	U		1	0.25	U	U		1	10	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.7	<	UJ (R)		1
2-Amino-4,6-dinitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.5	<	UJ (R)		1
4-Amino-2,6-dinitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.6	<	UJ (R)		1
2,4-Dinitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.5	<	UJ (R)		1
2,6-Dinitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.5	<	UJ (R)		1
o-Nitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.6	<	UJ (R)		1
p-Nitrotoluene	µg/L												0.2	U	U		1	0.255	U	U		1	0.4	<	UJ (R)		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW09					29WW09					29WW09					29WW09					29WW09				
	SAMPLE NO		29WW09-980709					29WW09-000916					29WW09-020313					29WW09-020921					29WW09-050515				
	SAMPLE DATE		9-Jul-98					16-Sep-00					13-Mar-02					21-Sep-02					15-May-05				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																							7.88			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	µS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		857,000				1																				
Nitrate	µg/L	10000																									
Nitrate / Nitrite	µg/L		100	<	U		1																				
Nitrite	µg/L	1000																									
Perchlorate	µg/L							3.4	<	U		4	479	U	U		500	1.45	U	U		1	2.5	U	U		5
Sulfate	µg/L		1,700,000				1																				
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	1	<	U		1																0.5	U	U		1
1,2-Dichloroethane	µg/L	5	1	<	U		1																0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	1.3				1																0.25	U	U		1
Chloroethane	µg/L		2	<	U		1																0.5	U	U		1
Methylene chloride	µg/L	5	1	<	U		1																0.25	U	U		1
trans-1,2-Dichloroethene	µg/L	100	1	<	U		1																0.25	U	U		1
Trichloroethene	µg/L	5	1.1				1																0.25	U	U		1
Vinyl chloride	µg/L	2	1	<	U		1																0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.26	<	U		1																0.25	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.13	<	U		1																0.25	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.13	<	U		1																0.25	U	U		1
2,4-Dinitrotoluene	µg/L		0.26	<	U		1																0.25	U	U		1
2,6-Dinitrotoluene	µg/L		0.26	<	U		1																0.25	U	U		1
o-Nitrotoluene	µg/L		31				1																0.25	U	U		1
p-Nitrotoluene	µg/L		5.4				1																0.25	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW10					29WW10					29WW10					29WW10					29WW10				
	SAMPLE NO		29WW10-950502					29WW10-950502FD					29WW10-980710					29WW10-000916					29WW10-020313				
	SAMPLE DATE		2-May-95					2-May-95					10-Jul-98					16-Sep-00					13-Mar-02				
	SAMPLE PURPOSE		REG					FD					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	29WW10	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																										
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	µS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L												135,000				1										
Nitrate	µg/L	10000																									
Nitrate / Nitrite	µg/L												100	<	U		1										
Nitrite	µg/L	1000																									
Perchlorate	µg/L																	0.85	<	U		1	0.958	U	U		1
Sulfate	µg/L												72,000				1										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	<	U		1	5	<	U		1	1	<	U		1										
1,2-Dichloroethane	µg/L	5	5	<	U		1	5	<	U		1	1	<	U		1										
cis-1,2-Dichloroethene	µg/L	70											1	<	U		1										
Chloroethane	µg/L		10	<	U		1	10	<	U		1	2	<	U		1										
Methylene chloride	µg/L	5	10	<	U		1	10	<	U		1	3.4		U		1										
trans-1,2-Dichloroethene	µg/L	100											1	<	U		1										
Trichloroethene	µg/L	5	5	<	U		1	5	<	U		1	1	<	U		1										
Vinyl chloride	µg/L	2	10	<	U		1	10	<	U		1	1	<	U		1										
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.7	<	UJ (R)		1	0.7	<	UJ (R)		1	0.26	<	UJ		1										
2-Amino-4,6-dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.5	<	UJ (R)		1	0.13	<	UJ		1										
4-Amino-2,6-dinitrotoluene	µg/L		0.6	<	UJ (R)		1	0.6	<	UJ (R)		1	0.13	<	UJ		1										
2,4-Dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.5	<	UJ (R)		1	0.26	<	UJ		1										
2,6-Dinitrotoluene	µg/L		0.5	<	UJ (R)		1	0.5	<	UJ (R)		1	0.26	<	UJ		1										
o-Nitrotoluene	µg/L		0.6	<	UJ (R)		1	0.6	<	UJ (R)		1	0.26	<	UJ		1										
p-Nitrotoluene	µg/L		0.4	<	UJ (R)		1	0.4	<	UJ (R)		1	0.26	<	UJ		1										

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW10					29WW10					29WW11					29WW11					29WW11				
	SAMPLE NO		29WW10-020923					29WW10-050516					29WW11-950430					29WW11-980713					29WW11-000522				
	SAMPLE DATE		23-Sep-02					16-May-05					30-Apr-95					13-Jul-98					22-May-00				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							3.91																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							200.7																			
pH	STD UNIT							6.81																			
Specific Conductivity	µS/cm							2,016																			
Temperature	Deg C							17.72																			
Turbidity	NTU							3.8																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																	1,070,000				1					
Nitrate	µg/L	10000																100	<	U		1					
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1000																									
Perchlorate	µg/L		1.45	U	U		1	1	U	U		2											16.6	J		1	
Sulfate	µg/L																	1,700,000				1					
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7						0.5	U	U		1	5	<	U		1	1	<	U		1					
1,2-Dichloroethene	µg/L	5						0.25	U	U		1	5	<	U		1	1	<	U		1					
cis-1,2-Dichloroethene	µg/L	70						0.25	U	U		1						1	<	U		1					
Chloroethane	µg/L							0.5	U	U		1	10	<	U		1	2	<	U		1					
Methylene chloride	µg/L	5						0.25	U	U		1	10	<	U		1	1	<	U		1					
trans-1,2-Dichloroethene	µg/L	100						0.25	U	U		1						1	<	U		1					
Trichloroethene	µg/L	5						0.25	U	U		1	5	<	U		1	1	<	U		1					
Vinyl chloride	µg/L	2						0.25	U	U		1	10	<	U		1	1	<	U		1					
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L							0.25	U	U		1	0.7	<	UJ (R)		1	0.26	<	U		1					
2-Amino-4,6-dinitrotoluene	µg/L							0.25	U	U		1	0.5	<	UJ (R)		1	0.13	<	U		1					
4-Amino-2,6-dinitrotoluene	µg/L							0.25	U	U		1	0.6	<	UJ (R)		1	0.13	<	U		1					
2,4-Dinitrotoluene	µg/L							0.25	U	U		1	0.5	<	UJ (R)		1	0.26	<	U		1					
2,6-Dinitrotoluene	µg/L							0.25	U	U		1	0.5	<	UJ (R)		1	0.26	<	U		1					
o-Nitrotoluene	µg/L							0.25	U	U		1	0.6	<	UJ (R)		1	0.26	<	U		1					
p-Nitrotoluene	µg/L							0.25	U	U		1	0.4	<	UJ (R)		1	0.26	<	U		1					

	LOCATION CODE		29WW11					29WW11					29WW11					29WW11					29WW11					
	SAMPLE NO		29WW11-000917					29WW11-010210					29WW11-020313					29WW11-020922					29WW11-040827					
	SAMPLE DATE		17-Sep-00					10-Feb-01					13-Mar-02					22-Sep-02					27-Aug-04					
	SAMPLE PURPOSE		REG					REG					REG					REG					REG					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	
DHE																												
Dehalococcoides	cells/ml																											
FIELD TESTS																												
Dissolved Oxygen	mg/L																						0.98					
Ferrous iron	µg/L																						98.1					
Oxygen Reduction Potential	mV																											
pH	STD UNIT																							6.19				
Specific Conductivity	µS/cm																							6,868				
Temperature	Deg C																							26.01				
Turbidity	NTU																							-1.9				
GASES																												
Ethane	µg/L																											
Ethylene	µg/L																											
Methane	µg/L																											
GEN CHEMISTRY																												
Chloride	µg/L																											
Nitrate	µg/L	10,000																										
Nitrate / Nitrite	µg/L																											
Nitrite	µg/L	1,000																										
Perchlorate	µg/L		4.3	<	U		5		8	<	U		2	9.58	U	U		10	29	U	U		20	1	U	U		1
Sulfate	µg/L																											
Sulfide	µg/L																											
Total Alkalinity	µg/L																											
Total Organic Carbon	µg/L																											
VOLATILES																												
1,1-Dichloroethene	µg/L	7																						5	U	U		1
1,2-Dichloroethane	µg/L	5																						5	U	U		1
cis-1,2-Dichloroethene	µg/L	70																						5	U	U		1
Chloroethane	µg/L																							5	U	U		1
Methylene chloride	µg/L	5																						5	U	UJ	05B	1
trans-1,2-Dichloroethene	µg/L	100																						5	U	U		1
Trichloroethene	µg/L	5																						5	U	U		1
Vinyl chloride	µg/L	2																						5	U	U		1
EXPLOSIVES																												
2,4,6-Trinitrotoluene	µg/L																							0.2	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L																							0.2	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L																							0.2	U	U		1
2,4-Dinitrotoluene	µg/L																							0.2	U	U		1
2,6-Dinitrotoluene	µg/L																							0.2	U	U		1
o-Nitrotoluene	µg/L																							0.2	U	U		1
p-Nitrotoluene	µg/L																							0.2	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW11					29WW11					29WW12					29WW12					29WW12				
	SAMPLE NO		29WW11-040827FD					29WW11-050514					29WW12-980710					29WW12-000522					29WW12-000918				
	SAMPLE DATE		27-Aug-04					14-May-05					10-Jul-98					22-May-00					18-Sep-00				
	SAMPLE PURPOSE		FD					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							3.25																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							219.4																			
pH	STD UNIT							6.12																			
Specific Conductivity	µS/cm							6,629																			
Temperature	Deg C							23.15																			
Turbidity	NTU							0																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L												268,000				1										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L												100	<	U		1										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1	U	U		1	5	U	U		10						1	<	U		1	1.7	<	U		2
Sulfate	µg/L												330,000				1										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5	U	U		1	0.5	U	U		1	1	<	U		1										
1,2-Dichloroethane	µg/L	5	5	U	U		1	0.25	U	U		1	1	<	U		1										
cis-1,2-Dichloroethene	µg/L	70	5	U	U		1	0.25	U	U		1	1	<	U		1										
Chloroethane	µg/L		5	U	U		1	0.5	U	U		1	2	<	U		1										
Methylene chloride	µg/L	5	5	U	UJ	05B	1	0.25	U	U		1	36				1										
trans-1,2-Dichloroethene	µg/L	100	5	U	U		1	0.25	U	U		1	1	<	U		1										
Trichloroethene	µg/L	5	5	U	U		1	0.25	U	U		1	1	<	U		1										
Vinyl chloride	µg/L	2	5	U	U		1	0.25	U	U		1	1	<	U		1										
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.26	<	UJ		1										
2-Amino-4,6-dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.13	<	UJ		1										
4-Amino-2,6-dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.13	<	UJ		1										
2,4-Dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.26	<	UJ		1										
2,6-Dinitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.26	<	UJ		1										
o-Nitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.26	<	UJ		1										
p-Nitrotoluene	µg/L		0.2	U	U		1	0.25	U	U		1	0.26	<	UJ		1										

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW12					29WW12					29WW12					29WW12					29WW15				
	SAMPLE NO		29WW12-020314					29WW12-020923					29WW12-040827					29WW12-050515					29WW15-980710				
	SAMPLE DATE		14-Mar-02					23-Sep-02					27-Aug-04					15-May-05					10-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L												6.36					2.54									
Ferrous iron	µg/L																	33.1									
Oxygen Reduction Potential	mV												148.5					33.1									
pH	STD UNIT												0.46					5.74									
Specific Conductivity	µS/cm												4,374					4,065									
Temperature	Deg C												18.93					17.61									
Turbidity	NTU												632.8					3.2									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																						763,000				1
Nitrate	µg/L	10,000																					407				1
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		0.958	U	U		1	1.45	U	U		1	1	U	U		1	2	U	U		4					
Sulfate	µg/L																						240,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7											5	U	U		1	0.5	U	U		1	200	<	U		200
1,2-Dichloroethane	µg/L	5											5	U	U		1	0.25	U	U		1	14000	<	U		200
cis-1,2-Dichloroethene	µg/L	70											5	U	U		1	0.25	U	U		1	200	<	U		200
Chloroethane	µg/L												5	U	U		1	0.5	U	U		1	400	<	U		200
Methylene chloride	µg/L	5											5	U	UJ	05B	1	0.25	U	U		1	200	<	U		200
trans-1,2-Dichloroethene	µg/L	100											5	U	U		1	0.25	U	U		1	200	<	U		200
Trichloroethene	µg/L	5											5	U	U		1	0.25	U	U		1	1200	<	U		200
Vinyl chloride	µg/L	2											5	U	U		1	0.25	U	U		1	200	<	U		200
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.26	<	UJ		1
2-Amino-4,6-dinitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.13	<	UJ		1
4-Amino-2,6-dinitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.13	<	UJ		1
2,4-Dinitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.26	<	UJ		1
2,6-Dinitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.26	<	UJ		1
o-Nitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.26	<	UJ		1
p-Nitrotoluene	µg/L												0.2	U	U		1	0.258	U	U		1	0.26	<	UJ		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW15					29WW15					29WW15					29WW15				
	SAMPLE NO		29WW15-000917					29WW15-010207					29WW15-010207FD					29WW15-020314				
	SAMPLE DATE		17-Sep-00					7-Feb-01					7-Feb-01					14-Mar-02				
	SAMPLE PURPOSE		REG					REG					FD					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L																					
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV																					
pH	STD UNIT																					
Specific Conductivity	µS/cm																					
Temperature	Deg C																					
Turbidity	NTU																					
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L																					
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L																					
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		88,000				2,000	47,000				1,000	44,000				1	61,400				1,000
Sulfate	µg/L																					
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7																				
1,2-Dichloroethane	µg/L	5																				
cis-1,2-Dichloroethene	µg/L	70																				
Chloroethane	µg/L																					
Methylene chloride	µg/L	5																				
trans-1,2-Dichloroethene	µg/L	100																				
Trichloroethene	µg/L	5																				
Vinyl chloride	µg/L	2																				
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L																					
2-Amino-4,6-dinitrotoluene	µg/L																					
4-Amino-2,6-dinitrotoluene	µg/L																					
2,4-Dinitrotoluene	µg/L																					
2,6-Dinitrotoluene	µg/L																					
o-Nitrotoluene	µg/L																					
p-Nitrotoluene	µg/L																					

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW15					29WW15					29WW15					29WW15				
	SAMPLE NO		29WW15-020924					29WW15-040825					29WW15-050516					29WW15-FEB2007				
	SAMPLE DATE		24-Sep-02					25-Aug-04					16-May-05					24-Feb-07				
	SAMPLE PURPOSE		REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																	10	U	U		1.6
FIELD TESTS																						
Dissolved Oxygen	mg/L							75.1														
Ferrous iron	µg/L																	2,330				
Oxygen Reduction Potential	mV							-42.1					-4									
pH	STD UNIT							6.86					6.2									
Specific Conductivity	µS/cm							4,519					4,282									
Temperature	Deg C							19.87					22.22									
Turbidity	NTU							263					1.3									
GASES																						
Ethane	µg/L																	0.6	U	U		1
Ethylene	µg/L																	0.8	U	U		1
Methane	µg/L																	1.27				1
GEN CHEMISTRY																						
Chloride	µg/L																					
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L																					
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		46,400				5,000	24,000				10,000	16,800				500					
Sulfate	µg/L																					
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																	4000				1
VOLATILES																						
1,1-Dichloroethene	µg/L	7						4	J	J	15	1	19.2				1	7.5				1
1,2-Dichloroethane	µg/L	5						6,400	D			80	8,180				100	5,520				50
cis-1,2-Dichloroethene	µg/L	70						3	J	J	15	1	3.62				1	1.8	J	J	15	1
Chloroethane	µg/L							5	U	U		1	0.741	J	J	15	1	0.46	U	U		1
Methylene chloride	µg/L	5						100				1	16.5		B	06C, 06D	1	3	J	J	15	1
trans-1,2-Dichloroethene	µg/L	100						12				1	37.3				1	15.6				1
Trichloroethene	µg/L	5						160	DJ	J	15	80	612				100	344				50
Vinyl chloride	µg/L	2						5	U	U		1	0.766	J	J	15	1	0.32	U	U		1
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.13	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.12	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.13	U	U		1
2,4-Dinitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.13	U	U		1
2,6-Dinitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.11	U	U		1
o-Nitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.1	U	U		1
p-Nitrotoluene	µg/L							0.2	U	U		1	0.255	U	U		1	0.13	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW17					29WW17					29WW17					29WW17							
	SAMPLE NO		29WW17-980710					29WW17-990315					29WW17-000916					29WW17-010207							
	SAMPLE DATE		10-Jul-98					15-Mar-99					16-Sep-00					7-Feb-01							
	SAMPLE PURPOSE		REG					REG					REG					REG							
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF			
DHE																									
Dehalococcoides	cells/ml																								
FIELD TESTS																									
Dissolved Oxygen	mg/L																								
Ferrous iron	µg/L																								
Oxygen Reduction Potential	mV																								
pH	STD UNIT																								
Specific Conductivity	µS/cm																								
Temperature	Deg C																								
Turbidity	NTU																								
GASES																									
Ethane	µg/L																								
Ethylene	µg/L																								
Methane	µg/L																								
GEN CHEMISTRY																									
Chloride	µg/L		184,000				1																		
Nitrate	µg/L	10,000																							
Nitrate / Nitrite	µg/L		100	<	U		1																		
Nitrite	µg/L	1,000																							
Perchlorate	µg/L												130				2			4	<	U			1
Sulfate	µg/L		320,000				1																		
Sulfide	µg/L																								
Total Alkalinity	µg/L																								
Total Organic Carbon	µg/L																								
VOLATILES																									
1,1-Dichloroethene	µg/L	7	1,000	<	U		1,000	1	<	U		1													
1,2-Dichloroethane	µg/L	5	1,000	<	U		1,000	1	<	U		1													
cis-1,2-Dichloroethene	µg/L	70	1,000	<	U		1,000	1	<	U		1													
Chloroethane	µg/L		2,000	<	U		1,000	2	<	U		1													
Methylene chloride	µg/L	5	74,000				1,000	1	<	U		1													
trans-1,2-Dichloroethene	µg/L	100	1,000	<	U		1,000	1	<	U		1													
Trichloroethene	µg/L	5	1,000	<	U		1,000	1	<	U		1													
Vinyl chloride	µg/L	2	1,000	<	U		1,000	1	<	U		1													
EXPLOSIVES																									
2,4,6-Trinitrotoluene	µg/L		0.26	<	UJ		1																		
2-Amino-4,6-dinitrotoluene	µg/L		0.13	<	UJ		1																		
4-Amino-2,6-dinitrotoluene	µg/L		0.13	<	UJ		1																		
2,4-Dinitrotoluene	µg/L		0.26	<	UJ		1																		
2,6-Dinitrotoluene	µg/L		0.26	<	UJ		1																		
o-Nitrotoluene	µg/L		0.26	<	UJ		1																		
p-Nitrotoluene	µg/L		0.26	<	UJ		1																		

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW17					29WW17					29WW17					29WW18				
	SAMPLE NO		29WW17-020314					29WW17-020924					29WW17-050516					29WW18-980710				
	SAMPLE DATE		14-Mar-02					24-Sep-02					16-May-05					10-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L												94.2									
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV												50.3									
pH	STD UNIT												6.85									
Specific Conductivity	µS/cm												2,483									
Temperature	Deg C												18									
Turbidity	NTU												52.8									
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L																	92,800				1
Nitrate	µg/L	10,000																1,410				1
Nitrate / Nitrite	µg/L																					
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		0.958	U	U		1	1.45	U	U		1	1	U	U		2					
Sulfate	µg/L																	270,000				1
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7											0.5	U	U		1	200	<	U		200
1,2-Dichloroethane	µg/L	5											0.25	U	U		1	200	<	U		200
cis-1,2-Dichloroethene	µg/L	70											0.25	U	U		1	200	<	U		200
Chloroethane	µg/L												0.5	U	U		1	400	<	U		200
Methylene chloride	µg/L	5											0.963	J	B	06C,06D,15	1	28,000				200
trans-1,2-Dichloroethene	µg/L	100											0.25	U	U		1	200	<	U		200
Trichloroethene	µg/L	5											0.25	U	U		1	140		J		200
Vinyl chloride	µg/L	2											0.25	U	U		1	200	<	U		200
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L												0.255	U	U		1	0.26	<	UJ		1
2-Amino-4,6-dinitrotoluene	µg/L												0.255	U	U		1	0.13	<	UJ		1
4-Amino-2,6-dinitrotoluene	µg/L												0.255	U	U		1	0.13	<	UJ		1
2,4-Dinitrotoluene	µg/L												0.255	U	U		1	0.26	<	UJ		1
2,6-Dinitrotoluene	µg/L												0.255	U	U		1	0.26	<	UJ		1
o-Nitrotoluene	µg/L												0.255	U	U		1	0.26	<	UJ		1
p-Nitrotoluene	µg/L												0.255	U	U		1	0.26	<	UJ		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW18					29WW18					29WW18					29WW18					29WW18				
	SAMPLE NO		29WW18-990315					29WW18-990315FD					29WW18-000916					29WW18-020314					29WW18-020924				
	SAMPLE DATE		15-Mar-99					15-Mar-99					16-Sep-00					14-Mar-02					24-Sep-02				
	SAMPLE PURPOSE		REG					FD					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																										
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	µS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L												0.85	<	U		1	84.7				1	1.45	U	U		1
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	1	<	U		1	1	<	U		1															
1,2-Dichloroethane	µg/L	5	1	<	U		1	1	<	U		1															
cis-1,2-Dichloroethene	µg/L	70	1	<	U		1	1	<	U		1															
Chloroethane	µg/L		2	<	U		1	2	<	U		1															
Methylene chloride	µg/L	5	1	<	U		1	1	<	U		1															
trans-1,2-Dichloroethene	µg/L	100	1	<	U		1	1	<	U		1															
Trichloroethene	µg/L	5	1	<	U		1	1	<	U		1															
Vinyl chloride	µg/L	2	1	<	U		1	1	<	U		1															
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																										
2-Amino-4,6-dinitrotoluene	µg/L																										
4-Amino-2,6-dinitrotoluene	µg/L																										
2,4-Dinitrotoluene	µg/L																										
2,6-Dinitrotoluene	µg/L																										
o-Nitrotoluene	µg/L																										
p-Nitrotoluene	µg/L																										

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW18					29WW19					29WW19					29WW19					29WW19				
	SAMPLE NO		29WW18-050514					29WW19-980713					29WW19-000916					29WW19-020314					29WW19-020924				
	SAMPLE DATE		14-May-05					13-Jul-98					16-Sep-00					14-Mar-02					24-Sep-02				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		0.73																								
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		61.3																								
pH	STD UNIT		6.97																								
Specific Conductivity	µS/cm		1,561																								
Temperature	Deg C		23.15																								
Turbidity	NTU		25.7																								
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							829,000				1															
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							100	<	U		1															
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1	U	U		2						0.85	<	U		1	0.958	U	U		1	1.45	U	U		1
Sulfate	µg/L							1,600,000				1															
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	1	<	U		1															
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	1	<	U		1															
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	1	<	U		1															
Chloroethane	µg/L		0.5	U	U		1	2	<	U		1															
Methylene chloride	µg/L	5	1.34	J	B	06A,06D,15	1	1	<	U		1															
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	1	<	U		1															
Trichloroethene	µg/L	5	0.25	U	U		1	1	<	U		1															
Vinyl chloride	µg/L	2	0.25	U	U		1	1	<	U		1															
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1															
2-Amino-4,6-dinitrotoluene	µg/L		0.255	U	U		1	0.13	<	U		1															
4-Amino-2,6-dinitrotoluene	µg/L		0.255	U	U		1	0.13	<	U		1															
2,4-Dinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1															
2,6-Dinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1															
o-Nitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1															
p-Nitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1															

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW19					29WW20					29WW20					29WW20					29WW20									
	SAMPLE NO		29WW19-050515					29WW20-980714					29WW20-990315					29WW20-000916					29WW20-000916FD									
	SAMPLE DATE		15-May-05					14-Jul-98					15-Mar-99					16-Sep-00					16-Sep-00									
	SAMPLE PURPOSE		REG					REG					REG					REG					FD									
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																																
Dehalococcoides	cells/ml																															
FIELD TESTS																																
Dissolved Oxygen	mg/L		8.1																													
Ferrous iron	µg/L																															
Oxygen Reduction Potential	mV		137.8																													
pH	STD UNIT		6.32																													
Specific Conductivity	µS/cm		4,569																													
Temperature	Deg C		22.31																													
Turbidity	NTU		0.5																													
GASES																																
Ethane	µg/L																															
Ethylene	µg/L																															
Methane	µg/L																															
GEN CHEMISTRY																																
Chloride	µg/L							113,000				1																				
Nitrate	µg/L	10,000																														
Nitrate / Nitrite	µg/L							825				1																				
Nitrite	µg/L	1,000																														
Perchlorate	µg/L		2.5	U	U		5											8				2	0.85	<	U					1		
Sulfate	µg/L							380,000				1																				
Sulfide	µg/L																															
Total Alkalinity	µg/L																															
Total Organic Carbon	µg/L																															
VOLATILES																																
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	20	<	U		20	1	<	U		1															
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	20	<	U		20	1	<	U		1															
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	20	<	U		20	1	<	U		1															
Chloroethane	µg/L		0.5	U	U		1	40	<	U		20	2	<	U		1															
Methylene chloride	µg/L	5	0.25	U	U		1	1400				20	1	<	U		1															
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	20	<	U		20	1	<	U		1															
Trichloroethene	µg/L	5	0.25	U	U		1	20				20	1	<	U		1															
Vinyl chloride	µg/L	2	0.25	U	U		1	20	<	U		20	1	<	U		1															
EXPLOSIVES																																
2,4,6-Trinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1																				
2-Amino-4,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1																				
4-Amino-2,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1																				
2,4-Dinitrotoluene	µg/L		0.25	U	U		1	530				1																				
2,6-Dinitrotoluene	µg/L		0.25	U	U		1	530				1																				
o-Nitrotoluene	µg/L		0.25	U	U		1	3200				1																				
p-Nitrotoluene	µg/L		0.25	U	U		1	2100				1																				

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW20					29WW20					29WW20					29WW20										
	SAMPLE NO		29WW20-010210					29WW20-020315					29WW20-020315FD					29WW20-020923					29WW20-040826					
	SAMPLE DATE		10-Feb-01					15-Mar-02					15-Mar-02					23-Sep-02					26-Aug-04					
	SAMPLE PURPOSE		REG					REG					FD					REG					REG					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	
DHE																												
Dehalococcoides	cells/ml																											
FIELD TESTS																												
Dissolved Oxygen	mg/L																							12.6				
Ferrous iron	µg/L																											
Oxygen Reduction Potential	mV																								-79.9			
pH	STD UNIT																								6.55			
Specific Conductivity	µS/cm																								2,418			
Temperature	Deg C																								23.83			
Turbidity	NTU																								1.3			
GASES																												
Ethane	µg/L																											
Ethylene	µg/L																											
Methane	µg/L																											
GEN CHEMISTRY																												
Chloride	µg/L																											
Nitrate	µg/L	10,000																										
Nitrate / Nitrite	µg/L																											
Nitrite	µg/L	1,000																										
Perchlorate	µg/L		4	<	U		1	0.958	U	U		1	0.958	U	U		1	1.45	U	U		1	1	U	U		1	
Sulfate	µg/L																											
Sulfide	µg/L																											
Total Alkalinity	µg/L																											
Total Organic Carbon	µg/L																											
VOLATILES																												
1,1-Dichloroethene	µg/L	7																						5	U	U		1
1,2-Dichloroethane	µg/L	5																						5	U	U		1
cis-1,2-Dichloroethene	µg/L	70																						5	U	U		1
Chloroethane	µg/L																							5	U	U		1
Methylene chloride	µg/L	5																						4	J	BJ	06D,15	1
trans-1,2-Dichloroethene	µg/L	100																						5	U	U		1
Trichloroethene	µg/L	5																						5	U	U		1
Vinyl chloride	µg/L	2																						5	U	U		1
EXPLOSIVES																												
2,4,6-Trinitrotoluene	µg/L																							4	U	U		20
2-Amino-4,6-dinitrotoluene	µg/L																							4	U	U		20
4-Amino-2,6-dinitrotoluene	µg/L																							4	U	U		20
2,4-Dinitrotoluene	µg/L																							13				20
2,6-Dinitrotoluene	µg/L																							45				20
o-Nitrotoluene	µg/L																							290				20
p-Nitrotoluene	µg/L																							4	U	U		20

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW20					29WW22					29WW22					29WW22					29WW22				
	SAMPLE NO		29WW20-050516					29WW22-980713					29WW22-020312					29WW22-020923					29WW22-040827				
	SAMPLE DATE		16-May-05					13-Jul-98					12-Mar-02					23-Sep-02					27-Aug-04				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		0.81																				16.37				
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		179.6																				96.1				
pH	STD UNIT		5.42																				3.41				
Specific Conductivity	µS/cm		1,893																				1,790				
Temperature	Deg C		20.14																				25.32				
Turbidity	NTU		2.1																				69.2				
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							106,000				1															
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							100	<	U		1															
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1	U	U		2						0.958	U	U		1	1.45	U	U		1	4				1
Sulfate	µg/L							240,000				1															
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	1	<	U		1											5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.65		J		1											5	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	1	<	U		1											5	U	U		1
Chloroethane	µg/L		0.5	U	U		1	2	<	U		1											5	U	U		1
Methylene chloride	µg/L	5	0.25	U	U		1	46				1											2	JB	BJ	06A,05B,15	1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	1	<	U		1											5	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	1.1				1											5	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	1	<	U		1											5	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1											0.2	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1											0.2	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1											0.2	U	U		1
2,4-Dinitrotoluene	µg/L		32.4		JL	07A	5	0.26	<	U		1											0.2	U	U		1
2,6-Dinitrotoluene	µg/L		112				25	0.26	<	U		1											0.2	U	U		1
o-Nitrotoluene	µg/L		401				100	0.26	<	U		1											0.2	U	U		1
p-Nitrotoluene	µg/L		374				100	0.26	<	U		1											0.2	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
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	LOCATION CODE		29WW22					29WW23					29WW23					29WW23				
	SAMPLE NO		29WW22-050516					29WW23-980713					29WW23-990315					29WW23-040830				
	SAMPLE DATE		16-May-05					13-Jul-98					15-Mar-99					30-Aug-04				
	SAMPLE PURPOSE		REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L		2.46															1.09				
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV		95.3															121.6				
pH	STD UNIT		6.45															2.52				
Specific Conductivity	µS/cm		1,975															4,701				
Temperature	Deg C		18.65															25.1				
Turbidity	NTU		26.4															80				
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L							867,000				1										
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L							100	<	U		1										
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		1	U	U		2											2.6				1
Sulfate	µg/L							1,300,000				1										
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	20	<	U		20	1	<	U		1	5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	20	<	U		20	1	<	U		1	5	U	UJ		05B
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	20	<	U		20	1	<	U		1	5	U	U		1
Chloroethane	µg/L		0.5	U	U		1	40	<	U		20	2	<	U		1	5	U	UJ		05B
Methylene chloride	µg/L	5	0.25	U	U		1	1,700				20	1	<	U		1	5	U	U		1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	20	<	U		20	1	<	U		1	5	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	17		J		20	1	<	U		1	5	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	20	<	U		20	1	<	U		1	5	U	U		1
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.2	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1						0.2	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1						0.2	U	U		1
2,4-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.2	U	U		1
2,6-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.2	U	U		1
o-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.2	U	U		1
p-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.2	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	29WW23							29WW25					29WW25					29WW25				
	29WW23-050515							29WW25-980713					29WW25-990315					29WW25-050514				
	15-May-05							13-Jul-98					15-Mar-99					14-May-05				
	REG							REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L		1.5															1.5				
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV		183.1															107.4				
pH	STD UNIT		6.07															5.79				
Specific Conductivity	µS/cm		4,806															3,722				
Temperature	Deg C		24.13															21.33				
Turbidity	NTU		20.6															39.7				
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L							1,030,000				1										
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L							100	<	U		1										
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		2.5	U	U		5											2	U	U		4
Sulfate	µg/L							190,000				1										
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	50	<	U		50	1	<	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	50	<	U		50	1	<	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	50	<	U		50	1	<	U		1	0.25	U	U		1
Chloroethane	µg/L		0.5	U	U		1	100	<	U		50	2	<	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	0.25	U	U		1	3,800				50	1	<	U		1	0.25	U	U		1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	50	<	U		50	1	<	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	46		J		50	1	<	U		1	0.25	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	50	<	U		50	1	<	U		1	0.25	U	U		1
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.25	U	UJL	07A	1
2-Amino-4,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1						0.25	U	UJL	07A	1
4-Amino-2,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	U		1						0.25	U	UJL	07A	1
2,4-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.25	U	UJL	07A	1
2,6-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.25	U	UJL	07A	1
o-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.25	U	UJL	07A	1
p-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	U		1						0.25	U	UJL	07A	1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW26					29WW26					29WW26					29WW27					29WW27				
	SAMPLE NO		29WW26-980714					29WW26-990315					29WW26-050513					29WW27-980714					29WW27-990315				
	SAMPLE DATE		14-Jul-98					15-Mar-99					13-May-05					14-Jul-98					15-Mar-99				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L												1.67														
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV												77.1														
pH	STD UNIT												6.79														
Specific Conductivity	µS/cm												1,123														
Temperature	Deg C												19.98														
Turbidity	NTU												20.4														
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		155,000				1											544,000				1					
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L		100	<	U		1											100	<	U		1					
Nitrite	µg/L	1,000																									
Perchlorate	µg/L												0.5	U	U		1										
Sulfate	µg/L		230,000				1											240,000				1					
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	40	<	U		40	1	<	U		1	0.5	U	U		1	40	<	U		40	1	<	U		1
1,2-Dichloroethane	µg/L	5	40	<	U		40	1	<	U		1	0.25	U	U		1	40	<	U		40	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70	40	<	U		40	1	<	U		1	0.25	U	U		1	40	<	U		40	1	<	U		1
Chloroethane	µg/L		80	<	U		40	2	<	U		1	0.5	U	U		1	80	<	U		40	2	<	U		1
Methylene chloride	µg/L	5	3,100				40	1	<	U		1	0.25	U	U		1	1,800				40	1	<	U		1
trans-1,2-Dichloroethene	µg/L	100	40	<	U		40	1	<	U		1	0.25	U	U		1	40	<	U		40	1	<	U		1
Trichloroethene	µg/L	5	29		J		40	1	<	U		1	0.25	U	U		1	40	<	U		40	1	<	U		1
Vinyl chloride	µg/L	2	40	<	U		40	1	<	U		1	0.25	U	U		1	40	<	U		40	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.26	<	U		1						0.25	U	U		1	0.26	<	U		1					
2-Amino-4,6-dinitrotoluene	µg/L		0.13	<	U		1						0.25	U	U		1	0.13	<	U		1					
4-Amino-2,6-dinitrotoluene	µg/L		0.13	<	U		1						0.25	U	U		1	0.13	<	U		1					
2,4-Dinitrotoluene	µg/L		0.26	<	U		1						0.25	U	U		1	0.26	<	U		1					
2,6-Dinitrotoluene	µg/L		0.26	<	U		1						0.25	U	U		1	0.26	<	U		1					
o-Nitrotoluene	µg/L		0.26	<	U		1						0.25	U	U		1	0.26	<	U		1					
p-Nitrotoluene	µg/L		0.26	<	U		1						0.25	U	U		1	0.26	<	U		1					

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW27					29WW29					29WW29					29WW29					29WW30				
	SAMPLE NO		29WW27-050514					29WW29-980714					29WW29-990315					29WW29-050515					29WW30-980713				
	SAMPLE DATE		14-May-05					14-Jul-98					15-Mar-99					15-May-05					13-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		2.48															0.66									
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		109.1															108.1									
pH	STD UNIT		6.64															6.7									
Specific Conductivity	µS/cm		2,618															3,017									
Temperature	Deg C		21.86															20.08									
Turbidity	NTU		14.8															19.95									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							771,000				1											931,000				1
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							1,100				1											100	<	U		1
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		2	U	U		4											2	U	U		4					
Sulfate	µg/L							53,000				1											81,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	10	<	U		10	1	<	U		1	0.5	U	U		1	1	<	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1	1	<	U		1
Chloroethane	µg/L		0.5	U	U		1	20	<	U		10	2	<	U		1	0.5	U	U		1	2	<	U		1
Methylene chloride	µg/L	5	0.25	U	U		1	800				10	0.52		UJ		1	0.25	U	U		1	0.68		J		1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1	1	<	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	7.1		J		10	1	<	U		1	0.25	U	U		1	1	<	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	10	<	U		10	1	<	U		1	0.25	U	U		1	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.258	U	U		1	0.26	<	U		1						0.255	U	U		1	0.26	<	U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.258	U	U		1	0.13	<	U		1						0.255	U	U		1	0.13	<	U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.258	U	U		1	0.13	<	U		1						0.255	U	U		1	0.13	<	U		1
2,4-Dinitrotoluene	µg/L		0.258	U	U		1	0.26	<	U		1						0.255	U	U		1	0.26	<	U		1
2,6-Dinitrotoluene	µg/L		0.258	U	U		1	0.26	<	U		1						0.255	U	U		1	0.26	<	U		1
o-Nitrotoluene	µg/L		0.258	U	U		1	10				1						0.255	U	U		1	0.26	<	U		1
p-Nitrotoluene	µg/L		0.258	U	U		1	8.9				1						0.255	U	U		1	0.26	<	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW30					29WW31					29WW31					29WW32					29WW32					
	SAMPLE NO		29WW30-050516					29WW31-980713					29WW31-050516					29WW32-980713					29WW32-990315					
	SAMPLE DATE		16-May-05					13-Jul-98					16-May-05					13-Jul-98					15-Mar-99					
	SAMPLE PURPOSE		REG					REG					REG					REG					REG					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	
DHE																												
Dehalococcoides	cells/ml																											
FIELD TESTS																												
Dissolved Oxygen	mg/L		1.02										0.35															
Ferrous iron	µg/L																											
Oxygen Reduction Potential	mV		145.7										4.5															
pH	STD UNIT		6.46										6.69															
Specific Conductivity	µS/cm		3,345										3,710															
Temperature	Deg C		20.1										19.92															
Turbidity	NTU		5.9										-5.2															
GASES																												
Ethane	µg/L																											
Ethylene	µg/L																											
Methane	µg/L																											
GEN CHEMISTRY																												
Chloride	µg/L							786,000				1						531,000			1							
Nitrate	µg/L	10,000																										
Nitrate / Nitrite	µg/L							100	<	U		1						100	<	U		1						
Nitrite	µg/L	1,000																										
Perchlorate	µg/L		2	U	U		4						4.99				4											
Sulfate	µg/L							470,000				1						250,000			1							
Sulfide	µg/L																											
Total Alkalinity	µg/L																											
Total Organic Carbon	µg/L																											
VOLATILES																												
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	1	<	U		1	0.5	U	U		1	100	<	U		100	1	<	U			1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	1	<	U		1	0.25	U	U		1	100	<	U		100	1	<	U			1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	1	<	U		1	0.25	U	U		1	100	<	U		100	1	<	U			1
Chloroethane	µg/L		0.5	U	U		1	2	<	U		1	0.5	U	U		1	200	<	U		100	2	<	U			1
Methylene chloride	µg/L	5	0.25	U	U		1	26				1	0.25	U	U		1	8,100				100	1	<	U			1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	1	<	U		1	0.25	U	U		1	100	<	U		100	1	<	U			1
Trichloroethene	µg/L	5	0.25	U	U		1	1	<	U		1	0.25	U	U		1	89		J		100	1	<	U			1
Vinyl chloride	µg/L	2	0.25	U	U		1	1	<	U		1	0.25	U	U		1	100	<	U		100	1	<	U			1
EXPLOSIVES																												
2,4,6-Trinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1	0.255	U	U		1	0.26	<	U		1						
2-Amino-4,6-dinitrotoluene	µg/L		0.255	U	U		1	0.13	<	U		1	0.255	U	U		1	0.13	<	U		1						
4-Amino-2,6-dinitrotoluene	µg/L		0.255	U	U		1	0.13	<	U		1	0.255	U	U		1	0.13	<	U		1						
2,4-Dinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1	0.255	U	U		1	0.26	<	U		1						
2,6-Dinitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1	0.255	U	U		1	0.26	<	U		1						
o-Nitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1	0.255	U	U		1	0.26	<	U		1						
p-Nitrotoluene	µg/L		0.255	U	U		1	0.26	<	U		1	0.255	U	U		1	0.26	<	U		1						

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW32					29WW32					29WW33					29WW33					29WW33									
	SAMPLE NO		29WW32-050515					29WW32-050516					29WW33-980714					L0001-29WW33					29WW33-MAY05									
	SAMPLE DATE		15-May-05					16-May-05					14-Jul-98					29-Aug-04					16-May-05									
	SAMPLE PURPOSE		REG					REG					REG					REG					REG									
Parameter	Units	MCL	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF
DHE																																
Dehalococcoides	cells/ml																															
FIELD TESTS																																
Dissolved Oxygen	mg/L		3.29															1.03														
Ferrous iron	µg/L																															
Oxygen Reduction Potential	mV		100																													
pH	STD UNIT																															
Specific Conductivity	µS/cm		1,163																													
Temperature	Deg C		19.65																													
Turbidity	NTU		46																													
GASES																																
Ethane	µg/L																															
Ethylene	µg/L																															
Methane	µg/L																															
GEN CHEMISTRY																																
Chloride	µg/L														614,000					1												
Nitrate	µg/L	10,000																														
Nitrate / Nitrite	µg/L														100	<	U			1												
Nitrite	µg/L	1,000																														
Perchlorate	µg/L								2	U		U		4													2	U		U		4
Sulfate	µg/L														540,000					1												
Sulfide	µg/L																															
Total Alkalinity	µg/L																															
Total Organic Carbon	µg/L																															
VOLATILES																																
1,1-Dichloroethene	µg/L	7	0.5	U	U			1							1	<	U			1		5	U	U		1	0.5	U	U		1	
1,2-Dichloroethane	µg/L	5	0.25	U	U			1							1	<	U			1		5	U	U		1	0.25	U	U		1	
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U			1							1	<	U			1		5	U	U		1	0.25	U	U		1	
Chloroethane	µg/L		0.5	U	U			1							2	<	U			1		5	U	U		1	0.5	U	U		1	
Methylene chloride	µg/L	5	0.25	U	U			1							0.65		J			1		5	U	U		1	0.25	U	U		1	
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U			1							1	<	U			1		5	U	U		1	0.25	U	U		1	
Trichloroethene	µg/L	5	0.25	U	U			1							1	<	U			1		5	U	U		1	0.401	J	J	15	1	
Vinyl chloride	µg/L	2	0.25	U	U			1							1	<	U			1		5	U	U		1	0.25	U	U		1	
EXPLOSIVES																																
2,4,6-Trinitrotoluene	µg/L								0.275	U	U			1	0.26	<	U			1		0.2	U	U		1	0.263	U	U		1	
2-Amino-4,6-dinitrotoluene	µg/L								0.275	U	U			1	0.13	<	U			1		0.2	U	U		1	0.263	U	U		1	
4-Amino-2,6-dinitrotoluene	µg/L								0.275	U	U			1	0.13	<	U			1		0.2	U	U		1	0.263	U	U		1	
2,4-Dinitrotoluene	µg/L								0.275	U	U			1	0.26	<	U			1		0.2	U	U		1	0.263	U	U		1	
2,6-Dinitrotoluene	µg/L								0.275	U	U			1	0.26	<	U			1		0.2	U	U		1	0.263	U	U		1	
o-Nitrotoluene	µg/L								0.275	U	U			1	0.26	<	U			1		0.2	U	U		1	0.263	U	U		1	
p-Nitrotoluene	µg/L								0.275	U	U			1	0.26	<	U			1		0.2	U	U		1	0.263	U	U		1	

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW36					29WW36					29WW36					29WW38					29WW38				
	SAMPLE NO		29WW36-060922					29WW36-061117					29WW36-FEB2007					29WW38-060927					29WW38-060927FD				
	SAMPLE DATE		22-Sep-06					17-Nov-06					21-Feb-07					27-Sep-06					27-Sep-06				
	SAMPLE PURPOSE		REG					REG					REG					REG					FD				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml												10	U	U		1										
FIELD TESTS																											
Dissolved Oxygen	mg/L							7.34					0.94					4.06									
Ferrous iron	µg/L												10														
Oxygen Reduction Potential	mV							51.1					302.8					NR									
pH	STD UNIT							6.39					6.44					6.23									
Specific Conductivity	µS/cm							5,365					4,633					742									
Temperature	Deg C							20.07					20.63					20.7									
Turbidity	NTU							1					1.2					1665.5									
GASES																											
Ethane	µg/L												0.6	U	U		1										
Ethylene	µg/L												0.8	U	U		1										
Methane	µg/L												0.94				1										
GEN CHEMISTRY																											
Chloride	µg/L												565,000				1										
Nitrate	µg/L	10,000											300				1										
Nitrate / Nitrite	µg/L												300				1										
Nitrite	µg/L	1,000											3	U	U		1										
Perchlorate	µg/L		5	U	U		10						4	U	U		1	0.5	U	U		1	0.5	U			1
Sulfate	µg/L												1,000,000				10										
Sulfide	µg/L												200	U	U		1										
Total Alkalinity	µg/L												1,040,000				1										
Total Organic Carbon	µg/L												10,000				1										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	0.5	U	U		1	0.68	U	U		1	0.5	U	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.53	U	U		1	0.25	U	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	0.25	U	U		1	0.83	U	U		1	0.25	U	U		1	0.25	U	U		1
Chloroethane	µg/L		0.5	U	U		1	0.5	U	U		1	0.46	U	U		1	0.5	U	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	5.59				1	1.1	J	J	15	1	0.67	U	U		1	12.7				1	12.5				1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	0.25	U	U		1	0.75	U	U		1	0.25	U	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.63	U	U		1	0.354	J	J	15	1	0.351	J	J	15	1
Vinyl chloride	µg/L	2	0.25	U	U		1	0.25	U	U		1	0.32	U	U		1	0.25	U	U		1	0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																										
2-Amino-4,6-dinitrotoluene	µg/L																										
4-Amino-2,6-dinitrotoluene	µg/L																										
2,4-Dinitrotoluene	µg/L																										
2,6-Dinitrotoluene	µg/L																										
o-Nitrotoluene	µg/L																										
p-Nitrotoluene	µg/L																										

