

LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 6 of 16

2011

Bate Stamp Numbers

00103380 – 00104302

Prepared for

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

1976 – 2011

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

VOLUME 6 of 16

2011

- A. Title: Report (continued) – Final Feasibility Study LHAAP-47, Plant 3 Area,
Group 4, Longhorn Army Ammunition Plant, Karnack, Texas
Author(s): Shaw Environmental, Inc., Houston, Texas
Recipient: All Stakeholders
Date: July 27, 2011
Bate Stamp: 00103380 - 00104302



158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • <http://www.microbac.com>

Laboratory Report Number: L09020438

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac'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.

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Jacqueline Parsons	<i>Team Assistant</i>	jparsons@microbac.com

This report was reviewed on March 02, 2009.

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 accrediting authority listed below. 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 Microbac Laboratories.

This report was certified on March 02, 2009.

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

David Vandenberg - Managing Director

State of origin: Texas

Accrediting authority: Texas Commission on Environmental Quality ID:T104704252-07-TX

QAPP: Microbac (OVD) LQAP

This report contains a total of 280 pages.

Look closer. Go further. Do more.



Microbac REPORT L09020438
PREPARED FOR Shaw E I, Inc.
WORK ID:

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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L09020438

CHAIN OF CUSTODY: The chain of custody number was 5777.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 0 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., 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: 02-MAR-09

<i>Stephanie Mousling</i>

Laboratory Data Package Cover Page

00103384

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

February 24, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09020438
Project Name: 798-LONGHORN
Method: TOC
Prep Batch Number(s): WG295582
Reviewer Name: DEANNA I. HESSON
LRC Date: February 24, 2009

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?	✓				

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?	✓				

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L09020438
Project Name:	798-LONGHORN
Method:	TOC
Prep Batch Number(s):	WG295582
Reviewer Name:	DEANNA I. HESSON
LRC Date:	February 24, 2009

EXCEPTIONS REPORT

ER# - Description

The samples were analyxed on 2/20/09 and the results were rejected due to a high CCV. The samples were reanalyzed on 2/23/09 with no dilution and the results went over the calibration range. They were reanalyzed a third and fourth time at the end of the run. There appears to be an interference that is reduced when the samples are diluted. The results are reported with the reporting limit elevated accordingly.

Footnotes:

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

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- 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.

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MICHAEL D. COCHRAN



Semivolatiles Lab Supervisor

February 24, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09020438
Project Name: 798-LONGHORN
Method: 300
Prep Batch Number(s): WG295483
Reviewer Name: MICHAEL D. COCHRAN
LRC Date: February 24, 2009

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?	✓				

00103391

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09020438
 Project Name: 798-LONGHORN
 Method: 300
 Prep Batch Number(s): WG295483
 Reviewer Name: MICHAEL D. COCHRAN
 LRC Date: February 24, 2009

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09020438
 Project Name: 798-LONGHORN
 Method: 300
 Prep Batch Number(s): WG295483
 Reviewer Name: MICHAEL D. COCHRAN
 LRC Date: February 24, 2009

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L09020438
Project Name:	798-LONGHORN
Method:	300
Prep Batch Number(s):	WG295483
Reviewer Name:	MICHAEL D. COCHRAN
LRC Date:	February 24, 2009

EXCEPTIONS REPORT

ER# - Description

1. Samples 07MS and 08MSD yielded recoveries beyond the acceptance limits for all compounds.

Footnotes:

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

Laboratory Data Package Cover Page

00103395

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 27, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09020438
Project Name: 798-LONGHORN
Method: 8260B
Prep Batch Number(s): 295505, 295535, 295620, 295733
Reviewer Name: MIKE D. ALBERTSON
LRC Date: February 27, 2009

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 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?		✓			2
Was the ICAL curve verified for each analyte?		✓			3
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?	✓				

00103398

EXCEPTIONS REPORT

ER# - Description

#1: t-1,3-Dichloropropene and isopropylbenzene were below the lower advisory limits in the LCS/LCSD analyzed 02/21/09 on HPMS-11.

#2: Vinyl acetate exceeded the upper control limit in the CCV analyzed 02/21/09 on HPMS-11.

#3: Vinyl acetate was below the lower control limit in the alternate source analyzed 02/06/09 on HPMS-11.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00103399

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 24, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09020438
 Project Name: 798-LONGHORN
 Method: RSK175
 Prep Batch Number(s): 295404
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: February 24, 2009

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?	✓				
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?	✓				

EXCEPTIONS REPORT

ER# - Description

There were no exceptions.

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

L09020438

00103406

03/02/09 09:04

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW43-021909	L09020438-01	8260B	50	20-FEB-09
LHSMW45-021909	L09020438-02	8260B	5	20-FEB-09
47WW14-021909	L09020438-03	8260B	2	20-FEB-09
47WW14-021909-FD	L09020438-04	8260B	2	20-FEB-09
47WW14-021909-FD	L09020438-04	8260B	1	20-FEB-09
47WW19-021909	L09020438-05	8260B	1	20-FEB-09
TRIP BLANK	L09020438-06	8260B	1	20-FEB-09



Sample Number: **L09020438-01**
Client ID: **LHSMW43-021909**
Matrix: **Water**
Workgroup Number: **WG295733**
Collect Date: **02/19/2009 08:24**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **5030B**
Analytical Method: **8260B**
Analyst: **FJB**
Dilution: **50**
Units: **ug/L**

Instrument: **HPMS8**
Prep Date: **02/24/2009 21:27**
Cal Date: **02/19/2009 14:17**
Run Date: **02/24/2009 21:27**
File ID: **8M351982**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	500	125
Benzene	71-43-2		U	50.0	6.25
Bromobenzene	108-86-1		U	50.0	6.25
Bromochloromethane	74-97-5		U	50.0	10.0
Bromodichloromethane	75-27-4		U	50.0	12.5
Bromoform	75-25-2		U	50.0	25.0
Bromomethane	74-83-9		U	50.0	25.0
2-Butanone	78-93-3		U	500	125
n-Butylbenzene	104-51-8		U	50.0	12.5
sec-Butylbenzene	135-98-8		U	50.0	12.5
tert-Butylbenzene	98-06-6		U	50.0	12.5
Carbon disulfide	75-15-0		U	50.0	25.0
Carbon tetrachloride	56-23-5		U	50.0	12.5
Chlorobenzene	108-90-7		U	50.0	6.25
Chlorodibromomethane	124-48-1		U	50.0	12.5
Chloroethane	75-00-3		U	50.0	25.0
2-Chloroethyl vinyl ether	110-75-8		U	500	100
Chloroform	67-66-3		U	50.0	6.25
Chloromethane	74-87-3		U	50.0	12.5
2-Chlorotoluene	95-49-8		U	50.0	6.25
4-Chlorotoluene	106-43-4		U	50.0	12.5
1,2-Dibromo-3-chloropropane	96-12-8		U	250	50.0
1,2-Dibromoethane	106-93-4		U	50.0	12.5
Dibromomethane	74-95-3		U	50.0	12.5
1,2-Dichlorobenzene	95-50-1		U	50.0	6.25
1,3-Dichlorobenzene	541-73-1		U	50.0	12.5
1,4-Dichlorobenzene	106-46-7		U	50.0	6.25
Dichlorodifluoromethane	75-71-8		U	50.0	12.5
1,1-Dichloroethane	75-34-3		U	50.0	6.25
1,2-Dichloroethane	107-06-2		U	50.0	12.5
1,1-Dichloroethene	75-35-4		U	50.0	25.0
cis-1,2-Dichloroethene	156-59-2	325		50.0	12.5
trans-1,2-Dichloroethene	156-60-5		U	50.0	12.5
1,2-Dichloropropane	78-87-5		U	50.0	10.0
1,3-Dichloropropane	142-28-9		U	50.0	10.0
2,2-Dichloropropane	594-20-7		U	50.0	12.5
cis-1,3-Dichloropropene	10061-01-5		U	50.0	12.5
trans-1,3-Dichloropropene	10061-02-6		U	50.0	25.0
1,1-Dichloropropene	563-58-6		U	50.0	12.5
Ethylbenzene	100-41-4		U	50.0	12.5
2-Hexanone	591-78-6		U	500	125
Hexachlorobutadiene	87-68-3		U	50.0	12.5
Isopropylbenzene	98-82-8		U	50.0	12.5
p-Isopropyltoluene	99-87-6		U	50.0	12.5
4-Methyl-2-pentanone	108-10-1		U	500	125
Methylene chloride	75-09-2		U	250	12.5
Naphthalene	91-20-3		U	50.0	10.0
n-Propylbenzene	103-65-1		U	50.0	6.25
Styrene	100-42-5	9.38	J	50.0	6.25
1,1,1,2-Tetrachloroethane	630-20-6		U	50.0	12.5
1,1,2,2-Tetrachloroethane	79-34-5		U	50.0	6.25
Tetrachloroethene	127-18-4	38.4	J	50.0	12.5
Toluene	108-88-3		U	50.0	12.5
1,2,3-Trichlorobenzene	87-61-6		U	50.0	7.50
1,2,4-Trichlorobenzene	120-82-1		U	50.0	10.0
1,1,1-Trichloroethane	71-55-6		U	50.0	12.5
1,1,2-Trichloroethane	79-00-5		U	50.0	12.5
Trichloroethene	79-01-6	6240		50.0	12.5
Trichlorofluoromethane	75-69-4		U	50.0	12.5

Report Number: **L09020438**Report Date : **March 2, 2009****00103408**

Sample Number: **L09020438-01**
 Client ID: **LHSMW43-021909**
 Matrix: **Water**
 Workgroup Number: **WG295733**
 Collect Date: **02/19/2009 08:24**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **FJB**
 Dilution: **50**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 21:27**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 21:27**
 File ID: **8M351982**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	50.0	25.0
1,2,4-Trimethylbenzene	95-63-6		U	50.0	12.5
1,3,5-Trimethylbenzene	108-67-8		U	50.0	12.5
Vinyl acetate	108-05-4		U	500	125
Vinyl chloride	75-01-4		U	50.0	12.5
o-Xylene	95-47-6		U	50.0	12.5
m-,p-Xylene	136777-61-2		U	50.0	25.0
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	100	86	118		
1,2-Dichloroethane-d4	88.4	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	104	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

Sample Number: **L09020438-02**
 Client ID: **LHSMW45-021909**
 Matrix: **Water**
 Workgroup Number: **WG295733**
 Collect Date: **02/19/2009 10:01**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **FJB**
 Dilution: **5**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 21:59**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 21:59**
 File ID: **8M351983**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	50.0	12.5
Benzene	71-43-2		U	5.00	0.625
Bromobenzene	108-86-1		U	5.00	0.625
Bromochloromethane	74-97-5		U	5.00	1.00
Bromodichloromethane	75-27-4		U	5.00	1.25
Bromoform	75-25-2		U	5.00	2.50
Bromomethane	74-83-9		U	5.00	2.50
2-Butanone	78-93-3		U	50.0	12.5
n-Butylbenzene	104-51-8		U	5.00	1.25
sec-Butylbenzene	135-98-8		U	5.00	1.25
tert-Butylbenzene	98-06-6		U	5.00	1.25
Carbon disulfide	75-15-0		U	5.00	2.50
Carbon tetrachloride	56-23-5		U	5.00	1.25
Chlorobenzene	108-90-7		U	5.00	0.625
Chlorodibromomethane	124-48-1		U	5.00	1.25
Chloroethane	75-00-3		U	5.00	2.50
2-Chloroethyl vinyl ether	110-75-8		U	50.0	10.0
Chloroform	67-66-3		U	5.00	0.625
Chloromethane	74-87-3		U	5.00	1.25
2-Chlorotoluene	95-49-8		U	5.00	0.625
4-Chlorotoluene	106-43-4		U	5.00	1.25
1,2-Dibromo-3-chloropropane	96-12-8		U	25.0	5.00
1,2-Dibromoethane	106-93-4		U	5.00	1.25
Dibromomethane	74-95-3		U	5.00	1.25
1,2-Dichlorobenzene	95-50-1		U	5.00	0.625
1,3-Dichlorobenzene	541-73-1		U	5.00	1.25
1,4-Dichlorobenzene	106-46-7		U	5.00	0.625
Dichlorodifluoromethane	75-71-8		U	5.00	1.25
1,1-Dichloroethane	75-34-3		U	5.00	0.625
1,2-Dichloroethane	107-06-2		U	5.00	1.25
1,1-Dichloroethene	75-35-4	2.63	J	5.00	2.50
cis-1,2-Dichloroethene	156-59-2	869		5.00	1.25
trans-1,2-Dichloroethene	156-60-5	2.35	J	5.00	1.25
1,2-Dichloropropane	78-87-5		U	5.00	1.00
1,3-Dichloropropane	142-28-9		U	5.00	1.00
2,2-Dichloropropane	594-20-7		U	5.00	1.25
cis-1,3-Dichloropropene	10061-01-5		U	5.00	1.25
trans-1,3-Dichloropropene	10061-02-6		U	5.00	2.50
1,1-Dichloropropene	563-58-6		U	5.00	1.25
Ethylbenzene	100-41-4		U	5.00	1.25
2-Hexanone	591-78-6		U	50.0	12.5
Hexachlorobutadiene	87-68-3		U	5.00	1.25
Isopropylbenzene	98-82-8		U	5.00	1.25
p-Isopropyltoluene	99-87-6		U	5.00	1.25
4-Methyl-2-pentanone	108-10-1		U	50.0	12.5
Methylene chloride	75-09-2		U	25.0	1.25
Naphthalene	91-20-3		U	5.00	1.00
n-Propylbenzene	103-65-1		U	5.00	0.625
Styrene	100-42-5		U	5.00	0.625
1,1,1,2-Tetrachloroethane	630-20-6		U	5.00	1.25
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.625
Tetrachloroethene	127-18-4		U	5.00	1.25
Toluene	108-88-3		U	5.00	1.25
1,2,3-Trichlorobenzene	87-61-6		U	5.00	0.750
1,2,4-Trichlorobenzene	120-82-1		U	5.00	1.00
1,1,1-Trichloroethane	71-55-6		U	5.00	1.25
1,1,2-Trichloroethane	79-00-5		U	5.00	1.25
Trichloroethene	79-01-6	926		5.00	1.25
Trichlorofluoromethane	75-69-4		U	5.00	1.25

Report Number: **L09020438**Report Date : **March 2, 2009**

00103410

Sample Number: **L09020438-02**
 Client ID: **LHSMW45-021909**
 Matrix: **Water**
 Workgroup Number: **WG295733**
 Collect Date: **02/19/2009 10:01**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **FJB**
 Dilution: **5**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 21:59**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 21:59**
 File ID: **8M351983**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	5.00	2.50
1,2,4-Trimethylbenzene	95-63-6		U	5.00	1.25
1,3,5-Trimethylbenzene	108-67-8		U	5.00	1.25
Vinyl acetate	108-05-4		U	50.0	12.5
Vinyl chloride	75-01-4	1.60	J	5.00	1.25
o-Xylene	95-47-6		U	5.00	1.25
m-,p-Xylene	136777-61-2		U	5.00	2.50
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	103	86	118		
1,2-Dichloroethane-d4	92.0	80	120		
Toluene-d8	103	88	110		
4-Bromofluorobenzene	108	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

Sample Number: L09020438-03
Client ID: 47WW14-021909
Matrix: Water
Workgroup Number: WG295733
Collect Date: 02/19/2009 12:01
Sample Tag: DL02

PrePrep Method: NONE
Prep Method: 5030B
Analytical Method: 8260B
Analyst: FJB
Dilution: 2
Units: ug/L

Instrument: HPMS8
Prep Date: 02/24/2009 22:31
Cal Date: 02/19/2009 14:17
Run Date: 02/24/2009 22:31
File ID: 8M351984

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	20.0	5.00
Benzene	71-43-2		U	2.00	0.250
Bromobenzene	108-86-1		U	2.00	0.250
Bromochloromethane	74-97-5		U	2.00	0.400
Bromodichloromethane	75-27-4		U	2.00	0.500
Bromoform	75-25-2		U	2.00	1.00
Bromomethane	74-83-9		U	2.00	1.00
2-Butanone	78-93-3		U	20.0	5.00
n-Butylbenzene	104-51-8		U	2.00	0.500
sec-Butylbenzene	135-98-8		U	2.00	0.500
tert-Butylbenzene	98-06-6		U	2.00	0.500
Carbon disulfide	75-15-0		U	2.00	1.00
Carbon tetrachloride	56-23-5		U	2.00	0.500
Chlorobenzene	108-90-7		U	2.00	0.250
Chlorodibromomethane	124-48-1		U	2.00	0.500
Chloroethane	75-00-3		U	2.00	1.00
2-Chloroethyl vinyl ether	110-75-8		U	20.0	4.00
Chloroform	67-66-3		U	2.00	0.250
Chloromethane	74-87-3		U	2.00	0.500
2-Chlorotoluene	95-49-8		U	2.00	0.250
4-Chlorotoluene	106-43-4		U	2.00	0.500
1,2-Dibromo-3-chloropropane	96-12-8		U	10.0	2.00
1,2-Dibromoethane	106-93-4		U	2.00	0.500
Dibromomethane	74-95-3		U	2.00	0.500
1,2-Dichlorobenzene	95-50-1		U	2.00	0.250
1,3-Dichlorobenzene	541-73-1		U	2.00	0.500
1,4-Dichlorobenzene	106-46-7		U	2.00	0.250
Dichlorodifluoromethane	75-71-8		U	2.00	0.500
1,1-Dichloroethane	75-34-3	0.722	J	2.00	0.250
1,2-Dichloroethane	107-06-2		U	2.00	0.500
1,1-Dichloroethene	75-35-4	2.24		2.00	1.00
cis-1,2-Dichloroethene	156-59-2	102		2.00	0.500
trans-1,2-Dichloroethene	156-60-5	0.702	J	2.00	0.500
1,2-Dichloropropane	78-87-5		U	2.00	0.400
1,3-Dichloropropane	142-28-9		U	2.00	0.400
2,2-Dichloropropane	594-20-7		U	2.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	2.00	0.500
trans-1,3-Dichloropropene	10061-02-6		U	2.00	1.00
1,1-Dichloropropene	563-58-6		U	2.00	0.500
Ethylbenzene	100-41-4		U	2.00	0.500
2-Hexanone	591-78-6		U	20.0	5.00
Hexachlorobutadiene	87-68-3		U	2.00	0.500
Isopropylbenzene	98-82-8		U	2.00	0.500
p-Isopropyltoluene	99-87-6		U	2.00	0.500
4-Methyl-2-pentanone	108-10-1		U	20.0	5.00
Methylene chloride	75-09-2		U	10.0	0.500
Naphthalene	91-20-3		U	2.00	0.400
n-Propylbenzene	103-65-1		U	2.00	0.250
Styrene	100-42-5		U	2.00	0.250
1,1,1,2-Tetrachloroethane	630-20-6		U	2.00	0.500
1,1,2,2-Tetrachloroethane	79-34-5		U	2.00	0.250
Tetrachloroethene	127-18-4		U	2.00	0.500
Toluene	108-88-3		U	2.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	2.00	0.300
1,2,4-Trichlorobenzene	120-82-1		U	2.00	0.400
1,1,1-Trichloroethane	71-55-6		U	2.00	0.500
1,1,2-Trichloroethane	79-00-5		U	2.00	0.500
Trichloroethene	79-01-6	196		2.00	0.500
Trichlorofluoromethane	75-69-4		U	2.00	0.500

Report Number: **L09020438**Report Date : **March 2, 2009**

00103412

Sample Number: **L09020438-03**
 Client ID: **47WW14-021909**
 Matrix: **Water**
 Workgroup Number: **WG295733**
 Collect Date: **02/19/2009 12:01**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **FJB**
 Dilution: **2**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 22:31**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 22:31**
 File ID: **8M351984**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	2.00	1.00
1,2,4-Trimethylbenzene	95-63-6		U	2.00	0.500
1,3,5-Trimethylbenzene	108-67-8		U	2.00	0.500
Vinyl acetate	108-05-4		U	20.0	5.00
Vinyl chloride	75-01-4	11.3		2.00	0.500
o-Xylene	95-47-6		U	2.00	0.500
m-,p-Xylene	136777-61-2		U	2.00	1.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	102	86	118		
1,2-Dichloroethane-d4	92.1	80	120		
Toluene-d8	103	88	110		
4-Bromofluorobenzene	106	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

Sample Number: **L09020438-04**
 Client ID: **47WW14-021909-FD**
 Matrix: **Water**
 Workgroup Number: **WG295620**
 Collect Date: **02/19/2009 12:01**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **2**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 12:53**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 12:53**
 File ID: **8M351966**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	20.0	5.00
Benzene	71-43-2		U	2.00	0.250
Bromobenzene	108-86-1		U	2.00	0.250
Bromochloromethane	74-97-5		U	2.00	0.400
Bromodichloromethane	75-27-4		U	2.00	0.500
Bromoform	75-25-2		U	2.00	1.00
Bromomethane	74-83-9		U	2.00	1.00
2-Butanone	78-93-3		U	20.0	5.00
n-Butylbenzene	104-51-8		U	2.00	0.500
sec-Butylbenzene	135-98-8		U	2.00	0.500
tert-Butylbenzene	98-06-6		U	2.00	0.500
Carbon disulfide	75-15-0		U	2.00	1.00
Carbon tetrachloride	56-23-5		U	2.00	0.500
Chlorobenzene	108-90-7		U	2.00	0.250
Chlorodibromomethane	124-48-1		U	2.00	0.500
Chloroethane	75-00-3		U	2.00	1.00
2-Chloroethyl vinyl ether	110-75-8		U	20.0	4.00
Chloroform	67-66-3		U	2.00	0.250
Chloromethane	74-87-3		U	2.00	0.500
2-Chlorotoluene	95-49-8		U	2.00	0.250
4-Chlorotoluene	106-43-4		U	2.00	0.500
1,2-Dibromo-3-chloropropane	96-12-8		U	10.0	2.00
1,2-Dibromoethane	106-93-4		U	2.00	0.500
Dibromomethane	74-95-3		U	2.00	0.500
1,2-Dichlorobenzene	95-50-1		U	2.00	0.250
1,3-Dichlorobenzene	541-73-1		U	2.00	0.500
1,4-Dichlorobenzene	106-46-7		U	2.00	0.250
Dichlorodifluoromethane	75-71-8		U	2.00	0.500
1,1-Dichloroethane	75-34-3	0.740	J	2.00	0.250
1,2-Dichloroethane	107-06-2		U	2.00	0.500
1,1-Dichloroethene	75-35-4	2.17		2.00	1.00
cis-1,2-Dichloroethene	156-59-2	97.8		2.00	0.500
trans-1,2-Dichloroethene	156-60-5	0.628	J	2.00	0.500
1,2-Dichloropropane	78-87-5		U	2.00	0.400
1,3-Dichloropropane	142-28-9		U	2.00	0.400
2,2-Dichloropropane	594-20-7		U	2.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	2.00	0.500
trans-1,3-Dichloropropene	10061-02-6		U	2.00	1.00
1,1-Dichloropropene	563-58-6		U	2.00	0.500
Ethylbenzene	100-41-4		U	2.00	0.500
2-Hexanone	591-78-6		U	20.0	5.00
Hexachlorobutadiene	87-68-3		U	2.00	0.500
Isopropylbenzene	98-82-8		U	2.00	0.500
p-Isopropyltoluene	99-87-6		U	2.00	0.500
4-Methyl-2-pentanone	108-10-1		U	20.0	5.00
Methylene chloride	75-09-2		U	10.0	0.500
Naphthalene	91-20-3		U	2.00	0.400
n-Propylbenzene	103-65-1		U	2.00	0.250
Styrene	100-42-5		U	2.00	0.250
1,1,1,2-Tetrachloroethane	630-20-6		U	2.00	0.500
1,1,2,2-Tetrachloroethane	79-34-5		U	2.00	0.250
Tetrachloroethene	127-18-4		U	2.00	0.500
Toluene	108-88-3		U	2.00	0.500
1,2,3-Trichlorobenzene	87-61-6		U	2.00	0.300
1,2,4-Trichlorobenzene	120-82-1		U	2.00	0.400
1,1,1-Trichloroethane	71-55-6		U	2.00	0.500
1,1,2-Trichloroethane	79-00-5		U	2.00	0.500
Trichloroethene	79-01-6	186		2.00	0.500
Trichlorofluoromethane	75-69-4		U	2.00	0.500

Report Number: **L09020438**Report Date : **March 2, 2009**

00103414

Sample Number: **L09020438-04**
 Client ID: **47WW14-021909-FD**
 Matrix: **Water**
 Workgroup Number: **WG295620**
 Collect Date: **02/19/2009 12:01**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **2**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/24/2009 12:53**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 12:53**
 File ID: **8M351966**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	2.00	1.00
1,2,4-Trimethylbenzene	95-63-6		U	2.00	0.500
1,3,5-Trimethylbenzene	108-67-8		U	2.00	0.500
Vinyl acetate	108-05-4		U	20.0	5.00
Vinyl chloride	75-01-4	8.91		2.00	0.500
o-Xylene	95-47-6		U	2.00	0.500
m-,p-Xylene	136777-61-2		U	2.00	1.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	99.8	86	118		
1,2-Dichloroethane-d4	88.2	80	120		
Toluene-d8	102	88	110		
4-Bromofluorobenzene	102	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

Sample Number: **L09020438-04**
 Client ID: **47WW14-021909-FD**
 Matrix: **Water**
 Workgroup Number: **WG295535**
 Collect Date: **02/19/2009 12:01**
 Sample Tag: **01**

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

Instrument: **HPMS8**
 Prep Date: **02/23/2009 18:30**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/23/2009 18:30**
 File ID: **8M351948**

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	0.851	J	1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4	2.75		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	111		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	0.699	J	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
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	0.150
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	213	I	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L09020438**Report Date : **March 2, 2009**

00103416

Sample Number: **L09020438-04**
 Client ID: **47WW14-021909-FD**
 Matrix: **Water**
 Workgroup Number: **WG295535**
 Collect Date: **02/19/2009 12:01**
 Sample Tag: **01**

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

Instrument: **HPMS8**
 Prep Date: **02/23/2009 18:30**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/23/2009 18:30**
 File ID: **8M351948**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	17.1		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	102	86	118		
1,2-Dichloroethane-d4	93.1	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	104	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

I Semiquantitative result (out of instrument calibration range)

Sample Number: L09020438-05
 Client ID: 47WW19-021909
 Matrix: Water
 Workgroup Number: WG295733
 Collect Date: 02/19/2009 13:43
 Sample Tag: 01

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

Instrument: HPMS8
 Prep Date: 02/24/2009 23:03
 Cal Date: 02/19/2009 14:17
 Run Date: 02/24/2009 23:03
 File ID: 8M351985

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
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	0.150
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	2.00		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L09020438**Report Date : **March 2, 2009****00103418**

Sample Number: **L09020438-05**
 Client ID: **47WW19-021909**
 Matrix: **Water**
 Workgroup Number: **WG295733**
 Collect Date: **02/19/2009 13:43**
 Sample Tag: **01**

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

Instrument: **HPMS8**
 Prep Date: **02/24/2009 23:03**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/24/2009 23:03**
 File ID: **8M351985**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	102	86	118		
1,2-Dichloroethane-d4	94.2	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	106	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: **L09020438-06**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG295505**
 Collect Date: **02/19/2009 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **02/21/2009 17:34**
 Cal Date: **02/06/2009 14:52**
 Run Date: **02/21/2009 17:34**
 File ID: **11M57281**

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
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	0.150
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

Report Number: **L09020438**Report Date : **March 2, 2009**

00103420

Sample Number: **L09020438-06**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG295505**
 Collect Date: **02/19/2009 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **02/21/2009 17:34**
 Cal Date: **02/06/2009 14:52**
 Run Date: **02/21/2009 17:34**
 File ID: **11M57281**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	97.3	86	118		
1,2-Dichloroethane-d4	83.9	80	120		
Toluene-d8	95.2	88	110		
4-Bromofluorobenzene	97.4	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

Microbac Laboratories Inc.
Instrument Run Log

00103424

Instrument: HPMS11 Dataset: 020609
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27562

Internal Standard: STD31017 Surrogate Standard: STD31019
 CCV: STD31193 LCS: STD31090 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG294332

Comments: First calibration after installation of 0.6mm id draw out plate.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M56945	WG294332-01 50ng BFB STD 8260	NA	1	1	STD30703	02/06/09 09:21
2	11M56946	SYSTEM BLANK	NA	1	1		02/06/09 09:49
3	11M56947	WG294332-02 0.3ug/L STD 8260	NA	1	1	STD31193	02/06/09 10:22
4	11M56948	WG294332-03 0.4ug/L STD 8260	NA	1	1	STD31193	02/06/09 10:52
5	11M56949	WG294332-04 1.0ug/L STD 8260	NA	1	1	STD31193	02/06/09 11:22
6	11M56950	WG294332-05 2.0ug/L STD 8260	NA	1	1	STD31193	02/06/09 11:52
7	11M56951	WG294332-06 5.0ug/L STD 8260	NA	1	1	STD31193	02/06/09 12:22
8	11M56952	WG294332-07 20ug/L STD 8260	NA	1	1	STD31193	02/06/09 12:52
9	11M56953	WG294332-08 50ug/L STD 8260	NA	1	1	STD31193	02/06/09 13:22
10	11M56954	WG294332-09 100ug/L STD 8260	NA	1	1	STD31193	02/06/09 13:52
11	11M56955	WG294332-10 200ug/L STD 8260	NA	1	1	STD31193	02/06/09 14:22
12	11M56956	WG294332-11 300ug/L STD 8260	NA	1	1	STD31193	02/06/09 14:52
13	11M56957	SYSTEM BLANK	NA	1	1		02/06/09 15:22
14	11M56958	SYSTEM BLANK	NA	1	1		02/06/09 15:53
15	11M56959	SYSTEM BLANK	NA	1	1		02/06/09 16:24
16	11M56960	WG294332-12 20ug/L ALT SRC	NA	1	1	STD31090	02/06/09 16:54
17	11M56961	SYSTEM BLANK	NA	1	1		02/06/09 17:25
18	11M56962	SYSTEM BLANK	NA	1	1		02/06/09 17:56

Comments

Seq.	Rerun	Dil.	Reason	Analytes
16				
File ID: 11M56960				
Oxygenates spiked at 50ug/L. ALT Source OXY's reran on 10-FEB-2009.				

Approved: February 12, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103425

Instrument: HPMS11 Dataset: 021009
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27593

Internal Standard: STD31017 Surrogate Standard: STD31019
 CCV: STD31246 LCS: STD31203 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 294549

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M56989	WG294548-01 50ng BFB STD 8260	NA	1	1	STD31210	02/10/09 10:29
2	11M56990	WG294332-12 OXY ALT SOURCE	NA	1	1	STD31098	02/10/09 10:53
3	11M56991	WG294548-02 50ug/L STD 8260	NA	1	1	STD31193	02/10/09 11:23
4	11M56992	WG294549-01 BLANK 8260	NA	1	1		02/10/09 11:57
5	11M56993	WG294549-01 BLANK 8260	NA	1	1		02/10/09 12:27
6	11M56994	WG294549-02 20ug/L LCS 8260	NA	1	1	STD31090	02/10/09 12:57
7	11M56995	WG294549-03 20ug/L LCSD 8260	NA	1	1	STD31090	02/10/09 13:27
8	11M56996	SYSTEM BLANK	NA	1	1		02/10/09 13:57
9	11M56997	L09020114-08 A 826-SPE	<2	1	1		02/10/09 14:27
10	11M56998	L09020114-10 A 826-SPE	<2	1	1		02/10/09 14:57
11	11M56999	L09020114-11 A 826-SPE	<2	1	1		02/10/09 15:28
12	11M57000	L09020114-12 A 826-SPE	<2	1	1		02/10/09 15:58
13	11M57001	L09020114-13 A 826-SPE	<2	1	1		02/10/09 16:28
14	11M57002	L09020136-01 A 826-SPE	<2	1	1		02/10/09 16:58
15	11M57003	L09020136-02 A 826-SPE	<2	1	1		02/10/09 17:29
16	11M57004	L09020136-04 A 826-SPE	<2	1	1		02/10/09 17:59
17	11M57005	L09020136-05 A 826-SPE	<2	1	1		02/10/09 18:29
18	11M57006	L09020136-06 A 826-SPE	<2	1	1		02/10/09 18:59
19	11M57007	L09020136-03 A 2X 826-SPE	<2	1	2		02/10/09 19:29
20	11M57008	L09020123-01 A 100X 826-SPE	<2	1	100		02/10/09 19:59
21	11M57009	L09020123-02 A 100X 826-SPE	<2	1	100		02/10/09 20:29
22	11M57010	SYSTEM BLANK	NA	1	1		02/10/09 20:59
23	11M57011	SYSTEM BLANK	NA	1	1		02/10/09 21:29

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X		Carry-over contamination	
File ID: 11M56992				
DNR				
20	X	1	Analyzed too dilute	
File ID: 11M57008				
21	X	1	Analyzed too dilute	

Approved: February 12, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103426

Instrument: HPMS11 Dataset: 021009
Analyst1: WTD Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27593

Internal Standard: STD31017 Surrogate Standard: STD31019
CCV: STD31246 LCS: STD31203 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: 294549

Comments: Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M57009				

Approved: February 12, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103427

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	8M351783	BLANK	NA	1	1		02/19/09 07:23
2	8M351784	BLANK	NA	1	1		02/19/09 07:55
3	8M351785	WG295276-01 50NG BFB STD 8260	NA	1	1	STD30703	02/19/09 08:25
4	8M351786	WG295276-02 0.3ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 08:50
5	8M351787	WG295276-03 0.4ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 09:23
6	8M351788	WG295276-04 1ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 09:55
7	8M351789	WG295276-05 2ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 10:31
8	8M351790	WG295276-06 5ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 11:03
9	8M351791	WG295276-07 20ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 11:37
10	8M351792	WG295276-08 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 12:09
11	8M351793	WG295276-09 100ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 12:41
12	8M351794	WG295276-10 200ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 13:13
13	8M351795	WG295276-11 300ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 13:45
14	8M351796	WG295276-09 100ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 14:17
15	8M351797	SYSTEM BLANK	NA	1	1		02/19/09 14:49
16	8M351798	SYSTEM BLANK	NA	1	1		02/19/09 15:21
17	8M351799	WG295276-12 20ug/L ALT SOURCE	NA	1	1	STD31431	02/19/09 16:12
18	8M351800	WG295276-12 100ug/L OXY ALT SOURCE	NA	1	1	STD31431	02/19/09 16:44
19	8M351801	WG295370-01 50NG BFB STD 8260	NA	1	1	STD30703	02/19/09 17:13
20	8M351802	WG295370-02 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 17:39
21	8M351803	WG295370-02 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 18:12
22	8M351804	WG295371-01 VBLK0219 BLANK 8260	NA	1	1		02/19/09 18:44
23	8M351805	WG295371-02 20ug/L LCS 8260	NA	1	1	STD31431	02/19/09 19:16
24	8M351806	WG295371-03 20ug/L LCSDUP 8260	NA	1	1	STD31431	02/19/09 19:48
25	8M351807	L09020270-08 A 826-SPE	<2	1	1		02/19/09 20:20
26	8M351808	L09020346-03 B 826-LOW	<2	1	1		02/19/09 20:52
27	8M351809	L09020270-05 A 826-SPE	<2	1	1		02/19/09 21:24
28	8M351810	L09020270-07 A 826-SPE	<2	1	1		02/19/09 21:56
29	8M351811	L09020270-01 A 5X 826-SPE	4	1	5		02/19/09 22:29
30	8M351812	L09020270-02 A 10X 826-SPE	<2	1	10		02/19/09 23:01
31	8M351813	L09020270-03 A 5X 826-SPE	<2	1	5		02/19/09 23:33
32	8M351814	L09020270-04 A 10X 826-SPE	<2	1	10		02/20/09 00:05
33	8M351815	L09020270-06 A 10X 826-SPE	<2	1	10		02/20/09 00:37
34	8M351816	L09020271-01 A 10X 826-SPE	<2	1	10		02/20/09 01:09

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103428

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	8M351817	L09020271-02 A 5X 826-SPE	<2	1	5		02/20/09 01:41
36	8M351818	L09020271-03 A 2.5X 826-SPE	<2	1	5		02/20/09 02:13
37	8M351819	L09020271-04 A 2.5X 826-SPE	<2	1	5		02/20/09 02:45
38	8M351820	L09020271-05 A 5X 826-SPE	<2	1	5		02/20/09 03:17
39	8M351821	L09020271-06 A 5X 826-SPE	<2	1	5		02/20/09 03:49
40	8M351822	L09020271-07 A 5X 826-SPE	<2	1	5		02/20/09 04:21
41	8M351823	L09020408-01 A 826-LOW	4	1	1		02/20/09 04:53
42	8M351824	SYSTEM BLANK	NA	1	1		02/20/09 05:25
43	8M351825	SYSTEM BLANK	NA	1	1		02/20/09 05:57
44	8M351826	SYSTEM BLANK	NA	1	1		02/20/09 06:29

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11	X	100		
File ID: 8M351793				
DNR.				
20	X			
File ID: 8M351802				
DNR.				
32	X	5	Analyzed too dilute	
File ID: 8M351814				
33	X	5	Analyzed too dilute	
File ID: 8M351815				
34	X	5	Analyzed too dilute	
File ID: 8M351816				
35	X	2.5	Analyzed too dilute	
File ID: 8M351817				
37	X	1	Analyzed too dilute	
File ID: 8M351819				
38	X	1	Analyzed too dilute	

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103429

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 8M351820				
40	X	2.5	Analyzed too dilute	
File ID: 8M351822				
41	X	10	Over Calibration Range	NAPH
File ID: 8M351823				

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103430

Instrument: HPMS11 Dataset: 022109
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27711

Internal Standard: STD31017 Surrogate Standard: STD31019
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 295505

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M57272	WG295504-01 BFB 50ng STD 8260	NA	1	1	STD31210	02/21/09 13:03
2	11M57273	WG295504-02 50ug/L STD 8260	NA	1	1	STD31425	02/21/09 13:27
3	11M57274	WG295505-01 VBLK0221 BLANK 8260	NA	1	1		02/21/09 13:59
4	11M57275	WG295505-01 VBLK0221 BLANK 8260	NA	1	1		02/21/09 14:29
5	11M57276	WG295505-02 20ug/L LCS STD 8260	NA	1	1	STD31431	02/21/09 15:00
6	11M57277	WG295505-03 20ug/L LCS DUP STD 8260	NA	1	1	STD31431	02/21/09 15:31
7	11M57278	SYSTEM BLANK	NA	1	1		02/21/09 16:02
8	11M57279	L09020278-08 A 826-SPE	<2	1	1		02/21/09 16:33
9	11M57280	L09020282-04 A 826-SPE	<2	1	1		02/21/09 17:03
10	11M57281	L09020438-06 A 826-LOW	<2	1	1		02/21/09 17:34
11	11M57282	L09020244-05 10X B 826-SPE	<2	1	10		02/21/09 18:05
12	11M57283	L09020244-06 500X B 826-SPE	<2	1	500		02/21/09 18:36
13	11M57284	L09020244-07 10X B 826-SPE	<2	1	10		02/21/09 19:07
14	11M57285	L09020244-11 B 826-SPE	<2	1	1		02/21/09 19:38
15	11M57286	L09020278-01 A 826-SPE	<2	1	1		02/21/09 20:09
16	11M57287	L09020278-02 A 826-SPE	<2	1	1		02/21/09 20:40
17	11M57288	L09020278-06 A 826-SPE	<2	1	1		02/21/09 21:10
18	11M57289	L09020320-01 A 826-SPE	<2	1	1		02/21/09 21:41
19	11M57290	L09020271-13 5X A 826-SPE	<2	1	5		02/21/09 22:13
20	11M57291	L09020278-03 25X A 826-SPE	<2	1	25		02/21/09 22:44
21	11M57292	L09020278-04 25X A 826-SPE	<2	1	25		02/21/09 23:15
22	11M57293	L09020278-05 25X A 826-SPE	<2	1	25		02/21/09 23:45
23	11M57294	L09020282-03 10X A 826-SPE	<2	1	10		02/22/09 00:16
24	11M57295	SYSTEM BLANK	NA	1	1		02/22/09 00:47
25	11M57296	SYSTEM BLANK	NA	1	1		02/22/09 01:18

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M57274				
DNR				
11	X		Internal standard failure	
File ID: 11M57282				

Approved: February 24, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103431

Instrument: HPMS11 Dataset: 022109
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27711

Internal Standard: STD31017 Surrogate Standard: STD31019
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 295505

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			Purge \& Trap system possibly foamed during analysis, DNR.	
12	X		Internal standard failure	
File ID: 11M57283				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
13	X		Internal standard failure	
File ID: 11M57284				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
14	X		Internal standard failure	
File ID: 11M57285				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
15	X		Internal standard failure	
File ID: 11M57286				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
16	X		Internal standard failure	
File ID: 11M57287				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
17	X		Internal standard failure	
File ID: 11M57288				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
18	X		Internal standard failure	
File ID: 11M57289				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
19	X		Internal standard failure	
File ID: 11M57290				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
20	X		Internal standard failure	
File ID: 11M57291				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
21	X		Internal standard failure	
File ID: 11M57292				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	
22	X		Internal standard failure	
File ID: 11M57293				
			Purge \& Trap system possibly foamed prior to analysis, DNR.	

Approved: February 24, 2009

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WTD



Microbac Laboratories Inc.
Instrument Run Log

00103432

Instrument: HPMS11 Dataset: 022109
Analyst1: WTD Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27711

Internal Standard: STD31017 Surrogate Standard: STD31019
CCV: STD31425 LCS: STD31431 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: 295505

Comments: Comments

Seq.	Rerun	Dil.	Reason	Analytes
23	X	5	Internal standard failure	
File ID: 11M57294				
Purge & Trap system possibly foamed prior to analysis, DNR.				

Approved: February 24, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103433

Instrument: HPMS8 Dataset: 022309
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030B SOP: PAT01 Rev: 11
 Maintenance Log ID: _____

Internal Standard: STD31335 Surrogate Standard: STD31439
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: wg295535

Comments: _____

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	8M351929	WG295534-01 BFB 50ng STD 8260	NA	1	1	STD31210	02/23/09 08:25
2	8M351930	WG295534-02 50ug/L STD 8260	NA	1	1	STD31425	02/23/09 08:51
3	8M351931	WG295535-01 VBLK0223 BLANK 8260	NA	1	1		02/23/09 09:23
4	8M351932	WG295535-02 20ug/L LCS 8260	NA	1	1	STD31431	02/23/09 09:55
5	8M351933	L09020269-05 B D2 250X 826-SPE3	<2	1	250		02/23/09 10:27
6	8M351934	L09020269-08 B D2 250X 826-SPE3	<2	1	250		02/23/09 11:00
7	8M351935	L09020269-09 B D2 1000X 826-SPE3	<2	1	1000		02/23/09 11:32
8	8M351936	L09020269-10 B D2 2500X 826-SPE3	<2	1	2500		02/23/09 12:04
9	8M351937	L09020244-11 C 826-SPE	<2	1	1		02/23/09 12:36
10	8M351938	L09020271-13 B 826-SPE	<2	1	1		02/23/09 13:08
11	8M351939	L09020244-05 B 100X 826-SPE	<2	1	100		02/23/09 13:40
12	8M351940	L09020244-07 B 10X 826-SPE	<2	1	10		02/23/09 14:13
13	8M351941	L09020295-01 A 826-SPE	<2	1	1		02/23/09 14:45
14	8M351942	L09020438-03 A 100X 826-LOW	<2	1	100		02/23/09 15:18
15	8M351943	L09020301-05 A 10X 826-SPE	<2	1	10		02/23/09 15:50
16	8M351944	L09020301-06 MS A 10X 826-SPE	<2	1	10	STD31431	02/23/09 16:22
17	8M351945	L09020301-07 MSD A 10X 826-SPE	<2	1	10	STD31431	02/23/09 16:54
18	8M351946	L09020438-01 A 100X 826-LOW	<2	1	100		02/23/09 17:26
19	8M351947	L09020438-02 A 100X 826-LOW	<2	1	100		02/23/09 17:58
20	8M351948	L09020438-04 A 826-LOW	<2	1	1		02/23/09 18:30
21	8M351949	L09020244-11 C D1 5X 826-SPE	<2	1	5		02/23/09 19:02
22	8M351950	L09020244-06 A 500X 826-SPE	<2	1	500		02/23/09 19:35
23	8M351951	L09020438-05 A 100X 826-LOW	<2	1	100		02/23/09 20:07
24	8M351952	SYSTEM BLANK	NA	1	1		02/23/09 20:39
25	8M351953	SYSTEM BLANK	NA	1	1		02/23/09 21:11
26	8M351954	SYSTEM BLANK	NA	1	1		02/23/09 21:43

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5	X	2500	Over Calibration Range	TCE
File ID: 8M351933				
7	X	5000	Over Calibration Range	1,1-DCE

Approved: February 25, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103434

Instrument: HPMS8 Dataset: 022309
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030B SOP: PAT01 Rev: 11
 Maintenance Log ID: _____

Internal Standard: STD31335 Surrogate Standard: STD31439
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: wg295535

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 8M351935				
9	X	5	Over Calibration Range	vc
File ID: 8M351937				
11				
File ID: 8M351939				
Not running more conc. due to thick white matrix-may have foamed 11.				
13	X	10	Over Calibration Range	tce
File ID: 8M351941				
14				
File ID: 8M351942				
PRELIM				
15	X	10	Over Calibration Range	cis-1,2
File ID: 8M351943				
18				
File ID: 8M351946				
PRELIM				
19	X	5	Analyzed too dilute	
File ID: 8M351947				
PRELIM				
20	X	2	Over Calibration Range	TCE
File ID: 8M351948				
21				
File ID: 8M351949				
Vial had headspace.				
23	X	1	Analyzed too dilute	
File ID: 8M351951				
PRELIM				

Approved: February 25, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103435

Instrument: HPMS8 Dataset: 022409
 Analyst1: MES Analyst2: FJB
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27763

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295620, WG295733

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	8M351956	WG295619-01 BFB 50ng STD 8260	NA	1	1	STD31210	02/24/09 07:15
2	8M351957	WG295619-02 50ug/L STD 8260	NA	1	1	STD31425	02/24/09 07:40
3	8M351958	WG295619-02 50ug/L STD 8260	NA	1	1	STD31425	02/24/09 08:36
4	8M351959	WG295620-01 VBLK0224 BLANK 8260	NA	1	1		02/24/09 09:08
5	8M351960	WG295620-02 20ug/L LCS 8260	NA	1	1	STD31431	02/24/09 09:40
6	8M351961	WG295620-03 20ug/L LCSDUP 8260	NA	1	1	STD31431	02/24/09 10:12
7	8M351962	L09020269-05 C D3 2500X 826-SPE3	NA	1	2500		02/24/09 10:45
8	8M351963	L09020269-09 C D3 5000X 826-SPE3	NA	1	5000		02/24/09 11:17
9	8M351964	L09020295-01 B D1 10X 826-SPE	NA	1	10		02/24/09 11:49
10	8M351965	L09020301-05 B D1 100X 826-SPE	NA	1	100		02/24/09 12:21
11	8M351966	L09020438-04 B D1 2X 826-LOW	NA	1	2		02/24/09 12:53
12	8M351967	L09020282-03 C D1 5X 826-SPE	NA	1	5		02/24/09 13:26
13	8M351968	L09020301-03 B D1 50X 826-SPE	NA	1	50		02/24/09 13:58
14	8M351969	L09020301-04 B D1 50X 826-SPE	NA	1	50		02/24/09 14:30
15	8M351970	L09020302-05 B 826-SPE	NA	1	1		02/24/09 15:02
16	8M351971	L09020301-01 B 826-SPE	NA	1	1		02/24/09 15:34
17	8M351972	L09020301-02 B 826-SPE	NA	1	1		02/24/09 16:06
18	8M351973	L09020323-08 A 826-SPE	NA	1	1		02/24/09 16:38
19	8M351974	L09020323-09 A 826-SPE	NA	1	1		02/24/09 17:10
20	8M351975	WG295732-01 BFB 50ng STD 8260	NA	1	1	STD31210	02/24/09 17:49
21	8M351976	WG295732-02 50ug/L STD 8260	NA	1	1	STD31425	02/24/09 18:14
22	8M351977	WG295733-01 VBLK0224 BLANK 8260	NA	1	1		02/24/09 18:46
23	8M351978	WG295733-02 20ug/L LCS STD 8260	NA	1	1	STD31431	02/24/09 19:18
24	8M351979	WG295733-03 20ug/L LCS DUP STD 8260	NA	1	1	STD31431	02/24/09 19:51
25	8M351980	L09020301-03 250X D1 C 826-SPE	<2	1	250		02/24/09 20:23
26	8M351981	L09020301-04 250X D1 C 826-SPE	<2	1	250		02/24/09 20:55
27	8M351982	L09020438-01 50X B 826-LOW	<2	1	50		02/24/09 21:27
28	8M351983	L09020438-02 5X B 826-LOW	<2	1	5		02/24/09 21:59
29	8M351984	L09020438-03 2X B 826-LOW	<2	1	2		02/24/09 22:31
30	8M351985	L09020438-05 B 826-LOW	<2	1	1		02/24/09 23:03
31	8M351986	L09020322-14 A 826-SPE	<2	1	1		02/24/09 23:35
32	8M351987	L09020322-15 A 826-SPE	<2	1	1		02/25/09 00:07
33	8M351988	L09020322-16 A 826-SPE	<2	1	1		02/25/09 00:39
34	8M351989	L09020456-03 A 826-BETX	<2	1	1		02/25/09 01:11

Approved: February 26, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103436

Instrument: HPMS8 Dataset: 022409
 Analyst1: MES Analyst2: FJB
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27763

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295620, WG295733

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	8M351990	L09020366-01 A 826-SPE	<2	1	1		02/25/09 01:43
36	8M351991	L09020366-03 A 826-SPE	<2	1	1		02/25/09 02:15
37	8M351992	L09020366-04 A 826-SPE	<2	1	1		02/25/09 02:47
38	8M351993	L09020366-05 A 826-SPE	<2	1	1		02/25/09 03:19
39	8M351994	L09020324-01 A 826-SPE	<2	1	1		02/25/09 03:51
40	8M351995	L09020324-02 A 826-SPE	<2	1	1		02/25/09 04:23
41	8M351996	L09020324-03 A 826-SPE	<2	1	1		02/25/09 04:55
42	8M351997	L09020324-04 A 826-SPE	<2	1	1		02/25/09 05:27
43	8M351998	SYSTEM BLANK	NA	1	1		02/25/09 05:59
44	8M351999	SYSTEM BLANK	NA	1	1		02/25/09 06:31

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2				
File ID: 8M351957				
RR for AF.				
13	X	250	Over Calibration Range	cis-1,2-DCE
File ID: 8M351968				
14	X	250	Over Calibration Range	cis-1,2-DCE
File ID: 8M351969				

Approved: February 26, 2009

Page: 2

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Microbac Laboratories Inc.

00103437

Data Checklist

Date: 06-FEB-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 26468

Analytical Workgroups: 294332

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Reruns	
Manual Integrations	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
10-FEB-2009

Secondary Reviewer:
12-FEB-2009



Microbac Laboratories Inc.

00103438

Data Checklist

Date: 10-FEB-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 26501

Analytical Workgroups: 294549

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
12-FEB-2009

Secondary Reviewer:
12-FEB-2009



Microbac Laboratories Inc.

00103439

Data Checklist

Date: 19-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS8

Curve Workgroup: NA

Runlog ID: 26615

Analytical Workgroups: WG295371; WG295276

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	TMB
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:
20-FEB-2009



Secondary Reviewer:
20-FEB-2009




Microbac Laboratories Inc.

00103440

Data Checklist

Date: 21-FEB-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 26654

Analytical Workgroups: 295505

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
24-FEB-2009

Secondary Reviewer:
24-FEB-2009



Microbac Laboratories Inc.

00103441

Data Checklist

Date: 23-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS8

Curve Workgroup: NA

Runlog ID: 26687

Analytical Workgroups: WG295535

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:
24-FEB-2009



Secondary Reviewer:
25-FEB-2009




Microbac Laboratories Inc.

00103442

Data Checklist

Date: 24-FEB-2009

Analyst: MES

Analyst: FJB

Method: 8260

Instrument: HPMS8

Curve Workgroup: NA

Runlog ID: 26746

Analytical Workgroups: WG295620, WG295733

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	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:
26-FEB-2009



Secondary Reviewer:
26-FEB-2009




Analytical Method: 8260B

AAB#: WG295505

Login Number: L09020438

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
TRIP BLANK	02/19/09	02/20/09	02/21/09	14	2.73	02/21/09	14	2.73	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG295535

Login Number: L09020438

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
47WW14-021909-FD	02/19/09	02/20/09	02/23/09	14	4.27	02/23/09	14	4.27	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG295620

Login Number: L09020438

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
47WW14-021909-FD	02/19/09	02/20/09	02/24/09	14	5.04	02/24/09	14	5.04	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG295733

Login Number: L09020438

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
LHSMW43-021909	02/19/09	02/20/09	02/24/09	14	5.54	02/24/09	14	5.54	
LHSMW45-021909	02/19/09	02/20/09	02/24/09	14	5.50	02/24/09	14	5.50	
47WW14-021909	02/19/09	02/20/09	02/24/09	14	5.44	02/24/09	14	5.44	
47WW19-021909	02/19/09	02/20/09	02/24/09	14	5.39	02/24/09	14	5.39	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L09020438
Instrument Id: HPMS8
Workgroup (AAB#): WG295733

Method: 8260
CAL ID: HPMS8 - 19-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020438-01	50.0	DL02	88.4	100	104	101
L09020438-02	5.00	DL02	92.0	103	108	103
L09020438-03	2.00	DL02	92.1	102	106	103
L09020438-05	1.00	01	94.2	102	106	101
WG295733-01	1.00	01	88.5	99.4	102	99.3
WG295733-02	1.00	01	91.4	99.6	103	101
WG295733-03	1.00	01	87.9	97.7	101	101

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: L09020438
Instrument Id: HPMS8
Workgroup (AAB#): WG295620

Method: 8260
CAL ID: HPMS8 - 19-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020438-04	2.00	DL01	88.2	99.8	102	102
WG295620-01	1.00	01	85.4	97.4	101	100
WG295620-02	1.00	01	83.6	96.8	100	100
WG295620-03	1.00	01	83.7	97.3	101	100

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: L09020438
Instrument Id: HPMS11
Workgroup (AAB#): WG295505

Method: 8260
CAL ID: HPMS11 - 06-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020438-06	1.00	01	83.9	97.3	97.4	95.2
WG295505-01	1.00	01	83.1	97.7	96.8	96.3
WG295505-02	1.00	01	83.3	98.6	95.1	95.2
WG295505-03	1.00	01	84.0	98.7	95.0	94.1

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: L09020438
Instrument Id: HPMS8
Workgroup (AAB#): WG295535

Method: 8260
CAL ID: HPMS8 - 19-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020438-04	1.00	01	93.1	102	104	101
WG295535-01	1.00	01	88.9	101	103	101
WG295535-02	1.00	01	89.4	99.6	103	99.5

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

Login Number:	<u>L09020438</u>	Work Group:	<u>WG295505</u>
Blank File ID:	<u>11M57275</u>	Blank Sample ID:	<u>WG295505-01</u>
Prep Date:	<u>02/21/09 14:29</u>	Instrument ID:	<u>HPMS11</u>
Analyzed Date:	<u>02/21/09 14:29</u>	Method:	<u>8260B</u>
Analyst:	<u>FJB</u>		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295505-02	11M57276	02/21/09 15:00	01
LCS2	WG295505-03	11M57277	02/21/09 15:31	01
TRIP BLANK	L09020438-06	11M57281	02/21/09 17:34	01

METHOD BLANK SUMMARY

Login Number: <u>L09020438</u>	Work Group: <u>WG295535</u>
Blank File ID: <u>8M351931</u>	Blank Sample ID: <u>WG295535-01</u>
Prep Date: <u>02/23/09 09:23</u>	Instrument ID: <u>HPMS8</u>
Analyzed Date: <u>02/23/09 09:23</u>	Method: <u>8260B</u>
Analyst: <u>MES</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295535-02	8M351932	02/23/09 09:55	01
47WW14-021909-FD	L09020438-04	8M351948	02/23/09 18:30	01

Report Name: BLANK_SUMMARY
PDF File ID: 1327013
Report generated 02/27/2009 14:30



METHOD BLANK SUMMARY

Login Number: <u>L09020438</u>	Work Group: <u>WG295620</u>
Blank File ID: <u>8M351959</u>	Blank Sample ID: <u>WG295620-01</u>
Prep Date: <u>02/24/09 09:08</u>	Instrument ID: <u>HPMS8</u>
Analyzed Date: <u>02/24/09 09:08</u>	Method: <u>8260B</u>
Analyst: <u>MES</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295620-02	8M351960	02/24/09 09:40	01
LCS2	WG295620-03	8M351961	02/24/09 10:12	01
47WW14-021909-FD	L09020438-04	8M351966	02/24/09 12:53	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1327013
Report generated 02/27/2009 14:30



METHOD BLANK SUMMARY

Login Number: L09020438
Blank File ID: 8M351977
Prep Date: 02/24/09 18:46
Analyzed Date: 02/24/09 18:46
Analyst: FJB

Work Group: WG295733
Blank Sample ID: WG295733-01
Instrument ID: HPMS8
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295733-02	8M351978	02/24/09 19:18	01
LCS2	WG295733-03	8M351979	02/24/09 19:51	01
LHSMW43-021909	L09020438-01	8M351982	02/24/09 21:27	DL02
LHSMW45-021909	L09020438-02	8M351983	02/24/09 21:59	DL02
47WW14-021909	L09020438-03	8M351984	02/24/09 22:31	DL02
47WW19-021909	L09020438-05	8M351985	02/24/09 23:03	01

Login Number: L09020438	Prep Date: 02/21/09 14:29	Sample ID: WG295505-01
Instrument ID: HPMS11	Run Date: 02/21/09 14:29	Prep Method: 5030B
File ID: 11M57275	Analyst: FJB	Method: 8260B
Workgroup (AAB#): WG295505	Matrix: Water	Units: ug/L
Contract #: DACA56-94-D-0020	Cal ID: HPMS11 - 06-FEB-09	

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	0.250	1	U

Report Name: BLANK

PDF ID: 1327014

27-FEB-2009 14:30



Login Number: L09020438 Prep Date: 02/21/09 14:29 Sample ID: WG295505-01
 Instrument ID: HPMS11 Run Date: 02/21/09 14:29 Prep Method: 5030B
 File ID: 11M57275 Analyst: FJB Method: 8260B
 Workgroup (AAB#): WG295505 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 06-FEB-09

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	0.200	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	0.150	1.00	0.150	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	0.500	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	97.7	86 - 118	PASS
1,2-Dichloroethane-d4	83.1	80 - 120	PASS
Toluene-d8	96.3	88 - 110	PASS
4-Bromofluorobenzene	96.8	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1327014

27-FEB-2009 14:30



Login Number: L09020438 Prep Date: 02/23/09 09:23 Sample ID: WG295535-01
 Instrument ID: HPMS8 Run Date: 02/23/09 09:23 Prep Method: 5030B
 File ID: 8M351931 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295535 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.253	1	J

Report Name: BLANK

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Login Number: L09020438 Prep Date: 02/23/09 09:23 Sample ID: WG295535-01
 Instrument ID: HPMS8 Run Date: 02/23/09 09:23 Prep Method: 5030B
 File ID: 8M351931 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295535 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.277	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	0.150	1.00	0.289	1	J
1,2,4-Trichlorobenzene	0.200	1.00	0.247	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	101	86 - 118	PASS
1,2-Dichloroethane-d4	88.9	80 - 120	PASS
Toluene-d8	101	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

Report Name: BLANK

PDF ID: 1327014

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Login Number: L09020438 Prep Date: 02/24/09 09:08 Sample ID: WG295620-01
 Instrument ID: HPMS8 Run Date: 02/24/09 09:08 Prep Method: 5030B
 File ID: 8M351959 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295620 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.250	1	U

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METHOD BLANK REPORT

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Login Number: L09020438 Prep Date: 02/24/09 09:08 Sample ID: WG295620-01
 Instrument ID: HPMS8 Run Date: 02/24/09 09:08 Prep Method: 5030B
 File ID: 8M351959 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295620 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.219	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	0.150	1.00	0.227	1	J
1,2,4-Trichlorobenzene	0.200	1.00	0.202	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	97.4	86 - 118	PASS
1,2-Dichloroethane-d4	85.4	80 - 120	PASS
Toluene-d8	100	88 - 110	PASS
4-Bromofluorobenzene	101	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1327014

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Login Number: L09020438 Prep Date: 02/24/09 18:46 Sample ID: WG295733-01
 Instrument ID: HPMS8 Run Date: 02/24/09 18:46 Prep Method: 5030B
 File ID: 8M351977 Analyst: FJB Method: 8260B
 Workgroup (AAB#): WG295733 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.250	1	U

Report Name: BLANK

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Login Number: L09020438 Prep Date: 02/24/09 18:46 Sample ID: WG295733-01
 Instrument ID: HPMS8 Run Date: 02/24/09 18:46 Prep Method: 5030B
 File ID: 8M351977 Analyst: FJB Method: 8260B
 Workgroup (AAB#): WG295733 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.200	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	0.150	1.00	0.165	1	J
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	0.500	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	99.4	86 - 118	PASS
1,2-Dichloroethane-d4	88.5	80 - 120	PASS
Toluene-d8	99.3	88 - 110	PASS
4-Bromofluorobenzene	102	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1327014

27-FEB-2009 14:30



Login Number: L09020438 Run Date: 02/23/2009 Sample ID: WG295535-02
Instrument ID: HPMS8 Run Time: 09:55 Prep Method: 5030B
File ID: 8M351932 Analyst: MES Method: 8260B
Workgroup (AAB#): WG295535 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD31431 Cal ID: HPMS8 - 19-FEB-09

Analytes	Expected	Found	% Rec	LCS Limits			Q
Acetone	20.0	24.8	124	40	-	142	
Benzene	20.0	21.4	107	80	-	121	
Bromobenzene	20.0	21.1	106	80	-	120	
Bromochloromethane	20.0	21.4	107	65	-	130	
Bromodichloromethane	20.0	20.5	103	80	-	131	
Bromoform	20.0	19.4	97.1	70	-	130	
Bromomethane	20.0	23.4	117	30	-	145	
2-Butanone	20.0	29.9	150	30	-	150	
n-Butylbenzene	20.0	22.1	111	80	-	131	
sec-Butylbenzene	20.0	22.0	110	80	-	127	
tert-Butylbenzene	20.0	21.7	109	80	-	126	
Carbon disulfide	20.0	19.7	98.4	58	-	138	
Carbon tetrachloride	20.0	20.8	104	65	-	140	
Chlorobenzene	20.0	20.6	103	80	-	120	
Chlorodibromomethane	20.0	20.8	104	60	-	135	
Chloroethane	20.0	22.7	114	60	-	135	
2-Chloroethyl vinyl ether	20.0	22.7	113	58	-	151	
Chloroform	20.0	20.4	102	80	-	125	
Chloromethane	20.0	20.0	99.8	40	-	125	
2-Chlorotoluene	20.0	21.5	107	80	-	127	
4-Chlorotoluene	20.0	21.0	105	80	-	126	
1,2-Dibromo-3-chloropropane	20.0	20.1	100	50	-	130	
1,2-Dibromoethane	20.0	21.0	105	80	-	125	
Dibromomethane	20.0	20.5	103	75	-	125	
1,2-Dichlorobenzene	20.0	20.2	101	80	-	125	
1,3-Dichlorobenzene	20.0	20.3	102	80	-	120	
1,4-Dichlorobenzene	20.0	19.4	96.9	80	-	120	
Dichlorodifluoromethane	20.0	21.6	108	50	-	133	
1,1-Dichloroethane	20.0	21.4	107	80	-	125	
1,2-Dichloroethane	20.0	19.7	98.5	80	-	129	
1,1-Dichloroethene	20.0	21.1	105	80	-	132	
cis-1,2-Dichloroethene	20.0	22.4	112	70	-	125	
trans-1,2-Dichloroethene	20.0	21.3	107	80	-	127	
1,2-Dichloropropane	20.0	20.8	104	80	-	120	
1,3-Dichloropropane	20.0	21.1	106	80	-	120	
2,2-Dichloropropane	20.0	20.9	105	80	-	133	
cis-1,3-Dichloropropene	20.0	21.0	105	70	-	130	
trans-1,3-Dichloropropene	20.0	18.6	93.2	80	-	130	
1,1-Dichloropropene	20.0	22.4	112	75	-	130	
Ethylbenzene	20.0	21.2	106	80	-	122	
2-Hexanone	20.0	20.0	99.9	55	-	130	

LCS - Modified 03/06/2008
PDF File ID: 1326930
Report generated: 02/27/2009 14:35



Login Number: L09020438 Run Date: 02/23/2009 Sample ID: WG295535-02
Instrument ID: HPMS8 Run Time: 09:55 Prep Method: 5030B
File ID: 8M351932 Analyst: MES Method: 8260B
Workgroup (AAB#): WG295535 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD31431 Cal ID: HPMS8 - 19-FEB-09

Analytes	Expected	Found	% Rec	LCS Limits			Q
Hexachlorobutadiene	20.0	20.6	103	72	-	132	
Isopropylbenzene	20.0	20.0	99.8	80	-	122	
p-Isopropyltoluene	20.0	21.6	108	80	-	122	
4-Methyl-2-pentanone	20.0	18.7	93.7	64	-	140	
Methylene chloride	20.0	21.7	109	80	-	123	
Naphthalene	20.0	21.0	105	59	-	149	
n-Propylbenzene	20.0	22.6	113	80	-	129	
Styrene	20.0	21.7	109	80	-	123	
1,1,1,2-Tetrachloroethane	20.0	20.5	102	80	-	130	
1,1,2,2-Tetrachloroethane	20.0	20.1	101	79	-	125	
Tetrachloroethene	20.0	21.0	105	80	-	124	
Toluene	20.0	21.8	109	80	-	124	
1,2,3-Trichlorobenzene	20.0	19.8	99.2	55	-	140	
1,2,4-Trichlorobenzene	20.0	20.6	103	65	-	135	
1,1,1-Trichloroethane	20.0	20.7	103	80	-	134	
1,1,2-Trichloroethane	20.0	21.0	105	80	-	125	
Trichloroethene	20.0	21.7	108	80	-	122	
Trichlorofluoromethane	20.0	21.2	106	62	-	151	
1,2,3-Trichloropropane	20.0	20.9	104	75	-	125	
1,2,4-Trimethylbenzene	20.0	21.8	109	80	-	125	
1,3,5-Trimethylbenzene	20.0	22.7	114	80	-	127	
Vinyl acetate	20.0	15.5	77.5	10	-	150	
Vinyl chloride	20.0	22.4	112	65	-	140	
o-Xylene	20.0	22.2	111	80	-	122	
m-,p-Xylene	40.0	42.6	106	80	-	122	

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	99.6	86	-	118	PASS
1,2-Dichloroethane-d4	89.4	80	-	120	PASS
Toluene-d8	99.5	88	-	110	PASS
4-Bromofluorobenzene	103	86	-	115	PASS

* FAILS %REC LIMIT

Login Number: L09020438 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295733 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295733-02 LCS File ID: 8M351978 Run Date: 02/24/2009 19:18
Sample ID: WG295733-03 LCS2 File ID: 8M351979 Run Date: 02/24/2009 19:51

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	18.9	94.3	20.0	19.0	95.1	0.845	40 - 142	20	
Benzene	20.0	20.8	104	20.0	20.4	102	2.08	80 - 121	20	
Bromobenzene	20.0	21.3	107	20.0	20.5	103	3.83	80 - 120	20	
Bromochloromethane	20.0	20.9	104	20.0	21.0	105	0.546	65 - 130	20	
Bromodichloromethane	20.0	20.1	101	20.0	19.5	97.4	3.30	80 - 131	20	
Bromoform	20.0	18.4	91.9	20.0	18.7	93.6	1.85	70 - 130	20	
Bromomethane	20.0	21.5	108	20.0	21.7	108	0.691	30 - 145	20	
2-Butanone	20.0	23.8	119	20.0	24.7	124	3.96	30 - 150	20	
n-Butylbenzene	20.0	20.0	99.9	20.0	19.4	97.2	2.80	80 - 131	20	
sec-Butylbenzene	20.0	20.6	103	20.0	20.1	101	2.40	80 - 127	20	
tert-Butylbenzene	20.0	20.5	102	20.0	20.4	102	0.187	80 - 126	20	
Carbon disulfide	20.0	18.4	92.2	20.0	17.9	89.4	2.99	58 - 138	20	
Carbon tetrachloride	20.0	20.6	103	20.0	19.8	98.8	4.30	65 - 140	20	
Chlorobenzene	20.0	20.0	100	20.0	19.9	99.6	0.660	80 - 120	20	
Chlorodibromomethane	20.0	20.7	104	20.0	20.1	100	2.96	60 - 135	20	
Chloroethane	20.0	21.5	108	20.0	21.1	106	1.84	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	21.1	105	20.0	22.0	110	4.36	58 - 151	20	
Chloroform	20.0	19.7	98.6	20.0	19.0	95.2	3.49	80 - 125	20	
Chloromethane	20.0	20.2	101	20.0	19.1	95.4	5.89	40 - 125	20	
2-Chlorotoluene	20.0	21.6	108	20.0	21.8	109	1.12	80 - 127	20	
4-Chlorotoluene	20.0	20.5	103	20.0	19.2	96.1	6.69	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	18.0	90.0	20.0	17.5	87.3	3.05	50 - 130	20	
1,2-Dibromoethane	20.0	20.8	104	20.0	20.6	103	1.26	80 - 125	20	
Dibromomethane	20.0	20.1	101	20.0	19.8	98.8	1.90	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.0	99.9	20.0	19.4	96.9	3.07	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.9	99.4	20.0	19.8	98.9	0.546	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.0	95.0	20.0	18.6	93.2	1.94	80 - 120	20	
Dichlorodifluoromethane	20.0	21.4	107	20.0	19.7	98.7	8.04	50 - 133	20	
1,1-Dichloroethane	20.0	20.9	104	20.0	20.4	102	2.16	80 - 125	20	
1,2-Dichloroethane	20.0	19.5	97.7	20.0	18.5	92.5	5.42	80 - 129	20	
1,1-Dichloroethene	20.0	20.6	103	20.0	20.1	101	2.24	80 - 132	20	
cis-1,2-Dichloroethene	20.0	21.8	109	20.0	21.4	107	1.70	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.8	104	20.0	20.2	101	2.52	80 - 127	20	
1,2-Dichloropropane	20.0	20.6	103	20.0	20.0	100	2.52	80 - 120	20	
1,3-Dichloropropane	20.0	21.0	105	20.0	20.8	104	1.04	80 - 120	20	
2,2-Dichloropropane	20.0	20.4	102	20.0	19.3	96.3	5.58	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.7	103	20.0	20.1	100	3.13	70 - 130	20	
trans-1,3-Dichloropropene	20.0	18.6	93.1	20.0	18.3	91.4	1.92	80 - 130	20	
1,1-Dichloropropene	20.0	21.7	109	20.0	21.3	106	2.16	75 - 130	20	
Ethylbenzene	20.0	21.1	105	20.0	20.7	103	1.90	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
Report generated: 02/27/2009 14:30



Login Number: L09020438 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295733 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295733-02 LCS File ID: 8M351978 Run Date: 02/24/2009 19:18
Sample ID: WG295733-03 LCS2 File ID: 8M351979 Run Date: 02/24/2009 19:51

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	17.8	89.0	20.0	18.2	91.1	2.27	55 - 130	20	
Hexachlorobutadiene	20.0	15.6	77.9	20.0	14.8	74.1	4.97	72 - 132	20	
Isopropylbenzene	20.0	19.2	96.1	20.0	19.0	95.0	1.11	80 - 122	20	
p-Isopropyltoluene	20.0	20.1	100	20.0	19.5	97.6	2.69	80 - 122	20	
4-Methyl-2-pentanone	20.0	18.4	92.2	20.0	18.0	90.2	2.21	64 - 140	20	
Methylene chloride	20.0	20.3	101	20.0	19.3	96.5	5.03	80 - 123	20	
Naphthalene	20.0	20.3	102	20.0	20.3	101	0.105	59 - 149	20	
n-Propylbenzene	20.0	22.1	111	20.0	21.6	108	2.42	80 - 129	20	
Styrene	20.0	21.1	106	20.0	21.1	106	0.183	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.4	102	20.0	19.6	98.1	3.79	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	20.2	101	20.0	19.7	98.7	2.31	79 - 125	20	
Tetrachloroethene	20.0	20.6	103	20.0	20.1	100	2.76	80 - 124	20	
Toluene	20.0	21.3	107	20.0	21.1	106	0.842	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.7	93.5	20.0	18.3	91.4	2.28	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.2	96.2	20.0	18.6	93.1	3.32	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.3	101	20.0	19.6	98.0	3.42	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.8	104	20.0	20.4	102	2.25	80 - 125	20	
Trichloroethene	20.0	20.9	104	20.0	20.6	103	1.17	80 - 122	20	
Trichlorofluoromethane	20.0	20.7	103	20.0	19.6	97.8	5.63	62 - 151	20	
1,2,3-Trichloropropane	20.0	20.7	104	20.0	20.5	103	1.12	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.3	106	20.0	20.7	104	2.68	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	22.0	110	20.0	21.7	108	1.49	80 - 127	20	
Vinyl acetate	20.0	14.4	71.8	20.0	14.1	70.7	1.60	10 - 150	20	
Vinyl chloride	20.0	23.2	116	20.0	21.0	105	10.2	65 - 140	20	
o-Xylene	20.0	21.2	106	20.0	21.3	107	0.403	80 - 122	20	
m-, p-Xylene	40.0	41.5	104	40.0	41.3	103	0.365	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	91.4	87.9	80 - 120	PASS
Dibromofluoromethane	99.6	97.7	86 - 118	PASS
4-Bromofluorobenzene	103	101	86 - 115	PASS
Toluene-d8	101	101	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
Report generated: 02/27/2009 14:30