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW38					29WW38				
	SAMPLE NO		29WW38-061120					29WW38-FEB2007				
	SAMPLE DATE		20-Nov-06					22-Feb-07				
	SAMPLE PURPOSE		REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE												
Dehalococcoides	cells/ml							10	U	U		1
FIELD TESTS												
Dissolved Oxygen	mg/L		0.92					1.04				
Ferrous iron	µg/L							20				
Oxygen Reduction Potential	mV		-93.1					307.1				
pH	STD UNIT		9.5					6.31				
Specific Conductivity	µS/cm		654					550				
Temperature	Deg C		17.81					18.45				
Turbidity	NTU		9.7					0.4				
GASES												
Ethane	µg/L							0.6	U	U		1
Ethylene	µg/L							0.8	U	U		1
Methane	µg/L							0.46	J	J	15	1
GEN CHEMISTRY												
Chloride	µg/L							9,000				1
Nitrate	µg/L	10,000						5	U	U		1
Nitrate / Nitrite	µg/L							30	B	J	15	1
Nitrite	µg/L	1,000						3	U	U		1
Perchlorate	µg/L							4	U	U		1
Sulfate	µg/L							126,000				2
Sulfide	µg/L							200	UB	U		1
Total Alkalinity	µg/L							132,000				2
Total Organic Carbon	µg/L							1,000				1
VOLATILES												
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	0.68	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.53	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	0.83	U	U		1
Chloroethane	µg/L		0.5	U	U		1	0.46	U	U		1
Methylene chloride	µg/L	5	0.568	J	J	15	1	0.67	U	U		1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	0.75	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	0.63	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	0.32	U	U		1
EXPLOSIVES												
2,4,6-Trinitrotoluene	µg/L							0.076	U	U		1
2-Amino-4,6-dinitrotoluene	µg/L							0.067	U	U		1
4-Amino-2,6-dinitrotoluene	µg/L							0.076	U	U		1
2,4-Dinitrotoluene	µg/L							0.071	U	U		1
2,6-Dinitrotoluene	µg/L							0.062	U	U		1
o-Nitrotoluene	µg/L							0.057	U	U		1
p-Nitrotoluene	µg/L							0.071	U	U		1

Table C-1
Summary of Shallow Groundwater Analytical Results
LHAAP-29

Notes and Abbreviations:				Reason Codes:			
Results without values indicate a result was not available.				02B	analysis		
<	not detected above MDL (same as U)			05B	compound % deviation QC criteria not met		
B	blank also contained parameter			06A	method or preparation blank		
Bold	above MCL			06C	equipment rinsate		
cell/ml	cells per milliliter			06D	trip blank		
D	diluted			07A	sample		
Deg C	degrees Celsius			08A	MS or MSD recovery not within control limits (accuracy)		
DF	dilution factor			11A	recovery		
FD	field duplicate			15	quantitation		
H	biased high			18	percent difference between original and second column exceeds QC criteria		
J	estimated result or detection limit						
L	biased low						
µg/L	micrograms per liter						
µS/cm	microSeimens per centimeter						
MCL	maximum contaminant level						
MDL	method detection limit						
mg/L	milligrams per liter						
mV	millivolts						
NR	not recorded						
NTU	nephelometric turbidity unit						
P	gas chromatograph column readings did not match within QC limits						
Qual	laboratory qualifiers						
R	rejected						
RC	reason code						
REG	regular sample						
STD UNIT	standard units						
U	not detected above MDL						
ValQual	validation qualifier						

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW13					29WW13					29WW13					29WW13					29WW13				
	SAMPLE NO		29WW13-980710					29WW13-000917					29WW13-000917FD					29WW13-010208					29WW13-020316				
	SAMPLE DATE		10-Jul-98					17-Sep-00					17-Sep-00					8-Feb-01					16-Mar-02				
	SAMPLE PURPOSE		REG					REG					FD					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																										
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	uS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		37,000				1																				
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L		100 <	U			1																				
Nitrite	µg/L	1,000																									
Perchlorate	µg/L							30				2	64				1	4 <	U		1	0.958 U	U			1	
Sulfate	µg/L		25,000				1																				
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	1 <	U			1																				
1,2-Dichloroethane	µg/L	5	1 <	U			1																				
cis-1,2-Dichloroethene	µg/L	70	1 <	U			1																				
Chloroethane	µg/L		2 <	U			1																				
Methylene chloride	µg/L	5	1.5	U			1																				
trans-1,2-Dichloroethene	µg/L	100	1 <	U			1																				
Trichloroethene	µg/L	5	1 <	U			1																				
Vinyl chloride	µg/L	2	1 <	U			1																				
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.26 <	UJ			1																				
2-Amino-4,6-dinitrotoluene	µg/L		0.13 <	UJ			1																				
4-Amino-2,6-dinitrotoluene	µg/L		0.13 <	UJ			1																				
2,4-Dinitrotoluene	µg/L		0.26 <	UJ			1																				
2,6-Dinitrotoluene	µg/L		0.26 <	UJ			1																				
o-Nitrotoluene	µg/L		0.26 <	UJ			1																				
p-Nitrotoluene	µg/L		0.26 <	UJ			1																				

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW13					29WW13					29WW13					29WW13					29WW14				
	SAMPLE NO		29WW13-020923					29WW13-040826					29WW13-050515					29WW13-102408					29WW14-980713				
	SAMPLE DATE		23-Sep-02					26-Aug-04					15-May-05					24-Oct-08					13-Jul-98				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							0.75					3.21					3.76									
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							-107.7					-126.4					31.6									
pH	STD UNIT							6.74					6.84					7.02									
Specific Conductivity	uS/cm							1116					1126					937									
Temperature	Deg C							21.88					18.05					18.05									
Turbidity	NTU							-2.5					0					31.4									
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																						102,000				1
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																						100 <	U			1
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1.45	U	U		1	1	U	U		1	0.5	U	U		1										
Sulfate	µg/L																						100,000				1
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7						5	U	U		1	0.5	U	U		1	0.5	U	U		1	1	<	U		1
1,2-Dichloroethane	µg/L	5						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1	<	U		1
cis-1,2-Dichloroethene	µg/L	70						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1	<	U		1
Chloroethane	µg/L							5	U	U		1	0.5	U	U		1	0.5	U	U		1	2	<	U		1
Methylene chloride	µg/L	5						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1.1		U		1
trans-1,2-Dichloroethene	µg/L	100						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1	<	U		1
Trichloroethene	µg/L	5						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1	<	U		1
Vinyl chloride	µg/L	2						5	U	U		1	0.25	U	U		1	0.25	U	U		1	1	<	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.26	<	U		1
2-Amino-4,6-dinitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.13	<	U		1
4-Amino-2,6-dinitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.13	<	U		1
2,4-Dinitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.26	<	U		1
2,6-Dinitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.26	<	U		1
o-Nitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.26	<	U		1
p-Nitrotoluene	µg/L							0.2	U	U		1	0.25	U	U		1						0.26	<	U		1

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW14					29WW14					29WW14					29WW14					29WW14				
	SAMPLE NO		29WW14-980713FD					29WW14-000917					29WW14-020313					29WW14-020922					29WW14-040824				
	SAMPLE DATE		13-Jul-98					17-Sep-00					13-Mar-02					22-Sep-02					24-Aug-04				
	SAMPLE PURPOSE		FD					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																						0.8				
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																						244.8				
pH	STD UNIT																						6.86				
Specific Conductivity	µS/cm																						925				
Temperature	Deg C																						27.57				
Turbidity	NTU																						4.8				
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L		98,400				1																				
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L		100 <		U		1																				
Nitrite	µg/L	1,000																									
Perchlorate	µg/L							0.85 <		U		1	0.958 U		U		1	1.45 U		U		1	1 U		U		1
Sulfate	µg/L		110,000				1																				
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	1 <		U		1																5 U		U		1
1,2-Dichloroethane	µg/L	5	1 <		U		1																5 U		U		1
cis-1,2-Dichloroethene	µg/L	70	1 <		U		1																5 U		U		1
Chloroethane	µg/L		2 <		U		1																5 U		U		1
Methylene chloride	µg/L	5	1.2		U		1																5 U		U		1
trans-1,2-Dichloroethene	µg/L	100	1 <		U		1																5 U		U		1
Trichloroethene	µg/L	5	1 <		U		1																5 U		U		1
Vinyl chloride	µg/L	2	1 <		U		1																5 U		U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.26 <		U		1																0.2 U		U		1
2-Amino-4,6-dinitrotoluene	µg/L		0.13 <		U		1																0.2 U		U		1
4-Amino-2,6-dinitrotoluene	µg/L		0.13 <		U		1																0.2 U		U		1
2,4-Dinitrotoluene	µg/L		0.26 <		U		1																0.2 U		U		1
2,6-Dinitrotoluene	µg/L		0.26 <		U		1																0.2 U		U		1
o-Nitrotoluene	µg/L		0.26 <		U		1																0.2 U		U		1
p-Nitrotoluene	µg/L		0.26 <		U		1																0.2 U		U		1

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW14					29WW16					29WW16					29WW16					29WW16				
	SAMPLE NO		29WW14-050514					29WW16-980710					29WW16-990316					29WW16-000524					29WW16-000524FD				
	SAMPLE DATE		14-May-05					10-Jul-98					16-Mar-99					24-May-00					24-May-00				
	SAMPLE PURPOSE		REG					REG					REG					REG					FD				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L		0.34																								
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV		-20.5																								
pH	STD UNIT		6.89																								
Specific Conductivity	uS/cm		9,000																								
Temperature	Deg C		20.14																								
Turbidity	NTU		6.1																								
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L							190,000				1															
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L							100	<	U		1															
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		0.5	U	U		1										35.8		J		1		1	<	UJ		1
Sulfate	µg/L							27,000				1															
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	2,000	<	U		2,000	100,000	<	U		100,000										
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	2,000	<	U		2,000	100,000	<	U		100,000										
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	2,000	<	U		2,000	100,000	<	U		100,000										
Chloroethane	µg/L		0.5	U	U		1	4,000	<	U		2,000	200,000	<	U		100,000										
Methylene chloride	µg/L	5	0.25	U	U		1	5,700,000				2,000	6,600,000				100,000										
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	2,000	<	U		2,000	100,000	<	U		100,000										
Trichloroethene	µg/L	5	0.25	U	U		1	8,800				2,000	100,000	<	U		100,000										
Vinyl chloride	µg/L	2	0.25	U	U		1	2,000	<	U		2,000	100,000	<	U		100,000										
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.25	U	U		1	0.26	<	UJ		1															
2-Amino-4,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	UJ		1															
4-Amino-2,6-dinitrotoluene	µg/L		0.25	U	U		1	0.13	<	UJ		1															
2,4-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	UJ		1															
2,6-Dinitrotoluene	µg/L		0.25	U	U		1	0.26	<	UJ		1															
o-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	UJ		1															
p-Nitrotoluene	µg/L		0.25	U	U		1	0.26	<	UJ		1															

Table C-2

	LOCATION CODE		29WW16					29WW16					29WW16					29WW16					29WW16				
	SAMPLE NO		29WW16-000916					29WW16-010207					29WW16-020314					29WW16-020314FD					29WW16-020924				
	SAMPLE DATE		16-Sep-00					7-Feb-01					14-Mar-02					14-Mar-02					24-Sep-02				
	SAMPLE PURPOSE		REG					REG					REG					FD					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L																										
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV																										
pH	STD UNIT																										
Specific Conductivity	uS/cm																										
Temperature	Deg C																										
Turbidity	NTU																										
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		0.85	<	U		1	4	<	U		1	0.958	U	U		1	0.958	U	U		1	1.45	U	U		1
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7																									
1,2-Dichloroethane	µg/L	5																									
cis-1,2-Dichloroethene	µg/L	70																									
Chloroethane	µg/L																										
Methylene chloride	µg/L	5																									
trans-1,2-Dichloroethene	µg/L	100																									
Trichloroethene	µg/L	5																									
Vinyl chloride	µg/L	2																									
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																										
2-Amino-4,6-dinitrotoluene	µg/L																										
4-Amino-2,6-dinitrotoluene	µg/L																										
2,4-Dinitrotoluene	µg/L																										
2,6-Dinitrotoluene	µg/L																										
o-Nitrotoluene	µg/L																										
p-Nitrotoluene	µg/L																										

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW16					29WW16					29WW16					29WW16				
	SAMPLE NO		29WW16-040824					29WW16-040824FD					29WW16-050516					29WW16-060921				
	SAMPLE DATE		24-Aug-04					24-Aug-04					16-May-05					21-Sep-06				
	SAMPLE PURPOSE		REG					FD					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L		0.78										81					0.78				
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV		-99.7										-64.4					-99.7				
pH	STD UNIT		7.05										7.01					7.05				
Specific Conductivity	uS/cm		1489										1,450					1,489				
Temperature	Deg C		19.36										19.82					19.36				
Turbidity	NTU		0.1										-0.8					0.1				
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L																					
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L																					
Nitrite	µg/L	1,000																				
Perchlorate	µg/L		1 U	U		1		1 U	U		1		1 U	U		2						
Sulfate	µg/L																					
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	200,000	U	U		40,000	100,000	U	U		20,000	500	U	U		1,000	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	200,000	U	U		40,000	100,000	U	U		20,000	250	U	U		1,000	14.3				1
cis-1,2-Dichloroethene	µg/L	70	200,000	U	U		40,000	100,000	U	U		20,000	315	J	J	15	1,000	0.25	U	U		1
Chloroethane	µg/L		200,000	U	U		40,000	100,000	U	U		20,000	500	U	U		1,000	0.5	U	U		1
Methylene chloride	µg/L	5	7,300,000	B			40,000	6,600,000	DB	J	05B	40,000	8,620,000				50,000	7,110,000				50,000
trans-1,2-Dichloroethene	µg/L	100	200,000	U	U		40,000	100,000	U	U		20,000	250	U	U		1,000	0.25	U	U		1
Trichloroethene	µg/L	5	200,000	U	U		40,000	100,000	U	U		20,000	6,000				1,000	4,340	E	J	15	1
Vinyl chloride	µg/L	2	200,000	U	U		40,000	100,000	U	U		20,000	250	U	U		1,000	22.4				1
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
2-Amino-4,6-dinitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
4-Amino-2,6-dinitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
2,4-Dinitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
2,6-Dinitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
o-Nitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					
p-Nitrotoluene	µg/L		0.2	U	U		1	0.2	U	U		1	0.258	U	UJL	07A	1					

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW16						29WW21						29WW21						29WW21						29WW21					
	SAMPLE NO		29WW16-102808						29WW21-980713						29WW21-020312						29W21QC-0203-FD						29WW21-020924					
	SAMPLE DATE		28-Oct-08						13-Jul-98						12-Mar-02						12-Mar-02						24-Sep-02					
	SAMPLE PURPOSE		REG						REG						REG						FD						REG					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																																
Dehalococcoides	cells/ml																															
FIELD TESTS																																
Dissolved Oxygen	mg/L		1.92																													
Ferrous iron	µg/L																															
Oxygen Reduction Potential	mV		-48.1																													
pH	STD UNIT		6.96																													
Specific Conductivity	uS/cm		1,482																													
Temperature	Deg C		17.98																													
Turbidity	NTU		0																													
GASES																																
Ethane	µg/L																															
Ethylene	µg/L																															
Methane	µg/L																															
GEN CHEMISTRY																																
Chloride	µg/L							21,400				1																				
Nitrate	µg/L	10,000																														
Nitrate / Nitrite	µg/L							243				1																				
Nitrite	µg/L	1,000																														
Perchlorate	µg/L												0.958	U	U		1	0.958	U	U		1	1.45	U	U		1				1	
Sulfate	µg/L							85,000				1																				
Sulfide	µg/L																															
Total Alkalinity	µg/L																															
Total Organic Carbon	µg/L																															
VOLATILES																																
1,1-Dichloroethene	µg/L	7	25000	U	U		50,000	1	<	U		1																				
1,2-Dichloroethane	µg/L	5	12500	U	U		50,000	1	<	U		1																				
cis-1,2-Dichloroethene	µg/L	70	12500	U	U		50,000	1	<	U		1																				
Chloroethane	µg/L		25000	U	U		50,000	2	<	U		1																				
Methylene chloride	µg/L	5	10,300,000				100,000	5.7		U		1																				
trans-1,2-Dichloroethene	µg/L	100	12500	U	U		50,000	1	<	U		1																				
Trichloroethene	µg/L	5	12500	U	U		50,000	1	<	U		1																				
Vinyl chloride	µg/L	2	12500	U	U		50,000	1	<	U		1																				
EXPLOSIVES																																
2,4,6-Trinitrotoluene	µg/L							0.26	<	U		1																				
2-Amino-4,6-dinitrotoluene	µg/L							0.13	<	U		1																				
4-Amino-2,6-dinitrotoluene	µg/L							0.13	<	U		1																				
2,4-Dinitrotoluene	µg/L							0.26	<	U		1																				
2,6-Dinitrotoluene	µg/L							0.26	<	U		1																				
o-Nitrotoluene	µg/L							0.26	<	U		1																				
p-Nitrotoluene	µg/L							0.26	<	U		1																				

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW21					29WW21					29WW24					29WW24					29WW24				
	SAMPLE NO		29WW21-040825					29WW21-050516					29WW24-980713					29WW24-980713FD					29WW24-990316				
	SAMPLE DATE		25-Aug-04					16-May-05					13-Jul-98					13-Jul-98					16-Mar-99				
	SAMPLE PURPOSE		REG					REG					REG					FD					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							1.51																			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							93.9																			
pH	STD UNIT							8.2																			
Specific Conductivity	uS/cm							663																			
Temperature	Deg C							18.91																			
Turbidity	NTU							-1.6																			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L												105000				1	103,000				1					
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L												100 <	U			1	100 <	U			1					
Nitrite	µg/L	1,000																									
Perchlorate	µg/L		1 U	U			1	0.5 U	U			1															
Sulfate	µg/L												64000				1	66,000				1					
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	5 U	U			1	0.5 U	U			1	20 <	R			20	20 <	R			20	1 <	U			1
1,2-Dichloroethane	µg/L	5	5 U	U			1	0.25 U	U			1	20 <	R			20	20 <	R			20	1 <	U			1
cis-1,2-Dichloroethene	µg/L	70	5 U	U			1	0.25 U	U			1	20 <	R			20	20 <	R			20	1 <	U			1
Chloroethane	µg/L		5 U	U			1	0.5 U	U			1	40 <	R			20	40 <	R			20	2 <	U			1
Methylene chloride	µg/L	5	120				1	0.25 U	U			1	1200	R			20	1,300	R			20	1 <	U			1
trans-1,2-Dichloroethene	µg/L	100	5 U	U			1	0.25 U	U			1	20 <	R			20	20 <	R			20	1 <	U			1
Trichloroethene	µg/L	5	8				1	0.25 U	U			1	20 <	R			20	20 <	R			20	0.66	J			1
Vinyl chloride	µg/L	2	5 U	U			1	0.25 U	U			1	20 <	R			20	20 <	R			20	1 <	U			1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.26 <	U			1	0.26 <	U			1					
2-Amino-4,6-dinitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.13 <	U			1	0.13 <	U			1					
4-Amino-2,6-dinitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.13 <	U			1	0.13 <	U			1					
2,4-Dinitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.26 <	U			1	0.26 <	U			1					
2,6-Dinitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.26 <	U			1	0.26 <	U			1					
o-Nitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.26 <	U			1	0.26 <	U			1					
p-Nitrotoluene	µg/L		0.2 U	U			1	0.25 U	U			1	0.26 <	U			1	0.26 <	U			1					

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW24					29WW24					29WW24					29WW28					29WW28					
		SAMPLE NO	29WW24-040827					29WW24-050515					29WW24-102708					29WW28-980714					29WW28-980714FD					
		SAMPLE DATE	27-Aug-04					15-May-05					27-Oct-08					14-Jul-98					14-Jul-98					
		SAMPLE PURPOSE	REG					REG					REG					REG					FD					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result
DHE																												
Dehalococcoides	cells/ml																											
FIELD TESTS																												
Dissolved Oxygen	mg/L		6.5					20.11					3.58															
Ferrous iron	µg/L																											
Oxygen Reduction Potential	mV		-61.9					-76.3					-78.1															
pH	STD UNIT		3.98					5.93					7.54															
Specific Conductivity	uS/cm		1,060					1,061					1,065															
Temperature	Deg C		25.14					25.12					15.62															
Turbidity	NTU		8.4					0.5					1.4															
GASES																												
Ethane	µg/L																											
Ethylene	µg/L																											
Methane	µg/L																											
GEN CHEMISTRY																												
Chloride	µg/L																	33,000				1	29,900				1	
Nitrate	µg/L	10,000																										
Nitrate / Nitrite	µg/L																	100 <	U			1	100 <	U			1	
Nitrite	µg/L	1,000																										
Perchlorate	µg/L		1 U	U			1	0.5 U	U			1																
Sulfate	µg/L																	61,000				1	58,000				1	
Sulfide	µg/L																											
Total Alkalinity	µg/L																											
Total Organic Carbon	µg/L																											
VOLATILES																												
1,1-Dichloroethene	µg/L	7	5 U	U			1	0.5 U	U			1	0.5 U	U			1	5 <	R			5	5 <	R			5	1
1,2-Dichloroethene	µg/L	5	5 U	U			1	0.25 U	U			1	0.25 U	U			1	5 <	R			5	5 <	R			5	1
cis-1,2-Dichloroethene	µg/L	70	5 U	U			1	0.25 U	U			1	0.25 U	U			1	5 <	R			5	5 <	R			5	1
Chloroethane	µg/L		5 U	U			1	0.5 U	U			1	0.5 U	U			1	10 <	R			5	10 <	R			5	2
Methylene chloride	µg/L	5	26 B	J		05B	1	0.25 U	U			1	0.25 U	U			1	300	R			5	300	R			5	1
trans-1,2-Dichloroethene	µg/L	100	5 U	U			1	0.25 U	U			1	0.25 U	U			1	5 <	R			5	5 <	R			5	1
Trichloroethene	µg/L	5	5 U	U			1	0.25 U	U			1	0.25 U	U			1	5 <	R			5	5 <	R			5	1
Vinyl chloride	µg/L	2	5 U	U			1	0.25 U	U			1	0.25 U	U			1	5 <	R			5	5 <	R			5	1
EXPLOSIVES																												
2,4,6-Trinitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.26 <	U			1	0.26 <	U			1	
2-Amino-4,6-dinitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.13 <	U			1	0.13 <	U			1	
4-Amino-2,6-dinitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.13 <	U			1	0.13 <	U			1	
2,4-Dinitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.26 <	U			1	0.26 <	U			1	
2,6-Dinitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.26 <	U			1	0.26 <	U			1	
o-Nitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						2	J			1	0.26 <	UJ			1	
p-Nitrotoluene	µg/L		0.2 U	U			1	0.255 U	U			1						0.26 <	U			1	0.26 <	U			1	

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW28				29WW28				29WW28				2WW34				29WW34							
		SAMPLE NO	29WW28-990316				29WW28-040826				29WW28-050515				29WW34-040826				29WW34-050516							
	SAMPLE DATE		16-Mar-99				26-Aug-04				15-May-05				26-Aug-04				16-May-05							
	SAMPLE PURPOSE		REG				REG				REG				REG				REG							
Parameter	Units	MCL	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																										
Dehalococcoides	cells/ml																									
FIELD TESTS																										
Dissolved Oxygen	mg/L						14.3					1.81					0.69					2.15				
Ferrous iron	µg/L																									
Oxygen Reduction Potential	mV						309					50.9					271					0.9				
pH	STD UNIT						7.04					6.9					7.24					6.92				
Specific Conductivity	uS/cm						1,024					1,032					833					818				
Temperature	Deg C						25.89					19.59					26.09					19.19				
Turbidity	NTU						11.3					8.9					4.5					0				
GASES																										
Ethane	µg/L																									
Ethylene	µg/L																									
Methane	µg/L																									
GEN CHEMISTRY																										
Chloride	µg/L																									
Nitrate	µg/L	10,000																								
Nitrate / Nitrite	µg/L																									
Nitrite	µg/L	1,000																								
Perchlorate	µg/L						1 U	U		1		0.5 U	U		1		1 U	U		1		0.5 U	U		1	
Sulfate	µg/L																									
Sulfide	µg/L																									
Total Alkalinity	µg/L																									
Total Organic Carbon	µg/L																									
VOLATILES																										
1,1-Dichloroethene	µg/L	7 <	U		1		5 U	U		1		0.5 U	U		1		5 U	U		1		0.5 U	U		1	
1,2-Dichloroethane	µg/L	5 <	U		1		5 U	U		1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
cis-1,2-Dichloroethene	µg/L	70 <	U		1		5 U	U		1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
Chloroethane	µg/L	<	U		1		5 U	U		1		0.5 U	U		1		5 U	U		1		0.5 U	U		1	
Methylene chloride	µg/L	5 <	U		1		36			1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
trans-1,2-Dichloroethene	µg/L	100 <	U		1		5 U	U		1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
Trichloroethene	µg/L	5 <	U		1		3 J	J		1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
Vinyl chloride	µg/L	2 <	U		1		5 U	U		1		0.25 U	U		1		5 U	U		1		0.25 U	U		1	
EXPLOSIVES																										
2,4,6-Trinitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U		1	
2-Amino-4,6-dinitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U		1	
4-Amino-2,6-dinitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U		1	
2,4-Dinitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U		1	
2,6-Dinitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U		1	
o-Nitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		1.39				1
p-Nitrotoluene	µg/L						0.2 U	U		1		0.25 U	U		1		0.2 U	U		1		0.25 U	U			

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW35					29WW35					29WW35					29WW35					29WW35				
		SAMPLE NO	29WW35-060926					29WW35-061120					29WW35-FEB2007					29WW35-FEB2007-FD					29WW35-102708				
	SAMPLE DATE		26-Sep-06					20-Nov-06					22-Feb-07					22-Feb-07					27-Oct-08				
	SAMPLE PURPOSE		REG					REG					REG					FD					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml												10	U	U		1										
FIELD TESTS																											
Dissolved Oxygen	mg/L		13.27					0.5					0.8										2.07				
Ferrous iron	µg/L												1,350														
Oxygen Reduction Potential	mV		NR					-215.3					-106.5										-82.1				
pH	STD UNIT		8.85					8.14					7.38					7.6					7.44				
Specific Conductivity	uS/cm		1,000					821					872					796					859				
Temperature	Deg C		21.19					19.71					25.96										17.84				
Turbidity	NTU		0					9.1					1.6										2.8				
GASES																											
Ethane	µg/L												0.6	U	U		1	0.6	U	U		1					
Ethylene	µg/L												0.8	U	U		1	0.8	U	U		1					
Methane	µg/L												5.08				1	5.7				1					
GEN CHEMISTRY																											
Chloride	µg/L												77,000				5	11,000				2					
Nitrate	µg/L	10,000											5	U	U		1	5	U	U		1					
Nitrate / Nitrite	µg/L												5	U	U		1	5	U	U		1					
Nitrite	µg/L	1,000											3	U	U		1	3	U	U		1					
Perchlorate	µg/L												21.5		J	17	1	5.1	B	J	17,15	1					
Sulfate	µg/L												49,000				2	36,000				2					
Sulfide	µg/L												200	UB	U		1	200	UB	U		1					
Total Alkalinity	µg/L												295,000				5	303,000				2					
Total Organic Carbon	µg/L												700	B	J	15	1	900	B	J	15	1					
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	0.5	U	U		1	0.68	U	U		1	0.68	U	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.53	U	U		1	0.53	U	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	2.27	JH	07A		1	0.619	J	J	15	1	0.83	U	U		1	0.83	U	U		1	0.25	U	U		1
Chloroethane	µg/L		0.5	U	U		1	0.5	U	U		1	0.46	U	U		1	0.46	U	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	8,770				100	1,400				20	237				5	168				1	0.25	U	U		1
trans-1,2-Dichloroethene	µg/L	100	0.328	J	JH	07A,15	1	0.25	U	U		1	0.75	U	U		1	0.75	U	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	123	JH	07A		1	43.5				1	25.6				1	23.4				1	0.685	J	J	15	1
Vinyl chloride	µg/L	2	0.25	U	U		1	0.25	U	U		1	0.32	U	U		1	0.32	U	U		1	0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L												0.076	U	U		1	0.076	U	U		1					
2-Amino-4,6-dinitrotoluene	µg/L												0.067	U	U		1	0.067	U	U		1					
4-Amino-2,6-dinitrotoluene	µg/L												0.076	U	U		1	0.076	U	U		1					
2,4-Dinitrotoluene	µg/L												0.071	U	U		1	0.071	U	U		1					
2,6-Dinitrotoluene	µg/L												0.062	U	U		1	0.062	U	U		1					
o-Nitrotoluene	µg/L												0.057	U	U		1	0.057	U	U		1					
p-Nitrotoluene	µg/L												0.071	U	U		1	0.071	U	U		1					

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW37					29WW37					29WW37					29WW39					29WW39				
		SAMPLE NO	29WW37-060922					29WW37-061117					29WW37-020108					29WW39-060926					29WW39-061120				
	SAMPLE DATE		22-Sep-06					17-Nov-06					1-Feb-08					26-Sep-06					20-Nov-06				
	SAMPLE PURPOSE		REG					REG					REG					REG					REG				
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							4.64					1.43					3.87					0.49				
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							-158					57.6					NR					-219.2				
pH	STD UNIT							12.16					6.55					6.17					9.4				
Specific Conductivity	uS/cm							3,198					672					1,170					808				
Temperature	Deg C							21.66					17.11					23.23					18.2				
Turbidity	NTU							25.3					0.3					17.8					5.6				
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L																										
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
Chloroethane	µg/L		0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	23.2				1	63.4				1	1.03	J	J	15	1	14.5				1	1.82	J	J	15	1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.683	J	J	15	1	0.25	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																										
2-Amino-4,6-dinitrotoluene	µg/L																										
4-Amino-2,6-dinitrotoluene	µg/L																										
2,4-Dinitrotoluene	µg/L																										
2,6-Dinitrotoluene	µg/L																										
o-Nitrotoluene	µg/L																										
p-Nitrotoluene	µg/L																										

Table C-2
Summary of Intermediate Groundwater Analytical Results
LHAAP-29

	LOCATION CODE	29WW39					
	SAMPLE NO	29WW39-020108					
	SAMPLE DATE	1-Feb-08					
	SAMPLE PURPOSE	REG					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF
DHE							
Dehalococcoides	cells/ml						
FIELD TESTS							
Dissolved Oxygen	mg/L		0.17				
Ferrous iron	µg/L						
Oxygen Reduction Potential	mV		29.5				
pH	STD UNIT		9.53				
Specific Conductivity	µS/cm		559				
Temperature	Deg C		17.53				
Turbidity	NTU		5.5				
GASES							
Ethane	µg/L						
Ethylene	µg/L						
Methane	µg/L						
GEN CHEMISTRY							
Chloride	µg/L						
Nitrate	µg/L	10,000					
Nitrate / Nitrite	µg/L						
Nitrite	µg/L	1,000					
Perchlorate	µg/L						
Sulfate	µg/L						
Sulfide	µg/L						
Total Alkalinity	µg/L						
Total Organic Carbon	µg/L						
VOLATILES							
1,1-Dichloroethene	µg/L	7	0.5 U	U			1
1,2-Dichloroethane	µg/L	5	0.25 U	U			1
cis-1,2-Dichloroethene	µg/L	70	0.25 U	U			1
Chloroethane	µg/L		0.5 U	U			1
Methylene chloride	µg/L	5	0.25 U	U			1
trans-1,2-Dichloroethene	µg/L	100	0.25 U	U			1
Trichloroethene	µg/L	5	0.25 U	U			1
Vinyl chloride	µg/L	2	0.25 U	U			1
EXPLOSIVES							
2,4,6-Trinitrotoluene	µg/L						
2-Amino-4,6-dinitrotoluene	µg/L						
4-Amino-2,6-dinitrotoluene	µg/L						
2,4-Dinitrotoluene	µg/L						
2,6-Dinitrotoluene	µg/L						
o-Nitrotoluene	µg/L						
p-Nitrotoluene	µg/L						

Notes and Abbreviations:

Results without values indicate a result was not available.

< not detected above MDL (same as U)

B blank

Bold above MCL

cell/ml cells per milliliter

D diluted

Deg C degrees Celsius

DF dilution factor

E result exceeded calibration limits

FD field duplicate

H biased high

J estimated result or detection limit

L biased low

µg/L micrograms per liter

µS/cm microSeimens per centimeter

MCL maximum contaminant level

MDL method detection limit

mg/L milligrams per liter

mV millivolts

NR not recorded

NTU nephelometric turbidity unit

P gas chromatograph column readings did not match within QC limits

Qual laboratory qualifiers

R rejected

RC reason code

REG regular sample

STD UNIT standard units

U not detected above MDL

ValQual validation qualifier

Reason Codes:

05B compound % deviation QC criteria not met

07A sample

15 quantitation

17 field duplicate RPD criteria is exceeded

Table C-3
Summary of Deep Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW04						29WW04						29WW04						29WW04					
	SAMPLE NO		29WW04-950504						29WW04-980714						29WW04-040829						29WW04-050517					
	SAMPLE DATE		4-May-95						14-Jul-98						29-Aug-04						17-May-05					
	SAMPLE PURPOSE		REG						REG						REG						FD					
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF				
DHE																										
Dehalococcoides	cells/ml																									
FIELD TESTS																										
Dissolved Oxygen	mg/L												1.79					3.25								
Ferrous iron	µg/L																									
Oxygen Reduction Potential	mV												-99178.8					-22.5								
pH	STD UNIT												8.76					9.22								
Specific Conductivity	uS/cm												907					912								
Temperature	Deg C												22.19					17.57								
Turbidity	NTU												0.7					-3.7								
GASES																										
Ethane	µg/L																									
Ethylene	µg/L																									
Methane	µg/L																									
GEN CHEMISTRY																										
Chloride	µg/L							45,900				1														
Nitrate	µg/L	10,000																								
Nitrate / Nitrite	µg/L							100	<	U		1														
Nitrite	µg/L	1,000																								
Perchlorate	µg/L												12				1	0.5	U	U		1				
Sulfate	µg/L							4,200				1														
Sulfide	µg/L																									
Total Alkalinity	µg/L																									
Total Organic Carbon	µg/L																									
VOLATILES																										
1,1-Dichloroethene	µg/L	7	5	<	U		1	1	<	U		1	5	U	U		1	0.5	U	U		1				
1,2-Dichloroethane	µg/L	5	5	<	U		1	1	<	U		1	5	U	U		1	0.524	J	J	15	1				
cis-1,2-Dichloroethene	µg/L	70						1	<	U		1	5	U	U		1	0.25	U	U		1				
Chloroethane	µg/L		10	<	U		1	2	<	U		1	5	U	U		1	0.5	U	U		1				
Methylene chloride	µg/L	5	10	<	U		1	1	<	U		1	5	U	U		1	1.72	J	B	06D,07A,15	1				
trans-1,2-Dichloroethene	µg/L	100						1	<	U		1	5	U	U		1	0.25	U	U		1				
Trichloroethene	µg/L	5	5	<	U		1	1	<	U		1	5	U	U		1	0.25	U	U		1				
Vinyl chloride	µg/L	2	10	<	U		1	1	<	U		1	5	U	U		1	0.25	U	U		1				
EXPLOSIVES																										
2,4,6-Trinitrotoluene	µg/L		0.7	<	UJ(R)		1	0.26	<	U		1	0.2	U	U		1	0.255	U	U		1				
2-Amino-4,6-dinitrotoluene	µg/L		0.5	<	UJ(R)		1	0.13	<	U		1	0.2	U	U		1	0.255	U	U		1				
4-Amino-2,6-dinitrotoluene	µg/L		0.6	<	UJ(R)		1	0.13	<	U		1	0.2	U	U		1	0.255	U	U		1				
2,4-Dinitrotoluene	µg/L		0.5	<	UJ(R)		1	8.7				1	0.2	U	U		1	0.255	U	U		1				
2,6-Dinitrotoluene	µg/L		0.5	<	UJ(R)		1	8.7				1	0.2	U	U		1	0.255	U	U		1				
o-Nitrotoluene	µg/L		0.6	<	UJ(R)		1	0.26	<	U		1	0.2	U	U		1	0.255	U	U		1				
p-Nitrotoluene	µg/L		0.4	<	UJ(R)		1	0.26	<	U		1	0.2	U	U		1	0.255	U	U		1				

Table C-3
Summary of Deep Groundwater Analytical Results
LHAAP-29

	LOCATION CODE	29WW08	29WW08					29WW08					29WW08					29WW08				
	SAMPLE NO	29WW08-950430	29WW08-980713					29WW08-990316					29WW08-020315									
	SAMPLE DATE	30-Apr-95	13-Jul-98					16-Mar-99					15-Mar-02									
	SAMPLE PURPOSE	REG	REG					REG					REG									
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																						
Dehalococcoides	cells/ml																					
FIELD TESTS																						
Dissolved Oxygen	mg/L																					
Ferrous iron	µg/L																					
Oxygen Reduction Potential	mV																					
pH	STD UNIT																					
Specific Conductivity	uS/cm																					
Temperature	Deg C																					
Turbidity	NTU																					
GASES																						
Ethane	µg/L																					
Ethylene	µg/L																					
Methane	µg/L																					
GEN CHEMISTRY																						
Chloride	µg/L							149,000				1										
Nitrate	µg/L	10,000																				
Nitrate / Nitrite	µg/L							100	<	U		1										
Nitrite	µg/L	1,000																				
Perchlorate	µg/L																	0.958	U	U		1
Sulfate	µg/L							8,400				1										
Sulfide	µg/L																					
Total Alkalinity	µg/L																					
Total Organic Carbon	µg/L																					
VOLATILES																						
1,1-Dichloroethene	µg/L	7	5	<	U		1	40	<	U		40	1	<	U		1					
1,2-Dichloroethane	µg/L	5	5	<	U		1	40	<	U		40	1	<	U		1					
cis-1,2-Dichloroethene	µg/L	70						40	<	U		40	1	<	U		1					
Chloroethane	µg/L		10	<	U		1	80	<	U		40	2	<	U		1					
Methylene chloride	µg/L	5	10	<	U		1	2,300				40	1	<	U		1					
trans-1,2-Dichloroethene	µg/L	100						40	<	U		40	1	<	U		1					
Trichloroethene	µg/L	5	5	<	U		1	40	<	U		40	1	<	U		1					
Vinyl chloride	µg/L	2	10	<	U		1	40	<	U		40	1	<	U		1					
EXPLOSIVES																						
2,4,6-Trinitrotoluene	µg/L		0.7	<	UJ(R)		1	0.26	<	U		1										
2-Amino-4,6-dinitrotoluene	µg/L		0.5	<	UJ(R)		1	0.13	<	U		1										
4-Amino-2,6-dinitrotoluene	µg/L		0.6	<	UJ(R)		1	0.13	<	U		1										
2,4-Dinitrotoluene	µg/L		0.5	<	UJ(R)		1	0.26	<	U		1										
2,6-Dinitrotoluene	µg/L		0.5	<	UJ(R)		1	0.26	<	U		1										
o-Nitrotoluene	µg/L		0.6	<	UJ(R)		1	0.26	<	U		1										
p-Nitrotoluene	µg/L		0.4	<	UJ(R)		1	0.26	<	U		1										

Table C-3
Summary of Deep Groundwater Analytical Results
LHAAP-29

	LOCATION CODE		29WW08						29WW08						29WW08						29WW40					
	SAMPLE NO		29WW08-020924						29WW08-040825						29WW08-050514						29WW40-060918					
	SAMPLE DATE		24-Sep-02						25-Aug-04						14-May-05						18-Sep-06					
	SAMPLE PURPOSE		REG						REG						REG						REG					
Parameter	Units	MCL	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF	Result	Qual	Val	Qual	RC	DF
DHE																										
Dehalococcoides	cells/ml																									
FIELD TESTS																										
Dissolved Oxygen	mg/L								0.99						0.37											
Ferrous iron	µg/L																									
Oxygen Reduction Potential	mV								250.1						-153.9											
pH	STD UNIT								7.67						7.71											
Specific Conductivity	uS/cm								1,086						1,069											
Temperature	Deg C								27.61						20.29											
Turbidity	NTU								4.1						4.6											
GASES																										
Ethane	µg/L																									
Ethylene	µg/L																									
Methane	µg/L																									
GEN CHEMISTRY																										
Chloride	µg/L																									
Nitrate	µg/L	10,000																								
Nitrate / Nitrite	µg/L																									
Nitrite	µg/L	1,000																								
Perchlorate	µg/L		72.6	U	U		50		1	U	U		1		0.5	U	U		1							
Sulfate	µg/L																									
Sulfide	µg/L																									
Total Alkalinity	µg/L																									
Total Organic Carbon	µg/L																									
VOLATILES																										
1,1-Dichloroethene	µg/L	7							5	U	U		1		0.5	U	U		1		0.5	U	U			1
1,2-Dichloroethane	µg/L	5							5	U	U		1		0.25	U	U		1		0.25	U	U			1
cis-1,2-Dichloroethene	µg/L	70							5	U	U		1		0.25	U	U		1		0.25	U	U			1
Chloroethane	µg/L								5	U	U		1		0.5	U	U		1		0.5	U	U			1
Methylene chloride	µg/L	5							5	U	U		1		0.25	U	U		1		215					10
trans-1,2-Dichloroethene	µg/L	100							5	U	U		1		0.25	U	U		1		0.25	U	U			1
Trichloroethene	µg/L	5							2	J	J	15	1		0.389	J	J	15	1		0.833	J	J	15	1	
Vinyl chloride	µg/L	2							5	U	U		1		0.25	U	U		1		0.25	U	U			1
EXPLOSIVES																										
2,4,6-Trinitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
2-Amino-4,6-dinitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
4-Amino-2,6-dinitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
2,4-Dinitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
2,6-Dinitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
o-Nitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							
p-Nitrotoluene	µg/L								0.2	U	U		1		0.258	U	U		1							

Table C-3
Summary of Deep Groundwater Analytical Results
LHAAP-29

	LOCATION CODE	29WW40	29WW40					29WW40					29WW40					29WW40					29WW41				
	SAMPLE NO	29WW40-060921	29WW40-061121					29WW40-061121FD					29WW40-061219					29WW40-061219					29WW41-090610				
	SAMPLE DATE	21-Sep-06	21-Nov-06					21-Nov-06					19-Dec-06					10-Jun-09									
	SAMPLE PURPOSE	REG	REG					FD					REG					REG									
Parameter	Units	MCL	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF	Result	Qual	ValQual	RC	DF
DHE																											
Dehalococcoides	cells/ml																										
FIELD TESTS																											
Dissolved Oxygen	mg/L							7.15										7.03						3.53			
Ferrous iron	µg/L																										
Oxygen Reduction Potential	mV							123.7										124.3						225.9			
pH	STD UNIT							8.78										8.8						7.72			
Specific Conductivity	µS/cm							3,239										3250						792			
Temperature	Deg C							21.22										24.2						25.24			
Turbidity	NTU							0.3										3						8.2			
GASES																											
Ethane	µg/L																										
Ethylene	µg/L																										
Methane	µg/L																										
GEN CHEMISTRY																											
Chloride	µg/L																										
Nitrate	µg/L	10,000																									
Nitrate / Nitrite	µg/L																										
Nitrite	µg/L	1,000																									
Perchlorate	µg/L																										
Sulfate	µg/L																										
Sulfide	µg/L																										
Total Alkalinity	µg/L																										
Total Organic Carbon	µg/L																										
VOLATILES																											
1,1-Dichloroethene	µg/L	7	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1
1,2-Dichloroethane	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
cis-1,2-Dichloroethene	µg/L	70	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
Chloroethane	µg/L		0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1	0.5	U	U		1
Methylene chloride	µg/L	5	92.8				1	6.79				1	6.75				1	0.25	U	U		1	0.25	U	U		1
trans-1,2-Dichloroethene	µg/L	100	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
Trichloroethene	µg/L	5	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
Vinyl chloride	µg/L	2	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1	0.25	U	U		1
EXPLOSIVES																											
2,4,6-Trinitrotoluene	µg/L																										
2-Amino-4,6-dinitrotoluene	µg/L																										
4-Amino-2,6-dinitrotoluene	µg/L																										
2,4-Dinitrotoluene	µg/L																										
2,6-Dinitrotoluene	µg/L																										
o-Nitrotoluene	µg/L																										
p-Nitrotoluene	µg/L																										

Table C-3
Summary of Deep Groundwater Analytical Results
LHAAP-29

Notes and Abbreviations:

Results without values indicate a result was not available.

<	not detected above MDL
B	blank also contained parameter
Bold	above MCL
cell/ml	cells per milliliter
D	diluted
Deg C	degrees Celsius
DF	dilution factor
E	result exceeded calibration limits
FD	field duplicate
H	biased high
J	estimated result or detection limit
L	biased low
µg/L	micrograms per liter
µS/cm	microSeimens per centimeter
MCL	maximum contaminant level
MDL	method detection limit
mg/L	milligrams per liter
mV	millivolts
NR	not recorded
NTU	nephelometric turbidity unit
Qual	laboratory qualifiers
R	rejected
RC	reason code
REG	regular sample
STD UNIT	standard units
U	not detected above MDL
ValQual	validation qualifier

Reason Codes:

06D	trip blank
07A	sample
15	quantitation

Table C-4
Preliminary Screening Worksheet for Reductive Dechlorination
LHAAP-29

Analytical Parameters and Weighting for Preliminary Screening for Anaerobic Biodegradation Processes (EPA/600/R-98/128)				29WW15	29WW16	29WW35
Analysis	Concentration in Most Contaminated Zone	Interpretation	Value	Points Assigned	Points Assigned	Points Assigned
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0	0	0
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3	-3	0	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2	2	2	0
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	3	3	NT	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2	0	0	0
Sulfide*	>1 mg/L	Reductive pathway possible	3	NT	NT	0
Methane*	<0.5 mg/L	VC oxidizes	0	0	NT	0
	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	3			
Oxidation Reduction Potential* (ORP) against Ag/AgCl electrode	<50 millivolts (mV) <-100mV	Reductive pathway possible	1	1	1	2
		Reductive pathway likely	2			
pH*	5 < pH < 9 5 > pH >9	Optimal range for reductive pathway	0	0	0	0
		Outside optimal range for reductive pathway	-2			
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	0	NT	0
Temperature*	> 20°C	At T >20°C biochemical process is accelerated	1	1	0	1
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1	NT	NT	NE
Alkalinity	>2x background	Results from interaction between CO2 and aquifer minerals	1	NT	NT	NE
Chloride*	>2x background	Daughter product of organic chlorine	2	NE	NE	NE
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3	NT	NT	NT
Hydrogen	<1 nM	VC oxidized	0	NT	NT	NT
Volatile Fatty Acids	> 0.1 mg/L	Intermediates resulting from biodegradation of more complex compounds; carbon and energy source	2	NT	NT	NT
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	0	0	0
Tetrachloroethene		Material released	0	0	0	0
Trichloroethene*		Material released	0	0	0	0
		Daughter product of PCE	2a			
DCE*		Material released	0	0	2	2
		Daughter product of TCE	2a			
		If cis is > 80% of total DCE it is likely a daughter product				
		1,1-DCE can be chemical reaction product of TCA				
VC*		Material released	0	0	2	0
		Daughter product of DCE	2a			
1,1,1-Trichloroethane*		Material released	0	0	0	0
DCA		Daughter product of TCA under reducing conditions	2	2	2	0
Carbon Tetrachloride		Material released	0	0	0	0
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2	0	0	0
Ethene/Ethane	>0.01mg/L	Daughter product of VC/ethene	2	0	NT	0
	>0.1 mg/L		3			
Chloroform		Material released	0	2	0	0
		Daughter product of Carbon Tetrachloride	2			
Dichloromethane (methylene chloride)		Material released	0	2	2	2
		Daughter product of Chloroform	2			
* - Required Analysis			Total	10	11	10
a - points awarded only if it can be shown that the compound is a daughter product (not a source constituent)				TCE	MC	TCE
NT - not tested			µg/L	344	10,300,000	0.685
NE - not evaluated (no background comparison)						

Table C-5
Estimation of Cleanup Times Using Time-Dependent Attenuation Rates - Shallow
LHAAP-29

Well ID	Attenuation Rate Constant	Attenuation Half-life		Most Recent Concentration		Target Concentration (µg/L)	Estimated Cleanup Time (years)
	(day ⁻¹)	(days)	(years)	Date	(µg/L)		
Perchlorate							
116	0.000239	2900	7.9	May-05	1130	72	32
29WW05	0.000480	1444	4.0	May-05	76.8	72	0.37
29WW06	0.00107	648	1.8	Feb-07	< 20	72	Completed
29WW15	0.000832	833	2.3	May-05	16800	72	18
29WW17	0.00786	88	0.24	May-05	< 1	72	Completed
29WW18	0.00273	254	0.70	May-05	< 1	72	Completed
2,4-Dinitrotoluene (2,4-DNT)							
29WW03	0.00204	340	0.93	May-05	< 0.25	0.42	Completed
29WW05	0.000796	871	2.4	May-05	50.9	0.42	17
29WW20	0.00133	521	1.4	May-05	32.4	0.42	9.0
2,6-Dinitrotoluene (2,6-DNT)							
29WW03	0.000384	1805	4.9	May-05	9.32	0.42	22
29WW20	0.000810	856	2.3	May-05	112	0.42	19
o-Nitrotoluene (o-NT)							
29WW03	0.00124	559	1.5	May-05	71.3	1000	Completed
29WW05	0.000554	1251	3.4	May-05	1230	1000	1.0
29WW20	0.000926	749	2.1	May-05	401	1000	Completed
p-Nitrotoluene (p-NT)							
29WW03	0.00256	271	0.74	May-05	37.2	1000	Completed
29WW05	0.00134	517	1.4	May-05	42.7	1000	Completed
29WW20	0.00151	459	1.3	May-05	374	1000	Completed
Trichloroethene (TCE)							
29WW15	0.000420	1650	4.5	Feb-07	344	5	28
29WW18	0.00177	392	1.1	May-05	< 0.25	5	Completed
29WW20	0.000759	913	2.5	May-05	< 0.25	5	Completed
29WW23	0.000717	967	2.6	May-05	< 0.25	5	Completed
29WW25	0.00150	462	1.3	May-05	< 0.25	5	Completed
29WW26	0.00139	499	1.4	May-05	< 0.25	5	Completed
29WW29	0.00105	660	1.8	May-05	< 0.25	5	Completed
29WW32	0.00166	418	1.1	May-05	< 0.25	5	Completed

Table C-5
Estimation of Cleanup Times Using Time-Dependent Attenuation Rates - Shallow
LHAAP-29

Well ID	Attenuation Rate Constant	Attenuation Half-life		Most Recent Concentration		Target Concentration (µg/L)	Estimated Cleanup Time (years)
	(day ⁻¹)	(days)	(years)	Date	(µg/L)		
1,2-Dichloroethane (1,2-DCA)							
29WW15	0.000283	2449	6.7	Feb-07	5520	5	68
Methylene Chloride (MC)							
114	0.00213	325	0.89	May-05	< 0.25	5	Completed
119	0.00159	436	1.2	May-05	< 0.25	5	Completed
29WW02	0.00132	525	1.4	May-05	< 0.25	5	Completed
29WW12	0.00155	447	1.2	May-05	< 0.25	5	Completed
29WW15	0.00115	603	1.7	Feb-07	3	5	Completed
29WW17	0.00272	255	0.70	May-05	0.963	5	Completed
29WW18	0.00235	295	0.81	May-05	1.34	5	Completed
29WW20	0.00184	377	1.0	May-05	< 0.25	5	Completed
29WW22	0.00182	381	1.0	May-05	< 0.25	5	Completed
29WW23	0.00184	377	1.0	May-05	< 0.25	5	Completed
29WW25	0.00257	270	0.74	May-05	< 0.25	5	Completed
29WW26	0.00252	275	0.75	May-05	< 0.25	5	Completed
29WW27	0.00239	290	0.79	May-05	< 0.25	5	Completed
29WW29	0.00207	335	0.92	May-05	< 0.25	5	Completed
29WW32	0.00275	252	0.69	May-05	< 0.25	5	Completed
29WW36	0.0130	53	0.15	Feb-07	< 0.67	5	Completed
29WW38	0.0175	40	0.11	Feb-07	< 0.67	5	Completed

Notes:

- 1) The estimated cleanup time was calculated as the time it would take the most recent detected COCs concentration to reach the MCL using the in-well attenuation rate, and assuming first order degradation kinetics.

Table C-6
Estimation of Cleanup Times Using Time-Dependent Attenuation Rates - Intermediate
LHAAP-29

Well ID	Attenuation Rate Constant (day ⁻¹)	Attenuation Half-life		Most Recent Concentration		Target Concentration (µg/L)	Estimated Cleanup Time (years)
		(days)	(years)	Date	(µg/L)		
Trichloroethene (TCE)							
29WW16	0.000209	3316	9.1	Sep-06	4340	5	89
29WW35	0.0100	69	0.19	Oct-08	0.685	5	Completed
Methylene Chloride (MC)							
29WW35	0.0128	54	0.15	Oct-08	< 0.25	5	Completed
29WW37	0.00744	93	0.26	Feb-08	1.03	5	Completed
29WW39	0.00682	102	0.28	Feb-08	< 0.25	5	Completed

Notes:

- 1) The estimated cleanup time was calculated as the time it would take the most recent detected COCs concentration to reach the MCL using the in-well attenuation rate, and assuming first order degradation kinetics.

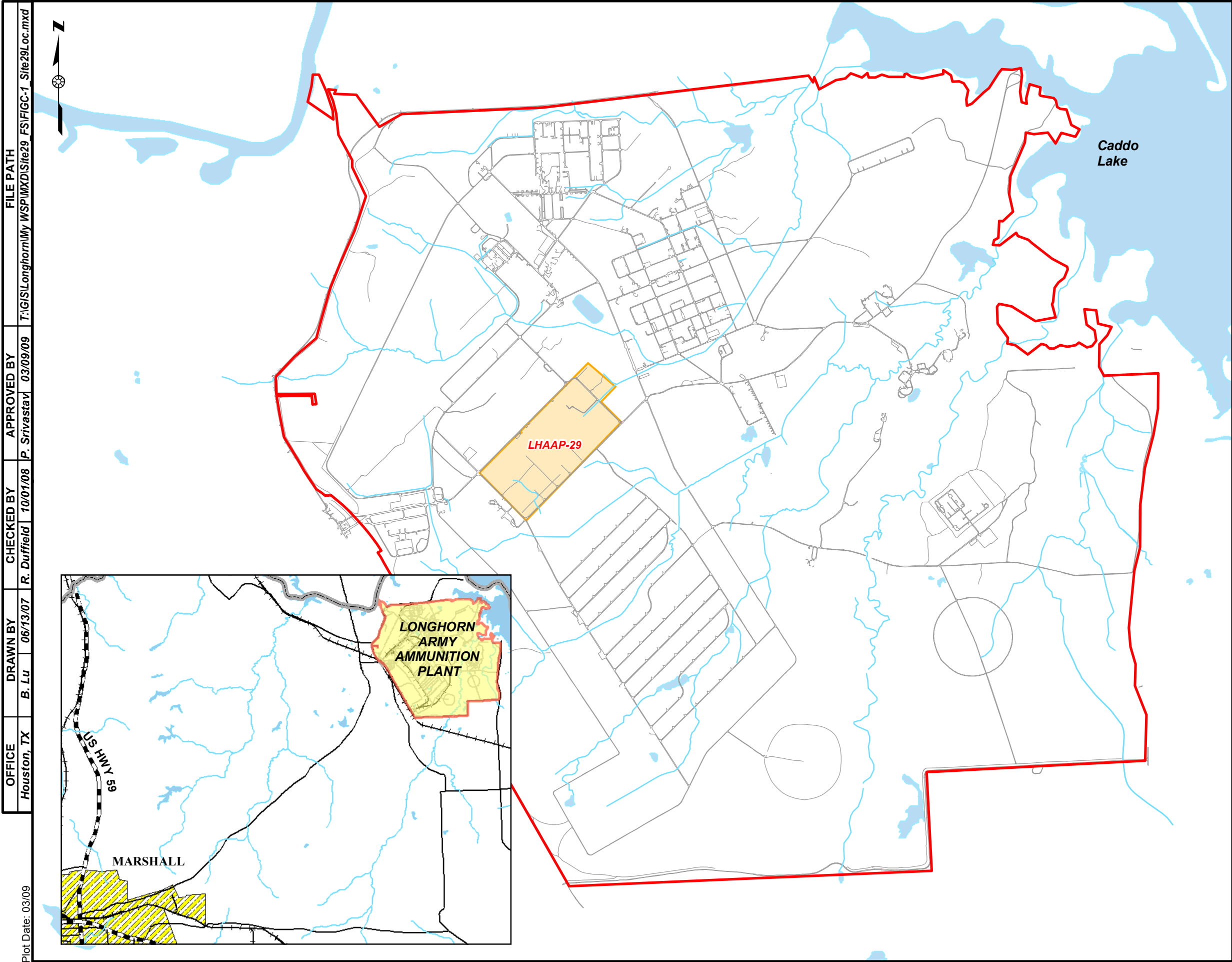
Table C-7
Estimation of Cleanup Times Using Time-Dependent Attenuation Rates - Deep
LHAAP-29

Well ID	Attenuation Rate Constant (day ⁻¹)	Attenuation Half-life		Most Recent Concentration		Target Concentration (µg/L)	Estimated Cleanup Time (years)
		(days)	(years)	Date	(µg/L)		
Methylene Chloride (MC)							
29WW08	0.00192	361	0.99	May-05	< 0.25	5	Completed
29WW40	0.0650	11	0.03	Dec-06	< 0.25	5	Completed

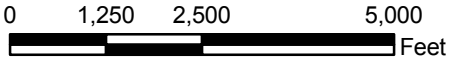
Notes:

- 1) The estimated cleanup time was calculated as the time it would take the most recent detected COCs concentration to reach the MCL using the in-well attenuation rate, and assuming first order degradation kinetics.

Figures



- LEGEND**
- LHAAP Boundary
 - Stream
 - Road
 - Site
 - Lake/Pond



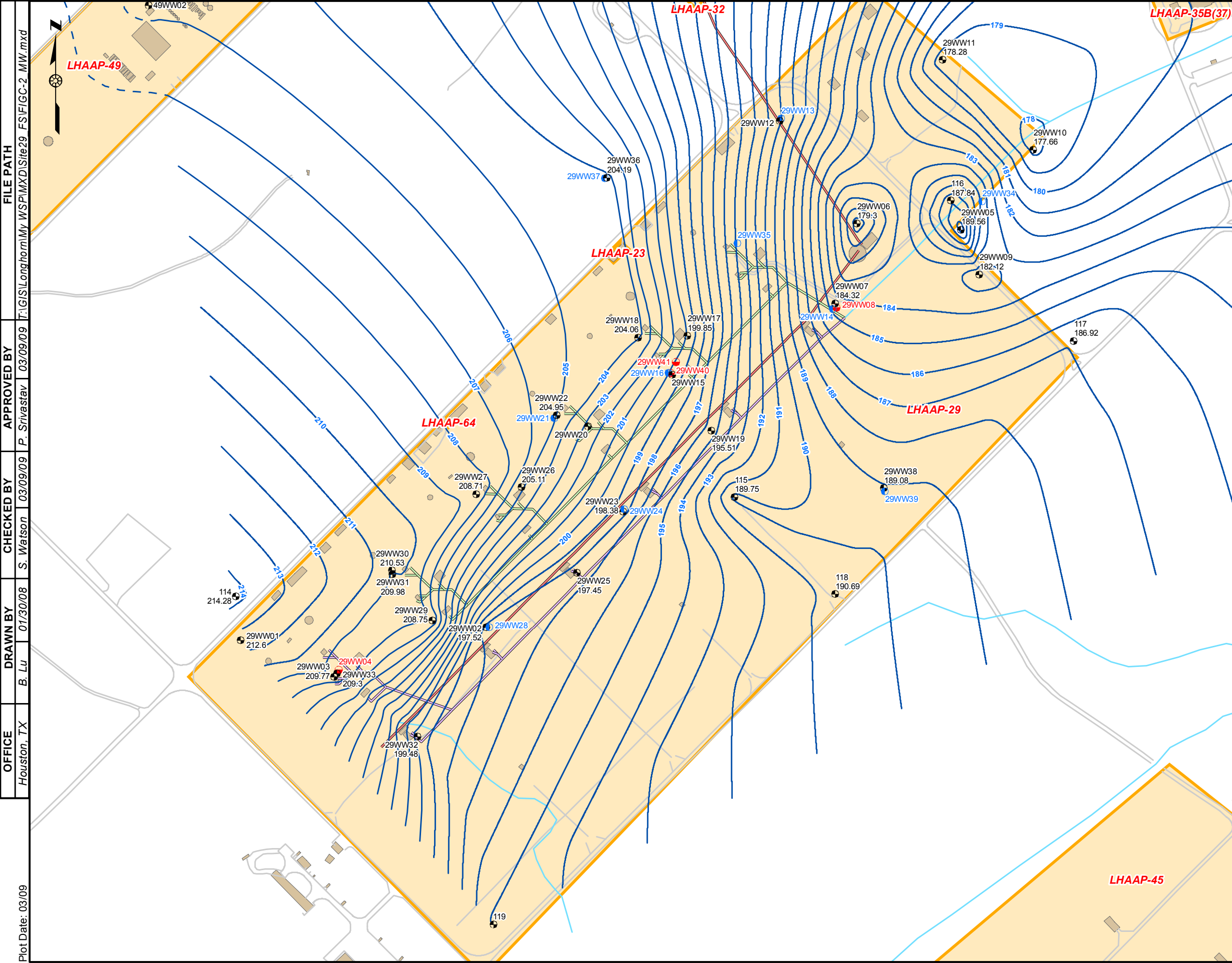
U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT
TULSA, OKLAHOMA

FIGURE C-1
SITE LOCATION MAP
LHAAP-29

LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	R. Duffield	P. Srivastav	T:\GIS\Longhorn\My WSP\MXD\Site29_FS\FIG-C-1_Site29L.oc.mxd

Plot Date: 03/09

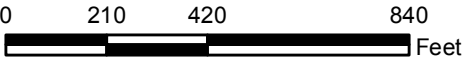


OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu	S. Watson	P. Srivastav	T:\GIS\Longhorn\My WSPMX\Site29 FS\FIGC-2 MW.mxd

LEGEND

- Shallow or Lower Shallow Monitoring Well
- Intermediate Monitoring Well
- Deep Monitoring Well
- Groundwater Elevation Contour
- Inferred Groundwater Elevation Contour
- TNT Cooling Water Drain Line (South)
- TNT Cooling Water Drain Line (North)
- TNT Wastewater Line
- Stream
- Road
- Former Building or Concrete Slab
- Site

Note:
Groundwater contours are based on data collected November 29, 2007 through December 3, 2007.



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

FIGURE C-2
MONITORING WELL LOCATION MAP
LHAAP-29
LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS

Figure C-3
Concentration Trends in 29WW15 at Shallow Groundwater Zone
LHAAP-29

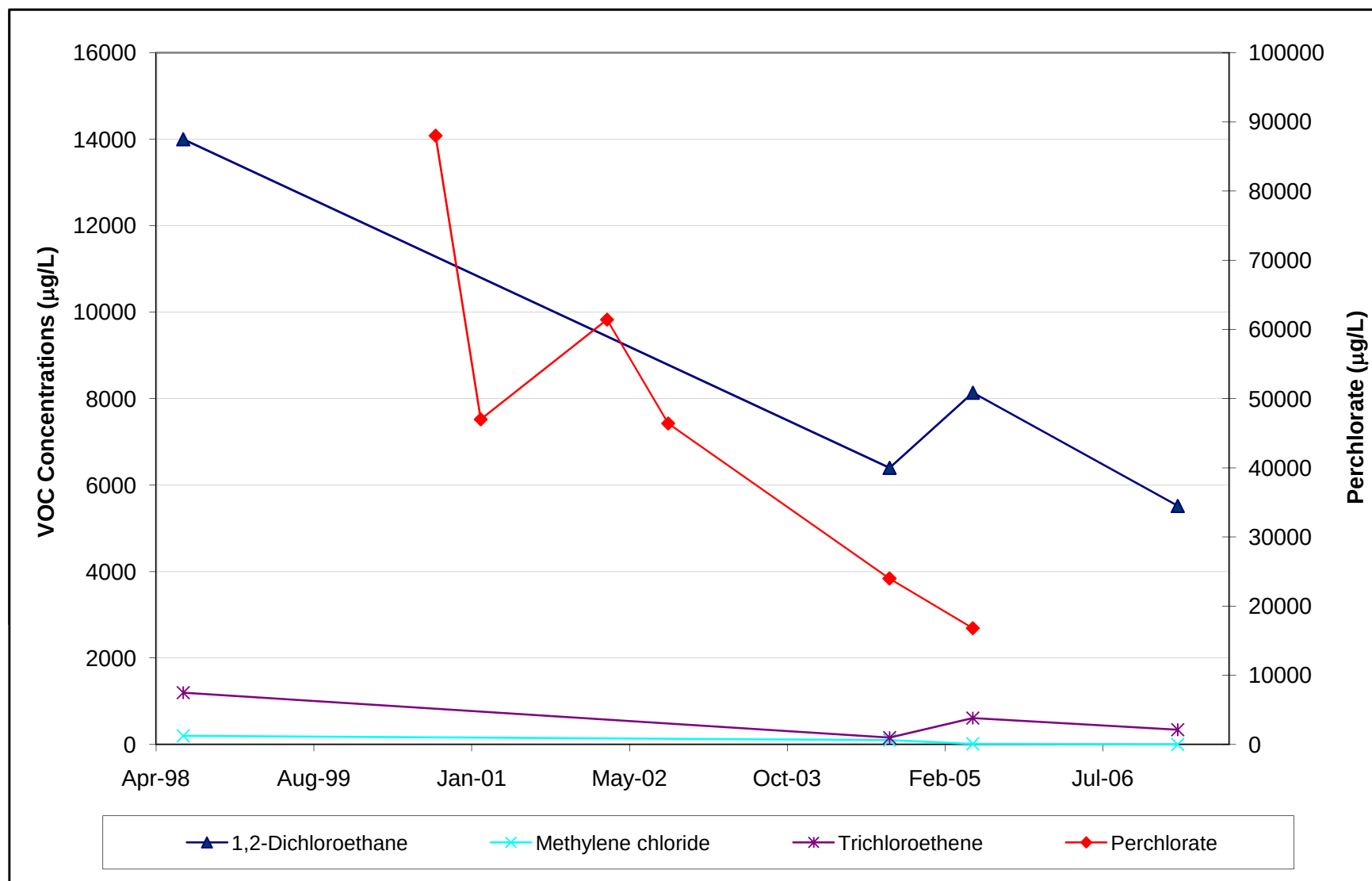


Figure C-4
Natural Attenuation Rate Estimation for Perchlorate
LHAAP-29

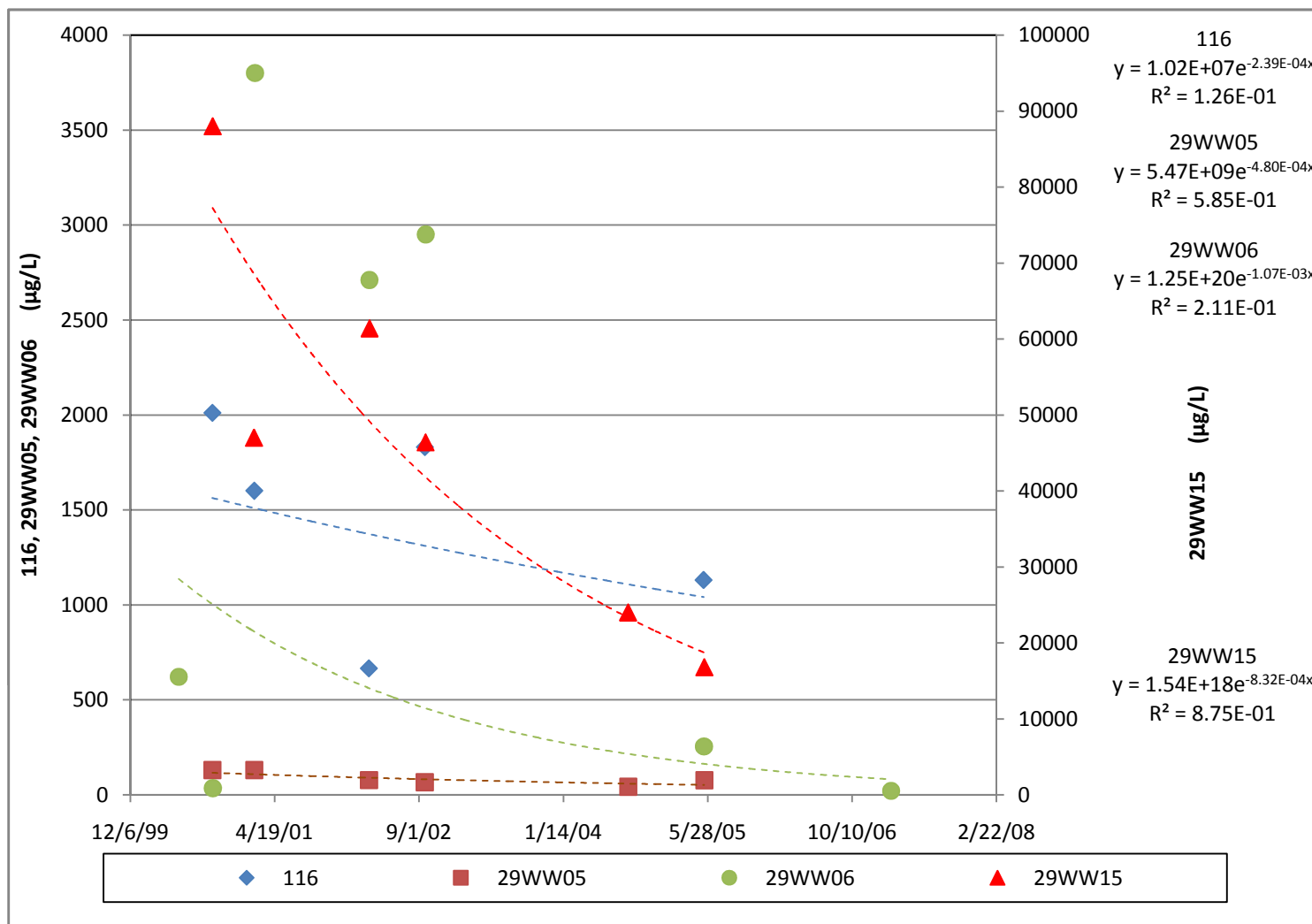


Figure C-5
Natural Attenuation Rate Estimation for 2,4-Dinitrotoluene
LHAAP-29

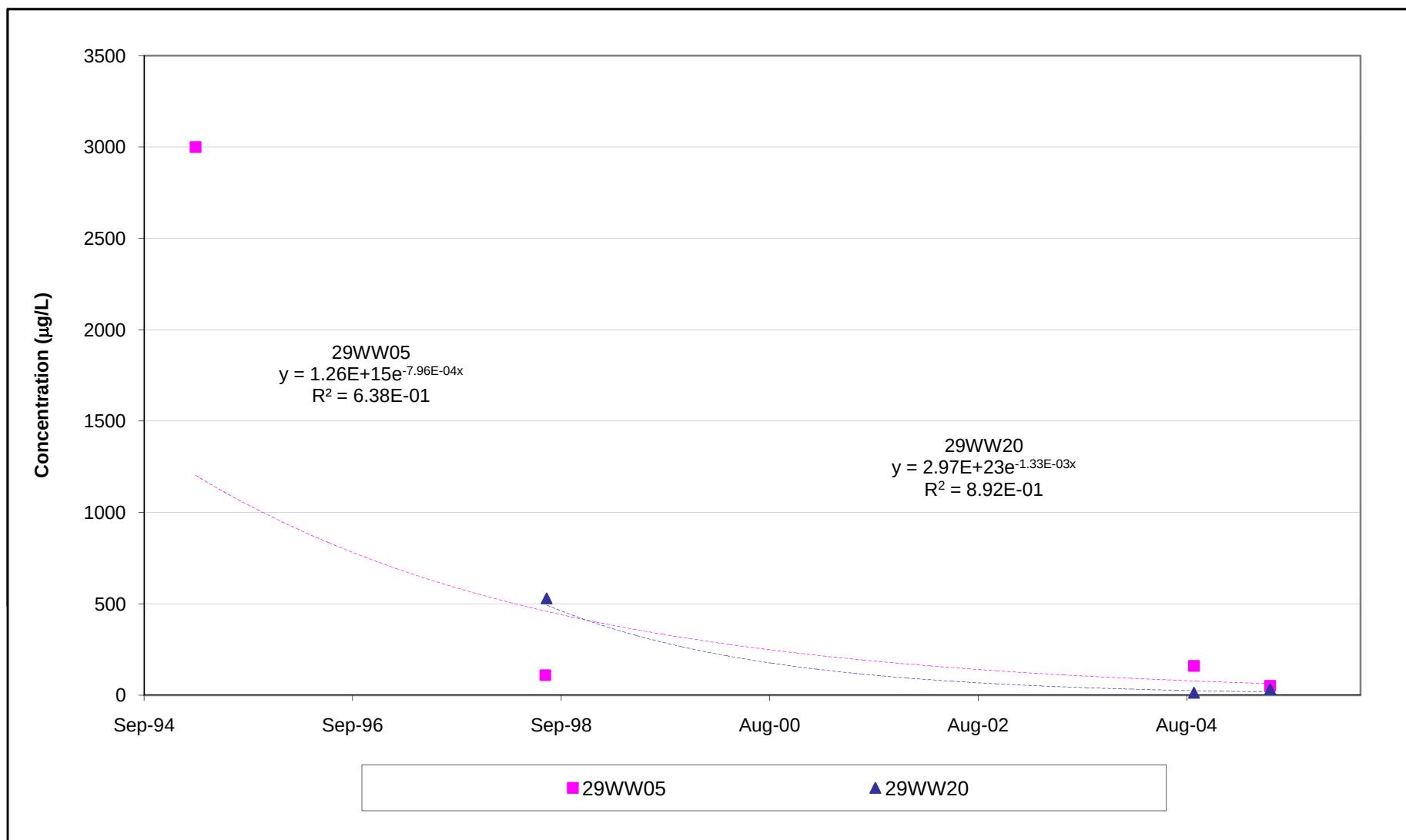


Figure C-6
Natural Attenuation Rate Estimation for 2,6-Dinitrotoluene
LHAAP-29

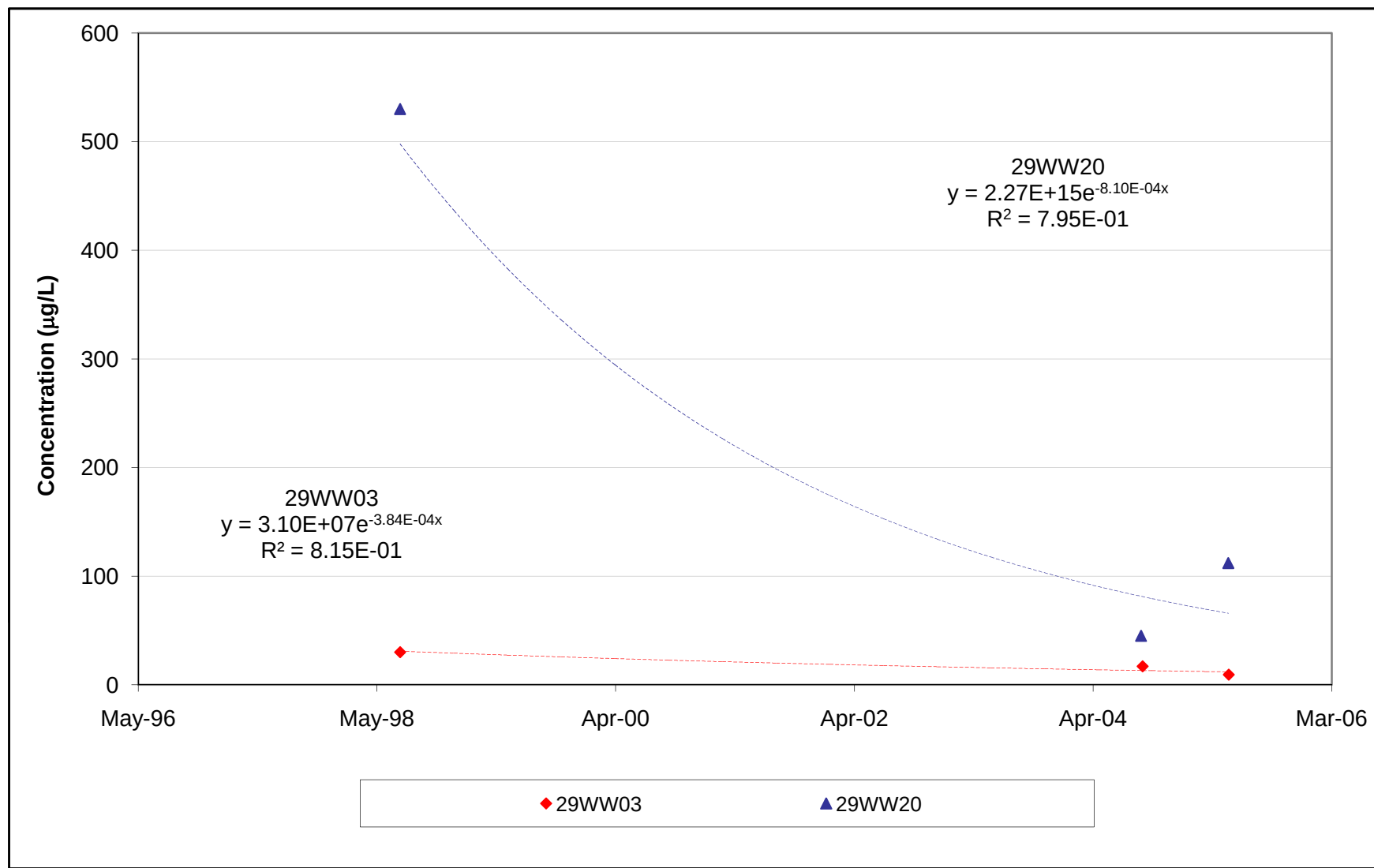


Figure C-7
Natural Attenuation Rate Estimation for o-Nitrotoluene
LHAAP-29

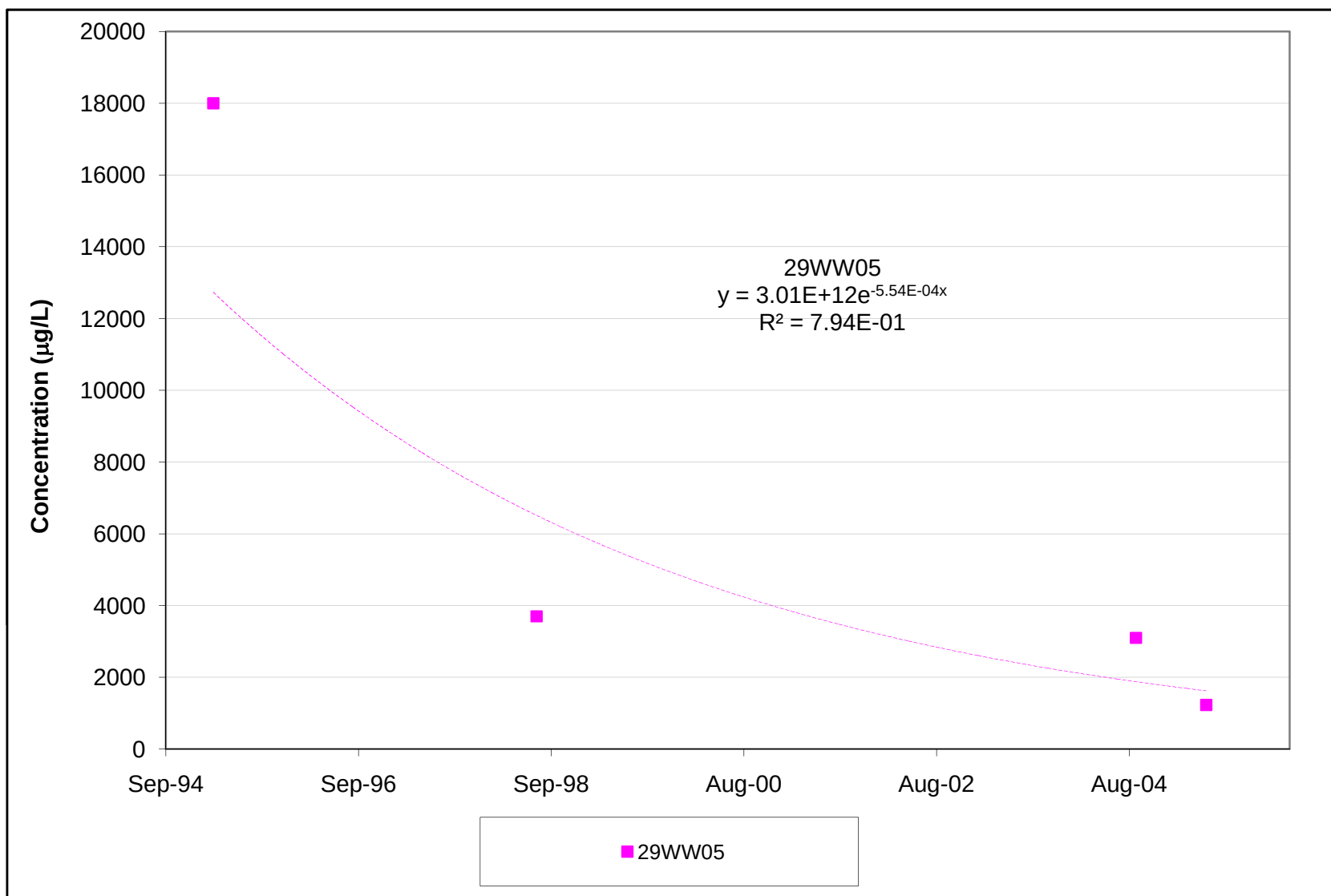


Figure C-8
Natural Attenuation Rate Estimation for Trichloroethene
LHAAP-29

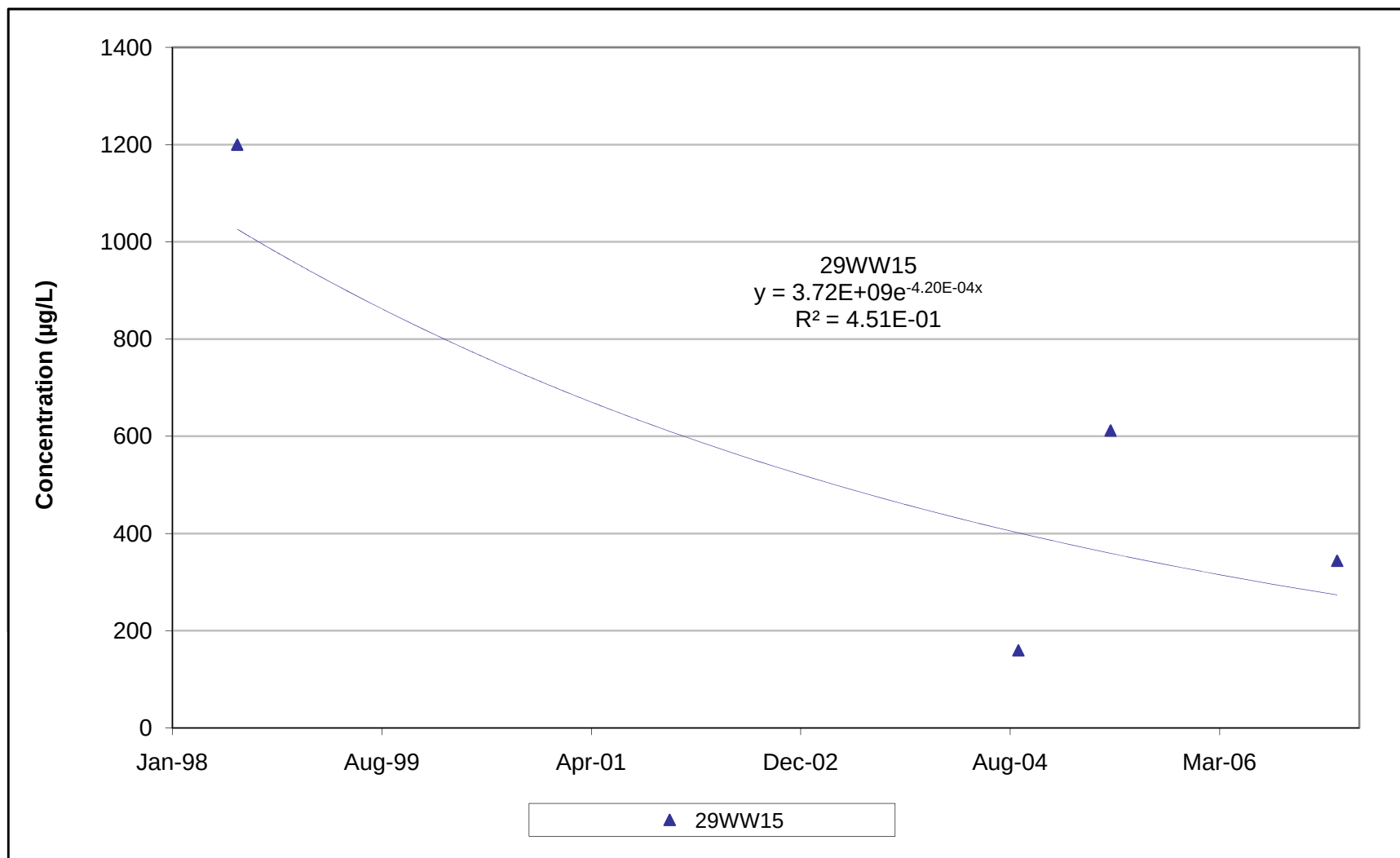


Figure C-9
Natural Attenuation Rate Estimation for 1,2-Dichloroethane
LHAAP-29

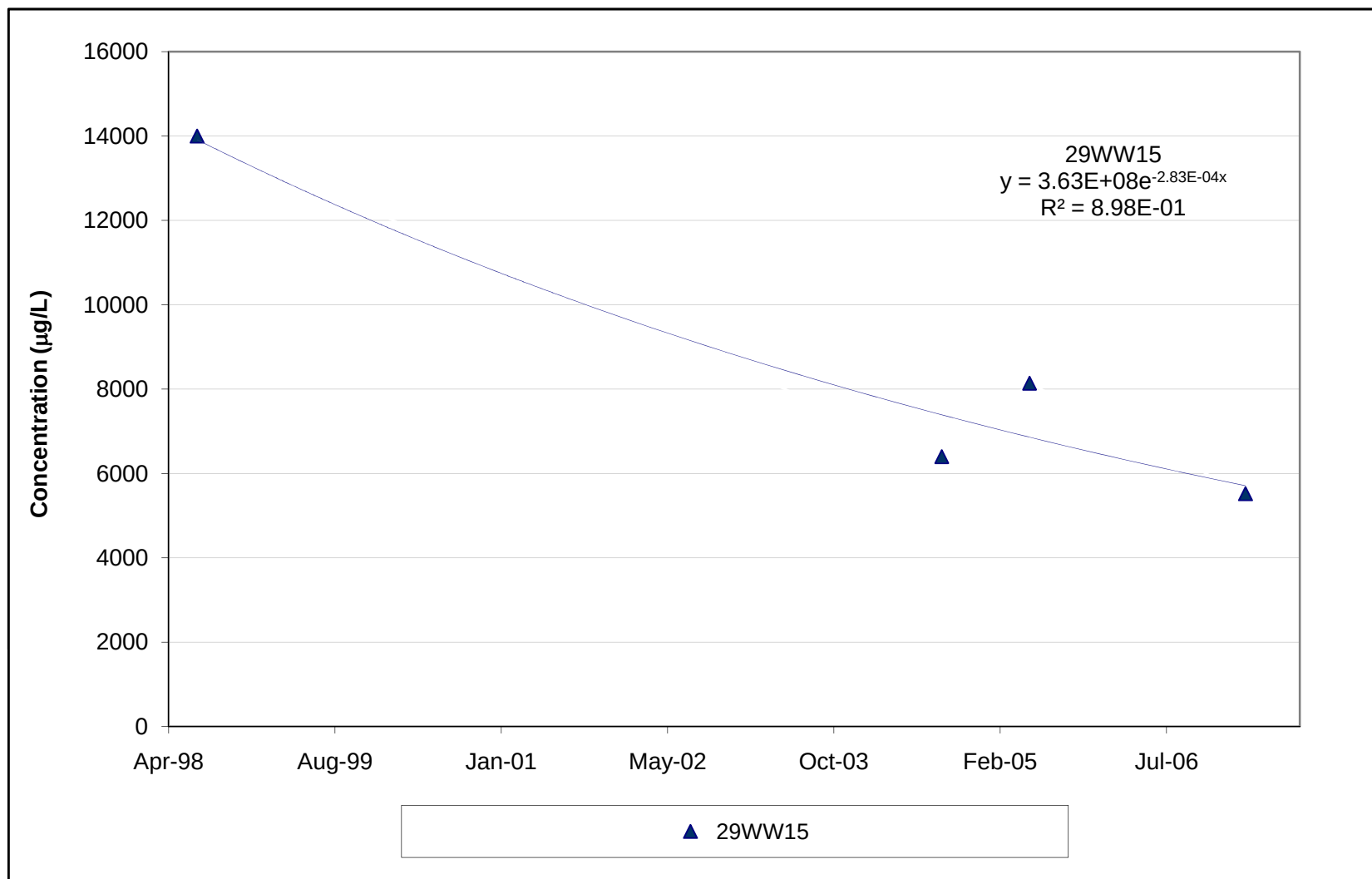


Figure C-10
Concentration Trends in 29WW16 at Intermediate Groundwater Zone
LHAAP-29

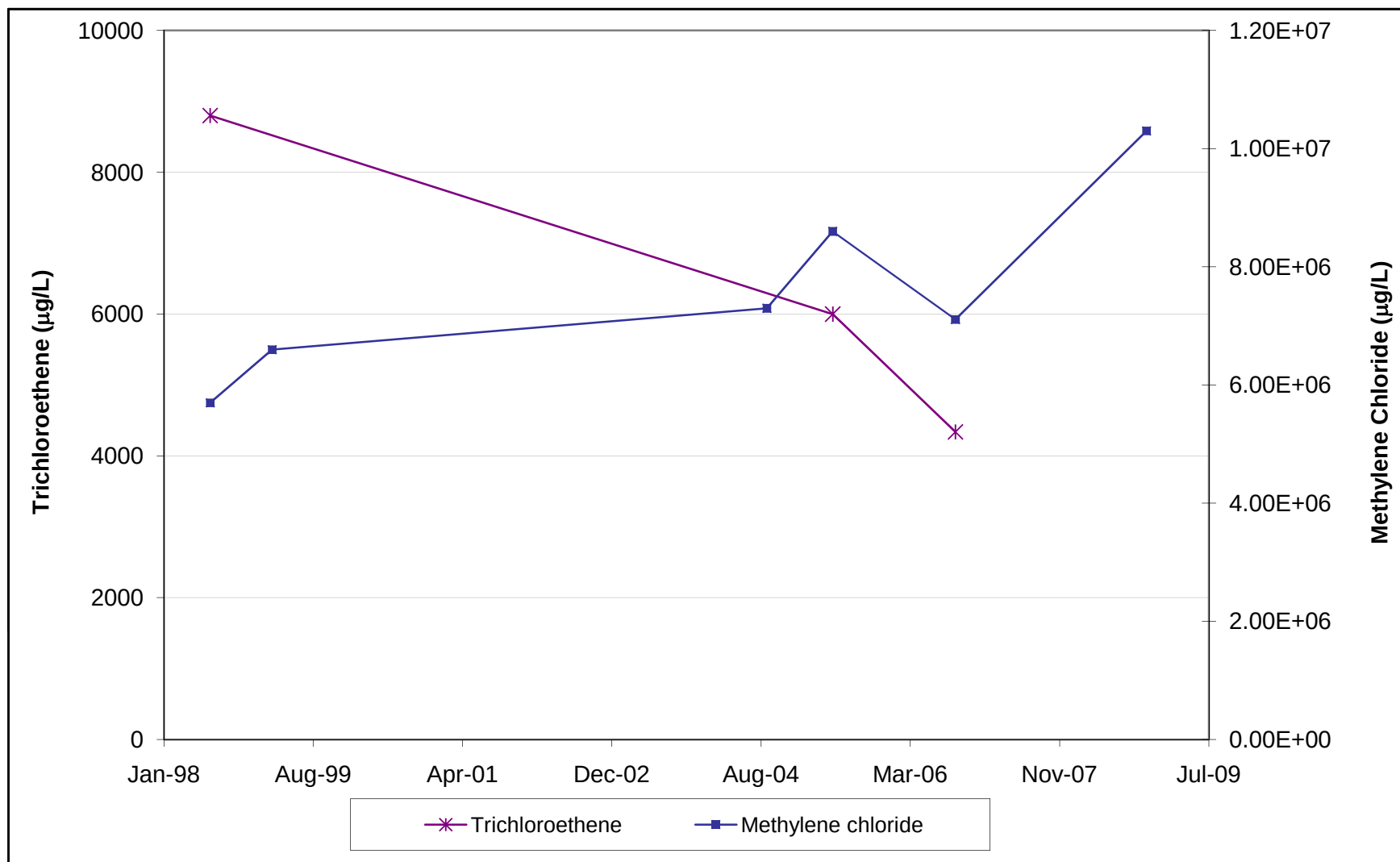


Figure C-11
Natural Attenuation Rate Estimation for Trichloroethene - Intermediate
LHAAP-29