Login Number: L09020438 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295620 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295620-02 LCS File ID: 8M351960 Run Date: 02/24/2009 09:40
Sample ID: WG295620-03 LCS2 File ID: 8M351961 Run Date: 02/24/2009 10:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	21.2	106	20.0	19.9	99.3	6.61	40 - 142	20	
Benzene	20.0	20.7	103	20.0	20.3	101	1.87	80 - 121	20	
Bromobenzene	20.0	20.8	104	20.0	20.8	104	0.0224	80 - 120	20	
Bromochloromethane	20.0	20.7	104	20.0	20.6	103	0.832	65 - 130	20	
Bromodichloromethane	20.0	19.6	98.2	20.0	19.0	95.1	3.11	80 - 131	20	
Bromoform	20.0	18.4	91.9	20.0	18.1	90.4	1.66	70 - 130	20	
Bromomethane	20.0	20.7	104	20.0	21.6	108	4.12	30 - 145	20	
2-Butanone	20.0	25.2	126	20.0	23.9	120	5.31	30 - 150	20	
n-Butylbenzene	20.0	19.4	96.9	20.0	19.0	94.9	2.06	80 - 131	20	
sec-Butylbenzene	20.0	20.1	101	20.0	19.8	98.8	1.75	80 - 127	20	
tert-Butylbenzene	20.0	20.5	102	20.0	20.4	102	0.646	80 - 126	20	
Carbon disulfide	20.0	18.4	91.8	20.0	18.1	90.3	1.58	58 - 138	20	
Carbon tetrachloride	20.0	19.5	97.7	20.0	18.7	93.3	4.67	65 - 140	20	
Chlorobenzene	20.0	20.1	101	20.0	19.7	98.7	2.06	80 - 120	20	
Chlorodibromomethane	20.0	20.2	101	20.0	19.6	97.8	3.17	60 - 135	20	
Chloroethane	20.0	21.7	108	20.0	21.4	107	1.47	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	21.7	108	20.0	21.9	110	1.02	58 - 151	20	
Chloroform	20.0	19.2	96.0	20.0	18.6	93.1	3.11	80 - 125	20	
Chloromethane	20.0	18.7	93.3	20.0	18.1	90.5	3.00	40 - 125	20	
2-Chlorotoluene	20.0	21.1	106	20.0	21.4	107	1.10	80 - 127	20	
4-Chlorotoluene	20.0	20.1	100	20.0	19.4	97.1	3.15	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	18.5	92.4	20.0	17.4	87.1	5.94	50 - 130	20	
1,2-Dibromoethane	20.0	20.3	101	20.0	20.3	102	0.0433	80 - 125	20	
Dibromomethane	20.0	19.7	98.7	20.0	19.5	97.3	1.46	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.4	97.1	20.0	19.6	97.8	0.662	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.7	98.4	20.0	19.6	98.2	0.230	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.8	93.9	20.0	18.9	94.7	0.879	80 - 120	20	
Dichlorodifluoromethane	20.0	20.6	103	20.0	18.9	94.6	8.37	50 - 133	20	
1,1-Dichloroethane	20.0	20.7	103	20.0	20.0	100	3.26	80 - 125	20	
1,2-Dichloroethane	20.0	18.4	92.2	20.0	18.0	89.9	2.59	80 - 129	20	
1,1-Dichloroethene	20.0	20.5	102	20.0	19.4	96.9	5.39	80 - 132	20	
cis-1,2-Dichloroethene	20.0	21.7	108	20.0	21.3	106	2.00	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.8	104	20.0	20.1	100	3.32	80 - 127	20	
1,2-Dichloropropane	20.0	20.4	102	20.0	20.5	102	0.137	80 - 120	20	
1,3-Dichloropropane	20.0	20.7	103	20.0	20.4	102	1.48	80 - 120	20	
2,2-Dichloropropane	20.0	20.1	100	20.0	19.1	95.4	5.15	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.3	102	20.0	20.1	100	1.13	70 - 130	20	
trans-1,3-Dichloropropene	20.0	18.4	91.9	20.0	18.1	90.4	1.56	80 - 130	20	
1,1-Dichloropropene	20.0	21.2	106	20.0	20.7	104	2.51	75 - 130	20	
Ethylbenzene	20.0	21.3	106	20.0	20.2	101	5.28	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
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Login Number: L09020438 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295620 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295620-02 LCS File ID: 8M351960 Run Date: 02/24/2009 09:40
Sample ID: WG295620-03 LCS2 File ID: 8M351961 Run Date: 02/24/2009 10:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	18.7	93.7	20.0	18.1	90.3	3.70	55 - 130	20	
Hexachlorobutadiene	20.0	14.8	74.1	20.0	14.7	73.3	1.17	72 - 132	20	
Isopropylbenzene	20.0	19.0	94.9	20.0	18.6	92.8	2.27	80 - 122	20	
p-Isopropyltoluene	20.0	19.9	99.5	20.0	19.6	97.9	1.63	80 - 122	20	
4-Methyl-2-pentanone	20.0	19.4	97.1	20.0	18.2	91.2	6.23	64 - 140	20	
Methylene chloride	20.0	20.0	100	20.0	19.9	99.7	0.315	80 - 123	20	
Naphthalene	20.0	20.0	100	20.0	20.5	102	2.20	59 - 149	20	
n-Propylbenzene	20.0	21.6	108	20.0	21.4	107	1.05	80 - 129	20	
Styrene	20.0	21.3	106	20.0	20.8	104	2.24	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	19.6	98.1	20.0	19.7	98.7	0.529	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	19.7	98.3	20.0	19.6	98.2	0.151	79 - 125	20	
Tetrachloroethene	20.0	20.7	104	20.0	19.6	97.8	5.74	80 - 124	20	
Toluene	20.0	21.4	107	20.0	20.9	104	2.51	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.2	91.2	20.0	18.4	92.2	1.11	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.0	94.9	20.0	19.0	94.9	0.0511	65 - 135	20	
1,1,1-Trichloroethane	20.0	19.4	96.8	20.0	18.7	93.3	3.64	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.6	103	20.0	20.6	103	0.0673	80 - 125	20	
Trichloroethene	20.0	20.9	104	20.0	20.5	102	1.92	80 - 122	20	
Trichlorofluoromethane	20.0	19.6	98.2	20.0	18.7	93.5	4.91	62 - 151	20	
1,2,3-Trichloropropane	20.0	19.8	98.9	20.0	20.1	101	1.83	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	20.9	105	20.0	20.8	104	0.635	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.6	108	20.0	21.5	108	0.424	80 - 127	20	
Vinyl acetate	20.0	14.8	74.2	20.0	14.6	73.0	1.66	10 - 150	20	
Vinyl chloride	20.0	20.5	103	20.0	19.2	96.0	6.72	65 - 140	20	
o-Xylene	20.0	21.7	109	20.0	21.0	105	3.20	80 - 122	20	
m-, p-Xylene	40.0	41.4	104	40.0	40.4	101	2.50	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	83.6	83.7	80 - 120	PASS
Dibromofluoromethane	96.8	97.3	86 - 118	PASS
4-Bromofluorobenzene	100	101	86 - 115	PASS
Toluene-d8	100	100	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
Report generated: 02/27/2009 14:30



Login Number: L09020438 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295505 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295505-02 LCS File ID: 11M57276 Run Date: 02/21/2009 15:00
Sample ID: WG295505-03 LCS2 File ID: 11M57277 Run Date: 02/21/2009 15:31

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	19.0	94.8	20.0	21.3	107	11.7	40 - 142	20	
Benzene	20.0	17.9	89.3	20.0	18.0	90.0	0.765	80 - 121	20	
Bromobenzene	20.0	18.7	93.6	20.0	19.3	96.7	3.27	80 - 120	20	
Bromochloromethane	20.0	20.9	105	20.0	21.5	107	2.59	65 - 130	20	
Bromodichloromethane	20.0	18.4	91.8	20.0	19.1	95.3	3.79	80 - 131	20	
Bromoform	20.0	17.7	88.3	20.0	18.2	91.1	3.17	70 - 130	20	
Bromomethane	20.0	21.7	108	20.0	20.5	102	5.64	30 - 145	20	
2-Butanone	20.0	25.9	130	20.0	27.9	140	7.35	30 - 150	20	
n-Butylbenzene	20.0	17.1	85.6	20.0	17.4	86.9	1.47	80 - 131	20	
sec-Butylbenzene	20.0	17.9	89.7	20.0	18.2	90.8	1.19	80 - 127	20	
tert-Butylbenzene	20.0	19.2	96.1	20.0	18.9	94.5	1.67	80 - 126	20	
Carbon disulfide	20.0	18.3	91.3	20.0	18.2	91.0	0.377	58 - 138	20	
Carbon tetrachloride	20.0	18.5	92.3	20.0	18.7	93.7	1.48	65 - 140	20	
Chlorobenzene	20.0	17.8	88.8	20.0	18.0	89.9	1.30	80 - 120	20	
Chlorodibromomethane	20.0	19.2	96.1	20.0	19.8	98.8	2.80	60 - 135	20	
Chloroethane	20.0	18.5	92.3	20.0	18.5	92.5	0.196	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	19.0	94.9	20.0	20.0	100	5.36	58 - 151	20	
Chloroform	20.0	17.6	88.2	20.0	17.6	87.8	0.438	80 - 125	20	
Chloromethane	20.0	12.1	60.4	20.0	12.8	64.0	5.79	40 - 125	20	
2-Chlorotoluene	20.0	17.2	86.1	20.0	17.3	86.6	0.596	80 - 127	20	
4-Chlorotoluene	20.0	16.9	84.7	20.0	16.6	83.2	1.86	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	16.1	80.6	20.0	16.4	81.9	1.57	50 - 130	20	
1,2-Dibromoethane	20.0	19.5	97.7	20.0	19.8	98.9	1.23	80 - 125	20	
Dibromomethane	20.0	19.5	97.3	20.0	19.9	99.6	2.35	75 - 125	20	
1,2-Dichlorobenzene	20.0	18.6	93.2	20.0	18.7	93.7	0.489	80 - 125	20	
1,3-Dichlorobenzene	20.0	18.2	91.1	20.0	18.3	91.3	0.137	80 - 120	20	
1,4-Dichlorobenzene	20.0	17.5	87.3	20.0	17.7	88.7	1.57	80 - 120	20	
Dichlorodifluoromethane	20.0	13.6	67.8	20.0	14.2	71.2	4.82	50 - 133	20	
1,1-Dichloroethane	20.0	18.0	90.1	20.0	17.9	89.6	0.545	80 - 125	20	
1,2-Dichloroethane	20.0	17.0	85.2	20.0	17.3	86.4	1.33	80 - 129	20	
1,1-Dichloroethene	20.0	17.0	84.9	20.0	17.1	85.6	0.819	80 - 132	20	
cis-1,2-Dichloroethene	20.0	18.8	94.2	20.0	19.1	95.4	1.17	70 - 125	20	
trans-1,2-Dichloroethene	20.0	17.5	87.5	20.0	18.3	91.7	4.66	80 - 127	20	
1,2-Dichloropropane	20.0	19.0	95.2	20.0	18.7	93.7	1.66	80 - 120	20	
1,3-Dichloropropane	20.0	18.1	90.5	20.0	18.3	91.4	0.944	80 - 120	20	
2,2-Dichloropropane	20.0	17.9	89.4	20.0	17.9	89.5	0.206	80 - 133	20	
cis-1,3-Dichloropropene	20.0	17.8	89.0	20.0	18.2	91.1	2.29	70 - 130	20	
trans-1,3-Dichloropropene	20.0	15.7	78.6	20.0	16.1	80.4	2.17	80 - 130	20	*
1,1-Dichloropropene	20.0	17.5	87.5	20.0	17.8	89.0	1.69	75 - 130	20	
Ethylbenzene	20.0	18.7	93.7	20.0	18.3	91.7	2.16	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
Report generated: 02/27/2009 14:30



Login Number: L09020438 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295505 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295505-02 LCS File ID: 11M57276 Run Date: 02/21/2009 15:00
Sample ID: WG295505-03 LCS2 File ID: 11M57277 Run Date: 02/21/2009 15:31

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	17.9	89.7	20.0	19.0	95.1	5.78	55 - 130	20	
Hexachlorobutadiene	20.0	18.2	90.9	20.0	18.5	92.6	1.90	72 - 132	20	
Isopropylbenzene	20.0	15.9	79.7	20.0	16.1	80.7	1.32	80 - 122	20	*
p-Isopropyltoluene	20.0	17.3	86.4	20.0	17.7	88.5	2.37	80 - 122	20	
4-Methyl-2-pentanone	20.0	19.3	96.3	20.0	20.2	101	4.75	64 - 140	20	
Methylene chloride	20.0	18.0	89.9	20.0	18.3	91.4	1.65	80 - 123	20	
Naphthalene	20.0	18.5	92.5	20.0	19.5	97.4	5.19	59 - 149	20	
n-Propylbenzene	20.0	17.8	89.1	20.0	18.0	90.2	1.21	80 - 129	20	
Styrene	20.0	18.1	90.6	20.0	18.4	92.0	1.48	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	18.5	92.6	20.0	18.8	93.9	1.33	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	17.7	88.6	20.0	18.8	93.8	5.64	79 - 125	20	
Tetrachloroethene	20.0	18.7	93.3	20.0	18.9	94.7	1.45	80 - 124	20	
Toluene	20.0	18.0	90.2	20.0	17.9	89.3	1.03	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.5	92.4	20.0	19.0	94.8	2.56	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	18.9	94.7	20.0	19.2	96.0	1.37	65 - 135	20	
1,1,1-Trichloroethane	20.0	17.5	87.6	20.0	17.5	87.7	0.0631	80 - 134	20	
1,1,2-Trichloroethane	20.0	19.1	95.7	20.0	19.6	97.8	2.19	80 - 125	20	
Trichloroethene	20.0	18.0	90.1	20.0	18.3	91.6	1.71	80 - 122	20	
Trichlorofluoromethane	20.0	16.6	82.9	20.0	17.3	86.4	4.14	62 - 151	20	
1,2,3-Trichloropropane	20.0	18.4	91.9	20.0	19.5	97.6	6.02	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	17.8	88.9	20.0	17.8	88.8	0.0977	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	17.8	88.8	20.0	17.9	89.3	0.668	80 - 127	20	
Vinyl acetate	20.0	22.5	113	20.0	22.8	114	1.06	10 - 150	20	
Vinyl chloride	20.0	15.8	78.9	20.0	14.8	73.8	6.70	65 - 140	20	
o-Xylene	20.0	18.3	91.5	20.0	18.6	93.0	1.56	80 - 122	20	
m-, p-Xylene	40.0	36.3	90.8	40.0	36.4	90.9	0.118	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	83.3	84.0	80 - 120	PASS
Dibromofluoromethane	98.6	98.7	86 - 118	PASS
4-Bromofluorobenzene	95.1	95.0	86 - 115	PASS
Toluene-d8	95.2	94.1	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326127
Report generated: 02/27/2009 14:30



BFB

Login Number: L09020438
Instrument: HPMS11
Analyst: wtd
Workgroup: WG294332

Tune ID: WG294332-01
Run Date: 02/06/2009
Run Time: 09:21
File ID: 11M56945

Cal ID: HPMS11-06-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	28.2	10611	PASS
75.0	95.0	30.0	60.0	49.5	18606	PASS
95.0	95.0	100	100	100	37578	PASS
96.0	95.0	5.00	9.00	6.87	2581	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	75.5	28357	PASS
175	174	5.00	9.00	7.36	2087	PASS
176	174	95.0	101	98.1	27807	PASS
177	176	5.00	9.00	6.43	1788	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG294332-02	STD	01	02/06/2009 10:22	
WG294332-03	STD	01	02/06/2009 10:52	
WG294332-04	STD	01	02/06/2009 11:22	
WG294332-05	STD	01	02/06/2009 11:52	
WG294332-06	STD	01	02/06/2009 12:22	
WG294332-07	STD	01	02/06/2009 12:52	
WG294332-08	STD-CCV	01	02/06/2009 13:22	
WG294332-09	STD	01	02/06/2009 13:52	
WG294332-10	STD	01	02/06/2009 14:22	
WG294332-11	STD	01	02/06/2009 14:52	
WG294332-12	SSCV	01	02/06/2009 16:54	

* Sample past 12 hour tune limit

BFB

Login Number: L09020438
Instrument: HPMS11
Analyst: FJB
Workgroup: WG295504

Tune ID: WG295504-01
Run Date: 02/21/2009
Run Time: 13:03
File ID: 11M57272

Cal ID: HPMS11-06-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	28.2	2531	PASS
75.0	95.0	30.0	60.0	49.9	4472	PASS
95.0	95.0	100	100	100	8966	PASS
96.0	95.0	5.00	9.00	7.34	658	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	93.7	8404	PASS
175	174	5.00	9.00	6.40	538	PASS
176	174	95.0	101	97.4	8189	PASS
177	176	5.00	9.00	5.15	422	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295504-02	CCV	01	02/21/2009 13:27	
WG295505-01	BLANK	01	02/21/2009 14:29	
WG295505-02	LCS	01	02/21/2009 15:00	
WG295505-03	LCS2	01	02/21/2009 15:31	
L09020438-06	TRIP BLANK	01	02/21/2009 17:34	

* Sample past 12 hour tune limit

BFB

Login Number: L09020438
Instrument: HPMS8
Analyst: MES
Workgroup: WG295276

Tune ID: WG295276-01
Run Date: 02/19/2009
Run Time: 08:25
File ID: 8M351785

Cal ID: HPMS8 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	28.7	28645	PASS
75.0	95.0	30.0	60.0	55.5	55453	PASS
95.0	95.0	100	100	100	99829	PASS
96.0	95.0	5.00	9.00	6.73	6717	PASS
173	174	0	2.00	0.293	213	PASS
174	95.0	50.0	100	72.8	72637	PASS
175	174	5.00	9.00	7.92	5753	PASS
176	174	95.0	101	99.9	72544	PASS
177	176	5.00	9.00	6.55	4752	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295276-02	STD	01	02/19/2009 08:50	
WG295276-03	STD	01	02/19/2009 09:23	
WG295276-04	STD	01	02/19/2009 09:55	
WG295276-05	STD	01	02/19/2009 10:31	
WG295276-06	STD	01	02/19/2009 11:03	
WG295276-07	STD	01	02/19/2009 11:37	
WG295276-08	STD-CCV	01	02/19/2009 12:09	
WG295276-10	STD	01	02/19/2009 13:13	
WG295276-11	STD	01	02/19/2009 13:45	
WG295276-09	STD	01	02/19/2009 14:17	
WG295276-12	SSCV	01	02/19/2009 16:12	
WG295276-12	SSCV	02	02/19/2009 16:44	

* Sample past 12 hour tune limit

BFB

Login Number: L09020438
Instrument: HPMS8
Analyst: MES
Workgroup: WG295534

Tune ID: WG295534-01
Run Date: 02/23/2009
Run Time: 08:25
File ID: 8M351929

Cal ID: HPMS8-19-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	24.7	24495	PASS
75.0	95.0	30.0	60.0	49.8	49368	PASS
95.0	95.0	100	100	100	99120	PASS
96.0	95.0	5.00	9.00	6.51	6453	PASS
173	174	0	2.00	0.849	615	PASS
174	95.0	50.0	100	73.1	72416	PASS
175	174	5.00	9.00	6.90	5000	PASS
176	174	95.0	101	98.8	71578	PASS
177	176	5.00	9.00	7.05	5047	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295534-02	CCV	01	02/23/2009 08:51	
WG295535-01	BLANK	01	02/23/2009 09:23	
WG295535-02	LCS	01	02/23/2009 09:55	
WG295535-03	REF	DL01	02/23/2009 15:50	
WG295535-04	MS	DL01	02/23/2009 16:22	
WG295535-05	MSD	DL01	02/23/2009 16:54	
L09020438-04	47WW14-021909-FD	01	02/23/2009 18:30	

* Sample past 12 hour tune limit

BFB

Login Number: L09020438
Instrument: HPMS8
Analyst: MES
Workgroup: WG295619

Tune ID: WG295619-01
Run Date: 02/24/2009
Run Time: 07:15
File ID: 8M351956

Cal ID: HPMS8-19-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	24.3	22478	PASS
75.0	95.0	30.0	60.0	51.3	47368	PASS
95.0	95.0	100	100	100	92360	PASS
96.0	95.0	5.00	9.00	7.03	6497	PASS
173	174	0	2.00	0.693	472	PASS
174	95.0	50.0	100	73.7	68109	PASS
175	174	5.00	9.00	6.67	4543	PASS
176	174	95.0	101	96.3	65608	PASS
177	176	5.00	9.00	6.60	4330	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295619-02	CCV	01	02/24/2009 08:36	
WG295620-01	BLANK	01	02/24/2009 09:08	
WG295620-02	LCS	01	02/24/2009 09:40	
WG295620-03	LCS2	01	02/24/2009 10:12	
L09020438-04	47WW14-021909-FD	DL01	02/24/2009 12:53	

* Sample past 12 hour tune limit

BFB

Login Number: L09020438
Instrument: HPMS8
Analyst: FJB
Workgroup: WG295732

Tune ID: WG295732-01
Run Date: 02/24/2009
Run Time: 17:49
File ID: 8M351975

Cal ID: HPMS8-19-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	29.4	7018	PASS
75.0	95.0	30.0	60.0	52.4	12508	PASS
95.0	95.0	100	100	100	23882	PASS
96.0	95.0	5.00	9.00	7.05	1684	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	70.9	16936	PASS
175	174	5.00	9.00	8.21	1391	PASS
176	174	95.0	101	97.1	16442	PASS
177	176	5.00	9.00	7.41	1219	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295732-02	CCV	01	02/24/2009 18:14	
WG295733-01	BLANK	01	02/24/2009 18:46	
WG295733-02	LCS	01	02/24/2009 19:18	
WG295733-03	LCS2	01	02/24/2009 19:51	
L09020438-01	LHSMW43-021909	DL02	02/24/2009 21:27	
L09020438-02	LHSMW45-021909	DL02	02/24/2009 21:59	
L09020438-03	47WW14-021909	DL02	02/24/2009 22:31	
L09020438-05	47WW19-021909	01	02/24/2009 23:03	

* Sample past 12 hour tune limit

Login Number: L09020438
Analytical Method: 8260B
ICAL Workgroup: WG294332

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.4455	6.21		
1,2-Dichloropropane	CCC	0.2846	4.90		
Chloroform	CCC	0.4109	4.09		
Ethylbenzene	CCC	0.4506	8.60		
Toluene	CCC	1.226	5.85		
Vinyl Chloride	CCC	0.2472	14.2		
1,1,2,2-Tetrachloroethane	SPCC	0.3687	3.36		
1,1-Dichloroethane	SPCC	0.5234	4.27		
Bromoform	SPCC	0.1634	15.6		0.99900
Chlorobenzene	SPCC	0.8457	5.39		
Chloromethane	SPCC	0.5168	11.4		
1,1,1,2-Tetrachloroethane		0.2863	7.94		
1,1,1-Trichloroethane		0.3545	5.95		
1,1,2-Trichloroethane		0.1839	8.54		
1,1-Dichloropropene		0.3262	6.84		
1,2,3-Trichlorobenzene		0.6031	7.52		
1,2,3-Trichloropropane		0.1053	11.8		
1,2,4-Trichlorobenzene		0.6985	7.64		
1,2,4-Trimethylbenzene		2.027	5.85		
1,2-Dibromo-3-Chloropropane		0.07360	4.54		
1,2-Dibromoethane		0.1887	13.8		
1,2-Dichlorobenzene		1.000	4.77		
1,2-Dichloroethane		0.3542	7.55		
1,3,5-Trimethylbenzene		1.938	5.31		
1,3-Dichlorobenzene		1.119	5.68		
1,3-Dichloropropane		0.3677	5.00		
1,4-Dichlorobenzene		1.169	6.66		
2,2-Dichloropropane		0.3552	6.77		
2-Butanone		0.09892	3.26		
2-Chloroethyl Vinyl Ether		0.1283	6.84		
2-Chlorotoluene		1.782	5.91		
2-Hexanone		0.1891	7.59		
4-Chlorotoluene		1.667	6.17		
4-Methyl-2-Pentanone		0.07762	6.49		
Acetone		0.07110	13.6		
Benzene		0.9540	6.77		
Bromobenzene		0.5799	4.58		
Bromochloromethane		0.1225	14.2		
Bromodichloromethane		0.3012	7.00		
Bromomethane		0.1338	7.42		
Carbon Disulfide		0.7471	8.01		
Carbon Tetrachloride		0.3146	11.0		
Chloroethane		0.1963	9.22		
Dibromochloromethane		0.2386	12.3		
Dibromomethane		0.1064	12.9		

INT_CAL - Modified 03/06/2008
PDF File ID: 1330648
Report generated 02/27/2009 14:30



Login Number: L09020438
Analytical Method: 8260B
ICAL Workgroup: WG294332

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane		0.2647	8.80		
Hexachlorobutadiene		0.3027	5.33		
Isopropylbenzene		1.376	7.51		
Methylene Chloride		0.3087	43.7		0.99900
Naphthalene		1.135	12.2		
Styrene		0.9276	11.1		
Tetrachloroethene		0.2468	5.64		
Trichloroethene		0.2465	8.53		
Trichlorofluoromethane		0.3702	7.35		
Vinyl Acetate		0.2825	11.7		
cis-1,2-Dichloroethene		0.2357	5.02		
cis-1,3-Dichloropropene		0.3677	8.00		
m-,p-Xylene		0.5692	6.80		
n-Butylbenzene		1.803	6.52		
n-Propylbenzene		2.680	6.68		
o-Xylene		0.5392	8.08		
p-Isopropyltoluene		1.976	6.62		
sec-Butylbenzene		2.360	7.32		
tert-Butylbenzene		0.3938	8.67		
trans-1,2-Dichloroethene		0.2239	6.88		
trans-1,3-Dichloropropene		0.3997	10.3		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09020438
Analytical Method: 8260B
ICAL Workgroup: WG295276

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.4551	5.74		
1,2-Dichloropropane	CCC	0.2286	2.31		
Chloroform	CCC	0.5415	10.1		
Ethylbenzene	CCC	0.4606	6.36		
Toluene	CCC	1.234	7.01		
Vinyl Chloride	CCC	0.3255	28.2		0.99100
1,1,2,2-Tetrachloroethane	SPCC	0.4396	7.97		
1,1-Dichloroethane	SPCC	0.4863	3.66		
Bromoform	SPCC	0.2153	7.44		
Chlorobenzene	SPCC	0.8737	6.73		
Chloromethane	SPCC	0.4759	19.2		1.00000
1,1,1,2-Tetrachloroethane		0.3650	9.95		
1,1,1-Trichloroethane		0.5417	11.2		
1,1,2-Trichloroethane		0.2285	7.93		
1,1-Dichloropropene		0.3390	10.6		
1,2,3-Trichlorobenzene		0.9570	10.7		
1,2,3-Trichloropropane		0.1572	13.8		
1,2,4-Trichlorobenzene		1.038	9.03		
1,2,4-Trimethylbenzene		2.511	9.89		
1,2-Dibromo-3-Chloropropane		0.1212	7.91		
1,2-Dibromoethane		0.2346	8.21		
1,2-Dichlorobenzene		1.269	6.30		
1,2-Dichloroethane		0.4997	13.5		
1,3,5-Trimethylbenzene		2.304	13.5		
1,3-Dichlorobenzene		1.349	6.36		
1,3-Dichloropropane		0.4103	7.29		
1,4-Dichlorobenzene		1.441	8.39		
2,2-Dichloropropane		0.5148	8.84		
2-Butanone		0.07805	1.57		
2-Chloroethyl Vinyl Ether		0.1073	14.3		
2-Chlorotoluene		2.197	11.3		
2-Hexanone		0.06718	12.7		
4-Chlorotoluene		2.276	8.51		
4-Methyl-2-Pentanone		0.05713	7.23		
Acetone		0.06597	15.5		0.99700
Benzene		0.8578	4.75		
Bromobenzene		0.6478	5.31		
Bromochloromethane		0.1396	7.97		
Bromodichloromethane		0.4142	9.17		
Bromomethane		0.1840	8.31		
Carbon Disulfide		0.7580	6.04		
Carbon Tetrachloride		0.4670	13.1		
Chloroethane		0.1829	7.64		
Dibromochloromethane		0.3370	6.87		
Dibromomethane		0.1403	10.6		

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Login Number: L09020438
Analytical Method: 8260B
ICAL Workgroup: WG295276

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.4593	15.3		1.00000
Hexachlorobutadiene	0.5521	11.4		
Isopropylbenzene	1.473	10.5		
Methylene Chloride	0.2847	26.2		1.00000
Naphthalene	1.817	9.41		
Styrene	0.9151	9.55		
Tetrachloroethene	0.2728	6.43		
Trichloroethene	0.2385	4.34		
Trichlorofluoromethane	0.5772	12.8		
Vinyl Acetate	0.4150	7.06		
cis-1,2-Dichloroethene	0.2422	6.47		
cis-1,3-Dichloropropene	0.3800	8.55		
m-,p-Xylene	0.5696	6.55		
n-Butylbenzene	2.552	11.2		
n-Propylbenzene	3.219	11.3		
o-Xylene	0.5367	10.3		
p-Isopropyltoluene	2.541	9.85		
sec-Butylbenzene	2.877	9.47		
tert-Butylbenzene	0.4735	7.15		
trans-1,2-Dichloroethene	0.3987	5.94		
trans-1,3-Dichloropropene	0.5203	10.2		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09020438
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte	WG294332-02			WG294332-03			WG294332-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	6259.00000	0.4627	1.00	13231.0000	0.3975
1,2-Dichloropropane	0.300	2886.00000	0.2771	0.400	3911.00000	0.2891	1.00	8518.00000	0.2559
Chloroform	0.300	4337.00000	0.4164	0.400	5399.00000	0.3991	1.00	12531.0000	0.3765
Ethylbenzene	0.300	3522.00000	0.4415	0.400	4225.00000	0.3992	1.00	10472.0000	0.4024
Toluene	0.300	10806.0000	1.355	0.400	12995.0000	1.228	1.00	28945.0000	1.112
Vinyl Chloride	NA	NA	NA	0.400	3991.00000	0.2950	1.00	9273.00000	0.2786
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2210.00000	0.3709	1.00	5142.00000	0.3500
1,1-Dichloroethane	0.300	5417.00000	0.5201	0.400	6761.00000	0.4998	1.00	16498.0000	0.4956
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3263.00000	0.1254
Chlorobenzene	0.300	7258.00000	0.9098	0.400	8892.00000	0.8403	1.00	20478.0000	0.7869
Chloromethane	NA	NA	NA	0.400	8453.00000	0.6249	1.00	17629.0000	0.5296
1,1,1,2-Tetrachloroethane	0.300	2174.00000	0.2725	0.400	2869.00000	0.2711	1.00	6647.00000	0.2554
1,1,1-Trichloroethane	0.300	3639.00000	0.3494	0.400	4371.00000	0.3231	1.00	10999.0000	0.3304
1,1,2-Trichloroethane	0.300	1264.00000	0.1584	0.400	1836.00000	0.1735	1.00	4179.00000	0.1606
1,1-Dichloropropene	0.300	3187.00000	0.3060	0.400	4420.00000	0.3268	1.00	9641.00000	0.2896
1,2,3-Trichlorobenzene	0.300	2410.00000	0.5437	0.400	3513.00000	0.5896	1.00	8149.00000	0.5547
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1185.00000	0.08070
1,2,4-Trichlorobenzene	0.300	2923.00000	0.6595	0.400	3984.00000	0.6687	1.00	9377.00000	0.6383
1,2,4-Trimethylbenzene	0.300	9750.00000	2.200	0.400	11789.0000	1.979	1.00	27300.0000	1.858
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.300	1030.00000	0.1291	0.400	1944.00000	0.1837	1.00	4411.00000	0.1695
1,2-Dichlorobenzene	0.300	4295.00000	0.9690	0.400	6018.00000	1.010	1.00	13393.0000	0.9117
1,2-Dichloroethane	0.300	3599.00000	0.3455	0.400	4425.00000	0.3271	1.00	10218.0000	0.3070
1,3,5-Trimethylbenzene	0.300	8994.00000	2.029	0.400	11291.0000	1.895	1.00	25812.0000	1.757
1,3-Dichlorobenzene	0.300	5354.00000	1.208	0.400	6494.00000	1.090	1.00	15171.0000	1.033
1,3-Dichloropropane	NA	NA	NA	0.400	3709.00000	0.3505	1.00	8678.00000	0.3335
1,4-Dichlorobenzene	0.300	5763.00000	1.300	0.400	7275.00000	1.221	1.00	15621.0000	1.063
2,2-Dichloropropane	NA	NA	NA	0.400	4410.00000	0.3260	1.00	10512.0000	0.3158
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	0.300	8964.00000	2.022	0.400	10681.0000	1.793	1.00	25178.0000	1.714
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	0.300	8244.00000	1.860	0.400	10437.0000	1.752	1.00	22227.0000	1.513
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	0.300	11231.0000	1.078	0.400	13354.0000	0.9872	1.00	28914.0000	0.8687
Bromobenzene	0.300	2676.00000	0.6038	0.400	3628.00000	0.6089	1.00	7795.00000	0.5306
Bromochloromethane	NA	NA	NA	0.400	1184.00000	0.08750	1.00	3740.00000	0.1124
Bromodichloromethane	0.300	3049.00000	0.2927	0.400	3833.00000	0.2834	1.00	8713.00000	0.2618
Bromomethane	NA	NA	NA	0.400	1661.00000	0.1228	1.00	4550.00000	0.1367
Carbon Disulfide	NA	NA	NA	0.400	10401.0000	0.7689	1.00	20171.0000	0.6060
Carbon Tetrachloride	0.300	3078.00000	0.2955	0.400	3656.00000	0.2703	1.00	8892.00000	0.2671

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Login Number: L09020438
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte	WG294332-05			WG294332-06			WG294332-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	27343.0000	0.4092	5.00	77998.0000	0.4779	20.0	300224.000	0.4473
1,2-Dichloropropane	2.00	18189.0000	0.2722	5.00	47482.0000	0.2909	20.0	193319.000	0.2880
Chloroform	2.00	26462.0000	0.3960	5.00	69446.0000	0.4255	20.0	278771.000	0.4153
Ethylbenzene	2.00	21932.0000	0.4221	5.00	58874.0000	0.4672	20.0	241422.000	0.4526
Toluene	2.00	59100.0000	1.137	5.00	160878.000	1.277	20.0	644741.000	1.209
Vinyl Chloride	2.00	14891.0000	0.2228	5.00	44908.0000	0.2752	20.0	157075.000	0.2340
1,1,2,2-Tetrachloroethane	2.00	11152.0000	0.3732	5.00	28629.0000	0.3910	20.0	116249.000	0.3688
1,1-Dichloroethane	2.00	32924.0000	0.4927	5.00	88718.0000	0.5436	20.0	353385.000	0.5265
Bromoform	2.00	6876.00000	0.1323	5.00	21073.0000	0.1672	20.0	87630.0000	0.1643
Chlorobenzene	2.00	40479.0000	0.7790	5.00	109597.000	0.8696	20.0	438050.000	0.8212
Chloromethane	2.00	29532.0000	0.4419	5.00	76919.0000	0.4713	20.0	308241.000	0.4592
1,1,1,2-Tetrachloroethane	2.00	13572.0000	0.2612	5.00	38120.0000	0.3025	20.0	152616.000	0.2861
1,1,1-Trichloroethane	2.00	22236.0000	0.3327	5.00	61755.0000	0.3784	20.0	246575.000	0.3674
1,1,2-Trichloroethane	2.00	9748.00000	0.1876	5.00	24885.0000	0.1975	20.0	101467.000	0.1902
1,1-Dichloropropene	2.00	20066.0000	0.3003	5.00	58025.0000	0.3555	20.0	228679.000	0.3407
1,2,3-Trichlorobenzene	2.00	16760.0000	0.5608	5.00	47993.0000	0.6555	20.0	190849.000	0.6054
1,2,3-Trichloropropane	2.00	2925.00000	0.09790	5.00	8629.00000	0.1179	20.0	35245.0000	0.1118
1,2,4-Trichlorobenzene	2.00	19020.0000	0.6364	5.00	52416.0000	0.7159	20.0	224072.000	0.7108
1,2,4-Trimethylbenzene	2.00	55754.0000	1.866	5.00	153475.000	2.096	20.0	637302.000	2.022
1,2-Dibromo-3-Chloropropane	2.00	2015.00000	0.06740	5.00	5517.00000	0.07540	20.0	23919.0000	0.07590
1,2-Dibromoethane	2.00	9842.00000	0.1894	5.00	26741.0000	0.2122	20.0	105991.000	0.1987
1,2-Dichlorobenzene	2.00	29254.0000	0.9789	5.00	74344.0000	1.016	20.0	310085.000	0.9836
1,2-Dichloroethane	2.00	22380.0000	0.3349	5.00	62905.0000	0.3854	20.0	245207.000	0.3653
1,3,5-Trimethylbenzene	2.00	53969.0000	1.806	5.00	149512.000	2.042	20.0	621928.000	1.973
1,3-Dichlorobenzene	2.00	30767.0000	1.030	5.00	83474.0000	1.140	20.0	346444.000	1.099
1,3-Dichloropropane	2.00	18651.0000	0.3589	5.00	48268.0000	0.3830	20.0	199189.000	0.3734
1,4-Dichlorobenzene	2.00	31989.0000	1.070	5.00	84905.0000	1.160	20.0	352988.000	1.120
2,2-Dichloropropane	2.00	22891.0000	0.3425	5.00	62006.0000	0.3799	20.0	244254.000	0.3639
2-Butanone	NA	NA	NA	5.00	15846.0000	0.09710	20.0	63637.0000	0.09480
2-Chloroethyl Vinyl Ether	2.00	7331.00000	0.1097	5.00	20829.0000	0.1276	20.0	85389.0000	0.1272
2-Chlorotoluene	2.00	51259.0000	1.715	5.00	134857.000	1.842	20.0	561188.000	1.780
2-Hexanone	NA	NA	NA	5.00	20715.0000	0.1644	20.0	95436.0000	0.1789
4-Chlorotoluene	2.00	46695.0000	1.563	5.00	125906.000	1.720	20.0	511542.000	1.623
4-Methyl-2-Pentanone	NA	NA	NA	5.00	11266.0000	0.06900	20.0	49786.0000	0.07420
Acetone	NA	NA	NA	5.00	14117.0000	0.08650	20.0	51259.0000	0.07640
Benzene	2.00	57505.0000	0.8605	5.00	155443.000	0.9524	20.0	629606.000	0.9380
Bromobenzene	2.00	16548.0000	0.5537	5.00	43837.0000	0.5988	20.0	184109.000	0.5840
Bromochloromethane	2.00	7473.00000	0.1118	5.00	21622.0000	0.1325	20.0	86786.0000	0.1293
Bromodichloromethane	2.00	19102.0000	0.2858	5.00	51895.0000	0.3180	20.0	208649.000	0.3109
Bromomethane	2.00	8187.00000	0.1225	5.00	23974.0000	0.1469	20.0	86660.0000	0.1291
Carbon Disulfide	2.00	49544.0000	0.7414	5.00	127308.000	0.7800	20.0	497125.000	0.7406
Carbon Tetrachloride	2.00	19109.0000	0.2860	5.00	57826.0000	0.3543	20.0	225780.000	0.3364

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Login Number: L09020438
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte	WG294332-08			WG294332-09			WG294332-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	766575.000	0.4596	100	1394316.00	0.4518	200	2971163.00	0.4578
1,2-Dichloropropane	50.0	488836.000	0.2931	100	905811.000	0.2935	200	1959453.00	0.3019
Chloroform	50.0	706043.000	0.4233	100	1300584.00	0.4214	200	2755047.00	0.4245
Ethylbenzene	50.0	625055.000	0.4750	100	1195313.00	0.4773	200	2745930.00	0.5182
Toluene	50.0	1650330.00	1.254	100	3105824.00	1.240	200	6486412.00	1.224
Vinyl Chloride	50.0	367787.000	0.2205	100	629652.000	0.2040	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	306374.000	0.3741	100	603516.000	0.3558	200	1302999.00	0.3655
1,1-Dichloroethane	50.0	910009.000	0.5456	100	1666717.00	0.5401	200	3545393.00	0.5463
Bromoform	50.0	233873.000	0.1777	100	461186.000	0.1842	200	1020872.00	0.1926
Chlorobenzene	50.0	1117019.00	0.8488	100	2133232.00	0.8519	200	4789023.00	0.9037
Chloromethane	50.0	863887.000	0.5179	100	1665813.00	0.5398	200	3570536.00	0.5501
1,1,1,2-Tetrachloroethane	50.0	398137.000	0.3025	100	758143.000	0.3028	200	1710895.00	0.3229
1,1,1-Trichloroethane	50.0	627541.000	0.3762	100	1129250.00	0.3659	200	2382778.00	0.3671
1,1,2-Trichloroethane	50.0	259938.000	0.1975	100	484193.000	0.1934	200	1042008.00	0.1966
1,1-Dichloropropene	50.0	566953.000	0.3399	100	1042969.00	0.3380	200	2200746.00	0.3391
1,2,3-Trichlorobenzene	50.0	502003.000	0.6129	100	1070567.00	0.6312	200	2402374.00	0.6738
1,2,3-Trichloropropane	50.0	91783.0000	0.1121	100	184886.000	0.1090	200	385164.000	0.1080
1,2,4-Trichlorobenzene	50.0	583791.000	0.7128	100	1263740.00	0.7451	200	2848176.00	0.7989
1,2,4-Trimethylbenzene	50.0	1742125.00	2.127	100	3594229.00	2.119	200	7042338.00	1.975
1,2-Dibromo-3-Chloropropane	50.0	62606.0000	0.07640	100	125446.000	0.07400	200	258411.000	0.07250
1,2-Dibromoethane	50.0	273457.000	0.2078	100	505739.000	0.2020	200	1090585.00	0.2058
1,2-Dichlorobenzene	50.0	831029.000	1.015	100	1753899.00	1.034	200	3864868.00	1.084
1,2-Dichloroethane	50.0	630473.000	0.3780	100	1144088.00	0.3707	200	2425189.00	0.3737
1,3,5-Trimethylbenzene	50.0	1664720.00	2.033	100	3376470.00	1.991	200	6817853.00	1.912
1,3-Dichlorobenzene	50.0	925202.000	1.130	100	1946012.00	1.147	200	4274129.00	1.199
1,3-Dichloropropane	50.0	503268.000	0.3824	100	942028.000	0.3762	200	2034465.00	0.3839
1,4-Dichlorobenzene	50.0	952642.000	1.163	100	2011853.00	1.186	200	4417818.00	1.239
2,2-Dichloropropane	50.0	625513.000	0.3750	100	1132131.00	0.3668	200	2412609.00	0.3717
2-Butanone	50.0	170436.000	0.1022	100	315270.000	0.1022	200	654892.000	0.1009
2-Chloroethyl Vinyl Ether	50.0	222441.000	0.1334	100	406256.000	0.1316	200	862548.000	0.1329
2-Chlorotoluene	50.0	1469319.00	1.794	100	2884183.00	1.701	200	5973661.00	1.676
2-Hexanone	50.0	259688.000	0.1973	100	502298.000	0.2006	200	1040518.00	0.1964
4-Chlorotoluene	50.0	1359749.00	1.660	100	2833230.00	1.671	200	5842330.00	1.639
4-Methyl-2-Pentanone	50.0	132761.000	0.07960	100	253158.000	0.08200	200	528437.000	0.08140
Acetone	50.0	119123.000	0.07140	100	215438.000	0.06980	200	411692.000	0.06340
Benzene	50.0	1604847.00	0.9622	100	2976517.00	0.9645	200	6324928.00	0.9745
Bromobenzene	50.0	477255.000	0.5827	100	948682.000	0.5593	200	2131096.00	0.5977
Bromochloromethane	50.0	224902.000	0.1348	100	413419.000	0.1340	200	895656.000	0.1380
Bromodichloromethane	50.0	530111.000	0.3178	100	978356.000	0.3170	200	2096143.00	0.3230
Bromomethane	50.0	248244.000	0.1488	100	411727.000	0.1334	200	844739.000	0.1302
Carbon Disulfide	50.0	1308587.00	0.7845	100	2366687.00	0.7669	200	5118605.00	0.7886
Carbon Tetrachloride	50.0	571266.000	0.3425	100	1044737.00	0.3385	200	2212967.00	0.3410

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Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte	WG294332-11		
	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	922665.000	0.09630
2-Chloroethyl Vinyl Ether	300	1300859.00	0.1358
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1480720.00	0.1970
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	761464.000	0.07950
Acetone	300	566341.000	0.05910
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

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Login Number: L09020438
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 06-FEB-09 14:52
Column ID: F

Analyte	WG294332-02			WG294332-03			WG294332-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	6020.00000	0.1809
Dibromochloromethane	0.300	1578.00000	0.1978	0.400	2087.00000	0.1972	1.00	5703.00000	0.2191
Dibromomethane	NA	NA	NA	0.400	1067.00000	0.07890	1.00	3150.00000	0.09460
Dichlorodifluoromethane	NA	NA	NA	0.400	3627.00000	0.2681	1.00	8445.00000	0.2537
Hexachlorobutadiene	0.300	1364.00000	0.3077	0.400	1727.00000	0.2899	1.00	4085.00000	0.2781
Isopropylbenzene	0.300	11847.00000	1.485	0.400	13799.00000	1.304	1.00	31303.00000	1.203
Methylene Chloride	NA	NA	NA	0.400	8384.00000	0.6198	1.00	12347.00000	0.3709
Naphthalene	NA	NA	NA	0.400	5537.00000	0.9293	1.00	13961.00000	0.9504
Styrene	0.300	7396.00000	0.9271	0.400	8714.00000	0.8234	1.00	20417.00000	0.7845
Tetrachloroethene	0.300	2107.00000	0.2641	0.400	2607.00000	0.2463	1.00	5831.00000	0.2241
Trichloroethene	NA	NA	NA	0.400	4005.00000	0.2961	1.00	8009.00000	0.2406
Trichlorofluoromethane	NA	NA	NA	0.400	4805.00000	0.3552	1.00	11606.00000	0.3487
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	0.300	2323.00000	0.2230	0.400	3260.00000	0.2410	1.00	7208.00000	0.2165
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4407.00000	0.3258	1.00	10853.00000	0.3261
m-,p-Xylene	0.600	9236.00000	0.5789	0.800	11330.00000	0.5353	2.00	27275.00000	0.5240
n-Butylbenzene	0.300	8727.00000	1.969	0.400	10580.00000	1.776	1.00	23493.00000	1.599
n-Propylbenzene	0.300	12647.00000	2.853	0.400	16192.00000	2.718	1.00	37036.00000	2.521
o-Xylene	0.300	4039.00000	0.5063	0.400	5430.00000	0.5131	1.00	12508.00000	0.4806
p-Isopropyltoluene	0.300	9503.00000	2.144	0.400	11116.00000	1.866	1.00	25942.00000	1.766
sec-Butylbenzene	0.300	11948.00000	2.696	0.400	13334.00000	2.238	1.00	31517.00000	2.146
tert-Butylbenzene	0.300	1841.00000	0.4154	0.400	1919.00000	0.3221	1.00	5327.00000	0.3626
trans-1,2-Dichloroethene	0.300	2589.00000	0.2486	0.400	2806.00000	0.2074	1.00	7083.00000	0.2128
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3555.00000	0.3359	1.00	9098.00000	0.3496

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Analyte	WG294332-05			WG294332-06			WG294332-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	10943.0000	0.1638	5.00	33805.0000	0.2071	20.0	135298.000	0.2016
Dibromochloromethane	2.00	11645.0000	0.2241	5.00	32723.0000	0.2597	20.0	134921.000	0.2529
Dibromomethane	2.00	6783.00000	0.1015	5.00	18959.0000	0.1162	20.0	75354.0000	0.1123
Dichlorodifluoromethane	2.00	14724.0000	0.2203	5.00	48173.0000	0.2952	20.0	181835.000	0.2709
Hexachlorobutadiene	2.00	8506.00000	0.2846	5.00	23258.0000	0.3177	20.0	95552.0000	0.3031
Isopropylbenzene	2.00	64969.0000	1.250	5.00	178016.000	1.413	20.0	729773.000	1.368
Methylene Chloride	2.00	19588.0000	0.2931	5.00	43390.0000	0.2659	20.0	153964.000	0.2294
Naphthalene	2.00	31534.0000	1.055	5.00	86213.0000	1.178	20.0	377071.000	1.196
Styrene	2.00	42577.0000	0.8194	5.00	118700.000	0.9419	20.0	494866.000	0.9277
Tetrachloroethene	2.00	11836.0000	0.2278	5.00	32883.0000	0.2609	20.0	128820.000	0.2415
Trichloroethene	2.00	15144.0000	0.2266	5.00	40544.0000	0.2484	20.0	159095.000	0.2370
Trichlorofluoromethane	2.00	21607.0000	0.3233	5.00	66247.0000	0.4059	20.0	254864.000	0.3797
Vinyl Acetate	NA	NA	NA	5.00	38279.0000	0.2345	20.0	177158.000	0.2639
cis-1,2-Dichloroethene	2.00	14819.0000	0.2218	5.00	40413.0000	0.2476	20.0	160543.000	0.2392
cis-1,3-Dichloropropene	2.00	23428.0000	0.3506	5.00	62640.0000	0.3838	20.0	253155.000	0.3772
m-,p-Xylene	4.00	53707.0000	0.5168	10.0	145122.000	0.5758	40.0	594808.000	0.5575
n-Butylbenzene	2.00	49178.0000	1.646	5.00	135595.000	1.852	20.0	572263.000	1.815
n-Propylbenzene	2.00	77249.0000	2.585	5.00	210949.000	2.881	20.0	871792.000	2.766
o-Xylene	2.00	25978.0000	0.5000	5.00	70669.0000	0.5607	20.0	285466.000	0.5352
p-Isopropyltoluene	2.00	54371.0000	1.819	5.00	150017.000	2.049	20.0	626615.000	1.988
sec-Butylbenzene	2.00	65603.0000	2.195	5.00	181258.000	2.476	20.0	749187.000	2.377
tert-Butylbenzene	2.00	11291.0000	0.3778	5.00	31058.0000	0.4242	20.0	126458.000	0.4011
trans-1,2-Dichloroethene	2.00	13358.0000	0.1999	5.00	39098.0000	0.2396	20.0	148662.000	0.2215
trans-1,3-Dichloropropene	2.00	19267.0000	0.3708	5.00	53172.0000	0.4219	20.0	222961.000	0.4180

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Analyte	WG294332-08			WG294332-09			WG294332-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	359984.000	0.2158	100	642599.000	0.2082	200	1277346.00	0.1968
Dibromochloromethane	50.0	350096.000	0.2660	100	650658.000	0.2598	200	1435564.00	0.2709
Dibromomethane	50.0	192406.000	0.1154	100	355699.000	0.1153	200	759859.000	0.1171
Dichlorodifluoromethane	50.0	480270.000	0.2879	100	832634.000	0.2698	200	1635405.00	0.2520
Hexachlorobutadiene	50.0	250365.000	0.3057	100	524031.000	0.3090	200	1172567.00	0.3289
Isopropylbenzene	50.0	1909398.00	1.451	100	3737320.00	1.493	200	7532161.00	1.421
Methylene Chloride	50.0	387954.000	0.2326	100	702068.000	0.2275	200	1494366.00	0.2302
Naphthalene	50.0	1018518.00	1.244	100	2128249.00	1.255	200	4537987.00	1.273
Styrene	50.0	1313842.00	0.9983	100	2626299.00	1.049	200	5706947.00	1.077
Tetrachloroethene	50.0	331383.000	0.2518	100	618965.000	0.2472	200	1365424.00	0.2577
Trichloroethene	50.0	398219.000	0.2387	100	739042.000	0.2395	200	1589710.00	0.2449
Trichlorofluoromethane	50.0	665958.000	0.3993	100	1172234.00	0.3798	200	2400643.00	0.3699
Vinyl Acetate	50.0	526333.000	0.3156	100	934522.000	0.3028	200	2039174.00	0.3142
cis-1,2-Dichloroethene	50.0	408392.000	0.2448	100	747892.000	0.2423	200	1589844.00	0.2450
cis-1,3-Dichloropropene	50.0	651841.000	0.3908	100	1201049.00	0.3892	200	2583825.00	0.3981
m-,p-Xylene	100	1568382.00	0.5959	200	3104042.00	0.6198	400	6561610.00	0.6191
n-Butylbenzene	50.0	1529513.00	1.867	100	3222303.00	1.900	200	6420950.00	1.801
n-Propylbenzene	50.0	2304799.00	2.814	100	4509235.00	2.659	200	8297217.00	2.327
o-Xylene	50.0	743309.000	0.5648	100	1442386.00	0.5760	200	3266372.00	0.6164
p-Isopropyltoluene	50.0	1694614.00	2.069	100	3547606.00	2.092	200	7086831.00	1.988
sec-Butylbenzene	50.0	2008769.00	2.453	100	4099194.00	2.417	200	8013735.00	2.248
tert-Butylbenzene	50.0	336101.000	0.4104	100	682590.000	0.4025	200	1525197.00	0.4278
trans-1,2-Dichloroethene	50.0	381839.000	0.2289	100	699209.000	0.2266	200	1491033.00	0.2297
trans-1,3-Dichloropropene	50.0	573678.000	0.4359	100	1072109.00	0.4281	200	2316901.00	0.4372

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Analyte	WG294332-11		
	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	300	2529460.00	0.2640
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

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Login Number: L09020438
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Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-02			WG295276-03			WG295276-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4715.00000	0.4497	1.00	11962.0000	0.4587
1,2-Dichloropropane	NA	NA	NA	0.400	2428.00000	0.2316	1.00	5855.00000	0.2245
Chloroform	0.300	4831.00000	0.6005	0.400	6197.00000	0.5910	1.00	14671.0000	0.5626
Ethylbenzene	NA	NA	NA	0.400	3272.00000	0.4312	1.00	8536.00000	0.4415
Toluene	NA	NA	NA	0.400	9312.00000	1.227	1.00	23265.0000	1.203
Vinyl Chloride	NA	NA	NA	NA	NA	NA	1.00	11136.0000	0.4270
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	1594.00000	0.3711	1.00	4706.00000	0.4205
1,1-Dichloroethane	NA	NA	NA	0.400	4999.00000	0.4768	1.00	12681.0000	0.4863
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3720.00000	0.1924
Chlorobenzene	NA	NA	NA	0.400	7220.00000	0.9515	1.00	17229.0000	0.8911
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	15514.0000	0.5949
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2618.00000	0.3450	1.00	7575.00000	0.3918
1,1,1-Trichloroethane	NA	NA	NA	0.400	6029.00000	0.5750	1.00	15415.0000	0.5911
1,1,2-Trichloroethane	NA	NA	NA	0.400	1493.00000	0.1967	1.00	4483.00000	0.2319
1,1-Dichloropropene	NA	NA	NA	0.400	2759.00000	0.2631	1.00	8704.00000	0.3338
1,2,3-Trichlorobenzene	0.300	2975.00000	0.9172	0.400	4872.00000	1.134	1.00	10218.0000	0.9131
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1343.00000	0.1200
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4081.00000	0.9501	1.00	12128.0000	1.084
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	1.00	27052.0000	2.418
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1659.00000	0.2186	1.00	4146.00000	0.2144
1,2-Dichlorobenzene	0.300	4212.00000	1.299	0.400	5688.00000	1.324	1.00	14351.0000	1.283
1,2-Dichloroethane	NA	NA	NA	0.400	5804.00000	0.5536	1.00	14617.0000	0.5605
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	7435.00000	1.731	1.00	24412.0000	2.182
1,3-Dichlorobenzene	NA	NA	NA	0.400	5873.00000	1.367	1.00	14927.0000	1.334
1,3-Dichloropropane	NA	NA	NA	0.400	2946.00000	0.3882	1.00	7353.00000	0.3803
1,4-Dichlorobenzene	0.300	5066.00000	1.562	0.400	6772.00000	1.577	1.00	16796.0000	1.501
2,2-Dichloropropane	NA	NA	NA	0.400	5865.00000	0.5594	1.00	13879.0000	0.5322
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	2241.00000	0.08590
2-Chlorotoluene	NA	NA	NA	0.400	9119.00000	2.123	1.00	24753.0000	2.212
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	9254.00000	2.155	1.00	26033.0000	2.326
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	8893.00000	0.8482	1.00	23299.0000	0.8935
Bromobenzene	0.300	1942.00000	0.5987	0.400	2810.00000	0.6542	1.00	6914.00000	0.6179
Bromochloromethane	NA	NA	NA	0.400	1319.00000	0.1258	1.00	3153.00000	0.1209
Bromodichloromethane	NA	NA	NA	0.400	4613.00000	0.4400	1.00	11285.0000	0.4328
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4276.00000	0.1640
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	20158.0000	0.7730
Carbon Tetrachloride	NA	NA	NA	0.400	4702.00000	0.4485	1.00	13588.0000	0.5211

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Login Number: L09020438
Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-05			WG295276-06			WG295276-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	24977.0000	0.4565	5.00	66542.0000	0.4682	20.0	299021.000	0.4891
1,2-Dichloropropane	2.00	12106.0000	0.2213	5.00	32017.0000	0.2253	20.0	142555.000	0.2332
Chloroform	2.00	30421.0000	0.5560	5.00	81408.0000	0.5728	20.0	337776.000	0.5525
Ethylbenzene	2.00	18858.0000	0.4668	5.00	51855.0000	0.4935	20.0	228925.000	0.4971
Toluene	2.00	50529.0000	1.251	5.00	138558.000	1.319	20.0	608585.000	1.322
Vinyl Chloride	2.00	24270.0000	0.4436	5.00	48049.0000	0.3381	20.0	206986.000	0.3386
1,1,2,2-Tetrachloroethane	2.00	9862.00000	0.4207	5.00	27916.0000	0.4561	20.0	127819.000	0.4751
1,1-Dichloroethane	2.00	27428.0000	0.5013	5.00	72521.0000	0.5103	20.0	300531.000	0.4916
Bromoform	2.00	8241.00000	0.2040	5.00	23921.0000	0.2277	20.0	107337.000	0.2331
Chlorobenzene	2.00	35575.0000	0.8805	5.00	95144.0000	0.9055	20.0	409519.000	0.8893
Chloromethane	2.00	30572.0000	0.5587	5.00	67826.0000	0.4773	20.0	283311.000	0.4634
1,1,1,2-Tetrachloroethane	2.00	15797.0000	0.3910	5.00	41179.0000	0.3919	20.0	181908.000	0.3950
1,1,1-Trichloroethane	2.00	31305.0000	0.5721	5.00	81187.0000	0.5713	20.0	352889.000	0.5772
1,1,2-Trichloroethane	2.00	9032.00000	0.2236	5.00	26254.0000	0.2499	20.0	113244.000	0.2459
1,1-Dichloropropene	2.00	18734.0000	0.3424	5.00	50538.0000	0.3556	20.0	230193.000	0.3765
1,2,3-Trichlorobenzene	2.00	23558.0000	1.005	5.00	61722.0000	1.008	20.0	271940.000	1.011
1,2,3-Trichloropropane	2.00	3355.00000	0.1431	5.00	10850.0000	0.1773	20.0	48286.0000	0.1795
1,2,4-Trichlorobenzene	2.00	24052.0000	1.026	5.00	69620.0000	1.137	20.0	307564.000	1.143
1,2,4-Trimethylbenzene	2.00	61187.0000	2.610	5.00	167374.000	2.735	20.0	742484.000	2.760
1,2-Dibromo-3-Chloropropane	2.00	2748.00000	0.1172	5.00	7517.00000	0.1228	20.0	35958.0000	0.1336
1,2-Dibromoethane	2.00	8647.00000	0.2140	5.00	26470.0000	0.2519	20.0	119385.000	0.2593
1,2-Dichlorobenzene	2.00	29891.0000	1.275	5.00	81941.0000	1.339	20.0	355807.000	1.322
1,2-Dichloroethane	2.00	28780.0000	0.5260	5.00	78021.0000	0.5490	20.0	318520.000	0.5210
1,3,5-Trimethylbenzene	2.00	56419.0000	2.407	5.00	158209.000	2.585	20.0	707856.000	2.631
1,3-Dichlorobenzene	2.00	31748.0000	1.354	5.00	88410.0000	1.444	20.0	388257.000	1.443
1,3-Dichloropropane	2.00	15868.0000	0.3928	5.00	46408.0000	0.4417	20.0	208713.000	0.4532
1,4-Dichlorobenzene	2.00	33783.0000	1.441	5.00	90288.0000	1.475	20.0	398403.000	1.481
2,2-Dichloropropane	2.00	29935.0000	0.5471	5.00	74198.0000	0.5221	20.0	330123.000	0.5400
2-Butanone	NA	NA	NA	5.00	11072.0000	0.07790	20.0	48246.0000	0.07890
2-Chloroethyl Vinyl Ether	2.00	4642.00000	0.08480	5.00	13917.0000	0.09790	20.0	72167.0000	0.1180
2-Chlorotoluene	2.00	53524.0000	2.283	5.00	145580.000	2.379	20.0	687416.000	2.555
2-Hexanone	NA	NA	NA	5.00	5410.00000	0.05150	20.0	29124.0000	0.06320
4-Chlorotoluene	2.00	56717.0000	2.420	5.00	152172.000	2.486	20.0	635371.000	2.361
4-Methyl-2-Pentanone	NA	NA	NA	5.00	6997.00000	0.04920	20.0	34429.0000	0.05630
Acetone	NA	NA	NA	5.00	11829.0000	0.08320	20.0	43564.0000	0.07130
Benzene	2.00	48442.0000	0.8853	5.00	123258.000	0.8673	20.0	537755.000	0.8796
Bromobenzene	2.00	15720.0000	0.6706	5.00	41701.0000	0.6813	20.0	184874.000	0.6871
Bromochloromethane	2.00	8056.00000	0.1472	5.00	21187.0000	0.1491	20.0	91279.0000	0.1493
Bromodichloromethane	2.00	23036.0000	0.4210	5.00	63009.0000	0.4434	20.0	271291.000	0.4437
Bromomethane	2.00	9657.00000	0.1765	5.00	23484.0000	0.1652	20.0	117645.000	0.1924
Carbon Disulfide	2.00	45447.0000	0.8306	5.00	106128.000	0.7468	20.0	475305.000	0.7774
Carbon Tetrachloride	2.00	28356.0000	0.5182	5.00	72207.0000	0.5081	20.0	310012.000	0.5071

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Analytical Method: 8260B

Instrument ID: HPMS8
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Column ID: F

Analyte	WG295276-08			WG295276-09			WG295276-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	791944.000	0.4814	100	1789244.00	0.4234	200	3422383.00	0.4138
1,2-Dichloropropane	50.0	388809.000	0.2363	100	979356.000	0.2318	200	1860359.00	0.2249
Chloroform	50.0	881651.000	0.5359	100	1932275.00	0.4573	200	3682931.00	0.4453
Ethylbenzene	50.0	597920.000	0.4861	100	1427701.00	0.4461	200	2710061.00	0.4223
Toluene	50.0	1608152.00	1.307	100	3777626.00	1.180	200	6844711.00	1.067
Vinyl Chloride	50.0	504282.000	0.3065	100	915240.000	0.2166	200	1720547.00	0.2080
1,1,2,2-Tetrachloroethane	50.0	344493.000	0.4758	100	845895.000	0.4579	200	1602576.00	0.4395
1,1-Dichloroethane	50.0	820761.000	0.4989	100	1958004.00	0.4634	200	3818131.00	0.4617
Bromoform	50.0	286415.000	0.2329	100	674865.000	0.2109	200	1320958.00	0.2059
Chlorobenzene	50.0	1097585.00	0.8923	100	2629626.00	0.8217	200	4861367.00	0.7576
Chloromethane	50.0	682926.000	0.4151	100	1462473.00	0.3461	NA	NA	NA
1,1,1,2-Tetrachloroethane	50.0	465365.000	0.3783	100	1042812.00	0.3259	200	1931054.00	0.3009
1,1,1-Trichloroethane	50.0	917718.000	0.5579	100	1900472.00	0.4498	200	3632463.00	0.4392
1,1,2-Trichloroethane	50.0	300576.000	0.2444	100	707539.000	0.2211	200	1377842.00	0.2147
1,1-Dichloropropene	50.0	618660.000	0.3761	100	1432180.00	0.3389	200	2694008.00	0.3257
1,2,3-Trichlorobenzene	50.0	711972.000	0.9834	100	1586095.00	0.8585	200	2852568.00	0.7823
1,2,3-Trichloropropane	50.0	126057.000	0.1741	100	285939.000	0.1548	200	551655.000	0.1513
1,2,4-Trichlorobenzene	50.0	798623.000	1.103	100	1803007.00	0.9759	200	3237810.00	0.8880
1,2,4-Trimethylbenzene	50.0	1923418.00	2.657	100	4263761.00	2.308	200	7621339.00	2.090
1,2-Dibromo-3-Chloropropane	50.0	94730.0000	0.1308	100	206703.000	0.1119	200	404256.000	0.1109
1,2-Dibromoethane	50.0	317368.000	0.2580	100	746940.000	0.2334	200	1456950.00	0.2271
1,2-Dichlorobenzene	50.0	944834.000	1.305	100	2189642.00	1.185	200	3985248.00	1.093
1,2-Dichloroethane	50.0	817627.000	0.4970	100	1676905.00	0.3968	200	3254542.00	0.3935
1,3,5-Trimethylbenzene	50.0	1866457.00	2.578	100	4168404.00	2.256	200	7515790.00	2.061
1,3-Dichlorobenzene	50.0	1004557.00	1.388	100	2358692.00	1.277	200	4326857.00	1.187
1,3-Dichloropropane	50.0	542911.000	0.4414	100	1282397.00	0.4007	200	2464862.00	0.3841
1,4-Dichlorobenzene	50.0	1035359.00	1.430	100	2407614.00	1.303	200	4372642.00	1.199
2,2-Dichloropropane	50.0	871707.000	0.5299	100	1909697.00	0.4519	200	3600786.00	0.4354
2-Butanone	50.0	128340.000	0.07800	100	331669.000	0.07850	200	654883.000	0.07920
2-Chloroethyl Vinyl Ether	50.0	197703.000	0.1202	100	500667.000	0.1185	200	979727.000	0.1185
2-Chlorotoluene	50.0	1657321.00	2.289	100	3680512.00	1.992	200	6361910.00	1.745
2-Hexanone	50.0	87874.0000	0.07140	100	234939.000	0.07340	200	456696.000	0.07120
4-Chlorotoluene	50.0	1756915.00	2.427	100	3888121.00	2.105	200	7030088.00	1.928
4-Methyl-2-Pentanone	50.0	97882.0000	0.05950	100	253233.000	0.05990	200	496445.000	0.06000
Acetone	50.0	108866.000	0.06620	100	245941.000	0.05820	200	511899.000	0.06190
Benzene	50.0	1458337.00	0.8865	100	3506633.00	0.8299	200	6387335.00	0.7723
Bromobenzene	50.0	492011.000	0.6796	100	1171429.00	0.6341	200	2210922.00	0.6064
Bromochloromethane	50.0	243459.000	0.1480	100	592717.000	0.1403	200	1125187.00	0.1360
Bromodichloromethane	50.0	697912.000	0.4242	100	1512936.00	0.3580	200	2898790.00	0.3505
Bromomethane	50.0	331908.000	0.2018	100	827352.000	0.1958	200	1589097.00	0.1921
Carbon Disulfide	50.0	1267167.00	0.7703	100	3042783.00	0.7201	200	5686051.00	0.6875
Carbon Tetrachloride	50.0	792280.000	0.4816	100	1584178.00	0.3749	200	3115474.00	0.3767

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Column ID: F

Analyte	WG295276-11		
	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	955364.000	0.07580
2-Chloroethyl Vinyl Ether	300	1448636.00	0.1149
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	674051.000	0.07240
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	729600.000	0.05790
Acetone	300	693920.000	0.05500
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

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Column ID: F

Analyte	WG295276-02			WG295276-03			WG295276-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	4144.00000	0.1589
Dibromochloromethane	NA	NA	NA	0.400	2478.00000	0.3266	1.00	5973.00000	0.3089
Dibromomethane	NA	NA	NA	0.400	1210.00000	0.1154	1.00	4048.00000	0.1552
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	12417.00000	0.4762
Hexachlorobutadiene	NA	NA	NA	0.400	2006.00000	0.4670	1.00	6411.00000	0.5729
Isopropylbenzene	NA	NA	NA	0.400	9993.00000	1.317	1.00	25889.00000	1.339
Methylene Chloride	NA	NA	NA	0.400	4723.00000	0.4505	1.00	8424.00000	0.3230
Naphthalene	NA	NA	NA	0.400	7114.00000	1.656	1.00	20409.00000	1.824
Styrene	NA	NA	NA	0.400	6198.00000	0.8168	1.00	15154.00000	0.7838
Tetrachloroethene	NA	NA	NA	0.400	2014.00000	0.2654	1.00	5339.00000	0.2761
Trichloroethene	NA	NA	NA	0.400	2525.00000	0.2408	1.00	5839.00000	0.2239
Trichlorofluoromethane	NA	NA	NA	0.400	5149.00000	0.4911	1.00	16661.00000	0.6389
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2228.00000	0.2125	1.00	5923.00000	0.2271
cis-1,3-Dichloropropene	NA	NA	NA	0.400	3611.00000	0.3444	1.00	8624.00000	0.3307
m-,p-Xylene	NA	NA	NA	0.800	8452.00000	0.5569	2.00	21515.00000	0.5564
n-Butylbenzene	NA	NA	NA	0.400	9473.00000	2.206	1.00	28070.00000	2.508
n-Propylbenzene	NA	NA	NA	0.400	12020.00000	2.799	1.00	34364.00000	3.071
o-Xylene	NA	NA	NA	0.400	3363.00000	0.4432	1.00	9172.00000	0.4744
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	24989.00000	2.233
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	29116.00000	2.602
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	4826.00000	0.4313
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3781.00000	0.3606	1.00	11005.00000	0.4220
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3325.00000	0.4382	1.00	9592.00000	0.4961

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Analyte	WG295276-05			WG295276-06			WG295276-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	10733.0000	0.1962	5.00	25720.0000	0.1810	20.0	121075.000	0.1980
Dibromochloromethane	2.00	13485.0000	0.3338	5.00	36990.0000	0.3520	20.0	170428.000	0.3701
Dibromomethane	2.00	7965.00000	0.1456	5.00	22138.0000	0.1558	20.0	90393.0000	0.1479
Dichlorodifluoromethane	2.00	30362.0000	0.5549	5.00	67312.0000	0.4736	20.0	292152.000	0.4779
Hexachlorobutadiene	2.00	14425.0000	0.6154	5.00	35753.0000	0.5841	20.0	164944.000	0.6130
Isopropylbenzene	2.00	61070.0000	1.512	5.00	165527.000	1.575	20.0	778252.000	1.690
Methylene Chloride	2.00	15781.0000	0.2884	5.00	38138.0000	0.2684	20.0	152020.000	0.2487
Naphthalene	2.00	41358.0000	1.764	5.00	119547.000	1.953	20.0	551069.000	2.048
Styrene	2.00	36458.0000	0.9024	5.00	103251.000	0.9826	20.0	469122.000	1.019
Tetrachloroethene	2.00	11172.0000	0.2765	5.00	29433.0000	0.2801	20.0	137533.000	0.2987
Trichloroethene	2.00	12992.0000	0.2374	5.00	33203.0000	0.2336	20.0	155468.000	0.2543
Trichlorofluoromethane	2.00	35435.0000	0.6476	5.00	87268.0000	0.6141	20.0	391875.000	0.6410
Vinyl Acetate	NA	NA	NA	5.00	61513.0000	0.4328	20.0	263943.000	0.4317
cis-1,2-Dichloroethene	2.00	13572.0000	0.2480	5.00	35524.0000	0.2500	20.0	157633.000	0.2578
cis-1,3-Dichloropropene	2.00	20241.0000	0.3699	5.00	56455.0000	0.3973	20.0	258299.000	0.4225
m-,p-Xylene	4.00	47150.0000	0.5835	10.0	126578.000	0.6023	40.0	558148.000	0.6060
n-Butylbenzene	2.00	61789.0000	2.636	5.00	167883.000	2.743	20.0	789569.000	2.935
n-Propylbenzene	2.00	78704.0000	3.358	5.00	214839.000	3.510	20.0	995567.000	3.700
o-Xylene	2.00	21677.0000	0.5365	5.00	59433.0000	0.5656	20.0	274235.000	0.5955
p-Isopropyltoluene	2.00	59076.0000	2.520	5.00	164372.000	2.686	20.0	763725.000	2.839
sec-Butylbenzene	2.00	68634.0000	2.928	5.00	184509.000	3.015	20.0	866560.000	3.221
tert-Butylbenzene	2.00	10102.0000	0.4310	5.00	29241.0000	0.4777	20.0	139028.000	0.5167
trans-1,2-Dichloroethene	2.00	23223.0000	0.4244	5.00	57486.0000	0.4045	20.0	249604.000	0.4083
trans-1,3-Dichloropropene	2.00	20971.0000	0.5191	5.00	60077.0000	0.5717	20.0	271409.000	0.5894

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Analyte	WG295276-08			WG295276-09			WG295276-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	314475.000	0.1912	100	772287.000	0.1828	200	1423001.00	0.1721
Dibromochloromethane	50.0	450327.000	0.3661	100	1033082.00	0.3228	200	2023338.00	0.3153
Dibromomethane	50.0	241494.000	0.1468	100	542934.000	0.1285	200	1048753.00	0.1268
Dichlorodifluoromethane	50.0	711830.000	0.4327	100	1438984.00	0.3405	NA	NA	NA
Hexachlorobutadiene	50.0	430955.000	0.5952	100	925253.000	0.5008	200	1708268.00	0.4685
Isopropylbenzene	50.0	2014116.00	1.638	100	4579616.00	1.431	200	8233983.00	1.283
Methylene Chloride	50.0	404344.000	0.2458	100	968905.000	0.2293	200	1846660.00	0.2233
Naphthalene	50.0	1447329.00	1.999	100	3193907.00	1.729	200	5707754.00	1.565
Styrene	50.0	1241570.00	1.009	100	2990640.00	0.9345	200	5598533.00	0.8725
Tetrachloroethene	50.0	351309.000	0.2856	100	828091.000	0.2588	200	1548493.00	0.2413
Trichloroethene	50.0	413043.000	0.2511	100	1008821.00	0.2387	200	1889944.00	0.2285
Trichlorofluoromethane	50.0	999652.000	0.6077	100	2037010.00	0.4821	200	4091463.00	0.4947
Vinyl Acetate	50.0	733905.000	0.4461	100	1751664.00	0.4145	200	3307293.00	0.3999
cis-1,2-Dichloroethene	50.0	424531.000	0.2581	100	1036329.00	0.2453	200	1976162.00	0.2389
cis-1,3-Dichloropropene	50.0	686342.000	0.4172	100	1631134.00	0.3860	200	3074105.00	0.3717
m-,p-Xylene	100	1488806.00	0.6052	200	3511729.00	0.5487	400	6392416.00	0.4981
n-Butylbenzene	50.0	2047844.00	2.829	100	4467064.00	2.418	200	7814064.00	2.143
n-Propylbenzene	50.0	2564367.00	3.542	100	5664306.00	3.066	200	9879817.00	2.710
o-Xylene	50.0	738900.000	0.6007	100	1765836.00	0.5518	200	3373997.00	0.5258
p-Isopropyltoluene	50.0	2027341.00	2.800	100	4587899.00	2.483	200	8109927.00	2.224
sec-Butylbenzene	50.0	2264843.00	3.128	100	5103029.00	2.762	200	9058770.00	2.485
tert-Butylbenzene	50.0	368529.000	0.5090	100	891104.000	0.4823	200	1700715.00	0.4664
trans-1,2-Dichloroethene	50.0	680511.000	0.4137	100	1617417.00	0.3828	200	3083792.00	0.3729
trans-1,3-Dichloropropene	50.0	703843.000	0.5722	100	1595318.00	0.4985	200	3064106.00	0.4775