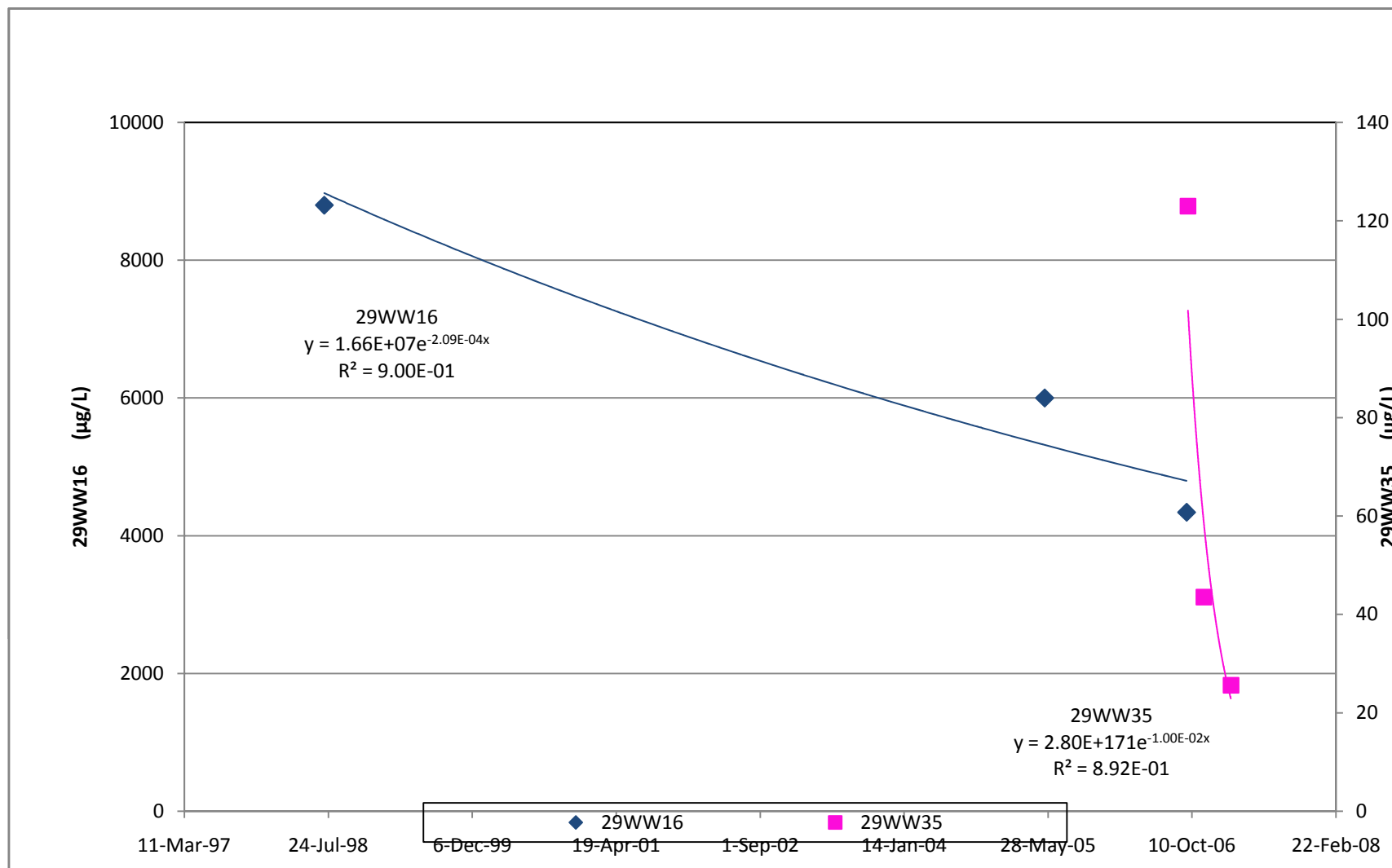
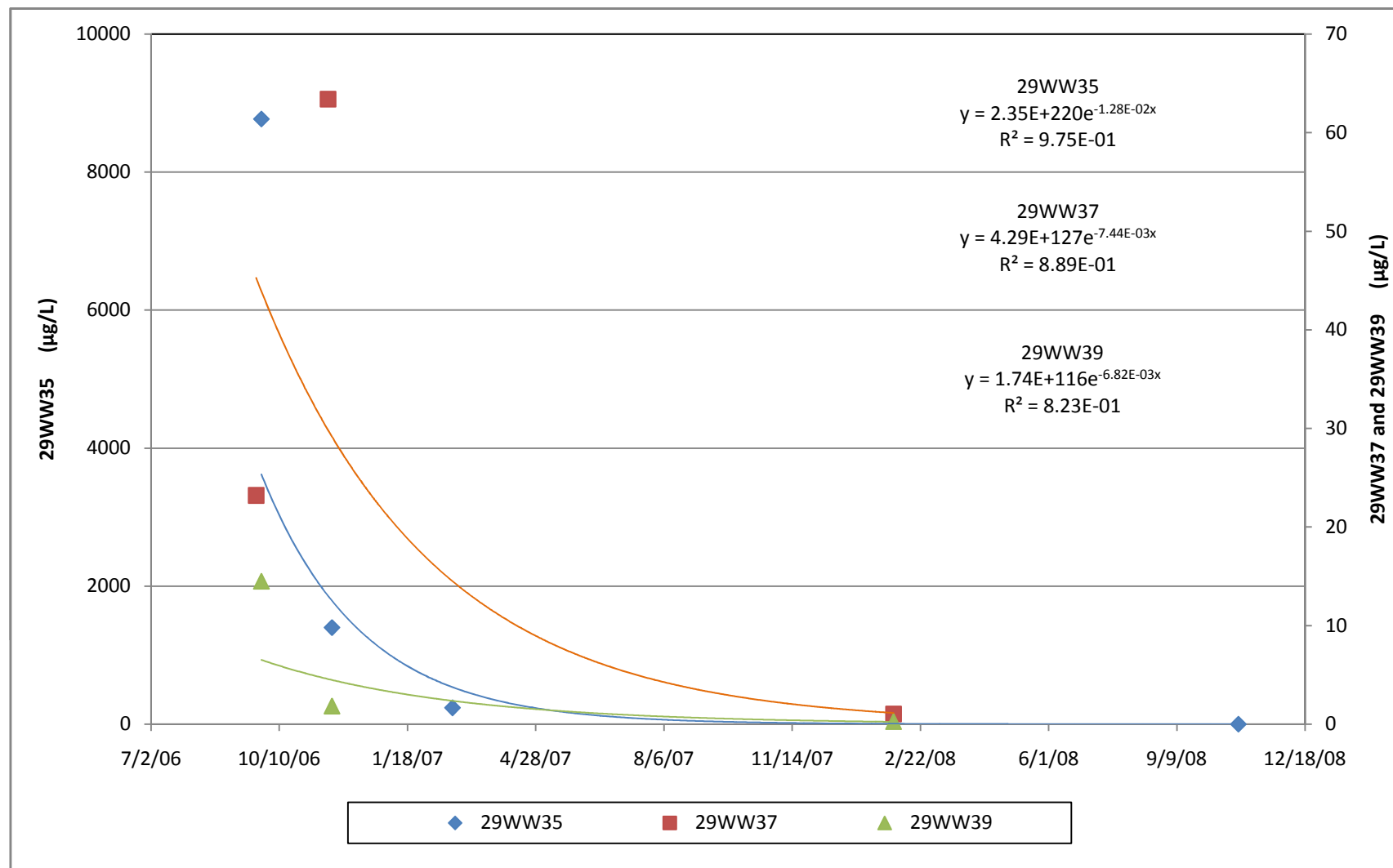


Figure C-12
Natural Attenuation Rate Estimation for Methylene Chloride - Intermediate
LHAAP-29





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

Laboratory Report Number: L0505321

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 our team member noted in the Reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

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Micalyn Harris - Team Chemist/Data Specialist
mharris@kemron-lab.com

This report was reviewed on May 23, 2005:

A handwritten signature in cursive script, reading "Stephanie Mossburg".

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 an '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 May 23, 2005:

A handwritten signature in cursive script, reading "David E. Vandenberg".

FL DOH NELAP ID: E87551

This report contains a total of 90 pages.

Protecting Our Environmental Future

LABORATORY REPORT

L0505321

00093569

05/23/05 14:58

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: 307-ALLIANCE-798

Work ID: LONGHORN AAP

P.O. Number: 98696

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
051205-TB-2	L0505321-01	12-MAY-05	14-MAY-05
051205-TB-1	L0505321-02	13-MAY-05	14-MAY-05
29WW26-MAY05	L0505321-03	12-MAY-05	14-MAY-05
35CWW106-MAY05	L0505321-04	12-MAY-05	14-MAY-05
35CWW107-MAY05	L0505321-05	12-MAY-05	14-MAY-05
48WW01-MAY05	L0505321-06	12-MAY-05	14-MAY-05
LHSMW62-MAY05	L0505321-07	12-MAY-05	14-MAY-05
LHSMW63-MAY05	L0505321-08	12-MAY-05	14-MAY-05
LHSMW66-MAY05	L0505321-09	12-MAY-05	14-MAY-05
LHSMW67-MAY05	L0505321-10	13-MAY-05	14-MAY-05
LHSMW67-MAY05-D	L0505321-11	13-MAY-05	14-MAY-05
PZ001-MAY05	L0505321-12	13-MAY-05	14-MAY-05
PZ002-MAY05	L0505321-13	13-MAY-05	14-MAY-05
PZ004-MAY05	L0505321-14	13-MAY-05	14-MAY-05

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0505321

CHAIN OF CUSTODY: The chain of custody number was LHAAP-013.

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: 16-MAY-05

<i>Stephanie Moseburg</i>

KEMRON ENVIRONMENTAL SERVICES
GC/MS VOLATILE ORGANICS

KEMRON Login No.: L0505321

METHOD

Preparation: SW-846 5030B

Analysis: SW-846 8260B

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 which yielded a %RSD greater than 15%, linear or higher order equations were applied or if the mean %RSD for all analytes was less than 15% the average response factors were used. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spike: The MS/MSD results were not associated with this sample delivery group (SDG).

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

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: MES

Approved: 20-MAY-05


KEMRON ENVIRONMENTAL SERVICES
HPLC-EXPLOSIVE RESIDUES

KEMRON Login No.: L0505321

METHOD

Analysis: SW-846 8330

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 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: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Surrogates: All acceptance criteria were met.

Samples: All acceptance criteria were met.

Manual Integration Reason Codes

KEMRON laboratory management has identified four general cases with valid reasons supporting the use of manual integration techniques.

Reason #1: Data System Fails to Select Correct Peak

In some cases the chromatography system selects and integrates the "wrong peak". In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

'Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak.

This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is

incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

00093574

Reason #3: Improperly Integrated Isomers and/or coeluting compounds.

This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline

There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous

Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

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: RDC

Approved: 23-MAY-05



Report Number: L0505321

Report Date : May 23, 2005

00093575

Sample Number: L0505321-01
 Client ID: 051205-TB-2
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 11:32
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 11:32
 File ID: 10M38046

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2	1.67	J	5.00	0.250
Napthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

Report Number: L0505321

Report Date : May 23, 2005

00093576

Sample Number: L0505321-01
 Client ID: 051205-TB-2
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 11:32
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 11:32
 File ID: 10M38046

Analyte	CAS. Number	Result	Qual	RL	MDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.4	86	118		
1,2-Dichloroethane-d4	97.0	80	120		
Toluene-d8	97.7	88	110		
4-Bromofluorobenzene	92.5	86	115		

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: L0505321-02
 Client ID: 051205-TB-1
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 12:04
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 12:04
 File ID: 10M38047

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125

Report Number: L0505321

Report Date : May 23, 2005

00093577

Sample Number: L0505321-02
 Client ID: 051205-TB-1
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 12:04
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 12:04
 File ID: 10M38047

Analyte	CAS. Number	Result	Qual	RL	MDL
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2	2.41	J	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250

Report Number: L0505321

Report Date : May 23, 2005

00093578

Sample Number: L0505321-02
 Client ID: 051205-TB-1
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 12:04
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 12:04
 File ID: 10M38047

Analyte	CAS. Number	Result	Qual	RL	MDL
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-, p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.5	86	118		
1,2-Dichloroethane-d4	95.9	80	120		
Toluene-d8	93.4	88	110		
4-Bromofluorobenzene	90.6	86	115		

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: L0505321-03
 Client ID: 29WW26-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 12:35
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 12:35
 File ID: 10M38048

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3	0.856	J	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250

Report Number: L0505321

Report Date : May 23, 2005

00093579

Sample Number: L0505321-03
 Client ID: 29WW26-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 12:35
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 12:35
 File ID: 10M38048

Analyte	CAS. Number	Result	Qual	RL	MDL
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-, p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.5	86	118		
1,2-Dichloroethane-d4	97.6	80	120		
Toluene-d8	92.8	88	110		
4-Bromofluorobenzene	91.1	86	115		

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: **L0505321**Report Date : **May 23, 2005****00093580**

Sample Number: **L0505321-03**
 Client ID: **29WW26-MAY05**
 Matrix: **Water**
 Workgroup Number: **WG189374**
 Collect Date: **12-MAY-05**
 Sample Tag: **01**

Prep Method: **3535**
 Analytical Method: **8330**
 Analyst: **RDC**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPLC4**
 Prep Date: **05/17/2005 11:40**
 Cal Date: **05/10/2005 17:19**
 Run Date: **05/18/2005 20:30**
 File ID: **4L008122.F**

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3,5-Trinitrobenzene	99-35-4		U	1.00	0.250
1,3-Dinitrobenzene	99-65-0		U	1.00	0.250
2,4,6-Trinitrotoluene	118-96-7		U	1.00	0.250
2,4-Dinitrotoluene	121-14-2		U	1.00	0.250
2,6-Dinitrotoluene	606-20-2		U	1.00	0.250
2-Amino-4,6-dinitrotoluene	35572-78-2		U	1.00	0.250
2-Nitrotoluene	88-72-2		U	1.00	0.250
3-Nitrotoluene	99-08-1		U	1.00	0.250
4-Nitrotoluene	99-99-0		U	1.00	0.250
4-Amino-2,6-dinitrotoluene	19406-51-0		U	1.00	0.250
HMX	2691-41-0		U	1.00	0.250
Nitrobenzene	98-95-3		U	1.00	0.250
RDX	121-82-4		U	1.00	0.250
Tetryl	479-45-8		U	1.00	0.250
Surrogate	% Recovery	Lower	Upper	Qual	
3,4-Dinitrotoluene	91.6	50	150		

U Not detected at or above adjusted sample detection limit

Sample Number: **L0505321-04**
 Client ID: **35CW106-MAY05**
 Matrix: **Water**
 Workgroup Number: **WG189173**
 Collect Date: **12-MAY-05**
 Sample Tag: **01**

Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **1**
 Units: **ug/L**

Instrument: **HPMS10**
 Prep Date: **05/17/2005 13:06**
 Cal Date: **04/23/2005 16:36**
 Run Date: **05/17/2005 13:06**
 File ID: **10M38049**

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00

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Report Number: L0505321

Report Date : May 23, 2005

00093581

Sample Number: L0505321-04
 Client ID: 35CWW106-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 13:06
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 13:06
 File ID: 10M38049

Analyte	CAS. Number	Result	Qual	RL	MDL
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500

Report Number: L0505321

Report Date : May 23, 2005

00093582

Sample Number: L0505321-04
 Client ID: 35CWW106-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 13:06
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 13:06
 File ID: 10M38049

Surrogate	% Recovery	Lower	Upper	Qual
Dibromofluoromethane	94.9	86	118	
1,2-Dichloroethane-d4	96.3	80	120	
Toluene-d8	93.2	88	110	
4-Bromofluorobenzene	89.6	86	115	

U Not detected at or above adjusted sample detection limit

Sample Number: L0505321-05
 Client ID: 35CWW107-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 13:37
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 13:37
 File ID: 10M38050

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125

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Report Number: L0505321

Report Date : May 23, 2005

00093583

Sample Number: L0505321-05
 Client ID: 35CWW107-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 13:37
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 13:37
 File ID: 10M38050

Analyte	CAS. Number	Result	Qual	RL	MDL
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	94.2	86	118		
1,2-Dichloroethane-d4	95.2	80	120		
Toluene-d8	92.6	88	110		
4-Bromofluorobenzene	90.6	86	115		

U Not detected at or above adjusted sample detection limit

Report Number: L0505321

Report Date : May 23, 2005

00093584

Sample Number: L0505321-06
 Client ID: 48W01-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 15:10
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 15:10
 File ID: 10M38053

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

Report Number: L0505321

Report Date : May 23, 2005

00093585

Sample Number: L0505321-06
 Client ID: 48WW01-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 15:10
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 15:10
 File ID: 10M38053

Analyte	CAS. Number	Result	Qual	RL	MDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	93.7	86	118		
1,2-Dichloroethane-d4	94.9	80	120		
Toluene-d8	93.0	88	110		
4-Bromofluorobenzene	90.6	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L0505321-07
 Client ID: LHSW62-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 15:41
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 15:41
 File ID: 10M38054

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250

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Report Number: L0505321

Report Date : May 23, 2005

00093586

Sample Number: L0505321-07
 Client ID: LHSMW62-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 15:41
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 15:41
 File ID: 10M38054

Analyte	CAS. Number	Result	Qual	RL	MDL
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4	0.276	J	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50

Report Number: L0505321

Report Date : May 23, 2005

00093587

Sample Number: L0505321-07
 Client ID: LHSMW62-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 15:41
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 15:41
 File ID: 10M38054

Analyte	CAS. Number	Result	Qual	RL	MDL
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	93.1	86	118		
1,2-Dichloroethane-d4	93.9	80	120		
Toluene-d8	92.6	88	110		
4-Bromofluorobenzene	89.3	86	115		

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: L0505321-08
 Client ID: LHSMW63-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 16:12
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 16:12
 File ID: 10M38055

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125

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Report Number: L0505321

Report Date : May 23, 2005

00093588

Sample Number: L0505321-08
 Client ID: LHSMW63-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 16:12
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 16:12
 File ID: 10M38055

Analyte	CAS. Number	Result	Qual	RL	MDL
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.360	J	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	94.1	86	118		
1,2-Dichloroethane-d4	96.9	80	120		
Toluene-d8	92.6	88	110		
4-Bromofluorobenzene	89.8	86	115		

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: L0505321

Report Date : May 23, 2005

00093589

Sample Number: L0505321-09
 Client ID: LHSMW66-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 16:43
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 16:43
 File ID: 10M38056

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

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Report Number: L0505321

Report Date : May 23, 2005

00093590

Sample Number: L0505321-09
 Client ID: LHSMW66-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 16:43
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 16:43
 File ID: 10M38056

Analyte	CAS. Number	Result	Qual	RL	MDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.398	J	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.8	86	118		
1,2-Dichloroethane-d4	97.0	80	120		
Toluene-d8	92.1	88	110		
4-Bromofluorobenzene	90.3	86	115		

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: L0505321-10
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 17:14
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 17:14
 File ID: 10M38057

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125

Report Number: L0505321

Report Date : May 23, 2005

00093591

Sample Number: L0505321-10
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 17:14
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 17:14
 File ID: 10M38057

Analyte	CAS. Number	Result	Qual	RL	MDL
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2	2.45		1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250

Report Number: L0505321

Report Date : May 23, 2005

00093592

Sample Number: L0505321-10
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 17:14
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 17:14
 File ID: 10M38057

Analyte	CAS. Number	Result	Qual	RL	MDL
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-, p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	94.2	86	118		
1,2-Dichloroethane-d4	96.8	80	120		
Toluene-d8	92.3	88	110		
4-Bromofluorobenzene	90.4	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L0505321-11
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 17:45
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 17:45
 File ID: 10M38058

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125

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Report Number: L0505321

Report Date : May 23, 2005

00093593

Sample Number: L0505321-11
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 17:45
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 17:45
 File ID: 10M38058

Analyte	CAS. Number	Result	Qual	RL	MDL
1,2-Dichloroethane	107-06-2	2.42		1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.3	86	118		
1,2-Dichloroethane-d4	95.2	80	120		
Toluene-d8	93.4	88	110		
4-Bromofluorobenzene	90.7	86	115		

U Not detected at or above adjusted sample detection limit

Report Number: L0505321

Report Date : May 23, 2005

00093594

Sample Number: L0505321-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 18:16
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 18:16
 File ID: 10M38059

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125

Report Number: L0505321

Report Date : May 23, 2005

00093595

Sample Number: L0505321-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 18:16
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 18:16
 File ID: 10M38059

Analyte	CAS. Number	Result	Qual	RL	MDL
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4	28.8		1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.5	86	118		
1,2-Dichloroethane-d4	98.7	80	120		
Toluene-d8	91.9	88	110		
4-Bromofluorobenzene	89.5	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L0505321-13
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 18:47
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 18:47
 File ID: 10M38060

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250

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Report Number: L0505321

Report Date : May 23, 2005

00093596

Sample Number: L0505321-13
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 18:47
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 18:47
 File ID: 10M38060

Analyte	CAS. Number	Result	Qual	RL	MDL
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50

Report Number: L0505321

Report Date : May 23, 2005

00093597

Sample Number: L0505321-13
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 18:47
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 18:47
 File ID: 10M38060

Analyte	CAS. Number	Result	Qual	RL	MDL
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.0	86	118		
1,2-Dichloroethane-d4	96.8	80	120		
Toluene-d8	92.9	88	110		
4-Bromofluorobenzene	91.3	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L0505321-14
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 19:18
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 19:18
 File ID: 10M38061

Analyte	CAS. Number	Result	Qual	RL	MDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	1.00	0.250
Bromoform	75-25-2		U	1.00	0.540
Bromomethane	74-83-9		U	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250

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Report Number: L0505321

Report Date : May 23, 2005

00093598

Sample Number: L0505321-14
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189173
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: MES
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 05/17/2005 19:18
 Cal Date: 04/23/2005 16:36
 Run Date: 05/17/2005 19:18
 File ID: 10M38061

Analyte	CAS. Number	Result	Qual	RL	MDL
1,1-Dichloroethene	75-35-4		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	1.19		1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
1,2-Dichloropropane	78-87-5		U	1.00	0.125
1,3-Dichloropropane	142-28-9		U	1.00	0.200
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
Hexachlorobutadiene	87-68-3		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
4-Methyl-2-pentanone	108-10-1		U	10.0	2.50
Methylene chloride	75-09-2		U	5.00	0.250
Naphthalene	91-20-3		U	1.00	0.200
n-Propylbenzene	103-65-1		U	1.00	0.125
Styrene	100-42-5		U	1.00	0.125
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.125
Tetrachloroethene	127-18-4	0.969	J	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.125
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
Trichloroethene	79-01-6	5.01		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
1,2,3-Trichloropropane	96-18-4		U	1.00	0.750
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
Vinyl acetate	108-05-4		U	10.0	2.50
Vinyl chloride	75-01-4		U	1.00	0.250
o-Xylene	95-47-6		U	1.00	0.250
m-,p-Xylene	136777-61-2		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.0	86	118		
1,2-Dichloroethane-d4	99.8	80	120		
Toluene-d8	92.9	88	110		
4-Bromofluorobenzene	91.6	86	115		

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

Analysis:Volatile Organics

Analytical Method:8260B

Workgroup:WG189173

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505321-01	051205-TB-2			05/17/05 11:32	01	HPMS10	MES
L0505321-02	051205-TB-1			05/17/05 12:04	01	HPMS10	MES
L0505321-03	29WW26-MAY05			05/17/05 12:35	01	HPMS10	MES
L0505321-04	35CWW106-MAY05			05/17/05 13:06	01	HPMS10	MES
L0505321-05	35CWW107-MAY05			05/17/05 13:37	01	HPMS10	MES
L0505321-06	48WW01-MAY05			05/17/05 15:10	01	HPMS10	MES
L0505321-07	LHSMW62-MAY05			05/17/05 15:41	01	HPMS10	MES
L0505321-08	LHSMW63-MAY05			05/17/05 16:12	01	HPMS10	MES
L0505321-09	LHSMW66-MAY05			05/17/05 16:43	01	HPMS10	MES
L0505321-10	LHSMW67-MAY05			05/17/05 17:14	01	HPMS10	MES
L0505321-11	LHSMW67-MAY05-D			05/17/05 17:45	01	HPMS10	MES
L0505321-12	PZ001-MAY05			05/17/05 18:16	01	HPMS10	MES
L0505321-13	PZ002-MAY05			05/17/05 18:47	01	HPMS10	MES
L0505321-14	PZ004-MAY05			05/17/05 19:18	01	HPMS10	MES

Analysis:Volatile Organics

Extraction Method:5030B

Workgroup:WG189173

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505321-01	051205-TB-2				189173	HPMS10	MES
L0505321-02	051205-TB-1				189173	HPMS10	MES
L0505321-03	29WW26-MAY05				189173	HPMS10	MES
L0505321-04	35CWW106-MAY05				189173	HPMS10	MES
L0505321-05	35CWW107-MAY05				189173	HPMS10	MES
L0505321-06	48WW01-MAY05				189173	HPMS10	MES
L0505321-07	LHSMW62-MAY05				189173	HPMS10	MES
L0505321-08	LHSMW63-MAY05				189173	HPMS10	MES
L0505321-09	LHSMW66-MAY05				189173	HPMS10	MES
L0505321-10	LHSMW67-MAY05				189173	HPMS10	MES
L0505321-11	LHSMW67-MAY05-D				189173	HPMS10	MES
L0505321-12	PZ001-MAY05				189173	HPMS10	MES
L0505321-13	PZ002-MAY05				189173	HPMS10	MES
L0505321-14	PZ004-MAY05				189173	HPMS10	MES

Analysis:Explosives

Extraction Method:3535

Workgroup:WG189200

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505321-03	29WW26-MAY05		05/17/05 11:40			SPE	CEB

Analysis:Explosives

Analytical Method:8330

Workgroup:WG189374

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505321-03	29WW26-MAY05		05/17/05 11:40	05/18/05 20:30	01	HPLC4	RDC

Kemron Environmental Services
Analyst Listing May 23, 2005

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
BRG - BRENDA R. GREGORY	CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD	CLK - CARL L. KING
CLS - CARA L. STRICKLER	CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN
CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN
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	DP - DEANNA L. PIERSON
DR - DEANNA ROBERTS	DRB - DOUG R. BARNETT	DSM - DAVID S. MOSSOR
DST - DENNIS S. TEPE	ECL - ERIC C. LAWSON	ED - EMILY E. DECKER
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JJG - JOHN J. GREUEY
JKT - JANE K. THOMPSON	JLS - JANICE L. SCHIMMEL	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATHRYN E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF
LSA - LUCINDA S. ARNOLD	LSB - LESLIE S. BUCINA	MAH - MICALYN A. HARRIS
MDA - MICHAEL 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
OGT - OKEY G. TUCKER	PAS - PATRICK A. STREET	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RWC - RODNEY W. CAMPBELL
SCM - SUSAN C. MOELLENDICK	SK - SANDRA KEENER	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	TD - TIMOTHY DYSERT
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER	VKL - VICKY K. LAUER

KEMRON Environmental Services, Inc.

List of Valid Qualifiers

May 23, 2005

These are KEMRON's standard report qualifiers:

B	Present in the method blank	NS	Not spiked
C	Confirmed by GC/MS	P	Concentration >40% difference between the two GC columns
CG	Confluent growth	QNS	Quantity not sufficient to perform analysis
D	The analyte was quantified as a secondary dilution factor	RA	Reanalysis confirms reported results
DL	Surrogate or spike was diluted out	RE	Reanalysis confirms sample matrix interference
E	Estimated concentration due to sample matrix interference	S	Analyzed by method of standard addition
FL	Free liquid	SMI	Sample matrix interference on surrogate
I	Semi-quantitative result, out of instrument calibration range	SP	Reported results are for spike compounds only
J	Present below normal reporting limit	TNTC	Too numerous to count
L	Sample reporting limits elevated due to matrix interference	U	Analyzed for but not detected
N	Tentatively Identified Compound (TIC)	W	Post-digestion spike for furnace AA out of control limits
NA	Not applicable	X	Exceeds regulatory limit
ND	Not detected at or above the reporting limit (RL)	Z	Can not be resolved from isomer.***
NF	Not found	+	Correlation coefficient for the MSA is less than 0.995
NFL	No free liquid	<	Less than
NI	Non-ignitable	>	Greater than
		*	Surrogate or spike compound out of range

*****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.

AFCEE Qualifiers

These are KEMRON's AFCEE Report Qualifiers

- J** The analyte was positively identified, the quantitation is an estimation.
- U** The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL
- F** The analyte was positively identified by the associated numerical value is below the RL
- R** The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
- B** The analyte was found in an associated blank, as well as in the sample
- M** The matrix effect was present
- S** To be applied to all field screening data
- T** Tentatively identified compound (using GC/MS)

Organic QA/QC

VOA - GC/MS

Date: 4/23/05 Analyst: MES Method: (8260) (624)
 Instrument: HPMS10 Work Group: WG 187632

	Analyst
System Performance Check	
BFB	✓
Initial Calibration	✓
Average RF	✓
Linear Reg or Higher Order Curve	✓
Second Source standard % Difference	✓
Continuing Calibration / Check Standards	NA
Project / Client Specific Requirements	
Special Standards	
Blanks	
TCL's	
Surrogates	
LCS (Laboratory Control Sample)	
Recoveries	
Surrogates	
MS / MSD / Duplicates	
Samples	
TCL Hits	
Spectra of TCL Hits	
Surrogates	
Internal Standards Criteria	
Calculations & Correct Factors	
Dilutions Run	
Reruns	
Manual Integrations	
Excel Spreadsheets	✓
Case Narrative	✓
Narrative Summary	NA
Results Reporting / Data Qualifiers	
Client Data Package Assembly	
Check for Completeness	✓

Primary Reviewers Initials & Date Checked: mf 4/25/05

Secondary Reviewers Initials & Date Checked: Cur 4/25/05

Comments: _____

✓ = Checked & OK
 NA = Not Applicable

VOA - GC/MS

Date: 5/17/05 Analyst: MES Method: 8260 624Instrument: HPMSD Work Group: WG 189173

System Performance Check	Analyst
BFB	✓
Initial Calibration	✓
Average RF	✓
Linear Reg or Higher Order Curve	✓
Second Source standard % Difference	✓
Continuing Calibration / Check Standards	✓
Project / Client Specific Requirements	✓
Special Standards	NA
Blanks	✓
TCL's	✓
Surrogates	✓
LCS (Laboratory Control Sample)	✓
Recoveries	✓
Surrogates	✓
MS / MSD / Duplicates	NA
Samples	✓
TCL Hits	✓
Spectra of TCL Hits	✓
Surrogates	✓
Internal Standards Criteria	✓
Calculations & Correct Factors	✓
Dilutions Run	✓
Reruns	✓
Manual Integrations	✓
Excel Spreadsheets	✓
Case Narrative	✓
Narrative Summary	NA
Results Reporting / Data Qualifiers	✓
Client Data Package Assembly	✓
Check for Completeness	NA

Primary Reviewers Initials & Date Checked: mf 5/18/05Secondary Reviewers Initials & Date Checked: mm 5/20/05

Comments: _____

✓ = Checked & OK
 NA = Not Applicable

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093607

Analytical Method: 8260B
Login Number: L0505321

AAB#: WG189173

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
051205-TB-2	05/12/05	05/14/05	05/17/05	14	4.88	05/17/05	14	4.88	
051205-TB-1	05/13/05	05/14/05	05/17/05	14	4.21	05/17/05	14	4.21	
29WW26-MAY05	05/12/05	05/14/05	05/17/05	14	5.00	05/17/05	14	5.00	
35CWW106-MAY05	05/12/05	05/14/05	05/17/05	14	4.87	05/17/05	14	4.87	
35CWW107-MAY05	05/12/05	05/14/05	05/17/05	14	4.96	05/17/05	14	4.96	
48WW01-MAY05	05/12/05	05/14/05	05/17/05	14	4.89	05/17/05	14	4.89	
LHSMW62-MAY05	05/12/05	05/14/05	05/17/05	14	5.09	05/17/05	14	5.09	
LHSMW63-MAY05	05/12/05	05/14/05	05/17/05	14	5.29	05/17/05	14	5.29	
LHSMW66-MAY05	05/12/05	05/14/05	05/17/05	14	5.06	05/17/05	14	5.06	
LHSMW67-MAY05	05/13/05	05/14/05	05/17/05	14	4.27	05/17/05	14	4.27	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/17/05	14	4.29	05/17/05	14	4.29	
PZ001-MAY05	05/13/05	05/14/05	05/17/05	14	4.25	05/17/05	14	4.25	
PZ002-MAY05	05/13/05	05/14/05	05/17/05	14	4.15	05/17/05	14	4.15	
PZ004-MAY05	05/13/05	05/14/05	05/17/05	14	4.21	05/17/05	14	4.21	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

Login Number:L0505321

Method:8260

Instrument Id:HPMS10

CAL ID: HPMS10 - 23-APR-05

Workgroup (AAB#):WG189173

Matrix:WATER

Sample Number	Dilution	Tag	1	2	3	4
L0505321-01	1.00	01	97.0	96.4	92.5	97.7
L0505321-02	1.00	01	95.9	95.5	90.6	93.4
L0505321-03	1.00	01	97.6	95.5	91.1	92.8
L0505321-04	1.00	01	96.3	94.9	89.6	93.2
L0505321-05	1.00	01	95.2	94.2	90.6	92.6
L0505321-06	1.00	01	94.9	93.7	90.6	93.0
L0505321-07	1.00	01	93.9	93.1	89.3	92.6
L0505321-08	1.00	01	96.9	94.1	89.8	92.6
L0505321-09	1.00	01	97.0	95.8	90.3	92.1
L0505321-10	1.00	01	96.8	94.2	90.4	92.3
L0505321-11	1.00	01	95.2	96.3	90.7	93.4
L0505321-12	1.00	01	98.7	96.5	89.5	91.9
L0505321-13	1.00	01	96.8	95.0	91.3	92.9
L0505321-14	1.00	01	99.8	96.0	91.6	92.9
WG189173-01	1.00	01	97.3	96.0	91.1	92.1
WG189173-02	1.00	01	96.6	97.4	90.2	93.4
WG189173-03	1.00	01	96.5	97.7	90.9	92.7

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

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

Login Number: L0505321
Blank File ID: 10M38042
Date Analyzed: 05/17/05
Time Analyzed: 09:24
Analyst: MES

Work Group: WG189173
Blank Sample ID: WG189173-01
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	WG189173-02	10M38043	05/17/05 09:56	01
LCS2	WG189173-03	10M38044	05/17/05 10:28	01
051205-TB-2	L0505321-01	10M38046	05/17/05 11:32	01
051205-TB-1	L0505321-02	10M38047	05/17/05 12:04	01
29WW26-MAY05	L0505321-03	10M38048	05/17/05 12:35	01
35CWW106-MAY05	L0505321-04	10M38049	05/17/05 13:06	01
35CWW107-MAY05	L0505321-05	10M38050	05/17/05 13:37	01
48WW01-MAY05	L0505321-06	10M38053	05/17/05 15:10	01
LHSMW62-MAY05	L0505321-07	10M38054	05/17/05 15:41	01
LHSMW63-MAY05	L0505321-08	10M38055	05/17/05 16:12	01
LHSMW66-MAY05	L0505321-09	10M38056	05/17/05 16:43	01
LHSMW67-MAY05	L0505321-10	10M38057	05/17/05 17:14	01
LHSMW67-MAY05-D	L0505321-11	10M38058	05/17/05 17:45	01
PZ001-MAY05	L0505321-12	10M38059	05/17/05 18:16	01
PZ002-MAY05	L0505321-13	10M38060	05/17/05 18:47	01
PZ004-MAY05	L0505321-14	10M38061	05/17/05 19:18	01

Login Number: L0505321 Run Date: 05/17/2005 Sample ID: WG189173-01
 Instrument ID: HPMS10 Run Time: 09:24 Prep Method: 5030B
 File ID: 10M38042 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG189173 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 23-APR-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Acetone	2.50	10.0	2.50	1	U
Benzene	0.125	1.00	0.125	1	U
Bromobenzene	0.125	1.00	0.125	1	U
Bromochloromethane	0.200	1.00	0.200	1	U
Bromodichloromethane	0.250	1.00	0.250	1	U
Bromoform	0.540	1.00	0.540	1	U
Bromomethane	0.500	1.00	0.500	1	U
2-Butanone	2.50	10.0	2.50	1	U
n-Butylbenzene	0.250	1.00	0.250	1	U
sec-Butylbenzene	0.250	1.00	0.250	1	U
tert-Butylbenzene	0.250	1.00	0.250	1	U
Carbon disulfide	0.500	1.00	0.500	1	U
Carbon tetrachloride	0.250	1.00	0.250	1	U
Chlorobenzene	0.125	1.00	0.125	1	U
Chlorodibromomethane	0.250	1.00	0.250	1	U
Chloroethane	0.500	1.00	0.500	1	U
2-Chloroethyl vinyl ether	2.00	10.0	2.00	1	U
Chloroform	0.125	1.00	0.125	1	U
Chloromethane	0.250	1.00	0.250	1	U
2-Chlorotoluene	0.125	1.00	0.125	1	U
4-Chlorotoluene	0.250	1.00	0.250	1	U
1,2-Dibromo-3-chloropropane	1.00	5.00	1.00	1	U
1,2-Dibromoethane	0.250	1.00	0.250	1	U
Dibromomethane	0.250	1.00	0.250	1	U
1,2-Dichlorobenzene	0.125	1.00	0.125	1	U
1,3-Dichlorobenzene	0.250	1.00	0.250	1	U
1,4-Dichlorobenzene	0.125	1.00	0.125	1	U
Dichlorodifluoromethane	0.250	1.00	0.250	1	U
1,1-Dichloroethane	0.125	1.00	0.125	1	U
1,2-Dichloroethane	0.250	1.00	0.250	1	U
1,1-Dichloroethene	0.500	1.00	0.500	1	U
cis-1,2-Dichloroethene	0.250	1.00	0.250	1	U
trans-1,2-Dichloroethene	0.250	1.00	0.250	1	U
1,2-Dichloropropane	0.125	1.00	0.125	1	U
1,3-Dichloropropane	0.200	1.00	0.200	1	U
2,2-Dichloropropane	0.250	1.00	0.250	1	U
cis-1,3-Dichloropropene	0.250	1.00	0.250	1	U
trans-1,3-Dichloropropene	0.500	1.00	0.500	1	U
1,1-Dichloropropene	0.250	1.00	0.250	1	U
Ethylbenzene	0.250	1.00	0.250	1	U
2-Hexanone	2.50	10.0	2.50	1	U
Hexachlorobutadiene	0.250	1.00	0.406	1	J

KEMRON FORMS - Modified 05/17/2005
 Version 1.5 PDF File ID: 240577
 Report generated 05/20/2005 12:04

Login Number: L0505321 Run Date: 05/17/2005 Sample ID: WG189173-01
 Instrument ID: HPMS10 Run Time: 09:24 Prep Method: 5030B
 File ID: 10M38042 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG189173 Matrix: Water Units: ug/L
 Contract #: Cal ID: HPMS10 - 23-APR-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Isopropylbenzene	0.250	1.00	0.250	1	U
p-Isopropyltoluene	0.250	1.00	0.250	1	U
4-Methyl-2-pentanone	2.50	10.0	2.50	1	U
Methylene chloride	0.250	5.00	0.250	1	U
Naphthalene	0.200	1.00	0.200	1	U
n-Propylbenzene	0.125	1.00	0.125	1	U
Styrene	0.125	1.00	0.125	1	U
1,1,1,2-Tetrachloroethane	0.250	1.00	0.250	1	U
1,1,2,2-Tetrachloroethane	0.125	1.00	0.125	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.125	1.00	0.125	1	U
1,2,4-Trichlorobenzene	0.200	1.00	0.200	1	U
1,1,1-Trichloroethane	0.250	1.00	0.250	1	U
1,1,2-Trichloroethane	0.250	1.00	0.250	1	U
Trichloroethene	0.250	1.00	0.250	1	U
Trichlorofluoromethane	0.250	1.00	0.250	1	U
1,2,3-Trichloropropane	0.750	1.00	0.750	1	U
1,2,4-Trimethylbenzene	0.250	1.00	0.250	1	U
1,3,5-Trimethylbenzene	0.250	1.00	0.250	1	U
Vinyl acetate	2.50	10.0	2.50	1	U
Vinyl chloride	0.250	1.00	0.250	1	U
o-Xylene	0.250	1.00	0.250	1	U
m-,p-Xylene	0.500	1.00	0.500	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	96.0	86 - 118	PASS
1,2-Dichloroethane-d4	97.3	80 - 120	PASS
Toluene-d8	92.1	88 - 110	PASS
4-Bromofluorobenzene	91.1	86 - 115	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

ND Analyte Not detected at or above reporting limit

KEMRON Environmental Services
LABORATORY CONTROL SAMPLES

00093612

Login Number: L0505321 **Analyst:** MES **Prep Method:** 5030B
Instrument ID: HPMS10 **Matrix:** Water **Method:** 8260B
Workgroup (AAB#): WG189173 **Units:** ug/L
Sample ID: WG189173-02 LCS **File ID:** 10M38043 **Run Date:** 05/17/2005 09:56
Sample ID: WG189173-03 LCS2 **File ID:** 10M38044 **Run Date:** 05/17/2005 10:28

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	18.0	89.9	20.0	18.8	94.1	4.53	40 - 142	63	
Benzene	20.0	20.9	104	20.0	22.2	111	6.10	80 - 121	21	
Bromobenzene	20.0	20.0	100	20.0	20.6	103	2.55	80 - 120	18	
Bromochloromethane	20.0	21.2	106	20.0	22.2	111	4.20	80 - 124	20	
Bromodichloromethane	20.0	22.7	113	20.0	23.4	117	3.04	80 - 131	25	
Bromoform	20.0	19.7	98.3	20.0	20.4	102	3.85	74 - 130	35	
Bromomethane	20.0	24.2	121	20.0	23.9	120	0.927	61 - 151	56	
2-Butanone	20.0	17.4	87.2	20.0	18.7	93.7	7.15	58 - 149	56	
n-Butylbenzene	20.0	20.5	103	20.0	21.2	106	3.51	80 - 131	29	
sec-Butylbenzene	20.0	20.7	103	20.0	21.4	107	3.60	80 - 127	28	
tert-Butylbenzene	20.0	20.1	101	20.0	20.9	105	3.86	80 - 126	27	
Carbon disulfide	20.0	19.4	96.8	20.0	20.4	102	5.30	58 - 138	49	
Carbon tetrachloride	20.0	22.3	112	20.0	23.1	116	3.50	80 - 137	32	
Chlorobenzene	20.0	20.5	103	20.0	20.8	104	1.52	80 - 120	16	
Chlorodibromomethane	20.0	20.0	100	20.0	20.7	104	3.69	80 - 127	26	
Chloroethane	20.0	21.3	106	20.0	22.1	111	4.06	77 - 133	34	
2-Chloroethyl vinyl ether	20.0	21.9	110	20.0	24.2	121	9.81	10 - 211	125	
Chloroform	20.0	21.5	108	20.0	22.2	111	2.93	80 - 125	23	
Chloromethane	20.0	20.5	103	20.0	21.8	109	5.81	60 - 130	43	
2-Chlorotoluene	20.0	20.2	101	20.0	20.6	103	1.87	80 - 127	28	
4-Chlorotoluene	20.0	19.9	99.6	20.0	20.5	103	2.97	80 - 126	26	
1,2-Dibromo-3-chloropropane	20.0	17.0	84.9	20.0	17.9	89.3	5.08	65 - 129	39	
1,2-Dibromoethane	20.0	20.6	103	20.0	21.0	105	2.39	80 - 125	20	
Dibromomethane	20.0	21.3	106	20.0	22.1	111	3.93	80 - 126	24	
1,2-Dichlorobenzene	20.0	19.9	99.3	20.0	20.3	101	2.21	80 - 125	15	
1,3-Dichlorobenzene	20.0	19.9	99.5	20.0	20.7	103	3.72	80 - 120	16	
1,4-Dichlorobenzene	20.0	19.5	97.3	20.0	20.1	101	3.45	80 - 120	15	
Dichlorodifluoromethane	20.0	24.8	124	20.0	25.5	128	3.11	50 - 133	51	
1,1-Dichloroethane	20.0	20.3	101	20.0	21.1	106	4.13	80 - 125	21	
1,2-Dichloroethane	20.0	21.8	109	20.0	22.4	112	2.79	80 - 129	29	
1,1-Dichloroethene	20.0	20.5	102	20.0	21.8	109	6.13	80 - 132	26	
cis-1,2-Dichloroethene	20.0	21.3	106	20.0	21.8	109	2.29	80 - 121	19	
trans-1,2-Dichloroethene	20.0	21.3	107	20.0	22.2	111	4.04	80 - 127	24	
1,2-Dichloropropane	20.0	20.2	101	20.0	21.0	105	3.80	80 - 120	20	
1,3-Dichloropropane	20.0	19.4	97.0	20.0	19.8	98.9	1.99	80 - 120	20	
2,2-Dichloropropane	20.0	23.8	119	20.0	24.6	123	3.15	80 - 133	29	
cis-1,3-Dichloropropene	20.0	21.7	109	20.0	22.7	113	4.33	80 - 132	26	
trans-1,3-Dichloropropene	20.0	22.2	111	20.0	22.9	115	3.08	80 - 130	25	
1,1-Dichloropropene	20.0	20.9	105	20.0	21.9	110	4.71	74 - 139	40	
Ethylbenzene	20.0	20.6	103	20.0	21.6	108	4.76	80 - 122	20	
2-Hexanone	20.0	16.4	81.9	20.0	17.0	84.9	3.63	56 - 136	49	
Hexachlorobutadiene	20.0	21.3	106	20.0	21.7	109	2.03	72 - 132	36	

KEMRON FORMS - Modified 01/03/2005
 Version 1.5 PDF File ID: 238775
 Report generated 05/20/2005 12:04

Login Number: L0505321 Analyst: MES Prep Method: 5030B
 Instrument ID: HPMS10 Matrix: Water Method: 8260B
 Workgroup (AAB#): WG189173 Units: ug/L
 Sample ID: WG189173-02 LCS File ID: 10M38043 Run Date: 05/17/2005 09:56
 Sample ID: WG189173-03 LCS2 File ID: 10M38044 Run Date: 05/17/2005 10:28