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Analytical Method: 8260B

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Column ID: F

Analyte	WG295276-11		
	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	300	4602674.00	0.3650
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: L09020438 Run Date: 02/06/2009 Sample ID: WG294332-12
Instrument ID: HPMS11 Run Time: 16:54 Method: 8260B
File ID: 11M56960 Analyst: wtd QC Key: STD
ICal Workgroup: WG294332 Cal ID: HPMS11 - 06-FEB-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	20.1	ug/L	0.413	0.400	30	
1,1-Dichloroethene	CCC	20.0	20.5	ug/L	0.456	2.40	30	
1,2-Dichloropropane	CCC	20.0	19.8	ug/L	0.282	0.800	30	
Ethylbenzene	CCC	20.0	20.7	ug/L	0.467	3.50	30	
Toluene	CCC	20.0	20.4	ug/L	1.25	1.80	30	
Vinyl Chloride	CCC	20.0	18.5	ug/L	0.229	7.50	30	
Bromoform	SPCC	20.0	17.1	ug/L	0.147	14.4	30	
Chlorobenzene	SPCC	20.0	19.5	ug/L	0.826	2.30	30	
Chloromethane	SPCC	20.0	19.5	ug/L	0.504	2.50	30	
1,1-Dichloroethane	SPCC	20.0	20.3	ug/L	0.531	1.50	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	17.8	ug/L	0.329	10.8	30	
Acetone		20.0	20.2	ug/L	0.0718	1.00	30	
Benzene		20.0	19.6	ug/L	0.935	2.00	30	
Bromobenzene		20.0	20.1	ug/L	0.583	0.600	30	
Bromochloromethane		20.0	20.3	ug/L	0.125	1.70	30	
Bromodichloromethane		20.0	19.9	ug/L	0.300	0.400	30	
Bromomethane		20.0	23.6	ug/L	0.158	17.9	30	
2-Butanone		20.0	20.3	ug/L	0.101	1.60	30	
n-Butylbenzene		20.0	20.3	ug/L	1.83	1.50	30	
sec-Butylbenzene		20.0	20.6	ug/L	2.43	2.90	30	
tert-Butylbenzene		20.0	21.4	ug/L	0.421	6.90	30	
Carbon Disulfide		20.0	18.1	ug/L	0.676	9.60	30	
Carbon Tetrachloride		20.0	21.0	ug/L	0.330	5.00	30	
Dibromochloromethane		20.0	19.5	ug/L	0.233	2.60	30	
Chloroethane		20.0	21.7	ug/L	0.213	8.60	30	
2-Chloroethyl Vinyl Ether		20.0	17.3	ug/L	0.111	13.4	30	
2-Chlorotoluene		20.0	20.4	ug/L	1.81	1.80	30	
4-Chlorotoluene		20.0	19.7	ug/L	1.64	1.50	30	
1,2-Dibromo-3-Chloropropane		20.0	17.6	ug/L	0.0647	12.1	30	
1,2-Dibromoethane		20.0	19.0	ug/L	0.179	5.10	30	
Dibromomethane		20.0	19.5	ug/L	0.104	2.70	30	
1,2-Dichlorobenzene		20.0	19.4	ug/L	0.972	2.90	30	
1,3-Dichlorobenzene		20.0	19.5	ug/L	1.09	2.60	30	
1,4-Dichlorobenzene		20.0	18.9	ug/L	1.11	5.30	30	
Dichlorodifluoromethane		20.0	24.5	ug/L	0.324	22.5	30	
1,2-Dichloroethane		20.0	18.7	ug/L	0.331	6.50	30	
cis-1,2-Dichloroethene		20.0	20.4	ug/L	0.241	2.10	30	
trans-1,2-Dichloroethene		20.0	19.7	ug/L	0.221	1.40	30	
1,3-Dichloropropane		20.0	18.9	ug/L	0.348	5.30	30	
2,2-Dichloropropane		20.0	18.8	ug/L	0.334	6.00	30	
cis-1,3-Dichloropropene		20.0	18.8	ug/L	0.345	6.20	30	
trans-1,3-Dichloropropene		20.0	17.1	ug/L	0.341	14.7	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1330649
Report generated 02/27/2009 14:30



Login Number: L09020438 Run Date: 02/06/2009 Sample ID: WG294332-12
Instrument ID: HPMS11 Run Time: 16:54 Method: 8260B
File ID: 11M56960 Analyst: wtd QC Key: STD
Ical Workgroup: WG294332 Cal ID: HPMS11 - 06-FEB-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	20.4	ug/L	0.332	1.80	30	
2-Hexanone	20.0	17.2	ug/L	0.163	13.9	30	
Hexachlorobutadiene	20.0	20.3	ug/L	0.307	1.30	30	
Isopropylbenzene	20.0	18.2	ug/L	1.25	9.20	30	
p-Isopropyltoluene	20.0	20.1	ug/L	1.98	0.400	30	
4-Methyl-2-Pentanone	20.0	16.9	ug/L	0.0657	15.3	30	
Methylene Chloride	20.0	19.5	ug/L	0.227	2.60	30	
Naphthalene	20.0	19.0	ug/L	1.08	5.00	30	
n-Propylbenzene	20.0	20.9	ug/L	2.80	4.60	30	
Styrene	20.0	20.0	ug/L	0.927	0	30	
1,1,1,2-Tetrachloroethane	20.0	20.6	ug/L	0.295	2.80	30	
Tetrachloroethene	20.0	20.3	ug/L	0.251	1.50	30	
1,2,3-Trichlorobenzene	20.0	19.5	ug/L	0.588	2.40	30	
1,2,4-Trichlorobenzene	20.0	20.3	ug/L	0.708	1.40	30	
1,1,1-Trichloroethane	20.0	20.6	ug/L	0.366	3.20	30	
1,1,2-Trichloroethane	20.0	19.3	ug/L	0.177	3.70	30	
Trichloroethene	20.0	19.4	ug/L	0.240	2.80	30	
Trichlorofluoromethane	20.0	21.0	ug/L	0.389	5.00	30	
1,2,3-Trichloropropane	20.0	19.1	ug/L	0.100	4.70	30	
1,2,4-Trimethylbenzene	20.0	21.0	ug/L	2.13	5.10	30	
1,3,5-Trimethylbenzene	20.0	20.8	ug/L	2.02	4.20	30	
Vinyl Acetate	20.0	8.63	ug/L	0.122	56.8	40	*
o-Xylene	20.0	20.2	ug/L	0.546	1.20	30	
m-,p-Xylene	40.0	40.2	ug/L	0.572	0.400	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09020438 Run Date: 02/19/2009 Sample ID: WG295276-12
Instrument ID: HPMS8 Run Time: 16:12 Method: 8260B
File ID: 8M351799 Analyst: MES QC Key: STD
Ical Workgroup: WG295276 Cal ID: HPMS8 - 19-FEB-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	18.9	ug/L	0.513	5.40	30	
1,1-Dichloroethene	CCC	20.0	20.5	ug/L	0.467	2.50	30	
1,2-Dichloropropane	CCC	20.0	21.0	ug/L	0.241	5.20	30	
Ethylbenzene	CCC	20.0	21.4	ug/L	0.493	7.00	30	
Toluene	CCC	20.0	21.4	ug/L	1.32	7.00	30	
Vinyl Chloride	CCC	20.0	20.4	ug/L	0.298	2.00	30	
Bromoform	SPCC	20.0	18.0	ug/L	0.194	9.90	30	
Chlorobenzene	SPCC	20.0	20.7	ug/L	0.905	3.50	30	
Chloromethane	SPCC	20.0	19.5	ug/L	0.448	2.70	30	
1,1-Dichloroethane	SPCC	20.0	20.6	ug/L	0.500	2.80	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.3	ug/L	0.445	1.30	30	
Acetone		20.0	20.5	ug/L	0.0684	2.60	30	
Benzene		20.0	20.9	ug/L	0.898	4.70	30	
Bromobenzene		20.0	21.2	ug/L	0.687	6.10	30	
Bromochloromethane		20.0	21.5	ug/L	0.150	7.40	30	
Bromodichloromethane		20.0	19.0	ug/L	0.393	5.10	30	
Bromomethane		20.0	23.1	ug/L	0.213	15.7	30	
2-Butanone		20.0	18.3	ug/L	0.0714	8.50	30	
n-Butylbenzene		20.0	22.1	ug/L	2.82	10.5	30	
sec-Butylbenzene		20.0	22.1	ug/L	3.18	10.7	30	
tert-Butylbenzene		20.0	21.7	ug/L	0.513	8.30	30	
Carbon Disulfide		20.0	18.0	ug/L	0.684	9.80	30	
Carbon Tetrachloride		20.0	18.8	ug/L	0.440	5.80	30	
Dibromochloromethane		20.0	19.3	ug/L	0.325	3.60	30	
Chloroethane		20.0	23.3	ug/L	0.213	16.4	30	
2-Chloroethyl Vinyl Ether		20.0	21.3	ug/L	0.114	6.30	30	
2-Chlorotoluene		20.0	20.9	ug/L	2.30	4.60	30	
4-Chlorotoluene		20.0	21.3	ug/L	2.42	6.50	30	
1,2-Dibromo-3-Chloropropane		20.0	17.8	ug/L	0.108	11.1	30	
1,2-Dibromoethane		20.0	20.7	ug/L	0.243	3.40	30	
Dibromomethane		20.0	19.1	ug/L	0.134	4.30	30	
1,2-Dichlorobenzene		20.0	20.6	ug/L	1.31	3.10	30	
1,3-Dichlorobenzene		20.0	20.8	ug/L	1.40	4.00	30	
1,4-Dichlorobenzene		20.0	19.8	ug/L	1.42	1.20	30	
Dichlorodifluoromethane		20.0	20.8	ug/L	0.500	3.80	30	
1,2-Dichloroethane		20.0	17.6	ug/L	0.440	12.0	30	
cis-1,2-Dichloroethene		20.0	22.1	ug/L	0.267	10.3	30	
trans-1,2-Dichloroethene		20.0	20.8	ug/L	0.414	3.90	30	
1,3-Dichloropropane		20.0	20.7	ug/L	0.425	3.50	30	
2,2-Dichloropropane		20.0	19.1	ug/L	0.493	4.30	30	
cis-1,3-Dichloropropene		20.0	20.5	ug/L	0.390	2.70	30	
trans-1,3-Dichloropropene		20.0	18.0	ug/L	0.468	10.1	30	

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Login Number: L09020438 Run Date: 02/19/2009 Sample ID: WG295276-12
Instrument ID: HPMS8 Run Time: 16:12 Method: 8260B
File ID: 8M351799 Analyst: MES QC Key: STD
ICal Workgroup: WG295276 Cal ID: HPMS8 - 19-FEB-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	21.5	ug/L	0.365	7.60	30	
2-Hexanone	20.0	18.3	ug/L	0.0615	8.50	30	
Hexachlorobutadiene	20.0	20.7	ug/L	0.571	3.50	30	
Isopropylbenzene	20.0	19.7	ug/L	1.45	1.50	30	
p-Isopropyltoluene	20.0	21.7	ug/L	2.75	8.30	30	
4-Methyl-2-Pentanone	20.0	17.9	ug/L	0.0511	10.6	30	
Methylene Chloride	20.0	21.1	ug/L	0.259	5.70	30	
Naphthalene	20.0	21.7	ug/L	1.97	8.50	30	
n-Propylbenzene	20.0	22.4	ug/L	3.61	12.1	30	
Styrene	20.0	21.8	ug/L	0.996	8.90	30	
1,1,1,2-Tetrachloroethane	20.0	19.6	ug/L	0.358	1.80	30	
Tetrachloroethene	20.0	21.2	ug/L	0.289	6.10	30	
1,2,3-Trichlorobenzene	20.0	20.2	ug/L	0.965	0.800	30	
1,2,4-Trichlorobenzene	20.0	21.1	ug/L	1.10	5.60	30	
1,1,1-Trichloroethane	20.0	18.8	ug/L	0.509	6.00	30	
1,1,2-Trichloroethane	20.0	20.6	ug/L	0.235	3.00	30	
Trichloroethene	20.0	21.0	ug/L	0.251	5.10	30	
Trichlorofluoromethane	20.0	19.7	ug/L	0.567	1.70	30	
1,2,3-Trichloropropane	20.0	20.5	ug/L	0.161	2.50	30	
1,2,4-Trimethylbenzene	20.0	22.0	ug/L	2.76	9.80	30	
1,3,5-Trimethylbenzene	20.0	22.7	ug/L	2.62	13.6	30	
Vinyl Acetate	20.0	15.8	ug/L	0.328	21.0	40	
o-Xylene	20.0	22.5	ug/L	0.603	12.3	30	
m-,p-Xylene	40.0	42.6	ug/L	0.607	6.60	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09020438	Run Date: 02/21/2009	Sample ID: WG295504-02
Instrument ID: HPMS11	Run Time: 13:27	Method: 8260B
File ID: 11M57273	Analyst: FJB	QC Key: STD
Workgroup (AAB#): WG295505	Cal ID: HPMS11 - 06-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	46.6	ug/L	0.383	6.76	20	
1,1-Dichloroethene	CCC	50.0	46.0	ug/L	0.410	8.05	20	
1,2-Dichloropropane	CCC	50.0	49.5	ug/L	0.282	0.926	20	
Ethylbenzene	CCC	50.0	48.5	ug/L	0.437	3.03	20	
Toluene	CCC	50.0	46.6	ug/L	1.14	6.88	20	
Vinyl Chloride	CCC	50.0	43.0	ug/L	0.213	14.0	20	
Bromoform	SPCC	50.0	46.4	ug/L	0.165	7.18	40	
Chlorobenzene	SPCC	50.0	46.9	ug/L	0.794	6.14	40	
Chloromethane	SPCC	50.0	38.0	ug/L	0.393	23.9	40	
1,1-Dichloroethane	SPCC	50.0	47.1	ug/L	0.493	5.84	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.3	ug/L	0.342	7.33	40	
Acetone		50.0	42.0	ug/L	0.0597	16.0	40	
Benzene		50.0	47.2	ug/L	0.901	5.53	40	
Bromobenzene		50.0	48.6	ug/L	0.564	2.74	40	
Bromochloromethane		50.0	54.8	ug/L	0.134	9.70	40	
Bromodichloromethane		50.0	47.5	ug/L	0.286	4.97	40	
Bromomethane		50.0	55.7	ug/L	0.149	11.5	40	
2-Butanone		50.0	45.5	ug/L	0.0900	9.06	40	
n-Butylbenzene		50.0	46.4	ug/L	1.67	7.29	40	
sec-Butylbenzene		50.0	48.0	ug/L	2.27	3.95	40	
tert-Butylbenzene		50.0	50.8	ug/L	0.400	1.62	40	
Carbon Disulfide		50.0	50.5	ug/L	0.755	1.03	40	
Carbon Tetrachloride		50.0	49.6	ug/L	0.312	0.724	40	
Dibromochloromethane		50.0	51.1	ug/L	0.244	2.23	40	
Chloroethane		50.0	51.9	ug/L	0.204	3.81	40	
2-Chloroethyl Vinyl Ether		50.0	46.9	ug/L	0.120	6.23	40	
2-Chlorotoluene		50.0	43.9	ug/L	1.56	12.3	40	
4-Chlorotoluene		50.0	45.7	ug/L	1.52	8.62	40	
1,2-Dibromo-3-Chloropropane		50.0	41.3	ug/L	0.0607	17.5	40	
1,2-Dibromoethane		50.0	50.3	ug/L	0.190	0.659	40	
Dibromomethane		50.0	50.3	ug/L	0.107	0.501	40	
1,2-Dichlorobenzene		50.0	48.9	ug/L	0.978	2.18	40	
1,3-Dichlorobenzene		50.0	48.5	ug/L	1.09	3.00	40	
1,4-Dichlorobenzene		50.0	47.2	ug/L	1.10	5.65	40	
Dichlorodifluoromethane		50.0	50.9	ug/L	0.270	1.78	40	
1,2-Dichloroethane		50.0	43.8	ug/L	0.311	12.3	40	
cis-1,2-Dichloroethene		50.0	49.7	ug/L	0.234	0.639	40	
trans-1,2-Dichloroethene		50.0	48.8	ug/L	0.219	2.30	40	
1,3-Dichloropropane		50.0	46.1	ug/L	0.339	7.74	40	
2,2-Dichloropropane		50.0	46.7	ug/L	0.332	6.56	40	
cis-1,3-Dichloropropene		50.0	48.0	ug/L	0.353	4.09	40	
trans-1,3-Dichloropropene		50.0	46.6	ug/L	0.373	6.77	40	

CCV - Modified 03/05/2008
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CONTINUING CALIBRATION VERIFICATION (CCV)

00103502

Login Number: L09020438	Run Date: 02/21/2009	Sample ID: WG295504-02
Instrument ID: HPMS11	Run Time: 13:27	Method: 8260B
File ID: 11M57273	Analyst: FJB	QC Key: STD
Workgroup (AAB#): WG295505	Cal ID: HPMS11 - 06-FEB-09	
Matrix: WATER		

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	47.8	ug/L	0.312	4.43	40	
2-Hexanone	50.0	44.7	ug/L	0.169	10.6	40	
Hexachlorobutadiene	50.0	49.4	ug/L	0.299	1.20	40	
Isopropylbenzene	50.0	47.9	ug/L	1.32	4.24	40	
p-Isopropyltoluene	50.0	48.6	ug/L	1.92	2.88	40	
4-Methyl-2-Pentanone	50.0	47.4	ug/L	0.0735	5.28	40	
Methylene Chloride	50.0	47.9	ug/L	0.220	4.19	40	
Naphthalene	50.0	47.2	ug/L	1.07	5.60	40	
n-Propylbenzene	50.0	47.9	ug/L	2.57	4.26	40	
Styrene	50.0	48.5	ug/L	0.901	2.91	40	
1,1,1,2-Tetrachloroethane	50.0	48.6	ug/L	0.278	2.82	40	
Tetrachloroethene	50.0	49.9	ug/L	0.247	0.110	40	
1,2,3-Trichlorobenzene	50.0	47.3	ug/L	0.571	5.35	40	
1,2,4-Trichlorobenzene	50.0	49.3	ug/L	0.689	1.34	40	
1,1,1-Trichloroethane	50.0	46.5	ug/L	0.330	6.98	40	
1,1,2-Trichloroethane	50.0	48.8	ug/L	0.180	2.31	40	
Trichloroethene	50.0	48.5	ug/L	0.239	3.04	40	
Trichlorofluoromethane	50.0	49.8	ug/L	0.369	0.410	40	
1,2,3-Trichloropropane	50.0	48.5	ug/L	0.102	3.02	40	
1,2,4-Trimethylbenzene	50.0	46.2	ug/L	1.87	7.67	40	
1,3,5-Trimethylbenzene	50.0	47.7	ug/L	1.85	4.69	40	
Vinyl Acetate	50.0	77.5	ug/L	0.438	55.0	40	*
o-Xylene	50.0	48.7	ug/L	0.525	2.69	40	
m-,p-Xylene	100	95.4	ug/L	0.543	4.56	40	
1,2-Dichloroethene	100	98.5	ug/L	0.226	1.47	40	
Xylenes	150	144	ug/L	0.534	3.94	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

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Login Number: L09020438	Run Date: 02/23/2009	Sample ID: WG295534-02
Instrument ID: HPMS8	Run Time: 08:51	Method: 8260B
File ID: 8M351930	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG295535	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	47.6	ug/L	0.516	4.79	20	
1,1-Dichloroethene	CCC	50.0	51.0	ug/L	0.464	2.00	20	
1,2-Dichloropropane	CCC	50.0	50.5	ug/L	0.231	0.931	20	
Ethylbenzene	CCC	50.0	50.5	ug/L	0.465	1.01	20	
Toluene	CCC	50.0	51.0	ug/L	1.26	1.92	20	
Vinyl Chloride	CCC	50.0	56.0	ug/L	0.286	12.0	20	
Bromoform	SPCC	50.0	45.9	ug/L	0.198	8.22	40	
Chlorobenzene	SPCC	50.0	48.4	ug/L	0.846	3.19	40	
Chloromethane	SPCC	50.0	49.6	ug/L	0.413	0.777	40	
1,1-Dichloroethane	SPCC	50.0	50.9	ug/L	0.495	1.78	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.1	ug/L	0.405	7.87	40	
Acetone		50.0	45.5	ug/L	0.0597	9.01	40	
Benzene		50.0	50.7	ug/L	0.870	1.39	40	
Bromobenzene		50.0	49.7	ug/L	0.644	0.595	40	
Bromochloromethane		50.0	49.1	ug/L	0.137	1.70	40	
Bromodichloromethane		50.0	47.1	ug/L	0.390	5.82	40	
Bromomethane		50.0	62.5	ug/L	0.230	25.0	40	
2-Butanone		50.0	44.6	ug/L	0.0696	10.8	40	
n-Butylbenzene		50.0	52.7	ug/L	2.69	5.45	40	
sec-Butylbenzene		50.0	52.5	ug/L	3.02	5.05	40	
tert-Butylbenzene		50.0	52.6	ug/L	0.499	5.29	40	
Carbon Disulfide		50.0	54.7	ug/L	0.829	9.32	40	
Carbon Tetrachloride		50.0	49.3	ug/L	0.461	1.37	40	
Dibromochloromethane		50.0	49.1	ug/L	0.331	1.80	40	
Chloroethane		50.0	53.0	ug/L	0.194	6.07	40	
2-Chloroethyl Vinyl Ether		50.0	50.9	ug/L	0.109	1.71	40	
2-Chlorotoluene		50.0	51.4	ug/L	2.26	2.75	40	
4-Chlorotoluene		50.0	50.0	ug/L	2.28	0.00580	40	
1,2-Dibromo-3-Chloropropane		50.0	42.8	ug/L	0.104	14.4	40	
1,2-Dibromoethane		50.0	47.8	ug/L	0.224	4.39	40	
Dibromomethane		50.0	46.2	ug/L	0.130	7.52	40	
1,2-Dichlorobenzene		50.0	47.2	ug/L	1.20	5.57	40	
1,3-Dichlorobenzene		50.0	49.0	ug/L	1.32	1.97	40	
1,4-Dichlorobenzene		50.0	47.2	ug/L	1.36	5.57	40	
Dichlorodifluoromethane		50.0	49.4	ug/L	0.427	1.27	40	
1,2-Dichloroethane		50.0	44.8	ug/L	0.448	10.3	40	
cis-1,2-Dichloroethene		50.0	53.0	ug/L	0.257	6.00	40	
trans-1,2-Dichloroethene		50.0	52.0	ug/L	0.414	3.93	40	
1,3-Dichloropropane		50.0	47.9	ug/L	0.393	4.19	40	
2,2-Dichloropropane		50.0	49.5	ug/L	0.509	1.07	40	
cis-1,3-Dichloropropene		50.0	51.0	ug/L	0.388	2.07	40	
trans-1,3-Dichloropropene		50.0	49.5	ug/L	0.516	0.906	40	

CCV - Modified 03/05/2008
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CONTINUING CALIBRATION VERIFICATION (CCV)

00103504

Login Number: L09020438	Run Date: 02/23/2009	Sample ID: WG295534-02
Instrument ID: HPMS8	Run Time: 08:51	Method: 8260B
File ID: 8M351930	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG295535	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	53.6	ug/L	0.363	7.14	40	
2-Hexanone	50.0	43.8	ug/L	0.0589	12.4	40	
Hexachlorobutadiene	50.0	49.8	ug/L	0.550	0.379	40	
Isopropylbenzene	50.0	52.9	ug/L	1.56	5.82	40	
p-Isopropyltoluene	50.0	53.8	ug/L	2.73	7.55	40	
4-Methyl-2-Pentanone	50.0	41.0	ug/L	0.0469	18.0	40	
Methylene Chloride	50.0	52.3	ug/L	0.249	4.66	40	
Naphthalene	50.0	45.4	ug/L	1.65	9.22	40	
n-Propylbenzene	50.0	53.7	ug/L	3.46	7.43	40	
Styrene	50.0	52.2	ug/L	0.955	4.38	40	
1,1,1,2-Tetrachloroethane	50.0	48.1	ug/L	0.351	3.74	40	
Tetrachloroethene	50.0	50.9	ug/L	0.278	1.77	40	
1,2,3-Trichlorobenzene	50.0	44.0	ug/L	0.842	12.0	40	
1,2,4-Trichlorobenzene	50.0	46.8	ug/L	0.972	6.40	40	
1,1,1-Trichloroethane	50.0	48.9	ug/L	0.529	2.29	40	
1,1,2-Trichloroethane	50.0	46.9	ug/L	0.214	6.28	40	
Trichloroethene	50.0	52.5	ug/L	0.251	5.10	40	
Trichlorofluoromethane	50.0	51.0	ug/L	0.588	1.95	40	
1,2,3-Trichloropropane	50.0	47.1	ug/L	0.148	5.85	40	
1,2,4-Trimethylbenzene	50.0	51.2	ug/L	2.57	2.40	40	
1,3,5-Trimethylbenzene	50.0	54.8	ug/L	2.52	9.55	40	
Vinyl Acetate	50.0	43.5	ug/L	0.362	12.9	40	
o-Xylene	50.0	53.4	ug/L	0.573	6.82	40	
m-,p-Xylene	100	102	ug/L	0.583	2.31	40	
1,2-Dichloroethene	100	105	ug/L	0.336	4.97	40	
Xylenes	150	156	ug/L	0.578	3.82	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

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Login Number: L09020438	Run Date: 02/24/2009	Sample ID: WG295619-02
Instrument ID: HPMS8	Run Time: 08:36	Method: 8260B
File ID: 8M351958	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG295620	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	46.0	ug/L	0.499	7.93	20	
1,1-Dichloroethene	CCC	50.0	48.7	ug/L	0.444	2.54	20	
1,2-Dichloropropane	CCC	50.0	50.1	ug/L	0.229	0.155	20	
Ethylbenzene	CCC	50.0	48.8	ug/L	0.450	2.33	20	
Toluene	CCC	50.0	49.3	ug/L	1.22	1.37	20	
Vinyl Chloride	CCC	50.0	53.1	ug/L	0.273	6.13	20	
Bromoform	SPCC	50.0	48.7	ug/L	0.210	2.66	40	
Chlorobenzene	SPCC	50.0	47.6	ug/L	0.831	4.86	40	
Chloromethane	SPCC	50.0	47.4	ug/L	0.398	5.14	40	
1,1-Dichloroethane	SPCC	50.0	49.3	ug/L	0.480	1.31	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	51.0	ug/L	0.448	1.95	40	
Acetone		50.0	51.2	ug/L	0.0670	2.35	40	
Benzene		50.0	49.5	ug/L	0.850	0.929	40	
Bromobenzene		50.0	49.3	ug/L	0.638	1.49	40	
Bromochloromethane		50.0	49.5	ug/L	0.138	0.963	40	
Bromodichloromethane		50.0	46.1	ug/L	0.382	7.75	40	
Bromomethane		50.0	61.5	ug/L	0.226	22.9	40	
2-Butanone		50.0	51.7	ug/L	0.0807	3.46	40	
n-Butylbenzene		50.0	46.2	ug/L	2.36	7.61	40	
sec-Butylbenzene		50.0	47.6	ug/L	2.74	4.78	40	
tert-Butylbenzene		50.0	49.0	ug/L	0.464	1.94	40	
Carbon Disulfide		50.0	51.0	ug/L	0.773	1.98	40	
Carbon Tetrachloride		50.0	47.2	ug/L	0.441	5.62	40	
Dibromochloromethane		50.0	49.4	ug/L	0.333	1.25	40	
Chloroethane		50.0	51.6	ug/L	0.189	3.21	40	
2-Chloroethyl Vinyl Ether		50.0	54.8	ug/L	0.118	9.67	40	
2-Chlorotoluene		50.0	47.9	ug/L	2.11	4.18	40	
4-Chlorotoluene		50.0	48.5	ug/L	2.21	2.93	40	
1,2-Dibromo-3-Chloropropane		50.0	48.7	ug/L	0.118	2.67	40	
1,2-Dibromoethane		50.0	49.8	ug/L	0.234	0.413	40	
Dibromomethane		50.0	47.7	ug/L	0.134	4.56	40	
1,2-Dichlorobenzene		50.0	47.1	ug/L	1.19	5.88	40	
1,3-Dichlorobenzene		50.0	47.8	ug/L	1.29	4.42	40	
1,4-Dichlorobenzene		50.0	45.7	ug/L	1.32	8.58	40	
Dichlorodifluoromethane		50.0	45.0	ug/L	0.396	9.96	40	
1,2-Dichloroethane		50.0	44.8	ug/L	0.448	10.3	40	
cis-1,2-Dichloroethene		50.0	51.3	ug/L	0.248	2.56	40	
trans-1,2-Dichloroethene		50.0	50.3	ug/L	0.401	0.645	40	
1,3-Dichloropropane		50.0	49.4	ug/L	0.405	1.28	40	
2,2-Dichloropropane		50.0	48.1	ug/L	0.495	3.75	40	
cis-1,3-Dichloropropene		50.0	51.7	ug/L	0.393	3.46	40	
trans-1,3-Dichloropropene		50.0	49.8	ug/L	0.518	0.375	40	

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Login Number: L09020438 Run Date: 02/24/2009 Sample ID: WG295619-02
Instrument ID: HPMS8 Run Time: 08:36 Method: 8260B
File ID: 8M351958 Analyst: MES QC Key: STD
Workgroup (AAB#): WG295620 Cal ID: HPMS8 - 19-FEB-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	52.3	ug/L	0.355	4.65	40	
2-Hexanone	50.0	51.8	ug/L	0.0696	3.52	40	
Hexachlorobutadiene	50.0	35.6	ug/L	0.393	28.8	40	
Isopropylbenzene	50.0	50.1	ug/L	1.48	0.265	40	
p-Isopropyltoluene	50.0	48.6	ug/L	2.47	2.77	40	
4-Methyl-2-Pentanone	50.0	51.1	ug/L	0.0584	2.21	40	
Methylene Chloride	50.0	50.1	ug/L	0.239	0.162	40	
Naphthalene	50.0	48.9	ug/L	1.78	2.13	40	
n-Propylbenzene	50.0	50.1	ug/L	3.22	0.114	40	
Styrene	50.0	51.3	ug/L	0.939	2.59	40	
1,1,1,2-Tetrachloroethane	50.0	46.9	ug/L	0.343	6.11	40	
Tetrachloroethene	50.0	48.1	ug/L	0.263	3.73	40	
1,2,3-Trichlorobenzene	50.0	43.6	ug/L	0.835	12.8	40	
1,2,4-Trichlorobenzene	50.0	45.5	ug/L	0.945	9.04	40	
1,1,1-Trichloroethane	50.0	46.7	ug/L	0.506	6.54	40	
1,1,2-Trichloroethane	50.0	48.8	ug/L	0.223	2.50	40	
Trichloroethene	50.0	50.7	ug/L	0.242	1.42	40	
Trichlorofluoromethane	50.0	49.8	ug/L	0.574	0.496	40	
1,2,3-Trichloropropane	50.0	50.8	ug/L	0.160	1.64	40	
1,2,4-Trimethylbenzene	50.0	48.6	ug/L	2.44	2.82	40	
1,3,5-Trimethylbenzene	50.0	51.2	ug/L	2.36	2.39	40	
Vinyl Acetate	50.0	58.1	ug/L	0.483	16.3	40	
o-Xylene	50.0	51.6	ug/L	0.554	3.29	40	
m-,p-Xylene	100	98.4	ug/L	0.561	1.58	40	
1,2-Dichloroethene	100	102	ug/L	0.325	1.60	40	
Xylenes	150	150	ug/L	0.558	0.0463	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09020438	Run Date: 02/24/2009	Sample ID: WG295732-02
Instrument ID: HPMS8	Run Time: 18:14	Method: 8260B
File ID: 8M351976	Analyst: FJB	QC Key: STD
Workgroup (AAB#): WG295733	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	46.4	ug/L	0.503	7.20	20	
1,1-Dichloroethene	CCC	50.0	47.3	ug/L	0.431	5.40	20	
1,2-Dichloropropane	CCC	50.0	46.9	ug/L	0.215	6.19	20	
Ethylbenzene	CCC	50.0	49.2	ug/L	0.453	1.62	20	
Toluene	CCC	50.0	49.7	ug/L	1.23	0.648	20	
Vinyl Chloride	CCC	50.0	59.2	ug/L	0.301	18.4	20	
Bromoform	SPCC	50.0	47.4	ug/L	0.204	5.15	40	
Chlorobenzene	SPCC	50.0	47.3	ug/L	0.827	5.36	40	
Chloromethane	SPCC	50.0	48.4	ug/L	0.404	3.26	40	
1,1-Dichloroethane	SPCC	50.0	48.3	ug/L	0.470	3.41	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.9	ug/L	0.413	6.17	40	
Acetone		50.0	34.5	ug/L	0.0456	30.9	40	
Benzene		50.0	47.5	ug/L	0.815	5.00	40	
Bromobenzene		50.0	49.5	ug/L	0.642	0.938	40	
Bromochloromethane		50.0	47.6	ug/L	0.133	4.85	40	
Bromodichloromethane		50.0	46.0	ug/L	0.381	7.95	40	
Bromomethane		50.0	48.3	ug/L	0.178	3.45	40	
2-Butanone		50.0	37.2	ug/L	0.0581	25.5	40	
n-Butylbenzene		50.0	47.4	ug/L	2.42	5.16	40	
sec-Butylbenzene		50.0	48.7	ug/L	2.80	2.62	40	
tert-Butylbenzene		50.0	48.6	ug/L	0.461	2.70	40	
Carbon Disulfide		50.0	46.9	ug/L	0.711	6.23	40	
Carbon Tetrachloride		50.0	48.2	ug/L	0.451	3.54	40	
Dibromochloromethane		50.0	48.8	ug/L	0.329	2.44	40	
Chloroethane		50.0	45.8	ug/L	0.168	8.43	40	
2-Chloroethyl Vinyl Ether		50.0	50.0	ug/L	0.107	0.0864	40	
2-Chlorotoluene		50.0	49.5	ug/L	2.18	0.958	40	
4-Chlorotoluene		50.0	50.0	ug/L	2.28	0.00980	40	
1,2-Dibromo-3-Chloropropane		50.0	42.2	ug/L	0.102	15.6	40	
1,2-Dibromoethane		50.0	48.4	ug/L	0.227	3.19	40	
Dibromomethane		50.0	46.0	ug/L	0.129	8.06	40	
1,2-Dichlorobenzene		50.0	46.5	ug/L	1.18	7.01	40	
1,3-Dichlorobenzene		50.0	47.6	ug/L	1.29	4.75	40	
1,4-Dichlorobenzene		50.0	45.8	ug/L	1.32	8.43	40	
Dichlorodifluoromethane		50.0	46.2	ug/L	0.405	7.51	40	
1,2-Dichloroethane		50.0	45.0	ug/L	0.450	9.94	40	
cis-1,2-Dichloroethene		50.0	49.7	ug/L	0.241	0.631	40	
trans-1,2-Dichloroethene		50.0	48.7	ug/L	0.388	2.63	40	
1,3-Dichloropropane		50.0	48.5	ug/L	0.398	2.91	40	
2,2-Dichloropropane		50.0	47.9	ug/L	0.494	4.13	40	
cis-1,3-Dichloropropene		50.0	49.0	ug/L	0.372	2.02	40	
trans-1,3-Dichloropropene		50.0	49.5	ug/L	0.515	1.02	40	

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CONTINUING CALIBRATION VERIFICATION (CCV)

00103508

Login Number: L09020438	Run Date: 02/24/2009	Sample ID: WG295732-02
Instrument ID: HPMS8	Run Time: 18:14	Method: 8260B
File ID: 8M351976	Analyst: FJB	QC Key: STD
Workgroup (AAB#): WG295733	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	51.0	ug/L	0.346	2.04	40	
2-Hexanone	50.0	42.2	ug/L	0.0567	15.7	40	
Hexachlorobutadiene	50.0	37.4	ug/L	0.413	25.2	40	
Isopropylbenzene	50.0	51.1	ug/L	1.51	2.26	40	
p-Isopropyltoluene	50.0	48.8	ug/L	2.48	2.45	40	
4-Methyl-2-Pentanone	50.0	40.8	ug/L	0.0466	18.5	40	
Methylene Chloride	50.0	44.8	ug/L	0.214	10.5	40	
Naphthalene	50.0	45.5	ug/L	1.66	8.94	40	
n-Propylbenzene	50.0	51.8	ug/L	3.34	3.62	40	
Styrene	50.0	50.4	ug/L	0.923	0.866	40	
1,1,1,2-Tetrachloroethane	50.0	47.7	ug/L	0.348	4.61	40	
Tetrachloroethene	50.0	48.4	ug/L	0.264	3.20	40	
1,2,3-Trichlorobenzene	50.0	42.0	ug/L	0.805	15.9	40	
1,2,4-Trichlorobenzene	50.0	44.2	ug/L	0.917	11.7	40	
1,1,1-Trichloroethane	50.0	47.7	ug/L	0.516	4.69	40	
1,1,2-Trichloroethane	50.0	47.5	ug/L	0.217	4.93	40	
Trichloroethene	50.0	48.0	ug/L	0.229	3.91	40	
Trichlorofluoromethane	50.0	49.0	ug/L	0.565	2.07	40	
1,2,3-Trichloropropane	50.0	46.8	ug/L	0.147	6.36	40	
1,2,4-Trimethylbenzene	50.0	49.4	ug/L	2.48	1.15	40	
1,3,5-Trimethylbenzene	50.0	52.4	ug/L	2.41	4.82	40	
Vinyl Acetate	50.0	52.5	ug/L	0.436	5.05	40	
o-Xylene	50.0	51.0	ug/L	0.548	2.08	40	
m-,p-Xylene	100	98.4	ug/L	0.561	1.61	40	
1,2-Dichloroethene	100	98.4	ug/L	0.314	1.63	40	
Xylenes	150	149	ug/L	0.554	0.378	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

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Login Number: L09020438
Instrument ID: HPMS11
Workgroup (AAB#): WG295505

CCV Number: WG295504-02
CAL ID: HPMS11 - 06-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295504-02	NA	NA	317607	521923	644827
Upper Limit	NA	NA	635214	1043846	1289654
Lower Limit	NA	NA	158804	260962	322414
<u>L09020438-06</u>	<u>1.00</u>	<u>01</u>	<u>266980</u>	<u>465040</u>	<u>574846</u>
WG295505-01	1.00	01	269485	466434	585943
WG295505-02	1.00	01	297805	498757	612694
WG295505-03	1.00	01	309910	514817	623742

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295535

CCV Number: WG295534-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295534-02	NA	NA	367228	646199	873660
Upper Limit	NA	NA	734456	1292398	1747320
Lower Limit	NA	NA	183614	323100	436830
<u>L09020438-04</u>	<u>1.00</u>	<u>01</u>	<u>305748</u>	<u>552544</u>	<u>752065</u>
WG295535-01	1.00	01	332839	605120	819297
WG295535-02	1.00	01	348055	606602	806515
WG295535-03	10.0	DL01	301052	547450	752641
WG295535-04	10.0	DL01	328578	577476	760234
WG295535-05	10.0	DL01	333071	592522	797260

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295620

CCV Number: WG295619-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295619-02	NA	NA	393891	689921	913137
Upper Limit	NA	NA	787782	1379842	1826274
Lower Limit	NA	NA	196946	344961	456569
<u>L09020438-04</u>	<u>2.00</u>	<u>DL01</u>	<u>315818</u>	<u>567840</u>	<u>783374</u>
WG295620-01	1.00	01	350808	639604	876045
WG295620-02	1.00	01	365605	645570	874735
WG295620-03	1.00	01	363080	653111	875668

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295733

CCV Number: WG295732-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295732-02	NA	NA	328221	580964	797703
Upper Limit	NA	NA	656442	1161928	1595406
Lower Limit	NA	NA	164111	290482	398852
L09020438-01	50.0	DL02	306956	558700	769867
L09020438-02	5.00	DL02	295957	546972	755697
L09020438-03	2.00	DL02	294451	537150	740053
L09020438-05	1.00	01	293643	528942	728223
WG295733-01	1.00	01	315687	569238	781197
WG295733-02	1.00	01	329332	585378	784540
WG295733-03	1.00	01	344578	600040	812792

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

Underline = Response outside limits

Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00103513

Login Number: L09020438
Instrument ID: HPMS11
Workgroup (AAB#): WG295505

CCV Number: WG295504-02
CAL ID: HPMS11 - 06-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295504-02	NA	NA	16.48	13.69	10.07
Upper Limit	NA	NA	16.98	14.19	10.57
Lower Limit	NA	NA	15.98	13.19	9.57
L09020438-06	1.00	01	16.482	13.68	10.071
WG295505-01	1.00	01	16.481	13.679	10.071
WG295505-02	1.00	01	16.481	13.679	10.071
WG295505-03	1.00	01	16.481	13.679	10.071

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295535

CCV Number: WG295534-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295534-02	NA	NA	17.68	14.66	10.79
Upper Limit	NA	NA	18.18	15.16	11.29
Lower Limit	NA	NA	17.18	14.16	10.29
<u>L09020438-04</u>	<u>1.00</u>	<u>01</u>	<u>17.68</u>	<u>14.66</u>	<u>10.79</u>
WG295535-01	1.00	01	17.68	14.66	10.8
WG295535-02	1.00	01	17.68	14.66	10.79
WG295535-03	10.0	DL01	17.67	14.66	10.8
WG295535-04	10.0	DL01	17.68	14.66	10.79
WG295535-05	10.0	DL01	17.68	14.66	10.79

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295620

CCV Number: WG295619-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295619-02	NA	NA	17.68	14.66	10.79
Upper Limit	NA	NA	18.18	15.16	11.29
Lower Limit	NA	NA	17.18	14.16	10.29
<u>L09020438-04</u>	<u>2.00</u>	<u>DL01</u>	17.68	14.66	10.79
WG295620-01	1.00	01	17.68	14.66	10.8
WG295620-02	1.00	01	17.68	14.66	10.79
WG295620-03	1.00	01	17.68	14.66	10.78

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

Underline = Response outside limits

Login Number: L09020438
Instrument ID: HPMS8
Workgroup (AAB#): WG295733

CCV Number: WG295732-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295732-02	NA	NA	17.68	14.66	10.79
Upper Limit	NA	NA	18.18	15.16	11.29
Lower Limit	NA	NA	17.18	14.16	10.29
L09020438-01	50.0	DL02	17.68	14.66	10.79
L09020438-02	5.00	DL02	17.68	14.66	10.79
L09020438-03	2.00	DL02	17.68	14.66	10.79
L09020438-05	1.00	01	17.68	14.66	10.79
WG295733-01	1.00	01	17.67	14.66	10.79
WG295733-02	1.00	01	17.68	14.66	10.79
WG295733-03	1.00	01	17.67	14.66	10.79

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

Underline = Response outside limits

2.1.2 RSK 175

2.1.2.1 Summary Data

LABORATORY REPORT

L09020438

00103519

03/02/09 09:04

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836 (GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW43-021909	L09020438-01	RSK175	1	20-FEB-09
LHSMW45-021909	L09020438-02	RSK175	1	20-FEB-09



Sample Number: **L09020438-01**
Client ID: **LHSMW43-021909**
Matrix: **Water**
Workgroup Number: **WG295404**
Collect Date: **02/19/2009 08:24**
Sample Tag: **01**

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

Instrument: **HP16**
Prep Date: **02/20/2009 11:57**
Cal Date: **11/07/2008 09:27**
Run Date: **02/20/2009 11:57**
File ID: **16618021**

Analyte	CAS. Number	Result	Qual	PQL	SDL
methane	74-82-8	4.28	J	5.00	1.00
ethene	74-85-1		U	5.00	1.00
ethane	74-84-0		U	5.00	1.00

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: **L09020438**Report Date : **March 2, 2009**

00103521

Sample Number: **L09020438-02**
Client ID: **LHSMW45-021909**
Matrix: **Water**
Workgroup Number: **WG295404**
Collect Date: **02/19/2009 10:01**
Sample Tag: **01**

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

Instrument: **HP16**
Prep Date: **02/20/2009 12:09**
Cal Date: **11/07/2008 09:27**
Run Date: **02/20/2009 12:09**
File ID: **16618022**

Analyte	CAS. Number	Result	Qual	PQL	SDL
methane	74-82-8	7.84		5.00	1.00
ethene	74-85-1		U	5.00	1.00
ethane	74-84-0		U	5.00	1.00

U Not detected at or above adjusted sample detection limit

2.1.2.2 QC Summary Data

Microbac Laboratories Inc.

00103523

Data Checklist

Date: 07-NOV-2008

Analyst: EAB

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Runlog ID: 25146

Analytical Workgroups: WG287221, WG287258

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	EAB
Secondary Reviewer	LSB
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:
07-NOV-2008

EAB

Secondary Reviewer:
17-NOV-2008

Leslie Bucina



Microbac Laboratories Inc.

00103524

Data Checklist

Date: 20-FEB-2009

Analyst: EAB

Analyst: NA

Method: RSK175

Instrument: HP16

Curve Workgroup: NA

Runlog ID: 26622

Analytical Workgroups: WG295404

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	NA
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	EAB
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:
20-FEB-2009



Secondary Reviewer:
24-FEB-2009




RSK-175 - Example Calculation for Methane**1.0 Linear Calibration Models****Option A - Average RF Method**

ICAL_x	ICAL_r	RF
1.67	19901	11917
6.67	69174	10371
16.7	176923	10594
66.7	685135	10272
133	1324853	9961
300	2845104	9484
Average RF:		10433

Where:

ICAL_x = the ICAL concentration

ICAL_r = the ICAL response (area)

RF = calibration factor = ICAL_r / ICAL_x

Option B - Agilent Linear Regression Constant

ICAL_x	ICAL_r	[ICAL_r]^2	[ICAL-x][ICAL-r]
1.67	19901	396049801	33235
6.67	69174	4785042276	461391
16.7	176923	31301747929	2954614
66.7	685135	4.6941E+11	45698505
133	1324853	1.75524E+12	176205449
300	2845104	8.09462E+12	853531200
Summation:		1.03557E+13	1078884393

Agilent Linear Regression Constant : **9598.567853**
 (1.03557E+13)/1078884393)

2.0 Calculate the concentration in extract, Cx

Where:

y = area response of methane from quant report

a = average RF (or Agilent regression constant)

Cx = y/a

1157414
10433.00
110.9377935

3.0 Calculate the concentration in sample**Cs = Cx (MW/Tf) (HS/S) (DF)**

Where:

Cx = Concentration in extract

MW = molecular weight of analyte

TF = temperature factor = (22.4)(313/273)

HS = headspace volume

S = sample volume remaining after headspace removal

DF = dilution factor

Cs = calculated sample concentration

110.9377935 umol/mol
16.04 ug/umol
25.68 L/mol
0.015 L
0.00547 L
2
380.034301 ug/L

RSK-175 - Example Calculation for Carbon DioxideICAL Plot - Quadratic Regression ($y = Ax^2 + Bx + C$)

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

Step 1 - Calculate the concentration in extract, CxData from quadratic regression plot:

Value of A from plot:	0.916
Value of B from plot:	1540
Value of C from plot:	0
Response for methane from quantitation report (y):	8763828
Value of C - y	-8763828

Solving for Cx using the quadratic formula:

Root 1 - Computed Cx1:	2364.716284 umol/mol
Root 2 - Computed Cx2:	-4045.938991

Step 2 - Calculate the concentration in sample

$$Cs = Cx (MW/Tf) (HS/S) (DF)$$

Where:

Cx = Concentration in extract :	2364.716284 umol/mol
MW = molecular weight of analyte:	44.0 ug/umol
TF = temperature factor = $(22.4)(313/273)$:	25.68 L/mol
HS = initial headspace volume (extraction log):	0.015 L
S = final volume (extraction log):	0.00547 L
DF = dilution factor:	10
Cs = calculated sample concentration:	111106.798 ug/L

Other Notes:

Temperature of headspace = 40 C = 313 K

Analyte	MW (g/mol)
Methane	16.04
Ethane	30.07
Ethene	28.05
Propane	44.1
Carbon Dioxide	44.0

Microbac Laboratories Inc.
Instrument Run Log

00103527

Instrument: HP16 Dataset: 110708
 Analyst1: EAB Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 26530

Internal Standard: NA Surrogate Standard: NA
 CCV: STD29606 LCS: STD29606 MS/MSD: STD29606
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG287221, WG287258

Comments: CURVE; THEN NO REANALYSIS REQUIRED

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G16513	warm up blank	NA	1	1		11/07/08 08:10
2	16G16514	WG287221-01 1.67umol/mol STD	NA	1	1	STD29606	11/07/08 08:24
3	16G16515	WG287221-02 6.67umol/mol STD	NA	1	1	STD29606	11/07/08 08:36
4	16G16516	WG287221-03 16.67umol/mol STD	NA	1	1	STD29606	11/07/08 08:48
5	16G16517	WG287221-04 66.67umol/mol STD	NA	1	1	STD29606	11/07/08 09:01
6	16G16518	WG287221-05 133.33umol/mol STD-CCV	NA	1	1	STD29606	11/07/08 09:13
7	16G16519	WG287221-06 300umol/mol STD-CCV	NA	1	1	STD29606	11/07/08 09:27
8	16G16520	BLANK	NA	1	1		11/07/08 10:38
9	16G16521	WG287221-07 67umol/mol ALT SRCE STD	NA	1	1	STD29606	11/07/08 10:50
10	16G16522	WG287254-01 133umol/mol CCV STD	NA	1	1	STD29606	11/07/08 11:03
11	16G16523	WG287258-01 BLANK	NA	1	1		11/07/08 11:15
12	16G16524	WG287258-02 67umol/mol LCS STD	NA	1	1	STD29606	11/07/08 11:27
13	16G16525	WG287258-02 67umol/mol LCS STD	NA	1	1	STD29606	11/07/08 11:39
14	16G16526	L08110122-01 A REF	7	1	1		11/07/08 11:53
15	16G16527	L08110122-02 A MS	7	1	1	STD29606	11/07/08 12:05
16	16G16528	L08110122-03 A MSD	7	1	1	STD29606	11/07/08 12:17
17	16G16529	L08110122-04 A	7	1	1		11/07/08 12:29
18	16G16530	L08110122-05 A	7	1	1		11/07/08 12:40
19	16G16531	L08110124-01 A	7	1	1		11/07/08 12:52
20	16G16532	L08110124-02 A	7	1	1		11/07/08 13:04
21	16G16533	WG287254-02 133umol/mol CCV STD	NA	1	1	STD29606	11/07/08 13:16
22	16G16534	L08110124-03 A	<2	1	1		11/07/08 13:28
23	16G16535	L08110124-04 A	7	1	1		11/07/08 13:39
24	16G16536	WG287254-03 133umol/mol CCV STD	NA	1	1	STD29606	11/07/08 13:51

Comments

Seq.	Rerun	Dil.	Reason	Analytes
12	X			
File ID: 16G16524				
ACETYLENE HIGH				

Approved: November 17, 2008

Page: 1




Microbac Laboratories Inc.
Instrument Run Log

00103528

Instrument: HP16 Dataset: 022009
 Analyst1: EAB Analyst2: NA
 Method: RSK175 SOP: RSK01 Rev: 7
 Method: 5021 SOP: RSK01 Rev: 7

Maintenance Log ID: 18711

Internal Standard: NA Surrogate Standard: NA
 CCV: STD29606 LCS: STD29606 MS/MSD: NA
 Column 1 ID: RTQPLOT Column 2 ID: RTQPLOT
 Workgroups: WG295404

Comments: 356: REPORT METHANE ONLY
410 01-09: REPORT ETHENE, ETHANE. RR FOR METHANE
438: REPORT ALL TARGET COMPOUNDS

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	16G18004	WG295399-01 133umol/mol CCV STD	NA	1	1	STD29606	02/20/09 08:22
2	16G18005	WG295404-01 BLANK	NA	1	1		02/20/09 08:34
3	16G18006	WG295404-02 67umol/mol LCS	NA	1	1	STD29606	02/20/09 08:46
4	16G18007	WG295404-03 67umol/mol LCS DUP	NA	1	1	STD29606	02/20/09 08:58
5	16G18008	L09020356-04 B 50X	7	1	50		02/20/09 09:09
6	16G18009	L09020356-05 B 50X	7	1	50		02/20/09 09:21
7	16G18010	L09020410-01 A	7	1	1		02/20/09 09:39
8	16G18011	L09020410-02 A	7	1	1		02/20/09 09:51
9	16G18012	L09020410-03 A	7	1	1		02/20/09 10:03
10	16G18013	L09020410-04 A	7	1	1		02/20/09 10:15
11	16G18014	L09020410-05 A	7	1	1		02/20/09 10:26
12	16G18015	WG295399-02 133umol/mol CCV STD	NA	1	1	STD29606	02/20/09 10:45
13	16G18016	L09020410-06 A	7	1	1		02/20/09 10:57
14	16G18017	L09020410-07 A	7	1	1		02/20/09 11:09
15	16G18018	L09020410-08 A	7	1	1		02/20/09 11:20
16	16G18019	L09020410-09 A	7	1	1		02/20/09 11:32
17	16G18020	L09020410-10 A	7	1	1		02/20/09 11:44
18	16G18021	L09020438-01 A	7	1	1		02/20/09 11:57
19	16G18022	L09020438-02 A	7	1	1		02/20/09 12:09
20	16G18023	WG295399-03 133umol/mol CCV STD	NA	1	1	STD29606	02/20/09 12:21

Approved: February 24, 2009

Page: 1




Analytical Method: RSK175

AAB#: WG295404

Login Number: L09020438

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
LHSMW43-021909	02/19/09	02/20/09	02/20/09	14	1.15	02/20/09	14	1.15	
LHSMW45-021909	02/19/09	02/20/09	02/20/09	14	1.09	02/20/09	14	1.09	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: <u>L09020438</u>	Work Group: <u>WG295404</u>
Blank File ID: <u>16G18005</u>	Blank Sample ID: <u>WG295404-01</u>
Prep Date: <u>02/20/09 08:34</u>	Instrument ID: <u>HP16</u>
Analyzed Date: <u>02/20/09 08:34</u>	Method: <u>RSK175</u>
Analyst: <u>EAB</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295404-02	16G18006	02/20/09 08:46	01
LCS2	WG295404-03	16G18007	02/20/09 08:58	01
LHSMW43-021909	L09020438-01	16G18021	02/20/09 11:57	01
LHSMW45-021909	L09020438-02	16G18022	02/20/09 12:09	01

Report Name: BLANK_SUMMARY
PDF File ID: 1326445
Report generated 02/24/2009 10:59



Login Number: L09020438 Prep Date: 02/20/09 08:34 Sample ID: WG295404-01
Instrument ID: HP16 Run Date: 02/20/09 08:34 Prep Method: 5021
File ID: 16G18005 Analyst: EAB Method: RSK175
Workgroup (AAB#): WG295404 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16 - 07-NOV-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
methane	1.00	5.00	1.00	1	U
ethene	1.00	5.00	1.00	1	U
ethane	1.00	5.00	1.00	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1326446
24-FEB-2009 10:59



Login Number: L09020438 Analyst: EAB Prep Method: 5021
Instrument ID: HP16 Matrix: Water Method: RSK175
Workgroup (AAB#): WG295404 Units: ug/L
QC Key: STD Lot #: STD29606
Sample ID: WG295404-02 LCS File ID: 16G18006 Run Date: 02/20/2009 08:46
Sample ID: WG295404-03 LCS2 File ID: 16G18007 Run Date: 02/20/2009 08:58

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	114	104	90.7	114	114	100	9.94	56 - 140	40	
ethene	200	179	89.6	200	207	103	14.3	56 - 140	40	
ethane	214	189	88.5	214	218	102	14.0	56 - 137	40	

Login Number: L09020438
Analytical Method: RSK175
ICAL Workgroup: WG287221

Instrument ID: HP16
Initial Calibration Date: 07-NOV-08 09:27
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
ethane		18600	4.55		
ethene		16990	4.97		
methane		10430	7.92		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09020438
Analytical Method: RSK175

Instrument ID: HP16
Initial Calibration Date: 07-NOV-08 09:27
Column ID: F

Analyte	WG287221-01			WG287221-02			WG287221-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	1.67	33015.0000	19770	6.67	122720.000	18400	16.7	320105.000	19200
ethene	1.67	30227.0000	18100	6.67	112610.000	16880	16.7	295286.000	17710
methane	1.67	19901.0000	11920	6.67	69174.0000	10370	16.7	176923.000	10610

INT_CAL - Modified 03/06/2008
PDF File ID: 1326448
Report generated 02/24/2009 10:59



Login Number: L09020438
Analytical Method: RSK175

Instrument ID: HP16
Initial Calibration Date: 07-NOV-08 09:27
Column ID: F

Analyte	WG287221-04			WG287221-05			WG287221-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
ethane	66.7	1250432.00	18760	133	2421985.00	18170	300	5200075.00	17330
ethene	66.7	1134818.00	17020	133	2195806.00	16470	300	4727255.00	15760
methane	66.7	685135.000	10280	133	1324853.00	9937	300	2845104.00	9484

INT_CAL - Modified 03/06/2008
PDF File ID: 1326448
Report generated 02/24/2009 10:59



Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

00103536

Login Number: L09020438 Run Date: 11/07/2008 Sample ID: WG287221-07
Instrument ID: HP16 Run Time: 10:50 Method: RSK175
File ID: 16G16521 Analyst: EAB QC Key: STD
ICal Workgroup: WG287221 Cal ID: HP16 - 07-NOV-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
methane		114	105	ug/L	9640	7.60	30	
ethene		200	191	ug/L	16300	4.30	30	
ethane		214	203	ug/L	17700	5.00	30	

* Exceeds %D Limit

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295399-01
Instrument ID: HP16 Run Time: 08:22 Method: RSK175
File ID: 16G18004 Analyst: EAB QC Key: STD
Workgroup (AAB#): WG295404 Cal ID: HP16 - 07-NOV-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	176	ug/L	8020	23.1	25	
ethene		399	318	ug/L	13500	20.3	25	
ethane		428	336	ug/L	14600	21.5	25	

* Exceeds %D Criteria

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295399-02
Instrument ID: HP16 Run Time: 10:45 Method: RSK175
File ID: 16G18015 Analyst: EAB QC Key: STD
Workgroup (AAB#): WG295404 Cal ID: HP16 - 07-NOV-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	212	ug/L	9700	7.05	25	
ethene		399	378	ug/L	16100	5.37	25	
ethane		428	398	ug/L	17300	6.89	25	

* Exceeds %D Criteria

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295399-03
Instrument ID: HP16 Run Time: 12:21 Method: RSK175
File ID: 16G18023 Analyst: EAB QC Key: STD
Workgroup (AAB#): WG295404 Cal ID: HP16 - 07-NOV-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	250	ug/L	11400	9.50	25	
ethene		399	454	ug/L	19300	13.7	25	
ethane		428	480	ug/L	20900	12.1	25	

* Exceeds %D Criteria

2.2 General Chemistry Data

2.2.1 Method 9056

2.2.1.1 Summary Data

LABORATORY REPORT

L09020438

00103543

03/02/09 09:04

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW43-021909	L09020438-01	300.0	10	20-FEB-09
LHSMW45-021909	L09020438-02	300.0	10	20-FEB-09
LHSMW45-021909	L09020438-02	300.0	3	20-FEB-09



Sample Number: **L09020438-01**
 Client ID: **LHSMW43-021909**
 Matrix: **Water**
 Workgroup Number: **WG295483**
 Collect Date: **02/19/2009 08:24**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **ADC**
 Dilution: **10**
 Units: **mg/L**

Instrument: **IC1**
 Prep Date: **02/20/2009 15:12**
 Cal Date: **10/29/2008 18:09**
 Run Date: **02/20/2009 17:55**
 File ID: **I10220091755.07**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	297		2.00	1.00
Fluoride	16984-48-8		U	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	731		10.0	5.00

U Not detected at or above adjusted sample detection limit

Sample Number: **L09020438-02**
 Client ID: **LHSMW45-021909**
 Matrix: **Water**
 Workgroup Number: **WG295483**
 Collect Date: **02/19/2009 10:01**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **ADC**
 Dilution: **10**
 Units: **mg/L**

Instrument: **IC1**
 Prep Date: **02/20/2009 15:12**
 Cal Date: **10/29/2008 18:09**
 Run Date: **02/20/2009 18:29**
 File ID: **I10220091829.09**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	377		2.00	1.00
Fluoride	16984-48-8		U	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	366		10.0	5.00

U Not detected at or above adjusted sample detection limit

Sample Number: **L09020438-02**
 Client ID: **LHSMW45-021909**
 Matrix: **Water**
 Workgroup Number: **WG295483**
 Collect Date: **02/19/2009 10:01**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **300.0**
 Analytical Method: **300.0**
 Analyst: **ADC**
 Dilution: **3**
 Units: **mg/L**

Instrument: **IC1**
 Prep Date: **02/20/2009 15:12**
 Cal Date: **10/29/2008 18:09**
 Run Date: **02/20/2009 18:12**
 File ID: **I10220091812.08**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	330	I	0.600	0.300
Fluoride	16984-48-8	0.891		0.600	0.300
Nitrate	14797-55-8		U	1.80	0.300
Nitrite	14797-65-0		U	1.20	0.300
Sulfate	14808-79-8	379		3.00	1.50

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

2.2.1.2 QC Summary Data

The concentrations (ppm) of the calibration standards and the resulting area counts are used to determine the equation of a linear or quadratic plot.

The slope and y-intercept of that line are used to calculate the quantity of the analyzed unknown samples.

$\text{Amount(ppm)} = [(\text{slope})(\text{area count of unknown}) + \text{y-intercept}](\text{dilution})$

(The slope is the amt/area also identified as the CF or calibration factor)

Microbac Laboratories Inc.
Instrument Run Log

00103549

Instrument: IC1 Dataset: 102908 HICAL 9056 IC1.SE
 Analyst1: JWR Analyst2: NA
 Method: 9056/300 SOP: IC1 Rev: 8

Maintenance Log ID: 26433

Column 1 ID: AS14A-4MM Column 2 ID: NA
 Workgroups: WG286427 (ICAL) WG286638
 Internal STD: NA Surrogate STD: NA Calibration STD: STD29498

Comments: Samples 0005-01 (MDL-Q) and 0006-01 (MDL-Q) were analyzed at two different levels of concentration each. One level is equal to the RL's for F, Cl, Br, SO4, whereas the other level is nearest to the RL's for NO2-N, NO3-N, PO4-P.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	I11029081624.01	WG286427-01 STD \#1	1	1		10/29/08 16:24
2	I11029081642.02	WG286427-02 STD \#2	1	1		10/29/08 16:42
3	I11029081659.03	WG286427-03 STD \#3	1	1		10/29/08 16:59
4	I11029081717.04	WG286427-04 STD \#4	1	1		10/29/08 17:17
5	I11029081734.05	WG286427-05 STD \#5	1	1		10/29/08 17:34
6	I11029081751.06	WG286427-06 STD \#6	1	1		10/29/08 17:51
7	I11029081809.07	WG286427-07 STD \#7	1	1		10/29/08 18:09
8	I11029081826.08	WG286427-08 ALT STD	1	1		10/29/08 18:26
9	I11029081844.09	ELUENT	1	1		10/29/08 18:44
10	I11029081901.10	DI WATER	1	1		10/29/08 19:01
11	I11029081918.11	WG286646-01 ANION CCV	1	1		10/29/08 19:18
12	I11029081936.12	WG286646-02 ANION CCB	1	1		10/29/08 19:36
13	I11029081953.13	WG286638-01 ANION BLANK	1	1		10/29/08 19:53
14	I11029082011.14	WG286638-02 ANION LCS	1	1		10/29/08 20:11
15	I11029082028.15	L08100005-01 MDL (F, Cl, Br, SO4)	1	1		10/29/08 20:28
16	I11029082046.16	L08100006-01 MDL (F, Cl, Br, SO4)	1	1		10/29/08 20:46
17	I11029082103.17	L08100005-01 MDL (NO2, NO3, PO4)	1	1		10/29/08 21:03
18	I11029082120.18	L08100006-01 MDL (NO2, NO3, PO4)	1	1		10/29/08 21:20
19	I11029082138.19	Test (Level \#5) CCV	1	1		10/29/08 21:38
20	I11029082155.20	Test (Level \#5) CCV	1	1		10/29/08 21:55
21	I11029082213.21	WG286646-03 ANION CCV	1	1		10/29/08 22:13
22	I11029082230.22	WG286646-04 ANION CCB	1	1		10/29/08 22:30
23	I11029082247.23	END	1	1		10/29/08 22:47

Comments

Seq.	Rerun	Dil.	Reason	Analytes




Microbac Laboratories Inc.
Instrument Run Log

00103550

Instrument: IC1 Dataset: 022009 IC1.SEQ
 Analyst1: ADC Analyst2: NA
 Method: 9056/300 SOP: IC1 Rev: 8

Maintenance Log ID: 27716

Column 1 ID: AS14A-4MM Column 2 ID: NA
 Workgroups: 0438, 0447, 0455, 0454
 Internal STD: NA Surrogate STD: NA Calibration STD: NA

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	I10220091610.01	ELUENT	1	1		02/20/09 16:10
2	I10220091628.02	DI WATER	1	1		02/20/09 16:28
3	I10220091645.03	WG295484-01 ANION CCV	1	1		02/20/09 16:45
4	I10220091702.04	WG295484-02 ANION CCB	1	1		02/20/09 17:02
5	I10220091720.05	WG295483-01 ANION BLANK	1	1		02/20/09 17:20
6	I10220091737.06	WG295483-02 ANION LCS	1	1		02/20/09 17:37
7	I10220091755.07	L09020438-01 (F, CL, NO2, NO3, SO4) 1/10	1	10		02/20/09 17:55
8	I10220091812.08	L09020438-02 (F, CL, NO2, NO3, SO4) 1/3	1	3		02/20/09 18:12
9	I10220091829.09	L09020438-02 (RR CL) 1/10	1	10		02/20/09 18:29
10	I10220091847.10	L09020447-01 (NO3, CL, SO4)	1	1		02/20/09 18:47
11	I10220091904.11	L09020447-02 (NO3, CL, SO4) 1/2	1	2		02/20/09 19:04
12	I10220091922.12	L09020447-03 (NO3, CL, SO4) REF	1	1		02/20/09 19:22
13	I10220091939.13	WG295483-04 0447-03 DUP	1	1		02/20/09 19:39
14	I10220091956.14	L09020447-04 (NO3, CL, SO4) 1/2	1	2		02/20/09 19:56
15	I10220092014.15	WG295484-03 ANION CCV	1	1		02/20/09 20:14
16	I10220092031.16	WG295484-04 ANION CCB	1	1		02/20/09 20:31
17	I10220092049.17	L09020447-05 (NO3, CL, SO4) 1/10	1	10		02/20/09 20:49
18	I10220092106.18	L09020447-06 (NO3, CL, SO4) 1/10	1	10		02/20/09 21:06
19	I10220092123.19	L09020447-07 (NO3, CL, SO4)	1	1		02/20/09 21:23
20	I10220092141.20	L09020455-02 (ALL) 1/10	1	10		02/20/09 21:41
21	I10220092158.21	L09020455-03 (ALL) 1/30 REF	1	30		02/20/09 21:58
22	I10220092216.22	WG295483-06 0455-03 DUP 1/30	1	30		02/20/09 22:16
23	I10220092233.23	L09020455-04 (ALL) 1/30	1	30		02/20/09 22:33
24	I10220092251.24	L09020455-05 (ALL) 1/30 MS	1	30		02/20/09 22:51
25	I10220092308.25	L09020455-06 (ALL) 1/30 MSD	1	30		02/20/09 23:08
26	I10220092325.26	L09020454-01 (F, CL, NO3, SO4)	1	1		02/20/09 23:25
27	I10220092343.27	WG295484-05 ANION CCV	1	1		02/20/09 23:43
28	I10221090000.28	WG295484-06 ANION CCB	1	1		02/21/09 00:00
29	I10221090018.29	L09020454-02 (F, CL, NO3, SO4)	1	1		02/21/09 00:18
30	I10221090035.30	L09020454-03 (F, CL, NO3, SO4)	1	1		02/21/09 00:35
31	I10221090052.31	L09020311-01 (RR CL) 1/5	1	5		02/21/09 00:52
32	I10221090110.32	L09020356-04 (RR CL) 1/5	1	5		02/21/09 01:10
33	I10221090127.33	L09020356-05 (RR CL) 1/5	1	5		02/21/09 01:27
34	I10221090145.34	L09020356-06 (RR CL) 1/5	1	5		02/21/09 01:45
35	I10221090202.35	WG295484-07 ANION CCV	1	1		02/21/09 02:02

Page: 1

Approved: 24-FEB-09




Microbac Laboratories Inc.
Instrument Run Log

00103551

Instrument: IC1 Dataset: 022009 IC1.SEQ
 Analyst1: ADC Analyst2: NA
 Method: 9056/300 SOP: IC1 Rev: 8

Maintenance Log ID: 27716

Column 1 ID: AS14A-4MM Column 2 ID: NA
 Workgroups: 0438, 0447, 0455, 0454
 Internal STD: NA Surrogate STD: NA NA

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
36	I10221090219.36	WG295484-08 ANION CCB	1	1		02/21/09 02:19
37	I10221090237.37	END	1	1		02/21/09 02:37

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11	X	5	Over Calibration Range	so4
14	X	5	Over Calibration Range	so4




Microbac Laboratories Inc.

00103552

Data Checklist

Date: 29-OCT-2008

Analyst: JWR

Analyst: NA

Method: 300/9056

Instrument: IC1

Curve Workgroup: WG286427

Runlog ID: 25025

Analytical Workgroups: 10-0005 (MDL-Q) 10-0006 (MDL-Q)

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	NA
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	X
Window standard (FID)	NA
Initial Calibration	X
Average RF	NA
Linear regression or higher order curve	X
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	X
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	NA
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	NA
Internal standard areas (MS)	NA
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	NA
Reruns	NA
Manual integrations	NA
Project/client specific requirements	NA
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	JWR
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer:
31-OCT-2008



Secondary Reviewer:
03-NOV-2008



CHECKLIST1 - Modified 03/05/2008

Generated: NOV-03-2008 10:42:04



Microbac Laboratories Inc.

00103553

Data Checklist

Date: 20-FEB-2009

Analyst: ADC

Analyst: NA

Method: 300/9056

Instrument: IC1

Curve Workgroup: NA

Runlog ID: 26661

Analytical Workgroups: 0438, 0447, 0455, 0454, 0311, 0356

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	NA
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	X
Window standard (FID)	NA
Initial Calibration	NA
Average RF	NA
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	NA
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	X
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	NA
MS/MSD/Sample duplicates	X
Recoveries	X
%RPD	X
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	NA
Internal standard areas (MS)	NA
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	X
Manual integrations	NA
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	X
Check for completeness	X
Primary Reviewer	ADC
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer:
24-FEB-2009



Secondary Reviewer:
24-FEB-2009



CHECKLIST1 - Modified 03/05/2008

Generated: FEB-24-2009 13:38:51



Analytical Method: 300.0

AAB#: WG295483

Login Number: L09020438

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
LHSMW43-021909	02/19/09	02/20/09	02/20/09	28	1.28	02/20/09	28	0.113	
LHSMW45-021909	02/19/09	02/20/09	02/20/09	28	1.22	02/20/09	28	0.125	
LHSMW45-021909	02/19/09	02/20/09	02/20/09	28	1.22	02/20/09	28	0.137	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: L09020438
 Blank File ID: I10220091720.05
 Prep Date: 02/20/09 15:12
 Analyzed Date: 02/20/09 17:20
 Analyst: ADC

Work Group: WG295483
 Blank Sample ID: WG295483-01
 Instrument ID: IC1
 Method: 300.0

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295483-02	I10220091737.06	02/20/09 17:37	01
LHSMW43-021909	L09020438-01	I10220091755.07	02/20/09 17:55	DL01
LHSMW45-021909	L09020438-02	I10220091812.08	02/20/09 18:12	DL01
LHSMW45-021909	L09020438-02	I10220091829.09	02/20/09 18:29	DL02
DUP	WG295483-04	I10220091939.13	02/20/09 19:39	01
DUP	WG295483-06	I10220092216.22	02/20/09 22:16	DL01

Report Name: BLANK_SUMMARY
 PDF File ID: 1326470
 Report generated 02/24/2009 14:05



Login Number: L09020438 Prep Date: 02/20/09 15:12 Sample ID: WG295483-01
Instrument ID: IC1 Run Date: 02/20/09 17:20 Prep Method: 300.0
File ID: I10220091720.05 Analyst: ADC Method: 300.0
Workgroup (AAB#): WG295483 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC1 - 29-OCT-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Fluoride	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

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1326471
24-FEB-2009 14:05



Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295483-02
Instrument ID: IC1 Run Time: 17:37 Prep Method: 300.0
File ID: I10220091737.06 Analyst: ADC Method: 300.0
Workgroup (AAB#): WG295483 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD29498 Cal ID: IC1 - 29-OCT-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Chloride	6.00	5.96	99.3	90 - 110	
Fluoride	6.00	5.92	98.7	90 - 110	
Nitrate	4.07	4.07	100	90 - 110	
Nitrite	3.65	3.63	99.4	90 - 110	
Sulfate	30.0	29.7	98.9	90 - 110	

Login Number: L09020438
Analytical Method: 300.0
ICAL Workgroup: WG286427

Instrument ID: IC1
Initial Calibration Date: 29-OCT-08 18:09
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Chloride		5.859	9.84		
Fluoride		4.335	7.39		
Nitrate		2.470	12.3		
Nitrite		2.877	6.25		
Sulfate		7.510	11.5		

R = Correlation coefficient; 0.995 minimum

R² = Coefficient of determination; 0.99 minimum

This method always uses quadratic calibration model (R²)

Login Number: L09020438
Analytical Method: 300.0

Instrument ID: IC1
Initial Calibration Date: 29-OCT-08 18:09
Column ID: F

Analyte	WG286427-01			WG286427-02			WG286427-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloride	0.200	0.032000000 0	6.250	2.00	0.322000000	6.211	4.00	0.653000000	6.126
Fluoride	0.200	0.041000000 0	4.878	2.00	0.445000000	4.494	4.00	0.901000000	4.440
Nitrate	0.136	0.048000000 0	2.823	1.36	0.513000000	2.642	2.71	1.05800000	2.562
Nitrite	0.122	0.038000000 0	3.205	1.22	0.418000000	2.913	2.44	0.835000000	2.917
Sulfate	1.00	0.125000000	8.000	10.0	1.22400000	8.170	20.0	2.50300000	7.990

INT_CAL - Modified 03/06/2008
PDF File ID: 1326736
Report generated 02/24/2009 14:05



Login Number: L09020438
Analytical Method: 300.0

Instrument ID: IC1
Initial Calibration Date: 29-OCT-08 18:09
Column ID: F

Analyte	WG286427-04			WG286427-05			WG286427-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloride	6.00	0.992000000	6.048	8.00	1.35700000	5.895	12.0	2.11200000	5.682
Fluoride	6.00	1.38700000	4.326	8.00	1.88900000	4.235	12.0	2.91600000	4.115
Nitrate	4.07	1.62400000	2.504	5.42	2.21900000	2.443	8.13	3.43500000	2.367
Nitrite	3.65	1.26900000	2.879	4.87	1.71100000	2.847	7.31	2.62600000	2.783
Sulfate	30.0	3.88900000	7.714	40.0	5.32300000	7.515	60.0	8.33300000	7.200

INT_CAL - Modified 03/06/2008
PDF File ID: 1326736
Report generated 02/24/2009 14:05



Login Number: L09020438
Analytical Method: 300.0

Instrument ID: IC1
Initial Calibration Date: 29-OCT-08 18:09
Column ID: F

Analyte	WG286427-07		
	CONC	RESP	RF
Chloride	48.0	9.99200000	4.804
Fluoride	48.0	12.4550000	3.854
Nitrate	32.5	16.6700000	1.951
Nitrite	29.2	11.2520000	2.598
Sulfate	240	40.1170000	5.983

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

00103562

Login Number: L09020438 Run Date: 10/29/2008 Sample ID: WG286427-08
Instrument ID: IC1 Run Time: 18:26 Method: 300.0
File ID: I11029081826.08 Analyst: JWR QC Key: STD
ICal Workgroup: WG286427 Cal ID: IC1 - 29-OCT-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloride		6.00	6.14	mg/L	5.81	2.30	10	
Fluoride		6.00	6.17	mg/L	4.14	2.80	10	
Nitrate		4.07	4.18	mg/L	2.41	2.80	10	
Nitrite		3.65	3.60	mg/L	2.89	1.40	10	
Sulfate		30.0	30.2	mg/L	7.55	0.800	10	

* Exceeds %D Limit

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295484-02
Instrument ID: IC1 Run Time: 17:02 Method: 300.0
File ID: I10220091702.04 Analyst: ADC Units: mg/L
Workgroup (AAB#): WG295483 Cal ID: IC1 -
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Chloride	0.100	0.200	0.100	U
Fluoride	0.100	0.200	0.100	U
Nitrate	0.100	0.600	0.100	U
Nitrite	0.100	0.400	0.100	U
Sulfate	0.500	1.00	0.500	U

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

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295484-04
Instrument ID: IC1 Run Time: 20:31 Method: 300.0
File ID: I10220092031.16 Analyst: ADC Units: mg/L
Workgroup (AAB#): WG295483 Cal ID: IC1 -
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Chloride	0.100	0.200	0.100	U
Fluoride	0.100	0.200	0.100	U
Nitrate	0.100	0.600	0.100	U
Nitrite	0.100	0.400	0.100	U
Sulfate	0.500	1.00	0.500	U

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

Login Number: L09020438 Run Date: 02/20/2009 Sample ID: WG295484-01
Instrument ID: IC1 Run Time: 16:45 Method: 300.0
File ID: I10220091645.03 Analyst: ADC QC Key: STD
Workgroup (AAB#): WG295483 Cal ID: IC1 - 29-OCT-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	5.95	mg/L	6.00	0.833	10	
Fluoride		6.00	5.87	mg/L	4.35	2.17	10	
Nitrate		4.07	4.07	mg/L	2.48	0.0935	10	
Nitrite		3.65	3.62	mg/L	2.88	0.969	10	
Sulfate		30.0	29.7	mg/L	7.68	0.963	10	

* Exceeds %D Criteria

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

00103566

Login Number: <u>L09020438</u>	Run Date: <u>02/20/2009</u>	Sample ID: <u>WG295484-03</u>
Instrument ID: <u>IC1</u>	Run Time: <u>20:14</u>	Method: <u>300.0</u>
File ID: <u>I10220092014.15</u>	Analyst: <u>ADC</u>	QC Key: <u>STD</u>
Workgroup (AAB#): <u>WG295483</u>	Cal ID: <u>IC1 - 29-OCT-08</u>	
Matrix: <u>WATER</u>		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloride		6.00	6.03	mg/L	5.92	0.417	10	
Fluoride		6.00	5.96	mg/L	4.29	0.733	10	
Nitrate		4.07	4.09	mg/L	2.47	0.487	10	
Nitrite		3.65	3.65	mg/L	2.86	0.203	10	
Sulfate		30.0	29.7	mg/L	7.68	0.940	10	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
PDF File ID: 1326475
Report generated 02/24/2009 14:05



2.2.2 Total Organic Carbon Data

2.2.2.1 Summary Data

LABORATORY REPORT

L09020438

00103569

03/02/09 09:04

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836 (GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW43-021909	L09020438-01	415.1	1	20-FEB-09
LHSMW45-021909	L09020438-02	415.1	4	20-FEB-09



Report Number: **L09020438**Report Date : **March 2, 2009**

00103570

Sample Number: **L09020438-01**
Client ID: **LHSMW43-021909**
Matrix: **Water**
Workgroup Number: **WG295582**
Collect Date: **02/19/2009 08:24**
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: **02/24/2009 09:51**
Cal Date: **01/13/2009 15:07**
Run Date: **02/24/2009 09:51**
File ID: **TC02232009.085**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Total Organic Carbon		11.8		1.00	0.500

Report Number: **L09020438**Report Date : **March 2, 2009**

00103571

Sample Number: **L09020438-02**
Client ID: **LHSMW45-021909**
Matrix: **Water**
Workgroup Number: **WG295582**
Collect Date: **02/19/2009 10:01**
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: **02/24/2009 09:33**
Cal Date: **01/13/2009 15:07**
Run Date: **02/24/2009 09:33**
File ID: **TC02232009.084**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Total Organic Carbon		2.39	J	4.00	2.00

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

2.2.2.2 QC Summary Data

Total Organic Carbon Example Calculations
(Direct Readout Parameter)

$$(\text{Readout})/(\text{dilution}) = \text{mg/L}$$

where:

Readout = direct readout from the instrument

dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)

Microbac Laboratories Inc.

00103574

Data Checklist

Date: 23-FEB-2009

Analyst: DIH

Analyst: NA

Method: TOC

Instrument: TOC

Curve Workgroup: NA

Runlog ID: _____

Analytical Workgroups: WG295582 WG295583 WG295584

Calibration/Linearity	1/13/2009
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	X
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:
24-FEB-2009

Secondary Reviewer:



Analytical Method: 415.1
Login Number: L09020438

AAB#: WG295582

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
LHSMW43-021909	02/19/09	02/20/09	02/24/09	28	5.06	02/24/09	28	5.06	
LHSMW45-021909	02/19/09	02/20/09	02/24/09	28	4.98	02/24/09	28	4.98	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: L09020438
 Blank File ID: TC02232009.004
 Prep Date: 02/23/09 15:36
 Analyzed Date: 02/23/09 15:36
 Analyst: DIH

Work Group: WG295582
 Blank Sample ID: WG295582-01
 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	WG295582-02	TC02232009.005	02/23/09 15:48	01
LCS2	WG295582-03	TC02232009.006	02/23/09 16:00	01
DUP	WG295582-05	TC02232009.031	02/23/09 21:57	01
LHSMW45-021909	L09020438-02	TC02232009.084	02/24/09 09:33	DL01
LHSMW43-021909	L09020438-01	TC02232009.085	02/24/09 09:51	01

Report Name: BLANK_SUMMARY
 PDF File ID: 1326958
 Report generated 02/24/2009 15:35



Login Number: L09020438 Prep Date: 02/23/09 15:36 Sample ID: WG295582-01
Instrument ID: TOC-VWP Run Date: 02/23/09 15:36 Prep Method: 415.1
File ID: TC02232009.004 Analyst: DIH Method: 415.1
Workgroup (AAB#): WG295582 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: TOC-VW-13-JAN-09

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

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1326959
24-FEB-2009 15:35



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00103578

Login Number: L09020438 Analyst: DIH Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG295582 Units: mg/L
QC Key: STD Lot #: STD30420
Sample ID: WG295582-02 LCS File ID: TC02232009.005 Run Date: 02/23/2009 15:48
Sample ID: WG295582-03 LCS2 File ID: TC02232009.006 Run Date: 02/23/2009 16:00

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	25.7	103	25.0	25.4	102	1.21	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1326960
Report generated: 02/24/2009 15:35



2.2.2.3 Raw Data

TC/TIC curves

wg 292773 00103580

Total Organic Carbon

MAKE DAILY

CCV (TOC): see below

LCS (TOC): _____

$$\left(\frac{10}{200}\right)(1000) = 50 \text{ mg/L} \quad \left(\frac{2}{200}\right)(1000) = 10 \text{ mg/L}$$

$$\left(\frac{5}{200}\right)(1000) = 25 \text{ mg/L}$$

CCV (TIC): _____

MS (TOC): _____

$$\left(\frac{5}{200}\right)(1000) = 25 \text{ mg/L}$$

Calibration Curve Date: _____



SM5310-C : Matrix 2 WG _____



EPA 415.1/9060A(mod): Matrix 1 WG _____

SOP: K 4151 Rev. 11

WG _____

Instrument: Shimadza TOC-VWP/ASI



drain reservoir filled



ASI water bottle full



dilution water bottle full



DAILY CHECK

3rd bottle full

sufficient gas



sufficient persulfate



sufficient acid

waste container

Position	Sample ID	Dilution
1	TC CURVE	
2	TIC CURVE	
3	TC ICV(25)	
4	TIC ICV(25)	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16	all curve points and ICV's were injected and analyzed in duplicate	
17		
18		
19		
20		
21		
22		
23		
24		
25		

Position	Sample ID	Dilution
26		
27		
28		
29		
30		
31	CURVE std	
32	std 30838	
33	TIC 28734	
34		
35		
36	ICV	
37	TC std 30420	
38	TIC std 28733	
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		

Position	Sample ID	Dilution
51		
52		
53		
54		
55		
56		
57	see SOP for	
58	curve pts	
59		
60		
61		
62	$\frac{5 \text{ ml}}{200}(1000) = 25 \text{ mg/L}$	
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		

Analyst: Deanna RobertsDate/Time: 11/13/09

WG: _____

WG: _____

WG: _____

DCN#78103



Deanna Roberts

Approved: January 19, 2009

	Analysis	Sample Name	Result	Status	Date / Time	Vial
1	TC	TC CURVE		Comple	01/13/2009 03:12:54 PM	0, 1,
2	IC	TIC CURVE		Comple	01/13/2009 04:22:39 PM	0, 6,
3	TC	TC ICV	TC:24.92mg/L	Comple	01/13/2009 04:38:03 PM	11
4	IC	TIC ICV	IC:24.60mg/L	Comple	01/13/2009 04:50:47 PM	12



Approved: January 19, 2009

01/13/2009 05:00:03 PM

CURVES-01-13-2009.132

Instr. Information

System
DetectorTOCVW ASI
Wet Chemical

Cal. Curve

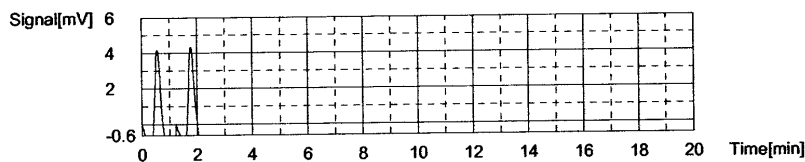
Sample Name: TC CURVE
 Sample ID: TCCURVE
 Cal. Curve: TCCURVE-01-13-2009.2009_01_13_14_10_52.cal
 Status: Completed

Type	Anal.
Standard	TC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	8.437	500uL	1	*****		01/13/2009 02:14:13 PM
2	8.432	500uL	1	*****		01/13/2009 02:18:55 PM

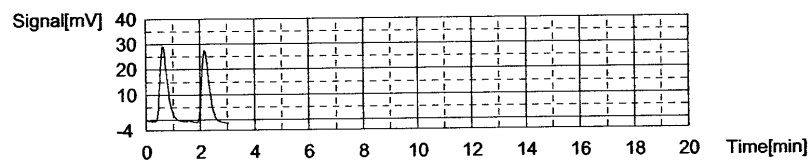
Acid Add. 0.000%
 Mean Area 8.434



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	56.85	500uL	1	*****		01/13/2009 02:24:22 PM
2	54.36	500uL	1	*****		01/13/2009 02:29:25 PM

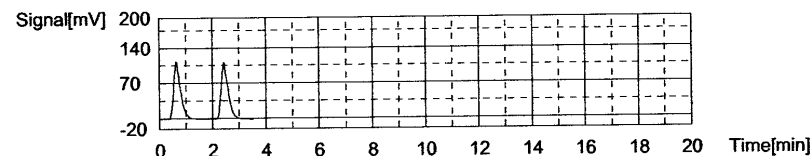
Acid Add. 0.000%
 Mean Area 55.61



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	206.9	500uL	1	*****		01/13/2009 02:35:09 PM
2	202.6	500uL	1	*****		01/13/2009 02:39:10 PM

Acid Add. 0.000%
 Mean Area 204.8



Conc: 10.00mg/L

1/5

Kearna Roberts

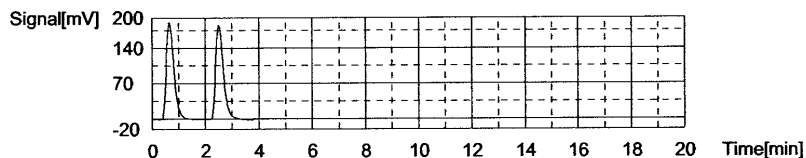
Approved: January 19, 2009

01/13/2009 05:00:03 PM

CURVES-01-13-2009.132

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	380.7	500uL	1	*****		01/13/2009 02:44:58 PM
2	379.4	500uL	1	*****		01/13/2009 02:49:11 PM

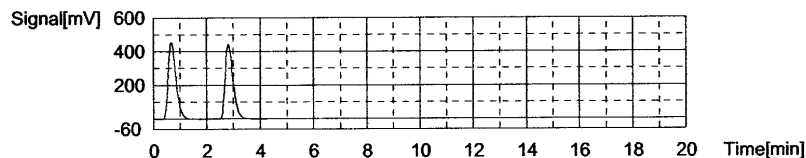
Acid Add. 0.000%
Mean Area 380.1



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	934.8	500uL	1	*****		01/13/2009 02:55:16 PM
2	914.5	500uL	1	*****		01/13/2009 03:00:30 PM

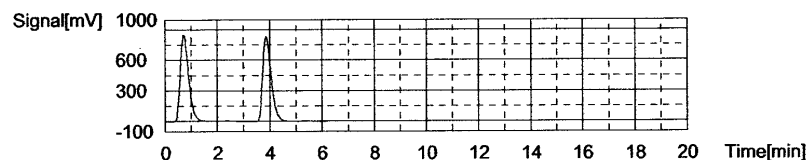
Acid Add. 0.000%
Mean Area 924.7



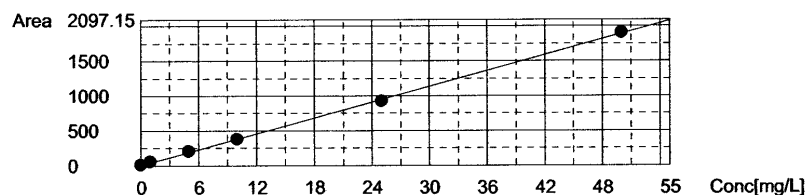
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1922	500uL	1	*****		01/13/2009 03:07:36 PM
2	1891	500uL	1	*****		01/13/2009 03:12:54 PM

Acid Add. 0.000%
Mean Area 1907



Slope: 37.71
Intercept 8.127
 r^2 0.999609
Zero Shift No



Cal. Curve

Sample Name: TIC CURVE
Sample ID: TICCURVE
Cal. Curve: TICCURVE-01-13-2009.2009_01_13_15_12_54.cal
Status: Completed

Type	Anal.
Standard	IC

Conc: 0.000mg/L

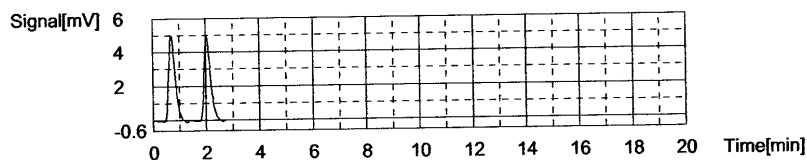
Approved: January 19, 2009

01/13/2009 05:00:03 PM

CURVES-01-13-2009.t32

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	8.658	500uL	1	*****		01/13/2009 03:16:31 PM
2	8.479	500uL	1	*****		01/13/2009 03:20:08 PM

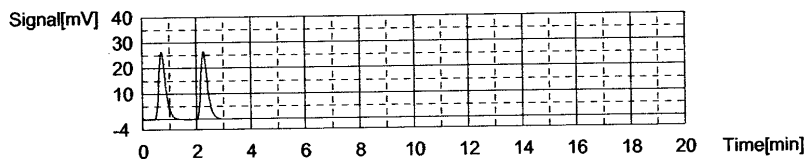
Acid Add. 3.000%
Mean Area 8.569



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	46.56	500uL	1	*****		01/13/2009 03:27:22 PM
2	46.10	500uL	1	*****		01/13/2009 03:31:26 PM

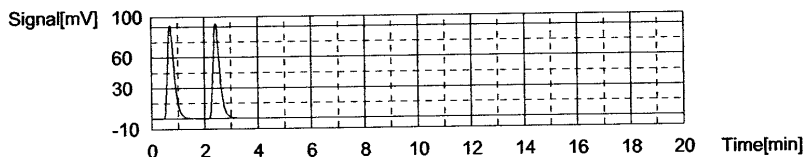
Acid Add. 3.000%
Mean Area 46.33



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	160.8	500uL	1	*****		01/13/2009 03:38:53 PM
2	161.9	500uL	1	*****		01/13/2009 03:43:10 PM

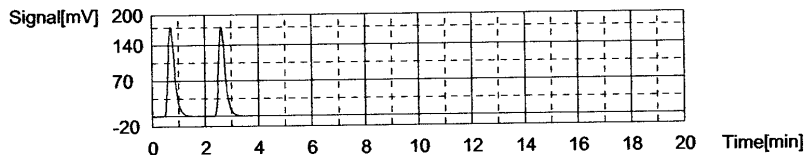
Acid Add. 3.000%
Mean Area 161.4



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	310.0	500uL	1	*****		01/13/2009 03:50:52 PM
2	308.4	500uL	1	*****		01/13/2009 03:55:18 PM

Acid Add. 3.000%
Mean Area 309.2



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	793.7	500uL	1	*****		01/13/2009 04:03:34 PM
2	782.1	500uL	1	*****		01/13/2009 04:08:41 PM

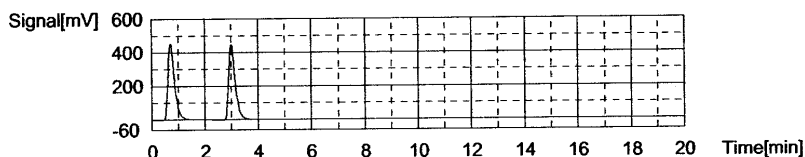
Heanna Roberts

Approved: January 19, 2009

01/13/2009 05:00:03 PM

CURVES-01-13-2009.i32

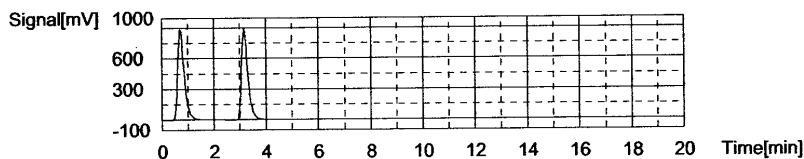
Acid Add. 3.000%
Mean Area 787.9



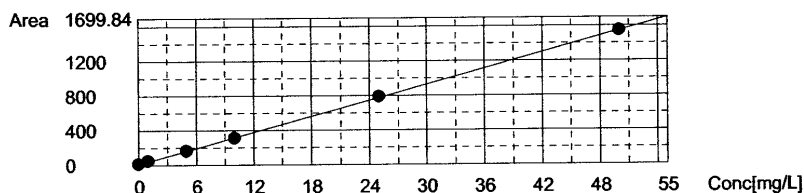
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1547	500uL	1	*****		01/13/2009 04:17:18 PM
2	1537	500uL	1	*****		01/13/2009 04:22:39 PM

Acid Add. 3.000%
Mean Area 1542



Slope: 30.70
Intercept 10.26
r^2 0.999878
Zero Shift No



Sample

Sample Name: TC ICV
Sample ID: TCCURVE
Origin: TCCURVE-01-13-2009.cal
Status: Completed
Chk. Result

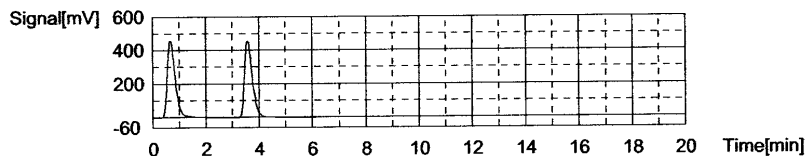
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:24.92mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	951.9	25.03mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	01/13/2009 04:31:14 PM
2	943.7	24.81mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	01/13/2009 04:38:03 PM

Mean Area 947.8
Mean Conc. 24.92mg/L



Heanna Roberts

Approved: January 19, 2009

01/13/2009 05:00:03 PM

CURVES-01-13-2009.t32

Sample

Sample Name: TIC ICV
Sample ID: TICCURVE
Origin: TICCURVE-01-13-2009.cal
Status: Completed
Chk. Result

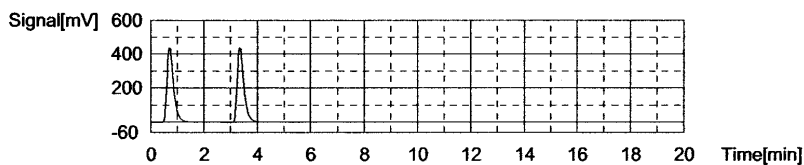
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:24.60mg/L

1. Det

Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	765.5	24.60mg/L	500ul	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	01/13/2009 04:45:09 PM
2	765.4	24.60mg/L	500ul	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	01/13/2009 04:50:47 PM

Mean Area 765.5
Mean Conc. 24.60mg/L

*Heanna Roberts*

Approved: January 19, 2009

WORKGROUP: WG295582

Total Organic Carbon

MAKE DAILY

CCV (TOC): std 30838LCS (TOC): std 30420 $\left(\frac{10}{200} (1000) = 50 \text{ mg/L}\right)$ $\left(\frac{5}{200} (1000) = 25 \text{ mg/L}\right)$ CCV (TIC): std 28734

MS (TOC):

 $\left(\frac{5}{200} (1000) = 25 \text{ mg/L}\right)$ 0.4/40(1000)=10Calibration Curve Date: 1/13/09☐ SM5310-C : Matrix 2 WG☒ EPA 415.1/9060A(mod): Matrix 1 WG aelSOP: K 4151 Rev. 11

WG

Instrument: Shimadzu TOC-VWP/ASI

☒ drain reservoir filled
☒ ASI water bottle full
☒ dilution water bottle full

☒ DAILY CHECK
☒ 3rd bottle full
☒ sufficient gas
☒ sufficient persulfate

☒ sufficient acid
☒ waste container

Position	Sample ID	Dilution
1	CCV 50	
2	CCV 10	
3	TIC 25	
40	BLK	
5	LCS 25	
6	LCS DUP	
7	02-438-01	
8	02	
9	02-366-04	1/2
10	05	
11	02-410-01	1/15
12	02	1/20
13	03	1/10
14	04	1/4
15	CCV	
180	CCB	
17	02-410-05	1/5
18	06	1/5
19	07	
20	08	1/10
21	09	1/10
22	10	
23	02-445-01	
24	03	
25	02-447-01	1/5

Position	Sample ID	Dilution
26	02-44702	1/5
27	CCV	
280	CCB	
29	02-44703	1/5
30	04	1/5
31	DUP 43802	
32	MS	↓
380	BLK	
34	LCS 25	
35	LCS DUP	
36	02-44705	1/5
37	06	1/5
38	07	
391	CCV	
380	CCB	
41	02-45502	
42	03	
43	DUP 03	
44	MS 05	
45	MSD 06	
46	04	
47	02-460-01	
48	02	
49	03	
50	04	

Position	Sample ID	Dilution
2815	CCV	
280	CCB	
53	02-460-05	
54	06	
55	02-468-01	
56	02	
57	03	
58	02-469-01	
59	03	
60	04	
61	02-485-03	
62	04	
6827	CCV	
640	CCB/BLK	
685	LCS	
686	LCS DUP	
67	02-485-05	
68	07	
684	02-482-04	
7816	05	
7528	06	1/20
7533	02-486-01	
7539	02	
7540	03	
75		

Analyst: Deanne JohnsonDate/Time: 2/23/09

pg 1

DCN#78473



Total Organic Carbon

MAKE DAILY

CCV (TOC): _____

LCS (TOC): _____

$$\left(\frac{10}{200} \times 1000\right) = 50 \text{ mg/L} \quad \left(\frac{2}{200} \times 1000\right) = 10 \text{ mg/L}$$

$$\left(\frac{5}{200} \times 1000\right) = 25 \text{ mg/L}$$

CCV (TIC): _____

MS (TOC): _____

$$\left(\frac{5}{200} \times 1000\right) = 25 \text{ mg/L}$$

Calibration Curve Date: _____

☐

SM5310-C : Matrix 2 WG _____

☐

EPA 415.1/9060A(mod): Matrix 1 WG _____ SOP: K _____ Rev. _____

WG _____

Instrument: Shimadza TOC-VWP/ASI

☐

drain reservoir filled

☐

ASI water bottle full

☐

dilution water bottle full

☐

DAILY CHECK

☐3rd bottle full☐

sufficient gas

sufficient persulfate

☐

sufficient acid

☐

waste container

Position	Sample ID	Dilution
1	CCV	
20	CCB	
251	DUP 482-86	
452	MS	↓
463	02-476-01	
464	02	1/5
765	03	1/10
866	04	1/100
785	CCV 02-438-01	1/2
8180	CCB	02 1/4
18115	CCV	
19128	CCB	
1827		
140		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Position	Sample ID	Dilution
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		

Position	Sample ID	Dilution
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		

Analyst: Deanna AbssonDate/Time: 2/23/09

Pg 2

DCN#78473

* a CCV was 116% in middle of run. All other CCV were OK
 455's rerun & 468, 469
 460 OK - all results near RL
 485 not rerun (both results $\leq$ RL & right before CCV)



good

	Analysis	Sample Name	Result	Status	Date / Time	Val
1	TOC	CCV 50	!!Error!! TOC:51.49mg/L TC:51.31mg/L IC:-0.1795mg	Comple	02/23/2009 03:04:11 PM	1
2	TOC	CCV 10	!!Error!! TOC:10.28mg/L TC:10.13mg/L IC:-0.1569mg	Comple	02/23/2009 03:16:12 PM	2
3	TOC	TIC 25	TOC:4.507mg/L TC:29.67mg/L IC:25.17mg/L	Comple	02/23/2009 03:30:57 PM	3
4	TOC	WG295582-01 BLANK	!!Error!! TOC:0.1642mg/L TC:0.07885mg/L IC:-0.085	Comple	02/23/2009 03:40:03 PM	0
5	TOC	WG295582-02 LCS	!!Error!! TOC:25.70mg/L TC:25.51mg/L IC:-0.1913mg	Comple	02/23/2009 03:52:30 PM	5
6	TOC	WG295582-03 LCSDUP	!!Error!! TOC:25.39mg/L TC:25.21mg/L IC:-0.1857mg	Comple	02/23/2009 04:04:58 PM	6
7	TOC	L09020438-01 X	TOC:14.16mg/L TC:52.16mg/L IC:38.00mg/L	Comple	02/23/2009 04:19:46 PM	7
8	TOC	L09020438-02 X	!!Error!! TOC:-0.2265mg/L TC:84.81mg/L IC:85.04mg	Comple	02/23/2009 04:36:32 PM	8
9	TOC	L09020366-04 (2) X	TOC:12.53mg/L TC:58.58mg/L IC:46.05mg/L	Comple	02/23/2009 04:53:27 PM	9
10	TOC	L09020366-05	TOC:4.413mg/L TC:16.57mg/L IC:12.15mg/L	Comple	02/23/2009 05:06:34 PM	10
11	TOC	L09020410-01 (15)	TOC:13.29mg/L TC:32.19mg/L IC:18.90mg/L	Comple	02/23/2009 05:27:15 PM	11
12	TOC	L09020410-02 (20)	TOC:7.786mg/L TC:19.90mg/L IC:12.11mg/L	Comple	02/23/2009 05:41:10 PM	12
13	TOC	L09020410-03 (10)	TOC:10.12mg/L TC:25.22mg/L IC:15.10mg/L	Comple	02/23/2009 05:54:27 PM	13
14	TOC	L09020410-04 (4)	TOC:18.49mg/L TC:45.64mg/L IC:27.15mg/L	Comple	02/23/2009 06:08:25 PM	14
15	TOC	CCV	!!Error!! TOC:52.28mg/L TC:52.22mg/L IC:-0.06363m	Comple	02/23/2009 06:21:18 PM	15
16	TOC	CCB	!!Error!! TOC:0.1237mg/L TC:0.04673mg/L IC:-0.076	Comple	02/23/2009 06:30:28 PM	0
17	TOC	L09020410-05 (5)	TOC:13.78mg/L TC:40.47mg/L IC:26.69mg/L	Comple	02/23/2009 06:44:51 PM	17
18	TOC	L09020410-06 (5) X	TOC:12.51mg/L TC:57.55mg/L IC:45.04mg/L	Comple	02/23/2009 07:00:01 PM	18
19	TOC	L09020410-07 X	TOC:13.09mg/L TC:62.29mg/L IC:49.21mg/L	Comple	02/23/2009 07:16:09 PM	19
20	TOC	L09020410-08 (10) X	TOC:34.41mg/L TC:75.21mg/L IC:40.80mg/L	Comple	02/23/2009 07:31:41 PM	20
21	TOC	L09020410-09 (10)	TOC:24.54mg/L TC:48.29mg/L IC:23.76mg/L	Comple	02/23/2009 07:45:39 PM	21
22	TOC	L09020410-10	!!Error!! TOC:0.3136mg/L TC:0.2953mg/L IC:-0.0182	Comple	02/23/2009 07:57:11 PM	22
23	TOC	L09020445-01	TOC:4.131mg/L TC:17.43mg/L IC:13.30mg/L	Comple	02/23/2009 08:11:49 PM	23
24	TOC	L09020445-03	TOC:5.560mg/L TC:18.12mg/L IC:12.56mg/L	Comple	02/23/2009 08:27:15 PM	24
25	TOC	L09020447-01 (5)	TOC:7.665mg/L TC:20.57mg/L IC:12.91mg/L	Comple	02/23/2009 08:40:12 PM	25
26	TOC	L09020447-02 (5) X	TOC:15.48mg/L TC:87.52mg/L IC:72.04mg/L	Comple	02/23/2009 08:57:12 PM	26
27	TOC	CCV	TOC:54.48mg/L TC:54.58mg/L IC:0.09969mg/L	Comple	02/23/2009 09:10:13 PM	27
28	TOC	CCB	!!Error!! TOC:0.1086mg/L TC:0.05843mg/L IC:-0.050	Comple	02/23/2009 09:19:17 PM	0
29	TOC	L09020447-03 (5)	TOC:14.69mg/L TC:26.57mg/L IC:11.88mg/L	Comple	02/23/2009 09:32:31 PM	29
30	TOC	L09020447-04 (5)	TOC:13.42mg/L TC:31.48mg/L IC:18.06mg/L	Comple	02/23/2009 09:47:14 PM	30
31	TOC	WG295582-05 DUP	TOC:10.76mg/L TC:61.92mg/L IC:51.16mg/L	Comple	02/23/2009 10:03:52 PM	31
32	TOC	WG295582-06 MS	TOC:15.01mg/L TC:73.14mg/L IC:58.13mg/L	Comple	02/23/2009 10:19:28 PM	32
33	TOC	WG295583-01 BLANK	TOC:0.1004mg/L TC:0.2027mg/L IC:0.1023mg/L	Comple	02/23/2009 10:28:55 PM	0
34	TOC	WG295583-02 LCS	!!Error!! TOC:25.96mg/L TC:25.92mg/L IC:-0.04077m	Comple	02/23/2009 11:48:16 PM	34
35	TOC	WG295583-03 LCSDUP	!!Error!! TOC:25.85mg/L TC:25.74mg/L IC:-0.1098mg	Comple	02/23/2009 10:53:45 PM	35
36	TOC	L09020447-05 (5)	TOC:10.24mg/L TC:35.19mg/L IC:24.95mg/L	Comple	02/23/2009 11:07:38 PM	36
37	TOC	L09020447-06 (5) X	TOC:30.38mg/L TC:66.43mg/L IC:36.05mg/L	Comple	02/23/2009 11:23:55 PM	37
38	TOC	L09020447-07	TOC:0.3452mg/L TC:0.4032mg/L IC:0.05799mg/L	Comple	02/23/2009 11:35:31 PM	38
39	TOC	CCV	!!Error!! TOC:52.11mg/L TC:52.00mg/L IC:-0.1056mg	Comple	02/23/2009 11:48:19 PM	1
40	TOC	CCB	!!Error!! TOC:0.1080mg/L TC:0.02761mg/L IC:-0.080	Comple	02/23/2009 11:57:25 PM	0
41	TOC	L09020455-02 X	TOC:4.113mg/L TC:30.20mg/L IC:26.09mg/L	Comple	02/24/2009 12:11:25 AM	41
42	TOC	WG295583-04	TOC:16.93mg/L TC:76.27mg/L IC:59.34mg/L	Comple	02/24/2009 12:27:20 AM	42
43	TOC	WG295583-05 DUP	TOC:20.01mg/L TC:85.08mg/L IC:65.07mg/L	Comple	02/24/2009 12:44:20 AM	43
44	TOC	L09020455-05 MS	TOC:27.03mg/L TC:51.50mg/L IC:24.47mg/L	Comple	02/24/2009 12:58:39 AM	44
45	TOC	L09020455-06 MSD	TOC:30.96mg/L TC:61.34mg/L IC:30.38mg/L	Comple	02/24/2009 01:13:48 AM	45
46	TOC	L09020455-04 X	TOC:16.09mg/L TC:77.25mg/L IC:61.16mg/L	Comple	02/24/2009 01:29:50 AM	46
47	TOC	L09020460-01	TOC:3.035mg/L TC:8.987mg/L IC:5.952mg/L	Comple	02/24/2009 01:42:42 AM	47
48	TOC	L09020460-02	TOC:8.782mg/L TC:18.80mg/L IC:10.02mg/L	Comple	02/24/2009 01:55:55 AM	48
49	TOC	L09020460-03	TOC:2.579mg/L TC:8.361mg/L IC:5.783mg/L	Comple	02/24/2009 02:08:37 AM	49
50	TOC	L09020460-04	TOC:2.143mg/L TC:7.401mg/L IC:5.258mg/L	Comple	02/24/2009 02:21:13 AM	50
51	TOC	CCV	!!Error!! TOC:58.47mg/L TC:58.37mg/L IC:-0.09741m	Comple	02/24/2009 02:34:26 AM	15
52	TOC	CCB	!!Error!! TOC:0.1036mg/L TC:0.02822mg/L IC:-0.075	Comple	02/24/2009 02:43:31 AM	0
53	TOC	L09020460-05	TOC:1.585mg/L TC:6.577mg/L IC:4.991mg/L	Comple	02/24/2009 02:56:31 AM	53
54	TOC	L09020460-06	TOC:1.676mg/L TC:6.720mg/L IC:5.043mg/L	Comple	02/24/2009 03:09:07 AM	54
55	TOC	L09020468-01 X	TOC:3.915mg/L TC:32.33mg/L IC:28.41mg/L	Comple	02/24/2009 03:23:23 AM	55
56	TOC	L09020468-02 X	TOC:2.197mg/L TC:14.29mg/L IC:12.09mg/L	Comple	02/24/2009 03:36:26 AM	56
57	TOC	L09020468-03 X	TOC:4.929mg/L TC:51.37mg/L IC:46.44mg/L	Comple	02/24/2009 03:51:59 AM	57
58	TOC	L09020469-01 X	TOC:1.504mg/L TC:6.659mg/L IC:5.154mg/L	Comple	02/24/2009 04:04:35 AM	58
59	TOC	L09020469-03 X	TOC:9.876mg/L TC:49.67mg/L IC:39.79mg/L	Comple	02/24/2009 04:20:45 AM	59
60	TOC	L09020469-04 X	TOC:9.267mg/L TC:61.05mg/L IC:51.78mg/L	Comple	02/24/2009 04:36:21 AM	60
61	TOC	L09020485-03 X	TOC:1.438mg/L TC:10.02mg/L IC:8.584mg/L	Comple	02/24/2009 04:49:20 AM	61
62	TOC	L09020485-04 X	TOC:0.7710mg/L TC:0.8198mg/L IC:0.04887mg/L	Comple	02/24/2009 05:01:04 AM	62
63	TOC	CCV	!!Error!! TOC:50.98mg/L TC:50.89mg/L IC:-0.09431m	Comple	02/24/2009 05:14:06 AM	27
64	TOC	WG295584-01 BLANK	!!Error!! TOC:0.09839mg/L TC:0.02355mg/L IC:-0.07	Comple	02/24/2009 05:23:14 AM	0
65	TOC	WG295584-02 LCS	!!Error!! TOC:25.90mg/L TC:25.79mg/L IC:-0.1076mg	Comple	02/24/2009 05:35:58 AM	5
66	TOC	WG295584-03 LCSDUP	!!Error!! TOC:24.83mg/L TC:24.71mg/L IC:-0.1126mg	Comple	02/24/2009 05:48:25 AM	6
67	TOC	L09020485-05	TOC:0.6375mg/L TC:4.648mg/L IC:4.011mg/L	Comple	02/24/2009 06:00:56 AM	67

	Analysis	Sample Name	Result	Status	Date / Time	Wait
68	TOC	L09020485-07	TOC:1.783mg/L TC:10.52mg/L IC:8.737mg/L	Comple	02/24/2009 06:14:04 AM	68
69	TOC	L09020482-04	TOC:11.84mg/L TC:38.00mg/L IC:26.16mg/L	Comple	02/24/2009 06:28:15 AM	4
70	TOC	L09020482-05	TOC:19.98mg/L TC:44.05mg/L IC:24.07mg/L	Comple	02/24/2009 06:44:14 AM	16
71	TOC	L09020482-06 (20) X	TOC:0.5575mg/L TC:1.039mg/L IC:0.4814mg/L	Comple	02/24/2009 06:56:25 AM	28
72	TOC	L09020486-01	TOC:2.906mg/L TC:9.308mg/L IC:6.402mg/L	Comple	02/24/2009 07:09:19 AM	33
73	TOC	L09020486-02	TOC:1.020mg/L TC:4.813mg/L IC:3.793mg/L	Comple	02/24/2009 07:21:35 AM	39
74	TOC	L09020486-03	TOC:2.985mg/L TC:15.50mg/L IC:12.52mg/L	Comple	02/24/2009 07:34:57 AM	40
75	TOC	CCV	!!Error!! TOC:50.98mg/L TC:50.92mg/L IC:-0.06249m	Comple	02/24/2009 07:47:47 AM	1
76	TOC	CCB	!!Error!! TOC:0.1064mg/L TC:0.03265mg/L IC:-0.073	Comple	02/24/2009 07:56:52 AM	0
77	TOC	WG295584-05 DUP	TOC:10.83mg/L TC:27.31mg/L IC:16.48mg/L	Comple	02/24/2009 08:10:02 AM	51
78	TOC	WG295584-06 MS	TOC:21.46mg/L TC:45.00mg/L IC:23.54mg/L	Comple	02/24/2009 08:23:49 AM	52
79	TOC	L09020476-01	!!Error!! TOC:0.5127mg/L TC:0.5056mg/L IC:-0.0071	Comple	02/24/2009 08:35:40 AM	63
80	TOC	L09020476-02 (5)	TOC:10.58mg/L TC:13.14mg/L IC:2.562mg/L	Comple	02/24/2009 08:48:14 AM	64
81	TOC	L09020476-03 (10)	TOC:20.59mg/L TC:23.05mg/L IC:2.455mg/L	Comple	02/24/2009 09:01:08 AM	65
82	TOC	L09020476-04 (100)	TOC:16.55mg/L TC:16.62mg/L IC:0.07298mg/L	Comple	02/24/2009 09:13:30 AM	66
83	TOC	L09020438-01 (2) X	TOC:4.803mg/L TC:5.887mg/L IC:1.084mg/L	Comple	02/24/2009 09:25:51 AM	7
84	TOC	L09020438-02 (4)	TOC:0.5970mg/L TC:1.611mg/L IC:1.014mg/L	Comple	02/24/2009 09:37:53 AM	8
85	TOC	L09020438-01	TOC:11.80mg/L TC:45.53mg/L IC:33.74mg/L	Comple	02/24/2009 09:57:37 AM	18
86	TOC	L09020438-02 X	TOC:6.646mg/L TC:61.68mg/L IC:55.04mg/L	Comple	02/24/2009 10:13:13 AM	19
87	TOC	CCV	TOC:55.39mg/L TC:55.51mg/L IC:0.1104mg/L	Comple	02/24/2009 10:26:31 AM	15
88	TOC	CCB	!!Error!! TOC:0.09855mg/L TC:0.05365mg/L IC:-0.04	Comple	02/24/2009 10:35:37 AM	0

Instr. Information

System TOCVW ASI
Detector Wet Chemical

Sample

Sample Name: CCV 50
Sample ID:
Origin: TOC-01-13-2009.met
Status Completed
Chk. Result

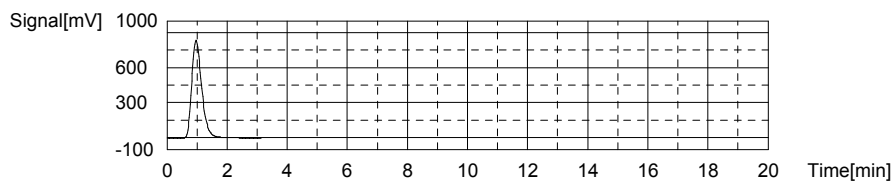
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:51.49mg/L TC:51.31mg/L IC:-0.1795mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1943	51.31mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 02:59:46 PM

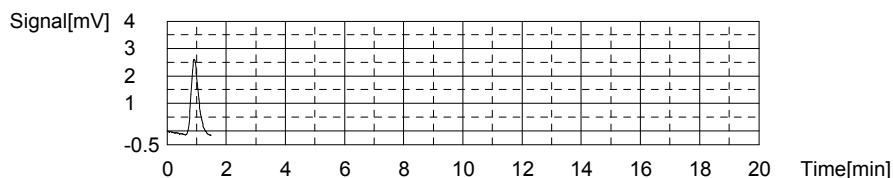
Mean Area 1943
Mean Conc. 51.31mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.748	-0.1795mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 03:04:11 PM

Mean Area 4.748
Mean Conc. -0.1795mg/L



Sample

Sample Name: CCV 10
Sample ID:
Origin: TOC-01-13-2009.met
Status Completed
Chk. Result

Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:10.28mg/L TC:10.13mg/L IC:-0.1569mg/L

1. Det

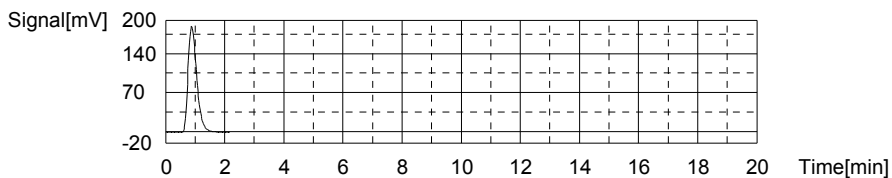
Anal.: TC

02/24/2009 10:43:46 AM

02-23-2009-DIH-TOC.t32

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	390.0	10.13mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 03:11:48 PM

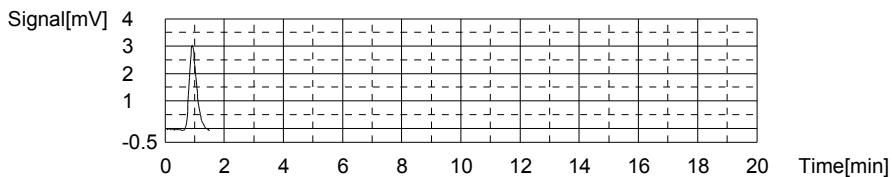
Mean Area 390.0
Mean Conc. 10.13mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.444	-0.1569mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 03:16:12 PM

Mean Area 5.444
Mean Conc. -0.1569mg/L



Sample

Sample Name: TIC 25
Sample ID: TOC-01-13-2009.met
Origin: Completed
Status: Completed
Chk. Result:

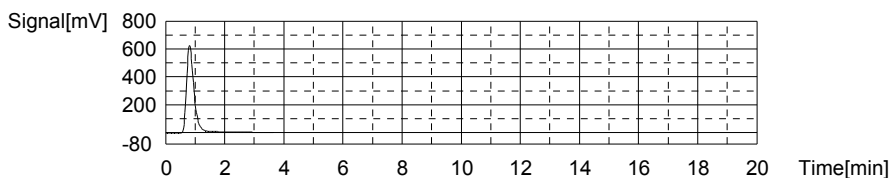
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.507mg/L TC:29.67mg/L IC:25.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1127	29.67mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 03:25:17 PM

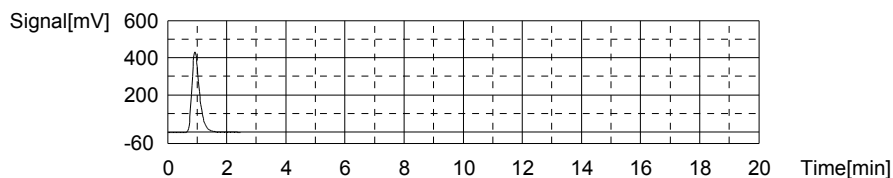
Mean Area 1127
Mean Conc. 29.67mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	782.9	25.17mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 03:30:57 PM

Mean Area 782.9
Mean Conc. 25.17mg/L



Sample

Sample Name: WG295582-01 BLANK
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

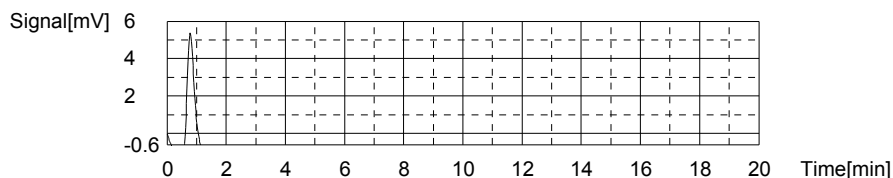
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1642mg/L TC:0.07885mg/L IC:-0.08539mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.10	0.07885mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 03:36:04 PM

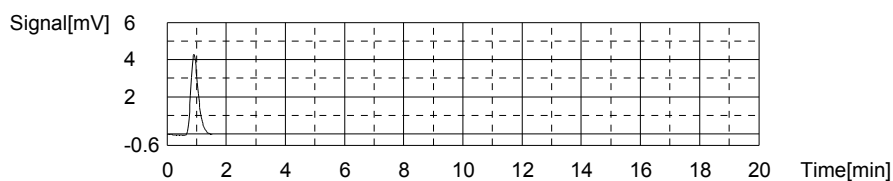
Mean Area 11.10
Mean Conc. 0.07885mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.638	-0.08539mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 03:40:03 PM

Mean Area 7.638
Mean Conc. -0.08539mg/L



Sample

Sample Name: WG295582-02 LCS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

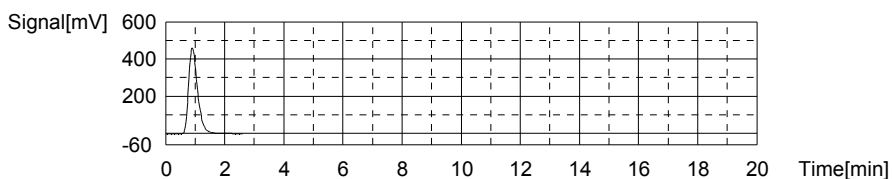
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.70mg/L TC:25.51mg/L IC:-0.1913mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	970.0	25.51mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 03:48:06 PM

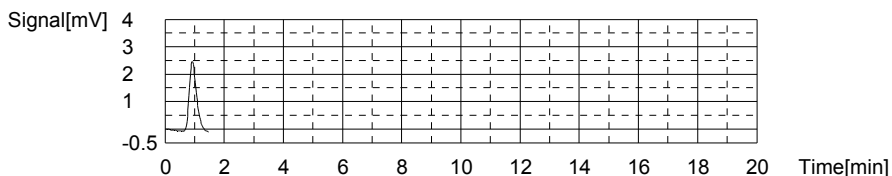
Mean Area 970.0
Mean Conc. 25.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.385	-0.1913mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 03:52:30 PM

Mean Area 4.385
Mean Conc. -0.1913mg/L



Sample

Sample Name: WG295582-03 LCSDUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

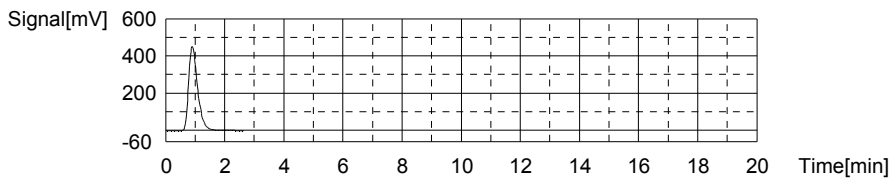
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.39mg/L TC:25.21mg/L IC:-0.1857mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	958.6	25.21mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 04:00:34 PM

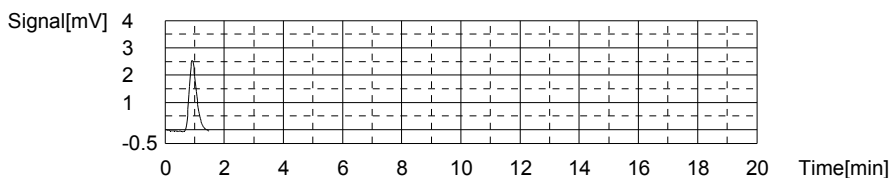
Mean Area 958.6
Mean Conc. 25.21mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.559	-0.1857mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 04:04:58 PM

Mean Area 4.559
Mean Conc. -0.1857mg/L



Sample

Sample Name: L09020438-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

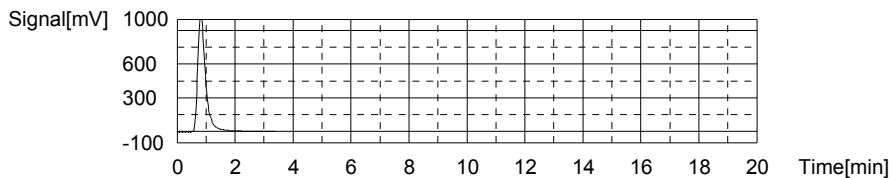
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.16mg/L TC:52.16mg/L IC:38.00mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1975	52.16mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 04:13:47 PM

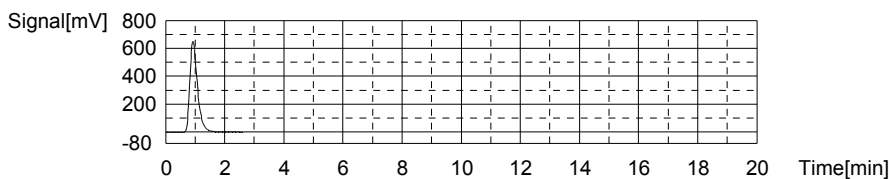
Mean Area 1975
Mean Conc. 52.16mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1177	38.00mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 04:19:46 PM

Mean Area 1177
Mean Conc. 38.00mg/L



Sample

Sample Name: L09020438-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

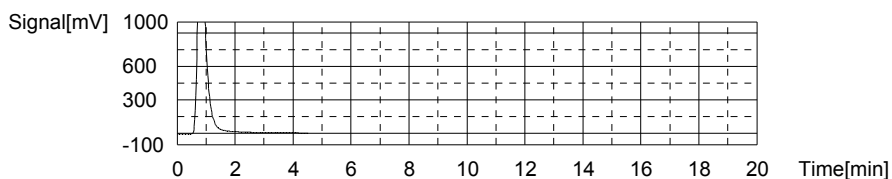
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.2265mg/L TC:84.81mg/L IC:85.04mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3206	84.81mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 04:29:43 PM

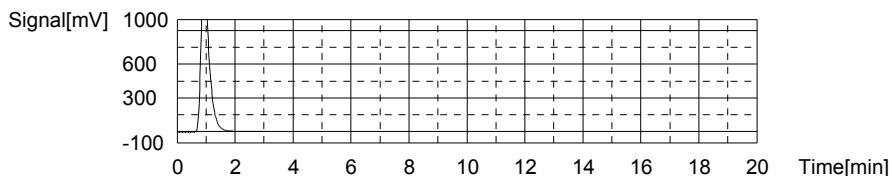
Mean Area 3206
Mean Conc. 84.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2621	85.04mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 04:36:32 PM

Mean Area 2621
Mean Conc. 85.04mg/L



Sample

Sample Name: L09020366-04 (2)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

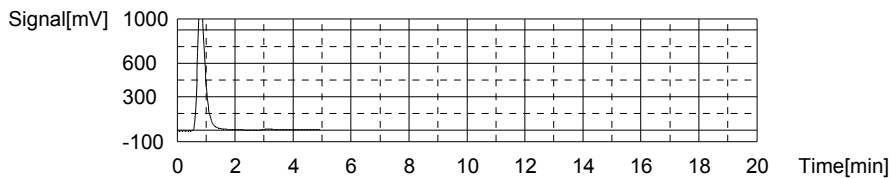
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.53mg/L TC:58.58mg/L IC:46.05mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2217	58.58mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 04:46:53 PM

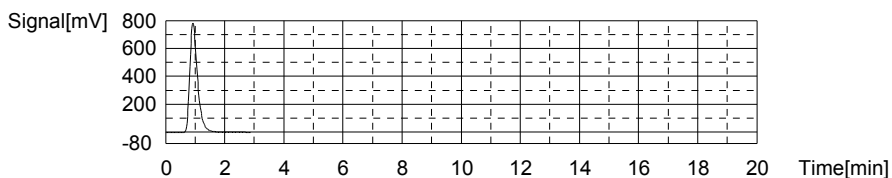
Mean Area 2217
Mean Conc. 58.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1424	46.05mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 04:53:27 PM

Mean Area 1424
Mean Conc. 46.05mg/L



Sample

Sample Name: L09020366-05
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

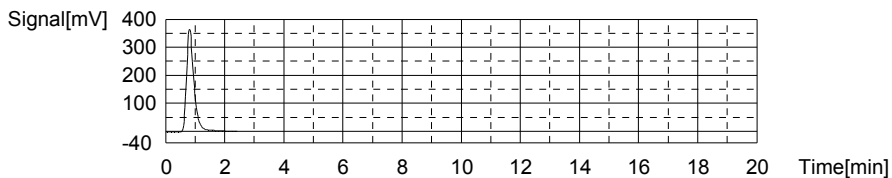
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.413mg/L TC:16.57mg/L IC:12.15mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	632.8	16.57mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 05:01:18 PM

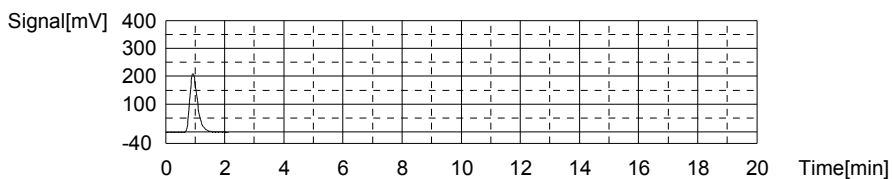
Mean Area 632.8
Mean Conc. 16.57mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	383.4	12.15mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 05:06:34 PM

Mean Area 383.4
Mean Conc. 12.15mg/L



Sample

Sample Name: L09020410-01 (15)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

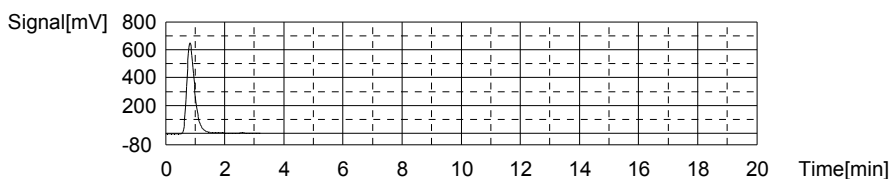
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.29mg/L TC:32.19mg/L IC:18.90mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1222	32.19mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 05:21:49 PM

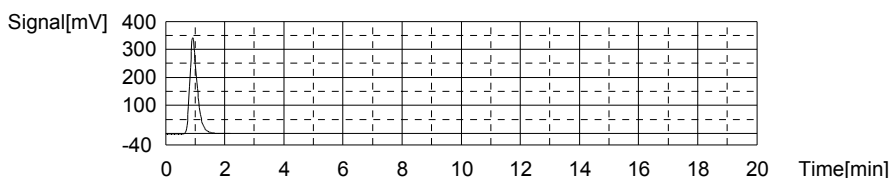
Mean Area 1222
Mean Conc. 32.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	590.6	18.90mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 05:27:15 PM

Mean Area 590.6
Mean Conc. 18.90mg/L



Sample

Sample Name: L09020410-02 (20)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

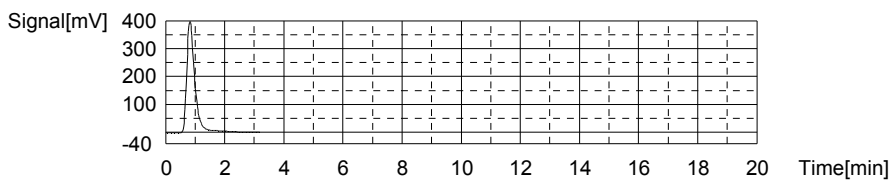
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.786mg/L TC:19.90mg/L IC:12.11mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	758.5	19.90mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 05:35:52 PM

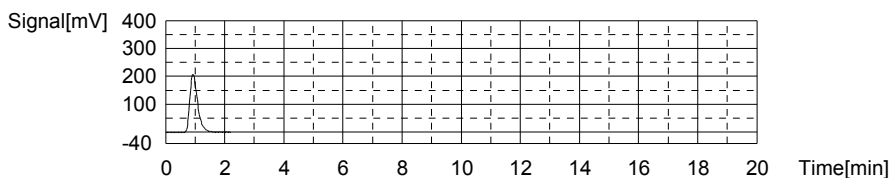
Mean Area 758.5
Mean Conc. 19.90mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	382.2	12.11mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 05:41:10 PM

Mean Area 382.2
Mean Conc. 12.11mg/L



Sample

Sample Name: L09020410-03 (10)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

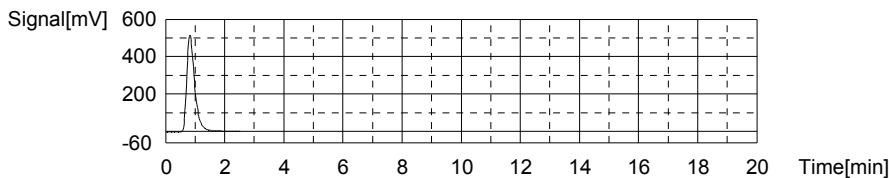
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.12mg/L TC:25.22mg/L IC:15.10mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	959.0	25.22mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 05:49:08 PM

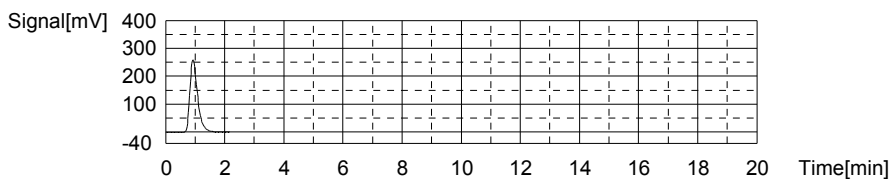
Mean Area 959.0
Mean Conc. 25.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	473.7	15.10mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 05:54:27 PM

Mean Area 473.7
Mean Conc. 15.10mg/L



Sample

Sample Name: L09020410-04 (4)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

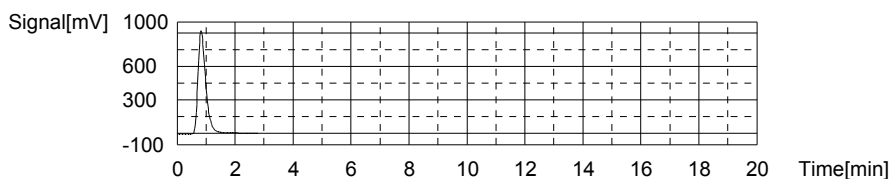
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:18.49mg/L TC:45.64mg/L IC:27.15mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1729	45.64mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 06:02:41 PM

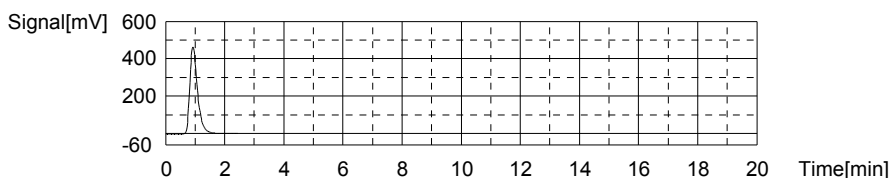
Mean Area 1729
Mean Conc. 45.64mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	843.9	27.15mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 06:08:25 PM

Mean Area 843.9
Mean Conc. 27.15mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

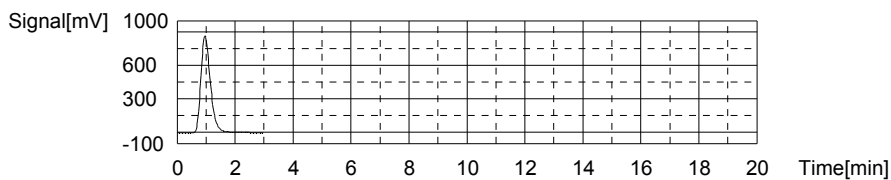
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:52.28mg/L TC:52.22mg/L IC:-0.06363mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1977	52.22mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 06:16:49 PM

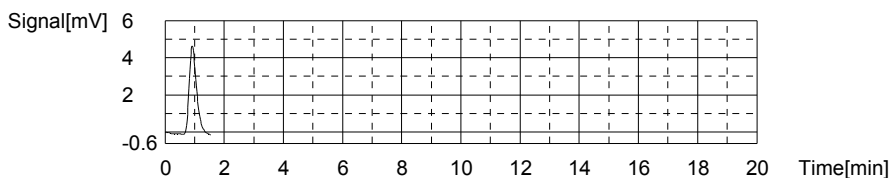
Mean Area 1977
Mean Conc. 52.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.306	-0.06363mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 06:21:18 PM

Mean Area 8.306
Mean Conc. -0.06363mg/L



Sample

Sample Name: CCB
Sample ID: TOC-01-13-2009.met
Origin: Completed
Status: Completed
Chk. Result

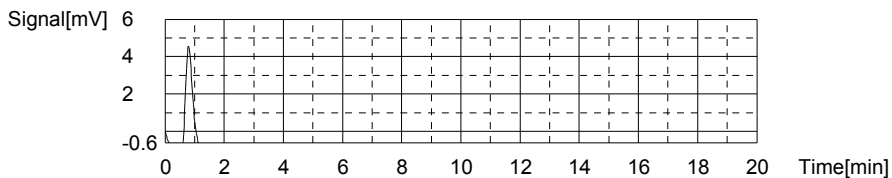
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1237mg/L TC:0.04673mg/L IC:-0.07695mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.889	0.04673mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 06:26:27 PM

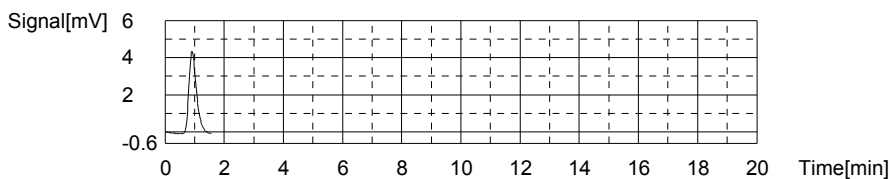
Mean Area 9.889
Mean Conc. 0.04673mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.897	-0.07695mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 06:30:28 PM

Mean Area 7.897
Mean Conc. -0.07695mg/L



Sample

Sample Name: L09020410-05 (5)
Sample ID: TOC-01-13-2009.met
Origin: Completed
Status: Completed
Chk. Result

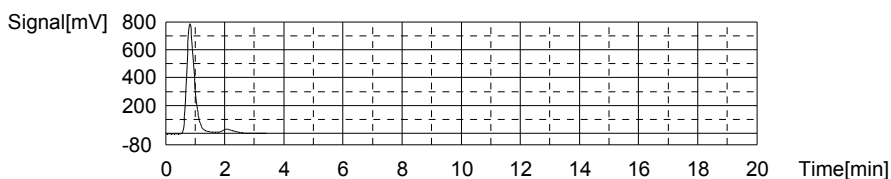
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.78mg/L TC:40.47mg/L IC:26.69mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1534	40.47mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 06:39:19 PM

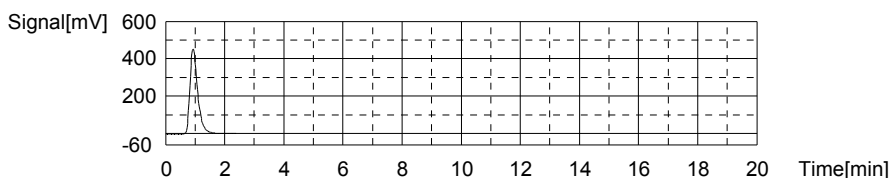
Mean Area 1534
Mean Conc. 40.47mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	829.7	26.69mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 06:44:51 PM

Mean Area 829.7
Mean Conc. 26.69mg/L



Sample

Sample Name: L09020410-06 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

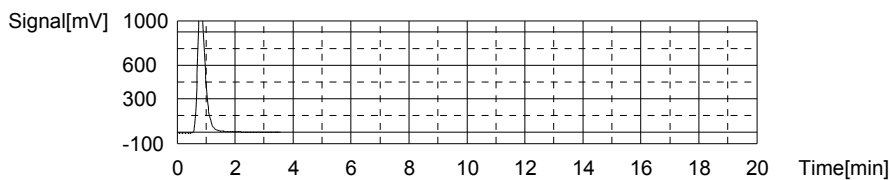
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.51mg/L TC:57.55mg/L IC:45.04mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2178	57.55mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 06:53:50 PM

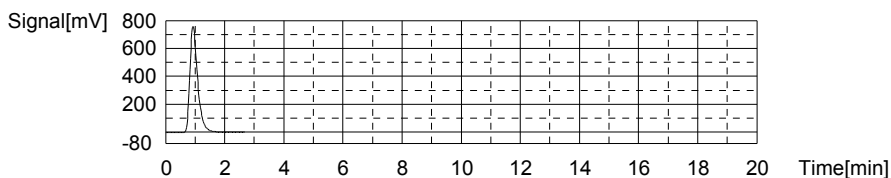
Mean Area 2178
Mean Conc. 57.55mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1393	45.04mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 07:00:01 PM

Mean Area 1393
Mean Conc. 45.04mg/L



Sample

Sample Name: L09020410-07
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

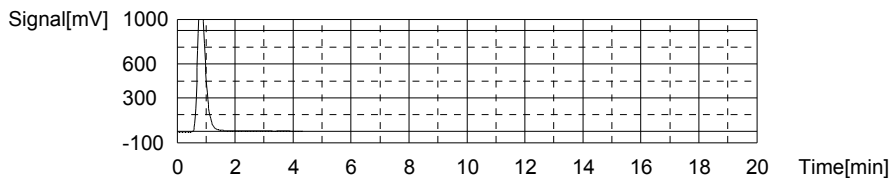
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.09mg/L TC:62.29mg/L IC:49.21mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2357	62.29mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 07:09:48 PM

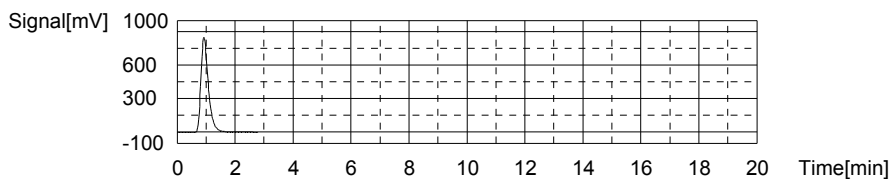
Mean Area 2357
Mean Conc. 62.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1521	49.21mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 07:16:09 PM

Mean Area 1521
Mean Conc. 49.21mg/L



Sample

Sample Name: L09020410-08 (10)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

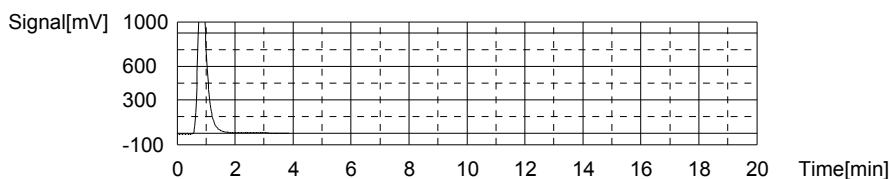
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:34.41mg/L TC:75.21mg/L IC:40.80mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2844	75.21mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 07:25:26 PM

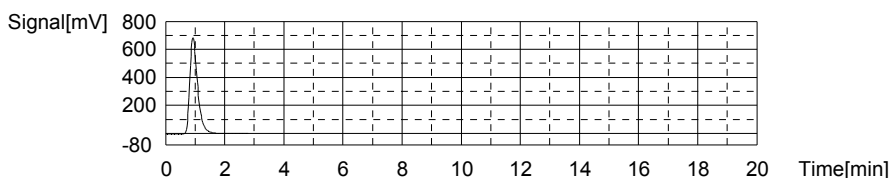
Mean Area 2844
Mean Conc. 75.21mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1263	40.80mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 07:31:41 PM

Mean Area 1263
Mean Conc. 40.80mg/L



Sample

Sample Name: L09020410-09 (10)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

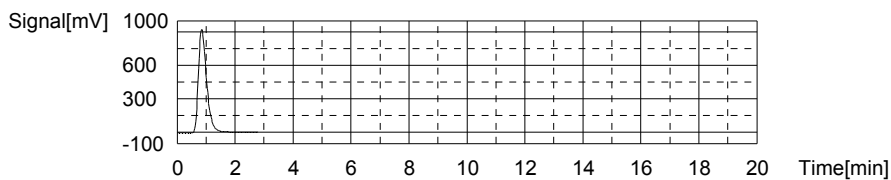
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.54mg/L TC:48.29mg/L IC:23.76mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1829	48.29mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 07:39:55 PM

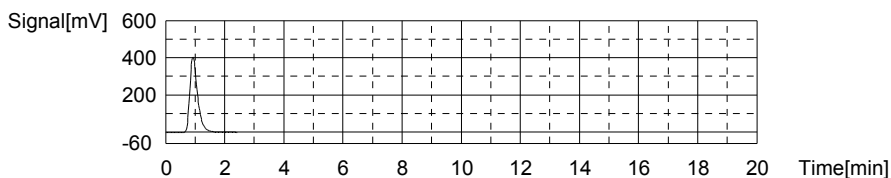
Mean Area 1829
Mean Conc. 48.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	739.6	23.76mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 07:45:39 PM

Mean Area 739.6
Mean Conc. 23.76mg/L



Sample

Sample Name: L09020410-10
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

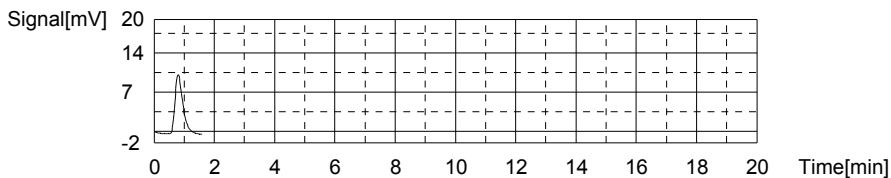
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3136mg/L TC:0.2953mg/L IC:-0.01829mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.26	0.2953mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 07:52:40 PM

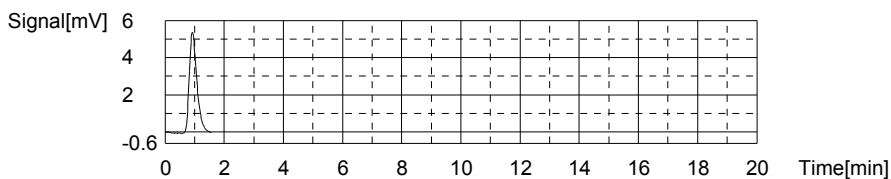
Mean Area 19.26
Mean Conc. 0.2953mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.698	-0.01829mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 07:57:11 PM

Mean Area 9.698
Mean Conc. -0.01829mg/L



Sample

Sample Name: L09020445-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

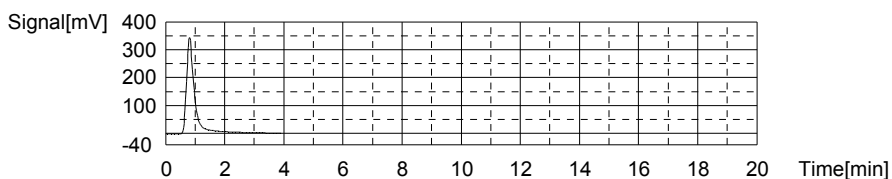
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.131mg/L TC:17.43mg/L IC:13.30mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	665.4	17.43mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 08:06:31 PM

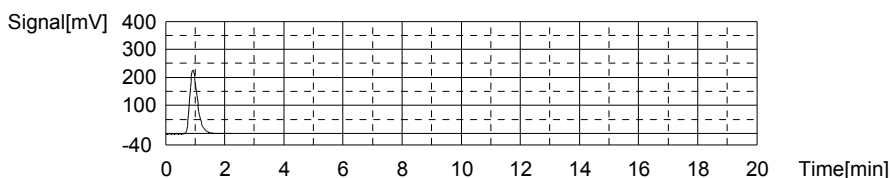
Mean Area 665.4
Mean Conc. 17.43mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	418.6	13.30mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 08:11:49 PM