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Isopropylbenzene	20.0	21.8	109	20.0	22.5	113	3.45	80 - 122	24	
p-Isopropyltoluene	20.0	20.9	105	20.0	21.5	108	2.98	80 - 122	24	
4-Methyl-2-pentanone	20.0	18.6	93.1	20.0	19.0	94.8	1.86	64 - 140	47	
Methylene chloride	20.0	19.7	98.5	20.0	20.8	104	5.35	80 - 123	22	
Naphthalene	20.0	17.0	85.0	20.0	17.8	89.0	4.53	59 - 149	55	
n-Propylbenzene	20.0	20.0	99.8	20.0	20.6	103	3.37	80 - 129	27	
Styrene	20.0	20.9	104	20.0	21.4	107	2.44	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	23.1	116	20.0	23.8	119	2.95	80 - 130	25	
1,1,2,2-Tetrachloroethane	20.0	18.8	93.9	20.0	19.9	99.5	5.76	79 - 125	28	
Tetrachloroethene	20.0	21.2	106	20.0	22.0	110	3.62	80 - 124	22	
Toluene	20.0	20.6	103	20.0	21.0	105	1.73	80 - 124	22	
1,2,3-Trichlorobenzene	20.0	19.5	97.5	20.0	20.5	103	5.05	62 - 140	48	
1,2,4-Trichlorobenzene	20.0	19.6	98.1	20.0	20.0	100	2.01	77 - 131	33	
1,1,1-Trichloroethane	20.0	23.3	117	20.0	24.3	122	4.22	80 - 134	28	
1,1,2-Trichloroethane	20.0	19.9	99.3	20.0	20.2	101	1.80	80 - 125	20	
Trichloroethene	20.0	20.7	104	20.0	22.1	111	6.68	80 - 122	21	
Trichlorofluoromethane	20.0	23.4	117	20.0	24.0	120	2.52	62 - 151	55	
1,2,3-Trichloropropane	20.0	20.4	102	20.0	20.8	104	1.67	80 - 126	25	
1,2,4-Trimethylbenzene	20.0	20.0	100	20.0	20.3	102	1.74	80 - 125	26	
1,3,5-Trimethylbenzene	20.0	20.9	105	20.0	21.3	106	1.63	80 - 127	25	
Vinyl acetate	20.0	21.6	108	20.0	21.3	107	1.31	10 - 285	201	
Vinyl chloride	20.0	22.4	112	20.0	22.9	114	2.00	65 - 140	46	
o-Xylene	20.0	20.9	104	20.0	21.4	107	2.46	80 - 122	18	
m-, p-Xylene	40.0	41.4	103	40.0	42.6	107	2.94	80 - 122	21	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	97.4	97.7	86 - 118	PASS
1,2-Dichloroethane-d4	96.6	96.5	80 - 120	PASS
Toluene-d8	93.4	92.7	88 - 110	PASS
4-Bromofluorobenzene	90.2	90.9	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

BFB

Login Number: L0505321	Tune ID: WG187632-01
Instrument: HPMS10	Run Date: 04/23/2005
Analyst: MES	Run Time: 11:48
Workgroup: WG187632	File ID: 10M37431
Cal ID: HPMS10 - 23-APR-05	

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	20.4	4731	PASS
75.0	95.0	30.0	60.0	50.5	11723	PASS
95.0	95.0	100	100	100	23213	PASS
96.0	95.0	5.00	9.00	6.79	1576	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	81.9	19021	PASS
175	174	5.00	9.00	7.79	1482	PASS
176	174	95.0	101	101	19202	PASS
177	176	5.00	9.00	6.20	1191	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG187632-11	SSCV	01	04/23/2005 18:10	
WG187632-10	STD	01	04/23/2005 16:36	
WG187632-09	STD	01	04/23/2005 16:05	
WG187632-08	CCV	01	04/23/2005 15:34	
WG187632-07	STD	01	04/23/2005 15:02	
WG187632-06	STD	01	04/23/2005 14:31	
WG187632-05	STD	01	04/23/2005 14:00	
WG187632-04	STD	01	04/23/2005 13:29	
WG187632-03	STD	01	04/23/2005 12:57	
WG187632-02	STD	01	04/23/2005 12:24	

* Sample past 12 hour tune limit

**KEMRON ENVIRONMENTAL SERVICES
ORGANIC INSTRUMENT CHECK**

BFB

Login Number: L0505321

Tune ID: WG189172-01

Instrument: HPMS10

Run Date: 05/17/2005

Analyst: MES

Run Time: 08:23

Workgroup: WG189172

File ID: 10M38040

Cal ID: HPMS10 -23-APR-05

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
50.0	95.0	15.0	40.0	22.1	7579	PASS
75.0	95.0	30.0	60.0	47.7	16347	PASS
95.0	95.0	100	100	100	34250	PASS
96.0	95.0	5.00	9.00	6.44	2206	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	80.9	27714	PASS
175	174	5.00	9.00	8.06	2233	PASS
176	174	95.0	101	97.5	27029	PASS
177	176	5.00	9.00	7.26	1963	PASS

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

Lab ID	Client ID	Tag	Date Analyzed	Q
WG189173-01	BLANK	01	05/17/2005 09:24	
WG189173-02	LCS	01	05/17/2005 09:56	
WG189173-03	LCS2	01	05/17/2005 10:28	
L0505321-01	051205-TB-2	01	05/17/2005 11:32	
L0505321-02	051205-TB-1	01	05/17/2005 12:04	
L0505321-03	29WW26-MAY05	01	05/17/2005 12:35	
L0505321-04	35CWW106-MAY05	01	05/17/2005 13:06	
L0505321-05	35CWW107-MAY05	01	05/17/2005 13:37	
L0505321-06	48WW01-MAY05	01	05/17/2005 15:10	
L0505321-07	LHSMW62-MAY05	01	05/17/2005 15:41	
L0505321-08	LHSMW63-MAY05	01	05/17/2005 16:12	
L0505321-09	LHSMW66-MAY05	01	05/17/2005 16:43	
L0505321-10	LHSMW67-MAY05	01	05/17/2005 17:14	
L0505321-11	LHSMW67-MAY05-D	01	05/17/2005 17:45	
L0505321-12	PZ001-MAY05	01	05/17/2005 18:16	
L0505321-13	PZ002-MAY05	01	05/17/2005 18:47	
L0505321-14	PZ004-MAY05	01	05/17/2005 19:18	

* Sample past 12 hour tune limit

Login Number: L0505321
 Analytical Method: 8260B
 ICAL Workgroup: WG187632

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte		AVG RF	% RSD	R2	QUAD
1,1-Dichloroethene	CCC	0.2234	11.8		
1,2-Dichloropropane	CCC	0.2377	5.95		
1,4-Dichlorobenzene	CCC	1.469	7.21		
Chloroform	CCC	0.4895	6.25		
Ethylbenzene	CCC	0.4983	6.68		
Hexachlorobutadiene	CCC	0.4582	5.70		
Toluene	CCC	1.346	5.45		
Vinyl Chloride	CCC	0.1812	10.2		
1,1,2,2-Tetrachloroethane	SPCC	0.4704	6.31		
1,1-Dichloroethane	SPCC	0.4751	5.07		
Bromoform	SPCC	0.1340	30.2	0.999	
Chlorobenzene	SPCC	0.8928	3.83		
Chloromethane	SPCC	0.2309	4.55		
1,1,1,2-Tetrachloroethane		0.2908	11.5		
1,1,1-Trichloroethane		0.4064	11.3		
1,1,2-Trichloroethane		0.2437	4.57		
1,1-Dichloropropene		0.3555	9.56		
1,2,3-Trichlorobenzene		0.7032	10.4		
1,2,3-Trichloropropane		0.1555	7.53		
1,2,4-Trichlorobenzene		0.8917	8.34		
1,2,4-Trimethylbenzene		2.623	4.75		
1,2-Dibromo-3-Chloropropane		0.07558	21.2	1.00	
1,2-Dibromoethane		0.2437	11.6		
1,2-Dichlorobenzene		1.286	7.16		
1,2-Dichloroethane		0.3544	6.13		
1,3,5-Trimethylbenzene		2.480	7.35		
1,3-Dichlorobenzene		1.419	6.39		
1,3-Dichloropropane		0.4281	4.45		
2,2-Dichloropropane		0.3560	13.5		
2-Butanone		0.06014	2.87		
2-Chloroethyl Vinyl Ether		0.08524	10.6		
2-Chlorotoluene		2.455	4.18		
2-Hexanone		0.1330	7.28		
4-Chlorotoluene		2.166	3.80		
4-Methyl-2-Pentanone		0.05336	3.76		
Acetone		0.04278	2.97		
Benzene		0.9302	5.96		
Bromobenzene		0.7266	4.31		
Bromochloromethane		0.1182	11.8		
Bromodichloromethane		0.3226	12.3		
Bromomethane		0.1295	11.1		
Carbon Disulfide		0.7510	3.47		
Carbon Tetrachloride		0.2992	23.2	1.00	
Chloroethane		0.1642	10.2		
Dibromochloromethane		0.2606	20.1	0.999	

Login Number: L0505321
 Analytical Method: 8260B
 ICAL Workgroup: WG187632

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	AVG RF	% RSD	R2	QUAD
Dibromomethane	0.1277	10.1		
Dichlorodifluoromethane	0.3345	12.7		
Isopropylbenzene	1.390	6.02		
Methylene Chloride	0.2534	4.50		
Naphthalene	1.336	9.39		
Styrene	0.9941	7.60		
Tetrachloroethene	0.3040	7.46		
Trichloroethene	0.2652	6.99		
Trichlorofluoromethane	0.4549	11.7		
Vinyl Acetate	0.3060	11.6		
cis-1,2-Dichloroethene	0.2636	9.92		
cis-1,3-Dichloropropene	0.3542	10.6		
m-,p-Xylene	0.6101	4.86		
n-Butylbenzene	2.349	4.58		
n-Propylbenzene	3.391	6.22		
o-Xylene	0.5838	8.27		
p-Isopropyltoluene	2.495	6.07		
sec-Butylbenzene	3.088	5.86		
tert-Butylbenzene	0.4969	6.33		
trans-1,2-Dichloroethene	0.2472	6.93		
trans-1,3-Dichloropropene	0.4075	13.5		
1,2-Dichloroethane-d4	0.2740	4.87		
Dibromofluoromethane	0.2378	8.17		
Toluene-d8	1.114	5.78		
p-Bromofluorobenzene	0.8548	6.02		

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-02			WG187632-03		
	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	1996	0.1652
1,2-Dichloropropane	NA	NA	NA	0.400	2604	0.2155
1,4-Dichlorobenzene	0.250	4623	1.643	0.400	7357	1.620
Chloroform	0.250	3950	0.5149	0.400	5266	0.4359
Ethylbenzene	NA	NA	NA	0.400	3902	0.4490
Hexachlorobutadiene	NA	NA	NA	0.400	1882	0.4143
Toluene	NA	NA	NA	0.400	10535	1.212
Vinyl Chloride	NA	NA	NA	0.400	1807	0.1496
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2379	0.5237
1,1-Dichloroethane	NA	NA	NA	0.400	5261	0.4354
Bromoform	NA	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	0.400	7717	0.8881
Chloromethane	NA	NA	NA	0.400	2681	0.2219
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2328	0.2679
1,1,1-Trichloroethane	NA	NA	NA	0.400	3985	0.3298
1,1,2-Trichloroethane	NA	NA	NA	0.400	1969	0.2266
1,1-Dichloropropene	NA	NA	NA	0.400	3429	0.2838
1,2,3-Trichlorobenzene	0.250	1832	0.6512	0.400	4021	0.8852
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4801	1.057
1,2,4-Trimethylbenzene	NA	NA	NA	0.400	12153	2.675
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1602	0.1844
1,2-Dichlorobenzene	0.250	4073	1.448	0.400	6415	1.412
1,2-Dichloroethane	NA	NA	NA	0.400	3817	0.3159
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	10017	2.205
1,3-Dichlorobenzene	NA	NA	NA	0.400	7318	1.611
1,3-Dichloropropane	NA	NA	NA	0.400	3639	0.4188
2,2-Dichloropropane	NA	NA	NA	0.400	3412	0.2824
2-Butanone	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	NA	NA	NA	0.400	11106	2.445
2-Hexanone	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	10188	2.243
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	0.400	9923	0.8213
Bromobenzene	0.250	2022	0.7188	0.400	3132	0.6895
Bromochloromethane	NA	NA	NA	0.400	1076	0.08910
Bromodichloromethane	NA	NA	NA	0.400	3028	0.2506
Bromomethane	NA	NA	NA	NA	NA	NA
Carbon Disulfide	NA	NA	NA	0.400	9429	0.7804

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-04			WG187632-05		
	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	1.00	6296	0.2095	2.00	13059	0.2200
1,2-Dichloropropane	1.00	6935	0.2308	2.00	13134	0.2212
1,4-Dichlorobenzene	1.00	15727	1.389	2.00	32223	1.424
Chloroform	1.00	13605	0.4527	2.00	28110	0.4735
Ethylbenzene	1.00	10364	0.4869	2.00	20440	0.4728
Hexachlorobutadiene	1.00	4886	0.4316	2.00	9960	0.4400
Toluene	1.00	27442	1.289	2.00	57546	1.331
Vinyl Chloride	1.00	6074	0.2021	2.00	11587	0.1952
1,1,2,2-Tetrachloroethane	1.00	4893	0.4323	2.00	10096	0.4460
1,1-Dichloroethane	1.00	13679	0.4552	2.00	27151	0.4573
Bromoform	1.00	1642	0.07710	2.00	4068	0.09410
Chlorobenzene	1.00	18628	0.8752	2.00	39444	0.9124
Chloromethane	1.00	7324	0.2437	2.00	13767	0.2319
1,1,1,2-Tetrachloroethane	1.00	5434	0.2553	2.00	10624	0.2458
1,1,1-Trichloroethane	1.00	10690	0.3557	2.00	22619	0.3810
1,1,2-Trichloroethane	1.00	5153	0.2421	2.00	10466	0.2421
1,1-Dichloropropene	1.00	10102	0.3362	2.00	20662	0.3480
1,2,3-Trichlorobenzene	1.00	7582	0.6698	2.00	14766	0.6523
1,2,3-Trichloropropane	1.00	1573	0.1390	2.00	3215	0.1420
1,2,4-Trichlorobenzene	1.00	9196	0.8124	2.00	19053	0.8417
1,2,4-Trimethylbenzene	1.00	27462	2.426	2.00	57186	2.526
1,2-Dibromo-3-Chloropropane	NA	NA	NA	2.00	1167	0.05160
1,2-Dibromoethane	1.00	5002	0.2350	2.00	10000	0.2313
1,2-Dichlorobenzene	1.00	13388	1.183	2.00	28530	1.260
1,2-Dichloroethane	1.00	10966	0.3649	2.00	20570	0.3465
1,3,5-Trimethylbenzene	1.00	25830	2.282	2.00	53630	2.369
1,3-Dichlorobenzene	1.00	15088	1.333	2.00	31559	1.394
1,3-Dichloropropane	1.00	8849	0.4158	2.00	17784	0.4114
2,2-Dichloropropane	1.00	9151	0.3045	2.00	18901	0.3184
2-Butanone	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	1.00	2450	0.08150	2.00	5623	0.09470
2-Chlorotoluene	1.00	26289	2.322	2.00	54641	2.414
2-Hexanone	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	1.00	23447	2.071	2.00	47044	2.078
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA
Benzene	1.00	26882	0.8945	2.00	55142	0.9288
Bromobenzene	1.00	7910	0.6988	2.00	16358	0.7227
Bromochloromethane	1.00	3402	0.1132	2.00	7322	0.1233
Bromodichloromethane	1.00	8768	0.2918	2.00	17682	0.2978
Bromomethane	1.00	3264	0.1086	2.00	6785	0.1143
Carbon Disulfide	1.00	22768	0.7576	2.00	42884	0.7223

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-06			WG187632-07		
	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	5.00	34386	0.2306	20.0	146670	0.2463
1,2-Dichloropropane	5.00	36490	0.2447	20.0	151286	0.2540
1,4-Dichlorobenzene	5.00	83847	1.497	20.0	333555	1.493
Chloroform	5.00	77308	0.5184	20.0	309551	0.5198
Ethylbenzene	5.00	57042	0.5293	20.0	231885	0.5437
Hexachlorobutadiene	5.00	25970	0.4638	20.0	108179	0.4840
Toluene	5.00	151483	1.406	20.0	608912	1.428
Vinyl Chloride	5.00	27588	0.1850	20.0	116860	0.1962
1,1,2,2-Tetrachloroethane	5.00	27073	0.4835	20.0	109335	0.4892
1,1-Dichloroethane	5.00	72935	0.4891	20.0	302171	0.5074
Bromoform	5.00	11485	0.1066	20.0	63767	0.1495
Chlorobenzene	5.00	98462	0.9137	20.0	398476	0.9343
Chloromethane	5.00	32918	0.2207	20.0	143990	0.2418
1,1,1,2-Tetrachloroethane	5.00	30919	0.2869	20.0	139289	0.3266
1,1,1-Trichloroethane	5.00	61569	0.4129	20.0	265086	0.4451
1,1,2-Trichloroethane	5.00	27246	0.2528	20.0	110084	0.2581
1,1-Dichloropropene	5.00	56176	0.3767	20.0	232378	0.3902
1,2,3-Trichlorobenzene	5.00	39904	0.7126	20.0	161494	0.7226
1,2,3-Trichloropropane	5.00	8720	0.1557	20.0	38069	0.1703
1,2,4-Trichlorobenzene	5.00	49960	0.8922	20.0	204691	0.9159
1,2,4-Trimethylbenzene	5.00	153421	2.740	20.0	620860	2.778
1,2-Dibromo-3-Chloropropane	5.00	3342	0.05970	20.0	17669	0.07910
1,2-Dibromoethane	5.00	27017	0.2507	20.0	116663	0.2735
1,2-Dichlorobenzene	5.00	71454	1.276	20.0	293129	1.312
1,2-Dichloroethane	5.00	56318	0.3777	20.0	224196	0.3764
1,3,5-Trimethylbenzene	5.00	146433	2.615	20.0	605476	2.709
1,3-Dichlorobenzene	5.00	80257	1.433	20.0	326918	1.463
1,3-Dichloropropane	5.00	47807	0.4436	20.0	195231	0.4577
2,2-Dichloropropane	5.00	53212	0.3568	20.0	230107	0.3864
2-Butanone	5.00	8927	0.05990	20.0	36226	0.06080
2-Chloroethyl Vinyl Ether	5.00	13672	0.09170	20.0	55575	0.09330
2-Chlorotoluene	5.00	145636	2.601	20.0	575091	2.573
2-Hexanone	5.00	15344	0.1424	20.0	59061	0.1385
4-Chlorotoluene	5.00	122237	2.183	20.0	509196	2.278
4-Methyl-2-Pentanone	5.00	7919	0.05310	20.0	32275	0.05420
Acetone	5.00	6428	0.04310	20.0	26118	0.04390
Benzene	5.00	145129	0.9732	20.0	591567	0.9933
Bromobenzene	5.00	43238	0.7722	20.0	172405	0.7714
Bromochloromethane	5.00	19602	0.1315	20.0	77375	0.1299
Bromodichloromethane	5.00	47849	0.3209	20.0	208550	0.3502
Bromomethane	5.00	18193	0.1220	20.0	84124	0.1413
Carbon Disulfide	5.00	107095	0.7182	20.0	467559	0.7851

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-08			WG187632-09		
	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	371474	0.2438	100	721551	0.2386
1,2-Dichloropropane	50.0	382961	0.2514	100	747192	0.2471
1,4-Dichlorobenzene	50.0	819513	1.440	100	1581401	1.387
Chloroform	50.0	776327	0.5095	100	1513385	0.5005
Ethylbenzene	50.0	576243	0.5294	100	1108098	0.5010
Hexachlorobutadiene	50.0	271555	0.4771	100	545424	0.4785
Toluene	50.0	1542741	1.417	100	3021398	1.366
Vinyl Chloride	50.0	281665	0.1849	100	535548	0.1771
1,1,2,2-Tetrachloroethane	50.0	273031	0.4797	100	527065	0.4624
1,1-Dichloroethane	50.0	755221	0.4957	100	1469955	0.4861
Bromoform	50.0	185879	0.1708	100	385553	0.1743
Chlorobenzene	50.0	999125	0.9178	100	1933303	0.8741
Chloromethane	50.0	363469	0.2386	100	705914	0.2334
1,1,1,2-Tetrachloroethane	50.0	363277	0.3337	100	708864	0.3205
1,1,1-Trichloroethane	50.0	686597	0.4506	100	1357112	0.4488
1,1,2-Trichloroethane	50.0	276135	0.2537	100	539358	0.2439
1,1-Dichloropropene	50.0	578594	0.3798	100	1124198	0.3718
1,2,3-Trichlorobenzene	50.0	395678	0.6952	100	779345	0.6837
1,2,3-Trichloropropane	50.0	94539	0.1661	100	183906	0.1613
1,2,4-Trichlorobenzene	50.0	505359	0.8879	100	999090	0.8765
1,2,4-Trimethylbenzene	50.0	1539056	2.704	100	2992078	2.625
1,2-Dibromo-3-Chloropropane	50.0	49502	0.08700	100	99530	0.08730
1,2-Dibromoethane	50.0	292620	0.2688	100	576203	0.2605
1,2-Dichlorobenzene	50.0	721596	1.268	100	1406477	1.234
1,2-Dichloroethane	50.0	557709	0.3660	100	1075135	0.3555
1,3,5-Trimethylbenzene	50.0	1504515	2.643	100	2923366	2.565
1,3-Dichlorobenzene	50.0	804344	1.413	100	1569303	1.377
1,3-Dichloropropane	50.0	486158	0.4466	100	942195	0.4260
2,2-Dichloropropane	50.0	610273	0.4005	100	1217455	0.4026
2-Butanone	50.0	93920	0.06160	100	184615	0.06110
2-Chloroethyl Vinyl Ether	50.0	131260	0.08620	100	241232	0.07980
2-Chlorotoluene	50.0	1417489	2.490	100	2818972	2.473
2-Hexanone	50.0	148271	0.1362	100	288385	0.1304
4-Chlorotoluene	50.0	1274782	2.240	100	2450588	2.150
4-Methyl-2-Pentanone	50.0	83641	0.05490	100	165083	0.05460
Acetone	50.0	65581	0.04300	100	130817	0.04330
Benzene	50.0	1477773	0.9699	100	2881697	0.9529
Bromobenzene	50.0	423382	0.7438	100	832351	0.7302
Bromochloromethane	50.0	193330	0.1269	100	365431	0.1208
Bromodichloromethane	50.0	546185	0.3585	100	1098570	0.3633
Bromomethane	50.0	221504	0.1454	100	411885	0.1362
Carbon Disulfide	50.0	1165181	0.7648	100	2277381	0.7531

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-10		
	CONC	RESP	RF
1,1-Dichloroethene	200	1389464	0.2328
1,2-Dichloropropane	200	1415219	0.2371
1,4-Dichlorobenzene	200	2926643	1.329
Chloroform	200	2867277	0.4804
Ethylbenzene	200	2036572	0.4745
Hexachlorobutadiene	200	1049148	0.4766
Toluene	200	5667972	1.321
Vinyl Chloride	200	950055	0.1592
1,1,2,2-Tetrachloroethane	200	982125	0.4461
1,1-Dichloroethane	200	2833930	0.4748
Bromoform	200	711670	0.1658
Chlorobenzene	200	3548899	0.8269
Chloromethane	200	1285483	0.2154
1,1,1,2-Tetrachloroethane	200	1242830	0.2896
1,1,1-Trichloroethane	200	2549431	0.4272
1,1,2-Trichloroethane	200	988455	0.2303
1,1-Dichloropropene	200	2134275	0.3576
1,2,3-Trichlorobenzene	200	1444399	0.6561
1,2,3-Trichloropropane	200	339429	0.1542
1,2,4-Trichlorobenzene	200	1870717	0.8497
1,2,4-Trimethylbenzene	200	5520689	2.508
1,2-Dibromo-3-Chloropropane	200	195470	0.08880
1,2-Dibromoethane	200	1051581	0.2450
1,2-Dichlorobenzene	200	2604803	1.183
1,2-Dichloroethane	200	1983904	0.3324
1,3,5-Trimethylbenzene	200	5390117	2.448
1,3-Dichlorobenzene	200	2918398	1.326
1,3-Dichloropropane	200	1736155	0.4045
2,2-Dichloropropane	200	2367804	0.3967
2-Butanone	200	341754	0.05730
2-Chloroethyl Vinyl Ether	200	414974	0.06950
2-Chlorotoluene	200	5113912	2.323
2-Hexanone	200	504416	0.1175
4-Chlorotoluene	200	4593693	2.087
4-Methyl-2-Pentanone	200	298302	0.05000
Acetone	200	242100	0.04060
Benzene	200	5419288	0.9080
Bromobenzene	200	1522542	0.6916
Bromochloromethane	200	660310	0.1106
Bromodichloromethane	200	2074683	0.3476
Bromomethane	200	827190	0.1386
Carbon Disulfide	200	4335929	0.7265

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-02			WG187632-03		
	CONC	RESP	RF	CONC	RESP	RF
Carbon Tetrachloride	NA	NA	NA	0.400	2180	0.1804
Chloroethane	NA	NA	NA	0.400	1559	0.1290
Dibromochloromethane	NA	NA	NA	0.400	1825	0.2100
Dibromomethane	NA	NA	NA	0.400	1230	0.1018
Dichlorodifluoromethane	NA	NA	NA	0.400	2875	0.2380
Isopropylbenzene	NA	NA	NA	0.400	10944	1.259
Methylene Chloride	NA	NA	NA	0.400	3172	0.2625
Naphthalene	NA	NA	NA	0.400	6445	1.419
Styrene	NA	NA	NA	0.400	7771	0.8943
Tetrachloroethene	NA	NA	NA	0.400	2243	0.2581
Trichloroethene	NA	NA	NA	0.400	2746	0.2273
Trichlorofluoromethane	NA	NA	NA	0.400	4001	0.3312
Vinyl Acetate	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2441	0.2020
cis-1,3-Dichloropropene	NA	NA	NA	0.400	3568	0.2953
m-,p-Xylene	NA	NA	NA	0.800	10394	0.5981
n-Butylbenzene	NA	NA	NA	0.400	10344	2.277
n-Propylbenzene	NA	NA	NA	0.400	14323	3.153
o-Xylene	NA	NA	NA	0.400	4280	0.4925
p-Isopropyltoluene	NA	NA	NA	0.400	10674	2.350
sec-Butylbenzene	NA	NA	NA	0.400	13086	2.881
tert-Butylbenzene	NA	NA	NA	0.400	2333	0.5136
trans-1,2-Dichloroethene	NA	NA	NA	0.400	2604	0.2155
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane-d4	NA	NA	NA	NA	NA	NA
Dibromofluoromethane	NA	NA	NA	NA	NA	NA
Toluene-d8	NA	NA	NA	NA	NA	NA
p-Bromofluorobenzene	NA	NA	NA	NA	NA	NA

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-04			WG187632-05		
	CONC	RESP	RF	CONC	RESP	RF
Carbon Tetrachloride	1.00	7536	0.2508	2.00	14878	0.2506
Chloroethane	1.00	5358	0.1783	2.00	8954	0.1508
Dibromochloromethane	1.00	4112	0.1932	2.00	8914	0.2062
Dibromomethane	1.00	3597	0.1197	2.00	7419	0.1250
Dichlorodifluoromethane	1.00	9791	0.3258	2.00	19943	0.3359
Isopropylbenzene	1.00	27893	1.311	2.00	58250	1.347
Methylene Chloride	1.00	7305	0.2431	2.00	16062	0.2705
Naphthalene	1.00	12220	1.080	2.00	27654	1.222
Styrene	1.00	18942	0.8900	2.00	41370	0.9570
Tetrachloroethene	1.00	6504	0.3056	2.00	12642	0.2924
Trichloroethene	1.00	7620	0.2536	2.00	15569	0.2622
Trichlorofluoromethane	1.00	13501	0.4493	2.00	27484	0.4629
Vinyl Acetate	NA	NA	NA	2.00	16988	0.2861
cis-1,2-Dichloroethene	1.00	7819	0.2602	2.00	15738	0.2651
cis-1,3-Dichloropropene	1.00	9826	0.3270	2.00	18960	0.3193
m-,p-Xylene	2.00	25739	0.6046	4.00	52100	0.6026
n-Butylbenzene	1.00	24540	2.168	2.00	50918	2.249
n-Propylbenzene	1.00	35079	3.099	2.00	73217	3.235
o-Xylene	1.00	11876	0.5580	2.00	23944	0.5539
p-Isopropyltoluene	1.00	25934	2.291	2.00	53243	2.352
sec-Butylbenzene	1.00	31710	2.801	2.00	67956	3.002
tert-Butylbenzene	1.00	5028	0.4442	2.00	10591	0.4679
trans-1,2-Dichloroethene	1.00	7088	0.2359	2.00	13913	0.2343
trans-1,3-Dichloropropene	1.00	6851	0.3219	2.00	14837	0.3432
1,2-Dichloroethane-d4	0.500	4108	0.2734	1.00	7437	0.2505
Dibromofluoromethane	0.500	3823	0.2544	1.00	6133	0.2066
Toluene-d8	0.500	11907	1.119	1.00	21501	0.9947
p-Bromofluorobenzene	0.500	5128	0.9060	1.00	8606	0.7604

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-06			WG187632-07		
	CONC	RESP	RF	CONC	RESP	RF
Carbon Tetrachloride	5.00	42457	0.2847	20.0	194596	0.3267
Chloroethane	5.00	24410	0.1637	20.0	106187	0.1783
Dibromochloromethane	5.00	26714	0.2479	20.0	124715	0.2924
Dibromomethane	5.00	21237	0.1424	20.0	82428	0.1384
Dichlorodifluoromethane	5.00	51493	0.3453	20.0	224327	0.3767
Isopropylbenzene	5.00	154866	1.437	20.0	640209	1.501
Methylene Chloride	5.00	39101	0.2622	20.0	152505	0.2561
Naphthalene	5.00	76730	1.370	20.0	325969	1.459
Styrene	5.00	112532	1.044	20.0	464281	1.089
Tetrachloroethene	5.00	34142	0.3168	20.0	141195	0.3310
Trichloroethene	5.00	41229	0.2765	20.0	169733	0.2850
Trichlorofluoromethane	5.00	69001	0.4627	20.0	300515	0.5046
Vinyl Acetate	5.00	46083	0.3090	20.0	206342	0.3465
cis-1,2-Dichloroethene	5.00	40797	0.2736	20.0	169000	0.2838
cis-1,3-Dichloropropene	5.00	51801	0.3474	20.0	229200	0.3848
m-,p-Xylene	10.0	137149	0.6364	40.0	555352	0.6510
n-Butylbenzene	5.00	133684	2.387	20.0	555804	2.487
n-Propylbenzene	5.00	199131	3.556	20.0	815001	3.647
o-Xylene	5.00	67713	0.6284	20.0	270543	0.6343
p-Isopropyltoluene	5.00	146494	2.616	20.0	602875	2.698
sec-Butylbenzene	5.00	180782	3.229	20.0	738161	3.303
tert-Butylbenzene	5.00	29813	0.5324	20.0	118120	0.5285
trans-1,2-Dichloroethene	5.00	38330	0.2570	20.0	158180	0.2656
trans-1,3-Dichloropropene	5.00	43218	0.4011	20.0	192942	0.4524
1,2-Dichloroethane-d4	2.50	20242	0.2715	10.0	86676	0.2911
Dibromofluoromethane	2.50	16155	0.2167	10.0	76797	0.2579
Toluene-d8	2.50	58089	1.078	10.0	253905	1.191
p-Bromofluorobenzene	2.50	22811	0.8147	10.0	99728	0.8925

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-08			WG187632-09		
	CONC	RESP	RF	CONC	RESP	RF
Carbon Tetrachloride	50.0	545437	0.3580	100	1129290	0.3734
Chloroethane	50.0	263405	0.1729	100	523077	0.1730
Dibromochloromethane	50.0	342359	0.3145	100	700238	0.3166
Dibromomethane	50.0	205614	0.1350	100	403756	0.1335
Dichlorodifluoromethane	50.0	559838	0.3674	100	1065923	0.3525
Isopropylbenzene	50.0	1608110	1.477	100	3151065	1.425
Methylene Chloride	50.0	380698	0.2499	100	745057	0.2464
Naphthalene	50.0	802512	1.410	100	1581895	1.388
Styrene	50.0	1158497	1.064	100	2279026	1.030
Tetrachloroethene	50.0	351721	0.3231	100	684249	0.3094
Trichloroethene	50.0	424892	0.2789	100	833346	0.2756
Trichlorofluoromethane	50.0	752848	0.4941	100	1440144	0.4762
Vinyl Acetate	50.0	522971	0.3432	100	899875	0.2976
cis-1,2-Dichloroethene	50.0	429207	0.2817	100	833237	0.2755
cis-1,3-Dichloropropene	50.0	601967	0.3951	100	1183440	0.3914
m-,p-Xylene	100	1377794	0.6329	200	2649429	0.5990
n-Butylbenzene	50.0	1388322	2.439	100	2749127	2.412
n-Propylbenzene	50.0	2042259	3.588	100	3989214	3.500
o-Xylene	50.0	677262	0.6222	100	1334582	0.6034
p-Isopropyltoluene	50.0	1493874	2.625	100	2915407	2.558
sec-Butylbenzene	50.0	1843795	3.239	100	3619481	3.176
tert-Butylbenzene	50.0	293911	0.5164	100	563243	0.4942
trans-1,2-Dichloroethene	50.0	398885	0.2618	100	777389	0.2571
trans-1,3-Dichloropropene	50.0	501039	0.4603	100	990903	0.4480
1,2-Dichloroethane-d4	25.0	216634	0.2844	50.0	424760	0.2809
Dibromofluoromethane	25.0	189194	0.2484	50.0	370157	0.2448
Toluene-d8	25.0	634828	1.166	50.0	1262272	1.141
p-Bromofluorobenzene	25.0	252161	0.8861	50.0	497781	0.8734

Login Number: L0505321
 Analytical Method: 8260B

Instrument ID: HPMS10
 Initial Calibration Date: 23-APR-05

Analyte	WG187632-10		
	CONC	RESP	RF
Carbon Tetrachloride	200	2203086	0.3691
Chloroethane	200	1001920	0.1679
Dibromochloromethane	200	1302931	0.3036
Dibromomethane	200	748206	0.1254
Dichlorodifluoromethane	200	1997222	0.3346
Isopropylbenzene	200	5863409	1.366
Methylene Chloride	200	1412184	0.2366
Naphthalene	200	2950278	1.340
Styrene	200	4224340	0.9842
Tetrachloroethene	200	1268436	0.2955
Trichloroethene	200	1564399	0.2621
Trichlorofluoromethane	200	2735015	0.4583
Vinyl Acetate	200	1513324	0.2536
cis-1,2-Dichloroethene	200	1592250	0.2668
cis-1,3-Dichloropropene	200	2228555	0.3734
m-,p-Xylene	400	4774092	0.5562
n-Butylbenzene	200	5214307	2.369
n-Propylbenzene	200	7374173	3.350
o-Xylene	200	2480311	0.5779
p-Isopropyltoluene	200	5432819	2.468
sec-Butylbenzene	200	6757695	3.070
tert-Butylbenzene	200	1051426	0.4776
trans-1,2-Dichloroethene	200	1496310	0.2507
trans-1,3-Dichloropropene	200	1826627	0.4256
1,2-Dichloroethane-d4	100	793624	0.2659
Dibromofluoromethane	100	703017	0.2356
Toluene-d8	100	2384526	1.111
p-Bromofluorobenzene	100	935965	0.8503

KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00093628

Login Number: L0505321 Run Date: 04/23/2005 Sample ID: WG187632-11
Instrument ID: HPMS10 Run Time: 18:10 Method: 8260B
File ID: 10M37443 Analyst: MES
ICal Workgroup: WG187632 Cal ID: HPMS10 - 23-APR-05

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloroform	CCC	20	20.3	0.496	1.4	ug/L	
1,4-Dichlorobenzene	CCC	20	20.0	1.47	.1	ug/L	
1,1-Dichloroethene	CCC	20	20.4	0.228	2.2	ug/L	
1,2-Dichloropropane	CCC	20	20.7	0.246	3.4	ug/L	
Ethylbenzene	CCC	20	21.2	0.529	6.1	ug/L	
Hexachlorobutadiene	CCC	20	19.9	0.455	.7	ug/L	
Toluene	CCC	20	21.1	1.42	5.7	ug/L	
Vinyl Chloride	CCC	20	19.1	0.173	4.7	ug/L	
Bromoform	SPCC	20	17.6	0.143	12.1	ug/L	
Chlorobenzene	SPCC	20	20.8	0.929	4	ug/L	
Chloromethane	SPCC	20	18.7	0.216	6.6	ug/L	
1,1-Dichloroethane	SPCC	20	20.2	0.479	.8	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	20	19.1	0.449	4.5	ug/L	
Acetone		20	22.3	0.0478	11.7	ug/L	
Benzene		20	20.8	0.970	4.2	ug/L	
Bromobenzene		20	20.9	0.759	4.4	ug/L	
Bromochloromethane		20	20.8	0.123	3.9	ug/L	
Bromodichloromethane		20	21.1	0.340	5.5	ug/L	
Bromomethane		20	19.6	0.127	2	ug/L	
2-Butanone		20	21.3	0.0639	6.3	ug/L	
n-Butylbenzene		20	20.5	2.41	2.6	ug/L	
sec-Butylbenzene		20	21.4	3.30	6.8	ug/L	
tert-Butylbenzene		20	20.9	0.519	4.4	ug/L	
Carbon Disulfide		20	21.8	0.820	9.2	ug/L	
Carbon Tetrachloride		20	18.7	0.331	6.5	ug/L	
Dibromochloromethane		20	18.8	0.288	6	ug/L	
Chloroethane		20	20.0	0.164	.2	ug/L	
2-Chloroethyl Vinyl Ether		20	21.9	0.0933	9.5	ug/L	
2-Chlorotoluene		20	20.8	2.55	4	ug/L	
4-Chlorotoluene		20	20.9	2.26	4.3	ug/L	
1,2-Dibromo-3-Chloropropane		20	19.0	0.0778	4.8	ug/L	
1,2-Dibromoethane		20	21.5	0.262	7.6	ug/L	
Dibromomethane		20	20.8	0.133	3.8	ug/L	
1,2-Dichlorobenzene		20	20.3	1.31	1.6	ug/L	
1,3-Dichlorobenzene		20	20.6	1.46	2.8	ug/L	
Dichlorodifluoromethane		20	20.8	0.349	4.2	ug/L	
1,2-Dichloroethane		20	19.7	0.350	1.3	ug/L	
cis-1,2-Dichloroethene		20	20.9	0.276	4.7	ug/L	
trans-1,2-Dichloroethene		20	21.1	0.260	5.3	ug/L	
1,3-Dichloropropane		20	20.1	0.429	.3	ug/L	
2,2-Dichloropropane		20	19.9	0.354	.6	ug/L	
cis-1,3-Dichloropropene		20	20.8	0.369	4.1	ug/L	

KEMRON FORMS - Modified 05/04/2005
Version 1.5 PDF File ID: 240579
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KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00093629

Login Number: L0505321 Run Date: 04/23/2005 Sample ID: WG187632-11
Instrument ID: HPMS10 Run Time: 18:10 Method: 8260B
File ID: 10M37443 Analyst: MES
ICal Workgroup: WG187632 Cal ID: HPMS10 - 23-APR-05

Analyte	Expected	Found	RF	%D	UNITS	Q
trans-1,3-Dichloropropene	20	21.9	0.446	9.4	ug/L	
1,1-Dichloropropene	20	20.2	0.359	1	ug/L	
2-Hexanone	20	20.1	0.134	.6	ug/L	
Isopropylbenzene	20	22.1	1.54	10.7	ug/L	
p-Isopropyltoluene	20	21.2	2.65	6.1	ug/L	
4-Methyl-2-Pentanone	20	20.7	0.0551	3.3	ug/L	
Methylene Chloride	20	19.7	0.250	1.3	ug/L	
Naphthalene	20	21.1	1.41	5.4	ug/L	
n-Propylbenzene	20	21.0	3.55	4.8	ug/L	
Styrene	20	21.5	1.07	7.5	ug/L	
1,1,1,2-Tetrachloroethane	20	22.4	0.326	12	ug/L	
Tetrachloroethene	20	21.0	0.319	5	ug/L	
1,2,3-Trichlorobenzene	20	19.6	0.690	1.9	ug/L	
1,2,4-Trichlorobenzene	20	20.1	0.897	.6	ug/L	
1,1,1-Trichloroethane	20	21.1	0.429	5.6	ug/L	
1,1,2-Trichloroethane	20	20.4	0.249	2.1	ug/L	
Trichloroethene	20	21.7	0.288	8.6	ug/L	
Trichlorofluoromethane	20	20.8	0.473	3.9	ug/L	
1,2,3-Trichloropropane	20	20.7	0.161	3.6	ug/L	
1,2,4-Trimethylbenzene	20	20.7	2.71	3.4	ug/L	
1,3,5-Trimethylbenzene	20	21.4	2.65	7	ug/L	
Vinyl Acetate	20	16.1	0.247	19.5	ug/L	
o-Xylene	20	21.7	0.635	8.7	ug/L	
m-,p-Xylene	40	42.3	0.645	5.6	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093630

Login Number: L0505321 Run Date: 05/17/2005 Sample ID: WG189172-02
Instrument ID: HPMS10 Run Time: 08:53 Method: 8260B
File ID: 10M38041 Analyst: MES
Workgroup (AAB#): WG189173 Cal ID: HPMS10 - 23-APR-05

Analyte		Expected	Found	RF	%D	UNITS	Q
Chloroform	CCC	50	52.5	0.514	5	ug/L	
1,1-Dichloroethene	CCC	50	53.4	0.239	6.8	ug/L	
1,2-Dichloropropane	CCC	50	49.9	0.237	.2	ug/L	
Ethylbenzene	CCC	50	51.7	0.515	3.4	ug/L	
Toluene	CCC	50	50.9	1.37	1.7	ug/L	
Vinyl Chloride	CCC	50	56.2	0.204	12.5	ug/L	
Bromoform	SPCC	50	50.7	0.169	1.4	ug/L	
Chlorobenzene	SPCC	50	50.4	0.900	.8	ug/L	
Chloromethane	SPCC	50	54.6	0.252	9.1	ug/L	
1,1-Dichloroethane	SPCC	50	52.0	0.494	4	ug/L	
1,1,2,2-Tetrachloroethane	SPCC	50	45.0	0.423	10.1	ug/L	
Acetone		50	44.3	0.0379	11.4	ug/L	
Benzene		50	52.2	0.972	4.5	ug/L	
Bromobenzene		50	49.7	0.722	.7	ug/L	
Bromochloromethane		50	51.6	0.122	3.2	ug/L	
Bromodichloromethane		50	51.7	0.334	3.5	ug/L	
Bromomethane		50	47.5	0.123	5.1	ug/L	
2-Butanone		50	42.7	0.0513	14.7	ug/L	
n-Butylbenzene		50	52.4	2.46	4.9	ug/L	
sec-Butylbenzene		50	52.6	3.25	5.1	ug/L	
tert-Butylbenzene		50	52.1	0.518	4.2	ug/L	
Carbon Disulfide		50	49.5	0.744	1	ug/L	
Carbon Tetrachloride		50	56.8	0.415	13.6	ug/L	
Dibromochloromethane		50	51.1	0.313	2.2	ug/L	
Chloroethane		50	56.0	0.184	11.9	ug/L	
2-Chloroethyl Vinyl Ether		50	57.5	0.0980	15	ug/L	
2-Chlorotoluene		50	49.8	2.45	.4	ug/L	
4-Chlorotoluene		50	50.7	2.20	1.5	ug/L	
1,2-Dibromo-3-Chloropropane		50	40.5	0.0695	19	ug/L	
1,2-Dibromoethane		50	49.2	0.240	1.6	ug/L	
Dibromomethane		50	50.1	0.128	.1	ug/L	
1,2-Dichlorobenzene		50	47.4	1.22	5.1	ug/L	
1,3-Dichlorobenzene		50	49.5	1.40	1	ug/L	
1,4-Dichlorobenzene		50	48.4	1.42	3.3	ug/L	
Dichlorodifluoromethane		50	53.5	0.358	7	ug/L	
1,2-Dichloroethane		50	51.7	0.366	3.3	ug/L	
cis-1,2-Dichloroethene		50	52.0	0.274	4.1	ug/L	
trans-1,2-Dichloroethene		50	52.7	0.261	5.4	ug/L	
1,3-Dichloropropane		50	46.1	0.395	7.8	ug/L	
2,2-Dichloropropane		50	62.1	0.442	24.2	ug/L	
cis-1,3-Dichloropropene		50	53.2	0.377	6.4	ug/L	
trans-1,3-Dichloropropene		50	54.9	0.447	9.7	ug/L	

KEMRON FORMS - Modified 03/21/2005
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KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093631

Login Number: L0505321 Run Date: 05/17/2005 Sample ID: WG189172-02
Instrument ID: HPMS10 Run Time: 08:53 Method: 8260B
File ID: 10M38041 Analyst: MES
Workgroup (AAB#): WG189173 Cal ID: HPMS10 - 23-APR-05

Analyte	Expected	Found	RF	%D	UNITS	Q
1,1-Dichloropropene	50	52.9	0.376	5.7	ug/L	
2-Hexanone	50	39.4	0.105	21.3	ug/L	
Hexachlorobutadiene	50	51.9	0.476	3.8	ug/L	
Isopropylbenzene	50	58.2	1.62	16.5	ug/L	
p-Isopropyltoluene	50	54.4	2.72	8.8	ug/L	
4-Methyl-2-Pentanone	50	43.3	0.0462	13.4	ug/L	
Methylene Chloride	50	48.7	0.247	2.6	ug/L	
Naphthalene	50	41.1	1.10	17.7	ug/L	
n-Propylbenzene	50	51.8	3.51	3.5	ug/L	
Styrene	50	51.5	1.02	3	ug/L	
1,1,1,2-Tetrachloroethane	50	58.3	0.339	16.7	ug/L	
Tetrachloroethene	50	53.4	0.325	6.8	ug/L	
1,2,3-Trichlorobenzene	50	46.3	0.651	7.4	ug/L	
1,2,4-Trichlorobenzene	50	46.9	0.836	6.3	ug/L	
1,1,1-Trichloroethane	50	59.4	0.483	18.8	ug/L	
1,1,2-Trichloroethane	50	46.6	0.227	6.9	ug/L	
Trichloroethene	50	52.2	0.277	4.5	ug/L	
Trichlorofluoromethane	50	60.6	0.552	21.3	ug/L	
1,2,3-Trichloropropane	50	47.2	0.147	5.6	ug/L	
1,2,4-Trimethylbenzene	50	50.7	2.66	1.3	ug/L	
1,3,5-Trimethylbenzene	50	52.1	2.58	4.2	ug/L	
Vinyl Acetate	50	46.9	0.287	6.2	ug/L	
o-Xylene	50	51.7	0.604	3.4	ug/L	
m-, p-Xylene	100	103	0.628	2.9	ug/L	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

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

00093632

Login Number: L0505321
Instrument ID: HPMS10
Workgroup (AAB#): WG189173

CCV Number: WG189172-02
CAL ID: HPMS10 - 23-APR-05
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG189172-02	NA	NA	293921	552746	739226
Upper Limit	NA	NA	587842	1105492	1478452
Lower Limit	NA	NA	146961	276373	369613
<u>L0505321-01</u>	<u>1.00</u>	<u>01</u>	<u>262223</u>	<u>495232</u>	<u>703335</u>
<u>L0505321-02</u>	<u>1.00</u>	<u>01</u>	<u>259615</u>	<u>499689</u>	<u>706802</u>
<u>L0505321-03</u>	<u>1.00</u>	<u>01</u>	<u>258584</u>	<u>497743</u>	<u>698066</u>
<u>L0505321-04</u>	<u>1.00</u>	<u>01</u>	<u>256889</u>	<u>492238</u>	<u>692638</u>
<u>L0505321-05</u>	<u>1.00</u>	<u>01</u>	<u>254557</u>	<u>494656</u>	<u>692911</u>
<u>L0505321-06</u>	<u>1.00</u>	<u>01</u>	<u>264122</u>	<u>505482</u>	<u>714466</u>
<u>L0505321-07</u>	<u>1.00</u>	<u>01</u>	<u>256059</u>	<u>492378</u>	<u>696059</u>
<u>L0505321-08</u>	<u>1.00</u>	<u>01</u>	<u>258966</u>	<u>491087</u>	<u>688202</u>
<u>L0505321-09</u>	<u>1.00</u>	<u>01</u>	<u>251431</u>	<u>485047</u>	<u>679808</u>
<u>L0505321-10</u>	<u>1.00</u>	<u>01</u>	<u>251651</u>	<u>486234</u>	<u>676733</u>
<u>L0505321-11</u>	<u>1.00</u>	<u>01</u>	<u>245548</u>	<u>473823</u>	<u>666229</u>
<u>L0505321-12</u>	<u>1.00</u>	<u>01</u>	<u>249596</u>	<u>474194</u>	<u>657485</u>
<u>L0505321-13</u>	<u>1.00</u>	<u>01</u>	<u>241977</u>	<u>468563</u>	<u>656527</u>
<u>L0505321-14</u>	<u>1.00</u>	<u>01</u>	<u>248656</u>	<u>473620</u>	<u>660791</u>
<u>WG189173-01</u>	<u>1.00</u>	<u>01</u>	<u>282374</u>	<u>534654</u>	<u>711973</u>
<u>WG189173-02</u>	<u>1.00</u>	<u>01</u>	<u>288635</u>	<u>535392</u>	<u>713783</u>
<u>WG189173-03</u>	<u>1.00</u>	<u>01</u>	<u>291329</u>	<u>544150</u>	<u>717268</u>

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)

00093633

Login Number: L0505321
Instrument ID: HPMS10
Workgroup (AAB#): WG189173

CCV Number: WG189172-02
CAL ID: HPMS10-23-APR-05
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG189172-02	NA	NA	15.65	12.67	8.83
Upper Limit	NA	NA	16.15	13.17	9.33
Lower Limit	NA	NA	15.15	12.17	8.33
L0505321-01	1.00	01	15.65	12.67	8.83
L0505321-02	1.00	01	15.65	12.68	8.83
L0505321-03	1.00	01	15.65	12.68	8.83
L0505321-04	1.00	01	15.65	12.67	8.84
L0505321-05	1.00	01	15.65	12.67	8.84
L0505321-06	1.00	01	15.65	12.68	8.83
L0505321-07	1.00	01	15.65	12.68	8.83
L0505321-08	1.00	01	15.65	12.67	8.84
L0505321-09	1.00	01	15.65	12.67	8.84
L0505321-10	1.00	01	15.65	12.67	8.84
L0505321-11	1.00	01	15.65	12.67	8.84
L0505321-12	1.00	01	15.65	12.67	8.84
L0505321-13	1.00	01	15.65	12.67	8.84
L0505321-14	1.00	01	15.65	12.67	8.83
WG189173-01	1.00	01	15.65	12.67	8.84
WG189173-02	1.00	01	15.65	12.67	8.84
WG189173-03	1.00	01	15.65	12.67	8.84

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

Underline = Response outside limits

Figure 1
Semi-Volatile GC Checklist

Run Date: 5-10-05
 Analyst: ECL
 Instrument: HPLC 4
 Method: 8330

Login no. Due Date Priority

05-084 need rerun

		Analyst	Peer
System Performance Check:	Endrin/DDT Breakdown		
Initial Calibration:	ICAL summary	✓	✓
	Linear or quadratic regression	✓	✓
	Alt Source Check	✓	✓
Continuing Calibration:	Continuing Calibration	✓	✓
	Ending standards	✓	✓
	Client Specific Requirements	✓	✓
	Special Standards		
Blanks:	Quant Report/Chromatogram	✓	✓
	Surrogates	✓	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓	✓
	Surrogates	✓	✓
	Spike Compounds	✓	✓
	MS/MSD	✓	✓
Samples:	Quant Reports/Chromatograms	✓	✓
	Mass spectra		
	Surrogates	✓	✓
	Dilution runs		
	Confirmations	NA	
	Correct Factors	✓	✓
	Manual integrations	✓	✓
Data Package:	Run logs	✓	✓
	Bench sheets		
	Upload results		
	QC forms		
	Seedpak workgroups		
Client Data	Data scanned		
	Integrations digitally signed	✓	
	Level 2 pdf files		
	Level 3/Level x		
	Level 4 copies		
	Case narratives		
		Supervisor	
	Integrations digitally cosigned	✓	
	Corrective Action		
	Results Reporting/Data Qualifiers		
	Client Data/digital signatures		
	Check for Completeness	✓	
	Check for compliance with method and project requirements	✓	
	Check the reasonableness of results	✓	

✓ = Checked & OK

NA = Not Applicable

Primary Reviewer:

ECL 5-11-05

Secondary Reviewer:

Robert Hester

Comments:

Semi-Volatile HPLC Checklist

Run Date: 18-MAY-2005Analyst: RDCInstrument: HPLC4Method: 8330

Login no.	Due Date	Priority
05-321	20-May-05	F3
05-338	24-May-05	F3
05-339	24-May-05	F3
05-340	24-May-05	F3

		Analyst	Peer
Initial Calibration:	ICAL summary		
	Linear or quadratic regression		
	Alt Source Check		
Continuing Calibration:	Continuing Calibration	✓	✓
	Ending Standards	✓	✓
	Client Specific Requirements	✓	✓
	Special Standards		
Blanks:	Quant Report/Chromatogram	✓	✓
	Surrogates	✓	✓
LCS/LCS DUP:	Quant Report/Chromatogram	✓	✓
	Surrogates	✓	✓
	Spike Compounds	✓	✓
	MS/MSD		
Samples:	Quant Reports/Chromatograms	✓	✓
	TCL Hits	✓	✓
	Surrogates	✓	✓
	Dilution runs	✓	✓
	Confirmations	✓	✓
	Correct Factors		
	Manual integrations	✓	✓
Data Package:	Run logs	✓	✓
	Bench sheets	✓	✓
	Upload results	✓	✓
	QC forms	✓	✓
	Seedpak workgroups	✓	✓
Client Data	Data scanned		
	Level 2 pdf files		
	Level 3/Level x		
	Level 4 copies		
	Case narratives		
	Integrations digitally signed	✓	
	Supervisor		
Corrective Action:			
Results Reporting/Data Qualifiers:		✓	
Client Data/digital signatures			
Check for Completeness:		✓	
Check for compliance with method and project requirements:		✓	
Check the reasonableness of results:		✓	

✓ = Checked & OK

NA = Not Applicable

Primary Reviewer: RDC 5/20/05Secondary Reviewer: ndc 5/20/05

Comments: _____

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093636

Analytical Method: 8330
Login Number: L0505321

AAB#: WG189374

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
29WW26-MAY05	05/12/05	05/14/05	05/17/05	7	4.97	05/18/05	40	1.37	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

SURROGATE STANDARDS

Login Number: L0505321
Instrument Id: HPLC4
Workgroup (AAB#): WG189374

Method: 8330
CAL ID: HPLC4 - 10-MAY-05
Matrix: WATER

Sample Number	Dilution	Tag	1
L0505321-03	1.00	01	91.6
WG189200-01	1.00	01	92.7
WG189200-02	1.00	01	98.5
WG189200-03	1.00	01	96.9

Surrogates	Surrogate Limits
1 - 3,4-Dinitrotoluene	50 - 150

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

Login Number: L0505321
Blank File ID: 4L008119.F
Date Analyzed: 05/18/05
Time Analyzed: 18:39
Analyst: RDC

Work Group: WG189374
Blank Sample ID: WG189200-01
Instrument ID: HPLC4
Method: 8330

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG189200-02	4L008120.F	05/18/05 19:16	01
LCS2	WG189200-03	4L008121.F	05/18/05 19:53	01
29WW26-MAY05	L0505321-03	4L008122.F	05/18/05 20:30	01

Login Number: L0505321 Run Date: 05/18/2005 Sample ID: WG189200-01
 Instrument ID: HPLC4 Run Time: 18:39 Prep Method: 3535
 File ID: 4L008119.F Analyst: RDC Method: 8330
 Workgroup (AAB#): WG189374 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPLC4-10-MAY-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
1,3,5-Trinitrobenzene	0.250	1.00	0.250	1	U
1,3-Dinitrobenzene	0.250	1.00	0.250	1	U
2,4,6-Trinitrotoluene	0.250	1.00	0.250	1	U
2,4-Dinitrotoluene	0.250	1.00	0.250	1	U
2,6-Dinitrotoluene	0.250	1.00	0.250	1	U
2-Amino-4,6-dinitrotoluene	0.250	1.00	0.250	1	U
2-Nitrotoluene	0.250	1.00	0.250	1	U
3-Nitrotoluene	0.250	1.00	0.250	1	U
4-Nitrotoluene	0.250	1.00	0.250	1	U
4-Amino-2,6-dinitrotoluene	0.250	1.00	0.250	1	U
HMX	0.250	1.00	0.250	1	U
Nitrobenzene	0.250	1.00	0.250	1	U
RDX	0.250	1.00	0.250	1	U
Tetryl	0.250	1.00	0.250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
3,4-Dinitrotoluene	92.7	50 - 150	PASS

MDL Method Detection Limit

RL Reporting/quantitation Limit

* Analyte concentration > RL

ND Analyte Not detected at or above reporting limit

KEMRON Environmental Services
LABORATORY CONTROL SAMPLES

00093640

Login Number: L0505321 Analyst: RDC Prep Method: 3535
Instrument ID: HPLC4 Matrix: Water Method: 8330
Workgroup (AAB#): WG189374 Units: ug/L
Sample ID: WG189200-02 LCS File ID: 4L008120.F Run Date: 05/18/2005 19:16
Sample ID: WG189200-03 LCS2 File ID: 4L008121.F Run Date: 05/18/2005 19:53

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,3,5-Trinitrobenzene	1.00	0.963	96.3	1.00	0.933	93.3	3.08	58 - 120	40	
1,3-Dinitrobenzene	1.00	1.02	102	1.00	1.01	101	1.16	68 - 135	40	
2,4,6-Trinitrotoluene	1.00	0.957	95.7	1.00	0.955	95.5	0.235	27 - 137	40	
2,4-Dinitrotoluene	1.00	0.969	96.9	1.00	1.02	102	4.70	69 - 109	40	
2,6-Dinitrotoluene	1.00	0.931	93.1	1.00	1.00	100	7.21	55 - 121	40	
2-Amino-4,6-dinitrotoluene	1.00	0.980	98.0	1.00	1.03	103	4.85	72 - 112	40	
2-Nitrotoluene	1.00	0.991	99.1	1.00	0.979	97.9	1.21	67 - 121	40	
3-Nitrotoluene	1.00	1.09	109	1.00	1.02	102	6.58	66 - 110	40	
4-Nitrotoluene	1.00	1.04	104	1.00	1.01	101	2.85	68 - 110	40	
4-Amino-2,6-dinitrotoluene	1.00	0.972	97.2	1.00	1.02	102	5.08	74 - 116	40	
HMX	1.00	0.870	87.0	1.00	0.867	86.7	0.393	54 - 99	40	
Nitrobenzene	1.00	1.05	105	1.00	1.03	103	1.90	70 - 131	40	
RDX	1.00	0.905	90.5	1.00	0.882	88.2	2.57	60 - 116	40	
Tetryl	1.00	0.913	91.3	1.00	0.916	91.6	0.313	10 - 147	40	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
3,4-Dinitrotoluene	98.5	96.9	50 - 150	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

Login Number: L0505321
Analytical Method: 8330
ICAL Workgroup: WG188649

Instrument ID: HPLC4
Initial Calibration Date: 10-MAY-05

Analyte		AVG RF	% RSD	R2	QUAD
1,3,5-Trinitrobenzene		2.337	3.55		
1,3-Dinitrobenzene		1.680	2.16		
2,4,6-Trinitrotoluene		2.420	2.92		
2,4-Dinitrotoluene		2.053	1.99		
2,6-Dinitrotoluene		3.328	2.02		
2-Amino-4,6-Dinitrotoluene		2.838	1.80		
2-Nitrotoluene		5.137	10.8		
3-Nitrotoluene		4.488	9.41		
4-Amino-2,6-Dinitrotoluene		4.191	5.77		
4-Nitrotoluene		6.412	14.3		
HMX		6.434	6.84		
Nitrobenzene		2.624	2.59		
RDX		5.492	5.79		
Tetryl		3.326	4.67		
3,4-Dinitrotoluene		4.439	1.93		

Login Number: L0505321
 Analytical Method: 8330

Instrument ID: HPLC4
 Initial Calibration Date: 10-MAY-05

Analyte	WG188649-01			WG188649-02		
	CONC	RESP	RF	CONC	RESP	RF
1,3,5-Trinitrobenzene	1000	446.747985839 844	2.238	500	217.363265991 211	2.300
1,3-Dinitrobenzene	1000	610.393554687 5	1.638	500	297.770141601 562	1.679
2,4,6-Trinitrotoluene	1000	423.587219238 281	2.361	500	205.149398803 711	2.437
2,4-Dinitrotoluene	1000	491.474548339 844	2.035	500	241.727981567 383	2.068
2,6-Dinitrotoluene	1000	306.740966796 875	3.260	500	150.109741210 938	3.331
2-Amino-4,6-Dinitrotoluene	1000	356.675018310 547	2.804	500	174.739929199 219	2.861
2-Nitrotoluene	1000	217.673385620 117	4.594	500	106.485511779 785	4.695
3-Nitrotoluene	1000	241.557525634 766	4.140	500	119.209320068 359	4.194
4-Amino-2,6-Dinitrotoluene	1000	245.562728881 836	4.072	500	121.182357788 086	4.126
4-Nitrotoluene	1000	176.280899047 852	5.673	500	86.6534042358 398	5.770
HMX	1000	167.391983032 227	5.974	500	83.7672042846 68	5.969
Nitrobenzene	1000	391.546417236 328	2.554	500	190.168502807 617	2.629
RDX	1000	197.137145996 094	5.073	500	95.2293777465 82	5.250
Tetryl	1000	302.889862060 547	3.302	500	148.361892700 195	3.370
3,4-Dinitrotoluene	1000	228.897964477 539	4.369	500	111.949325561 523	4.466

Login Number: L0505321
 Analytical Method: 8330

Instrument ID: HPLC4
 Initial Calibration Date: 10-MAY-05

Analyte	WG188649-03			WG188649-04		
	CONC	RESP	RF	CONC	RESP	RF
1,3,5-Trinitrobenzene	100	43.9480476379 395	2.275	50.0	20.9770450592 041	2.384
1,3-Dinitrobenzene	100	61.0492401123 047	1.638	50.0	29.0301837921 143	1.722
2,4,6-Trinitrotoluene	100	42.4625701904 297	2.355	50.0	19.8592967987 061	2.518
2,4-Dinitrotoluene	100	49.4773139953 613	2.021	50.0	23.4665546417 236	2.131
2,6-Dinitrotoluene	100	30.5008087158 203	3.279	50.0	14.5424079895 02	3.438
2-Amino-4,6-Dinitrotoluene	100	35.8206291198 73	2.792	50.0	17.3286323547 363	2.885
2-Nitrotoluene	100	21.1161098480 225	4.736	50.0	9.81066989898 682	5.096
3-Nitrotoluene	100	22.8780727386 475	4.371	50.0	10.5555210113 525	4.737
4-Amino-2,6-Dinitrotoluene	100	24.9738521575 928	4.004	50.0	11.9111776351 929	4.198
4-Nitrotoluene	100	16.7205638885 498	5.981	50.0	7.19282722473 145	6.951
HMX	100	16.1851272583 008	6.179	50.0	7.32371282577 515	6.827
Nitrobenzene	100	39.1169166564 941	2.556	50.0	18.6831703186 035	2.676
RDX	100	18.7005863189 697	5.347	50.0	8.75935649871 826	5.708
Tetryl	100	30.3004760742 188	3.300	50.0	14.2716827392 578	3.503
3,4-Dinitrotoluene	100	23.1127471923 828	4.327	50.0	11.2356529235 84	4.450

Login Number: L0505321
 Analytical Method: 8330

Instrument ID: HPLC4
 Initial Calibration Date: 10-MAY-05

Analyte	WG188649-05			WG188649-06		
	CONC	RESP	RF	CONC	RESP	RF
1,3,5-Trinitrobenzene	25.0	10.6327896118 164	2.351	10.0	4.04599857330 322	2.472
1,3-Dinitrobenzene	25.0	14.5816869735 718	1.714	10.0	5.93036365509 033	1.686
2,4,6-Trinitrotoluene	25.0	10.5805749893 188	2.363	10.0	4.02031326293 945	2.487
2,4-Dinitrotoluene	25.0	12.3679714202 881	2.021	10.0	4.89648914337 158	2.042
2,6-Dinitrotoluene	25.0	7.61175775527 954	3.284	10.0	2.96465897560 12	3.373
2-Amino-4,6-Dinitrotoluene	25.0	8.97884654998 779	2.784	10.0	3.44587087631 226	2.902
2-Nitrotoluene	25.0	4.36431169509 888	5.728	10.0	1.67381870746 613	5.974
3-Nitrotoluene	25.0	5.99579048156 738	4.170	10.0	1.88199961185 455	5.313
4-Amino-2,6-Dinitrotoluene	25.0	6.19186067581 177	4.038	10.0	2.12365388870 239	4.709
4-Nitrotoluene	25.0	4.35747051239 014	5.737	10.0	1.19627869129 181	8.359
HMX	25.0	3.66805291175 842	6.816	10.0	1.46236836910 248	6.838
Nitrobenzene	25.0	9.61166191101 074	2.601	10.0	3.66661310195 923	2.727
RDX	25.0	4.40615510940 552	5.674	10.0	1.69513332843 781	5.899
Tetryl	25.0	7.30986118316 65	3.420	10.0	3.26436543464 661	3.063
3,4-Dinitrotoluene	25.0	5.61809825897 217	4.450	10.0	2.18606066703 796	4.574

KEMRON Environmental Services
ALTERNATE SOURCE CALIBRATION REPORT

00093645

Login Number: L0505321 Run Date: 05/10/2005 Sample ID: WG188649-07
Instrument ID: HPLC4 Run Time: 17:56 Method: 8330
File ID: 4L007976.F Analyst: 833
ICal Workgroup: WG188649 Cal ID: HPLC4 - 10-MAY-05

Analyte	Expected	Found	RF	%D	UNITS	Q
1,3,5-Trinitrobenzene	50	52.7	2.25	5.5	ug/L	
1,3-Dinitrobenzene	50	51.8	1.65	3.5	ug/L	
2,4,6-Trinitrotoluene	50	55.3	2.23	10.5	ug/L	
2,4-Dinitrotoluene	50	57.0	1.82	14.1	ug/L	
2,6-Dinitrotoluene	50	54.6	3.10	9.2	ug/L	
2-Amino-4,6-Dinitrotoluene	50	55.1	2.61	10.2	ug/L	
2-Nitrotoluene	50	48.3	5.26	3.3	ug/L	
3-Nitrotoluene	50	51.2	4.38	2.4	ug/L	
4-Nitrotoluene	50	45.1	7.07	9.7	ug/L	
4-Amino-2,6-Dinitrotoluene	50	56.1	3.69	12.2	ug/L	
HMX	50	50.6	6.30	1.2	ug/L	
Nitrobenzene	50	51.9	2.58	3.8	ug/L	
RDX	50	54.4	5.15	8.7	ug/L	
Tetryl	50	55.1	3.09	10.2	ug/L	

* Exceeds %D Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093646

Login Number: L0505321 Run Date: 05/18/2005 Sample ID: WG189347-01
Instrument ID: HPLC4 Run Time: 18:01 Method: 8330
File ID: 4L008118.F Analyst: RDC
Workgroup (AAB#): WG189374 Cal ID: HPLC4 - 10-MAY-05

Analyte	Expected	Found	RF	%D	UNITS	Q
1,3,5-Trinitrobenzene	50	51.9	2.29	3.7	ug/L	
1,3-Dinitrobenzene	50	50.7	1.69	1.4	ug/L	
2,4,6-Trinitrotoluene	50	44.5	2.80	11	ug/L	
2,4-Dinitrotoluene	50	53.4	1.95	6.9	ug/L	
2,6-Dinitrotoluene	50	49.9	3.40	.2	ug/L	
2-Amino-4,6-Dinitrotoluene	50	50.6	2.84	1.3	ug/L	
2-Nitrotoluene	50	52.8	4.77	5.6	ug/L	
3-Nitrotoluene	50	53.3	4.19	6.6	ug/L	
4-Nitrotoluene	50	53.2	5.88	6.4	ug/L	
4-Amino-2,6-Dinitrotoluene	50	43.3	4.80	13.4	ug/L	
HMX	50	54.0	5.88	8	ug/L	
Nitrobenzene	50	45.3	2.97	9.4	ug/L	
RDX	50	54.2	5.18	8.3	ug/L	
Tetryl	50	42.8	4.01	14.3	ug/L	

* Exceeds %D Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093647

Login Number: L0505321 Run Date: 05/19/2005 Sample ID: WG189347-02
Instrument ID: HPLC4 Run Time: 00:51 Method: 8330
File ID: 4L008129.F Analyst: RDC
Workgroup (AAB#): WG189374 Cal ID: HPLC4 - 10-MAY-05

Analyte	Expected	Found	RF	%D	UNITS	Q
1,3,5-Trinitrobenzene	50	52.3	2.27	4.7	ug/L	
1,3-Dinitrobenzene	50	51.4	1.66	2.8	ug/L	
2,4,6-Trinitrotoluene	50	54.5	2.27	9.1	ug/L	
2,4-Dinitrotoluene	50	53.1	1.96	6.2	ug/L	
2,6-Dinitrotoluene	50	51.1	3.32	2.2	ug/L	
2-Amino-4,6-Dinitrotoluene	50	51.2	2.81	2.5	ug/L	
2-Nitrotoluene	50	54.5	4.61	8.9	ug/L	
3-Nitrotoluene	50	54.0	4.13	8	ug/L	
4-Nitrotoluene	50	53.7	5.82	7.5	ug/L	
4-Amino-2,6-Dinitrotoluene	50	50.4	4.12	.7	ug/L	
HMX	50	50.6	6.30	1.2	ug/L	
Nitrobenzene	50	49.9	2.68	.2	ug/L	
RDX	50	52.9	5.31	5.8	ug/L	
Tetryl	50	44.6	3.85	10.7	ug/L	

* Exceeds %D Limit



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LHAAP-013

Page 1 of 2

Project Number: 845714

Samples Shipment Date: 13 MAY 2005

Bill To: Diane Meyer

3010 Briarpark Drive

Houston

TX 77042

Project Name: Longhorn Army Ammunition Plant Lab Destination: Kemron Lab

Sample Coordinator: Phil Conley

Lab Contact: Stephanie Mossburg

Report To: Diane Meyer

3010 Briarpark Drive

Houston

TX 77042

Turnaround Time:

Project Contact: Diane Meyer

Carrier/Waybill No.: UPS/J178 825 534 4

Special Instructions:

Possible Hazard Identification:

Radiological ☐Non-hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown ☐

Sample Disposal:

Return to Client ☐Disposal by Lab ☐Archive ☐

(mos.)

1. Relinquished By
(Signature/Affiliation)

Date:

Time:

1. Received By
(Signature/Affiliation)

Date:

Time:

2. Relinquished By
(Signature/Affiliation)

Date:

Time:

2. Received By
(Signature/Affiliation)

Date:

Time:

3. Relinquished By
(Signature/Affiliation)

Date:

Time:

3. Received By
(Signature/Affiliation)

Date:

Time:

Comments:

C/c Vial
Spill
Cooler Temp 1 bag
Sto stored in
locked cooler
over
weekend
bag

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	File	CID	Receipt
051205-TB-2	107-BW-051205-TB-2-TB	12 MAY 2005	14:30	40 mL VOA VIAL	2	HCl-pH 2	Volatiles by SW8260B				N KL13E	
051305-TB-1	LHSMW67-BW-051305-TB-1-TB	13 MAY 2005	07:00	40 mL VOA Vial	2	0.008% Na2S2O3	Volatiles by SW8260B				N KL13E	
29WW26-MAY02-29WW26-GW-29WW26-MAY05-REG		13 MAY 2005	12:30	40 mL VOA VIAL	3	HCl-pH 2	Volatiles by SW8260B				N KL13E	
29WW26-MAY02-29WW26-GW-29WW26-MAY05-REG		13 MAY 2005	12:30	1 L Amb. Glass	2		Nitroaromatics and Nitroamines by 8330				N KL13E	
35CWW106-MA106-GW-35CWW106-MAY05-REG		12 MAY 2005	16:13	40 mL VOA VIAL	3	HCl-pH 2	Volatiles by SW8260B				N KL13E	
35CWW107-MA107-GW-35CWW107-MAY05-REG		12 MAY 2005	14:30	40 mL VOA VIAL	3	HCl-pH 2	Volatiles by SW8260B				N KL13E	
48WW01-MAY04-48WW01-GW-48WW01-MAY05-REG		12 MAY 2005	17:55	40 mL VOA VIAL	3	HCl-pH 2	Volatiles by SW8260B				N KL13E	
LHSMW62-MAY04-LHSMW62-GW-LHSMW62-MAY05-REG		12 MAY 2005	13:35	40 mL VOA VIAL	3	HCl-pH 2	Volatiles by SW8260B				N KL13E	



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LHAAP-013

Page 2 of 2

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
LHSMW63-MAY	LHSMW63-GW-LHSMW63-MAY05-REG	12 MAY 2005	09:15	40 mL VOA VIAL	3 HCl<pH 2	Volatiles by SW8260B			N	KL139	
LHSMW66-MAY	LHSMW66-GW-LHSMW66-MAY05-REG	12 MAY 2005	15:10	40 mL VOA VIAL	28 HCl<pH 2 5-16-05	Volatiles by SW8260B			N	KL139	
LHSMW67-MAY	LHSMW67-GW-LHSMW67-MAY05-REG	13 MAY 2005	10:45	40 mL VOA VIAL	3 HCl<pH 2	Volatiles by SW8260B			N		
LHSMW67-MAY	LHSMW67-GW-LHSMW67-MAY05-D-FD	13 MAY 2005	10:45	40 mL VOA Vial	3 HCl<pH 2	Volatiles by SW8260B			N		
PZ001-MAY05	PZ001-GW-PZ001-MAY05-REG	13 MAY 2005	12:15	40 mL VOA Vial	3 HCl<pH 2	Volatiles by SW8260B			N		
PZ002-MAY05	PZ002-GW-PZ002-MAY05-REG	13 MAY 2005	15:10	40 mL VOA Vial	3 HCl<pH 2	Volatiles by SW8260B			N		
PZ004-MAY05	PZ004-GW-PZ004-MAY05-REG	13 MAY 2005	14:20	40 mL VOA Vial	3 HCl<pH 2	Volatiles by SW8260B			N		

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-01 133201 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Samplenum **Container ID** **Products**

L0505321-02 133202 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Samplenum **Container ID** **Products**

L0505321-03 133203 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-03 133204 8330

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	PREP	W1	EXT	17-MAY-2005 11:27	CEB	JKT
3	DISP	EXT	DISP	18-MAY-2005 08:54	JKT	DEL

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	STORE	W1	A1	17-MAY-2005 14:42	CEB	CEB

Samplenum **Container ID** **Products**

L0505321-04 133205 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:47	MES	JKT

Samplenum **Container ID** **Products**

L0505321-05 133206 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-06 133207 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Samplenum **Container ID** **Products**

L0505321-07 133208 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-08 133209 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Samplenum **Container ID** **Products**

L0505321-09 133210 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	

Samplenum **Container ID** **Products**

L0505321-10 133211 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:48	MES	JKT

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-11 133212 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Samplenum **Container ID** **Products**

L0505321-12 133213 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Samplenum **Container ID** **Products**

L0505321-13 133214

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 09:33	BRG	

Login: L0505321

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 14

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505321-13 133219 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Samplenum **Container ID** **Products**

L0505321-14 133220 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 10:17	BRG	
2	ANALYZ	V1	ORG4	17-MAY-2005 09:49	MES	JKT

SAMPLE RECEIPT FORM

00093656

Date: 5-14-05 Client: Shaw-LAAP 1055
 Shipped By: () Fed-Ex ☒ UPS () DHL () KEMRON () Client () Other
 Opened By: Bly
 Logged By: Bly Login # L05 05321
 IR Temp Gun: 40 () F

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

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	KL1502	2	J1788255344	014	
2	Coleman	1	J1706153367	011	
3	KL1391	1	J1788255335	013	
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: C/C LHAAP-013

Date Received: 5/14/05

_____ 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
C/C 48ww 01-may 05 @ 1755 = labels 15:55
C/C LH5mw63-may 05 @ 915 = labels 1035

_____ Sample containers received broken, leaking or not sealed (List sample ID)

_____ 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**

NO

Name of Person contacted: _____

Company: _____

Service Representative: _____

Date: _____

Last Revised 08/22/03



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

Laboratory Report Number: L0505323

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 our team member noted in the Reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

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mharris@kemron-lab.com

This report was reviewed on May 20, 2005:

A handwritten signature in cursive script, reading "Stephanie Mossburg".

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 an '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 May 20, 2005:

A handwritten signature in cursive script, reading "David E. Vandenberg".

FL DOH NELAP ID: E87551

This report contains a total of **108** pages.

Protecting Our Environmental Future

LABORATORY REPORT

L0505323

00093659

05/20/05 14:47

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: 307-ALLIANCE-798

Work ID: LONGHORN AAP

P.O. Number: 98696

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
08WW01-MAY-05	L0505323-01	12-MAY-05	14-MAY-05
08WW02-MAY-05	L0505323-02	12-MAY-05	14-MAY-05
08WW02-MAY-05-D	L0505323-03	12-MAY-05	14-MAY-05
29WW26-MAY05	L0505323-04	13-MAY-05	14-MAY-05
48WW01-MAY05	L0505323-05	12-MAY-05	14-MAY-05
LHSMW66-MAY05	L0505323-06	12-MAY-05	14-MAY-05
LHSMW66-MAY05	L0505323-07	12-MAY-05	14-MAY-05
LHSMW67-MAY05	L0505323-08	13-MAY-05	14-MAY-05
LHSMW67-MAY05	L0505323-09	13-MAY-05	14-MAY-05
LHSMW67-MAY05-D	L0505323-10	13-MAY-05	14-MAY-05
LHSMW67-MAY05-D	L0505323-11	13-MAY-05	14-MAY-05
PZ001-MAY05	L0505323-12	13-MAY-05	14-MAY-05
PZ001-MAY05	L0505323-13	13-MAY-05	14-MAY-05
PZ002-MAY05	L0505323-14	13-MAY-05	14-MAY-05
PZ002-MAY05	L0505323-15	13-MAY-05	14-MAY-05
PZ004-MAY05	L0505323-16	13-MAY-05	14-MAY-05
PZ004-MAY05	L0505323-17	13-MAY-05	14-MAY-05

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

KEMRON Login No.: L0505323

CHAIN OF CUSTODY: The chain of custody number was LHAPP-014.

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. The requested analysis per the COC for sample LHSMW66 was Dioxins; however, this should have listed total and dissolved TALMET.

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: 16-MAY-05

<i>Stephanie Mossburg</i>

KEMRON ENVIRONMENTAL SERVICES
METALS

KEMRON Login No: L0505323

METHOD

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibrations: 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.

Serial Dilution/Post Digestion Spike: WG189304(6010) - All acceptance criteria were met.

SAMPLES WG189304(6010) - Client samples 12 and 13 yielded results that were over the linear range on initial analysis. The samples were reanalyzed at a dilution for sodium.

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: KHR

Approved: 20-MAY-05

<i>Maren Berry</i>

KEMRON ENVIRONMENTAL SERVICES
METALS

KEMRON Login No: L0505323

METHOD

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibrations: 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.

Serial Dilution/Post Digestion Spike: WG189354(6020) - All acceptance criteria were met.

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: JYH

Approved: 20-MAY-05
<i>Maren Berry</i>

KEMRON ENVIRONMENTAL SERVICES
METALS

KEMRON Login No: L0505323

METHOD

Analysis: 7470A

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibrations: 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.

Serial Dilution/Post Digestion Spike: WG189387(7470A) - All acceptance criteria were met.

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: CRC

Approved: 20-MAY-05
<i>Maren Berry</i>

KEMRON ENVIRONMENTAL SERVICES
Perchlorate**KEMRON Login No.:** L0505323**METHOD****Analysis:** U.S. EPA 314.0**HOLDING TIMES****Sample Preparation:** All holding times were met**Sample Analysis:** All holding times were met**PREPARATION**

Several samples were diluted to get their conductivity within the limits of the method. The reporting limits are elevated accordingly.

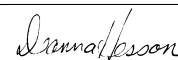
CALIBRATION**Initial Calibration:** All acceptance criteria were met.**Alternate Source Standards:** All acceptance criteria were met.**Continuing Calibration:** All acceptance criteria were met.**BATCH QA/QC****Method Blank:** All acceptance criteria were met.**Laboratory Control Sample:** All acceptance criteria were met.**Matrix Spikes:** All acceptance criteria were met.**SAMPLES**

There were no technical difficulties with this sample group.

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: JWR

Approved: 20-MAY-05



Report Number: **L0505323**Report Date : **May 20, 2005****00093665**

Sample Number: L0505323-01	Prep Method: 314.0	Instrument: IC1
Client ID: 08WW01-MAY-05	Analytical Method: 314.0	Prep Date: 05/17/2005 17:18
Matrix: Water	Analyst: JWR	Cal Date: _____
Workgroup Number: WG189410	Dilution: 1	Run Date: 05/17/2005 17:18
Collect Date: 12-MAY-05	Units: ug/L	File ID: I1051705.17
Sample Tag: 01		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0		U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-02	Prep Method: 314.0	Instrument: IC1
Client ID: 08WW02-MAY-05	Analytical Method: 314.0	Prep Date: 05/17/2005 18:19
Matrix: Water	Analyst: JWR	Cal Date: _____
Workgroup Number: WG189410	Dilution: 4	Run Date: 05/17/2005 18:19
Collect Date: 12-MAY-05	Units: ug/L	File ID: I1051705.20
Sample Tag: DL01		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0	26.6		4.00	2.00

Sample Number: L0505323-03	Prep Method: 314.0	Instrument: IC1
Client ID: 08WW02-MAY-05-D	Analytical Method: 314.0	Prep Date: 05/17/2005 18:39
Matrix: Water	Analyst: JWR	Cal Date: _____
Workgroup Number: WG189410	Dilution: 4	Run Date: 05/17/2005 18:39
Collect Date: 12-MAY-05	Units: ug/L	File ID: I1051705.21
Sample Tag: DL01		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0	26.1		4.00	2.00

Sample Number: L0505323-04	Prep Method: 314.0	Instrument: IC1
Client ID: 29WW26-MAY05	Analytical Method: 314.0	Prep Date: 05/17/2005 17:58
Matrix: Water	Analyst: JWR	Cal Date: _____
Workgroup Number: WG189410	Dilution: 1	Run Date: 05/17/2005 17:58
Collect Date: 13-MAY-05	Units: ug/L	File ID: I1051705.19
Sample Tag: 01		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0		U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093666

Sample Number: <u>L0505323-05</u>	Prep Method: <u>314.0</u>	Instrument: <u>IC1</u>
Client ID: <u>48WW01-MAY05</u>	Analytical Method: <u>314.0</u>	Prep Date: <u>05/17/2005 17:38</u>
Matrix: <u>Water</u>	Analyst: <u>JWR</u>	Cal Date: _____
Workgroup Number: <u>WG189410</u>	Dilution: <u>1</u>	Run Date: <u>05/17/2005 17:38</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>ug/L</u>	File ID: <u>I1051705.18</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0		U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0505323-06</u>	Prep Method: <u>314.0</u>	Instrument: <u>IC1</u>
Client ID: <u>LHSMW66-MAY05</u>	Analytical Method: <u>314.0</u>	Prep Date: <u>05/17/2005 19:00</u>
Matrix: <u>Water</u>	Analyst: <u>JWR</u>	Cal Date: _____
Workgroup Number: <u>WG189410</u>	Dilution: <u>1</u>	Run Date: <u>05/17/2005 19:00</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>ug/L</u>	File ID: <u>I1051705.22</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Perchlorate	14797-73-0		U	1.00	0.500

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0505323-06</u>	Prep Method: <u>3005A</u>	Instrument: <u>PE-ICP</u>
Client ID: <u>LHSMW66-MAY05</u>	Analytical Method: <u>6010B</u>	Prep Date: <u>05/17/2005 09:15</u>
Matrix: <u>Water</u>	Analyst: <u>KHR</u>	Cal Date: <u>05/18/2005 10:27</u>
Workgroup Number: <u>WG189304</u>	Dilution: <u>1</u>	Run Date: <u>05/18/2005 13:41</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>PE.051805.134118</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	2.10		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2		U	0.00400	0.00200
Barium, Total	7440-39-3	1.14		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	44.4		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.00254	J	0.0200	0.00250
Chromium, Total	7440-47-3	0.0668		0.0200	0.00250
Copper, Total	7440-50-8	0.00550	J	0.0200	0.00500
Iron, Total	7439-89-6	2.48		0.0400	0.0200
Potassium, Total	7440-09-7	6.03		1.00	0.250
Magnesium, Total	7439-95-4	31.6		0.500	0.250
Manganese, Total	7439-96-5	0.0292		0.0100	0.00100
Sodium, Total	7440-23-5	176		0.500	0.250
Nickel, Total	7440-02-0	0.0258	J	0.0400	0.00500
Lead, Total	7439-92-1	0.00347	J	0.00500	0.00250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0104	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: L0505323

Report Date : May 20, 2005

00093667

Sample Number: L0505323-06
 Client ID: LHSMW66-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 09:15
 File ID: EL.051905.091550

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Selenium, Total	7782-49-2		U	0.00100	0.000500
Thallium, Total	7440-28-0	0.000114	J	0.000200	0.000100

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: L0505323-06
 Client ID: LHSMW66-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:16
 File ID: HY.051905.131640

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-07
 Client ID: LHSMW66-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 12-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 13:57
 File ID: PE.051805.135714

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	0.0951	J	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2		U	0.00400	0.00200
Barium, Dissolved	7440-39-3	1.20		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000250
Calcium, Dissolved	7440-70-2	49.1		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.0120	J	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.0579		0.0400	0.0200
Potassium, Dissolved	7440-09-7	6.07		1.00	0.250
Magnesium, Dissolved	7439-95-4	34.3		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00100
Sodium, Dissolved	7440-23-5	219		0.500	0.250
Nickel, Dissolved	7440-02-0	0.0142	J	0.0400	0.00500
Lead, Dissolved	7439-92-1	0.00307	J	0.00500	0.00250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0677		0.0200	0.00500

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

Report Number: L0505323

Report Date : May 20, 2005

00093668

Sample Number: <u>L0505323-07</u>	Prep Method: <u>3005A</u>	Instrument: <u>PE-ICP</u>
Client ID: <u>LHSMW66-MAY05</u>	Analytical Method: <u>6010B</u>	Prep Date: <u>05/17/2005 09:15</u>
Matrix: <u>Water</u>	Analyst: <u>KHR</u>	Cal Date: <u>05/18/2005 10:27</u>
Workgroup Number: <u>WG189304</u>	Dilution: <u>1</u>	Run Date: <u>05/18/2005 13:57</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>PE.051805.135714</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
U Not detected at or above adjusted sample detection limit					

Sample Number: <u>L0505323-07</u>	Prep Method: <u>3015</u>	Instrument: <u>ELAN-ICP</u>
Client ID: <u>LHSMW66-MAY05</u>	Analytical Method: <u>6020</u>	Prep Date: <u>05/18/2005 08:00</u>
Matrix: <u>Water</u>	Analyst: <u>JYH</u>	Cal Date: <u>05/19/2005 08:06</u>
Workgroup Number: <u>WG189354</u>	Dilution: <u>1</u>	Run Date: <u>05/19/2005 08:59</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>EL.051905.085943</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000524	J	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.000615	J	0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000103	J	0.000200	0.000100

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

Sample Number: <u>L0505323-07</u>	Prep Method: <u>METHOD</u>	Instrument: <u>HYDRA</u>
Client ID: <u>LHSMW66-MAY05</u>	Analytical Method: <u>7470A</u>	Prep Date: <u>05/18/2005 08:45</u>
Matrix: <u>Water</u>	Analyst: <u>CRC</u>	Cal Date: <u>05/19/2005 12:02</u>
Workgroup Number: <u>WG189387</u>	Dilution: <u>1</u>	Run Date: <u>05/19/2005 13:21</u>
Collect Date: <u>12-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>HY.051905.132138</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0505323-08</u>	Prep Method: <u>3005A</u>	Instrument: <u>PE-ICP</u>
Client ID: <u>LHSMW67-MAY05</u>	Analytical Method: <u>6010B</u>	Prep Date: <u>05/17/2005 09:15</u>
Matrix: <u>Water</u>	Analyst: <u>KHR</u>	Cal Date: <u>05/18/2005 10:27</u>
Workgroup Number: <u>WG189304</u>	Dilution: <u>1</u>	Run Date: <u>05/18/2005 14:12</u>
Collect Date: <u>13-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>PE.051805.141254</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	8.21		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.00283	J	0.00400	0.00200
Barium, Total	7440-39-3	0.168		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	4.47		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.00494	J	0.0200	0.00250

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Report Number: L0505323

Report Date : May 20, 2005

00093669

Sample Number: L0505323-08
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:12
 File ID: PE.051805.141254

Analyte	CAS. Number	Result	Qual	RL	MDL
Chromium, Total	7440-47-3	0.0400		0.0200	0.00250
Copper, Total	7440-50-8	0.00606	J	0.0200	0.00500
Iron, Total	7439-89-6	6.94		0.0400	0.0200
Potassium, Total	7440-09-7	0.860	J	1.00	0.250
Magnesium, Total	7439-95-4	3.06		0.500	0.250
Manganese, Total	7439-96-5	0.0310		0.0100	0.00100
Sodium, Total	7440-23-5	142		0.500	0.250
Nickel, Total	7440-02-0	0.218		0.0400	0.00500
Lead, Total	7439-92-1	0.00366	J	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0116		0.0100	0.00500
Zinc, Total	7440-66-6	0.0531		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: L0505323-08
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 09:32
 File ID: EL.051905.093200

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.00532		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-08
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:27
 File ID: HY.051905.132711

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093670

Sample Number: L0505323-09
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:18
 File ID: PE.051805.141803

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	11.1		0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.00209	J	0.00400	0.00200
Barium, Dissolved	7440-39-3	0.113		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000250
Calcium, Dissolved	7440-70-2	3.70		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.00569	J	0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.0341		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.00633	J	0.0200	0.00500
Iron, Dissolved	7439-89-6	9.01		0.0400	0.0200
Potassium, Dissolved	7440-09-7	0.977	J	1.00	0.250
Magnesium, Dissolved	7439-95-4	3.34		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0287		0.0100	0.00100
Sodium, Dissolved	7440-23-5	170		0.500	0.250
Nickel, Dissolved	7440-02-0	0.239		0.0400	0.00500
Lead, Dissolved	7439-92-1	0.00382	J	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.0151		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0546		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: L0505323-09
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 09:37
 File ID: EL.051905.093724

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00658		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00359		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000103	J	0.000200	0.000100

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

Sample Number: L0505323-09
 Client ID: LHSMW67-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:28
 File ID: HY.051905.132853

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093671

Sample Number: L0505323-10
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:34
 File ID: PE.051805.143445

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	11.4		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.00207	J	0.00400	0.00200
Barium, Total	7440-39-3	0.114		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	3.26		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.00651	J	0.0200	0.00250
Chromium, Total	7440-47-3	0.0520		0.0200	0.00250
Copper, Total	7440-50-8	0.00698	J	0.0200	0.00500
Iron, Total	7439-89-6	9.29		0.0400	0.0200
Potassium, Total	7440-09-7	0.807	J	1.00	0.250
Magnesium, Total	7439-95-4	3.27		0.500	0.250
Manganese, Total	7439-96-5	0.0357		0.0100	0.00100
Sodium, Total	7440-23-5	141		0.500	0.250
Nickel, Total	7440-02-0	0.229		0.0400	0.00500
Lead, Total	7439-92-1	0.00404	J	0.00500	0.00250
Vanadium, Total	7440-62-2	0.0156		0.0100	0.00500
Zinc, Total	7440-66-6	0.0293		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: L0505323-10
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 09:53
 File ID: EL.051905.095355

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000511	J	0.00100	0.000500
Selenium, Total	7782-49-2	0.00534		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

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: L0505323

Report Date : May 20, 2005

00093672

Sample Number: L0505323-10
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:34
 File ID: HY.051905.133455

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-11
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:39
 File ID: PE.051805.143955

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	12.0		0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2		U	0.00400	0.00200
Barium, Dissolved	7440-39-3	0.148		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000250
Calcium, Dissolved	7440-70-2	3.98		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.00569	J	0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.0347		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.00605	J	0.0200	0.00500
Iron, Dissolved	7439-89-6	9.41		0.0400	0.0200
Potassium, Dissolved	7440-09-7	0.966	J	1.00	0.250
Magnesium, Dissolved	7439-95-4	3.41		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0290		0.0100	0.00100
Sodium, Dissolved	7440-23-5	154		0.500	0.250
Nickel, Dissolved	7440-02-0	0.226		0.0400	0.00500
Lead, Dissolved	7439-92-1	0.00383	J	0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.0163		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0282		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: L0505323-11
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 09:59
 File ID: EL.051905.095920

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00560		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00264		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093673

Sample Number: L0505323-11
 Client ID: LHSMW67-MAY05-D
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:36
 File ID: HY.051905.133652

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:45
 File ID: PE.051805.144504

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.288		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2		U	0.00400	0.00200
Barium, Total	7440-39-3	0.0714		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.0100	0.000250
Calcium, Total	7440-70-2	36.3		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4		U	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	0.313		0.0400	0.0200
Potassium, Total	7440-09-7	2.03		1.00	0.250
Magnesium, Total	7439-95-4	20.1		0.500	0.250
Manganese, Total	7439-96-5	0.0686		0.0100	0.00100
Nickel, Total	7440-02-0	0.0378	J	0.0400	0.00500
Lead, Total	7439-92-1	0.00270	J	0.00500	0.00250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	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: L0505323-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: DL01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 20
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 16:08
 File ID: PE.051805.160808