Mean Area 418.6
Mean Conc. 13.30mg/L



Sample

Sample Name: L09020445-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

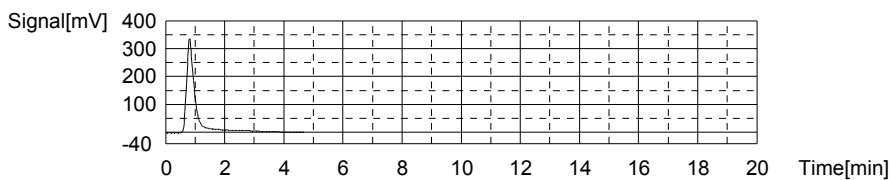
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.560mg/L TC:18.12mg/L IC:12.56mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	691.4	18.12mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 08:21:57 PM

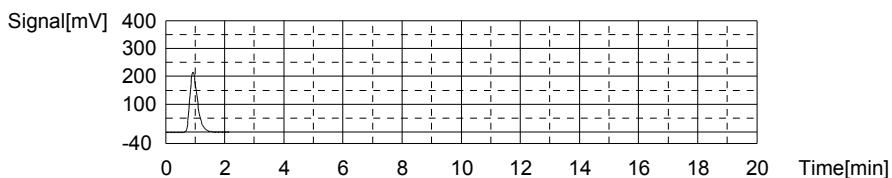
Mean Area 691.4
Mean Conc. 18.12mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	395.9	12.56mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 08:27:15 PM

Mean Area 395.9
Mean Conc. 12.56mg/L



Sample

Sample Name: L09020447-01 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

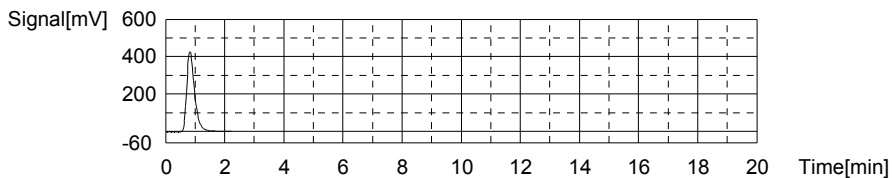
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.665mg/L TC:20.57mg/L IC:12.91mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	783.8	20.57mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 08:34:54 PM

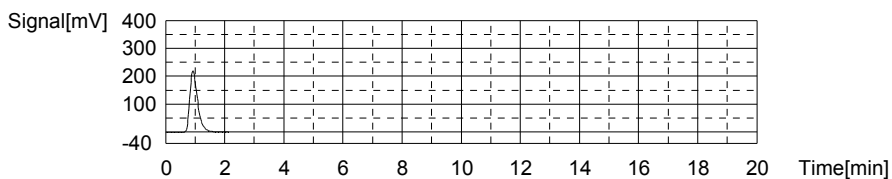
Mean Area 783.8
Mean Conc. 20.57mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	406.5	12.91mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 08:40:12 PM

Mean Area 406.5
Mean Conc. 12.91mg/L



Sample

Sample Name: L09020447-02 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

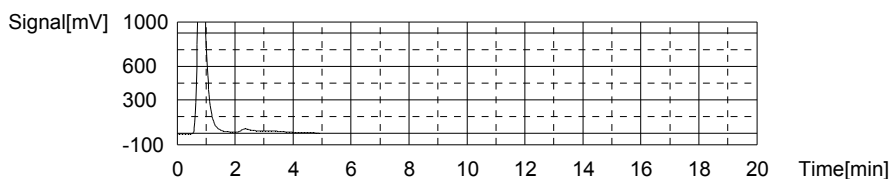
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.48mg/L TC:87.52mg/L IC:72.04mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3308	87.52mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 08:50:33 PM

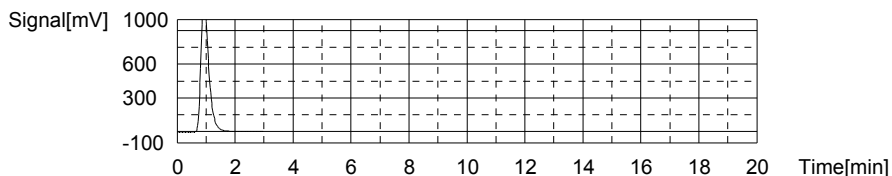
Mean Area 3308
Mean Conc. 87.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2222	72.04mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 08:57:12 PM

Mean Area 2222
Mean Conc. 72.04mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

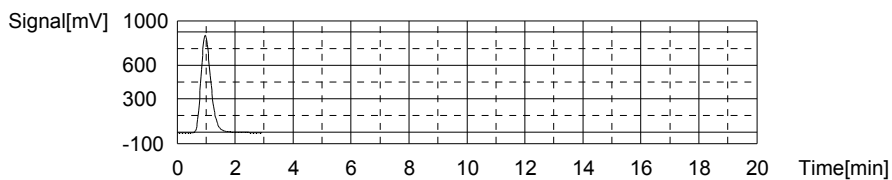
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:54.48mg/L TC:54.58mg/L IC:0.09969mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2066	54.58mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 09:05:34 PM

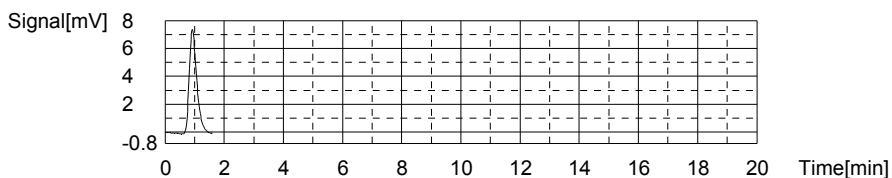
Mean Area 2066
Mean Conc. 54.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.32	0.09969mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 09:10:13 PM

Mean Area 13.32
Mean Conc. 0.09969mg/L



Sample

Sample Name: CCB
Sample ID: TOC-01-13-2009.met
Origin: Completed
Status: Completed
Chk. Result

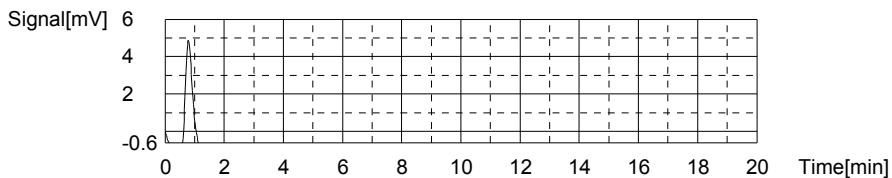
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1086mg/L TC:0.05843mg/L IC:-0.05021mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.33	0.05843mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 09:15:17 PM

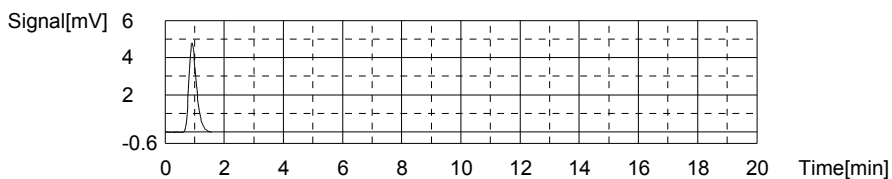
Mean Area 10.33
Mean Conc. 0.05843mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.718	-0.05021mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 09:19:17 PM

Mean Area 8.718
Mean Conc. -0.05021mg/L



Sample

Sample Name: L09020447-03 (5)
Sample ID: TOC-01-13-2009.met
Origin: Completed
Status: Completed
Chk. Result

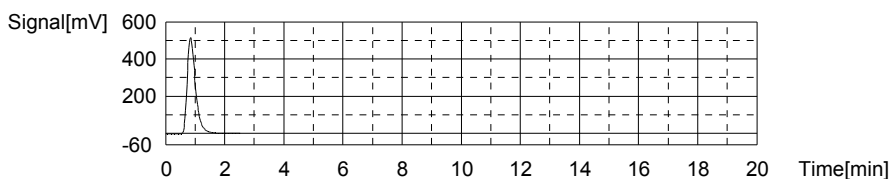
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.69mg/L TC:26.57mg/L IC:11.88mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1010	26.57mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 09:27:16 PM

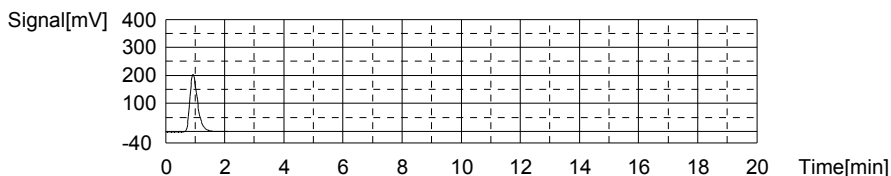
Mean Area 1010
Mean Conc. 26.57mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	374.9	11.88mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 09:32:31 PM

Mean Area 374.9
Mean Conc. 11.88mg/L



Sample

Sample Name: L09020447-04 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

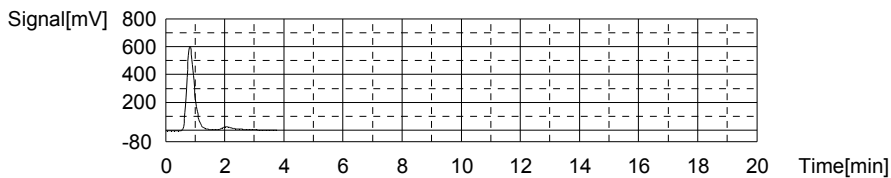
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.42mg/L TC:31.48mg/L IC:18.06mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1195	31.48mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 09:41:44 PM

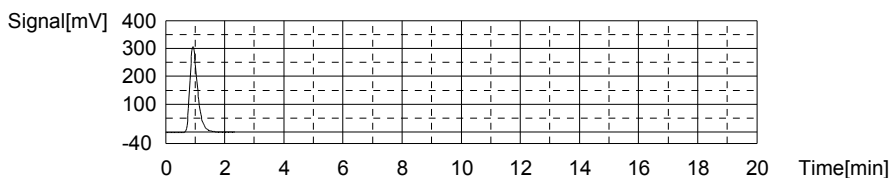
Mean Area 1195
Mean Conc. 31.48mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	564.6	18.06mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 09:47:14 PM

Mean Area 564.6
Mean Conc. 18.06mg/L



Sample

Sample Name: WG295582-05 DUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

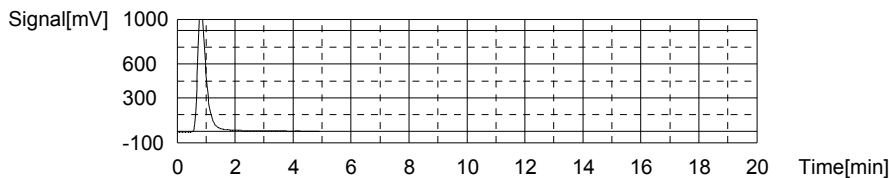
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.76mg/L TC:61.92mg/L IC:51.16mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2343	61.92mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 09:57:36 PM

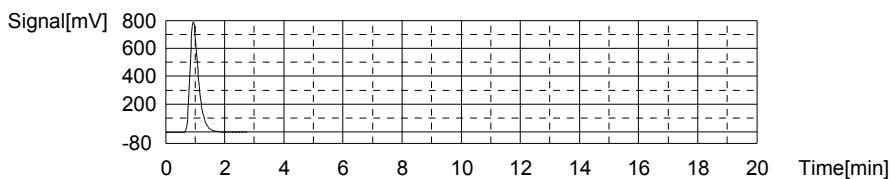
Mean Area 2343
Mean Conc. 61.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1581	51.16mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 10:03:52 PM

Mean Area 1581
Mean Conc. 51.16mg/L



Sample

Sample Name: WG295582-06 MS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

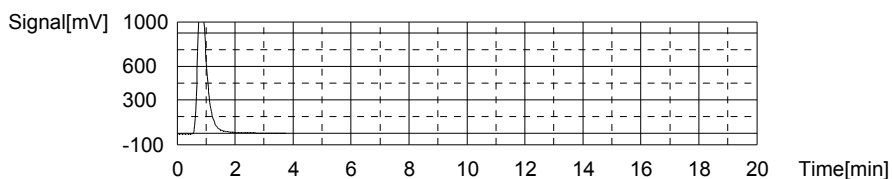
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.01mg/L TC:73.14mg/L IC:58.13mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2766	73.14mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 10:13:05 PM

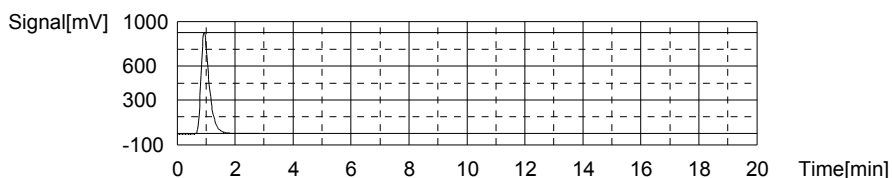
Mean Area 2766
Mean Conc. 73.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1795	58.13mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 10:19:28 PM

Mean Area 1795
Mean Conc. 58.13mg/L



Sample

Sample Name: WG295583-01 BLANK
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

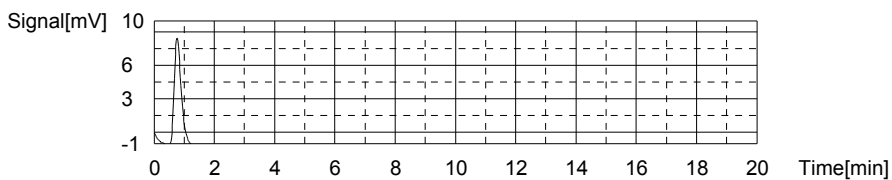
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.1004mg/L TC:0.2027mg/L IC:0.1023mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.77	0.2027mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 10:24:41 PM

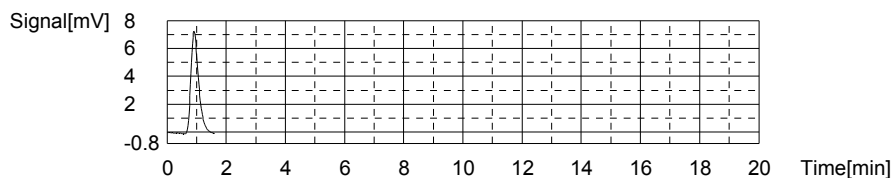
Mean Area 15.77
Mean Conc. 0.2027mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.40	0.1023mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 10:28:55 PM

Mean Area 13.40
Mean Conc. 0.1023mg/L



Sample

Sample Name: WG295583-02 LCS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

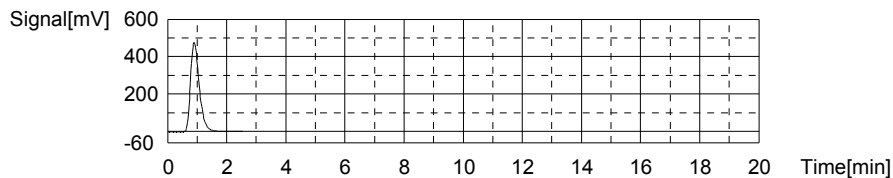
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.96mg/L TC:25.92mg/L IC:-0.04077mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	985.3	25.92mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 10:36:55 PM

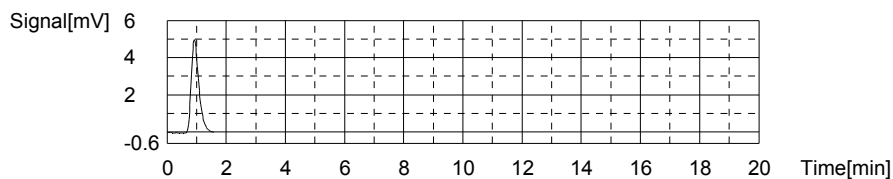
Mean Area 985.3
Mean Conc. 25.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.008	-0.04077mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 10:41:26 PM

Mean Area 9.008
Mean Conc. -0.04077mg/L



Sample

Sample Name: WG295583-03 LCSDUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

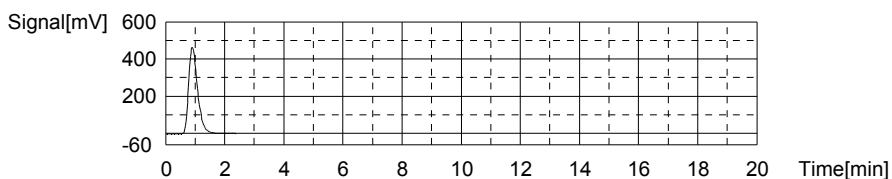
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.85mg/L TC:25.74mg/L IC:-0.1098mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	978.6	25.74mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 10:49:16 PM

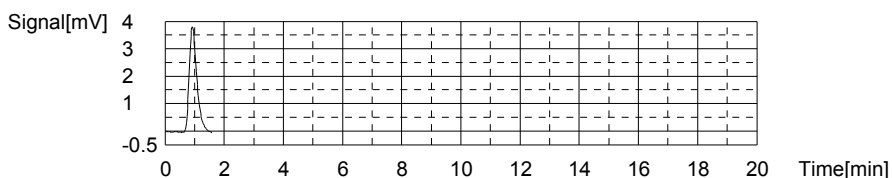
Mean Area 978.6
Mean Conc. 25.74mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.889	-0.1098mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 10:53:45 PM

Mean Area 6.889
Mean Conc. -0.1098mg/L



Sample

Sample Name: L09020447-05 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

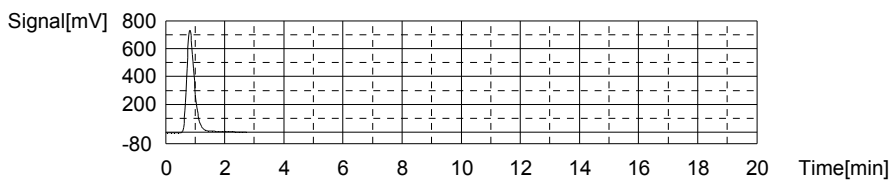
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.24mg/L TC:35.19mg/L IC:24.95mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1335	35.19mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 11:01:57 PM

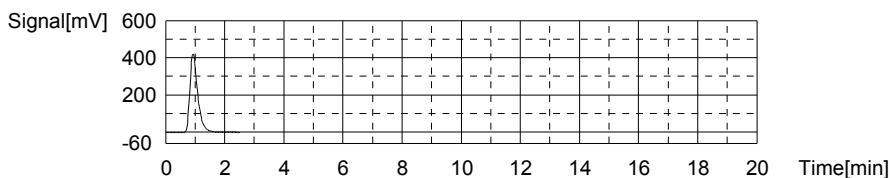
Mean Area 1335
Mean Conc. 35.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	776.3	24.95mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 11:07:38 PM

Mean Area 776.3
Mean Conc. 24.95mg/L



Sample

Sample Name: L09020447-06 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

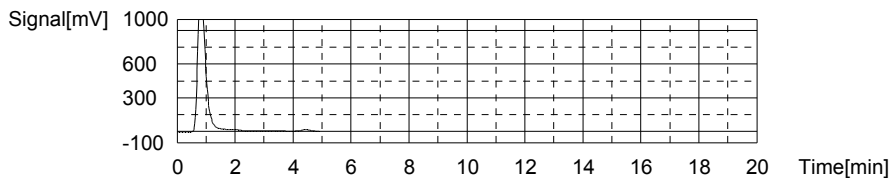
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:30.38mg/L TC:66.43mg/L IC:36.05mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2513	66.43mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 11:18:00 PM

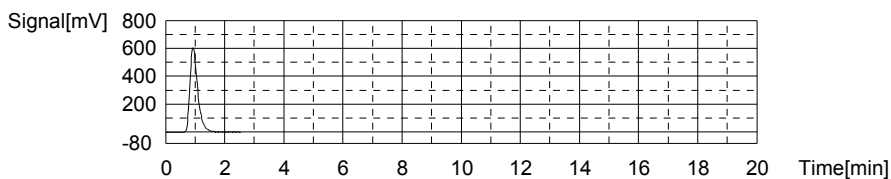
Mean Area 2513
Mean Conc. 66.43mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1117	36.05mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 11:23:55 PM

Mean Area 1117
Mean Conc. 36.05mg/L



Sample

Sample Name: L09020447-07
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

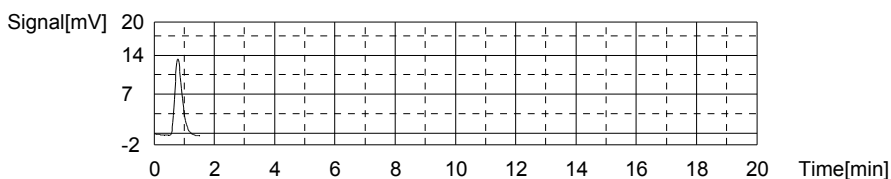
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.3452mg/L TC:0.4032mg/L IC:0.05799mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.33	0.4032mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 11:30:54 PM

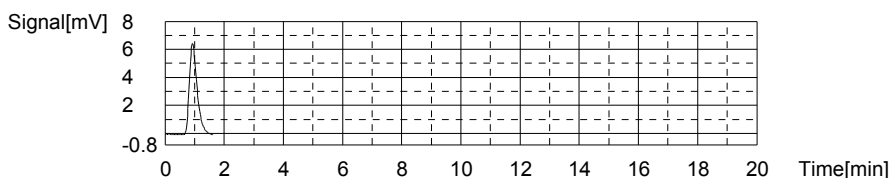
Mean Area 23.33
Mean Conc. 0.4032mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.04	0.05799mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 11:35:31 PM

Mean Area 12.04
Mean Conc. 0.05799mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

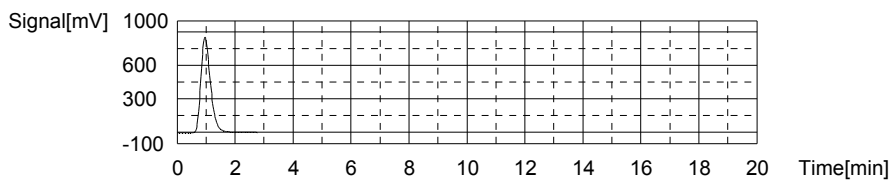
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:52.11mg/L TC:52.00mg/L IC:-0.1056mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1969	52.00mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/23/2009 11:43:52 PM

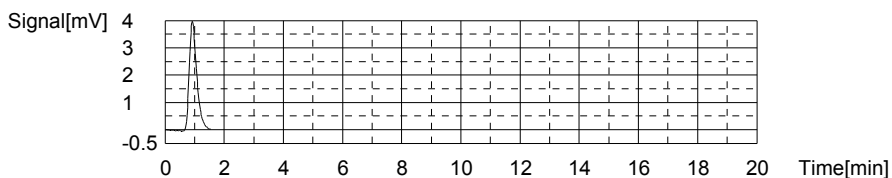
Mean Area 1969
Mean Conc. 52.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.019	-0.1056mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/23/2009 11:48:19 PM

Mean Area 7.019
Mean Conc. -0.1056mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

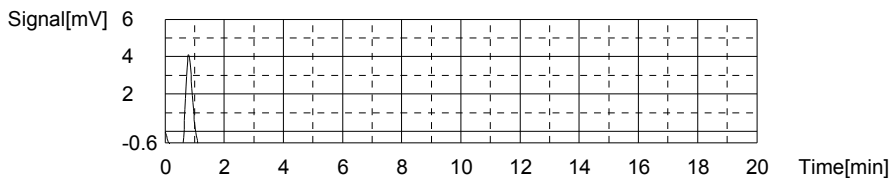
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1080mg/L TC:0.02761mg/L IC:-0.08037mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.168	0.02761mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/23/2009 11:53:24 PM

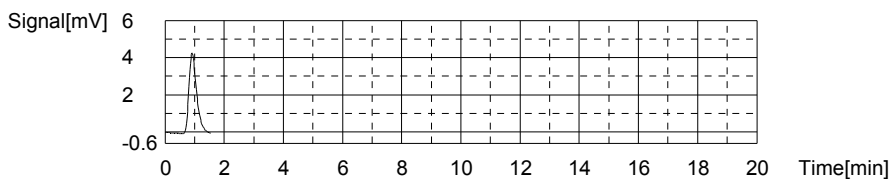
Mean Area 9.168
Mean Conc. 0.02761mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.792	-0.08037mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/23/2009 11:57:25 PM

Mean Area 7.792
Mean Conc. -0.08037mg/L



Sample

Sample Name: L09020455-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

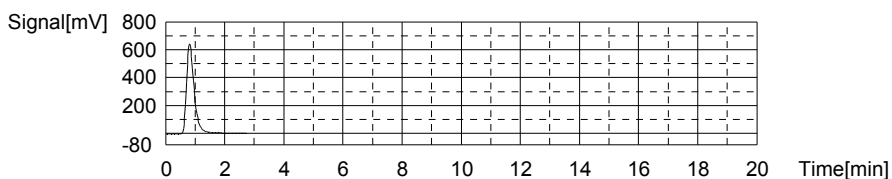
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.113mg/L TC:30.20mg/L IC:26.09mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1147	30.20mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 12:05:46 AM

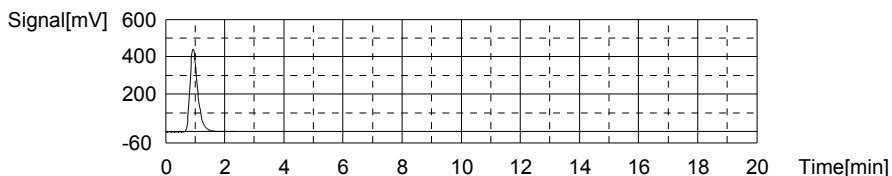
Mean Area 1147
Mean Conc. 30.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	811.3	26.09mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 12:11:25 AM

Mean Area 811.3
Mean Conc. 26.09mg/L



Sample

Sample Name: WG295583-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

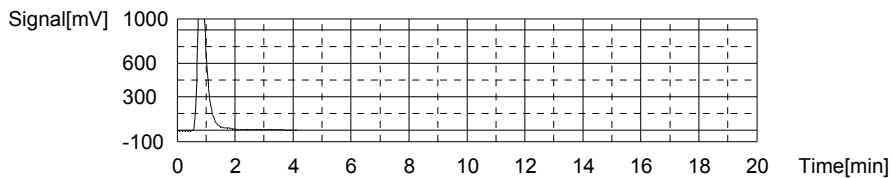
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:16.93mg/L TC:76.27mg/L IC:59.34mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2884	76.27mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 12:21:01 AM

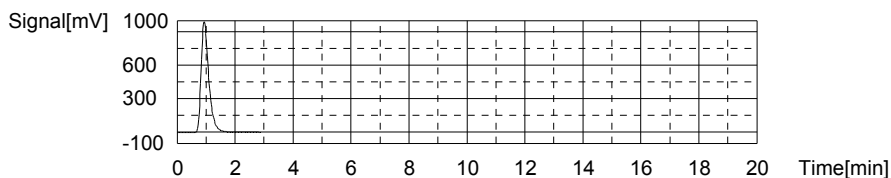
Mean Area 2884
Mean Conc. 76.27mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1832	59.34mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 12:27:20 AM

Mean Area 1832
Mean Conc. 59.34mg/L



Sample

Sample Name: WG295583-05 DUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

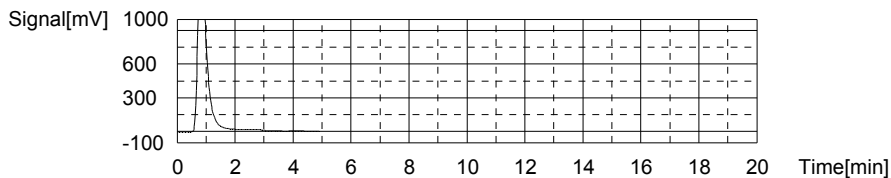
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:20.01mg/L TC:85.08mg/L IC:65.07mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3216	85.08mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 12:37:42 AM

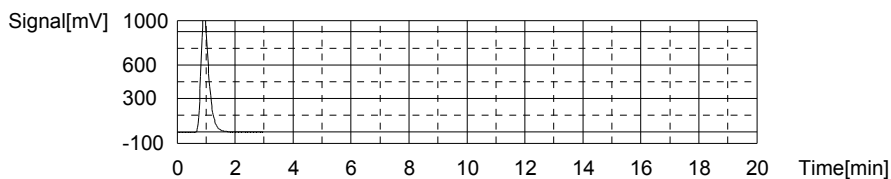
Mean Area 3216
Mean Conc. 85.08mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2008	65.07mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 12:44:20 AM

Mean Area 2008
Mean Conc. 65.07mg/L



Sample

Sample Name: L09020455-05 MS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

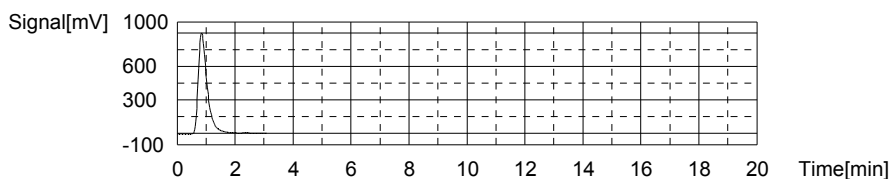
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:27.03mg/L TC:51.50mg/L IC:24.47mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1950	51.50mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 12:52:53 AM

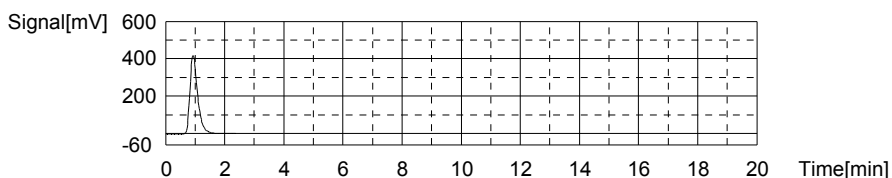
Mean Area 1950
Mean Conc. 51.50mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	761.6	24.47mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 12:58:39 AM

Mean Area 761.6
Mean Conc. 24.47mg/L



Sample

Sample Name: L09020455-06 MSD
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

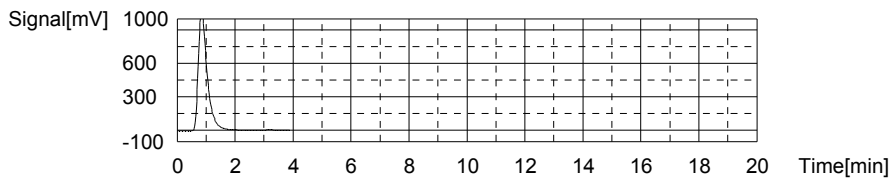
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:30.96mg/L TC:61.34mg/L IC:30.38mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2321	61.34mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 01:07:59 AM

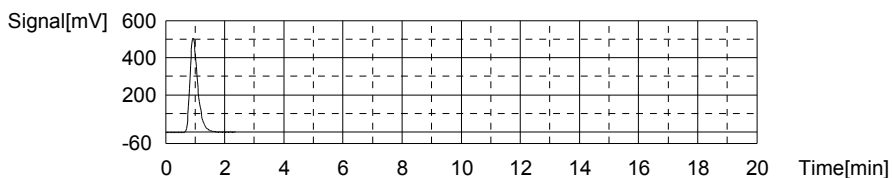
Mean Area 2321
Mean Conc. 61.34mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	943.0	30.38mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 01:13:48 AM

Mean Area 943.0
Mean Conc. 30.38mg/L



Sample

Sample Name: L09020455-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

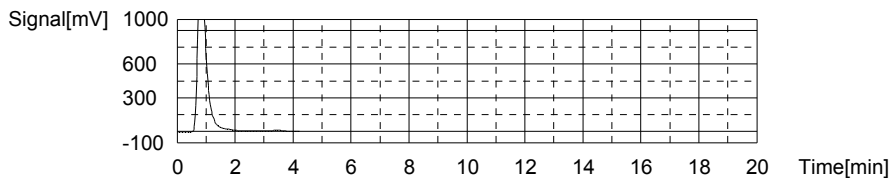
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:16.09mg/L TC:77.25mg/L IC:61.16mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2921	77.25mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 01:23:28 AM

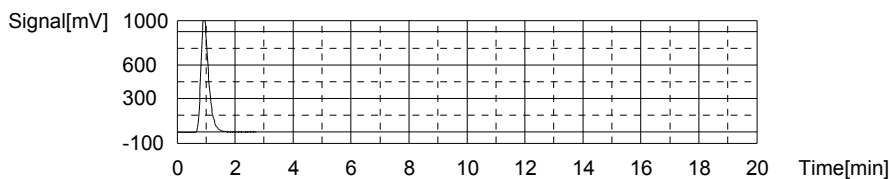
Mean Area 2921
Mean Conc. 77.25mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1888	61.16mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 01:29:50 AM

Mean Area 1888
Mean Conc. 61.16mg/L



Sample

Sample Name: L09020460-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

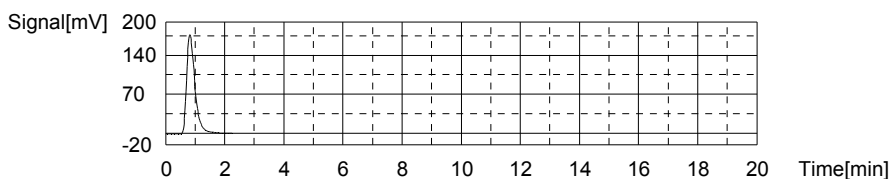
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.035mg/L TC:8.987mg/L IC:5.952mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	347.0	8.987mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 01:37:33 AM

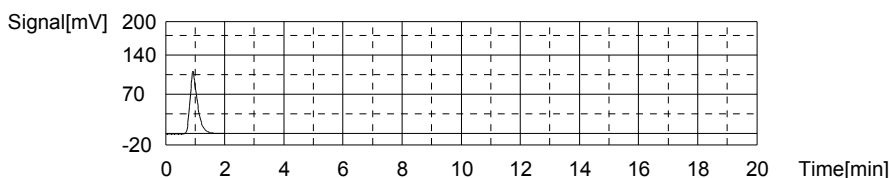
Mean Area 347.0
Mean Conc. 8.987mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	193.0	5.952mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 01:42:42 AM

Mean Area 193.0
Mean Conc. 5.952mg/L



Sample

Sample Name: L09020460-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

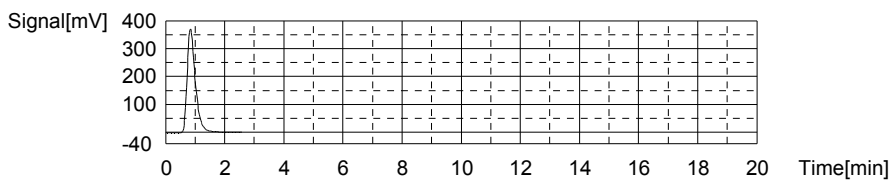
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.782mg/L TC:18.80mg/L IC:10.02mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	717.1	18.80mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 01:50:44 AM

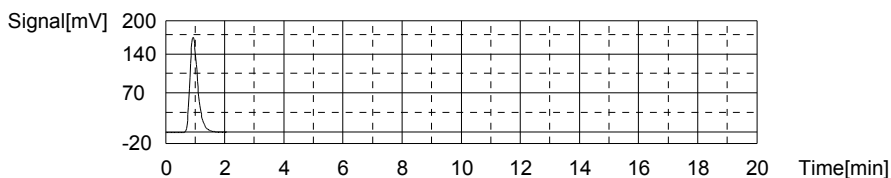
Mean Area 717.1
Mean Conc. 18.80mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	317.9	10.02mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 01:55:55 AM

Mean Area 317.9
Mean Conc. 10.02mg/L



Sample

Sample Name: L09020460-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

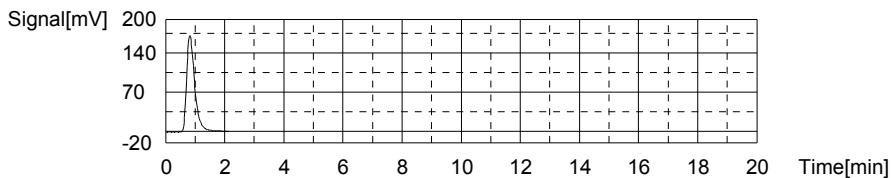
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.579mg/L TC:8.361mg/L IC:5.783mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	323.4	8.361mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 02:03:31 AM

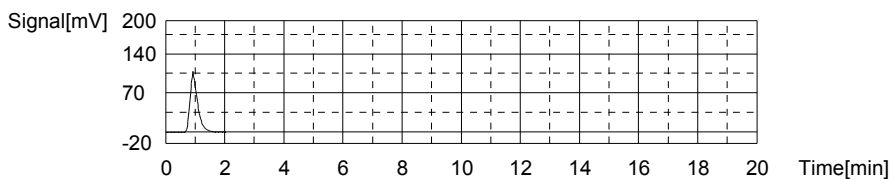
Mean Area 323.4
Mean Conc. 8.361mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	187.8	5.783mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 02:08:37 AM

Mean Area 187.8
Mean Conc. 5.783mg/L



Sample

Sample Name: L09020460-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

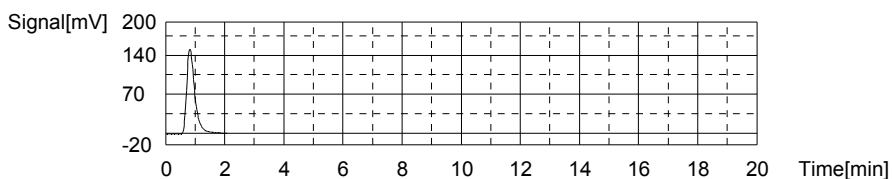
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.143mg/L TC:7.401mg/L IC:5.258mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	287.2	7.401mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 02:16:11 AM

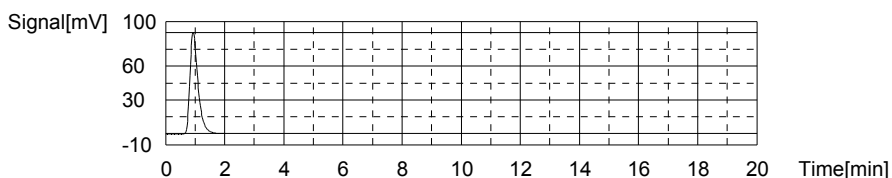
Mean Area 287.2
Mean Conc. 7.401mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	171.7	5.258mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 02:21:13 AM

Mean Area 171.7
Mean Conc. 5.258mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

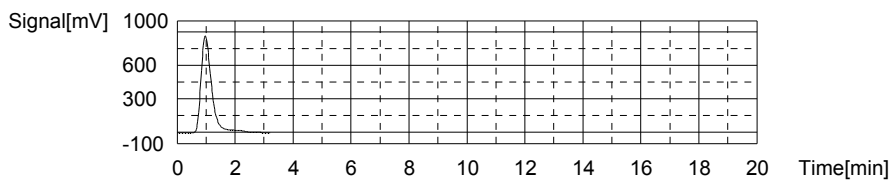
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:58.47mg/L TC:58.37mg/L IC:-0.09741mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2209	58.37mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 02:29:57 AM

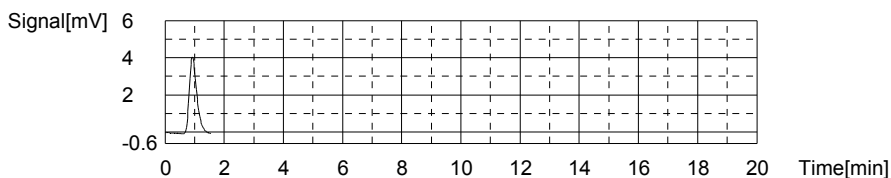
Mean Area 2209
Mean Conc. 58.37mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.269	-0.09741mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 02:34:26 AM

Mean Area 7.269
Mean Conc. -0.09741mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

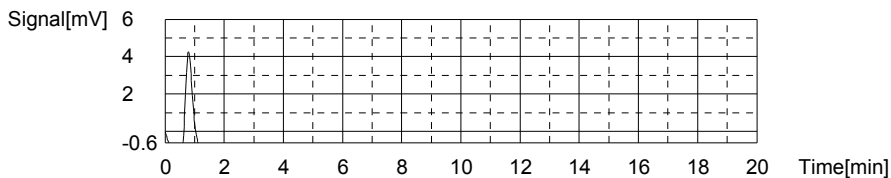
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1036mg/L TC:0.02822mg/L IC:-0.07539mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.191	0.02822mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 02:39:31 AM

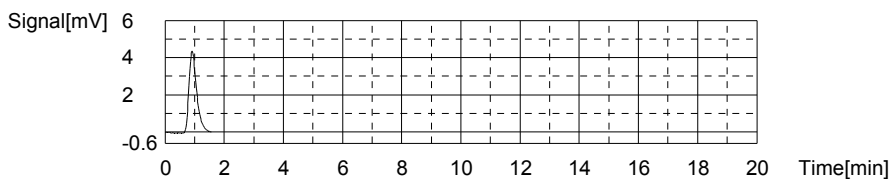
Mean Area 9.191
Mean Conc. 0.02822mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.945	-0.07539mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 02:43:31 AM

Mean Area 7.945
Mean Conc. -0.07539mg/L



Sample

Sample Name: L09020460-05
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

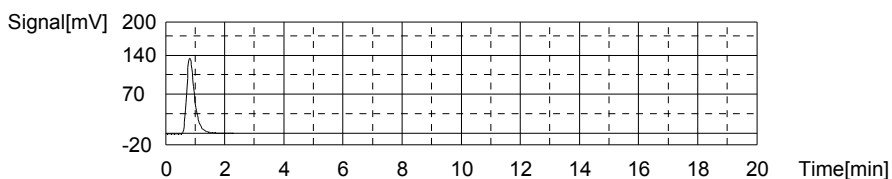
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.585mg/L TC:6.577mg/L IC:4.991mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	256.1	6.577mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 02:51:30 AM

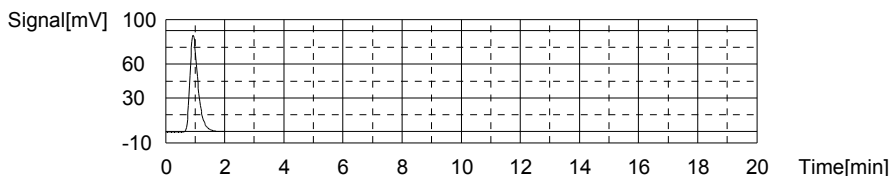
Mean Area 256.1
Mean Conc. 6.577mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	163.5	4.991mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 02:56:31 AM

Mean Area 163.5
Mean Conc. 4.991mg/L



Sample

Sample Name: L09020460-06
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

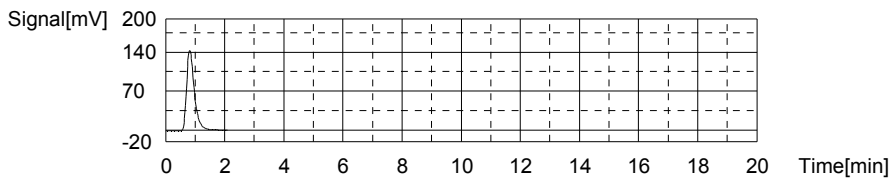
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.676mg/L TC:6.720mg/L IC:5.043mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	261.5	6.720mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 03:04:04 AM

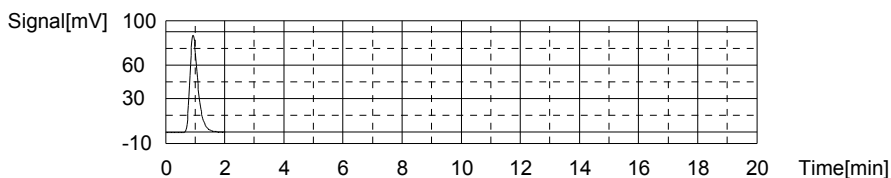
Mean Area 261.5
Mean Conc. 6.720mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	165.1	5.043mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 03:09:07 AM

Mean Area 165.1
Mean Conc. 5.043mg/L



Sample

Sample Name: L09020468-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

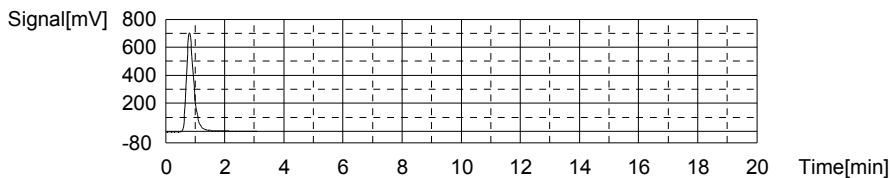
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.915mg/L TC:32.33mg/L IC:28.41mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1227	32.33mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 03:17:40 AM

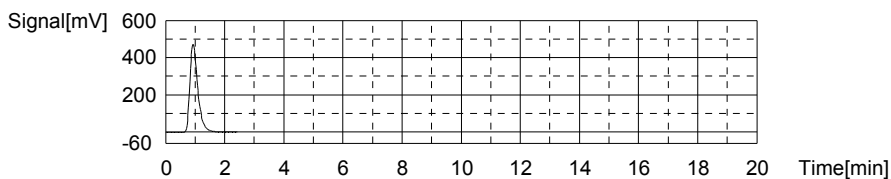
Mean Area 1227
Mean Conc. 32.33mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	882.5	28.41mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 03:23:23 AM

Mean Area 882.5
Mean Conc. 28.41mg/L



Sample

Sample Name: L09020468-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

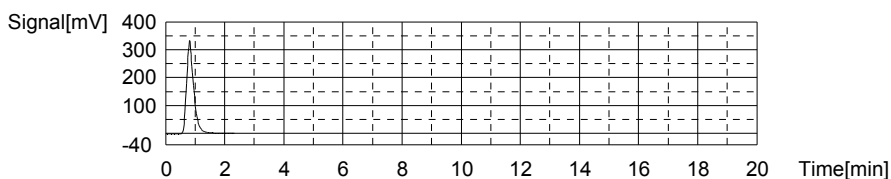
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.197mg/L TC:14.29mg/L IC:12.09mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	546.8	14.29mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 03:31:11 AM

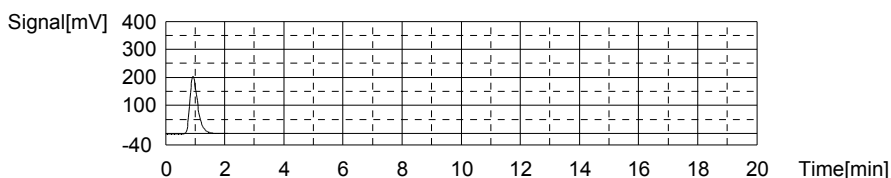
Mean Area 546.8
Mean Conc. 14.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	381.4	12.09mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 03:36:26 AM

Mean Area 381.4
Mean Conc. 12.09mg/L



Sample

Sample Name: L09020468-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

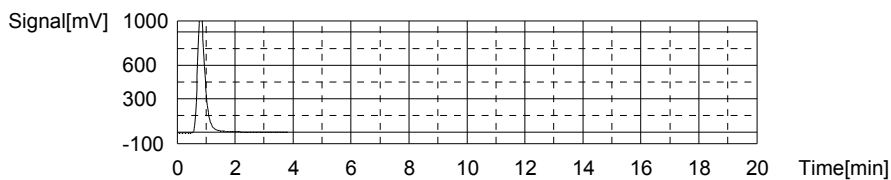
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.929mg/L TC:51.37mg/L IC:46.44mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1945	51.37mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 03:45:43 AM

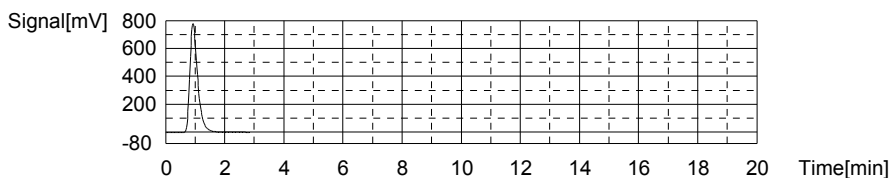
Mean Area 1945
Mean Conc. 51.37mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1436	46.44mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 03:51:59 AM

Mean Area 1436
Mean Conc. 46.44mg/L



Sample

Sample Name: L09020469-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

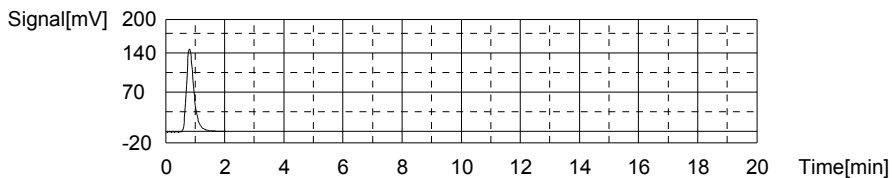
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.504mg/L TC:6.659mg/L IC:5.154mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	259.2	6.659mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 03:59:30 AM

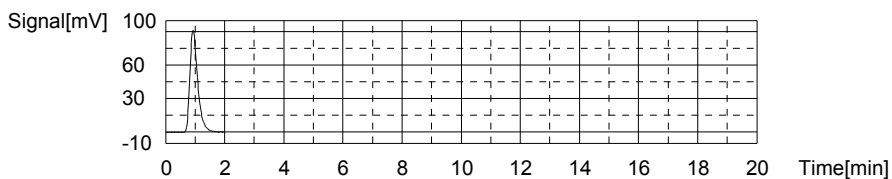
Mean Area 259.2
Mean Conc. 6.659mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	168.5	5.154mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 04:04:35 AM

Mean Area 168.5
Mean Conc. 5.154mg/L



Sample

Sample Name: L09020469-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

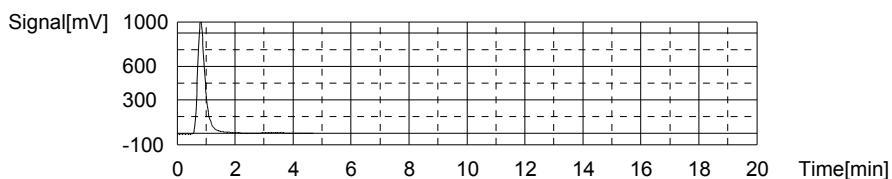
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.876mg/L TC:49.67mg/L IC:39.79mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1881	49.67mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 04:14:44 AM

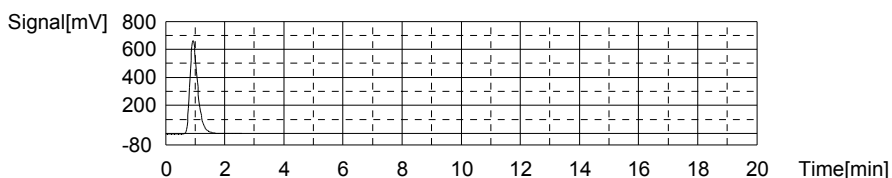
Mean Area 1881
Mean Conc. 49.67mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1232	39.79mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 04:20:45 AM

Mean Area 1232
Mean Conc. 39.79mg/L



Sample

Sample Name: L09020469-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

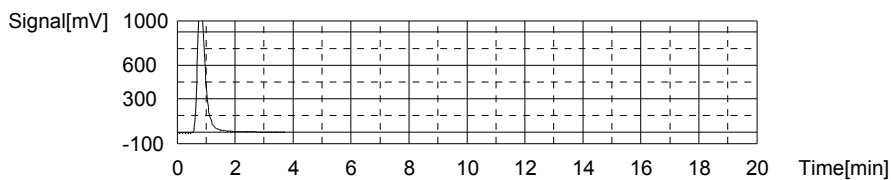
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.267mg/L TC:61.05mg/L IC:51.78mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2310	61.05mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 04:29:57 AM

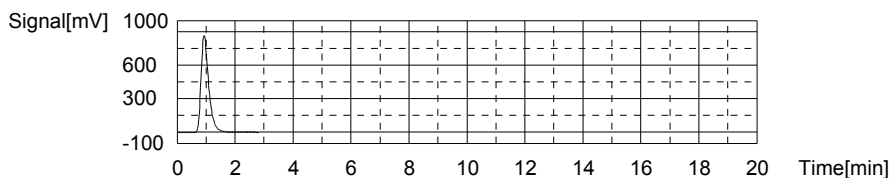
Mean Area 2310
Mean Conc. 61.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1600	51.78mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 04:36:21 AM

Mean Area 1600
Mean Conc. 51.78mg/L



Sample

Sample Name: L09020485-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

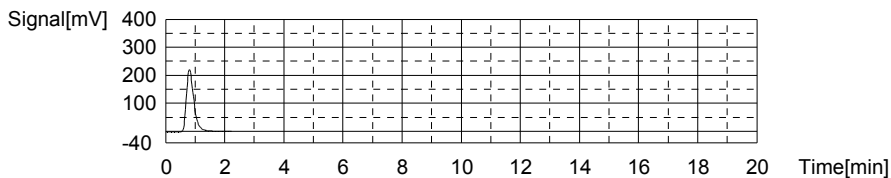
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.438mg/L TC:10.02mg/L IC:8.584mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	386.0	10.02mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 04:44:03 AM

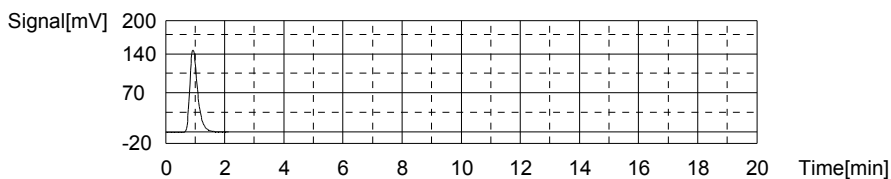
Mean Area 386.0
Mean Conc. 10.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	273.8	8.584mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 04:49:20 AM

Mean Area 273.8
Mean Conc. 8.584mg/L



Sample

Sample Name: L09020485-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

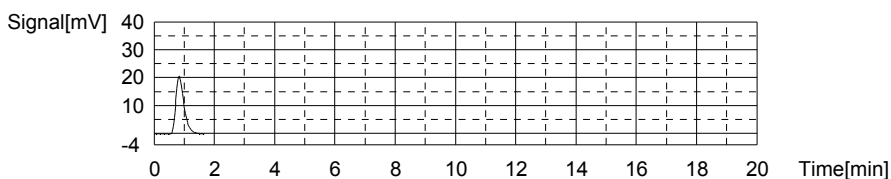
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.7710mg/L TC:0.8198mg/L IC:0.04887mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.04	0.8198mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 04:56:29 AM

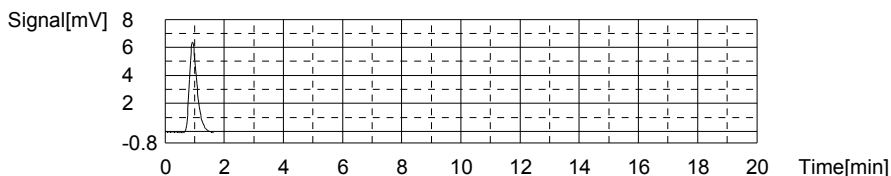
Mean Area 39.04
Mean Conc. 0.8198mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.76	0.04887mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 05:01:04 AM

Mean Area 11.76
Mean Conc. 0.04887mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

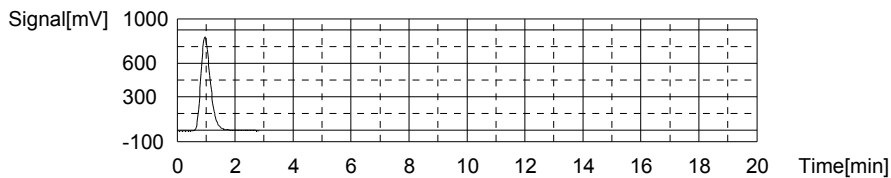
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:50.98mg/L TC:50.89mg/L IC:-0.09431mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1927	50.89mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 05:09:35 AM

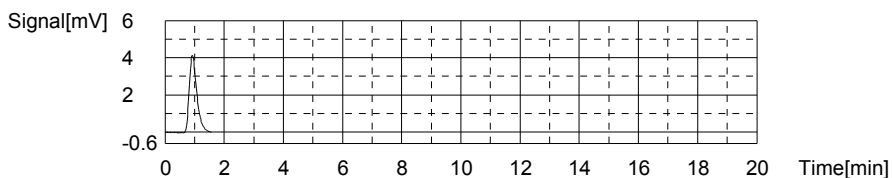
Mean Area 1927
Mean Conc. 50.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.364	-0.09431mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 05:14:06 AM

Mean Area 7.364
Mean Conc. -0.09431mg/L



Sample

Sample Name: WG295584-01 BLANK
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

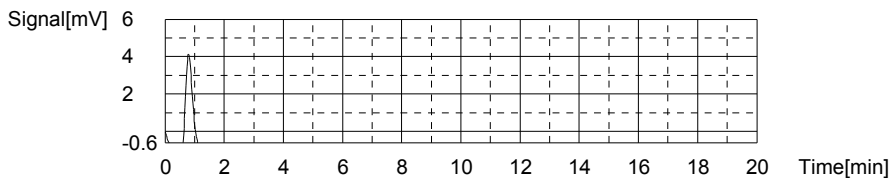
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.09839mg/L TC:0.02355mg/L IC:-0.07484mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.015	0.02355mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 05:19:09 AM

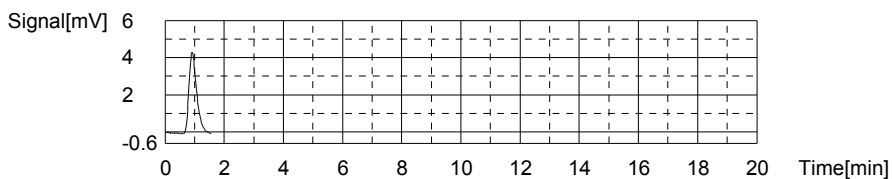
Mean Area 9.015
Mean Conc. 0.02355mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.962	-0.07484mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 05:23:14 AM

Mean Area 7.962
Mean Conc. -0.07484mg/L



Sample

Sample Name: WG295584-02 LCS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

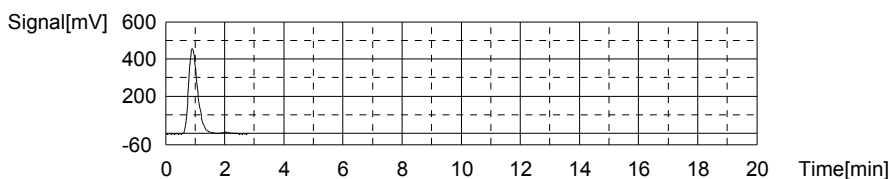
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.90mg/L TC:25.79mg/L IC:-0.1076mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	980.5	25.79mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 05:31:29 AM

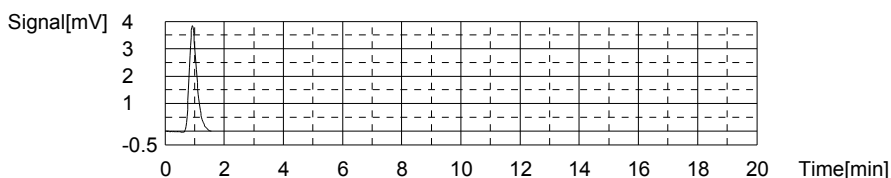
Mean Area 980.5
Mean Conc. 25.79mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.957	-0.1076mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 05:35:58 AM

Mean Area 6.957
Mean Conc. -0.1076mg/L



Sample

Sample Name: WG295584-03 LCSDUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

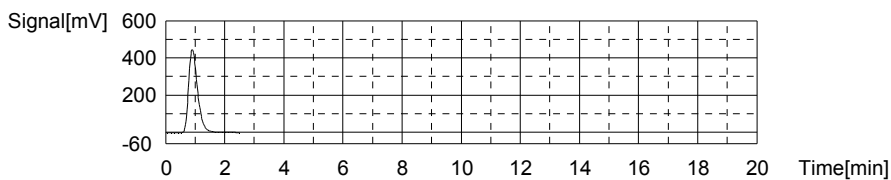
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.83mg/L TC:24.71mg/L IC:-0.1126mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	940.0	24.71mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 05:43:55 AM

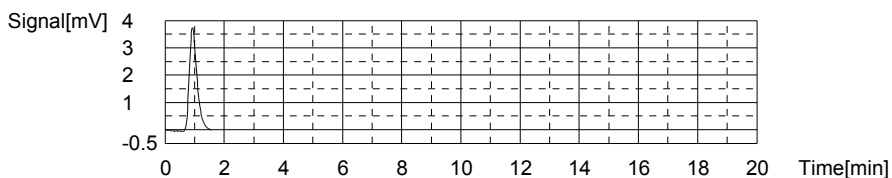
Mean Area 940.0
Mean Conc. 24.71mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.803	-0.1126mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 05:48:25 AM

Mean Area 6.803
Mean Conc. -0.1126mg/L



Sample

Sample Name: L09020485-05
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

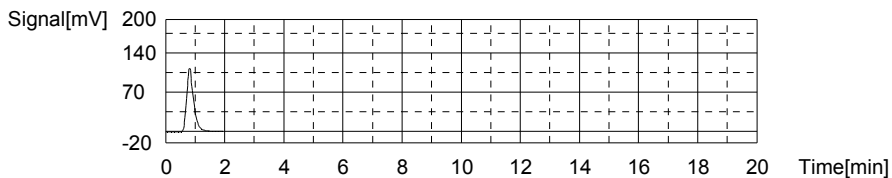
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.6375mg/L TC:4.648mg/L IC:4.011mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	183.4	4.648mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 05:55:58 AM

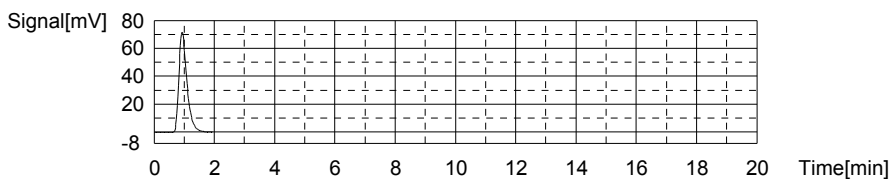
Mean Area 183.4
Mean Conc. 4.648mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	133.4	4.011mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 06:00:56 AM

Mean Area 133.4
Mean Conc. 4.011mg/L



Sample

Sample Name: L09020485-07
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

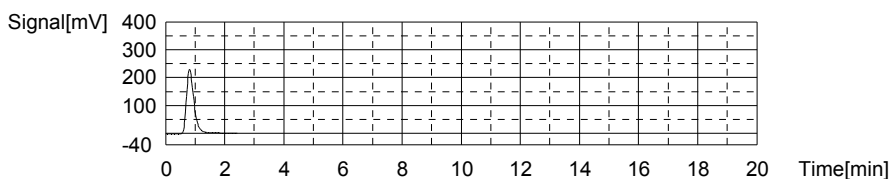
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.783mg/L TC:10.52mg/L IC:8.737mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	404.8	10.52mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 06:08:51 AM

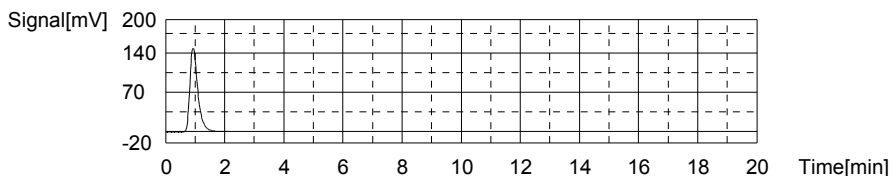
Mean Area 404.8
Mean Conc. 10.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	278.5	8.737mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 06:14:04 AM

Mean Area 278.5
Mean Conc. 8.737mg/L



Sample

Sample Name: L09020482-04
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

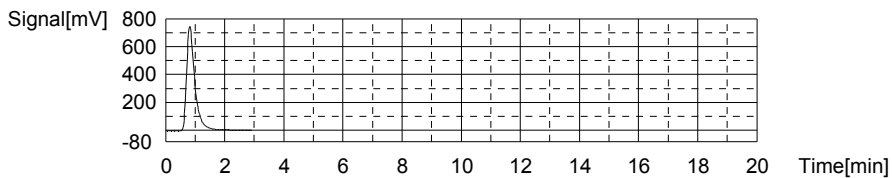
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.84mg/L TC:38.00mg/L IC:26.16mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1441	38.00mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 06:22:29 AM

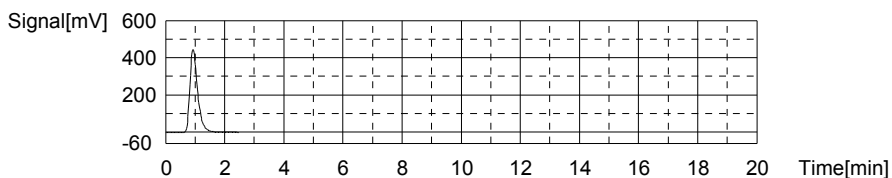
Mean Area 1441
Mean Conc. 38.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	813.3	26.16mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 06:28:15 AM

Mean Area 813.3
Mean Conc. 26.16mg/L



Sample

Sample Name: L09020482-05
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

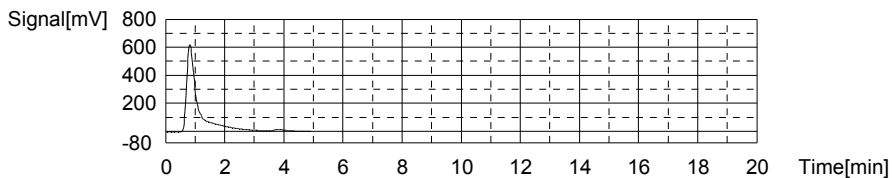
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:19.98mg/L TC:44.05mg/L IC:24.07mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1669	44.05mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 06:38:42 AM

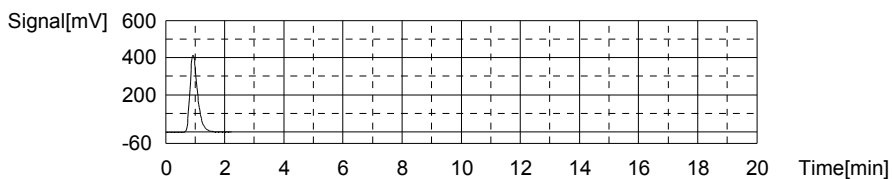
Mean Area 1669
Mean Conc. 44.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	749.3	24.07mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 06:44:14 AM

Mean Area 749.3
Mean Conc. 24.07mg/L



Sample

Sample Name: L09020482-06 (20)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

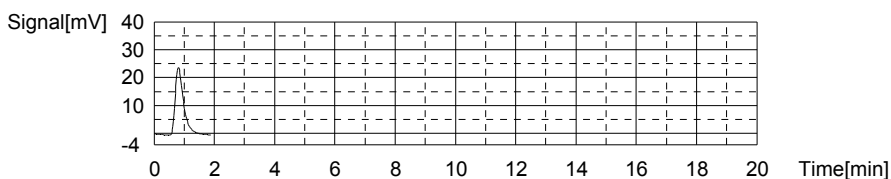
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.5575mg/L TC:1.039mg/L IC:0.4814mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.30	1.039mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 06:51:39 AM

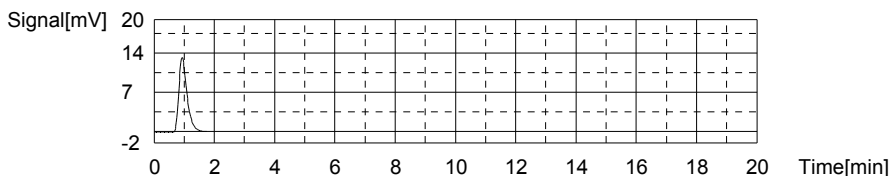
Mean Area 47.30
Mean Conc. 1.039mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.04	0.4814mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 06:56:25 AM

Mean Area 25.04
Mean Conc. 0.4814mg/L



Sample

Sample Name: L09020486-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

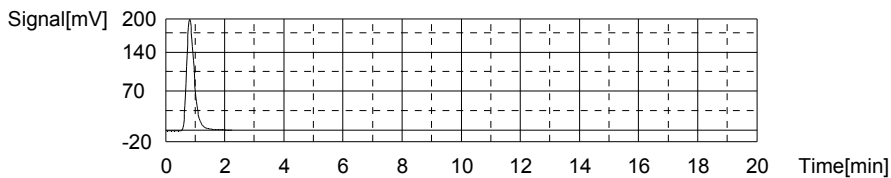
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.906mg/L TC:9.308mg/L IC:6.402mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	359.1	9.308mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 07:04:10 AM

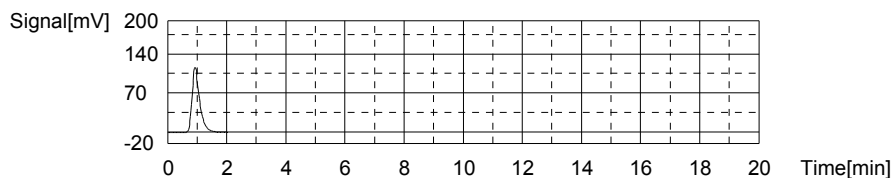
Mean Area 359.1
Mean Conc. 9.308mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	206.8	6.402mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 07:09:19 AM

Mean Area 206.8
Mean Conc. 6.402mg/L



Sample

Sample Name: L09020486-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

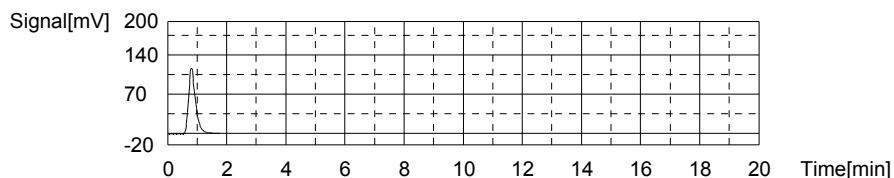
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.020mg/L TC:4.813mg/L IC:3.793mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	189.6	4.813mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 07:16:36 AM

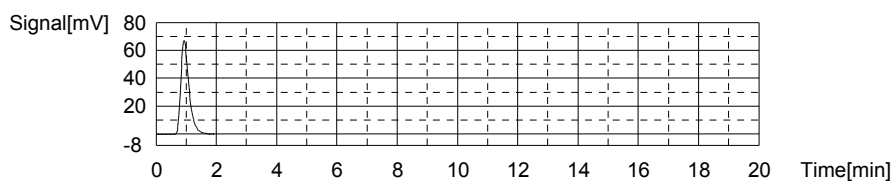
Mean Area 189.6
Mean Conc. 4.813mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	126.7	3.793mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 07:21:35 AM

Mean Area 126.7
Mean Conc. 3.793mg/L



Sample

Sample Name: L09020486-03
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

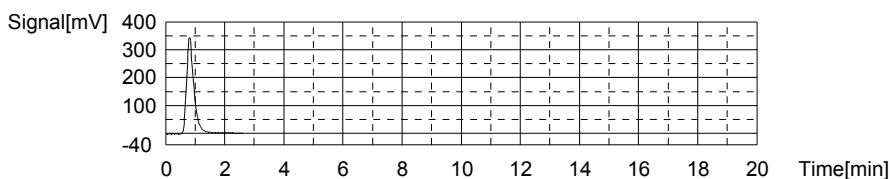
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.985mg/L TC:15.50mg/L IC:12.52mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	592.7	15.50mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 07:29:39 AM

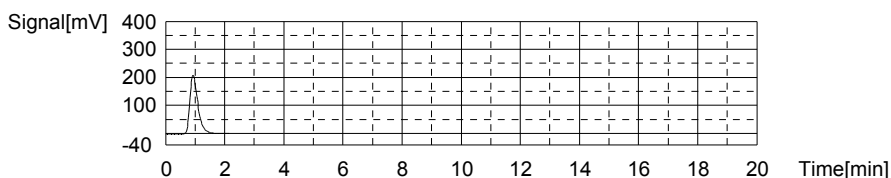
Mean Area 592.7
Mean Conc. 15.50mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	394.6	12.52mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 07:34:57 AM

Mean Area 394.6
Mean Conc. 12.52mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

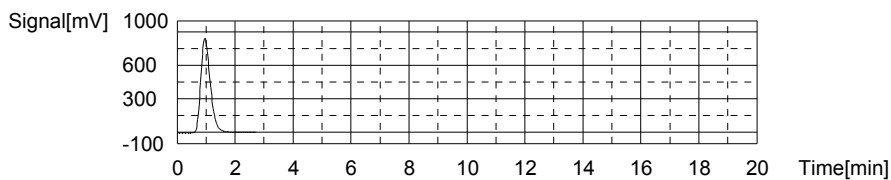
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:50.98mg/L TC:50.92mg/L IC:-0.06249mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1928	50.92mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 07:43:12 AM

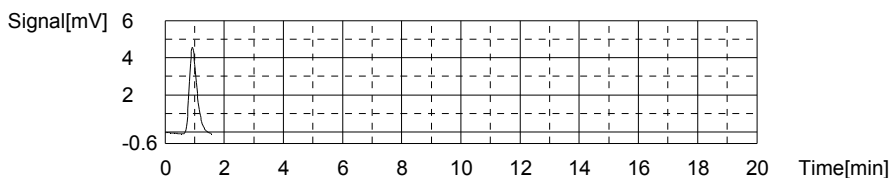
Mean Area 1928
Mean Conc. 50.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.341	-0.06249mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 07:47:47 AM

Mean Area 8.341
Mean Conc. -0.06249mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

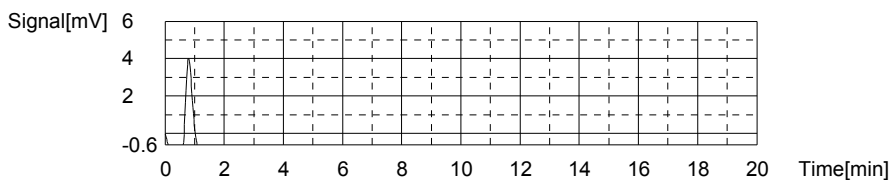
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.1064mg/L TC:0.03265mg/L IC:-0.07376mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.358	0.03265mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 07:52:52 AM

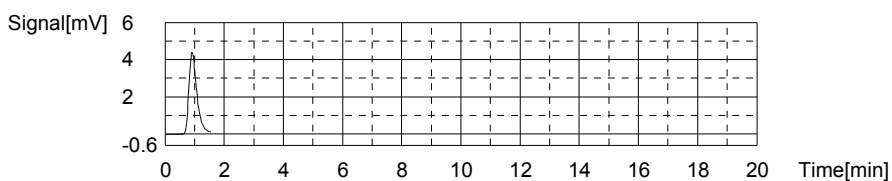
Mean Area 9.358
Mean Conc. 0.03265mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.995	-0.07376mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 07:56:52 AM

Mean Area 7.995
Mean Conc. -0.07376mg/L



Sample

Sample Name: WG295584-05 DUP
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

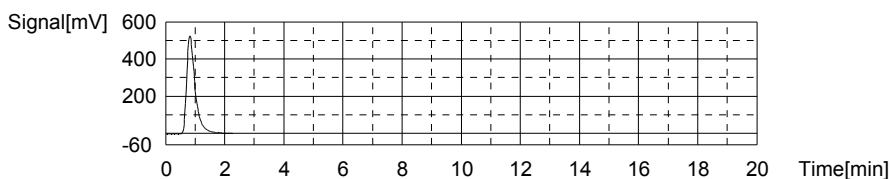
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.83mg/L TC:27.31mg/L IC:16.48mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1038	27.31mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 08:04:38 AM