Analyte	CAS. Number	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	594		10.0	5.00

Report Number: L0505323

Report Date : May 20, 2005

00093674

Sample Number: L0505323-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 10:04
 File ID: EL.051905.100442

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Selenium, Total	7782-49-2	0.0126		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-12
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:38
 File ID: HY.051905.133843

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00132		0.000200	0.000100

Sample Number: L0505323-13
 Client ID: PZ001-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:50
 File ID: PE.051805.145014

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	0.0947	J	0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2		U	0.00400	0.00200
Barium, Dissolved	7440-39-3	0.122		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000250
Calcium, Dissolved	7440-70-2	37.0		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4		U	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	0.0852		0.0400	0.0200
Potassium, Dissolved	7440-09-7	2.37		1.00	0.250
Magnesium, Dissolved	7439-95-4	20.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0510		0.0100	0.00100
Nickel, Dissolved	7440-02-0	0.0376	J	0.0400	0.00500
Lead, Dissolved	7439-92-1	0.00263	J	0.00500	0.00250
Vanadium, Dissolved	7440-62-2		U	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

Report Number: L0505323

Report Date : May 20, 2005

00093675

Sample Number: <u>L0505323-13</u>	Prep Method: <u>3005A</u>	Instrument: <u>PE-ICP</u>
Client ID: <u>PZ001-MAY05</u>	Analytical Method: <u>6010B</u>	Prep Date: <u>05/17/2005 09:15</u>
Matrix: <u>Water</u>	Analyst: <u>KHR</u>	Cal Date: <u>05/18/2005 10:27</u>
Workgroup Number: <u>WG189304</u>	Dilution: <u>20</u>	Run Date: <u>05/18/2005 16:13</u>
Collect Date: <u>13-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>PE.051805.161315</u>
Sample Tag: <u>DL01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	605		10.0	5.00

Sample Number: <u>L0505323-13</u>	Prep Method: <u>3015</u>	Instrument: <u>ELAN-ICP</u>
Client ID: <u>PZ001-MAY05</u>	Analytical Method: <u>6020</u>	Prep Date: <u>05/18/2005 08:00</u>
Matrix: <u>Water</u>	Analyst: <u>JYH</u>	Cal Date: <u>05/19/2005 08:06</u>
Workgroup Number: <u>WG189354</u>	Dilution: <u>1</u>	Run Date: <u>05/19/2005 10:10</u>
Collect Date: <u>13-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>EL.051905.101004</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0136		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: <u>L0505323-13</u>	Prep Method: <u>METHOD</u>	Instrument: <u>HYDRA</u>
Client ID: <u>PZ001-MAY05</u>	Analytical Method: <u>7470A</u>	Prep Date: <u>05/18/2005 08:45</u>
Matrix: <u>Water</u>	Analyst: <u>CRC</u>	Cal Date: <u>05/19/2005 12:02</u>
Workgroup Number: <u>WG189387</u>	Dilution: <u>1</u>	Run Date: <u>05/19/2005 13:41</u>
Collect Date: <u>13-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>HY.051905.134115</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00116		0.000200	0.000100

Sample Number: <u>L0505323-14</u>	Prep Method: <u>3005A</u>	Instrument: <u>PE-ICP</u>
Client ID: <u>PZ002-MAY05</u>	Analytical Method: <u>6010B</u>	Prep Date: <u>05/17/2005 09:15</u>
Matrix: <u>Water</u>	Analyst: <u>KHR</u>	Cal Date: <u>05/18/2005 10:27</u>
Workgroup Number: <u>WG189304</u>	Dilution: <u>1</u>	Run Date: <u>05/18/2005 14:55</u>
Collect Date: <u>13-MAY-05</u>	Units: <u>mg/L</u>	File ID: <u>PE.051805.145524</u>
Sample Tag: <u>01</u>		

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	13.3		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.0313		0.00400	0.00200
Barium, Total	7440-39-3	0.138		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000414	J	0.0100	0.000250
Calcium, Total	7440-70-2	11.0		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0139	J	0.0200	0.00250

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Report Number: L0505323

Report Date : May 20, 2005

00093676

Sample Number: L0505323-14
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 14:55
 File ID: PE.051805.145524

Analyte	CAS. Number	Result	Qual	RL	MDL
Chromium, Total	7440-47-3	0.0235		0.0200	0.00250
Copper, Total	7440-50-8	0.0115	J	0.0200	0.00500
Iron, Total	7439-89-6	15.6		0.0400	0.0200
Potassium, Total	7440-09-7	2.45		1.00	0.250
Magnesium, Total	7439-95-4	5.95		0.500	0.250
Manganese, Total	7439-96-5	0.101		0.0100	0.00100
Sodium, Total	7440-23-5	88.5		0.500	0.250
Nickel, Total	7440-02-0	0.0483		0.0400	0.00500
Lead, Total	7439-92-1	0.0189		0.00500	0.00250
Vanadium, Total	7440-62-2	0.0264		0.0100	0.00500
Zinc, Total	7440-66-6	0.0555		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: L0505323-14
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 10:15
 File ID: EL.051905.101527

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00577		0.00100	0.000500
Selenium, Total	7782-49-2	0.00289		0.00100	0.000500
Thallium, Total	7440-28-0	0.000188	J	0.000200	0.000100

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

Sample Number: L0505323-14
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:42
 File ID: HY.051905.134258

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093677

Sample Number: L0505323-15
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 15:00
 File ID: PE.051805.150034

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	2.11		0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.00263	J	0.00400	0.00200
Barium, Dissolved	7440-39-3	0.125		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.0100	0.000250
Calcium, Dissolved	7440-70-2	7.14		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.00501	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	2.49		0.0400	0.0200
Potassium, Dissolved	7440-09-7	0.839	J	1.00	0.250
Magnesium, Dissolved	7439-95-4	4.33		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0542		0.0100	0.00100
Sodium, Dissolved	7440-23-5	105		0.500	0.250
Nickel, Dissolved	7440-02-0	0.0272	J	0.0400	0.00500
Lead, Dissolved	7439-92-1	0.00270	J	0.00500	0.00250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	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

Sample Number: L0505323-15
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 10:20
 File ID: EL.051905.102049

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00188		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Sample Number: L0505323-15
 Client ID: PZ002-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:45
 File ID: HY.051905.134519

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093678

Sample Number: L0505323-16
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 15:05
 File ID: PE.051805.150546

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	13.0		0.100	0.0500
Silver, Total	7440-22-4		U	0.0100	0.00500
Arsenic, Total	7440-38-2	0.0348		0.00400	0.00200
Barium, Total	7440-39-3	0.264		0.0100	0.00250
Beryllium, Total	7440-41-7	0.00160	J	0.0100	0.000250
Calcium, Total	7440-70-2	10.9		0.200	0.100
Cadmium, Total	7440-43-9		U	0.0100	0.00250
Cobalt, Total	7440-48-4	0.0297		0.0200	0.00250
Chromium, Total	7440-47-3	0.0151	J	0.0200	0.00250
Copper, Total	7440-50-8	0.00946	J	0.0200	0.00500
Iron, Total	7439-89-6	10.2		0.0400	0.0200
Potassium, Total	7440-09-7	2.54		1.00	0.250
Magnesium, Total	7439-95-4	6.44		0.500	0.250
Manganese, Total	7439-96-5	0.180		0.0100	0.00100
Sodium, Total	7440-23-5	163		0.500	0.250
Nickel, Total	7440-02-0	0.0309	J	0.0400	0.00500
Lead, Total	7439-92-1	0.0190		0.00500	0.00250
Vanadium, Total	7440-62-2	0.0234		0.0100	0.00500
Zinc, Total	7440-66-6	0.0563		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: L0505323-16
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 10:26
 File ID: EL.051905.102612

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.00617		0.00100	0.000500
Selenium, Total	7782-49-2	0.00664		0.00100	0.000500
Thallium, Total	7440-28-0	0.000225		0.000200	0.000100

Sample Number: L0505323-16
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:51
 File ID: HY.051905.135109

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Report Number: L0505323

Report Date : May 20, 2005

00093679

Sample Number: L0505323-17
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189304
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3005A
 Analytical Method: 6010B
 Analyst: KHR
 Dilution: 1
 Units: mg/L

Instrument: PE-ICP
 Prep Date: 05/17/2005 09:15
 Cal Date: 05/18/2005 10:27
 Run Date: 05/18/2005 15:10
 File ID: PE.051805.151059

Analyte	CAS. Number	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	5.46		0.100	0.0500
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Arsenic, Dissolved	7440-38-2	0.0294		0.00400	0.00200
Barium, Dissolved	7440-39-3	0.251		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.000579	J	0.0100	0.000250
Calcium, Dissolved	7440-70-2	11.4		0.200	0.100
Cadmium, Dissolved	7440-43-9		U	0.0100	0.00250
Cobalt, Dissolved	7440-48-4	0.0216		0.0200	0.00250
Chromium, Dissolved	7440-47-3	0.00525	J	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	3.98		0.0400	0.0200
Potassium, Dissolved	7440-09-7	1.75		1.00	0.250
Magnesium, Dissolved	7439-95-4	5.53		0.500	0.250
Manganese, Dissolved	7439-96-5	0.148		0.0100	0.00100
Sodium, Dissolved	7440-23-5	171		0.500	0.250
Nickel, Dissolved	7440-02-0	0.0220	J	0.0400	0.00500
Lead, Dissolved	7439-92-1	0.0157		0.00500	0.00250
Vanadium, Dissolved	7440-62-2	0.00930	J	0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0402		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: L0505323-17
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189354
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: 3015
 Analytical Method: 6020
 Analyst: JYH
 Dilution: 1
 Units: mg/L

Instrument: ELAN-ICP
 Prep Date: 05/18/2005 08:00
 Cal Date: 05/19/2005 08:06
 Run Date: 05/19/2005 10:31
 File ID: EL.051905.103135

Analyte	CAS. Number	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.00483		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0106		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000127	J	0.000200	0.000100

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

Sample Number: L0505323-17
 Client ID: PZ004-MAY05
 Matrix: Water
 Workgroup Number: WG189387
 Collect Date: 13-MAY-05
 Sample Tag: 01

Prep Method: METHOD
 Analytical Method: 7470A
 Analyst: CRC
 Dilution: 1
 Units: mg/L

Instrument: HYDRA
 Prep Date: 05/18/2005 08:45
 Cal Date: 05/19/2005 12:02
 Run Date: 05/19/2005 13:52
 File ID: HY.051905.135248

Analyte	CAS. Number	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

WORKGROUP SUMMARY BY METHOD

WORKGROUP SUMMARY BY METHOD

00093681

Analysis:Metals Analysis

Extraction Method:3005A

Workgroup:WG189190

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-07	LHSMW66-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-08	LHSMW67-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-09	LHSMW67-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-10	LHSMW67-MAY05-D		05/17/05 09:15			HOT BLOCK	REK
L0505323-11	LHSMW67-MAY05-D		05/17/05 09:15			HOT BLOCK	REK
L0505323-12	PZ001-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-13	PZ001-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-14	PZ002-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-15	PZ002-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-16	PZ004-MAY05		05/17/05 09:15			HOT BLOCK	REK
L0505323-17	PZ004-MAY05		05/17/05 09:15			HOT BLOCK	REK

Analysis:Mercury, Dissolved

Extraction Method:METH0D

Workgroup:WG189295

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-07	LHSMW66-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-08	LHSMW67-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-09	LHSMW67-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-10	LHSMW67-MAY05-D		05/18/05 08:45			HOT BLOCK	REK
L0505323-11	LHSMW67-MAY05-D		05/18/05 08:45			HOT BLOCK	REK
L0505323-12	PZ001-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-13	PZ001-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-14	PZ002-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-15	PZ002-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-16	PZ004-MAY05		05/18/05 08:45			HOT BLOCK	REK
L0505323-17	PZ004-MAY05		05/18/05 08:45			HOT BLOCK	REK

Analysis:Metals Analysis

Extraction Method:3015

Workgroup:WG189299

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-07	LHSMW66-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-08	LHSMW67-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-09	LHSMW67-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-10	LHSMW67-MAY05-D		05/18/05 08:00			MICROWAVE	VC
L0505323-11	LHSMW67-MAY05-D		05/18/05 08:00			MICROWAVE	VC
L0505323-12	PZ001-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-13	PZ001-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-14	PZ002-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-15	PZ002-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-16	PZ004-MAY05		05/18/05 08:00			MICROWAVE	VC
L0505323-17	PZ004-MAY05		05/18/05 08:00			MICROWAVE	VC

Analysis:Metals Analysis

Analytical Method:6010B

Workgroup:WG189304

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/17/05 09:15	05/18/05 13:41	01	PE-ICP	KHR
L0505323-07	LHSMW66-MAY05		05/17/05 09:15	05/18/05 13:57	01	PE-ICP	KHR
L0505323-08	LHSMW67-MAY05		05/17/05 09:15	05/18/05 14:12	01	PE-ICP	KHR
L0505323-09	LHSMW67-MAY05		05/17/05 09:15	05/18/05 14:18	01	PE-ICP	KHR
L0505323-10	LHSMW67-MAY05-D		05/17/05 09:15	05/18/05 14:34	01	PE-ICP	KHR
L0505323-11	LHSMW67-MAY05-D		05/17/05 09:15	05/18/05 14:39	01	PE-ICP	KHR
L0505323-12	PZ001-MAY05		05/17/05 09:15	05/18/05 14:45	01	PE-ICP	KHR
L0505323-12	PZ001-MAY05		05/17/05 09:15	05/18/05 16:08	DL01	PE-ICP	KHR
L0505323-13	PZ001-MAY05		05/17/05 09:15	05/18/05 14:50	01	PE-ICP	KHR
L0505323-13	PZ001-MAY05		05/17/05 09:15	05/18/05 16:13	DL01	PE-ICP	KHR
L0505323-14	PZ002-MAY05		05/17/05 09:15	05/18/05 14:55	01	PE-ICP	KHR
L0505323-15	PZ002-MAY05		05/17/05 09:15	05/18/05 15:00	01	PE-ICP	KHR
L0505323-16	PZ004-MAY05		05/17/05 09:15	05/18/05 15:05	01	PE-ICP	KHR
L0505323-17	PZ004-MAY05		05/17/05 09:15	05/18/05 15:10	01	PE-ICP	KHR

WORKGROUP SUMMARY BY METHOD

00093683

Analysis:Metals Analysis

Analytical Method:6020

Workgroup:WG189354

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/18/05 08:00	05/19/05 09:15	01	ELAN-ICP	JYH
L0505323-07	LHSMW66-MAY05		05/18/05 08:00	05/19/05 08:59	01	ELAN-ICP	JYH
L0505323-08	LHSMW67-MAY05		05/18/05 08:00	05/19/05 09:32	01	ELAN-ICP	JYH
L0505323-09	LHSMW67-MAY05		05/18/05 08:00	05/19/05 09:37	01	ELAN-ICP	JYH
L0505323-10	LHSMW67-MAY05-D		05/18/05 08:00	05/19/05 09:53	01	ELAN-ICP	JYH
L0505323-11	LHSMW67-MAY05-D		05/18/05 08:00	05/19/05 09:59	01	ELAN-ICP	JYH
L0505323-12	PZ001-MAY05		05/18/05 08:00	05/19/05 10:04	01	ELAN-ICP	JYH
L0505323-13	PZ001-MAY05		05/18/05 08:00	05/19/05 10:10	01	ELAN-ICP	JYH
L0505323-14	PZ002-MAY05		05/18/05 08:00	05/19/05 10:15	01	ELAN-ICP	JYH
L0505323-15	PZ002-MAY05		05/18/05 08:00	05/19/05 10:20	01	ELAN-ICP	JYH
L0505323-16	PZ004-MAY05		05/18/05 08:00	05/19/05 10:26	01	ELAN-ICP	JYH
L0505323-17	PZ004-MAY05		05/18/05 08:00	05/19/05 10:31	01	ELAN-ICP	JYH

Analysis:Mercury, Dissolved

Analytical Method:7470A

Workgroup:WG189387

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-06	LHSMW66-MAY05		05/18/05 08:45	05/19/05 13:16	01	HYDRA	CRC
L0505323-07	LHSMW66-MAY05		05/18/05 08:45	05/19/05 13:21	01	HYDRA	CRC
L0505323-08	LHSMW67-MAY05		05/18/05 08:45	05/19/05 13:27	01	HYDRA	CRC
L0505323-09	LHSMW67-MAY05		05/18/05 08:45	05/19/05 13:28	01	HYDRA	CRC
L0505323-10	LHSMW67-MAY05-D		05/18/05 08:45	05/19/05 13:34	01	HYDRA	CRC
L0505323-11	LHSMW67-MAY05-D		05/18/05 08:45	05/19/05 13:36	01	HYDRA	CRC
L0505323-12	PZ001-MAY05		05/18/05 08:45	05/19/05 13:38	01	HYDRA	CRC
L0505323-13	PZ001-MAY05		05/18/05 08:45	05/19/05 13:41	01	HYDRA	CRC
L0505323-14	PZ002-MAY05		05/18/05 08:45	05/19/05 13:42	01	HYDRA	CRC
L0505323-15	PZ002-MAY05		05/18/05 08:45	05/19/05 13:45	01	HYDRA	CRC
L0505323-16	PZ004-MAY05		05/18/05 08:45	05/19/05 13:51	01	HYDRA	CRC
L0505323-17	PZ004-MAY05		05/18/05 08:45	05/19/05 13:52	01	HYDRA	CRC

Analysis:Perchlorate

Analytical Method:314.0

Workgroup:WG189410

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-01	08WW01-MAY-05			05/17/05 17:18	01	IC1	JWR
L0505323-02	08WW02-MAY-05			05/17/05 18:19	DL01	IC1	JWR
L0505323-03	08WW02-MAY-05-D			05/17/05 18:39	DL01	IC1	JWR
L0505323-04	29WW26-MAY05			05/17/05 17:58	01	IC1	JWR
L0505323-05	48WW01-MAY05			05/17/05 17:38	01	IC1	JWR
L0505323-06	LHSMW66-MAY05			05/17/05 19:00	01	IC1	JWR

Analysis:Perchlorate

Extraction Method:314.0

Workgroup:WG189410

Lab ID	Client ID	Tclp Date	Prep Date	Analysis Date	Tag	Inst Id	Analyst
L0505323-01	08WW01-MAY-05		05/17/05 15:15			FILTER	JWR
L0505323-02	08WW02-MAY-05		05/17/05 15:15			FILTER	JWR
L0505323-03	08WW02-MAY-05-D		05/17/05 15:15			FILTER	JWR
L0505323-04	29WW26-MAY05		05/17/05 15:15			FILTER	JWR
L0505323-05	48WW01-MAY05		05/17/05 15:15			FILTER	JWR
L0505323-06	LHSMW66-MAY05		05/17/05 15:15			FILTER	JWR

Kemron Environmental Services
Analyst Listing May 20, 2005

AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BOCK	ALT - ANN L. THAYER
BRG - BRENDA R. GREGORY	CAF - CHERYL A. FLOWERS	CAK - CHERYL A. KOELSCH
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD	CLK - CARL L. KING
CLS - CARA L. STRICKLER	CLW - CHARISSA L. WINTERS	CM - CHARLIE MARTIN
CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS	CRC - CARLA R. COCHRAN
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	DP - DEANNA L. PIERSON
DR - DEANNA ROBERTS	DRB - DOUG R. BARNETT	DSM - DAVID S. MOSSOR
DST - DENNIS S. TEPE	ECL - ERIC C. LAWSON	ED - EMILY E. DECKER
HAV - HEMA VILASAGAR	JAL - JOHN A. LENT	JJG - JOHN J. GREUEY
JKT - JANE K. THOMPSON	JLS - JANICE L. SCHIMMEL	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATHRYN E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF
LSA - LUCINDA S. ARNOLD	LSB - LESLIE S. BUCINA	MAH - MICALYN A. HARRIS
MDA - MICHAEL 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
OGT - OKEY G. TUCKER	PAS - PATRICK A. STREET	RB - ROBERT BUCHANAN
RDC - REBECCA D. CUTLIP	REK - ROBERT E. KYER	RWC - RODNEY W. CAMPBELL
SCM - SUSAN C. MOELLENDICK	SK - SANDRA KEENER	SLM - STEPHANIE L. MOSSBURG
SLP - SHERI L. PFALZGRAF	SMH - SHAUNA M. HYDE	TD - TIMOTHY DYSERT
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER	VKL - VICKY K. LAUER

KEMRON Environmental Services, Inc.

List of Valid Qualifiers

May 20, 2005

These are KEMRON's standard report qualifiers:

B	Present in the method blank	NS	Not spiked
C	Confirmed by GC/MS	P	Concentration >40% difference between the two GC columns
CG	Confluent growth		
D	The analyte was quantified as a secondary dilution factor	QNS	Quantity not sufficient to perform analysis
DL	Surrogate or spike was diluted out	RA	Reanalysis confirms reported results
		RE	Reanalysis confirms sample matrix interference
E	Estimated concentration due to sample matrix interference	S	Analyzed by method of standard addition
FL	Free liquid	SMI	Sample matrix interference on surrogate
I	Semi-quantitative result, out of instrument calibration range	SP	Reported results are for spike compounds only
J	Present below normal reporting limit	TNTC	Too numerous to count
L	Sample reporting limits elevated due to matrix interference	U	Analyzed for but not detected
N	Tentatively Identified Compound (TIC)	W	Post-digestion spike for furnace AA out of control limits
NA	Not applicable	X	Exceeds regulatory limit
ND	Not detected at or above the reporting limit (RL)	Z	Can not be resolved from isomer.***
NF	Not found	+	Correlation coefficient for the MSA is less than 0.995
NFL	No free liquid	<	Less than
NI	Non-ignitable	>	Greater than
		*	Surrogate or spike compound out of range

*****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.

AFCEE Qualifiers

These are KEMRON's AFCEE Report Qualifiers

- J** The analyte was positively identified, the quantitation is an estimation.
- U** The analyte was analyzed for, but not detected. The associated numerical value is at or below the MDL
- F** The analyte was positively identified by the associated numerical value is below the RL
- R** The data is unusable due to deficiencies in the ability to analyze the sample and meet QC criteria
- B** The analyte was found in an associated blank, as well as in the sample
- M** The matrix effect was present
- S** To be applied to all field screening data
- T** Tentatively identified compound (using GC/MS)

Inorganic QA/QC

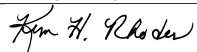
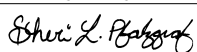
KEMRON Environmental Services
Data Checklist

Date: May 18, 2005
Analyst: KIM H. RHODES
Analyst2: MAREN M. BEERY
Method: 6010B
Instrument: PE-ICP
Curve Workgroup: 189302
Analytical Workgroups: 189247, 189304, 189348

Run Log ID:	5015
Calibration/Linearity	✓
ICV/CCV	✓
ICB/CCB	✓
ICSA/ICSAB	✓
CRI	
Blank/LCS	✓
MS/MSD	✓
Post Spike/Serial Dilution	✓
Upload Results	✓
Data Qualifiers	
Generate PDF Instrument Data	✓
Sign/Annotate PDF Data	✓
Upload Curve Data	✓
Workgroup Forms	✓
Case Narrative	✓
Client Forms	✓
Level X	303
Level 3	276, 323, 324, 334, 335
Level 4	300
Check for compliance with method and project specific requirements	✓
Check the completeness of reported information	✓
Check the information for the report narrative	✓
Primary Reviewer	KHR
Secondary Reviewer	SLP

Comments

Approved By:

Primary: May 18, 2005	Secondary: May 20, 2005
	

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093689

Analytical Method: 6010B
Login Number: L0505323

AAB#: WG189304

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
LHSMW66-MAY05	05/12/05	05/14/05	05/17/05	180	4.75	05/18/05	180	1.18	
LHSMW66-MAY05	05/12/05	05/14/05	05/17/05	180	4.75	05/18/05	180	1.20	
LHSMW67-MAY05	05/13/05	05/14/05	05/17/05	180	3.94	05/18/05	180	1.21	
LHSMW67-MAY05	05/13/05	05/14/05	05/17/05	180	3.94	05/18/05	180	1.21	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/17/05	180	3.94	05/18/05	180	1.22	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/17/05	180	3.94	05/18/05	180	1.23	
PZ001-MAY05	05/13/05	05/14/05	05/17/05	180	3.88	05/18/05	180	1.23	
PZ001-MAY05	05/13/05	05/14/05	05/17/05	180	3.88	05/18/05	180	1.29	
PZ001-MAY05	05/13/05	05/14/05	05/17/05	180	3.88	05/18/05	180	1.23	
PZ001-MAY05	05/13/05	05/14/05	05/17/05	180	3.88	05/18/05	180	1.29	
PZ002-MAY05	05/13/05	05/14/05	05/17/05	180	3.75	05/18/05	180	1.24	
PZ002-MAY05	05/13/05	05/14/05	05/17/05	180	3.75	05/18/05	180	1.24	
PZ004-MAY05	05/13/05	05/14/05	05/17/05	180	3.79	05/18/05	180	1.24	
PZ004-MAY05	05/13/05	05/14/05	05/17/05	180	3.79	05/18/05	180	1.25	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L0505323
Blank File ID: PE.051805.133058
Date Analyzed: 05/18/05
Time Analyzed: 13:30
Analyst: KHR

Work Group: WG189304
Blank Sample ID: WG189190-02
Instrument ID: PE-ICP
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG189190-03	PE.051805.133606	05/18/05 13:36	01
LHSMW66-MAY05	L0505323-06	PE.051805.134118	05/18/05 13:41	01
LHSMW66-MAY05	L0505323-07	PE.051805.135714	05/18/05 13:57	01
LHSMW67-MAY05	L0505323-08	PE.051805.141254	05/18/05 14:12	01
LHSMW67-MAY05	L0505323-09	PE.051805.141803	05/18/05 14:18	01
LHSMW67-MAY05-D	L0505323-10	PE.051805.143445	05/18/05 14:34	01
LHSMW67-MAY05-D	L0505323-11	PE.051805.143955	05/18/05 14:39	01
PZ001-MAY05	L0505323-12	PE.051805.144504	05/18/05 14:45	01
PZ001-MAY05	L0505323-13	PE.051805.145014	05/18/05 14:50	01
PZ002-MAY05	L0505323-14	PE.051805.145524	05/18/05 14:55	01
PZ002-MAY05	L0505323-15	PE.051805.150034	05/18/05 15:00	01
PZ004-MAY05	L0505323-16	PE.051805.150546	05/18/05 15:05	01
PZ004-MAY05	L0505323-17	PE.051805.151059	05/18/05 15:10	01
PZ001-MAY05	L0505323-12	PE.051805.160808	05/18/05 16:08	DL01
PZ001-MAY05	L0505323-13	PE.051805.161315	05/18/05 16:13	DL01

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189190-02
 Instrument ID: PE-ICP Run Time: 13:30 Prep Method: 3005A
 File ID: PE.051805.133058 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG189304 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 18-MAY-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	0.0514	1	J
Silver	0.00500	0.0100	0.00500	1	U
Arsenic	0.00200	0.00400	0.00200	1	U
Barium	0.00250	0.0100	0.00250	1	U
Beryllium	0.000250	0.0100	0.000250	1	U
Calcium	0.100	0.200	0.100	1	U
Cadmium	0.00250	0.0100	0.00250	1	U
Cobalt	0.00250	0.0200	0.00250	1	U
Chromium	0.00250	0.0200	0.00250	1	U
Copper	0.00500	0.0200	0.00500	1	U
Iron	0.0200	0.0400	0.0255	1	J
Potassium	0.250	1.00	0.250	1	U
Magnesium	0.250	0.500	0.250	1	U
Manganese	0.00100	0.0100	0.00100	1	U
Sodium	0.250	0.500	0.250	1	U
Nickel	0.00500	0.0400	0.00500	1	U
Lead	0.00250	0.00500	0.00250	1	U
Vanadium	0.00500	0.0100	0.00500	1	U
Zinc	0.00500	0.0200	0.00500	1	U

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189190-03
 Instrument ID: PE-ICP Run Time: 13:36 Prep Method: 3005A
 File ID: PE.051805.133606 Analyst: KHR Method: 6010B
 Workgroup (AAB#): WG189304 Matrix: Water Units: mg/L
 Contract #: DACA56-94-D-0020 Cal ID: PE-ICP-18-MAY-2005 10:27

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum	5.00	4.83	96.5	80 - 120	
Silver	0.200	0.193	96.3	80 - 120	
Arsenic	0.200	0.201	101	80 - 120	
Barium	0.500	0.506	101	80 - 120	
Beryllium	0.0250	0.0250	99.9	80 - 120	
Calcium	5.00	5.04	101	80 - 120	
Cadmium	0.0250	0.0239	95.6	80 - 120	
Cobalt	0.100	0.106	106	80 - 120	
Chromium	0.250	0.258	103	80 - 120	
Copper	0.250	0.246	98.5	80 - 120	
Iron	2.00	1.97	98.4	80 - 120	
Potassium	25.0	24.8	99.0	80 - 120	
Magnesium	5.00	4.82	96.3	80 - 120	
Manganese	0.250	0.253	101	80 - 120	
Sodium	25.0	25.4	102	80 - 120	
Nickel	0.250	0.264	105	80 - 120	
Lead	0.250	0.258	103	80 - 120	
Vanadium	0.500	0.495	99.1	80 - 120	
Zinc	0.500	0.519	104	80 - 120	

Loginnum: L0505323 Cal ID: PE-ICP - 18-MAY-2005 10:27 Worknum: WG189304
 Instrument ID: PE-ICP Contract #: DACA56-94-D-0020 Method: 6010B
 Parent ID: WG189190-01 File ID: PE.051805.134118 Dil: 1 Matrix: WATER
 Sample ID: WG189190-04 MS File ID: PE.051805.134638 Dil: 1 Units: mg/L
 Sample ID: WG189190-05 MSD File ID: PE.051805.135156 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	2.10	5.00	8.49	128	5.00	8.64	131	1.75	75 - 125	20	*
Arsenic, Total	ND	0.200	0.199	99.6	0.200	0.202	101	1.56	75 - 125	20	
Barium, Total	1.14	0.500	1.67	104	0.500	1.67	105	0.302	75 - 125	20	
Beryllium, Total	ND	0.0250	0.0264	106	0.0250	0.0270	108	2.17	75 - 125	20	
Cadmium, Total	ND	0.0250	0.0248	99.4	0.0250	0.0252	101	1.48	75 - 125	20	
Calcium, Total	44.4	5.00	50.4	121	5.00	50.5	121	0.0566	75 - 125	20	
Chromium, Total	0.0668	0.250	0.312	98.1	0.250	0.318	100	1.75	75 - 125	20	
Cobalt, Total	0.00254	0.100	0.101	98.7	0.100	0.103	101	1.86	75 - 125	20	
Copper, Total	0.00550	0.250	0.256	100	0.250	0.262	103	2.33	75 - 125	20	
Iron, Total	2.48	2.00	4.35	93.5	2.00	4.41	96.5	1.38	75 - 125	20	
Lead, Total	0.00347	0.250	0.253	99.9	0.250	0.257	102	1.56	75 - 125	20	
Magnesium, Total	31.6	5.00	38.1	129	5.00	38.0	128	0.135	75 - 125	20	*
Manganese, Total	0.0292	0.250	0.276	98.5	0.250	0.281	101	2.07	75 - 125	20	
Nickel, Total	0.0258	0.250	0.267	96.5	0.250	0.272	98.5	1.86	75 - 125	20	
Potassium, Total	6.03	25.0	31.6	102	25.0	32.3	105	1.94	75 - 125	20	
Silver, Total	ND	0.200	0.206	103	0.200	0.210	105	1.92	75 - 125	20	
Sodium, Total	176	25.0	207	125	25.0	207	127	0.187	75 - 125	20	*
Vanadium, Total	ND	0.500	0.492	98.4	0.500	0.502	100	2.09	75 - 125	20	
Zinc, Total	0.0104	0.500	0.495	96.9	0.500	0.504	98.8	1.85	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT

00093694

Sample Login ID: L0505323 _____
Instrument ID: PE-ICP _____
Sample ID: L0505323-07 File ID: PE.051805.135714 Dil: 1 _____
Serial Dilution ID: WG189304-02 File ID: PE.051805.140747 Dil: 5 _____

Worknum: WG189304 _____
Method: 6010B _____
Units: mg/L _____

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Aluminum	0.0951	F	0.306	F	222	
Arsenic	0.000700	U	0.00826	U	1080	
Barium	1.20		1.22		1.67	
Beryllium	ND	U	ND	U		
Cadmium	0.000554	U	0.000319	U	42.4	
Calcium	49.1		50.8		3.46	
Chromium	0.0120	F	0.00717	U	40.3	
Cobalt	ND	U	ND	U		
Copper	0.00259	U	0.00883	U	241	
Iron	0.0579	X	0.254	X	339	
Lead	0.00307	F	0.00650	U	112	
Magnesium	34.3		32.3	X	5.83	
Manganese	ND	U	ND	U		
Nickel	0.0142	F	0.00940	U	33.8	
Potassium	6.07	X	5.84	X	3.79	
Silver	0.00209	U	0.00867	U	315	
Sodium	219		216		1.37	
Vanadium	0.000682	U	0.00246	U	261	
Zinc	0.0677	X	0.190	X	181	

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

00093695

Sample Login ID: L0505323

Worknum: WG189304

Instrument ID: PE-ICP

Method: 6010B

Post Spike ID: WG189304-01 File ID: PE.051805.140237 Dil: 1

Units: mg/L

Sample ID: L0505323-07 File ID: PE.051805.135714 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added (SA)	% R	Q
Aluminum	75 - 125	5.30		0.0951	F	5.0	104	
Arsenic	75 - 125	0.205		0	U	0.2	103	
Barium	75 - 125	1.57		1.20		0.5	98.0	
Beryllium	75 - 125	0.0270		ND	U	0.025	108	
Cadmium	75 - 125	0.0252		0	U	0.025	101	
Calcium	75 - 125	49.0		49.1		5.0	96.2	
Chromium	75 - 125	0.263		0.0120	F	0.25	101	
Cobalt	75 - 125	0.101		ND	U	0.1	101	
Copper	75 - 125	0.260		0	U	0.25	104	
Iron	75 - 125	1.93		0.0579		2.0	93.9	
Lead	75 - 125	0.256		0.00307	F	0.25	101	
Magnesium	75 - 125	36.2		34.3		5.0	107	
Manganese	75 - 125	0.253		ND	U	0.25	101	
Nickel	75 - 125	0.262		0.0142	F	0.25	99.7	
Potassium	75 - 125	31.5		6.07		25.0	104	
Silver	75 - 125	0.210		0	U	0.2	105	
Sodium	75 - 125	222		219		25.0	99.6	
Vanadium	75 - 125	0.497		0	U	0.5	99.4	
Zinc	75 - 125	0.561		0.0677		0.5	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

00093696

Login Number: L0505323

Workgroup (AAB#): WG189304

Analytical Method: 6010B

Instrument ID: PE-ICP

ICAL Worknum: WG189302

Initial Calibration Date: 18-MAY-2005 10:27:13

Analyte	WG189302-01		WG189302-02		WG189302-03		WG189302-04		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT		
Aluminum	0	896.2	.1	2146.1	10	226186.1	20	464257.2	0.999914	
Arsenic	0	-44	.004	17.5	.4	1936.1	.8	3891.6	0.999997	
Barium	0	307.2	.01	3908.6	1	388963.8	2	766418.6	0.999970	
Beryllium	0	-1525.5	.0005	1203.4	.05	125824.4	.1	250688	0.999998	
Cadmium	0	123.2	.0005	133.8	.05	13188.6	.1	26176.3	0.999992	
Calcium	0	163.3	.1	85.2	10	7612.7	20	14922.7	0.999947	
Chromium	0	-1476	.005	1100	.5	107175.5	1	211450.3	0.999975	
Cobalt	0	-8.5	.002	172.8	.2	16735.9	.4	33060.3	0.999980	
Copper	0	2071.2	.005	2446.1	.5	284169.7	1	573350.1	0.999990	
Iron	0	-723.7	.04	261.9	4	57813.8	8	118041.5	0.999949	
Lead	0	55.2	.005	73.3	.5	7402.4	1	14766.5	0.999999	
Magnesium	0	-881.4	.1	3576.6	10	385651.3	20	795374.8	0.999880	
Manganese	0	-2276.8	.005	5288	.5	518874.7	1	1022450.6	0.999971	
Nickel	0	-315	.005	585.1	.5	56078.5	1	110291.2	0.999963	
Potassium	0	1119.8	.5	7612.5	50	774011.2	100	1535618.9	1.00000	
Silver	0	1403.4	.004	3473.6	.4	371297.4	.8	758086.5	0.999945	
Sodium	0	4549.2	.5	17979.2	50	1755750.5	100	3524268.9	1.00000	
Vanadium	0	-86.2	.01	3367.8	1	364826.2	2	727748.6	0.999999	
Zinc	0	194.6	.01	2694.8	1	184580	2	365997.9	0.999991	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

KEMRON Environmental Services
INITIAL CALIBRATION BLANK REPORT

00093697

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-06
Instrument ID: PE-ICP Run Time: 10:37 Method: 6010B
File ID: PE.051805.103757 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0515	1	F
Silver	0.00500	0.0100	.0018	1	U
Arsenic	0.00200	0.00400	.000729	1	U
Barium	0.00250	0.0100	-.00275	1	F
Beryllium	0.000250	0.0100	-.0000506	1	U
Calcium	0.100	0.200	-.0267	1	U
Cadmium	0.00250	0.0100	-.0000476	1	U
Cobalt	0.00250	0.0200	-.000472	1	U
Chromium	0.00250	0.0200	-.00148	1	U
Copper	0.00500	0.0200	.00125	1	U
Iron	0.0200	0.0400	.0267	1	F
Potassium	0.250	1.00	.0355	1	U
Magnesium	0.250	0.500	.0583	1	U
Manganese	0.00100	0.0100	-.00149	1	F
Sodium	0.250	0.500	.00751	1	U
Nickel	0.00500	0.0400	-.00176	1	U
Lead	0.00250	0.00500	.0000774	1	U
Vanadium	0.00500	0.0100	.000116	1	U
Zinc	0.00500	0.0200	-.00333	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093698

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-10
Instrument ID: PE-ICP	Run Time: 10:58	Method: 6010B
File ID: PE.051805.105839	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0534	1	F
Silver	0.00500	0.0100	.00194	1	U
Arsenic	0.00200	0.00400	.000952	1	U
Barium	0.00250	0.0100	-.00275	1	F
Beryllium	0.000250	0.0100	-.0000344	1	U
Calcium	0.100	0.200	-.0228	1	U
Cadmium	0.00250	0.0100	-.0000367	1	U
Cobalt	0.00250	0.0200	-.000522	1	U
Chromium	0.00250	0.0200	-.00157	1	U
Copper	0.00500	0.0200	.00135	1	U
Iron	0.0200	0.0400	.0277	1	F
Potassium	0.250	1.00	.0137	1	U
Magnesium	0.250	0.500	.0592	1	U
Manganese	0.00100	0.0100	-.00153	1	F
Sodium	0.250	0.500	-.00528	1	U
Nickel	0.00500	0.0400	-.00173	1	U
Lead	0.00250	0.00500	.000174	1	U
Vanadium	0.00500	0.0100	-.00013	1	U
Zinc	0.00500	0.0200	-.00338	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093699

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-14
Instrument ID: PE-ICP	Run Time: 12:33	Method: 6010B
File ID: PE.051805.123354	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0525	1	F
Silver	0.00500	0.0100	.00168	1	U
Arsenic	0.00200	0.00400	.00106	1	U
Barium	0.00250	0.0100	-.00276	1	F
Beryllium	0.000250	0.0100	-.0000655	1	U
Calcium	0.100	0.200	-.0268	1	U
Cadmium	0.00250	0.0100	-.0000704	1	U
Cobalt	0.00250	0.0200	-.000601	1	U
Chromium	0.00250	0.0200	-.00164	1	U
Copper	0.00500	0.0200	.00133	1	U
Iron	0.0200	0.0400	.0267	1	F
Potassium	0.250	1.00	.0153	1	U
Magnesium	0.250	0.500	.0581	1	U
Manganese	0.00100	0.0100	-.00153	1	F
Sodium	0.250	0.500	-.00203	1	U
Nickel	0.00500	0.0400	-.00165	1	U
Lead	0.00250	0.00500	.0000074	1	U
Vanadium	0.00500	0.0100	-.0000527	1	U
Zinc	0.00500	0.0200	-.00362	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093700

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-18
Instrument ID: PE-ICP	Run Time: 14:28	Method: 6010B
File ID: PE.051805.142825	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0529	1	F
Silver	0.00500	0.0100	.00179	1	U
Arsenic	0.00200	0.00400	.000976	1	U
Barium	0.00250	0.0100	-.00275	1	F
Beryllium	0.000250	0.0100	-.0000702	1	U
Calcium	0.100	0.200	-.0212	1	U
Cadmium	0.00250	0.0100	-.0000728	1	U
Cobalt	0.00250	0.0200	-.000667	1	U
Chromium	0.00250	0.0200	-.00157	1	U
Copper	0.00500	0.0200	.00109	1	U
Iron	0.0200	0.0400	.0263	1	F
Potassium	0.250	1.00	.0325	1	U
Magnesium	0.250	0.500	.0594	1	U
Manganese	0.00100	0.0100	-.00151	1	F
Sodium	0.250	0.500	.0601	1	U
Nickel	0.00500	0.0400	-.0016	1	U
Lead	0.00250	0.00500	.00028	1	U
Vanadium	0.00500	0.0100	.0000389	1	U
Zinc	0.00500	0.0200	-.00369	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093701

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-20
Instrument ID: PE-ICP	Run Time: 15:21	Method: 6010B
File ID: PE.051805.152126	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0522	1	F
Silver	0.00500	0.0100	.00185	1	U
Arsenic	0.00200	0.00400	.000573	1	U
Barium	0.00250	0.0100	-.00277	1	F
Beryllium	0.000250	0.0100	-.0000577	1	U
Calcium	0.100	0.200	-.0306	1	U
Cadmium	0.00250	0.0100	-.0000976	1	U
Cobalt	0.00250	0.0200	-.000634	1	U
Chromium	0.00250	0.0200	-.00145	1	U
Copper	0.00500	0.0200	.00107	1	U
Iron	0.0200	0.0400	.0272	1	F
Potassium	0.250	1.00	.0672	1	U
Magnesium	0.250	0.500	.0597	1	U
Manganese	0.00100	0.0100	-.00148	1	F
Sodium	0.250	0.500	.164	1	U
Nickel	0.00500	0.0400	-.00153	1	U
Lead	0.00250	0.00500	.000447	1	U
Vanadium	0.00500	0.0100	-.0000972	1	U
Zinc	0.00500	0.0200	-.0039	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093702

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-22
Instrument ID: PE-ICP	Run Time: 16:03	Method: 6010B
File ID: PE.051805.160304	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.052	1	F
Silver	0.00500	0.0100	.00177	1	U
Arsenic	0.00200	0.00400	.00112	1	U
Barium	0.00250	0.0100	-.00277	1	F
Beryllium	0.000250	0.0100	-.0000691	1	U
Calcium	0.100	0.200	-.0222	1	U
Cadmium	0.00250	0.0100	-.000106	1	U
Cobalt	0.00250	0.0200	-.000668	1	U
Chromium	0.00250	0.0200	-.00155	1	U
Copper	0.00500	0.0200	.000978	1	U
Iron	0.0200	0.0400	.0232	1	F
Potassium	0.250	1.00	.0357	1	U
Magnesium	0.250	0.500	.0598	1	U
Manganese	0.00100	0.0100	-.0015	1	F
Sodium	0.250	0.500	.0862	1	U
Nickel	0.00500	0.0400	-.00153	1	U
Lead	0.00250	0.00500	.000216	1	U
Vanadium	0.00500	0.0100	-.0000507	1	U
Zinc	0.00500	0.0200	-.00413	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093703

Login Number: L0505323	Run Date: 05/18/2005	Sample ID: WG189302-24
Instrument ID: PE-ICP	Run Time: 16:44	Method: 6010B
File ID: PE.051805.164413	Analyst: KHR	Units: mg/L
Workgroup (AAB#): WG189304	Cal ID: PE-ICP - 18-MAY-05	

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Aluminum	0.0500	0.100	.0517	1	F
Silver	0.00500	0.0100	.00171	1	U
Arsenic	0.00200	0.00400	.000988	1	U
Barium	0.00250	0.0100	-.00279	1	F
Beryllium	0.000250	0.0100	-.0000428	1	U
Calcium	0.100	0.200	-.0314	1	U
Cadmium	0.00250	0.0100	-.0000911	1	U
Cobalt	0.00250	0.0200	-.000655	1	U
Chromium	0.00250	0.0200	-.00151	1	U
Copper	0.00500	0.0200	.000969	1	U
Iron	0.0200	0.0400	.0242	1	F
Potassium	0.250	1.00	.0192	1	U
Magnesium	0.250	0.500	.0596	1	U
Manganese	0.00100	0.0100	-.00148	1	F
Sodium	0.250	0.500	.0387	1	U
Nickel	0.00500	0.0400	-.00148	1	U
Lead	0.00250	0.00500	.000375	1	U
Vanadium	0.00500	0.0100	-.0000421	1	U
Zinc	0.00500	0.0200	-.00413	1	U

U = Result is less than MDL
F = Result is between MDL and RL

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-05
 Instrument ID: PE-ICP Run Time: 10:32 Method: 6010B
 File ID: PE.051805.103234 Analyst: KHR Units: mg/L
 Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	9.69	96.9	90 - 110	
Silver	.4	0.384	96.1	90 - 110	
Arsenic	.4	0.393	98.2	90 - 110	
Barium	1	1.02	102	90 - 110	
Beryllium	.05	0.0502	100	90 - 110	
Calcium	10	9.90	99.0	90 - 110	
Cadmium	.05	0.0480	96.1	90 - 110	
Cobalt	.2	0.202	101	90 - 110	
Chromium	.5	0.515	103	90 - 110	
Copper	.5	0.503	101	90 - 110	
Iron	4	4.09	102	90 - 110	
Potassium	50	50.0	99.9	90 - 110	
Magnesium	10	9.75	97.5	90 - 110	
Manganese	.5	0.510	102	90 - 110	
Sodium	50	52.2	104	90 - 110	
Nickel	.5	0.534	107	90 - 110	
Lead	.5	0.514	103	90 - 110	
Vanadium	1	1.01	101	90 - 110	
Zinc	1	1.03	103	90 - 110	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093705