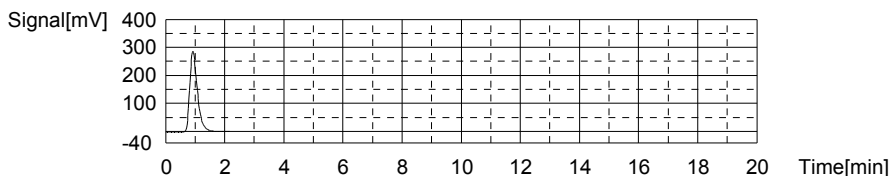
Mean Area 1038
Mean Conc. 27.31mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	516.3	16.48mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 08:10:02 AM

Mean Area 516.3
Mean Conc. 16.48mg/L



Sample

Sample Name: WG295584-06 MS
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

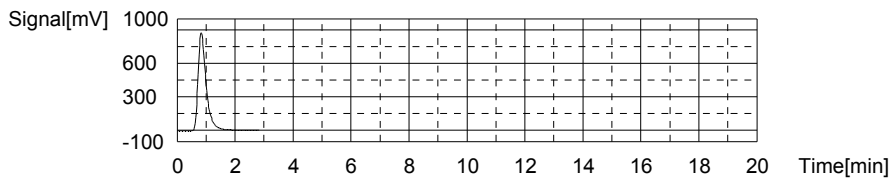
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:21.46mg/L TC:45.00mg/L IC:23.54mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1705	45.00mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 08:18:20 AM

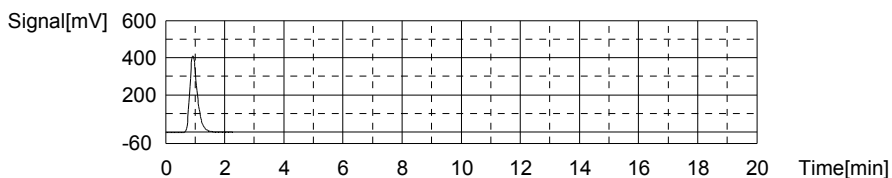
Mean Area 1705
Mean Conc. 45.00mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	732.9	23.54mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 08:23:49 AM

Mean Area 732.9
Mean Conc. 23.54mg/L



Sample

Sample Name: L09020476-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

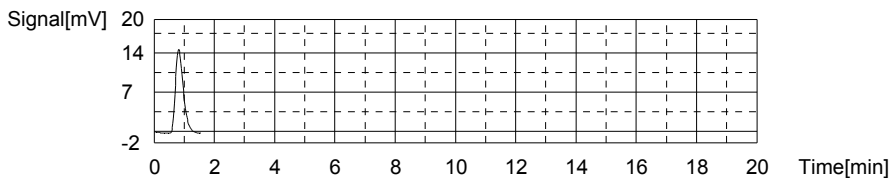
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.5127mg/L TC:0.5056mg/L IC:-0.00715mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.19	0.5056mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 08:31:05 AM

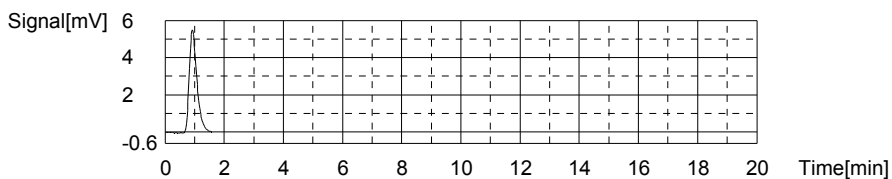
Mean Area 27.19
Mean Conc. 0.5056mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.04	-0.00715mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 08:35:40 AM

Mean Area 10.04
Mean Conc. -0.00715mg/L



Sample

Sample Name: L09020476-02 (5)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

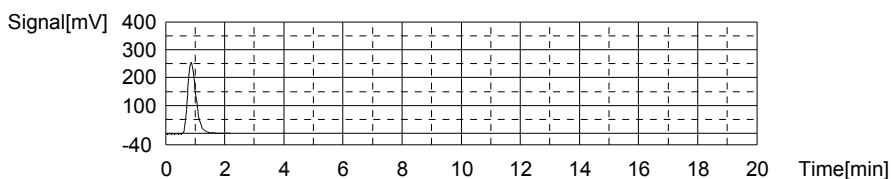
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.58mg/L TC:13.14mg/L IC:2.562mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	503.5	13.14mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 08:43:21 AM

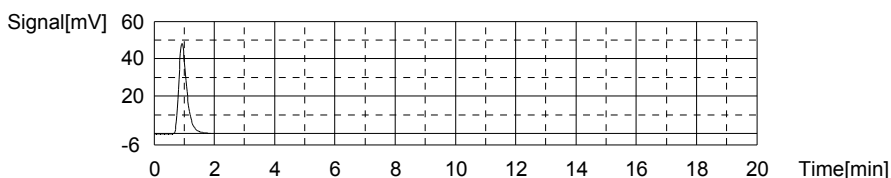
Mean Area 503.5
Mean Conc. 13.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.91	2.562mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 08:48:14 AM

Mean Area 88.91
Mean Conc. 2.562mg/L



Sample

Sample Name: L09020476-03 (10)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

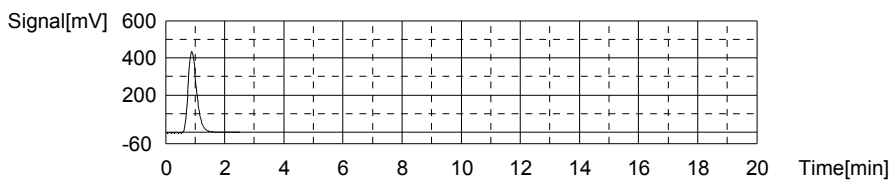
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:20.59mg/L TC:23.05mg/L IC:2.455mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	877.2	23.05mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 08:56:15 AM

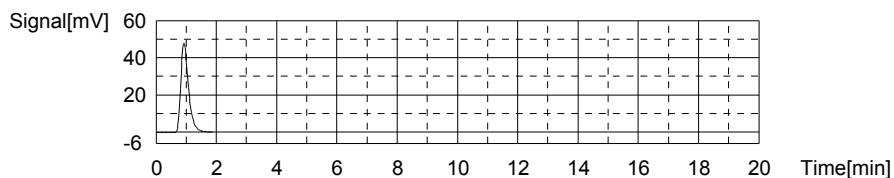
Mean Area 877.2
Mean Conc. 23.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.63	2.455mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 09:01:08 AM

Mean Area 85.63
Mean Conc. 2.455mg/L



Sample

Sample Name: L09020476-04 (100)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

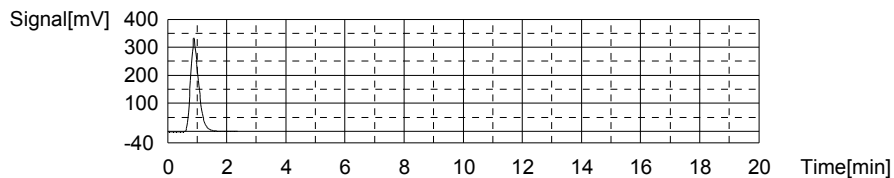
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:16.55mg/L TC:16.62mg/L IC:0.07298mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	634.8	16.62mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 09:08:58 AM

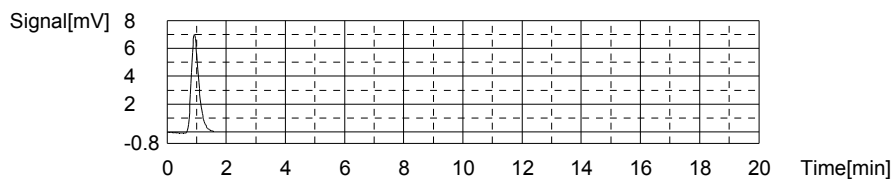
Mean Area 634.8
Mean Conc. 16.62mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.50	0.07298mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 09:13:30 AM

Mean Area 12.50
Mean Conc. 0.07298mg/L



Sample

Sample Name: L09020438-01 (2)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

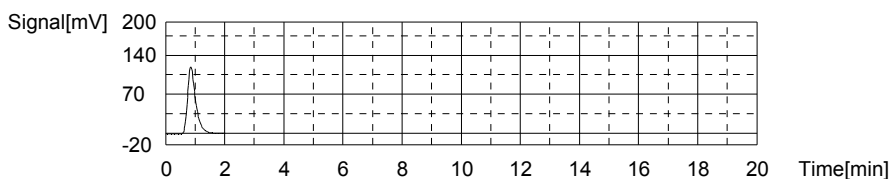
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.803mg/L TC:5.887mg/L IC:1.084mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	230.1	5.887mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 09:21:07 AM

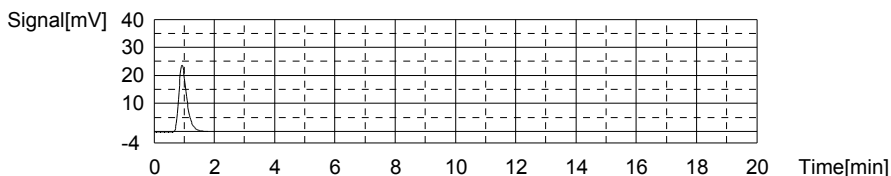
Mean Area 230.1
Mean Conc. 5.887mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.54	1.084mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 09:25:51 AM

Mean Area 43.54
Mean Conc. 1.084mg/L



Sample

Sample Name: L09020438-02 (4)
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

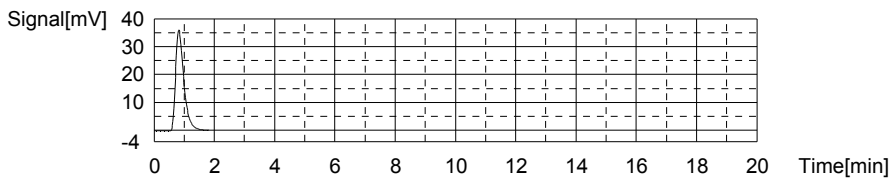
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.5970mg/L TC:1.611mg/L IC:1.014mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.86	1.611mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 09:33:07 AM

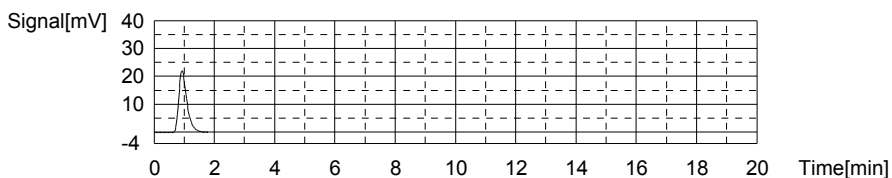
Mean Area 68.86
Mean Conc. 1.611mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.38	1.014mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 09:37:53 AM

Mean Area 41.38
Mean Conc. 1.014mg/L



Sample

Sample Name: L09020438-01
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

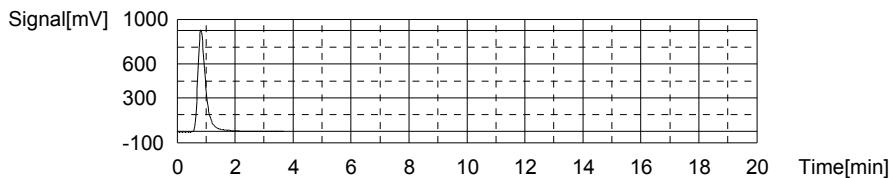
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.80mg/L TC:45.53mg/L IC:33.74mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1725	45.53mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	2/24/2009 09:51:41 AM

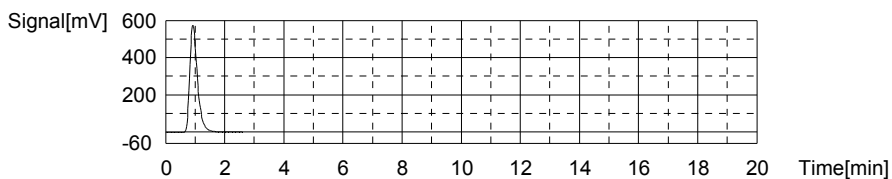
Mean Area 1725
Mean Conc. 45.53mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1046	33.74mg/L	500uL	1		TICURVE-01-13-2009.2009_01_13_15_12_50	2/24/2009 09:57:37 AM

Mean Area 1046
Mean Conc. 33.74mg/L



Sample

Sample Name: L09020438-02
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

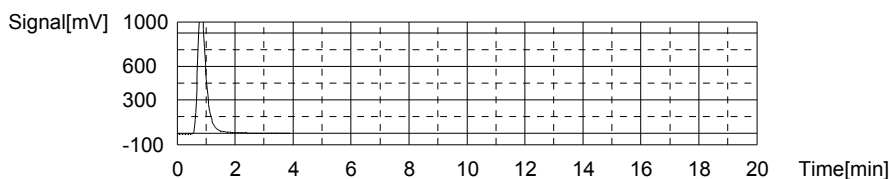
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.646mg/L TC:61.68mg/L IC:55.04mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2334	61.68mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 10:06:57 AM

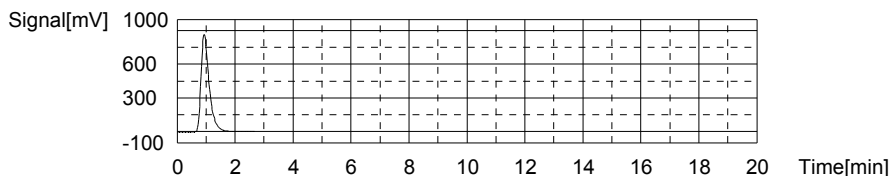
Mean Area 2334
Mean Conc. 61.68mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1700	55.04mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 10:13:13 AM

Mean Area 1700
Mean Conc. 55.04mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

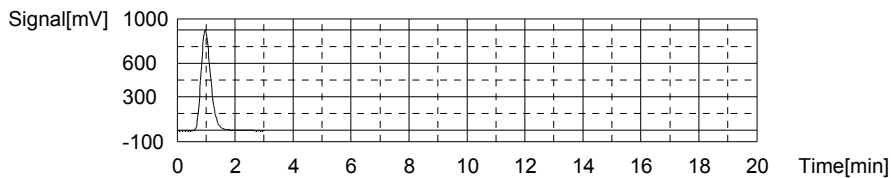
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:55.39mg/L TC:55.51mg/L IC:0.1104mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2101	55.51mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 10:21:53 AM

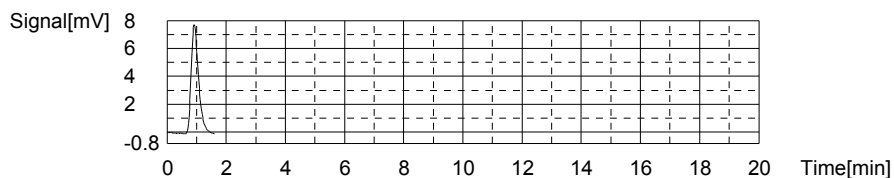
Mean Area 2101
Mean Conc. 55.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.65	0.1104mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 10:26:31 AM

Mean Area 13.65
Mean Conc. 0.1104mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-01-13-2009.met
Status: Completed
Chk. Result

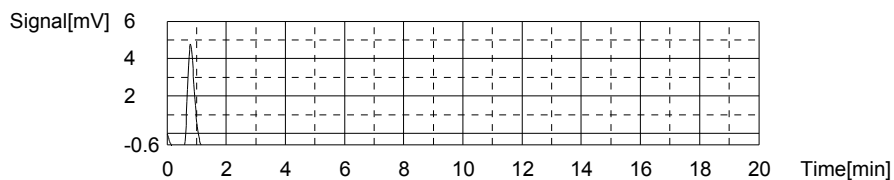
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.09855mg/L TC:0.05365mg/L IC:-0.04490mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.15	0.05365mg/L	500uL	1		TCCURVE-01-13-2009.2009_01_13_14_10_50	02/24/2009 10:31:36 AM

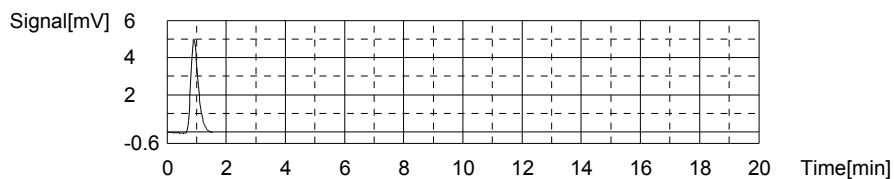
Mean Area 10.15
Mean Conc. 0.05365mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.881	-0.04490mg/L	500uL	1		TICCURVE-01-13-2009.2009_01_13_15_12_50	02/24/2009 10:35:37 AM

Mean Area 8.881
Mean Conc. -0.04490mg/L



3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
March 2, 2009

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
AM - ALISON J. MILLER	AML - ANTHONY M. LONG	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
CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL
CTB - CHRIS T. BUCINA	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	ECL - ERIC C. LAWSON	EDA - ERIN D. AGEES
ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR
HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON
JKP - JACQUELINE K. PARSONS	JKT - JANE K. THOMPSON	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATHRYN E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LHT - LANCE H. THOMPSON
LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON
MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	NPM - NATHANIEL P. MILLER
PDM - PIERCE D. MORRIS	RAH - ROY A. HALSTEAD	RB - ROBERT BUCHANAN
REK - ROBERT E. KYER	RLK - ROBIN L. KLINGER	RWC - RODNEY W. CAMPBELL
SAV - SARAH A. VANDENBERG	SDH - SHANA D. HINYARD	SDL - SHELLY D. LENT
SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF	TDH - TRICIA D. HUCK
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

Qualkey: STD

Qualifier	Description
*	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
B3	Target analyte detected in calibration blank at or above the method reporting limit
C	Confirmed by GC/MS
CG	Confluent growth
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
E1	Concentration estimated. Analyte exceeded calibration range. Insufficient sample for reanalysis.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to matrix.
E3	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
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
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration is disproportionate to the spike level.
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.
Q1	Sample integrity was not maintained. See report narrative.
QNS	Quantity of sample not sufficient to perform analysis
R1	Duplicate RPD/RSD exceeded the method acceptance limit.
R2	Duplicate RPD/RSD exceeded the laboratory acceptance limit.
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.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
V2	CCV recovery was above method acceptance limits. Insufficient volume for sample reanalysis.
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



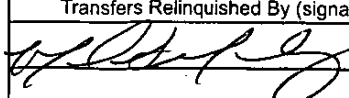
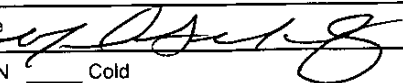
Qualkey: STD

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.



Chain of Custody

00103654
NO. 5777

Laboratory Name: MICROBAC				Address: 158 Starlite Dr. Marietta, OH				Contact: Stephanie Mossburg						
Project Name: LHAAP				Project Location: KARNACK, TX.				Analysis and Method Desired (Indicate separate containers)				Remarks		
Project No.: 117591.0009A130				Project Contact: Jen Hoang		Project Telephone No.: 713-996-4408		Number of Containers	VOC	GASES	ANIONS	TOC		
Point of Contact: Scott Beesinger				Project Manager/Supervisor: Praveen Srivastava										
Telephone No.: 903-679-3448														
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location							
1	LHS MW43-021909	02/19/09	0824		✓		Site 47	7	2	3	1	1		
2	LHS MW45-021909	02/19/09	1001		✓		Site 47	7	2	3	1	1		
3	47WW14-021909	02/19/09	1201		✓		Site 47	2	2					
4	47WW14-021909-FD	02/19/09	1201		✓		Site 47	2	2					
5	47WW19-021909	02/19/09	1343		✓		Site 47	2	2					
6	Trip Blank	02/19/09	0800		✓			2	2					
7														
8														
9														
10														
Transfers Relinquished By (signature)				Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions 48 Hr. TAT				
				2/19/09 3:00										
										FedEx Airbill No.:				
						Laboratory: Env PRA		2-2009 0912		Sampler's Signature: 				
TAT: ☐ Standard ☐ Rush Date				Seals Intact? ☐ Y ☐ N		Received Good Condition ☐ Y ☐ N ☐ Cold								

Client: <u>Staw Longhorn</u>				
Workorder Number: <u>B</u>				
Date Received: <u>2-20-09</u>				
Delivered by: <u>() Fedx () UPS () Client () Courier</u> Time: <u>0921</u>				
Opened by: <u>SLP</u>				
IR Temp Gun: <u>() H () G</u>				
Logged by: <u>SLP</u> <u>51m</u> <u>L 09070438</u>				

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
1669	0	1266V7250198420704		20 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 (< 6mm)?	☒	☒	☐	
Were samples received within EPA hold times?	☒	☒	☐	

Discrepancy/Comments/Other Problems

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

00103656

Login: L09020438

Account: 2773

Project: 2773.025

Samples: 6

Due Date: 24-FEB-2009

Samplenum **Container ID** **Products**
L09020438-01 553838 TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	20-FEB-2009 11:33	ERE	
2	ANALYZ	W1	WET	20-FEB-2009 12:48	DIH	ERE
3	STORE	WET	A2	25-FEB-2009 08:54	ERE	DIH

Samplenum **Container ID** **Products**
L09020438-05 553845 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Samplenum **Container ID** **Products**
L09020438-06 553846 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Samplenum **Container ID** **Products**
L09020438-02 553841 300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	20-FEB-2009 11:33	ERE	
2	PREP	W1	SEM	20-FEB-2009 12:12	CPD	ERE
3	ANALYZ	A1	SEM	24-FEB-2009 13:48	RLK	ADC

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



Internal Chain of Custody Report

00103657

Login: L09020438

Account: 2773

Project: 2773.025

Samples: 6

Due Date: 24-FEB-2009

Samplenum **Container ID** **Products**
L09020438-02 553842 TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	20-FEB-2009 11:33	ERE	
2	ANALYZ	W1	WET	20-FEB-2009 12:48	DIH	ERE
3	STORE	WET	A2	25-FEB-2009 08:54	ERE	DIH

Samplenum **Container ID** **Products**
L09020438-01 553836 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Samplenum **Container ID** **Products**
L09020438-02 553840 RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

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



Internal Chain of Custody Report

00103658

Login: L09020438

Account: 2773

Project: 2773.025

Samples: 6

Due Date: 24-FEB-2009

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020438-03	553843	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020438-01	553837	300

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	20-FEB-2009 11:33	ERE	
2	PREP	W1	SEM	20-FEB-2009 12:12	CPD	ERE
3	ANALYZ	A1	SEM	24-FEB-2009 13:48	RLK	ADC

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020438-02	553839	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

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



Internal Chain of Custody Report

00103659

Login: L09020438**Account:** 2773**Project:** 2773.025**Samples:** 6**Due Date:** 24-FEB-2009

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020438-04	553844	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020438-01	553835	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	20-FEB-2009 11:33	ERE	
2	ANALYZ	V1	ORG4	20-FEB-2009 11:46	MRT	ERE

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





158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • <http://www.microbac.com>

Laboratory Report Number: L09020556

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac'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.

Kathy Albertson	<i>Team Chemist/Data Specialist</i>	kalbertson@microbac.com
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Jacqueline Parsons	<i>Team Assistant</i>	jparsons@microbac.com

This report was reviewed on March 02, 2009.

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 accrediting authority listed below. 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 Microbac Laboratories.

This report was certified on March 02, 2009.

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

David Vandenberg - Managing Director

State of origin: Texas

Accrediting authority: Texas Commission on Environmental Quality ID:T104704252-07-TX

QAPP: Microbac (OVD) LQAP

This report contains a total of 96 pages.

Look closer. Go further. Do more.



Microbac REPORT L09020556
PREPARED FOR Shaw E I, Inc.
WORK ID:

1.0 Introduction	3
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2.1.1.2 QC Summary Data	23
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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L09020556

CHAIN OF CUSTODY: The chain of custody number was 5780.

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 Microbac Laboratories Inc., 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: 02-MAR-09

<i>Stephanie Mousling</i>

Laboratory Data Package Cover Page

00103664

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

March 2, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09020556
Project Name: 798-LONGHORN
Method: 8260B
Prep Batch Number(s): WG295873, WG296017
Reviewer Name: MIKE D. ALBERTSON
LRC Date: March 02, 2009

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 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?	✓				

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?	✓				

00103667

EXCEPTIONS REPORT

ER# - Description

1) Hexachlorobutadiene was below the lower advisory limit in the LCS/LCSD analyzed 02/26/09 on HPMS-8.

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

L09020556

00103671

03/02/09 15:17

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836 (GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
LHSMW57-022309	L09020556-01	8260B	1	25-FEB-09
LHSMW41-022309	L09020556-02	8260B	1	25-FEB-09
47WW34-022309	L09020556-03	8260B	25	25-FEB-09
47WW34-022309	L09020556-03	8260B	1	25-FEB-09
TRIP BLANK	L09020556-04	8260B	1	25-FEB-09



Sample Number: L09020556-01
Client ID: LHSMW57-022309
Matrix: Water
Workgroup Number: WG295873
Collect Date: 02/23/2009 10:01
Sample Tag: 01

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

Instrument: HPMS8
Prep Date: 02/26/2009 19:16
Cal Date: 02/19/2009 14:17
Run Date: 02/26/2009 19:16
File ID: 8M352053

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
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	0.150
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

Sample Number: **L09020556-01**
 Client ID: **LHSMW57-022309**
 Matrix: **Water**
 Workgroup Number: **WG295873**
 Collect Date: **02/23/2009 10:01**
 Sample Tag: **01**

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

Instrument: **HPMS8**
 Prep Date: **02/26/2009 19:16**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/26/2009 19:16**
 File ID: **8M352053**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	87.6	80	120		
Toluene-d8	102	88	110		
4-Bromofluorobenzene	104	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L09020556-02
 Client ID: LHSMW41-022309
 Matrix: Water
 Workgroup Number: WG296017
 Collect Date: 02/23/2009 11:39
 Sample Tag: 01

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

Instrument: HPMS6
 Prep Date: 02/27/2009 13:51
 Cal Date: 02/19/2009 19:06
 Run Date: 02/27/2009 13:51
 File ID: 6M81847

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
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	0.150
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	0.957	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L09020556**Report Date : **March 2, 2009**

00103675

Sample Number: **L09020556-02**
 Client ID: **LHSMW41-022309**
 Matrix: **Water**
 Workgroup Number: **WG296017**
 Collect Date: **02/23/2009 11:39**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **02/27/2009 13:51**
 Cal Date: **02/19/2009 19:06**
 Run Date: **02/27/2009 13:51**
 File ID: **6M81847**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	109	86	118		
1,2-Dichloroethane-d4	113	80	120		
Toluene-d8	98.3	88	110		
4-Bromofluorobenzene	101	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

Sample Number: **L09020556-03**
 Client ID: **47WW34-022309**
 Matrix: **Water**
 Workgroup Number: **WG295873**
 Collect Date: **02/23/2009 13:26**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **25**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/26/2009 12:49**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/26/2009 12:49**
 File ID: **8M352041**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	250	62.5
Benzene	71-43-2		U	25.0	3.13
Bromobenzene	108-86-1		U	25.0	3.13
Bromochloromethane	74-97-5		U	25.0	5.00
Bromodichloromethane	75-27-4		U	25.0	6.25
Bromoform	75-25-2		U	25.0	12.5
Bromomethane	74-83-9		U	25.0	12.5
2-Butanone	78-93-3		U	250	62.5
n-Butylbenzene	104-51-8		U	25.0	6.25
sec-Butylbenzene	135-98-8		U	25.0	6.25
tert-Butylbenzene	98-06-6		U	25.0	6.25
Carbon disulfide	75-15-0		U	25.0	12.5
Carbon tetrachloride	56-23-5		U	25.0	6.25
Chlorobenzene	108-90-7		U	25.0	3.13
Chlorodibromomethane	124-48-1		U	25.0	6.25
Chloroethane	75-00-3		U	25.0	12.5
2-Chloroethyl vinyl ether	110-75-8		U	250	50.0
Chloroform	67-66-3		U	25.0	3.13
Chloromethane	74-87-3		U	25.0	6.25
2-Chlorotoluene	95-49-8		U	25.0	3.13
4-Chlorotoluene	106-43-4		U	25.0	6.25
1,2-Dibromo-3-chloropropane	96-12-8		U	125	25.0
1,2-Dibromoethane	106-93-4		U	25.0	6.25
Dibromomethane	74-95-3		U	25.0	6.25
1,2-Dichlorobenzene	95-50-1		U	25.0	3.13
1,3-Dichlorobenzene	541-73-1		U	25.0	6.25
1,4-Dichlorobenzene	106-46-7		U	25.0	3.13
Dichlorodifluoromethane	75-71-8		U	25.0	6.25
1,1-Dichloroethane	75-34-3		U	25.0	3.13
1,2-Dichloroethane	107-06-2		U	25.0	6.25
1,1-Dichloroethene	75-35-4		U	25.0	12.5
cis-1,2-Dichloroethene	156-59-2	165		25.0	6.25
trans-1,2-Dichloroethene	156-60-5		U	25.0	6.25
1,2-Dichloropropane	78-87-5		U	25.0	5.00
1,3-Dichloropropane	142-28-9		U	25.0	5.00
2,2-Dichloropropane	594-20-7		U	25.0	6.25
cis-1,3-Dichloropropene	10061-01-5		U	25.0	6.25
trans-1,3-Dichloropropene	10061-02-6		U	25.0	12.5
1,1-Dichloropropene	563-58-6		U	25.0	6.25
Ethylbenzene	100-41-4		U	25.0	6.25
2-Hexanone	591-78-6		U	250	62.5
Hexachlorobutadiene	87-68-3		U	25.0	6.25
Isopropylbenzene	98-82-8		U	25.0	6.25
p-Isopropyltoluene	99-87-6		U	25.0	6.25
4-Methyl-2-pentanone	108-10-1		U	250	62.5
Methylene chloride	75-09-2		U	125	6.25
Naphthalene	91-20-3		U	25.0	5.00
n-Propylbenzene	103-65-1		U	25.0	3.13
Styrene	100-42-5		U	25.0	3.13
1,1,1,2-Tetrachloroethane	630-20-6		U	25.0	6.25
1,1,2,2-Tetrachloroethane	79-34-5		U	25.0	3.13
Tetrachloroethene	127-18-4		U	25.0	6.25
Toluene	108-88-3		U	25.0	6.25
1,2,3-Trichlorobenzene	87-61-6		U	25.0	3.75
1,2,4-Trichlorobenzene	120-82-1		U	25.0	5.00
1,1,1-Trichloroethane	71-55-6		U	25.0	6.25
1,1,2-Trichloroethane	79-00-5		U	25.0	6.25
Trichloroethene	79-01-6	1730		25.0	6.25
Trichlorofluoromethane	75-69-4		U	25.0	6.25

5 of 10



Report Number: **L09020556**Report Date : **March 2, 2009**

00103677

Sample Number: **L09020556-03**
 Client ID: **47WW34-022309**
 Matrix: **Water**
 Workgroup Number: **WG295873**
 Collect Date: **02/23/2009 13:26**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **MES**
 Dilution: **25**
 Units: **ug/L**

Instrument: **HPMS8**
 Prep Date: **02/26/2009 12:49**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/26/2009 12:49**
 File ID: **8M352041**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	25.0	12.5
1,2,4-Trimethylbenzene	95-63-6		U	25.0	6.25
1,3,5-Trimethylbenzene	108-67-8		U	25.0	6.25
Vinyl acetate	108-05-4		U	250	62.5
Vinyl chloride	75-01-4		U	25.0	6.25
o-Xylene	95-47-6		U	25.0	6.25
m-,p-Xylene	136777-61-2		U	25.0	12.5
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	90.5	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	105	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L09020556-03
Client ID: 47WW34-022309
Matrix: Water
Workgroup Number: WG296017
Collect Date: 02/23/2009 13:26
Sample Tag: 01

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

Instrument: HPMS6
Prep Date: 02/27/2009 14:23
Cal Date: 02/19/2009 19:06
Run Date: 02/27/2009 14:23
File ID: 6M81848

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.188	J	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	1.82		1.00	0.125
1,2-Dichloroethane	107-06-2	0.746	J	1.00	0.250
1,1-Dichloroethene	75-35-4	10.9		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	228	I	1.00	0.250
trans-1,2-Dichloroethene	156-60-5	1.63		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
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	0.150
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	0.299	J	1.00	0.250
Trichloroethene	79-01-6	1780	I	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L09020556**Report Date : **March 2, 2009**

00103679

Sample Number: **L09020556-03**
 Client ID: **47WW34-022309**
 Matrix: **Water**
 Workgroup Number: **WG296017**
 Collect Date: **02/23/2009 13:26**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **02/27/2009 14:23**
 Cal Date: **02/19/2009 19:06**
 Run Date: **02/27/2009 14:23**
 File ID: **6M81848**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	4.05		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	105	86	118		
1,2-Dichloroethane-d4	108	80	120		
Toluene-d8	97.3	88	110		
4-Bromofluorobenzene	98.4	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

I Semiquantitative result (out of instrument calibration range)

Sample Number: L09020556-04
Client ID: TRIP BLANK
Matrix: Water
Workgroup Number: WG295873
Collect Date: 02/23/2009 00:01
Sample Tag: 01

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

Instrument: HPMS8
Prep Date: 02/26/2009 11:13
Cal Date: 02/19/2009 14:17
Run Date: 02/26/2009 11:13
File ID: 8M352038

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
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	0.150
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

Report Number: **L09020556**Report Date : **March 2, 2009**

00103681

Sample Number: **L09020556-04**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG295873**
 Collect Date: **02/23/2009 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS8**
 Prep Date: **02/26/2009 11:13**
 Cal Date: **02/19/2009 14:17**
 Run Date: **02/26/2009 11:13**
 File ID: **8M352038**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	98.3	86	118		
1,2-Dichloroethane-d4	88.2	80	120		
Toluene-d8	102	88	110		
4-Bromofluorobenzene	103	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

Microbac Laboratories Inc.
Instrument Run Log

00103685

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	8M351783	BLANK	NA	1	1		02/19/09 07:23
2	8M351784	BLANK	NA	1	1		02/19/09 07:55
3	8M351785	WG295276-01 50NG BFB STD 8260	NA	1	1	STD30703	02/19/09 08:25
4	8M351786	WG295276-02 0.3ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 08:50
5	8M351787	WG295276-03 0.4ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 09:23
6	8M351788	WG295276-04 1ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 09:55
7	8M351789	WG295276-05 2ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 10:31
8	8M351790	WG295276-06 5ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 11:03
9	8M351791	WG295276-07 20ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 11:37
10	8M351792	WG295276-08 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 12:09
11	8M351793	WG295276-09 100ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 12:41
12	8M351794	WG295276-10 200ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 13:13
13	8M351795	WG295276-11 300ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 13:45
14	8M351796	WG295276-09 100ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 14:17
15	8M351797	SYSTEM BLANK	NA	1	1		02/19/09 14:49
16	8M351798	SYSTEM BLANK	NA	1	1		02/19/09 15:21
17	8M351799	WG295276-12 20ug/L ALT SOURCE	NA	1	1	STD31431	02/19/09 16:12
18	8M351800	WG295276-12 100ug/L OXY ALT SOURCE	NA	1	1	STD31431	02/19/09 16:44
19	8M351801	WG295370-01 50NG BFB STD 8260	NA	1	1	STD30703	02/19/09 17:13
20	8M351802	WG295370-02 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 17:39
21	8M351803	WG295370-02 50ug/L WATER STD 8260	NA	1	1	STD31425	02/19/09 18:12
22	8M351804	WG295371-01 VBLK0219 BLANK 8260	NA	1	1		02/19/09 18:44
23	8M351805	WG295371-02 20ug/L LCS 8260	NA	1	1	STD31431	02/19/09 19:16
24	8M351806	WG295371-03 20ug/L LCSDUP 8260	NA	1	1	STD31431	02/19/09 19:48
25	8M351807	L09020270-08 A 826-SPE	<2	1	1		02/19/09 20:20
26	8M351808	L09020346-03 B 826-LOW	<2	1	1		02/19/09 20:52
27	8M351809	L09020270-05 A 826-SPE	<2	1	1		02/19/09 21:24
28	8M351810	L09020270-07 A 826-SPE	<2	1	1		02/19/09 21:56
29	8M351811	L09020270-01 A 5X 826-SPE	4	1	5		02/19/09 22:29
30	8M351812	L09020270-02 A 10X 826-SPE	<2	1	10		02/19/09 23:01
31	8M351813	L09020270-03 A 5X 826-SPE	<2	1	5		02/19/09 23:33
32	8M351814	L09020270-04 A 10X 826-SPE	<2	1	10		02/20/09 00:05
33	8M351815	L09020270-06 A 10X 826-SPE	<2	1	10		02/20/09 00:37
34	8M351816	L09020271-01 A 10X 826-SPE	<2	1	10		02/20/09 01:09

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103686

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	8M351817	L09020271-02 A 5X 826-SPE	<2	1	5		02/20/09 01:41
36	8M351818	L09020271-03 A 2.5X 826-SPE	<2	1	5		02/20/09 02:13
37	8M351819	L09020271-04 A 2.5X 826-SPE	<2	1	5		02/20/09 02:45
38	8M351820	L09020271-05 A 5X 826-SPE	<2	1	5		02/20/09 03:17
39	8M351821	L09020271-06 A 5X 826-SPE	<2	1	5		02/20/09 03:49
40	8M351822	L09020271-07 A 5X 826-SPE	<2	1	5		02/20/09 04:21
41	8M351823	L09020408-01 A 826-LOW	4	1	1		02/20/09 04:53
42	8M351824	SYSTEM BLANK	NA	1	1		02/20/09 05:25
43	8M351825	SYSTEM BLANK	NA	1	1		02/20/09 05:57
44	8M351826	SYSTEM BLANK	NA	1	1		02/20/09 06:29

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11	X	100		
File ID: 8M351793				
DNR.				
20	X			
File ID: 8M351802				
DNR.				
32	X	5	Analyzed too dilute	
File ID: 8M351814				
33	X	5	Analyzed too dilute	
File ID: 8M351815				
34	X	5	Analyzed too dilute	
File ID: 8M351816				
35	X	2.5	Analyzed too dilute	
File ID: 8M351817				
37	X	1	Analyzed too dilute	
File ID: 8M351819				
38	X	1	Analyzed too dilute	

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103687

Instrument: HPMS8 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27679

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31425 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295276; WG295371

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 8M351820				
40	X	2.5	Analyzed too dilute	
File ID: 8M351822				
41	X	10	Over Calibration Range	NAPH
File ID: 8M351823				

Approved: February 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103688

Instrument: HPMS6 Dataset: 021909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Maintenance Log ID: 27709

Internal Standard: STD31170 Surrogate Standard: STD31171
 CCV: STD31435 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295337, WG295607

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M81600	BFB CHECK-RETUNED	NA	1	1		02/19/09 07:24
2	6M81601	BFB CHECK-RETUNED	NA	1	1		02/19/09 07:39
3	6M81602	BLANK-IS CHECK	NA	1	1		02/19/09 08:21
4	6M81603	BLANK-IS CHECK	NA	1	1		02/19/09 08:53
5	6M81604	TUNE CHECK-INST CHECK	NA	1	1		02/19/09 09:09
6	6M81607	BFB	NA	1	1		02/19/09 11:30
7	6M81608	BFB	NA	1	1		02/19/09 11:43
8	6M81609	BLANK	NA	1	1		02/19/09 12:11
9	6M81610	BLANK	NA	1	1		02/19/09 12:58
10	6M81611	WG295337-01 50NG BFB STD 8260	NA	1	1	STD31210	02/19/09 13:29
11	6M81612	WG295337-01 50NG BFB STD 8260	NA	1	1	STD31210	02/19/09 13:41
12	6M81613	WG295337-01 50NG BFB STD 8260	NA	1	1	STD31210	02/19/09 13:57
13	6M81614	WG295337-02 0.3ug/L WATER STD 826	NA	1	1	STD31435	02/19/09 14:11
14	6M81615	WG295337-03 0.4ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 14:45
15	6M81616	WG295337-04 1 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 15:19
16	6M81617	WG295337-05 2 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 15:51
17	6M81618	WG295337-06 5 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 16:25
18	6M81619	WG295337-07 20 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 16:57
19	6M81620	WG295337-08 50 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 17:29
20	6M81621	WG295337-09 100 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 18:01
21	6M81622	WG295337-10 200 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 18:34
22	6M81623	WG295337-11 300 ug/L WATER STD 8260	NA	1	1	STD31435	02/19/09 19:06
23	6M81624	SYSTEM BLANK	NA	1	1		02/19/09 19:38
24	6M81625	WG295337-12 20ug/L ALT SOURCE	NA	1	1	STD31431	02/19/09 20:10
25	6M81626	WG295337-12 100ug/L OXYGENATE ALT S	NA	1	1	STD31431	02/19/09 20:43
26	6M81627	WG295607-01	NA	1	1		02/19/09 21:15
27	6M81628	L09010006-01 MDL CHEXANE AT .4PPB	NA	1	1	STD31423	02/19/09 21:47
28	6M81629	L09010006-02 MDL	NA	1	1	STD31423	02/19/09 22:19
29	6M81630	L09010006-03 MDL	NA	1	1	STD31423	02/19/09 22:51
30	6M81631	L09010006-04 MDL	NA	1	1	STD31423	02/19/09 23:24
31	6M81632	L09010006-05 MDL	NA	1	1	STD31423	02/19/09 23:56
32	6M81633	L09010006-06 MDL	NA	1	1	STD31423	02/20/09 00:28
33	6M81634	L09010006-07 MDL	NA	1	1	STD31423	02/20/09 01:00

Approved:



Microbac Laboratories Inc.
Instrument Run Log

00103689

Instrument: HPMS6 Dataset: 021909
Analyst1: MES Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 624 SOP: MSV10 Rev: 7
Method: 5030/5035 SOP: PAT01 Rev: 11
Maintenance Log ID: 27709

Internal Standard: STD31170 Surrogate Standard: STD31171
CCV: STD31435 LCS: STD31431 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG295337, WG295607

Comments: Comments

Seq.	Rerun	Dil.	Reason	Analytes
10				
File ID: 6M81611				
RR-tuning				
11				
File ID: 6M81612				
RR-tuning				

Approved:

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Microbac Laboratories Inc.
Instrument Run Log

00103690

Instrument: HPMS8 Dataset: 022609
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Maintenance Log ID: 27780

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31491 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295873

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	8M352032	WG295872-01 50ng BFB STD 8260	NA	1	1	STD31210	02/26/09 08:07
2	8M352033	WG295872-02 50ug/L CCV STD 8260	NA	1	1	STD31491	02/26/09 08:32
3	8M352034	WG295873-01 VBLK0226 BLANK 8260	NA	1	1		02/26/09 09:04
4	8M352035	WG295873-02 20ug/L LCS 8260	NA	1	1	STD31431	02/26/09 09:37
5	8M352036	WG295873-03 20ug/L LCSDUP 8260	NA	1	1	STD31431	02/26/09 10:09
6	8M352037	WG295873-01 VBLK0226 BLANK 8260	NA	1	1		02/26/09 10:41
7	8M352038	L09020556-04 A 826-LOW	<2	1	1		02/26/09 11:13
8	8M352039	L09020556-01 A 100X 826-LOW	<2	1	100		02/26/09 11:45
9	8M352040	L09020556-02 A 100X 826-LOW	<2	1	100		02/26/09 12:17
10	8M352041	L09020556-03 A 25X 826-LOW	<2	1	25		02/26/09 12:49
11	8M352042	L09020583-01 A 10X 826-BETX	<2	1	10		02/26/09 13:21
12	8M352043	L09020445-02 B D1 250X 826-LOW	7	1	250		02/26/09 13:54
13	8M352044	L09020345-01 A 10000X 826-TC	NA	17	10000		02/26/09 14:27
14	8M352045	L09020356-04 B 826-SPE2	7	1	1		02/26/09 14:59
15	8M352046	L09020356-05 B 826-SPE2	7	1	1		02/26/09 15:31
16	8M352047	L09020356-07 B 826-SPE2	<2	1	1		02/26/09 16:03
17	8M352048	L09020356-08 B 10X 826-SPE2	<2	1	10		02/26/09 16:35
18	8M352049	L09020356-09 B 826-SPE2	7	1	1		02/26/09 17:07
19	8M352050	L09020356-13 B 826-SPE2	<2	1	1		02/26/09 17:40
20	8M352051	L09020356-14 B 826-SPE2	<2	1	1		02/26/09 18:12
21	8M352052	L09020356-15 B 826-SPE2	<2	1	1		02/26/09 18:44
22	8M352053	L09020556-01 B 826-LOW	<2	1	1		02/26/09 19:16
23	8M352054	L09020281-09 A 10X 826-TC	NA	17	10		02/26/09 19:48
24	8M352055	SYSTEM BLANK	NA	1	1		02/26/09 20:20
25	8M352056	WG295873-04 624 BLANK	NA	1	1		02/26/09 20:52
26	8M352057	L09020541-01 A 624	<2	2	1		02/26/09 21:24
27	8M352058	L09020541-02 A 624	<2	2	1		02/26/09 21:56

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3				
File ID: 8M352034				
RR for carryover.				

Approved: February 27, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103691

Instrument: HPMS8 Dataset: 022609
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Maintenance Log ID: 27780

Internal Standard: STD31335 Surrogate Standard: STD31410
 CCV: STD31491 LCS: STD31431 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG295873

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8				
File ID: 8M352039				
DNR				
9	X	1	Analyzed too dilute	
File ID: 8M352040				
Prelim only.				
10	X	10	Analyzed too dilute	
File ID: 8M352041				
Prelim only.				
11				
File ID: 8M352042				
Too much particulate to run more conc.				
13				
File ID: 8M352044				
Sample is foamy thick paint waste, not running more conc. Also, not water soluble-planning to run as an extraction.				

Approved: February 27, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103692

Instrument: HPMS6 Dataset: 022709
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27801

Internal Standard: STD31170 Surrogate Standard: STD31171
 CCV: STD31435 LCS: STD31498 MS/MSD: STD31498
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG296017

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M81836	WG296016-01 50NG BFB STD 8260	NA	1	1	STD31210	02/27/09 08:12
2	6M81837	WG296016-02 50ug/L WATER STD 8260	NA	1	1	STD31435	02/27/09 08:36
3	6M81838	WG296016-02 50ug/L WATER STD 8260	NA	1	1	STD31435	02/27/09 09:09
4	6M81839	WG296016-01 50NG BFB STD 8260	NA	1	1	STD31210	02/27/09 09:39
5	6M81840	WG296016-02 50ug/L WATER STD 8260	NA	1	1	STD31435	02/27/09 10:03
6	6M81841	WG296016-02 50ug/L WATER STD 82	NA	1	1		02/27/09 10:36
7	6M81842	WG296017-01 VBLK0227 BLANK 8260	NA	1	1		02/27/09 11:10
8	6M81843	WG296017-02 20ug/L LCS 8260	NA	1	1	STD31498	02/27/09 11:42
9	6M81844	L09020494-03 B D1 20X 826-SPE	<2	1	20		02/27/09 12:14
10	6M81845	L09020494-05 B D1 5X 826-SPE	<2	1	5		02/27/09 12:47
11	6M81846	L09020466-01 A 826-SPE	<2	1	1		02/27/09 13:19
12	6M81847	L09020556-02 B 826-LOW	<2	1	1		02/27/09 13:51
13	6M81848	L09020556-03 B 826-LOW	<2	1	1		02/27/09 14:23
14	6M81849	L09020469-01 A 826-SPE	<2	1	1		02/27/09 14:56
15	6M81850	L09020494-06 B D1 25X 826-SPE	<2	1	25		02/27/09 15:28
16	6M81851	L09020494-07 B D1 5X 826-SPE	<2	1	5		02/27/09 16:00
17	6M81852	L09020494-08 B D1 5X 826-SPE	<2	1	5		02/27/09 16:32
18	6M81853	L09020494-09 B D1 5X 826-SPE	<2	1	5		02/27/09 17:04
19	6M81854	L09020466-10 MS A 5X 8	6	1	5		02/27/09 17:36
20	6M81855	L09020466-11 MSD A 5X	6	1	5		02/27/09 18:08
21	6M81856	L09020411-01 B 826-SPE	<2	1	1		02/27/09 18:40
22	6M81857	L09020411-02 B 5X 826-SPE	5	1	5		02/27/09 19:13
23	6M81858	L09020466-09 A 5X 826-SPE	5	1	5		02/27/09 19:45
24	6M81859	L09020469-02 A 826-SPE	<2	1	1		02/27/09 20:17
25	6M81860	L09020469-04 A 826-SPE	<2	1	1		02/27/09 20:49
26	6M81861	L09020584-01 A 5X 826-SPE	<2	1	5		02/27/09 21:21
27	6M81862	SYSTEM BLANK	NA	1	5		02/27/09 21:53
28	6M81863	WG296017-06 624 BLANK	NA	1	1		02/27/09 22:25
29	6M81864	L09020673-01 A 10X 624	<2	2	10		02/27/09 22:57
30	6M81865	L09020673-02 A 10X 624	<2	2	10		02/27/09 23:29
31	6M81866	SYSTEM BLANK	NA	1	1		02/28/09 00:01

Comments

Approved:

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Microbac Laboratories Inc.
Instrument Run Log

00103693

Instrument: HPMS6 Dataset: 022709
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 27801

Internal Standard: STD31170 Surrogate Standard: STD31171
 CCV: STD31435 LCS: STD31498 MS/MSD: STD31498
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG296017

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2				
File ID: 6M81837				
RR, vc is high.				
3				
File ID: 6M81838				
RR, vc is high.				
5				
File ID: 6M81840				
RR, vc is high.				
13	X	25	Over Calibration Range	TCE
File ID: 6M81848				
14	X	1	Carry-over contamination	
File ID: 6M81849				
DNR				
19	X	1	Analyzed too dilute	
File ID: 6M81854				
QC only.				
20	X	1	Analyzed too dilute	
File ID: 6M81855				
QC only.				
22				
File ID: 6M81857				
Too much particulate to analyze more concentrated.				
23	X	1	Analyzed too dilute	
File ID: 6M81858				
QC only.				
26	X	1	Analyzed too dilute	
File ID: 6M81861				
29	X	1	Analyzed too dilute	
File ID: 6M81864				
DNR				
30	X	1	Analyzed too dilute	
File ID: 6M81865				
DNR				

Approved:



Microbac Laboratories Inc.

00103694

Data Checklist

Date: 19-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS8

Curve Workgroup: NA

Runlog ID: 26615

Analytical Workgroups: WG295371; WG295276

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	TMB
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:
20-FEB-2009



Secondary Reviewer:
20-FEB-2009




Microbac Laboratories Inc.

00103695

Data Checklist

Date: 19-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 26652

Analytical Workgroups: WG295337, WG295607

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)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	
Check for compliance with method and project specific requirements	
Check the completeness of reported information	
Check the information for the report narrative	
Check the reasonableness of the results	

Primary Reviewer:
23-FEB-2009



Secondary Reviewer:

Microbac Laboratories Inc.

00103696

Data Checklist

Date: 26-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260/624

Instrument: HPMS8

Curve Workgroup: NA

Runlog ID: 26765

Analytical Workgroups: WG295873

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	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:
27-FEB-2009



Secondary Reviewer:
27-FEB-2009




Microbac Laboratories Inc.

00103697

Data Checklist

Date: 27-FEB-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 26791

Analytical Workgroups: WG296017

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	X
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	
Check for compliance with method and project specific requirements	
Check the completeness of reported information	
Check the information for the report narrative	
Check the reasonableness of the results	

Primary Reviewer:
02-MAR-2009



Secondary Reviewer:



Analytical Method: 8260B

AAB#: WG295873

Login Number: L09020556

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
47WW34-022309	02/23/09	02/25/09	02/26/09	14	2.97	02/26/09	14	2.97	
TRIP BLANK	02/23/09	02/25/09	02/26/09	14	3.47	02/26/09	14	3.47	
LHSMW57-022309	02/23/09	02/25/09	02/26/09	14	3.39	02/26/09	14	3.39	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG296017

Login Number: L09020556

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
47WW34-022309	02/23/09	02/25/09	02/27/09	14	4.04	02/27/09	14	4.04	
LHSMW41-022309	02/23/09	02/25/09	02/27/09	14	4.09	02/27/09	14	4.09	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L09020556
Instrument Id: HPMS8
Workgroup (AAB#): WG295873

Method: 8260
CAL ID: HPMS8 - 19-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020556-01	1.00	01	87.6	99.6	104	102
L09020556-03	25.0	DL01	90.5	101	105	101
L09020556-04	1.00	01	88.2	98.3	103	102
WG295873-01	1.00	02	85.0	96.7	103	101
WG295873-02	1.00	01	89.7	100	102	102
WG295873-03	1.00	01	87.0	97.1	102	99.7
WG295873-04	1.00	01	91.4	102	103	100

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: L09020556
Instrument Id: HPMS6
Workgroup (AAB#): WG296017

Method: 8260
CAL ID: HPMS6 - 19-FEB-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09020556-02	1.00	01	113	109	101	98.3
L09020556-03	1.00	01	108	105	98.4	97.3
WG296017-01	1.00	01	99.7	101	95.5	93.2
WG296017-02	1.00	01	96.3	99.2	95.2	95.2

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

Login Number: <u>L09020556</u>	Work Group: <u>WG296017</u>
Blank File ID: <u>6M81842</u>	Blank Sample ID: <u>WG296017-01</u>
Prep Date: <u>02/27/09 11:10</u>	Instrument ID: <u>HPMS6</u>
Analyzed Date: <u>02/27/09 11:10</u>	Method: <u>8260B</u>
Analyst: <u>MES</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG296017-02	6M81843	02/27/09 11:42	01
LHSMW41-022309	L09020556-02	6M81847	02/27/09 13:51	01
47WW34-022309	L09020556-03	6M81848	02/27/09 14:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 1331960
Report generated 03/02/2009 10:08



METHOD BLANK SUMMARY

Login Number: <u>L09020556</u>	Work Group: <u>WG295873</u>
Blank File ID: <u>8M352037</u>	Blank Sample ID: <u>WG295873-01</u>
Prep Date: <u>02/26/09 10:41</u>	Instrument ID: <u>HPMS8</u>
Analyzed Date: <u>02/26/09 10:41</u>	Method: <u>8260B</u>
Analyst: <u>MES</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG295873-02	8M352035	02/26/09 09:37	01
LCS2	WG295873-03	8M352036	02/26/09 10:09	01
TRIP BLANK	L09020556-04	8M352038	02/26/09 11:13	01
47WW34-022309	L09020556-03	8M352041	02/26/09 12:49	DL01
LHSMW57-022309	L09020556-01	8M352053	02/26/09 19:16	01

Report Name: BLANK_SUMMARY
 PDF File ID: 1331960
 Report generated 03/02/2009 10:08



Login Number: L09020556 Prep Date: 02/27/09 11:10 Sample ID: WG296017-01
 Instrument ID: HPMS6 Run Date: 02/27/09 11:10 Prep Method: 5030B
 File ID: 6M81842 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG296017 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 19-FEB-09

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	0.460	1	J

Report Name: BLANK

PDF ID: 1331962

02-MAR-2009 10:08



METHOD BLANK REPORT

00103705

Login Number: L09020556 Prep Date: 02/27/09 11:10 Sample ID: WG296017-01
 Instrument ID: HPMS6 Run Date: 02/27/09 11:10 Prep Method: 5030B
 File ID: 6M81842 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG296017 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 19-FEB-09

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	0.200	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	0.150	1.00	0.214	1	J
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	0.500	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	101	86 - 118	PASS
1,2-Dichloroethane-d4	99.7	80 - 120	PASS
Toluene-d8	93.2	88 - 110	PASS
4-Bromofluorobenzene	95.5	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1331962

02-MAR-2009 10:08



Login Number: L09020556 Prep Date: 02/26/09 10:41 Sample ID: WG295873-01
 Instrument ID: HPMS8 Run Date: 02/26/09 10:41 Prep Method: 5030B
 File ID: 8M352037 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295873 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.250	1	U

Report Name: BLANK

PDF ID: 1331962

02-MAR-2009 10:08



Login Number: L09020556 Prep Date: 02/26/09 10:41 Sample ID: WG295873-01
 Instrument ID: HPMS8 Run Date: 02/26/09 10:41 Prep Method: 5030B
 File ID: 8M352037 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG295873 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8 - 19-FEB-09

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	0.200	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	0.150	1.00	0.150	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	0.500	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	96.7	86 - 118	PASS
1,2-Dichloroethane-d4	85.0	80 - 120	PASS
Toluene-d8	101	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

Report Name: BLANK

PDF ID: 1331962

02-MAR-2009 10:08



Login Number: L09020556 Run Date: 02/27/2009 Sample ID: WG296017-02
Instrument ID: HPMS6 Run Time: 11:42 Prep Method: 5030B
File ID: 6M81843 Analyst: MES Method: 8260B
Workgroup (AAB#): WG296017 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD31498 Cal ID: HPMS6 - 19-FEB-09

Analytes	Expected	Found	% Rec	LCS Limits			Q
Acetone	20.0	19.6	98.2	40	-	142	
Benzene	20.0	20.1	101	80	-	121	
Bromobenzene	20.0	18.6	93.2	80	-	120	
Bromochloromethane	20.0	20.5	103	65	-	130	
Bromodichloromethane	20.0	22.1	111	80	-	131	
Bromoform	20.0	18.7	93.5	70	-	130	
Bromomethane	20.0	20.0	100	30	-	145	
2-Butanone	20.0	24.2	121	30	-	150	
n-Butylbenzene	20.0	18.4	92.2	80	-	131	
sec-Butylbenzene	20.0	19.4	97.1	80	-	127	
tert-Butylbenzene	20.0	18.6	93.1	80	-	126	
Carbon disulfide	20.0	17.7	88.7	58	-	138	
Carbon tetrachloride	20.0	24.1	120	65	-	140	
Chlorobenzene	20.0	18.6	92.9	80	-	120	
Chlorodibromomethane	20.0	19.4	97.2	60	-	135	
Chloroethane	20.0	19.8	99.2	60	-	135	
2-Chloroethyl vinyl ether	20.0	18.6	92.8	58	-	151	
Chloroform	20.0	21.2	106	80	-	125	
Chloromethane	20.0	22.0	110	40	-	125	
2-Chlorotoluene	20.0	19.0	95.2	80	-	127	
4-Chlorotoluene	20.0	18.9	94.7	80	-	126	
1,2-Dibromo-3-chloropropane	20.0	19.3	96.4	50	-	130	
1,2-Dibromoethane	20.0	19.2	95.8	80	-	125	
Dibromomethane	20.0	20.1	100	75	-	125	
1,2-Dichlorobenzene	20.0	17.8	88.9	80	-	125	
1,3-Dichlorobenzene	20.0	17.9	89.5	80	-	120	
1,4-Dichlorobenzene	20.0	17.3	86.3	80	-	120	
Dichlorodifluoromethane	20.0	21.6	108	50	-	133	
1,1-Dichloroethane	20.0	20.5	103	80	-	125	
1,2-Dichloroethane	20.0	20.6	103	80	-	129	
1,1-Dichloroethene	20.0	20.6	103	80	-	132	
cis-1,2-Dichloroethene	20.0	21.2	106	70	-	125	
trans-1,2-Dichloroethene	20.0	20.1	100	80	-	127	
1,2-Dichloropropane	20.0	19.4	96.8	80	-	120	
1,3-Dichloropropane	20.0	18.4	91.9	80	-	120	
2,2-Dichloropropane	20.0	21.0	105	80	-	133	
cis-1,3-Dichloropropene	20.0	19.1	95.3	70	-	130	
trans-1,3-Dichloropropene	20.0	17.2	85.8	80	-	130	
1,1-Dichloropropene	20.0	19.9	99.4	75	-	130	
Ethylbenzene	20.0	19.5	97.3	80	-	122	
2-Hexanone	20.0	17.5	87.4	55	-	130	

LCS - Modified 03/06/2008
PDF File ID: 1331908
Report generated: 03/02/2009 10:08



Login Number: L09020556 Run Date: 02/27/2009 Sample ID: WG296017-02
Instrument ID: HPMS6 Run Time: 11:42 Prep Method: 5030B
File ID: 6M81843 Analyst: MES Method: 8260B
Workgroup (AAB#): WG296017 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD31498 Cal ID: HPMS6 - 19-FEB-09

Analytes	Expected	Found	% Rec	LCS Limits	Q
Hexachlorobutadiene	20.0	18.8	93.9	72 - 132	
Isopropylbenzene	20.0	17.4	87.1	80 - 122	
p-Isopropyltoluene	20.0	18.1	90.7	80 - 122	
4-Methyl-2-pentanone	20.0	17.7	88.6	64 - 140	
Methylene chloride	20.0	20.3	101	80 - 123	
Naphthalene	20.0	16.4	82.1	59 - 149	
n-Propylbenzene	20.0	19.4	97.1	80 - 129	
Styrene	20.0	18.9	94.6	80 - 123	
1,1,1,2-Tetrachloroethane	20.0	20.8	104	80 - 130	
1,1,2,2-Tetrachloroethane	20.0	16.9	84.5	79 - 125	
Tetrachloroethene	20.0	19.9	99.3	80 - 124	
Toluene	20.0	20.3	101	80 - 124	
1,2,3-Trichlorobenzene	20.0	16.7	83.5	55 - 140	
1,2,4-Trichlorobenzene	20.0	16.6	82.8	65 - 135	
1,1,1-Trichloroethane	20.0	22.5	113	80 - 134	
1,1,2-Trichloroethane	20.0	18.5	92.4	80 - 125	
Trichloroethene	20.0	19.9	99.5	80 - 122	
Trichlorofluoromethane	20.0	21.6	108	62 - 151	
1,2,3-Trichloropropane	20.0	18.0	89.9	75 - 125	
1,2,4-Trimethylbenzene	20.0	19.2	96.0	80 - 125	
1,3,5-Trimethylbenzene	20.0	19.1	95.7	80 - 127	
Vinyl acetate	20.0	12.4	62.1	10 - 150	
Vinyl chloride	20.0	22.2	111	65 - 140	
o-Xylene	20.0	18.8	93.9	80 - 122	
m-,p-Xylene	40.0	38.6	96.6	80 - 122	

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	99.2	86 - 118	PASS
1,2-Dichloroethane-d4	96.3	80 - 120	PASS
Toluene-d8	95.2	88 - 110	PASS
4-Bromofluorobenzene	95.2	86 - 115	PASS

* FAILS %REC LIMIT

Login Number: L09020556 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295873 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295873-02 LCS File ID: 8M352035 Run Date: 02/26/2009 09:37
Sample ID: WG295873-03 LCS2 File ID: 8M352036 Run Date: 02/26/2009 10:09

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	22.8	114	20.0	21.2	106	7.29	40 - 142	20	
Benzene	20.0	20.5	103	20.0	20.8	104	1.48	80 - 121	20	
Bromobenzene	20.0	20.9	104	20.0	20.8	104	0.254	80 - 120	20	
Bromochloromethane	20.0	20.5	102	20.0	20.5	103	0.309	65 - 130	20	
Bromodichloromethane	20.0	20.1	100	20.0	19.9	99.5	0.860	80 - 131	20	
Bromoform	20.0	18.8	93.8	20.0	18.0	90.1	3.95	70 - 130	20	
Bromomethane	20.0	18.8	94.1	20.0	17.4	87.2	7.53	30 - 145	20	
2-Butanone	20.0	27.0	135	20.0	25.8	129	4.56	30 - 150	20	
n-Butylbenzene	20.0	18.8	93.8	20.0	19.5	97.5	3.85	80 - 131	20	
sec-Butylbenzene	20.0	19.5	97.4	20.0	20.3	102	4.28	80 - 127	20	
tert-Butylbenzene	20.0	19.8	99.1	20.0	20.5	103	3.52	80 - 126	20	
Carbon disulfide	20.0	17.5	87.7	20.0	17.9	89.7	2.25	58 - 138	20	
Carbon tetrachloride	20.0	19.8	99.0	20.0	19.8	98.9	0.114	65 - 140	20	
Chlorobenzene	20.0	19.7	98.5	20.0	20.1	101	2.05	80 - 120	20	
Chlorodibromomethane	20.0	20.4	102	20.0	19.8	98.9	3.26	60 - 135	20	
Chloroethane	20.0	21.2	106	20.0	21.3	106	0.299	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	22.2	111	20.0	20.9	105	5.97	58 - 151	20	
Chloroform	20.0	19.2	96.2	20.0	19.5	97.3	1.16	80 - 125	20	
Chloromethane	20.0	18.7	93.7	20.0	19.0	95.2	1.65	40 - 125	20	
2-Chlorotoluene	20.0	20.7	104	20.0	21.2	106	2.14	80 - 127	20	
4-Chlorotoluene	20.0	19.8	99.2	20.0	20.6	103	3.64	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	18.4	91.8	20.0	17.1	85.5	7.04	50 - 130	20	
1,2-Dibromoethane	20.0	20.6	103	20.0	20.1	101	2.62	80 - 125	20	
Dibromomethane	20.0	20.1	101	20.0	19.3	96.7	3.87	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.2	96.2	20.0	19.6	97.8	1.62	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.4	96.9	20.0	20.2	101	3.97	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.7	93.7	20.0	19.0	95.0	1.29	80 - 120	20	
Dichlorodifluoromethane	20.0	19.4	97.0	20.0	19.9	99.4	2.48	50 - 133	20	
1,1-Dichloroethane	20.0	20.5	102	20.0	20.7	103	0.953	80 - 125	20	
1,2-Dichloroethane	20.0	19.1	95.6	20.0	18.6	93.2	2.60	80 - 129	20	
1,1-Dichloroethene	20.0	19.8	99.2	20.0	20.3	101	2.17	80 - 132	20	
cis-1,2-Dichloroethene	20.0	21.2	106	20.0	22.0	110	3.67	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.8	99.2	20.0	20.8	104	4.92	80 - 127	20	
1,2-Dichloropropane	20.0	20.2	101	20.0	20.0	100	0.863	80 - 120	20	
1,3-Dichloropropane	20.0	20.4	102	20.0	19.6	97.9	3.88	80 - 120	20	
2,2-Dichloropropane	20.0	20.1	101	20.0	20.2	101	0.151	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.7	103	20.0	20.1	100	3.01	70 - 130	20	
trans-1,3-Dichloropropene	20.0	18.6	92.9	20.0	18.0	90.0	3.16	80 - 130	20	
1,1-Dichloropropene	20.0	21.1	106	20.0	21.5	108	1.87	75 - 130	20	
Ethylbenzene	20.0	20.4	102	20.0	20.5	103	0.524	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1330666
Report generated: 03/02/2009 10:08



Login Number: L09020556 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG295873 Units: ug/L
QC Key: STD Lot #: STD31431

Sample ID: WG295873-02 LCS File ID: 8M352035 Run Date: 02/26/2009 09:37
Sample ID: WG295873-03 LCS2 File ID: 8M352036 Run Date: 02/26/2009 10:09

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	18.5	92.5	20.0	18.3	91.5	1.12	55 - 130	20	
Hexachlorobutadiene	20.0	14.3	71.5	20.0	14.3	71.6	0.0880	72 - 132	20	*
Isopropylbenzene	20.0	18.7	93.5	20.0	19.2	95.8	2.42	80 - 122	20	
p-Isopropyltoluene	20.0	19.1	95.5	20.0	19.9	99.6	4.20	80 - 122	20	
4-Methyl-2-pentanone	20.0	19.0	95.2	20.0	18.1	90.7	4.80	64 - 140	20	
Methylene chloride	20.0	20.0	100	20.0	19.4	97.0	3.16	80 - 123	20	
Naphthalene	20.0	18.1	90.5	20.0	17.8	89.2	1.43	59 - 149	20	
n-Propylbenzene	20.0	21.0	105	20.0	21.7	108	3.40	80 - 129	20	
Styrene	20.0	20.9	105	20.0	21.1	106	0.862	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.0	100	20.0	20.3	102	1.41	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	20.0	99.9	20.0	19.3	96.5	3.49	79 - 125	20	
Tetrachloroethene	20.0	19.8	98.9	20.0	20.7	103	4.55	80 - 124	20	
Toluene	20.0	21.0	105	20.0	21.4	107	1.79	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	16.2	81.2	20.0	16.3	81.5	0.370	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	17.7	88.4	20.0	17.8	89.1	0.750	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.1	100	20.0	20.2	101	0.782	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.8	104	20.0	20.2	101	2.96	80 - 125	20	
Trichloroethene	20.0	20.6	103	20.0	20.9	105	1.66	80 - 122	20	
Trichlorofluoromethane	20.0	20.3	101	20.0	20.1	101	0.786	62 - 151	20	
1,2,3-Trichloropropane	20.0	20.7	103	20.0	19.7	98.7	4.76	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	20.8	104	20.0	21.3	106	2.36	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.2	106	20.0	22.0	110	3.63	80 - 127	20	
Vinyl acetate	20.0	13.8	69.2	20.0	13.1	65.7	5.06	10 - 150	20	
Vinyl chloride	20.0	20.6	103	20.0	21.0	105	1.75	65 - 140	20	
o-Xylene	20.0	21.0	105	20.0	21.5	107	2.35	80 - 122	20	
m-, p-Xylene	40.0	40.7	102	40.0	41.5	104	2.03	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	89.7	87.0	80 - 120	PASS
Dibromofluoromethane	100	97.1	86 - 118	PASS
4-Bromofluorobenzene	102	102	86 - 115	PASS
Toluene-d8	102	99.7	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1330666
Report generated: 03/02/2009 10:08



BFB

Login Number: L09020556

Instrument: HPMS6

Analyst: MES

Workgroup: WG295337

Tune ID: WG295337-01

Run Date: 02/19/2009

Run Time: 13:57

File ID: 6M81613

Cal ID: HPMS6 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.3	10840	PASS
75.0	95.0	30.0	60.0	47.9	25597	PASS
95.0	95.0	100	100	100	53440	PASS
96.0	95.0	5.00	9.00	7.68	4102	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	75.9	40549	PASS
175	174	5.00	9.00	7.51	3045	PASS
176	174	95.0	101	96.8	39232	PASS
177	176	5.00	9.00	6.31	2476	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295337-02	STD	01	02/19/2009 14:11	
WG295337-03	STD	01	02/19/2009 14:45	
WG295337-04	STD	01	02/19/2009 15:19	
WG295337-05	STD	01	02/19/2009 15:51	
WG295337-06	STD	01	02/19/2009 16:25	
WG295337-07	STD	01	02/19/2009 16:57	
WG295337-08	STD-CCV	01	02/19/2009 17:29	
WG295337-09	STD	01	02/19/2009 18:01	
WG295337-10	STD	01	02/19/2009 18:34	
WG295337-11	STD	01	02/19/2009 19:06	
WG295337-12	SSCV	01	02/19/2009 20:10	
WG295337-12	SSCV	02	02/19/2009 20:43	

* Sample past 12 hour tune limit

BFB

Login Number: L09020556
Instrument: HPMS6
Analyst: MES
Workgroup: WG296016

Tune ID: WG296016-01
Run Date: 02/27/2009
Run Time: 09:39
File ID: 6M81839

Cal ID: HPMS6 - 19-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	22.2	9134	PASS
75.0	95.0	30.0	60.0	51.6	21224	PASS
95.0	95.0	100	100	100	41117	PASS
96.0	95.0	5.00	9.00	7.33	3012	PASS
173	174	0	2.00	0.940	291	PASS
174	95.0	50.0	100	75.3	30960	PASS
175	174	5.00	9.00	8.03	2486	PASS
176	174	95.0	101	95.7	29616	PASS
177	176	5.00	9.00	6.75	2000	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG296016-02	CCV	01	02/27/2009 10:36	
WG296017-01	BLANK	01	02/27/2009 11:10	
WG296017-02	LCS	01	02/27/2009 11:42	
L09020556-02	LHSMW41-022309	01	02/27/2009 13:51	
L09020556-03	47WW34-022309	01	02/27/2009 14:23	

* Sample past 12 hour tune limit

BFB

Login Number: L09020556
Instrument: HPMS8
Analyst: MES
Workgroup: WG295276

Tune ID: WG295276-01
Run Date: 02/19/2009
Run Time: 08:25
File ID: 8M351785

Cal ID: HPMS8 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	28.7	28645	PASS
75.0	95.0	30.0	60.0	55.5	55453	PASS
95.0	95.0	100	100	100	99829	PASS
96.0	95.0	5.00	9.00	6.73	6717	PASS
173	174	0	2.00	0.293	213	PASS
174	95.0	50.0	100	72.8	72637	PASS
175	174	5.00	9.00	7.92	5753	PASS
176	174	95.0	101	99.9	72544	PASS
177	176	5.00	9.00	6.55	4752	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295276-02	STD	01	02/19/2009 08:50	
WG295276-03	STD	01	02/19/2009 09:23	
WG295276-04	STD	01	02/19/2009 09:55	
WG295276-05	STD	01	02/19/2009 10:31	
WG295276-06	STD	01	02/19/2009 11:03	
WG295276-07	STD	01	02/19/2009 11:37	
WG295276-08	STD-CCV	01	02/19/2009 12:09	
WG295276-10	STD	01	02/19/2009 13:13	
WG295276-11	STD	01	02/19/2009 13:45	
WG295276-09	STD	01	02/19/2009 14:17	
WG295276-12	SSCV	01	02/19/2009 16:12	
WG295276-12	SSCV	02	02/19/2009 16:44	

* Sample past 12 hour tune limit

BFB

Login Number: L09020556
Instrument: HPMS8
Analyst: MES
Workgroup: WG295872

Tune ID: WG295872-01
Run Date: 02/26/2009
Run Time: 08:07
File ID: 8M352032

Cal ID: HPMS8 - 19-FEB-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	25.1	19511	PASS
75.0	95.0	30.0	60.0	51.2	39792	PASS
95.0	95.0	100	100	100	77722	PASS
96.0	95.0	5.00	9.00	7.18	5583	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	72.7	56490	PASS
175	174	5.00	9.00	7.70	4352	PASS
176	174	95.0	101	95.7	54064	PASS
177	176	5.00	9.00	6.85	3705	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG295872-02	CCV	01	02/26/2009 08:32	
WG295873-02	LCS	01	02/26/2009 09:37	
WG295873-03	LCS2	01	02/26/2009 10:09	
WG295873-01	BLANK	02	02/26/2009 10:41	
L09020556-04	TRIP BLANK	01	02/26/2009 11:13	
L09020556-03	47WW34-022309	DL01	02/26/2009 12:49	
L09020556-01	LHSMW57-022309	01	02/26/2009 19:16	
WG295873-04	BLANK2	01	02/26/2009 20:52	*

* Sample past 12 hour tune limit

Login Number: L09020556
Analytical Method: 8260B
ICAL Workgroup: WG295337

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3638	5.52		
1,2-Dichloropropane	CCC	0.2272	4.51		
Chloroform	CCC	0.4524	4.93		
Ethylbenzene	CCC	0.4727	6.70		
Toluene	CCC	1.215	5.91		
Vinyl Chloride	CCC	0.1948	12.6		
1,1,2,2-Tetrachloroethane	SPCC	0.4006	7.14		
1,1-Dichloroethane	SPCC	0.4410	3.87		
Bromoform	SPCC	0.1297	25.9		1.00000
Chlorobenzene	SPCC	0.8922	9.46		
Chloromethane	SPCC	0.2799	12.7		
1,1,1,2-Tetrachloroethane		0.2647	6.95		
1,1,1-Trichloroethane		0.3799	7.14		
1,1,2-Trichloroethane		0.2075	6.80		
1,1-Dichloropropene		0.3308	6.73		
1,2,3-Trichlorobenzene		0.7353	11.2		
1,2,3-Trichloropropane		0.1255	6.59		
1,2,4-Trichlorobenzene		0.8256	11.0		
1,2,4-Trimethylbenzene		2.252	9.63		
1,2-Dibromo-3-Chloropropane		0.07270	8.35		
1,2-Dibromoethane		0.2079	9.32		
1,2-Dichlorobenzene		1.240	11.2		
1,2-Dichloroethane		0.3270	3.65		
1,3,5-Trimethylbenzene		2.218	8.82		
1,3-Dichlorobenzene		1.358	11.8		
1,3-Dichloropropane		0.3739	4.43		
1,4-Dichlorobenzene		1.447	14.0		
2,2-Dichloropropane		0.3745	7.20		
2-Butanone		0.06755	6.12		
2-Chloroethyl Vinyl Ether		0.1000	6.94		
2-Chlorotoluene		2.243	10.5		
2-Hexanone		0.1166	9.01		
4-Chlorotoluene		1.962	12.4		
4-Methyl-2-Pentanone		0.05390	8.19		
Acetone		0.04615	8.10		
Benzene		0.9553	5.90		
Bromobenzene		0.6422	8.39		
Bromochloromethane		0.1483	4.04		
Bromodichloromethane		0.3074	7.47		
Bromomethane		0.1771	16.1		1.00000
Carbon Disulfide		0.8118	3.81		
Carbon Tetrachloride		0.2970	14.2		
Chloroethane		0.2001	8.04		
Dibromochloromethane		0.2289	15.3		1.00000
Dibromomethane		0.1276	5.30		

INT_CAL - Modified 03/06/2008
PDF File ID: 1331963
Report generated 03/02/2009 10:08



Login Number: L09020556
Analytical Method: 8260B
ICAL Workgroup: WG295337

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.3644	6.60		
Hexachlorobutadiene	0.3158	7.83		
Isopropylbenzene	1.500	9.33		
Methylene Chloride	0.3157	33.2		1.00000
Naphthalene	1.284	6.13		
Styrene	1.024	6.52		
Tetrachloroethene	0.2998	4.98		
Trichloroethene	0.2503	5.44		
Trichlorofluoromethane	0.4319	10.7		
Vinyl Acetate	0.3576	6.32		
cis-1,2-Dichloroethene	0.2554	5.50		
cis-1,3-Dichloropropene	0.3685	6.83		
m-,p-Xylene	0.6124	10.1		
n-Butylbenzene	1.997	7.31		
n-Propylbenzene	2.991	9.98		
o-Xylene	0.6032	7.70		
p-Isopropyltoluene	2.273	8.59		
sec-Butylbenzene	2.553	8.88		
tert-Butylbenzene	0.4671	7.32		
trans-1,2-Dichloroethene	0.2353	5.69		
trans-1,3-Dichloropropene	0.3973	7.34		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09020556
Analytical Method: 8260B
ICAL Workgroup: WG295276

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.4551	5.74		
1,2-Dichloropropane	CCC	0.2286	2.31		
Chloroform	CCC	0.5415	10.1		
Ethylbenzene	CCC	0.4606	6.36		
Toluene	CCC	1.234	7.01		
Vinyl Chloride	CCC	0.3255	28.2		0.99100
1,1,2,2-Tetrachloroethane	SPCC	0.4396	7.97		
1,1-Dichloroethane	SPCC	0.4863	3.66		
Bromoform	SPCC	0.2153	7.44		
Chlorobenzene	SPCC	0.8737	6.73		
Chloromethane	SPCC	0.4759	19.2		1.00000
1,1,1,2-Tetrachloroethane		0.3650	9.95		
1,1,1-Trichloroethane		0.5417	11.2		
1,1,2-Trichloroethane		0.2285	7.93		
1,1-Dichloropropene		0.3390	10.6		
1,2,3-Trichlorobenzene		0.9570	10.7		
1,2,3-Trichloropropane		0.1572	13.8		
1,2,4-Trichlorobenzene		1.038	9.03		
1,2,4-Trimethylbenzene		2.511	9.89		
1,2-Dibromo-3-Chloropropane		0.1212	7.91		
1,2-Dibromoethane		0.2346	8.21		
1,2-Dichlorobenzene		1.269	6.30		
1,2-Dichloroethane		0.4997	13.5		
1,3,5-Trimethylbenzene		2.304	13.5		
1,3-Dichlorobenzene		1.349	6.36		
1,3-Dichloropropane		0.4103	7.29		
1,4-Dichlorobenzene		1.441	8.39		
2,2-Dichloropropane		0.5148	8.84		
2-Butanone		0.07805	1.57		
2-Chloroethyl Vinyl Ether		0.1073	14.3		
2-Chlorotoluene		2.197	11.3		
2-Hexanone		0.06718	12.7		
4-Chlorotoluene		2.276	8.51		
4-Methyl-2-Pentanone		0.05713	7.23		
Acetone		0.06597	15.5		0.99700
Benzene		0.8578	4.75		
Bromobenzene		0.6478	5.31		
Bromochloromethane		0.1396	7.97		
Bromodichloromethane		0.4142	9.17		
Bromomethane		0.1840	8.31		
Carbon Disulfide		0.7580	6.04		
Carbon Tetrachloride		0.4670	13.1		
Chloroethane		0.1829	7.64		
Dibromochloromethane		0.3370	6.87		
Dibromomethane		0.1403	10.6		

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Login Number: L09020556
Analytical Method: 8260B
ICAL Workgroup: WG295276

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.4593	15.3		1.00000
Hexachlorobutadiene	0.5521	11.4		
Isopropylbenzene	1.473	10.5		
Methylene Chloride	0.2847	26.2		1.00000
Naphthalene	1.817	9.41		
Styrene	0.9151	9.55		
Tetrachloroethene	0.2728	6.43		
Trichloroethene	0.2385	4.34		
Trichlorofluoromethane	0.5772	12.8		
Vinyl Acetate	0.4150	7.06		
cis-1,2-Dichloroethene	0.2422	6.47		
cis-1,3-Dichloropropene	0.3800	8.55		
m-,p-Xylene	0.5696	6.55		
n-Butylbenzene	2.552	11.2		
n-Propylbenzene	3.219	11.3		
o-Xylene	0.5367	10.3		
p-Isopropyltoluene	2.541	9.85		
sec-Butylbenzene	2.877	9.47		
tert-Butylbenzene	0.4735	7.15		
trans-1,2-Dichloroethene	0.3987	5.94		
trans-1,3-Dichloropropene	0.5203	10.2		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-02			WG295337-03			WG295337-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4933.00000	0.3868	1.00	12195.00000	0.3724
1,2-Dichloropropane	NA	NA	NA	0.400	2852.00000	0.2236	1.00	7355.00000	0.2246
Chloroform	0.300	4948.00000	0.4588	0.400	6322.00000	0.4957	1.00	15152.00000	0.4627
Ethylbenzene	NA	NA	NA	0.400	5529.00000	0.4991	1.00	14840.00000	0.5194
Toluene	NA	NA	NA	0.400	14297.00000	1.291	1.00	36012.00000	1.260
Vinyl Chloride	NA	NA	NA	0.400	2765.00000	0.2168	1.00	7670.00000	0.2342
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2892.00000	0.4221	1.00	7762.00000	0.4416
1,1-Dichloroethane	NA	NA	NA	0.400	5800.00000	0.4548	1.00	14934.00000	0.4560
Bromoform	NA	NA	NA	NA	NA	NA	1.00	2790.00000	0.09760
Chlorobenzene	NA	NA	NA	0.400	11274.00000	1.018	1.00	28733.00000	1.006
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	11631.00000	0.3552
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2808.00000	0.2535	1.00	7834.00000	0.2742
1,1,1-Trichloroethane	NA	NA	NA	0.400	4655.00000	0.3650	1.00	12478.00000	0.3810
1,1,2-Trichloroethane	NA	NA	NA	0.400	2464.00000	0.2224	1.00	6615.00000	0.2315
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	10952.00000	0.3344
1,2,3-Trichlorobenzene	0.300	3964.00000	0.7053	0.400	6176.00000	0.9014	1.00	14761.00000	0.8397
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	2309.00000	0.1314
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	6998.00000	1.021	1.00	15586.00000	0.8867
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	1.00	46218.00000	2.629
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1842.00000	0.1663	1.00	6311.00000	0.2209
1,2-Dichlorobenzene	0.300	6867.00000	1.222	0.400	10241.00000	1.495	1.00	25118.00000	1.429
1,2-Dichloroethane	NA	NA	NA	0.400	4348.00000	0.3409	1.00	10944.00000	0.3342
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	17055.00000	2.489	1.00	42912.00000	2.441
1,3-Dichlorobenzene	NA	NA	NA	0.400	11153.00000	1.628	1.00	27689.00000	1.575
1,3-Dichloropropane	NA	NA	NA	0.400	4314.00000	0.3894	1.00	11220.00000	0.3927
1,4-Dichlorobenzene	0.300	8751.00000	1.557	0.400	12338.00000	1.801	1.00	30072.00000	1.711
2,2-Dichloropropane	NA	NA	NA	0.400	4458.00000	0.3495	1.00	11967.00000	0.3654
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	NA	NA	NA	0.400	17907.00000	2.614	1.00	44860.00000	2.552
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	16209.00000	2.366	1.00	39590.00000	2.252
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	13349.00000	1.047	1.00	32039.00000	0.9783
Bromobenzene	0.300	3386.00000	0.6024	0.400	5033.00000	0.7346	1.00	12849.00000	0.7310
Bromochloromethane	NA	NA	NA	0.400	1903.00000	0.1492	1.00	4685.00000	0.1431
Bromodichloromethane	NA	NA	NA	0.400	3759.00000	0.2947	1.00	9633.00000	0.2941
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4944.00000	0.1510
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	26643.00000	0.8135
Carbon Tetrachloride	NA	NA	NA	0.400	3274.00000	0.2567	1.00	8736.00000	0.2668

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Login Number: L09020556
Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-05			WG295337-06			WG295337-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	22227.0000	0.3352	5.00	60075.0000	0.3308	20.0	256524.000	0.3675
1,2-Dichloropropane	2.00	14665.0000	0.2212	5.00	37775.0000	0.2080	20.0	159840.000	0.2290
Chloroform	2.00	28826.0000	0.4347	5.00	75647.0000	0.4166	20.0	316897.000	0.4540
Ethylbenzene	2.00	27254.0000	0.4705	5.00	70835.0000	0.4515	20.0	286643.000	0.4801
Toluene	2.00	67205.0000	1.160	5.00	181787.000	1.159	20.0	754578.000	1.264
Vinyl Chloride	2.00	13053.0000	0.1968	5.00	31563.0000	0.1738	20.0	132772.000	0.1902
1,1,2,2-Tetrachloroethane	2.00	14882.0000	0.4192	5.00	34011.0000	0.3559	20.0	133921.000	0.3661
1,1-Dichloroethane	2.00	28170.0000	0.4248	5.00	74323.0000	0.4093	20.0	309934.000	0.4441
Bromoform	2.00	5846.00000	0.1009	5.00	14777.0000	0.09420	20.0	74083.0000	0.1241
Chlorobenzene	2.00	51662.0000	0.8919	5.00	130139.000	0.8296	20.0	530201.000	0.8880
Chloromethane	2.00	19058.0000	0.2874	5.00	47156.0000	0.2597	20.0	191125.000	0.2738
1,1,1,2-Tetrachloroethane	2.00	14340.0000	0.2476	5.00	36640.0000	0.2336	20.0	158158.000	0.2649
1,1,1-Trichloroethane	2.00	23199.0000	0.3498	5.00	61395.0000	0.3381	20.0	271591.000	0.3891
1,1,2-Trichloroethane	2.00	12242.0000	0.2113	5.00	29397.0000	0.1874	20.0	118032.000	0.1977
1,1-Dichloropropene	2.00	20243.0000	0.3053	5.00	53712.0000	0.2958	20.0	237397.000	0.3401
1,2,3-Trichlorobenzene	2.00	26432.0000	0.7446	5.00	63472.0000	0.6642	20.0	252445.000	0.6902
1,2,3-Trichloropropane	2.00	4967.00000	0.1399	5.00	11124.0000	0.1164	20.0	42603.0000	0.1165
1,2,4-Trichlorobenzene	2.00	29222.0000	0.8232	5.00	70770.0000	0.7406	20.0	286159.000	0.7824
1,2,4-Trimethylbenzene	2.00	81653.0000	2.300	5.00	205800.000	2.154	20.0	833032.000	2.278
1,2-Dibromo-3-Chloropropane	2.00	2386.00000	0.06720	5.00	6199.00000	0.06490	20.0	25654.0000	0.07010
1,2-Dibromoethane	2.00	12852.0000	0.2219	5.00	30212.0000	0.1926	20.0	125189.000	0.2097
1,2-Dichlorobenzene	2.00	45702.0000	1.288	5.00	109313.000	1.144	20.0	426815.000	1.167
1,2-Dichloroethane	2.00	21990.0000	0.3316	5.00	56000.0000	0.3084	20.0	232357.000	0.3329
1,3,5-Trimethylbenzene	2.00	78734.0000	2.218	5.00	201762.000	2.111	20.0	817304.000	2.235
1,3-Dichlorobenzene	2.00	48614.0000	1.370	5.00	119459.000	1.250	20.0	472857.000	1.293
1,3-Dichloropropane	2.00	22411.0000	0.3869	5.00	53828.0000	0.3431	20.0	217111.000	0.3636
1,4-Dichlorobenzene	2.00	51356.0000	1.447	5.00	125416.000	1.312	20.0	491953.000	1.345
2,2-Dichloropropane	2.00	22594.0000	0.3407	5.00	63062.0000	0.3473	20.0	270713.000	0.3879
2-Butanone	NA	NA	NA	5.00	12864.0000	0.07080	20.0	41828.0000	0.05990
2-Chloroethyl Vinyl Ether	NA	NA	NA	5.00	15934.0000	0.08770	20.0	67129.0000	0.09620
2-Chlorotoluene	2.00	80961.0000	2.281	5.00	199857.000	2.091	20.0	803211.000	2.196
2-Hexanone	NA	NA	NA	5.00	15447.0000	0.09850	20.0	66239.0000	0.1109
4-Chlorotoluene	2.00	69067.0000	1.946	5.00	176453.000	1.847	20.0	706979.000	1.933
4-Methyl-2-Pentanone	NA	NA	NA	5.00	8466.00000	0.04660	20.0	35112.0000	0.05030
Acetone	NA	NA	NA	5.00	9361.00000	0.05150	20.0	29093.0000	0.04170
Benzene	2.00	60080.0000	0.9060	5.00	160722.000	0.8850	20.0	678351.000	0.9719
Bromobenzene	2.00	23049.0000	0.6493	5.00	57547.0000	0.6022	20.0	225576.000	0.6167
Bromochloromethane	2.00	9405.00000	0.1418	5.00	25426.0000	0.1400	20.0	105408.000	0.1510
Bromodichloromethane	2.00	19871.0000	0.2997	5.00	49160.0000	0.2707	20.0	211187.000	0.3026
Bromomethane	2.00	9851.00000	0.1486	5.00	26540.0000	0.1461	20.0	124263.000	0.1780
Carbon Disulfide	2.00	54011.0000	0.8145	5.00	138185.000	0.7609	20.0	577691.000	0.8277
Carbon Tetrachloride	2.00	16778.0000	0.2530	5.00	47284.0000	0.2604	20.0	217607.000	0.3118

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Analytical Method:8260B

Instrument ID:HPMS6
Initial Calibration Date:19-FEB-09 19:06
Column ID:F

Analyte	WG295337-08			WG295337-09			WG295337-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	658849.000	0.3771	100	1362861.00	0.3660	200	2799696.00	0.3748
1,2-Dichloropropane	50.0	419438.000	0.2401	100	872597.000	0.2344	200	1768094.00	0.2367
Chloroform	50.0	811392.000	0.4644	100	1637698.00	0.4398	200	3322326.00	0.4448
Ethylbenzene	50.0	728921.000	0.4896	100	1433636.00	0.4531	200	2705481.00	0.4183
Toluene	50.0	1922199.00	1.291	100	3800207.00	1.201	200	7098664.00	1.098
Vinyl Chloride	50.0	331726.000	0.1899	100	604075.000	0.1622	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	361617.000	0.3942	100	789864.000	0.4027	200	1586197.00	0.4031
1,1-Dichloroethane	50.0	796095.000	0.4557	100	1615238.00	0.4338	200	3359401.00	0.4498
Bromoform	50.0	229746.000	0.1543	100	526975.000	0.1665	200	1100971.00	0.1702
Chlorobenzene	50.0	1334836.00	0.8966	100	2638725.00	0.8339	200	5006831.00	0.7741
Chloromethane	50.0	483988.000	0.2770	100	941629.000	0.2529	200	1889843.00	0.2530
1,1,1,2-Tetrachloroethane	50.0	424685.000	0.2852	100	898726.000	0.2840	200	1773783.00	0.2742
1,1,1-Trichloroethane	50.0	729193.000	0.4174	100	1483175.00	0.3983	200	2993972.00	0.4008
1,1,2-Trichloroethane	50.0	307097.000	0.2063	100	645656.000	0.2040	200	1289957.00	0.1994
1,1-Dichloropropene	50.0	627537.000	0.3592	100	1263972.00	0.3395	200	2548675.00	0.3412
1,2,3-Trichlorobenzene	50.0	660450.000	0.7199	100	1363711.00	0.6953	200	2586803.00	0.6575
1,2,3-Trichloropropane	50.0	113516.000	0.1237	100	245464.000	0.1252	200	492168.000	0.1251
1,2,4-Trichlorobenzene	50.0	746158.000	0.8134	100	1535055.00	0.7827	200	2969183.00	0.7546
1,2,4-Trimethylbenzene	50.0	2143087.00	2.336	100	4207845.00	2.146	200	7563305.00	1.922
1,2-Dibromo-3-Chloropropane	50.0	71774.0000	0.07820	100	154384.000	0.07870	200	303361.000	0.07710
1,2-Dibromoethane	50.0	327659.000	0.2201	100	691347.000	0.2185	200	1381000.00	0.2135
1,2-Dichlorobenzene	50.0	1100653.00	1.200	100	2224217.00	1.134	200	4268310.00	1.085
1,2-Dichloroethane	50.0	586380.000	0.3356	100	1195578.00	0.3211	200	2326589.00	0.3115
1,3,5-Trimethylbenzene	50.0	2095085.00	2.284	100	4080114.00	2.080	200	7423045.00	1.887
1,3-Dichlorobenzene	50.0	1209954.00	1.319	100	2429294.00	1.239	200	4679044.00	1.189
1,3-Dichloropropane	50.0	563222.000	0.3783	100	1180000.00	0.3729	200	2357227.00	0.3645
1,4-Dichlorobenzene	50.0	1250828.00	1.364	100	2502439.00	1.276	200	4771655.00	1.213
2,2-Dichloropropane	50.0	717233.000	0.4106	100	1472289.00	0.3954	200	2978503.00	0.3988
2-Butanone	50.0	115831.000	0.06630	100	254040.000	0.06820	200	515025.000	0.06900
2-Chloroethyl Vinyl Ether	50.0	178565.000	0.1022	100	383391.000	0.1030	200	785937.000	0.1052
2-Chlorotoluene	50.0	2036565.00	2.220	100	4044057.00	2.062	200	7594190.00	1.930
2-Hexanone	50.0	183481.000	0.1232	100	390289.000	0.1233	200	755459.000	0.1168
4-Chlorotoluene	50.0	1786612.00	1.948	100	3528133.00	1.799	200	6332647.00	1.610
4-Methyl-2-Pentanone	50.0	97356.0000	0.05570	100	212620.000	0.05710	200	422364.000	0.05650
Acetone	50.0	77546.0000	0.04440	100	164857.000	0.04430	200	371945.000	0.04980
Benzene	50.0	1756627.00	1.006	100	3537337.00	0.9500	200	6714909.00	0.8990
Bromobenzene	50.0	581459.000	0.6338	100	1194931.00	0.6093	200	2361216.00	0.6001
Bromochloromethane	50.0	274696.000	0.1572	100	565322.000	0.1518	200	1134637.00	0.1519
Bromodichloromethane	50.0	576722.000	0.3301	100	1228346.00	0.3299	200	2520602.00	0.3375
Bromomethane	50.0	363123.000	0.2079	100	748618.000	0.2011	200	1546911.00	0.2071
Carbon Disulfide	50.0	1506847.00	0.8625	100	3014113.00	0.8095	200	5932790.00	0.7943
Carbon Tetrachloride	50.0	599713.000	0.3433	100	1240185.00	0.3331	200	2621469.00	0.3510

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Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-11		
	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	802118.000	0.07110
2-Chloroethyl Vinyl Ether	300	1195152.00	0.1059
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1193848.00	0.1266
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	645495.000	0.05720
Acetone	300	510413.000	0.04520
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

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Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-02			WG295337-03			WG295337-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	6722.00000	0.2053
Dibromochloromethane	NA	NA	NA	0.400	2153.00000	0.1943	1.00	6091.00000	0.2132
Dibromomethane	NA	NA	NA	0.400	1527.00000	0.1197	1.00	4508.00000	0.1377
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	12863.00000	0.3928
Hexachlorobutadiene	NA	NA	NA	0.400	2351.00000	0.3431	1.00	6207.00000	0.3531
Isopropylbenzene	NA	NA	NA	0.400	18458.00000	1.666	1.00	48026.00000	1.681
Methylene Chloride	NA	NA	NA	0.400	7119.00000	0.5582	1.00	12003.00000	0.3665
Naphthalene	NA	NA	NA	0.400	9232.00000	1.347	1.00	24559.00000	1.397
Styrene	NA	NA	NA	0.400	11133.00000	1.005	1.00	32313.00000	1.131
Tetrachloroethene	NA	NA	NA	0.400	3258.00000	0.2941	1.00	9016.00000	0.3156
Trichloroethene	NA	NA	NA	0.400	3278.00000	0.2570	1.00	8423.00000	0.2572
Trichlorofluoromethane	NA	NA	NA	0.400	4449.00000	0.3488	1.00	14494.00000	0.4426
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	3288.00000	0.2578	1.00	8938.00000	0.2729
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4690.00000	0.3677	1.00	12264.00000	0.3745
m-,p-Xylene	NA	NA	NA	0.800	15060.00000	0.6797	2.00	39709.00000	0.6949
n-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	38772.00000	2.206
n-Propylbenzene	NA	NA	NA	0.400	22905.00000	3.343	1.00	57946.00000	3.297
o-Xylene	NA	NA	NA	0.400	7324.00000	0.6611	1.00	19153.00000	0.6703
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	45505.00000	2.589
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	51219.00000	2.914
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	9437.00000	0.5369
trans-1,2-Dichloroethene	NA	NA	NA	0.400	2865.00000	0.2246	1.00	8036.00000	0.2454
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	10822.00000	0.3788

Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-05			WG295337-06			WG295337-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	11869.0000	0.1790	5.00	31972.0000	0.1761	20.0	141958.000	0.2034
Dibromochloromethane	2.00	11637.0000	0.2009	5.00	30081.0000	0.1918	20.0	133955.000	0.2243
Dibromomethane	2.00	8862.00000	0.1336	5.00	21289.0000	0.1172	20.0	88538.0000	0.1269
Dichlorodifluoromethane	2.00	23596.0000	0.3558	5.00	59595.0000	0.3282	20.0	267998.000	0.3840
Hexachlorobutadiene	2.00	10305.0000	0.2903	5.00	26616.0000	0.2785	20.0	113811.000	0.3112
Isopropylbenzene	2.00	83517.0000	1.442	5.00	220330.000	1.405	20.0	914381.000	1.531
Methylene Chloride	2.00	19691.0000	0.2969	5.00	46805.0000	0.2577	20.0	182940.000	0.2621
Naphthalene	2.00	45672.0000	1.287	5.00	110269.000	1.154	20.0	446842.000	1.222
Styrene	2.00	60616.0000	1.046	5.00	152543.000	0.9724	20.0	623446.000	1.044
Tetrachloroethene	2.00	16497.0000	0.2848	5.00	43704.0000	0.2786	20.0	184948.000	0.3097
Trichloroethene	2.00	15401.0000	0.2323	5.00	41081.0000	0.2262	20.0	176600.000	0.2530
Trichlorofluoromethane	2.00	27441.0000	0.4138	5.00	69742.0000	0.3840	20.0	314503.000	0.4506
Vinyl Acetate	2.00	25503.0000	0.3846	5.00	57950.0000	0.3191	20.0	246311.000	0.3529
cis-1,2-Dichloroethene	2.00	15771.0000	0.2378	5.00	42159.0000	0.2322	20.0	181797.000	0.2605
cis-1,3-Dichloropropene	2.00	22408.0000	0.3379	5.00	59033.0000	0.3251	20.0	257845.000	0.3694
m-,p-Xylene	4.00	71740.0000	0.6192	10.0	185290.000	0.5906	40.0	746077.000	0.6248
n-Butylbenzene	2.00	68528.0000	1.931	5.00	180156.000	1.885	20.0	754099.000	2.062
n-Propylbenzene	2.00	104480.000	2.943	5.00	273945.000	2.867	20.0	1136341.00	3.107
o-Xylene	2.00	34473.0000	0.5951	5.00	90260.0000	0.5754	20.0	362886.000	0.6078
p-Isopropyltoluene	2.00	78521.0000	2.212	5.00	206757.000	2.164	20.0	859044.000	2.349
sec-Butylbenzene	2.00	87717.0000	2.471	5.00	233878.000	2.447	20.0	971695.000	2.657
tert-Butylbenzene	2.00	16094.0000	0.4534	5.00	42018.0000	0.4397	20.0	170432.000	0.4660
trans-1,2-Dichloroethene	2.00	14459.0000	0.2180	5.00	39629.0000	0.2182	20.0	171373.000	0.2455
trans-1,3-Dichloropropene	2.00	22094.0000	0.3814	5.00	54921.0000	0.3501	20.0	237025.000	0.3970

Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-08			WG295337-09			WG295337-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	380724.000	0.2179	100	783801.000	0.2105	200	1555600.00	0.2083
Dibromochloromethane	50.0	387815.000	0.2605	100	860334.000	0.2719	200	1775438.00	0.2745
Dibromomethane	50.0	229005.000	0.1311	100	473525.000	0.1272	200	950585.000	0.1273
Dichlorodifluoromethane	50.0	671556.000	0.3844	100	1354126.00	0.3637	200	2556344.00	0.3422
Hexachlorobutadiene	50.0	296183.000	0.3229	100	608828.000	0.3104	200	1246818.00	0.3169
Isopropylbenzene	50.0	2338303.00	1.571	100	4547103.00	1.437	200	8192460.00	1.267
Methylene Chloride	50.0	463663.000	0.2654	100	959634.000	0.2577	200	1947248.00	0.2607
Naphthalene	50.0	1222126.00	1.332	100	2553524.00	1.302	200	4835175.00	1.229
Styrene	50.0	1605486.00	1.078	100	3160037.00	0.9987	200	5907042.00	0.9133
Tetrachloroethene	50.0	478091.000	0.3211	100	953655.000	0.3014	200	1893565.00	0.2928
Trichloroethene	50.0	463924.000	0.2656	100	956672.000	0.2569	200	1900970.00	0.2545
Trichlorofluoromethane	50.0	830809.000	0.4756	100	1728454.00	0.4642	200	3553210.00	0.4757
Vinyl Acetate	50.0	649839.000	0.3720	100	1363253.00	0.3661	200	2620569.00	0.3508
cis-1,2-Dichloroethene	50.0	469409.000	0.2687	100	946722.000	0.2543	200	1937167.00	0.2593
cis-1,3-Dichloropropene	50.0	691857.000	0.3960	100	1445492.00	0.3882	200	2908005.00	0.3893
m-,p-Xylene	100	1859932.00	0.6246	200	3568324.00	0.5638	400	6488658.00	0.5016
n-Butylbenzene	50.0	1959573.00	2.136	100	3860410.00	1.968	200	7040078.00	1.789
n-Propylbenzene	50.0	2875662.00	3.135	100	5528271.00	2.819	200	9522742.00	2.420
o-Xylene	50.0	913051.000	0.6133	100	1808596.00	0.5716	200	3431722.00	0.5306
p-Isopropyltoluene	50.0	2216115.00	2.416	100	4313213.00	2.199	200	7815585.00	1.986
sec-Butylbenzene	50.0	2487105.00	2.711	100	4828699.00	2.462	200	8702988.00	2.212
tert-Butylbenzene	50.0	441922.000	0.4817	100	887361.000	0.4525	200	1728339.00	0.4393
trans-1,2-Dichloroethene	50.0	441924.000	0.2530	100	880895.000	0.2366	200	1800640.00	0.2411
trans-1,3-Dichloropropene	50.0	637149.000	0.4280	100	1351315.00	0.4271	200	2708145.00	0.4187

Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-FEB-09 19:06
Column ID: F

Analyte	WG295337-11		
	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: L09020556
Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-02			WG295276-03			WG295276-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4715.00000	0.4497	1.00	11962.0000	0.4587
1,2-Dichloropropane	NA	NA	NA	0.400	2428.00000	0.2316	1.00	5855.00000	0.2245
Chloroform	0.300	4831.00000	0.6005	0.400	6197.00000	0.5910	1.00	14671.0000	0.5626
Ethylbenzene	NA	NA	NA	0.400	3272.00000	0.4312	1.00	8536.00000	0.4415
Toluene	NA	NA	NA	0.400	9312.00000	1.227	1.00	23265.0000	1.203
Vinyl Chloride	NA	NA	NA	NA	NA	NA	1.00	11136.0000	0.4270
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	1594.00000	0.3711	1.00	4706.00000	0.4205
1,1-Dichloroethane	NA	NA	NA	0.400	4999.00000	0.4768	1.00	12681.0000	0.4863
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3720.00000	0.1924
Chlorobenzene	NA	NA	NA	0.400	7220.00000	0.9515	1.00	17229.0000	0.8911
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	15514.0000	0.5949
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2618.00000	0.3450	1.00	7575.00000	0.3918
1,1,1-Trichloroethane	NA	NA	NA	0.400	6029.00000	0.5750	1.00	15415.0000	0.5911
1,1,2-Trichloroethane	NA	NA	NA	0.400	1493.00000	0.1967	1.00	4483.00000	0.2319
1,1-Dichloropropene	NA	NA	NA	0.400	2759.00000	0.2631	1.00	8704.00000	0.3338
1,2,3-Trichlorobenzene	0.300	2975.00000	0.9172	0.400	4872.00000	1.134	1.00	10218.0000	0.9131
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1343.00000	0.1200
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4081.00000	0.9501	1.00	12128.0000	1.084
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	1.00	27052.0000	2.418
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1659.00000	0.2186	1.00	4146.00000	0.2144
1,2-Dichlorobenzene	0.300	4212.00000	1.299	0.400	5688.00000	1.324	1.00	14351.0000	1.283
1,2-Dichloroethane	NA	NA	NA	0.400	5804.00000	0.5536	1.00	14617.0000	0.5605
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	7435.00000	1.731	1.00	24412.0000	2.182
1,3-Dichlorobenzene	NA	NA	NA	0.400	5873.00000	1.367	1.00	14927.0000	1.334
1,3-Dichloropropane	NA	NA	NA	0.400	2946.00000	0.3882	1.00	7353.00000	0.3803
1,4-Dichlorobenzene	0.300	5066.00000	1.562	0.400	6772.00000	1.577	1.00	16796.0000	1.501
2,2-Dichloropropane	NA	NA	NA	0.400	5865.00000	0.5594	1.00	13879.0000	0.5322
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	2241.00000	0.08590
2-Chlorotoluene	NA	NA	NA	0.400	9119.00000	2.123	1.00	24753.0000	2.212
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	9254.00000	2.155	1.00	26033.0000	2.326
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	8893.00000	0.8482	1.00	23299.0000	0.8935
Bromobenzene	0.300	1942.00000	0.5987	0.400	2810.00000	0.6542	1.00	6914.00000	0.6179
Bromochloromethane	NA	NA	NA	0.400	1319.00000	0.1258	1.00	3153.00000	0.1209
Bromodichloromethane	NA	NA	NA	0.400	4613.00000	0.4400	1.00	11285.0000	0.4328
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4276.00000	0.1640
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	20158.0000	0.7730
Carbon Tetrachloride	NA	NA	NA	0.400	4702.00000	0.4485	1.00	13588.0000	0.5211

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Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-05			WG295276-06			WG295276-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	24977.0000	0.4565	5.00	66542.0000	0.4682	20.0	299021.000	0.4891
1,2-Dichloropropane	2.00	12106.0000	0.2213	5.00	32017.0000	0.2253	20.0	142555.000	0.2332
Chloroform	2.00	30421.0000	0.5560	5.00	81408.0000	0.5728	20.0	337776.000	0.5525
Ethylbenzene	2.00	18858.0000	0.4668	5.00	51855.0000	0.4935	20.0	228925.000	0.4971
Toluene	2.00	50529.0000	1.251	5.00	138558.000	1.319	20.0	608585.000	1.322
Vinyl Chloride	2.00	24270.0000	0.4436	5.00	48049.0000	0.3381	20.0	206986.000	0.3386
1,1,2,2-Tetrachloroethane	2.00	9862.00000	0.4207	5.00	27916.0000	0.4561	20.0	127819.000	0.4751
1,1-Dichloroethane	2.00	27428.0000	0.5013	5.00	72521.0000	0.5103	20.0	300531.000	0.4916
Bromoform	2.00	8241.00000	0.2040	5.00	23921.0000	0.2277	20.0	107337.000	0.2331
Chlorobenzene	2.00	35575.0000	0.8805	5.00	95144.0000	0.9055	20.0	409519.000	0.8893
Chloromethane	2.00	30572.0000	0.5587	5.00	67826.0000	0.4773	20.0	283311.000	0.4634
1,1,1,2-Tetrachloroethane	2.00	15797.0000	0.3910	5.00	41179.0000	0.3919	20.0	181908.000	0.3950
1,1,1-Trichloroethane	2.00	31305.0000	0.5721	5.00	81187.0000	0.5713	20.0	352889.000	0.5772
1,1,2-Trichloroethane	2.00	9032.00000	0.2236	5.00	26254.0000	0.2499	20.0	113244.000	0.2459
1,1-Dichloropropene	2.00	18734.0000	0.3424	5.00	50538.0000	0.3556	20.0	230193.000	0.3765
1,2,3-Trichlorobenzene	2.00	23558.0000	1.005	5.00	61722.0000	1.008	20.0	271940.000	1.011
1,2,3-Trichloropropane	2.00	3355.00000	0.1431	5.00	10850.0000	0.1773	20.0	48286.0000	0.1795
1,2,4-Trichlorobenzene	2.00	24052.0000	1.026	5.00	69620.0000	1.137	20.0	307564.000	1.143
1,2,4-Trimethylbenzene	2.00	61187.0000	2.610	5.00	167374.000	2.735	20.0	742484.000	2.760
1,2-Dibromo-3-Chloropropane	2.00	2748.00000	0.1172	5.00	7517.00000	0.1228	20.0	35958.0000	0.1336
1,2-Dibromoethane	2.00	8647.00000	0.2140	5.00	26470.0000	0.2519	20.0	119385.000	0.2593
1,2-Dichlorobenzene	2.00	29891.0000	1.275	5.00	81941.0000	1.339	20.0	355807.000	1.322
1,2-Dichloroethane	2.00	28780.0000	0.5260	5.00	78021.0000	0.5490	20.0	318520.000	0.5210
1,3,5-Trimethylbenzene	2.00	56419.0000	2.407	5.00	158209.000	2.585	20.0	707856.000	2.631
1,3-Dichlorobenzene	2.00	31748.0000	1.354	5.00	88410.0000	1.444	20.0	388257.000	1.443
1,3-Dichloropropane	2.00	15868.0000	0.3928	5.00	46408.0000	0.4417	20.0	208713.000	0.4532
1,4-Dichlorobenzene	2.00	33783.0000	1.441	5.00	90288.0000	1.475	20.0	398403.000	1.481
2,2-Dichloropropane	2.00	29935.0000	0.5471	5.00	74198.0000	0.5221	20.0	330123.000	0.5400
2-Butanone	NA	NA	NA	5.00	11072.0000	0.07790	20.0	48246.0000	0.07890
2-Chloroethyl Vinyl Ether	2.00	4642.00000	0.08480	5.00	13917.0000	0.09790	20.0	72167.0000	0.1180
2-Chlorotoluene	2.00	53524.0000	2.283	5.00	145580.000	2.379	20.0	687416.000	2.555
2-Hexanone	NA	NA	NA	5.00	5410.00000	0.05150	20.0	29124.0000	0.06320
4-Chlorotoluene	2.00	56717.0000	2.420	5.00	152172.000	2.486	20.0	635371.000	2.361
4-Methyl-2-Pentanone	NA	NA	NA	5.00	6997.00000	0.04920	20.0	34429.0000	0.05630
Acetone	NA	NA	NA	5.00	11829.0000	0.08320	20.0	43564.0000	0.07130
Benzene	2.00	48442.0000	0.8853	5.00	123258.000	0.8673	20.0	537755.000	0.8796
Bromobenzene	2.00	15720.0000	0.6706	5.00	41701.0000	0.6813	20.0	184874.000	0.6871
Bromochloromethane	2.00	8056.00000	0.1472	5.00	21187.0000	0.1491	20.0	91279.0000	0.1493
Bromodichloromethane	2.00	23036.0000	0.4210	5.00	63009.0000	0.4434	20.0	271291.000	0.4437
Bromomethane	2.00	9657.00000	0.1765	5.00	23484.0000	0.1652	20.0	117645.000	0.1924
Carbon Disulfide	2.00	45447.0000	0.8306	5.00	106128.000	0.7468	20.0	475305.000	0.7774
Carbon Tetrachloride	2.00	28356.0000	0.5182	5.00	72207.0000	0.5081	20.0	310012.000	0.5071

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Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-08			WG295276-09			WG295276-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	791944.000	0.4814	100	1789244.00	0.4234	200	3422383.00	0.4138
1,2-Dichloropropane	50.0	388809.000	0.2363	100	979356.000	0.2318	200	1860359.00	0.2249
Chloroform	50.0	881651.000	0.5359	100	1932275.00	0.4573	200	3682931.00	0.4453
Ethylbenzene	50.0	597920.000	0.4861	100	1427701.00	0.4461	200	2710061.00	0.4223
Toluene	50.0	1608152.00	1.307	100	3777626.00	1.180	200	6844711.00	1.067
Vinyl Chloride	50.0	504282.000	0.3065	100	915240.000	0.2166	200	1720547.00	0.2080
1,1,2,2-Tetrachloroethane	50.0	344493.000	0.4758	100	845895.000	0.4579	200	1602576.00	0.4395
1,1-Dichloroethane	50.0	820761.000	0.4989	100	1958004.00	0.4634	200	3818131.00	0.4617
Bromoform	50.0	286415.000	0.2329	100	674865.000	0.2109	200	1320958.00	0.2059
Chlorobenzene	50.0	1097585.00	0.8923	100	2629626.00	0.8217	200	4861367.00	0.7576
Chloromethane	50.0	682926.000	0.4151	100	1462473.00	0.3461	NA	NA	NA
1,1,1,2-Tetrachloroethane	50.0	465365.000	0.3783	100	1042812.00	0.3259	200	1931054.00	0.3009
1,1,1-Trichloroethane	50.0	917718.000	0.5579	100	1900472.00	0.4498	200	3632463.00	0.4392
1,1,2-Trichloroethane	50.0	300576.000	0.2444	100	707539.000	0.2211	200	1377842.00	0.2147
1,1-Dichloropropene	50.0	618660.000	0.3761	100	1432180.00	0.3389	200	2694008.00	0.3257
1,2,3-Trichlorobenzene	50.0	711972.000	0.9834	100	1586095.00	0.8585	200	2852568.00	0.7823
1,2,3-Trichloropropane	50.0	126057.000	0.1741	100	285939.000	0.1548	200	551655.000	0.1513
1,2,4-Trichlorobenzene	50.0	798623.000	1.103	100	1803007.00	0.9759	200	3237810.00	0.8880
1,2,4-Trimethylbenzene	50.0	1923418.00	2.657	100	4263761.00	2.308	200	7621339.00	2.090
1,2-Dibromo-3-Chloropropane	50.0	94730.0000	0.1308	100	206703.000	0.1119	200	404256.000	0.1109
1,2-Dibromoethane	50.0	317368.000	0.2580	100	746940.000	0.2334	200	1456950.00	0.2271
1,2-Dichlorobenzene	50.0	944834.000	1.305	100	2189642.00	1.185	200	3985248.00	1.093
1,2-Dichloroethane	50.0	817627.000	0.4970	100	1676905.00	0.3968	200	3254542.00	0.3935
1,3,5-Trimethylbenzene	50.0	1866457.00	2.578	100	4168404.00	2.256	200	7515790.00	2.061
1,3-Dichlorobenzene	50.0	1004557.00	1.388	100	2358692.00	1.277	200	4326857.00	1.187
1,3-Dichloropropane	50.0	542911.000	0.4414	100	1282397.00	0.4007	200	2464862.00	0.3841
1,4-Dichlorobenzene	50.0	1035359.00	1.430	100	2407614.00	1.303	200	4372642.00	1.199
2,2-Dichloropropane	50.0	871707.000	0.5299	100	1909697.00	0.4519	200	3600786.00	0.4354
2-Butanone	50.0	128340.000	0.07800	100	331669.000	0.07850	200	654883.000	0.07920
2-Chloroethyl Vinyl Ether	50.0	197703.000	0.1202	100	500667.000	0.1185	200	979727.000	0.1185
2-Chlorotoluene	50.0	1657321.00	2.289	100	3680512.00	1.992	200	6361910.00	1.745
2-Hexanone	50.0	87874.0000	0.07140	100	234939.000	0.07340	200	456696.000	0.07120
4-Chlorotoluene	50.0	1756915.00	2.427	100	3888121.00	2.105	200	7030088.00	1.928
4-Methyl-2-Pentanone	50.0	97882.0000	0.05950	100	253233.000	0.05990	200	496445.000	0.06000
Acetone	50.0	108866.000	0.06620	100	245941.000	0.05820	200	511899.000	0.06190
Benzene	50.0	1458337.00	0.8865	100	3506633.00	0.8299	200	6387335.00	0.7723
Bromobenzene	50.0	492011.000	0.6796	100	1171429.00	0.6341	200	2210922.00	0.6064
Bromochloromethane	50.0	243459.000	0.1480	100	592717.000	0.1403	200	1125187.00	0.1360
Bromodichloromethane	50.0	697912.000	0.4242	100	1512936.00	0.3580	200	2898790.00	0.3505
Bromomethane	50.0	331908.000	0.2018	100	827352.000	0.1958	200	1589097.00	0.1921
Carbon Disulfide	50.0	1267167.00	0.7703	100	3042783.00	0.7201	200	5686051.00	0.6875
Carbon Tetrachloride	50.0	792280.000	0.4816	100	1584178.00	0.3749	200	3115474.00	0.3767

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Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-11		
	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	955364.000	0.07580
2-Chloroethyl Vinyl Ether	300	1448636.00	0.1149
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	674051.000	0.07240
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	729600.000	0.05790
Acetone	300	693920.000	0.05500
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

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Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-02			WG295276-03			WG295276-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	4144.00000	0.1589
Dibromochloromethane	NA	NA	NA	0.400	2478.00000	0.3266	1.00	5973.00000	0.3089
Dibromomethane	NA	NA	NA	0.400	1210.00000	0.1154	1.00	4048.00000	0.1552
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	12417.00000	0.4762
Hexachlorobutadiene	NA	NA	NA	0.400	2006.00000	0.4670	1.00	6411.00000	0.5729
Isopropylbenzene	NA	NA	NA	0.400	9993.00000	1.317	1.00	25889.00000	1.339
Methylene Chloride	NA	NA	NA	0.400	4723.00000	0.4505	1.00	8424.00000	0.3230
Naphthalene	NA	NA	NA	0.400	7114.00000	1.656	1.00	20409.00000	1.824
Styrene	NA	NA	NA	0.400	6198.00000	0.8168	1.00	15154.00000	0.7838
Tetrachloroethene	NA	NA	NA	0.400	2014.00000	0.2654	1.00	5339.00000	0.2761
Trichloroethene	NA	NA	NA	0.400	2525.00000	0.2408	1.00	5839.00000	0.2239
Trichlorofluoromethane	NA	NA	NA	0.400	5149.00000	0.4911	1.00	16661.00000	0.6389
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2228.00000	0.2125	1.00	5923.00000	0.2271
cis-1,3-Dichloropropene	NA	NA	NA	0.400	3611.00000	0.3444	1.00	8624.00000	0.3307
m-,p-Xylene	NA	NA	NA	0.800	8452.00000	0.5569	2.00	21515.00000	0.5564
n-Butylbenzene	NA	NA	NA	0.400	9473.00000	2.206	1.00	28070.00000	2.508
n-Propylbenzene	NA	NA	NA	0.400	12020.00000	2.799	1.00	34364.00000	3.071
o-Xylene	NA	NA	NA	0.400	3363.00000	0.4432	1.00	9172.00000	0.4744
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	24989.00000	2.233
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	29116.00000	2.602
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	4826.00000	0.4313
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3781.00000	0.3606	1.00	11005.00000	0.4220
trans-1,3-Dichloropropene	NA	NA	NA	0.400	3325.00000	0.4382	1.00	9592.00000	0.4961

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Analytical Method: 8260B

Instrument ID: HPMS8
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Analyte	WG295276-05			WG295276-06			WG295276-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	10733.0000	0.1962	5.00	25720.0000	0.1810	20.0	121075.000	0.1980
Dibromochloromethane	2.00	13485.0000	0.3338	5.00	36990.0000	0.3520	20.0	170428.000	0.3701
Dibromomethane	2.00	7965.00000	0.1456	5.00	22138.0000	0.1558	20.0	90393.0000	0.1479
Dichlorodifluoromethane	2.00	30362.0000	0.5549	5.00	67312.0000	0.4736	20.0	292152.000	0.4779
Hexachlorobutadiene	2.00	14425.0000	0.6154	5.00	35753.0000	0.5841	20.0	164944.000	0.6130
Isopropylbenzene	2.00	61070.0000	1.512	5.00	165527.000	1.575	20.0	778252.000	1.690
Methylene Chloride	2.00	15781.0000	0.2884	5.00	38138.0000	0.2684	20.0	152020.000	0.2487
Naphthalene	2.00	41358.0000	1.764	5.00	119547.000	1.953	20.0	551069.000	2.048
Styrene	2.00	36458.0000	0.9024	5.00	103251.000	0.9826	20.0	469122.000	1.019
Tetrachloroethene	2.00	11172.0000	0.2765	5.00	29433.0000	0.2801	20.0	137533.000	0.2987
Trichloroethene	2.00	12992.0000	0.2374	5.00	33203.0000	0.2336	20.0	155468.000	0.2543
Trichlorofluoromethane	2.00	35435.0000	0.6476	5.00	87268.0000	0.6141	20.0	391875.000	0.6410
Vinyl Acetate	NA	NA	NA	5.00	61513.0000	0.4328	20.0	263943.000	0.4317
cis-1,2-Dichloroethene	2.00	13572.0000	0.2480	5.00	35524.0000	0.2500	20.0	157633.000	0.2578
cis-1,3-Dichloropropene	2.00	20241.0000	0.3699	5.00	56455.0000	0.3973	20.0	258299.000	0.4225
m-,p-Xylene	4.00	47150.0000	0.5835	10.0	126578.000	0.6023	40.0	558148.000	0.6060
n-Butylbenzene	2.00	61789.0000	2.636	5.00	167883.000	2.743	20.0	789569.000	2.935
n-Propylbenzene	2.00	78704.0000	3.358	5.00	214839.000	3.510	20.0	995567.000	3.700
o-Xylene	2.00	21677.0000	0.5365	5.00	59433.0000	0.5656	20.0	274235.000	0.5955
p-Isopropyltoluene	2.00	59076.0000	2.520	5.00	164372.000	2.686	20.0	763725.000	2.839
sec-Butylbenzene	2.00	68634.0000	2.928	5.00	184509.000	3.015	20.0	866560.000	3.221
tert-Butylbenzene	2.00	10102.0000	0.4310	5.00	29241.0000	0.4777	20.0	139028.000	0.5167
trans-1,2-Dichloroethene	2.00	23223.0000	0.4244	5.00	57486.0000	0.4045	20.0	249604.000	0.4083
trans-1,3-Dichloropropene	2.00	20971.0000	0.5191	5.00	60077.0000	0.5717	20.0	271409.000	0.5894

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Analytical Method: 8260B

Instrument ID: HPMS8
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Column ID: F

Analyte	WG295276-08			WG295276-09			WG295276-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	314475.000	0.1912	100	772287.000	0.1828	200	1423001.00	0.1721
Dibromochloromethane	50.0	450327.000	0.3661	100	1033082.00	0.3228	200	2023338.00	0.3153
Dibromomethane	50.0	241494.000	0.1468	100	542934.000	0.1285	200	1048753.00	0.1268
Dichlorodifluoromethane	50.0	711830.000	0.4327	100	1438984.00	0.3405	NA	NA	NA
Hexachlorobutadiene	50.0	430955.000	0.5952	100	925253.000	0.5008	200	1708268.00	0.4685
Isopropylbenzene	50.0	2014116.00	1.638	100	4579616.00	1.431	200	8233983.00	1.283
Methylene Chloride	50.0	404344.000	0.2458	100	968905.000	0.2293	200	1846660.00	0.2233
Naphthalene	50.0	1447329.00	1.999	100	3193907.00	1.729	200	5707754.00	1.565
Styrene	50.0	1241570.00	1.009	100	2990640.00	0.9345	200	5598533.00	0.8725
Tetrachloroethene	50.0	351309.000	0.2856	100	828091.000	0.2588	200	1548493.00	0.2413
Trichloroethene	50.0	413043.000	0.2511	100	1008821.00	0.2387	200	1889944.00	0.2285
Trichlorofluoromethane	50.0	999652.000	0.6077	100	2037010.00	0.4821	200	4091463.00	0.4947
Vinyl Acetate	50.0	733905.000	0.4461	100	1751664.00	0.4145	200	3307293.00	0.3999
cis-1,2-Dichloroethene	50.0	424531.000	0.2581	100	1036329.00	0.2453	200	1976162.00	0.2389
cis-1,3-Dichloropropene	50.0	686342.000	0.4172	100	1631134.00	0.3860	200	3074105.00	0.3717
m-,p-Xylene	100	1488806.00	0.6052	200	3511729.00	0.5487	400	6392416.00	0.4981
n-Butylbenzene	50.0	2047844.00	2.829	100	4467064.00	2.418	200	7814064.00	2.143
n-Propylbenzene	50.0	2564367.00	3.542	100	5664306.00	3.066	200	9879817.00	2.710
o-Xylene	50.0	738900.000	0.6007	100	1765836.00	0.5518	200	3373997.00	0.5258
p-Isopropyltoluene	50.0	2027341.00	2.800	100	4587899.00	2.483	200	8109927.00	2.224
sec-Butylbenzene	50.0	2264843.00	3.128	100	5103029.00	2.762	200	9058770.00	2.485
tert-Butylbenzene	50.0	368529.000	0.5090	100	891104.000	0.4823	200	1700715.00	0.4664
trans-1,2-Dichloroethene	50.0	680511.000	0.4137	100	1617417.00	0.3828	200	3083792.00	0.3729
trans-1,3-Dichloropropene	50.0	703843.000	0.5722	100	1595318.00	0.4985	200	3064106.00	0.4775

Login Number: L09020556
Analytical Method: 8260B

Instrument ID: HPMS8
Initial Calibration Date: 19-FEB-09 14:17
Column ID: F

Analyte	WG295276-11		
	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	300	4602674.00	0.3650
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

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Login Number: L09020556 Run Date: 02/19/2009 Sample ID: WG295337-12
Instrument ID: HPMS6 Run Time: 20:10 Method: 8260B
File ID: 6M81625 Analyst: MES QC Key: STD
ICal Workgroup: WG295337 Cal ID: HPMS6 - 19-FEB-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	20.6	ug/L	0.466	3.00	30	
1,1-Dichloroethene	CCC	20.0	21.4	ug/L	0.390	7.10	30	
1,2-Dichloropropane	CCC	20.0	20.9	ug/L	0.237	4.50	30	
Ethylbenzene	CCC	20.0	21.0	ug/L	0.496	5.00	30	
Toluene	CCC	20.0	21.4	ug/L	1.30	7.20	30	
Vinyl Chloride	CCC	20.0	20.4	ug/L	0.198	1.80	30	
Bromoform	SPCC	20.0	16.8	ug/L	0.121	16.0	30	
Chlorobenzene	SPCC	20.0	20.1	ug/L	0.898	0.700	30	
Chloromethane	SPCC	20.0	21.3	ug/L	0.299	6.70	30	
1,1-Dichloroethane	SPCC	20.0	21.5	ug/L	0.473	7.30	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	18.3	ug/L	0.366	8.60	30	
Acetone		20.0	23.2	ug/L	0.0536	16.2	30	
Benzene		20.0	21.0	ug/L	1.00	4.90	30	
Bromobenzene		20.0	19.8	ug/L	0.637	0.800	30	
Bromochloromethane		20.0	21.3	ug/L	0.158	6.60	30	
Bromodichloromethane		20.0	21.0	ug/L	0.324	5.20	30	
Bromomethane		20.0	21.5	ug/L	0.209	7.60	30	
2-Butanone		20.0	20.5	ug/L	0.0694	2.70	30	
n-Butylbenzene		20.0	20.7	ug/L	2.07	3.40	30	
sec-Butylbenzene		20.0	21.2	ug/L	2.71	6.20	30	
tert-Butylbenzene		20.0	20.7	ug/L	0.483	3.40	30	
Carbon Disulfide		20.0	18.8	ug/L	0.765	5.80	30	
Carbon Tetrachloride		20.0	22.1	ug/L	0.328	10.3	30	
Dibromochloromethane		20.0	17.8	ug/L	0.224	11.1	30	
Chloroethane		20.0	22.2	ug/L	0.222	10.8	30	
2-Chloroethyl Vinyl Ether		20.0	20.8	ug/L	0.104	4.00	30	
2-Chlorotoluene		20.0	19.2	ug/L	2.15	4.10	30	
4-Chlorotoluene		20.0	20.8	ug/L	2.04	4.20	30	
1,2-Dibromo-3-Chloropropane		20.0	18.8	ug/L	0.0684	5.90	30	
1,2-Dibromoethane		20.0	19.4	ug/L	0.201	3.20	30	
Dibromomethane		20.0	20.7	ug/L	0.132	3.30	30	
1,2-Dichlorobenzene		20.0	19.2	ug/L	1.19	3.80	30	
1,3-Dichlorobenzene		20.0	19.3	ug/L	1.31	3.50	30	
1,4-Dichlorobenzene		20.0	18.6	ug/L	1.34	7.20	30	
Dichlorodifluoromethane		20.0	23.7	ug/L	0.433	18.7	30	
1,2-Dichloroethane		20.0	19.7	ug/L	0.322	1.60	30	
cis-1,2-Dichloroethene		20.0	22.1	ug/L	0.282	10.5	30	
trans-1,2-Dichloroethene		20.0	21.6	ug/L	0.254	7.90	30	
1,3-Dichloropropane		20.0	19.0	ug/L	0.356	4.80	30	
2,2-Dichloropropane		20.0	20.6	ug/L	0.385	2.80	30	
cis-1,3-Dichloropropene		20.0	19.8	ug/L	0.366	0.800	30	
trans-1,3-Dichloropropene		20.0	17.1	ug/L	0.340	14.4	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1331964
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Login Number: L09020556 Run Date: 02/19/2009 Sample ID: WG295337-12
Instrument ID: HPMS6 Run Time: 20:10 Method: 8260B
File ID: 6M81625 Analyst: MES QC Key: STD
Ical Workgroup: WG295337 Cal ID: HPMS6 - 19-FEB-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	20.9	ug/L	0.346	4.50	30	
2-Hexanone	20.0	19.5	ug/L	0.114	2.40	30	
Hexachlorobutadiene	20.0	19.9	ug/L	0.315	0.400	30	
Isopropylbenzene	20.0	18.6	ug/L	1.39	7.10	30	
p-Isopropyltoluene	20.0	20.4	ug/L	2.31	1.80	30	
4-Methyl-2-Pentanone	20.0	19.9	ug/L	0.0537	0.300	30	
Methylene Chloride	20.0	21.6	ug/L	0.283	8.10	30	
Naphthalene	20.0	19.2	ug/L	1.23	3.80	30	
n-Propylbenzene	20.0	20.9	ug/L	3.13	4.50	30	
Styrene	20.0	20.9	ug/L	1.07	4.40	30	
1,1,1,2-Tetrachloroethane	20.0	20.1	ug/L	0.266	0.400	30	
Tetrachloroethene	20.0	20.7	ug/L	0.310	3.30	30	
1,2,3-Trichlorobenzene	20.0	19.2	ug/L	0.704	4.20	30	
1,2,4-Trichlorobenzene	20.0	19.1	ug/L	0.787	4.70	30	
1,1,1-Trichloroethane	20.0	21.1	ug/L	0.402	5.70	30	
1,1,2-Trichloroethane	20.0	18.7	ug/L	0.194	6.70	30	
Trichloroethene	20.0	20.8	ug/L	0.260	3.80	30	
Trichlorofluoromethane	20.0	20.8	ug/L	0.449	3.90	30	
1,2,3-Trichloropropane	20.0	18.5	ug/L	0.116	7.30	30	
1,2,4-Trimethylbenzene	20.0	21.0	ug/L	2.36	4.80	30	
1,3,5-Trimethylbenzene	20.0	20.6	ug/L	2.29	3.20	30	
Vinyl Acetate	20.0	15.4	ug/L	0.276	22.9	40	
o-Xylene	20.0	20.4	ug/L	0.615	2.00	30	
m-,p-Xylene	40.0	41.9	ug/L	0.641	4.70	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09020556 Run Date: 02/19/2009 Sample ID: WG295276-12
Instrument ID: HPMS8 Run Time: 16:12 Method: 8260B
File ID: 8M351799 Analyst: MES QC Key: STD
ICal Workgroup: WG295276 Cal ID: HPMS8 - 19-FEB-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	18.9	ug/L	0.513	5.40	30	
1,1-Dichloroethene	CCC	20.0	20.5	ug/L	0.467	2.50	30	
1,2-Dichloropropane	CCC	20.0	21.0	ug/L	0.241	5.20	30	
Ethylbenzene	CCC	20.0	21.4	ug/L	0.493	7.00	30	
Toluene	CCC	20.0	21.4	ug/L	1.32	7.00	30	
Vinyl Chloride	CCC	20.0	20.4	ug/L	0.298	2.00	30	
Bromoform	SPCC	20.0	18.0	ug/L	0.194	9.90	30	
Chlorobenzene	SPCC	20.0	20.7	ug/L	0.905	3.50	30	
Chloromethane	SPCC	20.0	19.5	ug/L	0.448	2.70	30	
1,1-Dichloroethane	SPCC	20.0	20.6	ug/L	0.500	2.80	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.3	ug/L	0.445	1.30	30	
Acetone		20.0	20.5	ug/L	0.0684	2.60	30	
Benzene		20.0	20.9	ug/L	0.898	4.70	30	
Bromobenzene		20.0	21.2	ug/L	0.687	6.10	30	
Bromochloromethane		20.0	21.5	ug/L	0.150	7.40	30	
Bromodichloromethane		20.0	19.0	ug/L	0.393	5.10	30	
Bromomethane		20.0	23.1	ug/L	0.213	15.7	30	
2-Butanone		20.0	18.3	ug/L	0.0714	8.50	30	
n-Butylbenzene		20.0	22.1	ug/L	2.82	10.5	30	
sec-Butylbenzene		20.0	22.1	ug/L	3.18	10.7	30	
tert-Butylbenzene		20.0	21.7	ug/L	0.513	8.30	30	
Carbon Disulfide		20.0	18.0	ug/L	0.684	9.80	30	
Carbon Tetrachloride		20.0	18.8	ug/L	0.440	5.80	30	
Dibromochloromethane		20.0	19.3	ug/L	0.325	3.60	30	
Chloroethane		20.0	23.3	ug/L	0.213	16.4	30	
2-Chloroethyl Vinyl Ether		20.0	21.3	ug/L	0.114	6.30	30	
2-Chlorotoluene		20.0	20.9	ug/L	2.30	4.60	30	
4-Chlorotoluene		20.0	21.3	ug/L	2.42	6.50	30	
1,2-Dibromo-3-Chloropropane		20.0	17.8	ug/L	0.108	11.1	30	
1,2-Dibromoethane		20.0	20.7	ug/L	0.243	3.40	30	
Dibromomethane		20.0	19.1	ug/L	0.134	4.30	30	
1,2-Dichlorobenzene		20.0	20.6	ug/L	1.31	3.10	30	
1,3-Dichlorobenzene		20.0	20.8	ug/L	1.40	4.00	30	
1,4-Dichlorobenzene		20.0	19.8	ug/L	1.42	1.20	30	
Dichlorodifluoromethane		20.0	20.8	ug/L	0.500	3.80	30	
1,2-Dichloroethane		20.0	17.6	ug/L	0.440	12.0	30	
cis-1,2-Dichloroethene		20.0	22.1	ug/L	0.267	10.3	30	
trans-1,2-Dichloroethene		20.0	20.8	ug/L	0.414	3.90	30	
1,3-Dichloropropane		20.0	20.7	ug/L	0.425	3.50	30	
2,2-Dichloropropane		20.0	19.1	ug/L	0.493	4.30	30	
cis-1,3-Dichloropropene		20.0	20.5	ug/L	0.390	2.70	30	
trans-1,3-Dichloropropene		20.0	18.0	ug/L	0.468	10.1	30	

ALT - Modified 09/06/2007
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Login Number: L09020556 Run Date: 02/19/2009 Sample ID: WG295276-12
Instrument ID: HPMS8 Run Time: 16:12 Method: 8260B
File ID: 8M351799 Analyst: MES QC Key: STD
ICal Workgroup: WG295276 Cal ID: HPMS8 - 19-FEB-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	21.5	ug/L	0.365	7.60	30	
2-Hexanone	20.0	18.3	ug/L	0.0615	8.50	30	
Hexachlorobutadiene	20.0	20.7	ug/L	0.571	3.50	30	
Isopropylbenzene	20.0	19.7	ug/L	1.45	1.50	30	
p-Isopropyltoluene	20.0	21.7	ug/L	2.75	8.30	30	
4-Methyl-2-Pentanone	20.0	17.9	ug/L	0.0511	10.6	30	
Methylene Chloride	20.0	21.1	ug/L	0.259	5.70	30	
Naphthalene	20.0	21.7	ug/L	1.97	8.50	30	
n-Propylbenzene	20.0	22.4	ug/L	3.61	12.1	30	
Styrene	20.0	21.8	ug/L	0.996	8.90	30	
1,1,1,2-Tetrachloroethane	20.0	19.6	ug/L	0.358	1.80	30	
Tetrachloroethene	20.0	21.2	ug/L	0.289	6.10	30	
1,2,3-Trichlorobenzene	20.0	20.2	ug/L	0.965	0.800	30	
1,2,4-Trichlorobenzene	20.0	21.1	ug/L	1.10	5.60	30	
1,1,1-Trichloroethane	20.0	18.8	ug/L	0.509	6.00	30	
1,1,2-Trichloroethane	20.0	20.6	ug/L	0.235	3.00	30	
Trichloroethene	20.0	21.0	ug/L	0.251	5.10	30	
Trichlorofluoromethane	20.0	19.7	ug/L	0.567	1.70	30	
1,2,3-Trichloropropane	20.0	20.5	ug/L	0.161	2.50	30	
1,2,4-Trimethylbenzene	20.0	22.0	ug/L	2.76	9.80	30	
1,3,5-Trimethylbenzene	20.0	22.7	ug/L	2.62	13.6	30	
Vinyl Acetate	20.0	15.8	ug/L	0.328	21.0	40	
o-Xylene	20.0	22.5	ug/L	0.603	12.3	30	
m-,p-Xylene	40.0	42.6	ug/L	0.607	6.60	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09020556	Run Date: 02/26/2009	Sample ID: WG295872-02
Instrument ID: HPMS8	Run Time: 08:32	Method: 8260B
File ID: 8M352033	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG295873	Cal ID: HPMS8 - 19-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	47.6	ug/L	0.516	4.75	20	
1,1-Dichloroethene	CCC	50.0	50.5	ug/L	0.460	1.06	20	
1,2-Dichloropropane	CCC	50.0	49.0	ug/L	0.224	2.07	20	
Ethylbenzene	CCC	50.0	50.4	ug/L	0.465	0.864	20	
Toluene	CCC	50.0	50.9	ug/L	1.26	1.75	20	
Vinyl Chloride	CCC	50.0	56.6	ug/L	0.289	13.1	20	
Bromoform	SPCC	50.0	45.1	ug/L	0.194	9.77	40	
Chlorobenzene	SPCC	50.0	48.1	ug/L	0.840	3.86	40	
Chloromethane	SPCC	50.0	47.7	ug/L	0.400	4.61	40	
1,1-Dichloroethane	SPCC	50.0	50.5	ug/L	0.491	0.976	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.9	ug/L	0.395	10.2	40	
Acetone		50.0	43.2	ug/L	0.0568	13.6	40	
Benzene		50.0	50.3	ug/L	0.862	0.520	40	
Bromobenzene		50.0	50.2	ug/L	0.651	0.434	40	
Bromochloromethane		50.0	48.5	ug/L	0.135	3.10	40	
Bromodichloromethane		50.0	46.6	ug/L	0.386	6.79	40	
Bromomethane		50.0	49.6	ug/L	0.182	0.874	40	
2-Butanone		50.0	43.5	ug/L	0.0679	13.0	40	
n-Butylbenzene		50.0	47.9	ug/L	2.44	4.27	40	
sec-Butylbenzene		50.0	49.5	ug/L	2.85	1.08	40	
tert-Butylbenzene		50.0	50.7	ug/L	0.480	1.43	40	
Carbon Disulfide		50.0	50.7	ug/L	0.769	1.43	40	
Carbon Tetrachloride		50.0	49.2	ug/L	0.460	1.59	40	
Dibromochloromethane		50.0	47.7	ug/L	0.321	4.67	40	
Chloroethane		50.0	52.7	ug/L	0.193	5.38	40	
2-Chloroethyl Vinyl Ether		50.0	48.8	ug/L	0.105	2.41	40	
2-Chlorotoluene		50.0	52.1	ug/L	2.29	4.21	40	
4-Chlorotoluene		50.0	49.7	ug/L	2.26	0.555	40	
1,2-Dibromo-3-Chloropropane		50.0	40.0	ug/L	0.0971	19.9	40	
1,2-Dibromoethane		50.0	47.1	ug/L	0.221	5.76	40	
Dibromomethane		50.0	45.0	ug/L	0.126	9.94	40	
1,2-Dichlorobenzene		50.0	46.0	ug/L	1.17	8.06	40	
1,3-Dichlorobenzene		50.0	48.7	ug/L	1.31	2.63	40	
1,4-Dichlorobenzene		50.0	46.5	ug/L	1.34	7.03	40	
Dichlorodifluoromethane		50.0	47.1	ug/L	0.411	5.82	40	
1,2-Dichloroethane		50.0	44.2	ug/L	0.442	11.5	40	
cis-1,2-Dichloroethene		50.0	52.4	ug/L	0.254	4.77	40	
trans-1,2-Dichloroethene		50.0	51.7	ug/L	0.413	3.50	40	
1,3-Dichloropropane		50.0	47.0	ug/L	0.386	6.01	40	
2,2-Dichloropropane		50.0	50.4	ug/L	0.519	0.720	40	
cis-1,3-Dichloropropene		50.0	50.1	ug/L	0.381	0.172	40	
trans-1,3-Dichloropropene		50.0	48.7	ug/L	0.507	2.56	40	

CCV - Modified 03/05/2008
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Login Number: L09020556 Run Date: 02/26/2009 Sample ID: WG295872-02
Instrument ID: HPMS8 Run Time: 08:32 Method: 8260B
File ID: 8M352033 Analyst: MES QC Key: STD
Workgroup (AAB#): WG295873 Cal ID: HPMS8 - 19-FEB-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	52.9	ug/L	0.359	5.89	40	
2-Hexanone	50.0	42.7	ug/L	0.0573	14.7	40	
Hexachlorobutadiene	50.0	36.1	ug/L	0.399	27.7	40	
Isopropylbenzene	50.0	52.3	ug/L	1.54	4.53	40	
p-Isopropyltoluene	50.0	50.3	ug/L	2.56	0.688	40	
4-Methyl-2-Pentanone	50.0	41.1	ug/L	0.0470	17.8	40	
Methylene Chloride	50.0	49.8	ug/L	0.237	0.404	40	
Naphthalene	50.0	39.2	ug/L	1.43	21.6	40	
n-Propylbenzene	50.0	52.8	ug/L	3.40	5.56	40	
Styrene	50.0	51.9	ug/L	0.950	3.84	40	
1,1,1,2-Tetrachloroethane	50.0	47.9	ug/L	0.350	4.19	40	
Tetrachloroethene	50.0	50.6	ug/L	0.276	1.25	40	
1,2,3-Trichlorobenzene	50.0	36.4	ug/L	0.696	27.3	40	
1,2,4-Trichlorobenzene	50.0	41.1	ug/L	0.853	17.8	40	
1,1,1-Trichloroethane	50.0	49.1	ug/L	0.532	1.82	40	
1,1,2-Trichloroethane	50.0	46.2	ug/L	0.211	7.61	40	
Trichloroethene	50.0	51.2	ug/L	0.245	2.48	40	
Trichlorofluoromethane	50.0	51.3	ug/L	0.592	2.59	40	
1,2,3-Trichloropropane	50.0	45.2	ug/L	0.142	9.59	40	
1,2,4-Trimethylbenzene	50.0	50.7	ug/L	2.55	1.46	40	
1,3,5-Trimethylbenzene	50.0	53.8	ug/L	2.48	7.67	40	
Vinyl Acetate	50.0	49.5	ug/L	0.411	1.05	40	
o-Xylene	50.0	53.2	ug/L	0.571	6.42	40	
m-,p-Xylene	100	101	ug/L	0.576	1.16	40	
1,2-Dichloroethene	100	104	ug/L	0.333	4.14	40	
Xylenes	150	154	ug/L	0.574	2.92	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L09020556	Run Date: 02/27/2009	Sample ID: WG296016-02
Instrument ID: HPMS6	Run Time: 10:36	Method: 8260B
File ID: 6M81841	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG296017	Cal ID: HPMS6 - 19-FEB-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	57.7	ug/L	0.522	15.3	20	
1,1-Dichloroethene	CCC	50.0	55.3	ug/L	0.403	10.6	20	
1,2-Dichloropropane	CCC	50.0	53.1	ug/L	0.241	6.14	20	
Ethylbenzene	CCC	50.0	53.4	ug/L	0.505	6.83	20	
Toluene	CCC	50.0	54.7	ug/L	1.33	9.42	20	
Vinyl Chloride	CCC	50.0	55.7	ug/L	0.217	11.4	20	
Bromoform	SPCC	50.0	53.4	ug/L	0.169	6.88	40	
Chlorobenzene	SPCC	50.0	50.9	ug/L	0.909	1.89	40	
Chloromethane	SPCC	50.0	53.8	ug/L	0.301	7.64	40	
1,1-Dichloroethane	SPCC	50.0	55.0	ug/L	0.485	9.95	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	47.0	ug/L	0.376	6.05	40	
Acetone		50.0	49.1	ug/L	0.0454	1.74	40	
Benzene		50.0	54.2	ug/L	1.04	8.35	40	
Bromobenzene		50.0	50.4	ug/L	0.648	0.859	40	
Bromochloromethane		50.0	54.7	ug/L	0.162	9.37	40	
Bromodichloromethane		50.0	61.0	ug/L	0.375	22.1	40	
Bromomethane		50.0	53.7	ug/L	0.215	7.46	40	
2-Butanone		50.0	53.8	ug/L	0.0727	7.68	40	
n-Butylbenzene		50.0	52.5	ug/L	2.10	5.01	40	
sec-Butylbenzene		50.0	53.3	ug/L	2.72	6.53	40	
tert-Butylbenzene		50.0	50.7	ug/L	0.474	1.40	40	
Carbon Disulfide		50.0	53.8	ug/L	0.873	7.51	40	
Carbon Tetrachloride		50.0	69.3	ug/L	0.412	38.6	40	
Dibromochloromethane		50.0	52.9	ug/L	0.279	5.83	40	
Chloroethane		50.0	51.9	ug/L	0.208	3.74	40	
2-Chloroethyl Vinyl Ether		50.0	47.0	ug/L	0.0941	5.94	40	
2-Chlorotoluene		50.0	50.9	ug/L	2.28	1.71	40	
4-Chlorotoluene		50.0	51.9	ug/L	2.04	3.87	40	
1,2-Dibromo-3-Chloropropane		50.0	53.7	ug/L	0.0781	7.47	40	
1,2-Dibromoethane		50.0	52.8	ug/L	0.220	5.57	40	
Dibromomethane		50.0	53.6	ug/L	0.137	7.22	40	
1,2-Dichlorobenzene		50.0	48.2	ug/L	1.20	3.51	40	
1,3-Dichlorobenzene		50.0	49.4	ug/L	1.34	1.12	40	
1,4-Dichlorobenzene		50.0	47.7	ug/L	1.38	4.62	40	
Dichlorodifluoromethane		50.0	49.6	ug/L	0.361	0.889	40	
1,2-Dichloroethane		50.0	55.6	ug/L	0.364	11.3	40	
cis-1,2-Dichloroethene		50.0	55.7	ug/L	0.285	11.5	40	
trans-1,2-Dichloroethene		50.0	56.6	ug/L	0.267	13.2	40	
1,3-Dichloropropane		50.0	49.7	ug/L	0.371	0.664	40	
2,2-Dichloropropane		50.0	63.0	ug/L	0.472	25.9	40	
cis-1,3-Dichloropropene		50.0	55.5	ug/L	0.409	11.1	40	
trans-1,3-Dichloropropene		50.0	55.0	ug/L	0.437	10.1	40	

CCV - Modified 03/05/2008
PDF File ID: 1331966
Report generated 03/02/2009 10:08



Login Number: L09020556 Run Date: 02/27/2009 Sample ID: WG296016-02
Instrument ID: HPMS6 Run Time: 10:36 Method: 8260B
File ID: 6M81841 Analyst: MES QC Key: STD
Workgroup (AAB#): WG296017 Cal ID: HPMS6 - 19-FEB-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	57.2	ug/L	0.378	14.4	40	
2-Hexanone	50.0	47.6	ug/L	0.111	4.83	40	
Hexachlorobutadiene	50.0	53.6	ug/L	0.339	7.22	40	
Isopropylbenzene	50.0	53.8	ug/L	1.61	7.61	40	
p-Isopropyltoluene	50.0	52.1	ug/L	2.37	4.20	40	
4-Methyl-2-Pentanone	50.0	48.7	ug/L	0.0525	2.58	40	
Methylene Chloride	50.0	53.0	ug/L	0.276	6.09	40	
Naphthalene	50.0	46.8	ug/L	1.20	6.31	40	
n-Propylbenzene	50.0	53.0	ug/L	3.17	6.00	40	
Styrene	50.0	52.8	ug/L	1.08	5.65	40	
1,1,1,2-Tetrachloroethane	50.0	58.5	ug/L	0.310	17.1	40	
Tetrachloroethene	50.0	55.7	ug/L	0.334	11.5	40	
1,2,3-Trichlorobenzene	50.0	46.6	ug/L	0.685	6.82	40	
1,2,4-Trichlorobenzene	50.0	47.4	ug/L	0.782	5.26	40	
1,1,1-Trichloroethane	50.0	64.2	ug/L	0.488	28.4	40	
1,1,2-Trichloroethane	50.0	48.8	ug/L	0.202	2.49	40	
Trichloroethene	50.0	56.0	ug/L	0.281	12.0	40	
Trichlorofluoromethane	50.0	61.0	ug/L	0.527	21.9	40	
1,2,3-Trichloropropane	50.0	49.7	ug/L	0.125	0.632	40	
1,2,4-Trimethylbenzene	50.0	52.4	ug/L	2.36	4.83	40	
1,3,5-Trimethylbenzene	50.0	52.4	ug/L	2.32	4.79	40	
Vinyl Acetate	50.0	49.5	ug/L	0.354	1.08	40	
o-Xylene	50.0	51.7	ug/L	0.624	3.39	40	
m-,p-Xylene	100	105	ug/L	0.642	4.88	40	
1,2-Dichloroethene	100	112	ug/L	0.276	12.4	40	
Xylenes	150	157	ug/L	0.633	4.39	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

PDF File ID: 1331966

Report generated 03/02/2009 10:08



Login Number: L09020556
Instrument ID: HPMS8
Workgroup (AAB#): WG295873

CCV Number: WG295872-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295872-02	NA	NA	349423	619045	838077
Upper Limit	NA	NA	698846	1238090	1676154
Lower Limit	NA	NA	174712	309523	419039
L09020556-01	1.00	01	305797	552019	758149
L09020556-03	25.0	DL01	285031	519867	714208
L09020556-04	1.00	01	304055	554157	771606
WG295873-01	1.00	02	315777	575585	800239
WG295873-02	1.00	01	334340	589225	781968
WG295873-03	1.00	01	335965	596214	802753
WG295873-04	1.00	01	292135	532138	729063

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

Underline = Response outside limits

Login Number: L09020556
Instrument ID: HPMS6
Workgroup (AAB#): WG296017

CCV Number: WG296016-02
CAL ID: HPMS6 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG296016-02	NA	NA	491072	797171	900722
Upper Limit	NA	NA	982144	1594342	1801444
Lower Limit	NA	NA	245536	398586	450361
L09020556-02	1.00	01	424299	695226	746915
L09020556-03	1.00	01	415536	675651	774035
WG296017-01	1.00	01	492693	815556	883819
WG296017-02	1.00	01	508939	833540	938043

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

Underline = Response outside limits

Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00103746

Login Number: L09020556
Instrument ID: HPMS8
Workgroup (AAB#): WG295873

CCV Number: WG295872-02
CAL ID: HPMS8 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG295872-02	NA	NA	17.68	14.66	10.79
Upper Limit	NA	NA	18.18	15.16	11.29
Lower Limit	NA	NA	17.18	14.16	10.29
L09020556-01	1.00	01	17.68	14.66	10.79
L09020556-03	25.0	DL01	17.68	14.66	10.79
L09020556-04	1.00	01	17.68	14.66	10.79
WG295873-01	1.00	02	17.68	14.66	10.79
WG295873-02	1.00	01	17.68	14.66	10.79
WG295873-03	1.00	01	17.68	14.66	10.79
WG295873-04	1.00	01	17.68	14.66	10.79

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

Underline = Response outside limits

Login Number: L09020556
Instrument ID: HPMS6
Workgroup (AAB#): WG296017

CCV Number: WG296016-02
CAL ID: HPMS6 - 19-FEB-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG296016-02	NA	NA	18.61	15.06	10.59
Upper Limit	NA	NA	19.11	15.56	11.09
Lower Limit	NA	NA	18.11	14.56	10.09
L09020556-02	1.00	01	18.62	15.06	10.59
L09020556-03	1.00	01	18.61	15.06	10.6
WG296017-01	1.00	01	18.61	15.06	10.59
WG296017-02	1.00	01	18.61	15.06	10.59

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

Underline = Response outside limits

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
March 2, 2009

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
AM - ALISON J. MILLER	AML - ANTHONY M. LONG	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
CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL
CTB - CHRIS T. BUCINA	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	ECL - ERIC C. LAWSON	EDA - ERIN D. AGEE
ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR
HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON
JKP - JACQUELINE K. PARSONS	JKT - JANE K. THOMPSON	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATHRYN E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LHT - LANCE H. THOMPSON
LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON
MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	NPM - NATHANIEL P. MILLER
PDM - PIERCE D. MORRIS	RAH - ROY A. HALSTEAD	RB - ROBERT BUCHANAN
REK - ROBERT E. KYER	RLK - ROBIN L. KLINGER	RWC - RODNEY W. CAMPBELL
SAV - SARAH A. VANDENBERG	SDH - SHANA D. HINYARD	SDL - SHELLY D. LENT
SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF	TDH - TRICIA D. HUCK
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

Qualkey: STD

Qualifier	Description
*	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
B3	Target analyte detected in calibration blank at or above the method reporting limit
C	Confirmed by GC/MS
CG	Confluent growth
D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
E1	Concentration estimated. Analyte exceeded calibration range. Insufficient sample for reanalysis.
E2	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to matrix.
E3	Concentration estimated. Analyte exceeded calibration range. Reanalysis not performed due to holding time requirements
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
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
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
M1	Matrix spike recovery was high; the associated blank spike recovery was acceptable.
M2	Matrix spike recovery was low; the associated blank spike recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration is disproportionate to the spike level.
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.
Q1	Sample integrity was not maintained. See report narrative.
QNS	Quantity of sample not sufficient to perform analysis
R1	Duplicate RPD/RSD exceeded the method acceptance limit.
R2	Duplicate RPD/RSD exceeded the laboratory acceptance limit.
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.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
V2	CCV recovery was above method acceptance limits. Insufficient volume for sample reanalysis.
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



Qualkey: STD

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.