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-09
Instrument ID: PE-ICP Run Time: 10:53 Method: 6010B
File ID: PE.051805.105326 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.81	98.1	90 - 110	mg/L	
Silver	.4	0.389	97.2	90 - 110	mg/L	
Arsenic	.4	0.398	99.5	90 - 110	mg/L	
Barium	1	1.03	103	90 - 110	mg/L	
Beryllium	.05	0.0508	102	90 - 110	mg/L	
Calcium	10	9.95	99.5	90 - 110	mg/L	
Cadmium	.05	0.0488	97.7	90 - 110	mg/L	
Cobalt	.2	0.207	103	90 - 110	mg/L	
Chromium	.5	0.521	104	90 - 110	mg/L	
Copper	.5	0.509	102	90 - 110	mg/L	
Iron	4	4.11	103	90 - 110	mg/L	
Potassium	50	50.6	101	90 - 110	mg/L	
Magnesium	10	9.82	98.2	90 - 110	mg/L	
Manganese	.5	0.512	102	90 - 110	mg/L	
Sodium	50	52.8	106	90 - 110	mg/L	
Nickel	.5	0.540	108	90 - 110	mg/L	
Lead	.5	0.520	104	90 - 110	mg/L	
Vanadium	1	1.01	101	90 - 110	mg/L	
Zinc	1	1.03	103	90 - 110	mg/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093706

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-13
Instrument ID: PE-ICP Run Time: 12:28 Method: 6010B
File ID: PE.051805.122841 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.81	98.1	90 - 110	mg/L	
Silver	.4	0.388	97.1	90 - 110	mg/L	
Arsenic	.4	0.399	99.8	90 - 110	mg/L	
Barium	1	1.02	102	90 - 110	mg/L	
Beryllium	.05	0.0506	101	90 - 110	mg/L	
Calcium	10	9.98	99.8	90 - 110	mg/L	
Cadmium	.05	0.0487	97.4	90 - 110	mg/L	
Cobalt	.2	0.210	105	90 - 110	mg/L	
Chromium	.5	0.521	104	90 - 110	mg/L	
Copper	.5	0.509	102	90 - 110	mg/L	
Iron	4	4.07	102	90 - 110	mg/L	
Potassium	50	49.9	99.7	90 - 110	mg/L	
Magnesium	10	9.86	98.6	90 - 110	mg/L	
Manganese	.5	0.512	102	90 - 110	mg/L	
Sodium	50	52.8	106	90 - 110	mg/L	
Nickel	.5	0.540	108	90 - 110	mg/L	
Lead	.5	0.522	104	90 - 110	mg/L	
Vanadium	1	1.01	101	90 - 110	mg/L	
Zinc	1	1.03	103	90 - 110	mg/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093707

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-17
Instrument ID: PE-ICP Run Time: 14:23 Method: 6010B
File ID: PE.051805.142312 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.83	98.3	90 - 110	mg/L	
Silver	.4	0.390	97.5	90 - 110	mg/L	
Arsenic	.4	0.399	99.8	90 - 110	mg/L	
Barium	1	1.03	103	90 - 110	mg/L	
Beryllium	.05	0.0506	101	90 - 110	mg/L	
Calcium	10	10.0	100	90 - 110	mg/L	
Cadmium	.05	0.0489	97.8	90 - 110	mg/L	
Cobalt	.2	0.213	107	90 - 110	mg/L	
Chromium	.5	0.522	104	90 - 110	mg/L	
Copper	.5	0.511	102	90 - 110	mg/L	
Iron	4	4.06	102	90 - 110	mg/L	
Potassium	50	50.9	102	90 - 110	mg/L	
Magnesium	10	9.85	98.5	90 - 110	mg/L	
Manganese	.5	0.511	102	90 - 110	mg/L	
Sodium	50	54.0	108	90 - 110	mg/L	
Nickel	.5	0.539	108	90 - 110	mg/L	
Lead	.5	0.523	105	90 - 110	mg/L	
Vanadium	1	1.01	101	90 - 110	mg/L	
Zinc	1	1.02	102	90 - 110	mg/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093708

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-19
Instrument ID: PE-ICP Run Time: 15:16 Method: 6010B
File ID: PE.051805.151612 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.77	97.7	90 - 110	mg/L	
Silver	.4	0.388	97.0	90 - 110	mg/L	
Arsenic	.4	0.393	98.4	90 - 110	mg/L	
Barium	1	1.02	102	90 - 110	mg/L	
Beryllium	.05	0.0501	100	90 - 110	mg/L	
Calcium	10	9.91	99.1	90 - 110	mg/L	
Cadmium	.05	0.0483	96.5	90 - 110	mg/L	
Cobalt	.2	0.214	107	90 - 110	mg/L	
Chromium	.5	0.518	104	90 - 110	mg/L	
Copper	.5	0.509	102	90 - 110	mg/L	
Iron	4	4.02	100	90 - 110	mg/L	
Potassium	50	51.3	103	90 - 110	mg/L	
Magnesium	10	9.80	98.0	90 - 110	mg/L	
Manganese	.5	0.508	102	90 - 110	mg/L	
Sodium	50	54.4	109	90 - 110	mg/L	
Nickel	.5	0.535	107	90 - 110	mg/L	
Lead	.5	0.517	103	90 - 110	mg/L	
Vanadium	1	0.996	99.6	90 - 110	mg/L	
Zinc	1	1.01	101	90 - 110	mg/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093709

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-21
Instrument ID: PE-ICP Run Time: 15:57 Method: 6010B
File ID: PE.051805.155751 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.70	97.0	90 - 110	mg/L	
Silver	.4	0.385	96.2	90 - 110	mg/L	
Arsenic	.4	0.394	98.4	90 - 110	mg/L	
Barium	1	1.01	101	90 - 110	mg/L	
Beryllium	.05	0.0497	99.4	90 - 110	mg/L	
Calcium	10	9.87	98.7	90 - 110	mg/L	
Cadmium	.05	0.0478	95.6	90 - 110	mg/L	
Cobalt	.2	0.213	107	90 - 110	mg/L	
Chromium	.5	0.514	103	90 - 110	mg/L	
Copper	.5	0.504	101	90 - 110	mg/L	
Iron	4	3.95	98.6	90 - 110	mg/L	
Potassium	50	50.6	101	90 - 110	mg/L	
Magnesium	10	9.75	97.5	90 - 110	mg/L	
Manganese	.5	0.506	101	90 - 110	mg/L	
Sodium	50	53.4	107	90 - 110	mg/L	
Nickel	.5	0.532	106	90 - 110	mg/L	
Lead	.5	0.516	103	90 - 110	mg/L	
Vanadium	1	0.992	99.2	90 - 110	mg/L	
Zinc	1	1.00	100	90 - 110	mg/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093710

Login Number: L0505323 Run Date: 05/18/2005 Sample ID: WG189302-23
Instrument ID: PE-ICP Run Time: 16:38 Method: 6010B
File ID: PE.051805.163858 Analyst: KHR
Workgroup (AAB#): WG189304 Cal ID: PE-ICP - 18-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Aluminum	10	9.75	97.5	90 - 110	mg/L	
Silver	.4	0.388	97.0	90 - 110	mg/L	
Arsenic	.4	0.395	98.7	90 - 110	mg/L	
Barium	1	1.01	101	90 - 110	mg/L	
Beryllium	.05	0.0498	99.7	90 - 110	mg/L	
Calcium	10	9.90	99.0	90 - 110	mg/L	
Cadmium	.05	0.0481	96.2	90 - 110	mg/L	
Cobalt	.2	0.214	107	90 - 110	mg/L	
Chromium	.5	0.516	103	90 - 110	mg/L	
Copper	.5	0.509	102	90 - 110	mg/L	
Iron	4	3.96	99.1	90 - 110	mg/L	
Potassium	50	50.7	101	90 - 110	mg/L	
Magnesium	10	9.75	97.5	90 - 110	mg/L	
Manganese	.5	0.505	101	90 - 110	mg/L	
Sodium	50	53.2	106	90 - 110	mg/L	
Nickel	.5	0.531	106	90 - 110	mg/L	
Lead	.5	0.518	104	90 - 110	mg/L	
Vanadium	1	0.989	98.9	90 - 110	mg/L	
Zinc	1	0.995	99.5	90 - 110	mg/L	

* Exceeds LIMITS Limit

**KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES**

00093711

Login number: L0505323
Instrument ID: PE-ICP
Sol. A : WG189302-07
Sol. AB : WG189302-08

File ID: PE.051805.104302
File ID: PE.051805.104813

Workgroup (AAB#): WG189304
Method: 6010B
Units: mg/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	267	107	250	268	107	
Arsenic	NS	0.00578	NS	0.250	0.265	106	
Barium	NS	-0.000860	NS	0.250	0.250	100	
Beryllium	NS	-0.000760	NS	0.250	0.293	117	
Cadmium	NS	-0.000170	NS	0.500	0.527	105	
Calcium	250	278	111	250	277	111	
Chromium	NS	-0.00232	NS	0.250	0.244	97.6	
Cobalt	NS	0.00487	NS	0.250	0.239	95.6	
Copper	NS	-0.00399	NS	0.250	0.275	110	
Iron	100	93.8	93.8	100	93.7	93.7	
Lead	NS	0.00729	NS	0.500	0.494	98.8	
Magnesium	250	265	106	250	266	106	
Manganese	NS	-0.0000500	NS	0.250	0.254	102	
Nickel	NS	-0.00291	NS	0.500	0.466	93.2	
Potassium	NS	-0.185	NS	5.00	5.00	100	
Silver	NS	0.000150	NS	0.500	0.568	114	
Sodium	NS	0.0696	NS	5.00	5.29	106	
Vanadium	NS	-0.00104	NS	0.250	0.250	100	
Zinc	NS	0.00571	NS	0.500	0.449	89.8	

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 (+/-) 2x the project reporting limit (RL).

KEMRON Environmental Services
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00093712

Login Number: L0505323 **Date:** 03/22/2005
Insturment ID: PE-ICP **Method:** 6010B

Analyte	Wave Length	AL	AS	BA	BE	CA
ALUMINUM	237.30	0	0	0	130	0
ANTIMONY	206.80	0.0800	0	0	0	0
ARSENIC	189.00	-0.0170	0	0	0	0
BARIUM	230.40	0.00200	0	0	0	0
BERYLLIUM	234.90	0.00195	0	0	0	0
CADMIUM	228.80	0	4.90	0	0	0
CALCIUM	227.50	0.866	0	0	0	0
CHROMIUM	267.70	0	0	0	0	0
COBALT	228.60	0	0	-1.20	0	-0.000500
COPPER	327.40	0.00920	0	0	0	0
IRON	261.40	0.0200	0	0	0	0
LEAD	220.40	-0.104	0	0	0	0
MAGNESIUM	279.10	-0.0100	0	0	0	0.105
MANGANESE	257.60	-0.0528	0	0	0	0.000400
MOLYBDENUM	202.00	0.00260	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.50	0	0	0	0	0
SELENIUM	196.00	0.0180	0	0	0	0
SILICON	288.20	-0.350	0	0	0	-0.500
SILVER	328.10	0	0	0	0	0
SODIUM	589.60	0	0	0	0	0
STRONTIUM	407.80	-0.210	0	0	0	-0.100
THALLIUM	190.80	0	0	0	0	0
TIN	189.90	0.0800	0	0	0	-0.0100
TITANIUM	337.30	0	0	0	0	-0.00160
VANADIUM	292.40	0.00100	0	0	0	0
ZINC	206.20	0	0	0	0	0

KEMRON Environmental Services
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00093713

Login Number: L0505323 **Date:** 03/22/2005
Instrument ID: PE-ICP **Method:** 6010B

Analyte	Wave Length	CD	CO	CR	CU	FE
ALUMINUM	237.30	0	-5.40	0	0	5.80
ANTIMONY	206.80	0	0	19.0	0	0.100
ARSENIC	189.00	0	0	-4.12	0	-0.120
BARIUM	230.40	0	0.644	0	0	-0.0200
BERYLLIUM	234.90	0	0	0	0	0.0800
CADMIUM	228.80	0	-3.96	0.140	0	-0.00100
CALCIUM	227.50	0	232	0	0	10.8
CHROMIUM	267.70	0	0	0	0	-0.121
COBALT	228.60	0	0	0.0750	0	-0.00500
COPPER	327.40	0	0	0	0	0
IRON	261.40	-0.0240	-119	-7.90	0	0
LEAD	220.40	0	0	-0.568	0	0.180
MAGNESIUM	279.10	0	0	0	0	0
MANGANESE	257.60	0	0	0.580	0	0.00600
MOLYBDENUM	202.00	0	0	0	0	0
NICKEL	231.60	0	0	-0.0800	0	-0.0130
POTASSIUM	766.50	0	0	0	0	0
SELENIUM	196.00	0	0	0	0	0.250
SILICON	288.20	0	0	0	0	0
SILVER	328.10	0	0	0	0	0
SODIUM	589.60	0	0	0	0	2.00
STRONTIUM	407.80	0	0	0	0	-4.70
THALLIUM	190.80	0	0	0	0	-0.200
TIN	189.90	0	0	0	0	0
TITANIUM	337.30	0	0	0	0	-0.0400
VANADIUM	292.40	0	0	-3.78	0	0.0180
ZINC	206.20	0	0	-3.50	0	-0.0733

KEMRON Environmental Services
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00093714

Login Number: L0505323 **Date:** 03/22/2005
Instrument ID: PE-ICP **Method:** 6010B

Analyte	Wave Length	MG	MN	MO	NI	PB
ALUMINUM	237.30	-0.340	0	0	0	0
ANTIMONY	206.80	0	0.370	3.67	-3.00	0
ARSENIC	189.00	0	-0.00250	5.00	0	0
BARIUM	230.40	0	0	3.30	0	0
BERYLLIUM	234.90	0	0	-0.120	0	0
CADMIUM	228.80	0.000800	0	0	0	0
CALCIUM	227.50	0	0	0	-8.00	0
CHROMIUM	267.70	-0.0201	0	0	0	0
COBALT	228.60	-0.000500	0	-0.920	0	0
COPPER	327.40	0	0	0	0	0
IRON	261.40	-0.100	-5.00	0	0	-5.55
LEAD	220.40	0	0	-1.30	0	0
MAGNESIUM	279.10	0	0	45.0	0	0
MANGANESE	257.60	0.0100	0	0.0900	0	0
MOLYBDENUM	202.00	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.50	1.70	0	0	0	0
SELENIUM	196.00	0	0	0	0.960	0
SILICON	288.20	0	0	0	0	0
SILVER	328.10	0	0	0	0	0
SODIUM	589.60	0	0	0	0	0
STRONTIUM	407.80	-0.360	0	165	0	0
THALLIUM	190.80	0	-6.90	0	0	0
TIN	189.90	0	0	0	0	0
TITANIUM	337.30	0	0	4.34	0	0
VANADIUM	292.40	0	0	-0.900	0	0
ZINC	206.20	0.0500	0	0	0	0

KEMRON Environmental Services
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

00093715

Login Number: L0505323 **Date:** 03/22/2005
Instrument ID: PE-ICP **Method:** 6010B

Analyte	Wave Length	TI	TL	V
ALUMINUM	237.30	4.50	0	0
ANTIMONY	206.80	-1.58	0	-2.10
ARSENIC	189.00	2.30	0	0.100
BARIUM	230.40	-1.00	0	0
BERYLLIUM	234.90	-0.00100	0	0
CADMIUM	228.80	0.300	0	0.190
CALCIUM	227.50	4.50	0	60.0
CHROMIUM	267.70	0	0	0
COBALT	228.60	2.30	0	-0.0700
COPPER	327.40	-0.800	0	0
IRON	261.40	0	0	-9.66
LEAD	220.40	-0.710	-0.200	-0.200
MAGNESIUM	279.10	-7.60	0	4.60
MANGANESE	257.60	0.0700	0	-0.0200
MOLYBDENUM	202.00	0	0	0
NICKEL	231.60	-0.160	0	-0.0700
POTASSIUM	766.50	0	0	0
SELENIUM	196.00	-0.200	0	0.940
SILICON	288.20	0	0	0
SILVER	328.10	0	0	0
SODIUM	589.60	0	0	0
STRONTIUM	407.80	0	0	0
THALLIUM	190.80	-4.00	0	-6.83
TIN	189.90	-6.00	0	0
TITANIUM	337.30	0	0	0
VANADIUM	292.40	0.500	0	0
ZINC	206.20	2.20	0	3.50

Login Number: L0505323 Date: 03/09/2005
Instrument ID: PE-ICP Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	500.0
Antimony	10.00	6.0
Arsenic	10.00	2.0
Barium	10.00	10.0
Beryllium	10.00	1.0
Cadmium	10.00	1.0
Calcium	10.00	500.0
Chromium	10.00	10.0
Cobalt	10.00	10.0
Copper	10.00	10.0
Iron	10.00	50.0
Lead	10.00	100.0
Magnesium	10.00	500.0
Manganese	10.00	5.0
Molybdenum	10.00	10.0
Nickel	10.00	10.0
Potassium	10.00	250.0
Selenium	10.00	1.0
Silicon	10.00	10.0
Silver	10.00	2.0
Sodium	10.00	250.0
Strontium	10.00	5.0
Thallium	10.00	1.0
Tin	10.00	1.0
Titanium	10.00	5.0
Vanadium	10.00	10.0
Zinc	10.00	10.0

Comments:

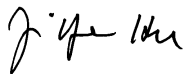
KEMRON Environmental Services
Data Checklist

Date: May 19, 2005
Analyst: JI Y. HU
Method: 6020A
Instrument: ELAN-ICP
Curve Workgroup: 189388
Analytical Workgroups: 189354,189355,189270,189269

Run Log ID:	5034
Calibration/Linearity	✓
ICV/CCV	✓
ICB/CCB	✓
ICSA/ICSAB	✓
CRI	
Blank/LCS	✓
MS/MSD	✓
Post Spike/Serial Dilution	✓
Upload Results	✓
Data Qualifiers	
Generate PDF Instrument Data	✓
Sign/Annotate PDF Data	✓
Upload Curve Data	
Workgroup Forms	✓
Case Narrative	✓
Client Forms	
Level X	303
Level 3	323,334,324,335
Level 4	275
Check for compliance with method and project specific requirements	✓
Check the completeness of reported information	✓
Check the information for the report narrative	✓
Primary Reviewer	JYH
Secondary Reviewer	MMB

Comments

Approved By:

Primary: May 19, 2005	Secondary: May 20, 2005
	

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093718

Analytical Method: 6020
 Login Number: L0505323

AAB#: WG189354

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
LHSMW66-MAY05	05/12/05	05/14/05	05/18/05	180	5.70	05/19/05	180	1.05	
LHSMW66-MAY05	05/12/05	05/14/05	05/18/05	180	5.70	05/19/05	180	1.04	
LHSMW67-MAY05	05/13/05	05/14/05	05/18/05	180	4.89	05/19/05	180	1.06	
LHSMW67-MAY05	05/13/05	05/14/05	05/18/05	180	4.89	05/19/05	180	1.07	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/18/05	180	4.89	05/19/05	180	1.08	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/18/05	180	4.89	05/19/05	180	1.08	
PZ001-MAY05	05/13/05	05/14/05	05/18/05	180	4.82	05/19/05	180	1.09	
PZ001-MAY05	05/13/05	05/14/05	05/18/05	180	4.82	05/19/05	180	1.09	
PZ002-MAY05	05/13/05	05/14/05	05/18/05	180	4.70	05/19/05	180	1.09	
PZ002-MAY05	05/13/05	05/14/05	05/18/05	180	4.70	05/19/05	180	1.10	
PZ004-MAY05	05/13/05	05/14/05	05/18/05	180	4.74	05/19/05	180	1.10	
PZ004-MAY05	05/13/05	05/14/05	05/18/05	180	4.74	05/19/05	180	1.11	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L0505323
Blank File ID: EL.051905.084900
Date Analyzed: 05/19/05
Time Analyzed: 08:49
Analyst: JYH

Work Group: WG189354
Blank Sample ID: WG189299-02
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	WG189299-03	EL.051905.085422	05/19/05 08:54	DL01
LHSMW66-MAY05	L0505323-07	EL.051905.085943	05/19/05 08:59	01
LHSMW66-MAY05	L0505323-06	EL.051905.091550	05/19/05 09:15	01
LHSMW67-MAY05	L0505323-08	EL.051905.093200	05/19/05 09:32	01
LHSMW67-MAY05	L0505323-09	EL.051905.093724	05/19/05 09:37	01
LHSMW67-MAY05-D	L0505323-10	EL.051905.095355	05/19/05 09:53	01
LHSMW67-MAY05-D	L0505323-11	EL.051905.095920	05/19/05 09:59	01
PZ001-MAY05	L0505323-12	EL.051905.100442	05/19/05 10:04	01
PZ001-MAY05	L0505323-13	EL.051905.101004	05/19/05 10:10	01
PZ002-MAY05	L0505323-14	EL.051905.101527	05/19/05 10:15	01
PZ002-MAY05	L0505323-15	EL.051905.102049	05/19/05 10:20	01
PZ004-MAY05	L0505323-16	EL.051905.102612	05/19/05 10:26	01
PZ004-MAY05	L0505323-17	EL.051905.103135	05/19/05 10:31	01

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189299-02
Instrument ID: ELAN-ICP Run Time: 08:49 Prep Method: 3015
File ID: EL_051905.084900 Analyst: JYH Method: 6020
Workgroup (AAB#): WG189354 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 19-MAY-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Antimony	0.000500	0.00100	0.000500	1	U
Selenium	0.000500	0.00100	0.000500	1	U
Thallium	0.000100	0.000200	0.000100	1	U

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189299-03
Instrument ID: ELAN-ICP Run Time: 08:54 Prep Method: 3015
File ID: EL_051905.085422 Analyst: JYH Method: 6020
Workgroup (AAB#): WG189354 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 19-MAY-2005 08:06

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony	0.125	0.105	84.0	80 - 120	
Selenium	0.125	0.106	84.5	80 - 120	
Thallium	0.125	0.105	83.6	80 - 120	

Loginnum: L0505323 Cal ID: ELAN-ICP - 19-MAY-2005 08:06 Worknum: WG189354
Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
Parent ID: WG189299-01 File ID: EL.051905.085943 Dil: 1 Matrix: WATER
Sample ID: WG189299-04 MS File ID: EL.051905.090505 Dil: 1 Units: mg/L
Sample ID: WG189299-05 MSD File ID: EL.051905.091027 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	0.000524	0.125	0.140	111	0.125	0.146	116	4.27	75 - 125	20	
Selenium, Dissolved	0.000615	0.125	0.143	114	0.125	0.141	113	1.21	75 - 125	20	
Thallium, Dissolved	0.000103	0.125	0.134	107	0.125	0.137	109	2.33	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON ENVIRONMENTAL SERVICES
SERIAL DILUTION REPORT

00093723

Sample Login ID:L0505323

Instrument ID:ELAN-ICP

Sample ID:L0505323-06 File ID:EL.051905.091550 Dil:1

Serial Dilution ID:WG189354-02 File ID:EL.051905.092636 Dil:5

Worknum:WG189354

Method:6020

Units:ug/L

Analyte	Sample	C	Serial Dilution	C	% Difference	Q
Antimony	0.140	U	0.550	U	293	
Selenium	0.136	U	ND	U		
Thallium	0.0454	F	0.141	U	211	

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

00093724

Sample Login ID: L0505323

Worknum: WG189354

Instrument ID: ELAN-ICP

Method: 6020

Post Spike ID: WG189354-01 File ID: EL.051905.092113 Dil: 1

Units: ug/L

Sample ID: L0505323-06 File ID: EL.051905.091550 Dil: 1

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added (SA)	% R	Q
Antimony	75 - 125	43.5		0	U	50.0	87.0	
Selenium	75 - 125	41.7		0	U	50.0	83.4	
Thallium	75 - 125	43.1		0.0454	F	50.0	86.1	

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.

Login Number:L0505323

Workgroup (AAB#):WG189354

Analytical Method:6020

Instrument ID:ELAN-ICP

ICAL Worknum:WG189388

Initial Calibration Date:19-MAY-2005 08:06:22

Analyte	WG189388-01		WG189388-02		WG189388-03		WG189388-04		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT		
Antimony	0	42.033	.5	2356.334	50	249058.727	100	501316.599	0.999884	
Selenium	0	13.641	.5	79.843	50	7432.945	100	15423.97	0.999588	
Thallium	0	53.334	.5	2563.354	50	265490.811	100	523709.501	0.999975	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

KEMRON Environmental Services
INITIAL CALIBRATION BLANK REPORT

00093726

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-06
Instrument ID: ELAN-ICP Run Time: 08:15 Method: 6020
File ID: EL.051905.081538 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.200	0.400	.169	1	U
Selenium	0.200	0.400	-.107	1	U
Thallium	0.0400	0.0800	.0305	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093727

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-11
Instrument ID: ELAN-ICP Run Time: 08:43 Method: 6020
File ID: EL.051905.084330 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.200	0.400	.155	1	U
Selenium	0.200	0.400	.0348	1	U
Thallium	0.0400	0.0800	.0331	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093728

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-13
Instrument ID: ELAN-ICP Run Time: 09:48 Method: 6020
File ID: EL_051905.094822 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.200	0.400	.155	1	U
Selenium	0.200	0.400	.048	1	U
Thallium	0.0400	0.0800	.0255	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093729

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-15
Instrument ID: ELAN-ICP Run Time: 10:53 Method: 6020
File ID: EL.051905.105319 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Antimony	0.200	0.400	.167	1	U
Selenium	0.200	0.400	.0305	1	U
Thallium	0.0400	0.0800	.0235	1	U

U = Result is less than MDL
F = Result is between MDL and RL

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-05
Instrument ID: ELAN-ICP Run Time: 08:10 Method: 6020
File ID: EL.051905.081005 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.1	98.2	90 - 110	
Selenium		50	49.2	98.5	90 - 110	
Thallium		50	50.5	101	90 - 110	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093731

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-10
Instrument ID: ELAN-ICP Run Time: 08:37 Method: 6020
File ID: EL_051905.083757 Analyst: JYH
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		50	49.0	98.1	90 - 110	ug/L	
Selenium		50	49.5	99.0	90 - 110	ug/L	
Thallium		50	49.1	98.2	90 - 110	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093732

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-12
Instrument ID: ELAN-ICP Run Time: 09:42 Method: 6020
File ID: EL.051905.094248 Analyst: JYH
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		50	47.5	94.9	90 - 110	ug/L	
Selenium		50	48.6	97.2	90 - 110	ug/L	
Thallium		50	48.7	97.4	90 - 110	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093733

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189388-14
Instrument ID: ELAN-ICP Run Time: 10:47 Method: 6020
File ID: EL.051905.104747 Analyst: JYH
Workgroup (AAB#): WG189354 Cal ID: ELAN-I - 19-MAY-05

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Antimony		50	48.7	97.4	90 - 110	ug/L	
Selenium		50	50.4	101	90 - 110	ug/L	
Thallium		50	48.3	96.7	90 - 110	ug/L	

* Exceeds LIMITS Limit

KEMRON ENVIRONMENTAL SERVICES
INTERFERENCE CHECK SAMPLES

00093734

Login number: L0505323
Instrument ID: ELAN-ICP
Sol. A : WG189388-08
Sol. AB : WG189388-09

File ID: EL_051905.082648
File ID: EL_051905.083222

Workgroup (AAB#): WG189354
Method: 6020
Units: ug/L

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	0.0906	NS	100	91.1	91.1	
Selenium	NS	0.0568	NS	100	89.4	89.4	
Thallium	NS	0.0271	NS	100	87.4	87.4	

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 (+/-) 2x the project reporting limit (RL).

Login Number: L0505323 Date: 03/07/2005
Insturment ID: ELAN-ICP Method: 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Lead	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0

Comments:

KEMRON Environmental Services
Data Checklist

Date: May 19, 2005
 Analyst: CARLA R. COCHRAN
 Method: 7471A
 Instrument: HYDRA
 Curve Workgroup: 189420
 Analytical Workgroups: 189386,189387

Run Log ID:	5043
Calibration/Linearity	✓
ICV/CCV	✓
ICB/CCB	✓
ICSA/ICSAB	
CRI	
Blank/LCS	✓
MS/MSD	✓
Post Spike/Serial Dilution	✓
Upload Results	✓
Data Qualifiers	
Generate PDF Instrument Data	✓
Sign/Annotate PDF Data	✓
Upload Curve Data	
Workgroup Forms	
Case Narrative	05-275,300,304,309,310,311,323,324,334,335
Client Forms	✓
Level X	
Level 3	05-323,324,334,335
Level 4	05-275,300
Check for compliance with method and project specific requirements	✓
Check the completeness of reported information	✓
Check the information for the report narrative	✓
Primary Reviewer	CRC
Secondary Reviewer	MMB

Approved By:

Primary: May 19, 2005	Secondary: May 20, 2005
<i>Carla R. Cochran</i>	<i>Maren Berry</i>

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093737

Analytical Method: 7470A
Login Number: L0505323

AAB#: WG189387

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
LHSMW66-MAY05	05/12/05	05/14/05	05/18/05	28	5.73	05/19/05	28	1.19	
LHSMW67-MAY05	05/13/05	05/14/05	05/18/05	28	4.92	05/19/05	28	1.20	
LHSMW67-MAY05-D	05/13/05	05/14/05	05/18/05	28	4.92	05/19/05	28	1.20	
PZ001-MAY05	05/13/05	05/14/05	05/18/05	28	4.85	05/19/05	28	1.20	
PZ002-MAY05	05/13/05	05/14/05	05/18/05	28	4.73	05/19/05	28	1.21	
PZ004-MAY05	05/13/05	05/14/05	05/18/05	28	4.77	05/19/05	28	1.21	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L0505323
Blank File ID: HY.051905.131252
Date Analyzed: 05/19/05
Time Analyzed: 13:12
Analyst: CRC

Work Group: WG189387
Blank Sample ID: WG189295-02
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	WG189295-03	HY.051905.131449	05/19/05 13:14	01
LHSMW66-MAY05	L0505323-06	HY.051905.131640	05/19/05 13:16	01
LHSMW66-MAY05	L0505323-07	HY.051905.132138	05/19/05 13:21	01
LHSMW67-MAY05	L0505323-08	HY.051905.132711	05/19/05 13:27	01
LHSMW67-MAY05	L0505323-09	HY.051905.132853	05/19/05 13:28	01
LHSMW67-MAY05-D	L0505323-10	HY.051905.133455	05/19/05 13:34	01
LHSMW67-MAY05-D	L0505323-11	HY.051905.133652	05/19/05 13:36	01
PZ001-MAY05	L0505323-12	HY.051905.133843	05/19/05 13:38	01
PZ001-MAY05	L0505323-13	HY.051905.134115	05/19/05 13:41	01
PZ002-MAY05	L0505323-14	HY.051905.134258	05/19/05 13:42	01
PZ002-MAY05	L0505323-15	HY.051905.134519	05/19/05 13:45	01
PZ004-MAY05	L0505323-16	HY.051905.135109	05/19/05 13:51	01
PZ004-MAY05	L0505323-17	HY.051905.135248	05/19/05 13:52	01

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189295-02
Instrument ID: HYDRA Run Time: 13:12 Prep Method: METHOD
File ID: HY.051905.131252 Analyst: CRC Method: 7470A
Workgroup (AAB#): WG189387 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189295-03
Instrument ID: HYDRA Run Time: 13:14 Prep Method: METHOD
File ID: HY.051905.131449 Analyst: CRC Method: 7470A
Workgroup (AAB#): WG189387 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-19-MAY-2005

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00455	114	80 - 120	

KEMRON Environmental Services
MS/MSD REPORT

00093741

Loginnum: L0505323 Cal ID: HYDRA-19-MAY-2005 Worknum: WG189387
 Instrument ID: HYDRA Contract #: DACA56-94-D-0020 Method: 7470A
 Parent ID: WG189295-01 File ID: HY.051905.132853 Dil: 1 Matrix: WATER
 Sample ID: WG189295-04 MS File ID: HY.051905.133044 Dil: 1 Units: mg/L
 Sample ID: WG189295-05 MSD File ID: HY.051905.133236 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	0.00538	121	0.00444	0.00530	119	1.46	75 - 125	15	

* FAILS %REC LIMIT

FAILS RPD LIMIT

KEMRON ENVIRONMENTAL SERVICES
POST SPIKE REPORT

00093742

Sample Login ID: L0505323

Instrument ID: HYDRA

Post Spike ID: WG189387-01 File ID: HY.051905.131939 Dil: 1

Sample ID: L0505323-06 File ID: HY.051905.131640 Dil: 1

Worknum: WG189387

Method: 7470A

Units: ug/L

Matrix: Water

Analyte	Control Limit %R	Post Spike Result	C	Sample Result	C	Spike Added (SA)	% R	Q
Mercury	85 - 115	0.972		ND	U	1.0	97.2	

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.

Login Number: L0505323
Analytical Method: 7470A

Instrument ID: HYDRA
Initial Calibration Date: 05/19/2005 12:02

Analyte	WG189420-01		WG189420-02		WG189420-03		WG189420-04		WG189420-05		WG189420-06		R	Q
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT		
Mercury	0	10634	0.200	30268	1.00	75930	2.00	134290	5.00	335130	10.0	631458	0.9997	

INT = Instrument intensity

R = Coefficient of correlation

Q = Data Qualifier

* = Out of Compliance; R < 0.995

KEMRON Environmental Services
INITIAL CALIBRATION BLANK REPORT

00093744

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-08
Instrument ID: HYDRA Run Time: 12:06 Method: 7470A
File ID: HY.051905.120641 Analvst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.08	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093745

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-14
Instrument ID: HYDRA Run Time: 13:01 Method: 7470A
File ID: HY.051905.130114 Analyst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.177	1	F

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093746

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-16
Instrument ID: HYDRA Run Time: 13:25 Method: 7470A
File ID: HY.051905.132501 Analyst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.081	1	U

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093747

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-18
Instrument ID: HYDRA Run Time: 13:49 Method: 7470A
File ID: HY.051905.134930 Analyst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.194	1	F

U = Result is less than MDL
F = Result is between MDL and RL

KEMRON Environmental Services
CONTINUING CALIBRATION BLANK REPORT

00093748

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-20
Instrument ID: HYDRA Run Time: 14:01 Method: 7470A
File ID: HY.051905.140104 Analyst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analytes	MDL	RDL	Concentration	Dilution	Qualifier
Mercury	0.100	0.200	-.12	1	F

U = Result is less than MDL
F = Result is between MDL and RL

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-07
Instrument ID: HYDRA Run Time: 12:05 Method: 7470A
File ID: HY.051905.120501 Analyst: CRC Units: ug/L
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	2.08	104	90 - 110	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093750

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-13
Instrument ID: HYDRA Run Time: 12:59 Method: 7470A
File ID: HY.051905.125932 Analvst: CRC
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Mercury	2	1.84	92.0	80 - 120	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093751

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-15
Instrument ID: HYDRA Run Time: 13:23 Method: 7470A
File ID: HY.051905.132319 Analvst: CRC
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Mercury	2	1.82	91.0	80 - 120	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093752

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-17
Instrument ID: HYDRA Run Time: 13:47 Method: 7470A
File ID: HY.051905.134717 Analvst: CRC
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analyte	Expected	Found	%REC	LIMITS	UNITS	Q
Mercury	2	1.87	93.5	80 - 120	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
CONTINUING CALIBRATION REPORT

00093753

Login Number: L0505323 Run Date: 05/19/2005 Sample ID: WG189420-19
Instrument ID: HYDRA Run Time: 13:59 Method: 7470A
File ID: HY.051905.135923 Analvst: CRC
Workgroup (AAB#): WG189387 Cal ID: HYDRA - 19-MAY-05

Analyte		Expected	Found	%REC	LIMITS	UNITS	Q
Mercury		2	1.89	94.5	80 - 120	ug/L	

* Exceeds LIMITS Limit

KEMRON Environmental Services
HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

00093754

Analytical Method: 314.0
Login Number: L0505323

AAB#: WG189410

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
08WW01-MAY-05	05/12/05	05/14/05	05/17/05	28	4.98	05/17/05	28	4.98	
08WW02-MAY-05	05/12/05	05/14/05	05/17/05	28	5.21	05/17/05	28	5.21	
08WW02-MAY-05-D	05/12/05	05/14/05	05/17/05	28	5.22	05/17/05	28	5.22	
29WW26-MAY05	05/13/05	05/14/05	05/17/05	28	4.23	05/17/05	28	4.23	
48WW01-MAY05	05/12/05	05/14/05	05/17/05	28	5.07	05/17/05	28	5.07	
LHSMW66-MAY05	05/12/05	05/14/05	05/17/05	28	5.16	05/17/05	28	5.16	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L0505323
Blank File ID: I1051705.12
Date Analyzed: 05/17/05
Time Analyzed: 15:36
Analyst: JWR

Work Group: WG189410
Blank Sample ID: WG189410-01
Instrument ID: IC1
Method: 314.0

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG189410-02	I1051705.14	05/17/05 16:16	01
08WW01-MAY-05	L0505323-01	I1051705.17	05/17/05 17:18	01
48WW01-MAY05	L0505323-05	I1051705.18	05/17/05 17:38	01
29WW26-MAY05	L0505323-04	I1051705.19	05/17/05 17:58	01
08WW02-MAY-05	L0505323-02	I1051705.20	05/17/05 18:19	DL01
08WW02-MAY-05-D	L0505323-03	I1051705.21	05/17/05 18:39	DL01
LHSMW66-MAY05	L0505323-06	I1051705.22	05/17/05 19:00	01
DUP	WG189410-04	I1051705.25	05/17/05 20:01	01

Login Number: L0505323 Run Date: 05/17/2005 Sample ID: WG189410-01
Instrument ID: IC1 Run Time: 15:36 Prep Method: 314.0
File ID: I1051705.12 Analyst: JWR Method: 314.0
Workgroup (AAB#): WG189410 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: IC1-

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Perchlorate	0.500	1.00	0.500	1	U

Login Number: L0505323 Run Date: 05/17/2005 Sample ID: WG189410-02
Instrument ID: IC1 Run Time: 16:16 Prep Method: 314.0
File ID: I1051705.14 Analyst: JWR Method: 314.0
Workgroup (AAB#): WG189410 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: IC1-

Analytes	Expected	Found	% Rec	LCS Limits	Q
Perchlorate	25.0	23.3	93.3	85 - 115	



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LHAAP-014

Page 1 of 2

Project Number: 845714

Samples Shipment Date: 13 MAY 2005

Bill To: Diane Meyer

Project Name: Longhorn Army Ammunition Plant Lab Destination: Kemron Lab

3010 Briarpark Drive

Houston

TX 77042

Sample Coordinator: Phil Conley

Lab Contact: Stephanie Mossburg

Report To: Diane Meyer

Turnaround Time:

Project Contact: Diane Meyer

3010 Briarpark Drive

Houston

TX 77042

Carrier/Waybill No.: UPS/J178 825 533 5

Special Instructions:

Possible Hazard Identification:

Non-hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown ☐Radiological ☐

Sample Disposal:

Return to Client ☐Disposal by Lab ☐Archive ☐

(mos.)

1. Relinquished By
(Signature/Affiliation)Date: 5/13/05
Time: 17001. Received By
(Signature/Affiliation)Date: 5/14/05
Time: 10552. Relinquished By
(Signature/Affiliation)Date:
Time:2. Received By
(Signature/Affiliation)Date:
Time:3. Relinquished By
(Signature/Affiliation)Date:
Time:3. Received By
(Signature/Affiliation)Date:
Time: -

Comments:

Sib stored in
locked cooler
over weekend
by
cooler temp 2 by

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	File	CID	Condition On Receipt
08WW01-MAY05:08WW01-GW-08WW01-MAY05-REG		12 MAY 2005	17:50	1 L HDPE	1		Perchlorate by 314.0				N	KL139
08WW02-MAY05:08WW02-GW-08WW02-MAY05-REG		12 MAY 2005	13:20	1 L HDPE	1		Perchlorate by 314.0				N	KL139
08WW02-MAY05:08WW02-GW-08WW02-MAY05-D-FD		12 MAY 2005	13:20	1 L HDPE	1		Perchlorate by 314.0				N	KL139
29WW26-MAY05:29WW26-GW-29WW26-MAY05-REG		13 MAY 2005	12:30	1 L HDPE	1		Perchlorate by 314.0				N	KL139
48WW01-MAY05:48WW01-GW-48WW01-MAY05-REG		12 MAY 2005	17:55	1 L HDPE	1	per label 1 by 5-16-05	Perchlorate by 314.0				N	KL139
LHSMW66-MAY05:LHSMW66-GW-LHSMW66-MAY05-REG		12 MAY 2005	15:10	1 L Amb. Glass	2	None except cool to 4 C	Dioxins and Furans by SW8290				N	
LHSMW66-MAY05:LHSMW66-GW-LHSMW66-MAY05-REG		12 MAY 2005	15:10	1 L Amb. Glass	2	None except cool to 4 C	Dioxins and Furans by SW8290				N	
LHSMW66-MAY05:LHSMW66-GW-LHSMW66-MAY05-REG		12 MAY 2005	15:10	1 L HDPE	1		Dissolved Perchlorate by 314.0				N	KL139

metals
by
5-16-05



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: LHAAP-014

Page 2 of 2

Sample No	Sample Name	Sample Date	Sample Time	Container	Preservative	Requested Testing Program	Sample Vol	Units	File	CID	Condition On Receipt
LHSMW67-MAY01	LHSMW67-GW-LHSMW67-MAY05-REG	13 MAY 2005	10:45	1000 mL HDPE	1 HNO3<pH 2	TAL METALS by 6010b, 6020, 7471A			N		
LHSMW67-MAY01	LHSMW67-GW-LHSMW67-MAY05-REG	13 MAY 2005	10:45	1000 mL HDPE	1 None except cool to 4 C	TAL METALS by 6010B, 6020, 7471A			N		
LHSMW67-MAY01	LHSMW67-GW-LHSMW67-MAY05-D-FD	13 MAY 2005	10:45	500 mL HDPE	1 HNO3<pH 2	TAL METALS by 6010b, 6020, 7471A			N		
LHSMW67-MAY01	LHSMW67-GW-LHSMW67-MAY05-D-FD	13 MAY 2005	10:45	500 mL HDPE	1	TAL METALS by 6010B, 6020, 7471A			N		
PZ001-MAY05	PZ001-GW-PZ001-MAY05-REG	13 MAY 2005	12:15	500 mL HDPE	1 HNO3<pH 2	TAL METALS by 6010b, 6020, 7471A			N		
PZ001-MAY05	PZ001-GW-PZ001-MAY05-REG	13 MAY 2005	12:15	500 mL HDPE	1	TAL METALS by 6010B, 6020, 7471A			N		
PZ002-MAY05	PZ002-GW-PZ002-MAY05-REG	13 MAY 2005	15:10	500 mL HDPE	1 HNO3<pH 2	TAL METALS by 6010b, 6020, 7471A			N		
PZ002-MAY05	PZ002-GW-PZ002-MAY05-REG	13 MAY 2005	15:10	500 mL HDPE	1	TAL METALS by 6010B, 6020, 7471A			N		
PZ004-MAY05	PZ004-GW-PZ004-MAY05-REG	13 MAY 2005	14:20	500 mL HDPE	1 HNO3<pH 2	TAL METALS by 6010b, 6020, 7471A			N		
PZ004-MAY05	PZ004-GW-PZ004-MAY05-REG	13 MAY 2005	14:20	500 mL HDPE	1	TAL METALS by 6010B, 6020, 7471A			N		

Login: L0505323

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 17

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505323-01 133221 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:46	JWR	JKT

Samplenum **Container ID** **Products**

L0505323-02 133222 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:47	JWR	JKT

Samplenum **Container ID** **Products**

L0505323-03 133223 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:47	JWR	JKT

Samplenum **Container ID** **Products**

L0505323-04 133224 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:47	JWR	JKT

Samplenum **Container ID** **Products**

L0505323-05 133225 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:47	JWR	JKT

Login: L0505323

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 17

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**

L0505323-06 133226 CL04

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	ANALYZ	W1	WET	17-MAY-2005 08:47	JWR	JKT

Samplenum **Container ID** **Products**

L0505323-06 133227 DIG-MW PB-AX SB-MS SE-MS TL-MS V ZN AG AL AS-/

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**

L0505323-07 133228 DIG-MW NI-D PB-AX-D SB-MS-D SE-MS-D TL-MS-D V-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**

L0505323-08 133229 AG AL AS-AX BA BE CA CD CO CR CU DIG-ICP DIG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**

L0505323-09 133230 AG-D AL-D AS-AX-D BA-D BE-D CA-D CD-D CO-D CR-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Login: L0505323

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 17

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**
L0505323-10 133231 AG AL AS-AX BA BE CA CD CO CR CU DIG-ICP DIG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-11 133232 AG-D AL-D AS-AX-D BA-D BE-D CA-D CD-D CO-D CR-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-12 133233 AG AL AS-AX BA BE CA CD CO CR CU DIG-ICP DIG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-13 133234 AG-D AL-D AS-AX-D BA-D BE-D CA-D CD-D CO-D CR-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-14 133235 AG AL AS-AX BA BE CA CD CO CR CU DIG-ICP DIG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Login: L0505323

Account: SHAW-ALLIANCE-798

Project: 798-LONGHORN

Samples: 17

Due Date: 20-MAY-2005

Samplenum **Container ID** **Products**
L0505323-15 133236 AG-D AL-D AS-AX-D BA-D BE-D CA-D CD-D CO-D CR-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:36	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-16 133237 AG AL AS-AX BA BE CA CD CO CR CU DIG-ICP DIG-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

Samplenum **Container ID** **Products**
L0505323-17 133238 AG-D AL-D AS-AX-D BA-D BE-D CA-D CD-D CO-D CR-

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN			16-MAY-2005 11:13	BRG	
2	PREP	W1	DIG	17-MAY-2005 08:37	REK	JKT
3	STORE	DIG	A1	19-MAY-2005 07:28	JKT	REK

SAMPLE RECEIPT FORM

00093764

Date: 5-14-05 Client: Shaw-LAAP 1055156 STARLITE DRIVE
MARIETTA, OH
45750
(740) 373-4071Shipped By: () Fed-Ex ☒ UPS () DHL () KEMRON () Client () OtherOpened By: VBGLogged By: Big Login # L05 05323IR Temp Gun: ☒ () F

COOLER INFORMATION

Number	Cooler ID	Temp °C	Airbill#	COC#	Other
1	KL1502	2	01788255344	014	
2	Coleman	1	01704153367	011	
3	KL1391	1	01788255335	013	
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: LHAAP Project: c/c LHAAP-014Date Received: 5/14/05

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
- ① c/c 48 WW01-may05 @ 1755 = labels 1555
- ② c/c LH5mw66-may05 @ 1510 = labels 1738
- c/c reads "Dioxins/Furans"
- bottles rec'd total + Diss. Metals

Sample containers received broken, leaking or not sealed (List sample ID)

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

NO

Name of Person contacted: Diane MeyerCompany: ShawService Representative: SUMDate: 5/16/05

Dioxins should be TALMET (per bottles)

Times = go with the earliest. SUM 5/16/05

Last Revised 08/22/03