Chain of Custody

00103752
NO. 5780

Laboratory Name: MICROBAC		Address: 158 Starlite Dr. Marietta, OH.		Contact: Stephanie Mossburg													
Project Name: LHAAP		Project Location: Karback, TX.		Analysis and Method Desired (Indicate separate containers)													
Project No. 0009A130 117591-0005B00		Project Contact: Jen Hoang		Project Telephone No. 713-996-4408													
Point of Contact: Scott Beesinger		Project Manager/Supervisor: Praveen Srivastav		Telephone No. 903-679-3448													
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description	Location	Number of Containers	VOA	NITRATE	NITRITE					Remarks
1	LHSMW57-022309	2/23/09	10:01		✓	W	Site 47		2	✓							48 Hr. TAT
2	LHSMW41-022309	2/23/09	11:39		✓	W	Site 47		2	✓							48 Hr. TAT
3	47WN34-022309	2/23/09	13:26		✓	W	Site 47		2	✓							48 Hr. TAT
4	TRip Blank	2/23/09			✓	W			2	✓							
5	A9WMO4-022409	2/24/09	12:55		✓	W	Site 49		1		✓						Standard TAT
6																	
7																	
8																	
9																	
10																	
Transfers Relinquished By (signature)		Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions									
Scott Beesinger		2/24/09 3:00															
								FedEx Airbill No.:									
				Laboratory Heli K		2/25/09 9:27		Sampler's Signature Scott Beesinger									
TAT: ☐ Standard ☐ Rush		Date		Seals Intact? ☐ Y ☐ N		Received Good Condition ☐ Y ☐ N		Cold									

Client: <u>Shaw Longhorn</u>				
Workorder Number: <u>B</u>				
Date Received: <u>3-25-07</u>				
Delivered by: ☐ Fedx ☒ UPS ☐ Client ☐ Courier Time: <u>927</u>				
Opened by: <u>RLK</u>				
IR Temp Gun: ☒ H ☐ G				
Logged by: <u>RLK/JKT</u> <u>L 09020556</u>				

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
151	3	1266V 72501 9330 0656	5780	48 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 (< 6mm)?	✓			
Were samples received within EPA hold times?	✓			

Discrepancy/Comments/Other Problems

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

00103754

Login: L09020556**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 27-FEB-2009

Samplenum **Container ID** **Products**
L09020556-01 555341 826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:46	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

Samplenum **Container ID** **Products**
L09020556-03 555343 826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

Samplenum **Container ID** **Products**
L09020556-04 555344 826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

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



Internal Chain of Custody Report

00103755

Login: L09020556**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 27-FEB-2009

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09020556-02	555342	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	25-FEB-2009 12:29	ERE	
2	ANALYZ	V1	ORG4	25-FEB-2009 13:47	MRT	RLK

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





158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • <http://www.microbac.com>

Laboratory Report Number: L09040142

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac'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.

Kathy Albertson	<i>Team Chemist/Data Specialist</i>	kalbertson@microbac.com
Stephanie Mossburg	<i>Team Chemist/Data Specialist</i>	smossburg@microbac.com
Tony Long	<i>Team Chemist/Data Specialist</i>	tlong@microbac.com
Amanda Fickiesen	<i>Client Services Specialist</i>	afickiesen@microbac.com
Annie Brown	<i>Client Services Specialist</i>	abrown@microbac.com
Jacqueline Parsons	<i>Team Assistant</i>	jparsons@microbac.com

This report was reviewed on April 13, 2009.

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 accrediting authority listed below. 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 Microbac Laboratories.

This report was certified on April 13, 2009.

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

David Vandenberg - Managing Director

State of origin: Texas

Accrediting authority: Texas Commission on Environmental Quality ID:T104704252-07-TX

QAPP: Microbac OVD

This report contains a total of 181 pages.

Look closer. Go further. Do more.



Microbac REPORT L09040142
PREPARED FOR Shaw E I, Inc.
WORK ID:

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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L09040142

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 4 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

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

Approved: 10-APR-09
<i>Stephanie Mossburg</i>

Laboratory Data Package Cover Page

00103760

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

April 9, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09040142
Project Name: 798-LONGHORN
Method: 8260B
Prep Batch Number(s): 299157, 299281
Reviewer Name: MIKE D. ALBERTSON
LRC Date: April 09, 2009

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?	✓				
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?		✓			1
Was the ICAL curve verified for each analyte?		✓			2
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?	✓				

EXCEPTIONS REPORT

ER# - Description

#1: 2-Chloroethyl vinyl ether exceeded the upper control limit in the CCV's analyzed 04/07/09 and 04/08/09 on HPMS-11.

#2: Vinyl acetate exceeded the upper control limit in the alternate source analyzed 03/24/09 on HPMS-11.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

Laboratory Data Package Cover Page

00103764

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

April 8, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09040142
Project Name: 798-LONGHORN
Method: NITRATE-NITRITE
Prep Batch Number(s): WG299288
Reviewer Name: DEANNA I. HESSON
LRC Date: April 08, 2009

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?	✓				

00103766

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09040142
 Project Name: 798-LONGHORN
 Method: NITRATE-NITRITE
 Prep Batch Number(s): WG299288
 Reviewer Name: DEANNA I. HESSON
 LRC Date: April 08, 2009

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09040142
 Project Name: 798-LONGHORN
 Method: NITRATE-NITRITE
 Prep Batch Number(s): WG299288
 Reviewer Name: DEANNA I. HESSON
 LRC Date: April 08, 2009

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	<u>Microbac Laboratories Inc.</u>
Laboratory Log Number:	<u>L09040142</u>
Project Name:	<u>798-LONGHORN</u>
Method:	<u>NITRATE-NITRITE</u>
Prep Batch Number(s):	<u>WG299288</u>
Reviewer Name:	<u>DEANNA I. HESSON</u>
LRC Date:	<u>April 08, 2009</u>

EXCEPTIONS REPORT

ER# - Description

Footnotes:

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

Laboratory Data Package Cover Page

00103770

This data Package consists of:

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

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

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

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

R4 Surrogate recovery data including:

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

R5 Test reports/summary forms for blank samples;

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

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

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

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

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

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

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

R10 Other problems or anomalies.

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

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

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

MAREN M. BEERY



Metals Supervisor

April 8, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L09040142
Project Name: 798-LONGHORN
Method: 6020
Prep Batch Number(s): WG299169
Reviewer Name: MAREN M. BEERY
LRC Date: April 08, 2009

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 <RL?	✓				
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?	✓				ER1
ICAL					
Were response factors and/or relative response factors for each analyte within QC limits?			✓		
Were percent RSDs or correlation coefficient criteria met?	✓				
Was the number of standards recommended in the method used for all analytes?	✓				
Were all points generated between the lowest and highest standard used to calculate the curve?	✓				
Are ICAL data available for all instruments used?	✓				
Has the initial calibration curve been verified using an appropriate second source standard?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L09040142
Project Name:	798-LONGHORN
Method:	6020
Prep Batch Number(s):	WG299169
Reviewer Name:	MAREN M. BEERY
LRC Date:	April 08, 2009

EXCEPTIONS REPORT

ER#1 - Due to high levels of nontarget analytes, client sample 07 was analyzed at a dilution for all analytes.

Footnotes:

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

Laboratory Data Package Cover Page

00103775

This data Package consists of:

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

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

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

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

R4 Surrogate recovery data including:

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

R5 Test reports/summary forms for blank samples;

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

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

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

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

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

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

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

R10 Other problems or anomalies.

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

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

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

MAREN M. BEERY



Metals Supervisor

April 8, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

RG-366/TRRP-13 December 2002

A1

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09040142
 Project Name: 798-LONGHORN
 Method: 6010
 Prep Batch Number(s): WG299269
 Reviewer Name: MAREN M. BEERY
 LRC Date: April 08, 2009

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 <RL?	✓				
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?	✓				
Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):					
Was the CCV analyzed at the method-required frequency?	✓				
Were percent differences for each analyte within the method-required QC limits?	✓				
Was the ICAL curve verified for each analyte?	✓				
Was the absolute value of the analyte concentration in the inorganic CCB <RL?	✓				
Mass spectral tuning:					
Was the appropriate compound for the method used for tuning?			✓		
Were ion abundance data within the method-required QC limits?			✓		
Internal standards (IS):					
Were IS area counts and retention times within the method-required QC limits?			✓		
Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 4.12.2)					
Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	✓				
Were data associated with manual integrations flagged on the raw data?			✓		
Dual column confirmation					
Did dual column confirmation results meet the method-required QC?			✓		
Tentatively identified compounds (TICs):					
If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			✓		
Interference Check Sample (ICS) results:					
Were percent recoveries within method QC limits?	✓				
Serial dilutions, post digestion spikes, and method of standard additions					
Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	✓				
Method detection limit (MDL) studies					
Was a MDL study performed for each reported analyte?	✓				
Is the MDL either adjusted or supported by the analysis of DCSs?	✓				
Proficiency test reports:					
Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	✓				

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L09040142
Project Name:	798-LONGHORN
Method:	6010
Prep Batch Number(s):	WG299269
Reviewer Name:	MAREN M. BEERY
LRC Date:	April 08, 2009

EXCEPTIONS REPORT

ER# - Description

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

L09040142

00103783

04/13/09 09:35

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836 (GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW25-040309	L09040142-01	8260B	100	07-APR-09
LHSMW56-040309	L09040142-02	8260B	50	07-APR-09
50WW02-040309	L09040142-03	8260B	50	07-APR-09
50WW05-040409	L09040142-04	8260B	5	07-APR-09
50WW07-040409	L09040142-05	8260B	1	07-APR-09
TB-0904	L09040142-08	8260B	1	07-APR-09



Sample Number: L09040142-01
 Client ID: 47WW25-040309
 Matrix: Water
 Workgroup Number: WG299281
 Collect Date: 04/03/2009 10:55
 Sample Tag: DL02

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: WTD
 Dilution: 100
 Units: ug/L

Instrument: HPMS11
 Prep Date: 04/08/2009 16:54
 Cal Date: 03/24/2009 16:13
 Run Date: 04/08/2009 16:54
 File ID: 11M58409

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	1000	250
Benzene	71-43-2		U	100	12.5
Bromobenzene	108-86-1		U	100	12.5
Bromochloromethane	74-97-5		U	100	20.0
Bromodichloromethane	75-27-4		U	100	25.0
Bromoform	75-25-2		U	100	50.0
Bromomethane	74-83-9		U	100	50.0
2-Butanone	78-93-3		U	1000	250
n-Butylbenzene	104-51-8		U	100	25.0
sec-Butylbenzene	135-98-8		U	100	25.0
tert-Butylbenzene	98-06-6		U	100	25.0
Carbon disulfide	75-15-0		U	100	50.0
Carbon tetrachloride	56-23-5		U	100	25.0
Chlorobenzene	108-90-7		U	100	12.5
Chlorodibromomethane	124-48-1		U	100	25.0
Chloroethane	75-00-3		U	100	50.0
2-Chloroethyl vinyl ether	110-75-8		U	1000	200
Chloroform	67-66-3		U	100	12.5
Chloromethane	74-87-3		U	100	25.0
2-Chlorotoluene	95-49-8		U	100	12.5
4-Chlorotoluene	106-43-4		U	100	25.0
1,2-Dibromo-3-chloropropane	96-12-8		U	500	100
1,2-Dibromoethane	106-93-4		U	100	25.0
Dibromomethane	74-95-3		U	100	25.0
1,2-Dichlorobenzene	95-50-1		U	100	12.5
1,3-Dichlorobenzene	541-73-1		U	100	25.0
1,4-Dichlorobenzene	106-46-7		U	100	12.5
Dichlorodifluoromethane	75-71-8		U	100	25.0
1,1-Dichloroethane	75-34-3		U	100	12.5
1,2-Dichloroethane	107-06-2		U	100	25.0
1,1-Dichloroethene	75-35-4		U	100	50.0
cis-1,2-Dichloroethene	156-59-2	942		100	25.0
trans-1,2-Dichloroethene	156-60-5		U	100	25.0
1,2-Dichloropropane	78-87-5		U	100	20.0
1,3-Dichloropropane	142-28-9		U	100	20.0
2,2-Dichloropropane	594-20-7		U	100	25.0
cis-1,3-Dichloropropene	10061-01-5		U	100	25.0
trans-1,3-Dichloropropene	10061-02-6		U	100	50.0
1,1-Dichloropropene	563-58-6		U	100	25.0
Ethylbenzene	100-41-4		U	100	25.0
2-Hexanone	591-78-6		U	1000	250
Hexachlorobutadiene	87-68-3		U	100	25.0
Isopropylbenzene	98-82-8		U	100	25.0
p-Isopropyltoluene	99-87-6		U	100	25.0
4-Methyl-2-pentanone	108-10-1		U	1000	250
Methylene chloride	75-09-2	44.5	J	500	25.0
Naphthalene	91-20-3		U	100	20.0
n-Propylbenzene	103-65-1		U	100	12.5
Styrene	100-42-5		U	100	12.5
1,1,1,2-Tetrachloroethane	630-20-6		U	100	25.0
1,1,2,2-Tetrachloroethane	79-34-5		U	100	12.5
Tetrachloroethene	127-18-4		U	100	25.0
Toluene	108-88-3		U	100	25.0
1,2,3-Trichlorobenzene	87-61-6		U	100	15.0
1,2,4-Trichlorobenzene	120-82-1		U	100	20.0
1,1,1-Trichloroethane	71-55-6		U	100	25.0
1,1,2-Trichloroethane	79-00-5		U	100	25.0
Trichloroethene	79-01-6	13300		100	25.0
Trichlorofluoromethane	75-69-4		U	100	25.0

Report Number: **L09040142**Report Date : **April 13, 2009****00103785**

Sample Number: **L09040142-01**
 Client ID: **47WW25-040309**
 Matrix: **Water**
 Workgroup Number: **WG299281**
 Collect Date: **04/03/2009 10:55**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **WTD**
 Dilution: **100**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **04/08/2009 16:54**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/08/2009 16:54**
 File ID: **11M58409**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	100	50.0
1,2,4-Trimethylbenzene	95-63-6		U	100	25.0
1,3,5-Trimethylbenzene	108-67-8		U	100	25.0
Vinyl acetate	108-05-4		U	1000	250
Vinyl chloride	75-01-4		U	100	25.0
o-Xylene	95-47-6		U	100	25.0
m-,p-Xylene	136777-61-2		U	100	50.0
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	100	86	118		
1,2-Dichloroethane-d4	102	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	109	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

Sample Number: L09040142-02
 Client ID: LHSMW56-040309
 Matrix: Water
 Workgroup Number: WG299281
 Collect Date: 04/03/2009 12:50
 Sample Tag: DL02

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: WTD
 Dilution: 50
 Units: ug/L

Instrument: HPMS11
 Prep Date: 04/08/2009 17:25
 Cal Date: 03/24/2009 16:13
 Run Date: 04/08/2009 17:25
 File ID: 11M58410

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	500	125
Benzene	71-43-2		U	50.0	6.25
Bromobenzene	108-86-1		U	50.0	6.25
Bromochloromethane	74-97-5		U	50.0	10.0
Bromodichloromethane	75-27-4		U	50.0	12.5
Bromoform	75-25-2		U	50.0	25.0
Bromomethane	74-83-9		U	50.0	25.0
2-Butanone	78-93-3		U	500	125
n-Butylbenzene	104-51-8		U	50.0	12.5
sec-Butylbenzene	135-98-8		U	50.0	12.5
tert-Butylbenzene	98-06-6		U	50.0	12.5
Carbon disulfide	75-15-0		U	50.0	25.0
Carbon tetrachloride	56-23-5		U	50.0	12.5
Chlorobenzene	108-90-7		U	50.0	6.25
Chlorodibromomethane	124-48-1		U	50.0	12.5
Chloroethane	75-00-3		U	50.0	25.0
2-Chloroethyl vinyl ether	110-75-8		U	500	100
Chloroform	67-66-3		U	50.0	6.25
Chloromethane	74-87-3		U	50.0	12.5
2-Chlorotoluene	95-49-8		U	50.0	6.25
4-Chlorotoluene	106-43-4		U	50.0	12.5
1,2-Dibromo-3-chloropropane	96-12-8		U	250	50.0
1,2-Dibromoethane	106-93-4		U	50.0	12.5
Dibromomethane	74-95-3		U	50.0	12.5
1,2-Dichlorobenzene	95-50-1		U	50.0	6.25
1,3-Dichlorobenzene	541-73-1		U	50.0	12.5
1,4-Dichlorobenzene	106-46-7		U	50.0	6.25
Dichlorodifluoromethane	75-71-8		U	50.0	12.5
1,1-Dichloroethane	75-34-3	63.6		50.0	6.25
1,2-Dichloroethane	107-06-2		U	50.0	12.5
1,1-Dichloroethene	75-35-4	108		50.0	25.0
cis-1,2-Dichloroethene	156-59-2	269		50.0	12.5
trans-1,2-Dichloroethene	156-60-5		U	50.0	12.5
1,2-Dichloropropane	78-87-5		U	50.0	10.0
1,3-Dichloropropane	142-28-9		U	50.0	10.0
2,2-Dichloropropane	594-20-7		U	50.0	12.5
cis-1,3-Dichloropropene	10061-01-5		U	50.0	12.5
trans-1,3-Dichloropropene	10061-02-6		U	50.0	25.0
1,1-Dichloropropene	563-58-6		U	50.0	12.5
Ethylbenzene	100-41-4		U	50.0	12.5
2-Hexanone	591-78-6		U	500	125
Hexachlorobutadiene	87-68-3		U	50.0	12.5
Isopropylbenzene	98-82-8		U	50.0	12.5
p-Isopropyltoluene	99-87-6		U	50.0	12.5
4-Methyl-2-pentanone	108-10-1		U	500	125
Methylene chloride	75-09-2	21.3	J	250	12.5
Naphthalene	91-20-3		U	50.0	10.0
n-Propylbenzene	103-65-1		U	50.0	6.25
Styrene	100-42-5		U	50.0	6.25
1,1,1,2-Tetrachloroethane	630-20-6		U	50.0	12.5
1,1,2,2-Tetrachloroethane	79-34-5		U	50.0	6.25
Tetrachloroethene	127-18-4		U	50.0	12.5
Toluene	108-88-3		U	50.0	12.5
1,2,3-Trichlorobenzene	87-61-6		U	50.0	7.50
1,2,4-Trichlorobenzene	120-82-1		U	50.0	10.0
1,1,1-Trichloroethane	71-55-6		U	50.0	12.5
1,1,2-Trichloroethane	79-00-5		U	50.0	12.5
Trichloroethene	79-01-6	4610		50.0	12.5
Trichlorofluoromethane	75-69-4		U	50.0	12.5

Report Number: **L09040142**Report Date : **April 13, 2009**

00103787

Sample Number: **L09040142-02**
 Client ID: **LHSMW56-040309**
 Matrix: **Water**
 Workgroup Number: **WG299281**
 Collect Date: **04/03/2009 12:50**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **WTD**
 Dilution: **50**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **04/08/2009 17:25**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/08/2009 17:25**
 File ID: **11M58410**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	50.0	25.0
1,2,4-Trimethylbenzene	95-63-6		U	50.0	12.5
1,3,5-Trimethylbenzene	108-67-8		U	50.0	12.5
Vinyl acetate	108-05-4		U	500	125
Vinyl chloride	75-01-4	14.3	J	50.0	12.5
o-Xylene	95-47-6		U	50.0	12.5
m-,p-Xylene	136777-61-2		U	50.0	25.0
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	102	80	120		
Toluene-d8	103	88	110		
4-Bromofluorobenzene	109	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

Sample Number: **L09040142-03**
 Client ID: **50WW02-040309**
 Matrix: **Water**
 Workgroup Number: **WG299281**
 Collect Date: **04/03/2009 14:45**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **WTD**
 Dilution: **50**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **04/08/2009 17:56**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/08/2009 17:56**
 File ID: **11M58411**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	500	125
Benzene	71-43-2		U	50.0	6.25
Bromobenzene	108-86-1		U	50.0	6.25
Bromochloromethane	74-97-5		U	50.0	10.0
Bromodichloromethane	75-27-4		U	50.0	12.5
Bromoform	75-25-2		U	50.0	25.0
Bromomethane	74-83-9		U	50.0	25.0
2-Butanone	78-93-3		U	500	125
n-Butylbenzene	104-51-8		U	50.0	12.5
sec-Butylbenzene	135-98-8		U	50.0	12.5
tert-Butylbenzene	98-06-6		U	50.0	12.5
Carbon disulfide	75-15-0		U	50.0	25.0
Carbon tetrachloride	56-23-5		U	50.0	12.5
Chlorobenzene	108-90-7		U	50.0	6.25
Chlorodibromomethane	124-48-1		U	50.0	12.5
Chloroethane	75-00-3		U	50.0	25.0
2-Chloroethyl vinyl ether	110-75-8		U	500	100
Chloroform	67-66-3		U	50.0	6.25
Chloromethane	74-87-3		U	50.0	12.5
2-Chlorotoluene	95-49-8		U	50.0	6.25
4-Chlorotoluene	106-43-4		U	50.0	12.5
1,2-Dibromo-3-chloropropane	96-12-8		U	250	50.0
1,2-Dibromoethane	106-93-4		U	50.0	12.5
Dibromomethane	74-95-3		U	50.0	12.5
1,2-Dichlorobenzene	95-50-1		U	50.0	6.25
1,3-Dichlorobenzene	541-73-1		U	50.0	12.5
1,4-Dichlorobenzene	106-46-7		U	50.0	6.25
Dichlorodifluoromethane	75-71-8		U	50.0	12.5
1,1-Dichloroethane	75-34-3		U	50.0	6.25
1,2-Dichloroethane	107-06-2	18.0	J	50.0	12.5
1,1-Dichloroethene	75-35-4		U	50.0	25.0
cis-1,2-Dichloroethene	156-59-2	978		50.0	12.5
trans-1,2-Dichloroethene	156-60-5		U	50.0	12.5
1,2-Dichloropropane	78-87-5		U	50.0	10.0
1,3-Dichloropropane	142-28-9		U	50.0	10.0
2,2-Dichloropropane	594-20-7		U	50.0	12.5
cis-1,3-Dichloropropene	10061-01-5		U	50.0	12.5
trans-1,3-Dichloropropene	10061-02-6		U	50.0	25.0
1,1-Dichloropropene	563-58-6		U	50.0	12.5
Ethylbenzene	100-41-4		U	50.0	12.5
2-Hexanone	591-78-6		U	500	125
Hexachlorobutadiene	87-68-3		U	50.0	12.5
Isopropylbenzene	98-82-8		U	50.0	12.5
p-Isopropyltoluene	99-87-6		U	50.0	12.5
4-Methyl-2-pentanone	108-10-1		U	500	125
Methylene chloride	75-09-2	15.9	J	250	12.5
Naphthalene	91-20-3		U	50.0	10.0
n-Propylbenzene	103-65-1		U	50.0	6.25
Styrene	100-42-5		U	50.0	6.25
1,1,1,2-Tetrachloroethane	630-20-6		U	50.0	12.5
1,1,2,2-Tetrachloroethane	79-34-5		U	50.0	6.25
Tetrachloroethene	127-18-4		U	50.0	12.5
Toluene	108-88-3		U	50.0	12.5
1,2,3-Trichlorobenzene	87-61-6		U	50.0	7.50
1,2,4-Trichlorobenzene	120-82-1		U	50.0	10.0
1,1,1-Trichloroethane	71-55-6		U	50.0	12.5
1,1,2-Trichloroethane	79-00-5		U	50.0	12.5
Trichloroethene	79-01-6	8050		50.0	12.5
Trichlorofluoromethane	75-69-4		U	50.0	12.5

Report Number: **L09040142**Report Date : **April 13, 2009**

00103789

Sample Number: **L09040142-03**
 Client ID: **50WW02-040309**
 Matrix: **Water**
 Workgroup Number: **WG299281**
 Collect Date: **04/03/2009 14:45**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **WTD**
 Dilution: **50**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **04/08/2009 17:56**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/08/2009 17:56**
 File ID: **11M58411**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	50.0	25.0
1,2,4-Trimethylbenzene	95-63-6		U	50.0	12.5
1,3,5-Trimethylbenzene	108-67-8		U	50.0	12.5
Vinyl acetate	108-05-4		U	500	125
Vinyl chloride	75-01-4		U	50.0	12.5
o-Xylene	95-47-6		U	50.0	12.5
m-,p-Xylene	136777-61-2		U	50.0	25.0
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	103	80	120		
Toluene-d8	103	88	110		
4-Bromofluorobenzene	110	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

Sample Number: L09040142-04
 Client ID: 50WW05-040409
 Matrix: Water
 Workgroup Number: WG299281
 Collect Date: 04/04/2009 09:35
 Sample Tag: DL02

PrePrep Method: NONE
 Prep Method: 5030B
 Analytical Method: 8260B
 Analyst: WTD
 Dilution: 5
 Units: ug/L

Instrument: HPMS11
 Prep Date: 04/08/2009 18:27
 Cal Date: 03/24/2009 16:13
 Run Date: 04/08/2009 18:27
 File ID: 11M58412

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	50.0	12.5
Benzene	71-43-2		U	5.00	0.625
Bromobenzene	108-86-1		U	5.00	0.625
Bromochloromethane	74-97-5		U	5.00	1.00
Bromodichloromethane	75-27-4		U	5.00	1.25
Bromoform	75-25-2		U	5.00	2.50
Bromomethane	74-83-9		U	5.00	2.50
2-Butanone	78-93-3		U	50.0	12.5
n-Butylbenzene	104-51-8		U	5.00	1.25
sec-Butylbenzene	135-98-8		U	5.00	1.25
tert-Butylbenzene	98-06-6		U	5.00	1.25
Carbon disulfide	75-15-0		U	5.00	2.50
Carbon tetrachloride	56-23-5		U	5.00	1.25
Chlorobenzene	108-90-7		U	5.00	0.625
Chlorodibromomethane	124-48-1		U	5.00	1.25
Chloroethane	75-00-3		U	5.00	2.50
2-Chloroethyl vinyl ether	110-75-8		U	50.0	10.0
Chloroform	67-66-3		U	5.00	0.625
Chloromethane	74-87-3		U	5.00	1.25
2-Chlorotoluene	95-49-8		U	5.00	0.625
4-Chlorotoluene	106-43-4		U	5.00	1.25
1,2-Dibromo-3-chloropropane	96-12-8		U	25.0	5.00
1,2-Dibromoethane	106-93-4		U	5.00	1.25
Dibromomethane	74-95-3		U	5.00	1.25
1,2-Dichlorobenzene	95-50-1		U	5.00	0.625
1,3-Dichlorobenzene	541-73-1		U	5.00	1.25
1,4-Dichlorobenzene	106-46-7		U	5.00	0.625
Dichlorodifluoromethane	75-71-8		U	5.00	1.25
1,1-Dichloroethane	75-34-3		U	5.00	0.625
1,2-Dichloroethane	107-06-2	7.39		5.00	1.25
1,1-Dichloroethene	75-35-4	4.61	J	5.00	2.50
cis-1,2-Dichloroethene	156-59-2	29.0		5.00	1.25
trans-1,2-Dichloroethene	156-60-5		U	5.00	1.25
1,2-Dichloropropane	78-87-5		U	5.00	1.00
1,3-Dichloropropane	142-28-9		U	5.00	1.00
2,2-Dichloropropane	594-20-7		U	5.00	1.25
cis-1,3-Dichloropropene	10061-01-5		U	5.00	1.25
trans-1,3-Dichloropropene	10061-02-6		U	5.00	2.50
1,1-Dichloropropene	563-58-6		U	5.00	1.25
Ethylbenzene	100-41-4		U	5.00	1.25
2-Hexanone	591-78-6		U	50.0	12.5
Hexachlorobutadiene	87-68-3		U	5.00	1.25
Isopropylbenzene	98-82-8		U	5.00	1.25
p-Isopropyltoluene	99-87-6		U	5.00	1.25
4-Methyl-2-pentanone	108-10-1		U	50.0	12.5
Methylene chloride	75-09-2	1.71	J	25.0	1.25
Naphthalene	91-20-3		U	5.00	1.00
n-Propylbenzene	103-65-1		U	5.00	0.625
Styrene	100-42-5		U	5.00	0.625
1,1,1,2-Tetrachloroethane	630-20-6		U	5.00	1.25
1,1,2,2-Tetrachloroethane	79-34-5		U	5.00	0.625
Tetrachloroethene	127-18-4	1.61	J	5.00	1.25
Toluene	108-88-3		U	5.00	1.25
1,2,3-Trichlorobenzene	87-61-6		U	5.00	0.750
1,2,4-Trichlorobenzene	120-82-1		U	5.00	1.00
1,1,1-Trichloroethane	71-55-6		U	5.00	1.25
1,1,2-Trichloroethane	79-00-5		U	5.00	1.25
Trichloroethene	79-01-6	601		5.00	1.25
Trichlorofluoromethane	75-69-4		U	5.00	1.25

Report Number: **L09040142**Report Date : **April 13, 2009****00103791**

Sample Number: **L09040142-04**
 Client ID: **50WW05-040409**
 Matrix: **Water**
 Workgroup Number: **WG299281**
 Collect Date: **04/04/2009 09:35**
 Sample Tag: **DL02**

PrePrep Method: **NONE**
 Prep Method: **5030B**
 Analytical Method: **8260B**
 Analyst: **WTD**
 Dilution: **5**
 Units: **ug/L**

Instrument: **HPMS11**
 Prep Date: **04/08/2009 18:27**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/08/2009 18:27**
 File ID: **11M58412**

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	5.00	2.50
1,2,4-Trimethylbenzene	95-63-6		U	5.00	1.25
1,3,5-Trimethylbenzene	108-67-8		U	5.00	1.25
Vinyl acetate	108-05-4		U	50.0	12.5
Vinyl chloride	75-01-4		U	5.00	1.25
o-Xylene	95-47-6		U	5.00	1.25
m-,p-Xylene	136777-61-2		U	5.00	2.50
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	102	80	120		
Toluene-d8	105	88	110		
4-Bromofluorobenzene	109	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

Sample Number: L09040142-05
 Client ID: 50WW07-040409
 Matrix: Water
 Workgroup Number: WG299157
 Collect Date: 04/04/2009 11:45
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 04/07/2009 17:33
 Cal Date: 03/24/2009 16:13
 Run Date: 04/07/2009 17:33
 File ID: 11M58383

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
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	0.150
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

Report Number: **L09040142**Report Date : **April 13, 2009****00103793**

Sample Number: **L09040142-05**
 Client ID: **50WW07-040409**
 Matrix: **Water**
 Workgroup Number: **WG299157**
 Collect Date: **04/04/2009 11:45**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **04/07/2009 17:33**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/07/2009 17:33**
 File ID: **11M58383**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	101	86	118		
1,2-Dichloroethane-d4	101	80	120		
Toluene-d8	103	88	110		
4-Bromofluorobenzene	108	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L09040142-08
 Client ID: TB-0904
 Matrix: Water
 Workgroup Number: WG299157
 Collect Date: 04/04/2009 00:01
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 04/07/2009 18:35
 Cal Date: 03/24/2009 16:13
 Run Date: 04/07/2009 18:35
 File ID: 11M58385

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
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	0.150
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

Report Number: **L09040142**Report Date : **April 13, 2009****00103795**

Sample Number: **L09040142-08**
 Client ID: **TB-0904**
 Matrix: **Water**
 Workgroup Number: **WG299157**
 Collect Date: **04/04/2009 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **04/07/2009 18:35**
 Cal Date: **03/24/2009 16:13**
 Run Date: **04/07/2009 18:35**
 File ID: **11M58385**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	105	86	118		
1,2-Dichloroethane-d4	104	80	120		
Toluene-d8	104	88	110		
4-Bromofluorobenzene	110	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

Microbac Laboratories Inc.
Instrument Run Log

00103799

Instrument: HPMS11 Dataset: 032409
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28099

Internal Standard: STD31804 Surrogate Standard: STD31805
 CCV: STD31950 LCS: STD31951 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 298037

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M58014	SYSTEM BLANK	NA	1	1		03/24/09 10:16
2	11M58015	WG298037-02 0.3 ug/L STD	NA	1	1		03/24/09 11:00
3	11M58016	WG298037-03 0.4 ug/L STD	NA	1	1		03/24/09 11:33
4	11M58017	WG298037-03 0.4 ug/L STD	NA	1	1		03/24/09 12:04
5	11M58018	WG298037-04 1.0 ug/L STD	NA	1	1		03/24/09 12:35
6	11M58019	WG298037-05 2.0 ug/L STD	NA	1	1		03/24/09 13:06
7	11M58020	WG298037-06 5.0 ug/L STD	NA	1	1		03/24/09 13:37
8	11M58021	WG298037-07 20 ug/L STD	NA	1	1		03/24/09 14:09
9	11M58022	WG298037-08 50 ug/L STD	NA	1	1		03/24/09 14:40
10	11M58023	WG298037-09 100 ug/L STD	NA	1	1	STD31950	03/24/09 15:11
11	11M58024	WG298037-10 200 ug/L STD	NA	1	1	STD31950	03/24/09 15:42
12	11M58025	WG298037-11 300 ug/L STD	NA	1	1	STD31950	03/24/09 16:13
13	11M58026	SYSTEM BLANK	NA	1	1		03/24/09 16:44
14	11M58027	SYSTEM BLANK	NA	1	1		03/24/09 17:15
15	11M58028	SYSTEM BLANK	NA	1	1		03/24/09 17:46
16	11M58029	WG298037-12 20ug/L ALT SRC	NA	1	1	STD31951	03/24/09 18:17
17	11M58030	WG298037-12 OXY ALT SRC	NA	1	1	STD31951	03/24/09 18:48
18	11M58031	SYSTEM BLANK	NA	1	1		03/24/09 19:19
19	11M58032	SYSTEM BLANK	NA	1	1		03/24/09 19:50

Approved: March 25, 2009

Page: 1

Nen



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS11 Dataset: 040709
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28260

Internal Standard: STD31804 Surrogate Standard: STD32038
 CCV: STD32157 LCS: STD32158 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 299157

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M58369	WG299155-01 BFB 50ng STD 8260	NA	1	1	STD31709	04/07/09 10:24
2	11M58370	WG299155-02 CCV 50ug/L 8260	NA	1	1	STD32157	04/07/09 10:48
3	11M58371	WG299155-02 CCV 50ug/L 8260	NA	1	1	STD32157	04/07/09 11:20
4	11M58372	WG299157-01 BLANK 8260	NA	1	1		04/07/09 11:51
5	11M58373	WG299157-01 BLANK 8260	NA	1	1		04/07/09 12:23
6	11M58374	WG299157-02 LCS 20ug/L 8260	NA	1	1	STD32158	04/07/09 12:54
7	11M58375	L09040108-02 A MS 826-SPE	<2	1	1	STD32158	04/07/09 13:24
8	11M58376	L09040108-03 A MSD 826-SPE	<2	1	1	STD32158	04/07/09 13:55
9	11M58377	SYSTEM BLANK	NA	1	1		04/07/09 14:26
10	11M58378	L09040108-01 A 826-SPE	<2	1	1		04/07/09 14:57
11	11M58379	L09040142-01 A 250X 826-LOW	<2	1	250		04/07/09 15:28
12	11M58380	L09040142-02 A 100X 826-LOW	<2	1	100		04/07/09 15:59
13	11M58381	L09040142-03 A 100X 826-LOW	<2	1	100		04/07/09 16:31
14	11M58382	L09040142-04 A 100X 826-SPE	<2	1	100		04/07/09 17:02
15	11M58383	L09040142-05 A 826-SPE	<2	1	1		04/07/09 17:33
16	11M58384	L09040108-05 A 826-SPE	<2	1	1		04/07/09 18:04
17	11M58385	L09040142-08 A 826-LOW	<2	1	1		04/07/09 18:35
18	11M58386	L09040112-03 A 826-SPE	<2	1	1		04/07/09 19:06
19	11M58387	L09040108-04 A 826-SPE	<2	1	1		04/07/09 19:37
20	11M58388	L09040112-01 A 826-SPE	<2	1	1		04/07/09 20:08
21	11M58389	L09040112-04 A 826-SPE	<2	1	1		04/07/09 20:40
22	11M58390	L09030649-07 C 50X 826-LOW	<2	1	50		04/07/09 21:11
23	11M58391	L09040099-10 B 100X 826-BETX	<2	1	100		04/07/09 21:42
24	11M58392	L09040016-14 B 2X 826-SPE	<2	1	2		04/07/09 22:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X		Carry-over contamination	
File ID: 11M58372				
dnr				
11	X	100	Analyzed too dilute	
File ID: 11M58379				
12	X	50	Analyzed too dilute	

Approved: April 08, 2009

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WTD



Microbac Laboratories Inc.
Instrument Run Log

00103801

Instrument: HPMS11 Dataset: 040709
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28260

Internal Standard: STD31804 Surrogate Standard: STD32038
 CCV: STD32157 LCS: STD32158 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 299157

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M58380				
13	X	50	Analyzed too dilute	
File ID: 11M58381				
14	X	5	Analyzed too dilute	
File ID: 11M58382				
21	X	10	Over Calibration Range	vinyl chloride, cis-1,2-dichloroethene, trichloroethene, tetrachloroethene
File ID: 11M58389				

Approved: April 08, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103802

Instrument: HPMS11 Dataset: 040809
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28286

Internal Standard: STD31804 Surrogate Standard: STD32038
 CCV: STD32157 LCS: STD32158 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 299281

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M58398	WG299280-01 BFB 50ng STD 8260	NA	1	1	STD31709	04/08/09 11:16
2	11M58399	WG299280-02 CCV 50ug/L 8260	NA	1	1	STD32157	04/08/09 11:42
3	11M58400	WG299281-01 BLANK 8260	NA	1	1		04/08/09 12:13
4	11M58401	WG299281-01 BLANK 8260	NA	1	1		04/08/09 12:44
5	11M58402	WG299281-02 LCS 20ug/L 8260	NA	1	1	STD32158	04/08/09 13:16
6	11M58403	WG299281-03 LCSD 20ug/L 8260	NA	1	1	STD32158	04/08/09 13:47
7	11M58404	SYSTEM BLANK	NA	1	1		04/08/09 14:18
8	11M58405	L09040004-01 A 8260 QTR MDL	NA	1	1	STD32133	04/08/09 14:50
9	11M58406	L09040005-01 A 8260 QTR MDL	NA	1	1	STD32133	04/08/09 15:21
10	11M58407	L09040175-01 A 826-SPE	<2	1	1		04/08/09 15:52
11	11M58408	L09040004-01 A 8260 QTR MDL	NA	1	1	STD32133	04/08/09 16:23
12	11M58409	L09040142-01 B 100X 826-LOW	<2	1	100		04/08/09 16:54
13	11M58410	L09040142-02 B 50X 826-LOW	<2	1	50		04/08/09 17:25
14	11M58411	L09040142-03 B 50X 826-LOW	<2	1	50		04/08/09 17:56
15	11M58412	L09040142-04 B 5X 826-LOW	<2	1	5		04/08/09 18:27
16	11M58413	L09040073-07 C 25X 826-SPE	<2	1	25		04/08/09 18:59
17	11M58414	L09040073-14 C 10X 826-SPE	<2	1	10		04/08/09 19:30
18	11M58415	L09040073-12 C 5X 826-SPE	<2	1	5		04/08/09 20:01
19	11M58416	SYSTEM BLANK	NA	1	1		04/08/09 20:32
20	11M58417	SYSTEM BLANK	NA	1	1		04/08/09 21:03

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M58400				
DNR				
11				
File ID: 11M58408				
NOT USED				

Approved: April 09, 2009

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Microbac Laboratories Inc.

00103803

Data Checklist

Date: 24-MAR-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 27216

Analytical Workgroups: 298037

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Reruns	
Manual Integrations	
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
25-MAR-2009

Secondary Reviewer:
25-MAR-2009



Microbac Laboratories Inc.

00103804

Data Checklist

Date: 07-APR-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 27440

Analytical Workgroups: 299157

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	
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	
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
08-APR-2009

Secondary Reviewer:
08-APR-2009



Microbac Laboratories Inc.

00103805

Data Checklist

Date: 08-APR-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 27476

Analytical Workgroups: 299281

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
09-APR-2009

Secondary Reviewer:
09-APR-2009



Analytical Method: 8260B

AAB#: WG299157

Login Number: L09040142

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
50WW07-040409	04/04/09	04/07/09	04/07/09	14	3.24	04/07/09	14	3.24	
TB-0904	04/04/09	04/07/09	04/07/09	14	3.77	04/07/09	14	3.77	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG299281

Login Number: L09040142

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
47WW25-040309	04/03/09	04/07/09	04/08/09	14	5.25	04/08/09	14	5.25	
LHSMW56-040309	04/03/09	04/07/09	04/08/09	14	5.19	04/08/09	14	5.19	
50WW02-040309	04/03/09	04/07/09	04/08/09	14	5.13	04/08/09	14	5.13	
50WW05-040409	04/04/09	04/07/09	04/08/09	14	4.37	04/08/09	14	4.37	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L09040142
Instrument Id: HPMS11
Workgroup (AAB#): WG299157

Method: 8260
CAL ID: HPMS11 - 24-MAR-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09040142-05	1.00	01	101	101	108	103
L09040142-08	1.00	01	104	105	110	104
WG299157-01	1.00	01	99.2	101	110	102
WG299157-02	1.00	01	101	104	102	99.8

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: L09040142
Instrument Id: HPMS11
Workgroup (AAB#): WG299281

Method: 8260
CAL ID: HPMS11 - 24-MAR-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09040142-01	100	DL02	102	100	109	105
L09040142-02	50.0	DL02	102	101	109	103
L09040142-03	50.0	DL02	103	101	110	103
L09040142-04	5.00	DL02	102	101	109	105
WG299281-01	1.00	01	102	101	107	105
WG299281-02	1.00	01	103	104	103	98.9
WG299281-03	1.00	01	103	104	101	99.8

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

Login Number:	<u>L09040142</u>	Work Group:	<u>WG299157</u>
Blank File ID:	<u>11M58373</u>	Blank Sample ID:	<u>WG299157-01</u>
Prep Date:	<u>04/07/09 12:23</u>	Instrument ID:	<u>HPMS11</u>
Analyzed Date:	<u>04/07/09 12:23</u>	Method:	<u>8260B</u>
Analyst:	<u>WTD</u>		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG299157-02	11M58374	04/07/09 12:54	01
50WW07-040409	L09040142-05	11M58383	04/07/09 17:33	01
TB-0904	L09040142-08	11M58385	04/07/09 18:35	01

Report Name: BLANK_SUMMARY
PDF File ID: 1361868
Report generated 04/09/2009 15:22



METHOD BLANK SUMMARY

Login Number: <u>L09040142</u>	Work Group: <u>WG299281</u>
Blank File ID: <u>11M58401</u>	Blank Sample ID: <u>WG299281-01</u>
Prep Date: <u>04/08/09 12:44</u>	Instrument ID: <u>HPMS11</u>
Analyzed Date: <u>04/08/09 12:44</u>	Method: <u>8260B</u>
Analyst: <u>WTD</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG299281-02	11M58402	04/08/09 13:16	01
LCS2	WG299281-03	11M58403	04/08/09 13:47	01
47WW25-040309	L09040142-01	11M58409	04/08/09 16:54	DL02
LHSMW56-040309	L09040142-02	11M58410	04/08/09 17:25	DL02
50WW02-040309	L09040142-03	11M58411	04/08/09 17:56	DL02
50WW05-040409	L09040142-04	11M58412	04/08/09 18:27	DL02

Report Name: BLANK_SUMMARY
 PDF File ID: 1361868
 Report generated 04/09/2009 15:22



Login Number: L09040142 Prep Date: 04/07/09 12:23 Sample ID: WG299157-01
 Instrument ID: HPMS11 Run Date: 04/07/09 12:23 Prep Method: 5030B
 File ID: 11M58373 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG299157 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 24-MAR-09

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	0.250	1	U

Report Name: BLANK

PDF ID: 1362421

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METHOD BLANK REPORT

00103813

Login Number: L09040142 Prep Date: 04/07/09 12:23 Sample ID: WG299157-01
 Instrument ID: HPMS11 Run Date: 04/07/09 12:23 Prep Method: 5030B
 File ID: 11M58373 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG299157 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 24-MAR-09

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	0.363	1	J
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	0.150	1.00	0.150	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	0.500	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	101	86 - 118	PASS
1,2-Dichloroethane-d4	99.2	80 - 120	PASS
Toluene-d8	102	88 - 110	PASS
4-Bromofluorobenzene	110	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1362421

09-APR-2009 15:22



Login Number: L09040142 Prep Date: 04/08/09 12:44 Sample ID: WG299281-01
 Instrument ID: HPMS11 Run Date: 04/08/09 12:44 Prep Method: 5030B
 File ID: 11M58401 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG299281 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 24-MAR-09

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	0.250	1	U

Report Name: BLANK

PDF ID: 1362421

09-APR-2009 15:22



Login Number: L09040142 Prep Date: 04/08/09 12:44 Sample ID: WG299281-01
 Instrument ID: HPMS11 Run Date: 04/08/09 12:44 Prep Method: 5030B
 File ID: 11M58401 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG299281 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 24-MAR-09

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	0.200	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	0.150	1.00	0.150	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	0.500	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	101	86 - 118	PASS
1,2-Dichloroethane-d4	102	80 - 120	PASS
Toluene-d8	105	88 - 110	PASS
4-Bromofluorobenzene	107	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1362421

09-APR-2009 15:22



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299157-02
Instrument ID: HPMS11 Run Time: 12:54 Prep Method: 5030B
File ID: 11M58374 Analyst: WTD Method: 8260B
Workgroup (AAB#): WG299157 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD32158 Cal ID: HPMS11 - 24-MAR-09

Analytes	Expected	Found	% Rec	LCS Limits	Q
Acetone	20.0	19.2	95.8	40 - 142	
Benzene	20.0	20.9	104	80 - 121	
Bromobenzene	20.0	19.8	98.9	80 - 120	
Bromochloromethane	20.0	20.9	105	65 - 130	
Bromodichloromethane	20.0	22.4	112	80 - 131	
Bromoform	20.0	17.5	87.6	70 - 130	
Bromomethane	20.0	18.5	92.6	30 - 145	
2-Butanone	20.0	18.9	94.5	30 - 150	
n-Butylbenzene	20.0	22.6	113	80 - 131	
sec-Butylbenzene	20.0	21.6	108	80 - 127	
tert-Butylbenzene	20.0	21.0	105	80 - 126	
Carbon disulfide	20.0	18.7	93.7	58 - 138	
Carbon tetrachloride	20.0	22.5	113	65 - 140	
Chlorobenzene	20.0	19.4	97.2	80 - 120	
Chlorodibromomethane	20.0	20.6	103	60 - 135	
Chloroethane	20.0	23.0	115	60 - 135	
2-Chloroethyl vinyl ether	20.0	29.7	148	58 - 151	
Chloroform	20.0	21.5	107	80 - 125	
Chloromethane	20.0	23.6	118	40 - 125	
2-Chlorotoluene	20.0	20.9	105	80 - 127	
4-Chlorotoluene	20.0	21.1	106	80 - 126	
1,2-Dibromo-3-chloropropane	20.0	20.5	102	50 - 130	
1,2-Dibromoethane	20.0	19.8	99.1	80 - 125	
Dibromomethane	20.0	20.6	103	75 - 125	
1,2-Dichlorobenzene	20.0	19.0	95.2	80 - 125	
1,3-Dichlorobenzene	20.0	19.6	98.2	80 - 120	
1,4-Dichlorobenzene	20.0	18.9	94.4	80 - 120	
Dichlorodifluoromethane	20.0	21.7	109	50 - 133	
1,1-Dichloroethane	20.0	22.1	110	80 - 125	
1,2-Dichloroethane	20.0	21.6	108	80 - 129	
1,1-Dichloroethene	20.0	22.6	113	80 - 132	
cis-1,2-Dichloroethene	20.0	21.3	107	70 - 125	
trans-1,2-Dichloroethene	20.0	22.8	114	80 - 127	
1,2-Dichloropropane	20.0	21.6	108	80 - 120	
1,3-Dichloropropane	20.0	20.4	102	80 - 120	
2,2-Dichloropropane	20.0	24.7	123	80 - 133	
cis-1,3-Dichloropropene	20.0	21.6	108	70 - 130	
trans-1,3-Dichloropropene	20.0	18.9	94.5	80 - 130	
1,1-Dichloropropene	20.0	21.9	110	75 - 130	
Ethylbenzene	20.0	20.3	102	80 - 122	
2-Hexanone	20.0	19.2	95.9	55 - 130	

LCS - Modified 03/06/2008
PDF File ID: 1360655
Report generated: 04/09/2009 15:38



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299157-02
Instrument ID: HPMS11 Run Time: 12:54 Prep Method: 5030B
File ID: 11M58374 Analyst: WTD Method: 8260B
Workgroup (AAB#): WG299157 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD32158 Cal ID: HPMS11 - 24-MAR-09

Analytes	Expected	Found	% Rec	LCS Limits	Q
Hexachlorobutadiene	20.0	19.9	99.3	72 - 132	
Isopropylbenzene	20.0	18.1	90.5	80 - 122	
p-Isopropyltoluene	20.0	20.3	102	80 - 122	
4-Methyl-2-pentanone	20.0	19.5	97.3	64 - 140	
Methylene chloride	20.0	21.2	106	80 - 123	
Naphthalene	20.0	18.3	91.6	59 - 149	
n-Propylbenzene	20.0	22.0	110	80 - 129	
Styrene	20.0	20.5	103	80 - 123	
1,1,1,2-Tetrachloroethane	20.0	20.5	102	80 - 130	
1,1,2,2-Tetrachloroethane	20.0	20.9	104	79 - 125	
Tetrachloroethene	20.0	19.6	98.0	80 - 124	
Toluene	20.0	20.6	103	80 - 124	
1,2,3-Trichlorobenzene	20.0	18.7	93.7	55 - 140	
1,2,4-Trichlorobenzene	20.0	19.4	97.0	65 - 135	
1,1,1-Trichloroethane	20.0	21.9	110	80 - 134	
1,1,2-Trichloroethane	20.0	20.2	101	80 - 125	
Trichloroethene	20.0	19.5	97.3	80 - 122	
Trichlorofluoromethane	20.0	22.1	111	62 - 151	
1,2,3-Trichloropropane	20.0	19.1	95.5	75 - 125	
1,2,4-Trimethylbenzene	20.0	21.6	108	80 - 125	
1,3,5-Trimethylbenzene	20.0	21.2	106	80 - 127	
Vinyl acetate	20.0	28.4	142	10 - 150	
Vinyl chloride	20.0	22.6	113	65 - 140	
o-Xylene	20.0	20.1	101	80 - 122	
m-,p-Xylene	40.0	41.4	104	80 - 122	

Surrogates	% Recovery	Surrogate Limits	Qualifier
Dibromofluoromethane	104	86 - 118	PASS
1,2-Dichloroethane-d4	101	80 - 120	PASS
Toluene-d8	99.8	88 - 110	PASS
4-Bromofluorobenzene	102	86 - 115	PASS

* FAILS %REC LIMIT

Login Number: L09040142 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG299281 Units: ug/L
QC Key: STD Lot #: STD32158

Sample ID: WG299281-02 LCS File ID: 11M58402 Run Date: 04/08/2009 13:16
Sample ID: WG299281-03 LCS2 File ID: 11M58403 Run Date: 04/08/2009 13:47

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	23.9	119	20.0	22.7	114	4.86	40 - 142	20	
Benzene	20.0	21.0	105	20.0	20.3	101	3.59	80 - 121	20	
Bromobenzene	20.0	20.1	101	20.0	19.4	97.1	3.59	80 - 120	20	
Bromochloromethane	20.0	21.1	105	20.0	20.8	104	1.36	65 - 130	20	
Bromodichloromethane	20.0	22.8	114	20.0	22.5	113	1.15	80 - 131	20	
Bromoform	20.0	18.5	92.7	20.0	18.4	91.8	0.997	70 - 130	20	
Bromomethane	20.0	19.2	95.8	20.0	20.7	104	7.88	30 - 145	20	
2-Butanone	20.0	21.6	108	20.0	21.3	106	1.27	30 - 150	20	
n-Butylbenzene	20.0	23.1	116	20.0	21.9	110	5.30	80 - 131	20	
sec-Butylbenzene	20.0	21.8	109	20.0	20.8	104	4.70	80 - 127	20	
tert-Butylbenzene	20.0	21.2	106	20.0	20.4	102	3.78	80 - 126	20	
Carbon disulfide	20.0	19.1	95.4	20.0	18.2	90.9	4.88	58 - 138	20	
Carbon tetrachloride	20.0	23.0	115	20.0	21.7	109	5.84	65 - 140	20	
Chlorobenzene	20.0	19.4	97.0	20.0	19.1	95.5	1.62	80 - 120	20	
Chlorodibromomethane	20.0	21.1	105	20.0	21.1	105	0.171	60 - 135	20	
Chloroethane	20.0	23.3	117	20.0	21.9	110	6.21	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	30.2	151	20.0	29.9	150	0.932	58 - 151	20	
Chloroform	20.0	21.5	108	20.0	21.0	105	2.71	80 - 125	20	
Chloromethane	20.0	23.2	116	20.0	22.2	111	4.08	40 - 125	20	
2-Chlorotoluene	20.0	21.0	105	20.0	20.4	102	3.01	80 - 127	20	
4-Chlorotoluene	20.0	21.7	109	20.0	20.9	104	4.01	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	23.1	116	20.0	22.5	113	2.52	50 - 130	20	
1,2-Dibromoethane	20.0	21.0	105	20.0	20.7	104	1.17	80 - 125	20	
Dibromomethane	20.0	21.7	109	20.0	21.5	107	1.10	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.7	98.7	20.0	19.0	95.2	3.60	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.0	100	20.0	19.3	96.5	3.78	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.1	95.7	20.0	18.7	93.6	2.22	80 - 120	20	
Dichlorodifluoromethane	20.0	22.3	111	20.0	20.5	103	8.06	50 - 133	20	
1,1-Dichloroethane	20.0	22.6	113	20.0	21.8	109	3.38	80 - 125	20	
1,2-Dichloroethane	20.0	22.2	111	20.0	21.8	109	2.09	80 - 129	20	
1,1-Dichloroethene	20.0	22.9	114	20.0	21.6	108	5.59	80 - 132	20	
cis-1,2-Dichloroethene	20.0	22.2	111	20.0	21.3	106	4.11	70 - 125	20	
trans-1,2-Dichloroethene	20.0	23.1	115	20.0	22.2	111	3.75	80 - 127	20	
1,2-Dichloropropane	20.0	21.2	106	20.0	21.1	105	0.890	80 - 120	20	
1,3-Dichloropropane	20.0	21.4	107	20.0	21.4	107	0.198	80 - 120	20	
2,2-Dichloropropane	20.0	23.7	118	20.0	22.1	111	6.71	80 - 133	20	
cis-1,3-Dichloropropene	20.0	21.9	109	20.0	21.5	107	1.71	70 - 130	20	
trans-1,3-Dichloropropene	20.0	19.3	96.7	20.0	19.2	96.0	0.735	80 - 130	20	
1,1-Dichloropropene	20.0	22.0	110	20.0	20.8	104	5.66	75 - 130	20	
Ethylbenzene	20.0	20.3	102	20.0	19.9	99.7	2.03	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1362118
Report generated: 04/09/2009 15:22



Login Number: L09040142 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG299281 Units: ug/L
QC Key: STD Lot #: STD32158

Sample ID: WG299281-02 LCS File ID: 11M58402 Run Date: 04/08/2009 13:16
Sample ID: WG299281-03 LCS2 File ID: 11M58403 Run Date: 04/08/2009 13:47

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	21.1	105	20.0	21.7	109	3.15	55 - 130	20	
Hexachlorobutadiene	20.0	20.5	102	20.0	19.7	98.4	3.90	72 - 132	20	
Isopropylbenzene	20.0	18.2	91.0	20.0	17.6	87.8	3.63	80 - 122	20	
p-Isopropyltoluene	20.0	20.8	104	20.0	19.6	98.0	5.94	80 - 122	20	
4-Methyl-2-pentanone	20.0	21.8	109	20.0	21.9	110	0.333	64 - 140	20	
Methylene chloride	20.0	21.5	107	20.0	21.5	108	0.240	80 - 123	20	
Naphthalene	20.0	19.7	98.3	20.0	19.7	98.7	0.432	59 - 149	20	
n-Propylbenzene	20.0	22.5	113	20.0	21.5	108	4.66	80 - 129	20	
Styrene	20.0	20.8	104	20.0	20.0	99.8	4.08	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.5	103	20.0	20.7	103	0.720	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	22.2	111	20.0	22.1	111	0.459	79 - 125	20	
Tetrachloroethene	20.0	19.7	98.5	20.0	18.6	92.8	5.91	80 - 124	20	
Toluene	20.0	20.1	101	20.0	19.8	98.9	1.73	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	19.6	98.2	20.0	19.4	97.0	1.18	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.9	99.3	20.0	19.3	96.6	2.73	65 - 135	20	
1,1,1-Trichloroethane	20.0	22.1	111	20.0	21.2	106	4.16	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.8	104	20.0	21.1	106	1.79	80 - 125	20	
Trichloroethene	20.0	19.5	97.6	20.0	18.9	94.7	3.07	80 - 122	20	
Trichlorofluoromethane	20.0	22.7	113	20.0	21.2	106	6.79	62 - 151	20	
1,2,3-Trichloropropane	20.0	19.7	98.5	20.0	20.1	101	2.11	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.8	109	20.0	21.2	106	2.90	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.6	108	20.0	20.7	104	4.04	80 - 127	20	
Vinyl acetate	20.0	29.4	147	20.0	28.7	143	2.42	10 - 150	20	
Vinyl chloride	20.0	23.5	118	20.0	21.6	108	8.57	65 - 140	20	
o-Xylene	20.0	20.5	102	20.0	19.9	99.7	2.52	80 - 122	20	
m-, p-Xylene	40.0	41.5	104	40.0	39.6	99.1	4.61	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	103	103	80 - 120	PASS
Dibromofluoromethane	104	104	86 - 118	PASS
4-Bromofluorobenzene	103	101	86 - 115	PASS
Toluene-d8	98.9	99.8	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
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Report generated: 04/09/2009 15:22



BFB

Login Number: L09040142
Instrument: HPMS11
Analyst: WTD
Workgroup: WG298037

Tune ID: WG298037-01
Run Date: 03/24/2009
Run Time: 09:50
File ID: 11M58013

Cal ID: HPMS11-24-MAR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	26.2	2235	PASS
75.0	95.0	30.0	60.0	47.3	4031	PASS
95.0	95.0	100	100	100	8519	PASS
96.0	95.0	5.00	9.00	6.35	541	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	84.4	7189	PASS
175	174	5.00	9.00	6.77	487	PASS
176	174	95.0	101	100	7203	PASS
177	176	5.00	9.00	7.52	542	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG298037-02	STD	01	03/24/2009 11:00	
WG298037-03	STD	01	03/24/2009 12:04	
WG298037-04	STD	01	03/24/2009 12:35	
WG298037-05	STD	01	03/24/2009 13:06	
WG298037-06	STD	01	03/24/2009 13:37	
WG298037-07	STD	01	03/24/2009 14:09	
WG298037-08	STD-CCV	01	03/24/2009 14:40	
WG298037-09	STD	01	03/24/2009 15:11	
WG298037-10	STD	01	03/24/2009 15:42	
WG298037-11	STD	01	03/24/2009 16:13	
WG298037-12	SSCV	01	03/24/2009 18:17	
WG298037-12	SSCV	02	03/24/2009 18:48	

* Sample past 12 hour tune limit

BFB

Login Number: L09040142
Instrument: HPMS11
Analyst: WTD
Workgroup: WG299155

Tune ID: WG299155-01
Run Date: 04/07/2009
Run Time: 10:24
File ID: 11M58369

Cal ID: HPMS11-24-MAR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.7	6174	PASS
75.0	95.0	30.0	60.0	54.6	12149	PASS
95.0	95.0	100	100	100	22270	PASS
96.0	95.0	5.00	9.00	7.65	1703	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	66.0	14705	PASS
175	174	5.00	9.00	7.64	1124	PASS
176	174	95.0	101	96.8	14229	PASS
177	176	5.00	9.00	7.69	1094	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG299155-02	CCV	01	04/07/2009 11:20	
WG299157-01	BLANK	01	04/07/2009 12:23	
WG299157-02	LCS	01	04/07/2009 12:54	
WG299157-04	MS	01	04/07/2009 13:24	
WG299157-05	MSD	01	04/07/2009 13:55	
WG299157-03	REF	01	04/07/2009 14:57	
L09040142-05	50WW07-040409	01	04/07/2009 17:33	
L09040142-08	TB-0904	01	04/07/2009 18:35	

* Sample past 12 hour tune limit

BFB

Login Number: L09040142
Instrument: HPMS11
Analyst: WTD
Workgroup: WG299280

Tune ID: WG299280-01
Run Date: 04/08/2009
Run Time: 11:16
File ID: 11M58398

Cal ID: HPMS11-24-MAR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	29.4	3473	PASS
75.0	95.0	30.0	60.0	58.3	6889	PASS
95.0	95.0	100	100	100	11812	PASS
96.0	95.0	5.00	9.00	6.32	746	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	68.7	8113	PASS
175	174	5.00	9.00	7.06	573	PASS
176	174	95.0	101	95.9	7783	PASS
177	176	5.00	9.00	5.63	438	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG299280-02	CCV	01	04/08/2009 11:42	
WG299281-01	BLANK	01	04/08/2009 12:44	
WG299281-02	LCS	01	04/08/2009 13:16	
WG299281-03	LCS2	01	04/08/2009 13:47	
L09040142-01	47WW25-040309	DL02	04/08/2009 16:54	
L09040142-02	LHSMW56-040309	DL02	04/08/2009 17:25	
L09040142-03	50WW02-040309	DL02	04/08/2009 17:56	
L09040142-04	50WW05-040409	DL02	04/08/2009 18:27	

* Sample past 12 hour tune limit

Login Number: L09040142
Analytical Method: 8260B
ICAL Workgroup: WG298037

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3797	8.19		
1,2-Dichloropropane	CCC	0.2426	5.25		
Chloroform	CCC	0.4141	3.57		
Ethylbenzene	CCC	0.4475	8.70		
Toluene	CCC	1.177	2.83		
Vinyl Chloride	CCC	0.2385	14.9		
1,1,2,2-Tetrachloroethane	SPCC	0.4063	19.4		0.99900
1,1-Dichloroethane	SPCC	0.4407	6.59		
Bromoform	SPCC	0.2022	8.79		
Chlorobenzene	SPCC	0.8489	3.69		
Chloromethane	SPCC	0.3970	3.87		
1,1,1,2-Tetrachloroethane		0.3148	12.2		
1,1,1-Trichloroethane		0.3670	7.29		
1,1,2-Trichloroethane		0.2100	7.39		
1,1-Dichloropropene		0.3043	4.05		
1,2,3-Trichlorobenzene		0.6786	12.5		
1,2,3-Trichloropropane		0.1303	12.7		
1,2,4-Trichlorobenzene		0.7417	12.6		
1,2,4-Trimethylbenzene		1.831	5.38		
1,2-Dibromo-3-Chloropropane		0.07718	5.46		
1,2-Dibromoethane		0.2175	7.78		
1,2-Dichlorobenzene		1.062	8.10		
1,2-Dichloroethane		0.3382	1.68		
1,3,5-Trimethylbenzene		1.762	4.29		
1,3-Dichlorobenzene		1.114	8.16		
1,3-Dichloropropane		0.3838	5.01		
1,4-Dichlorobenzene		1.182	6.72		
2,2-Dichloropropane		0.3243	8.99		
2-Butanone		0.09736	4.78		
2-Chloroethyl Vinyl Ether		0.08037	11.0		
2-Chlorotoluene		1.686	5.40		
2-Hexanone		0.1905	4.26		
4-Chlorotoluene		1.457	5.01		
4-Methyl-2-Pentanone		0.06380	8.80		
Acetone		0.07056	12.5		
Benzene		0.8526	4.65		
Bromobenzene		0.5923	7.54		
Bromochloromethane		0.1348	12.7		
Bromodichloromethane		0.3042	6.04		
Bromomethane		0.1191	8.09		
Carbon Disulfide		0.7235	4.62		
Carbon Tetrachloride		0.3413	4.78		
Chloroethane		0.1624	7.32		
Dibromochloromethane		0.2841	11.1		
Dibromomethane		0.1198	3.67		

INT_CAL - Modified 03/06/2008
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Login Number: L09040142
Analytical Method: 8260B
ICAL Workgroup: WG298037

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.2856	4.37		
Hexachlorobutadiene	0.3480	8.32		
Isopropylbenzene	1.299	5.58		
Methylene Chloride	0.2725	30.4		0.99900
Naphthalene	1.458	14.3		
Styrene	0.8277	14.2		
Tetrachloroethene	0.2517	7.81		
Trichloroethene	0.2423	5.66		
Trichlorofluoromethane	0.3678	7.89		
Vinyl Acetate	0.3205	14.6		
cis-1,2-Dichloroethene	0.2318	4.01		
cis-1,3-Dichloropropene	0.3364	10.6		
m-,p-Xylene	0.5409	9.64		
n-Butylbenzene	1.690	9.67		
n-Propylbenzene	2.479	5.85		
o-Xylene	0.5170	8.84		
p-Isopropyltoluene	2.013	6.65		
sec-Butylbenzene	2.157	6.11		
tert-Butylbenzene	0.3952	11.6		
trans-1,2-Dichloroethene	0.2140	8.42		
trans-1,3-Dichloropropene	0.4192	9.36		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09040142
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-02			WG298037-03			WG298037-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	0.300	2703.00000	0.2998	0.400	4254.00000	0.3856	1.00	10496.0000	0.3896
1,2-Dichloropropane	0.300	1965.00000	0.2179	0.400	2909.00000	0.2636	1.00	6582.00000	0.2443
Chloroform	0.300	3551.00000	0.3939	0.400	4830.00000	0.4378	1.00	11248.0000	0.4175
Ethylbenzene	0.300	2714.00000	0.4099	0.400	3577.00000	0.4372	1.00	8168.00000	0.4087
Toluene	0.300	7567.00000	1.143	0.400	10011.0000	1.224	1.00	23327.0000	1.167
Vinyl Chloride	NA	NA	NA	0.400	3016.00000	0.2733	1.00	6783.00000	0.2518
1,1,2,2-Tetrachloroethane	0.300	1112.00000	0.2883	0.400	1793.00000	0.3720	1.00	6958.00000	0.5888
1,1-Dichloroethane	0.300	3349.00000	0.3715	0.400	4903.00000	0.4444	1.00	11812.0000	0.4385
Bromoform	NA	NA	NA	NA	NA	NA	1.00	4533.00000	0.2268
Chlorobenzene	0.300	5487.00000	0.8288	0.400	7149.00000	0.8739	1.00	17052.0000	0.8532
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	11329.0000	0.4205
1,1,1,2-Tetrachloroethane	0.300	1725.00000	0.2605	0.400	2043.00000	0.2497	1.00	6714.00000	0.3359
1,1,1-Trichloroethane	0.300	2716.00000	0.3012	0.400	4188.00000	0.3796	1.00	9880.00000	0.3668
1,1,2-Trichloroethane	0.300	1140.00000	0.1722	0.400	1841.00000	0.2250	1.00	4465.00000	0.2234
1,1-Dichloropropene	0.300	2632.00000	0.2919	0.400	3426.00000	0.3105	1.00	8213.00000	0.3049
1,2,3-Trichlorobenzene	0.300	2452.00000	0.6357	0.400	2610.00000	0.5416	1.00	9936.00000	0.8408
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1967.00000	0.1665
1,2,4-Trichlorobenzene	0.300	2273.00000	0.5893	0.400	3248.00000	0.6740	1.00	9620.00000	0.8141
1,2,4-Trimethylbenzene	0.300	6724.00000	1.743	0.400	8373.00000	1.737	1.00	22318.0000	1.889
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	0.300	1155.00000	0.1745	0.400	1827.00000	0.2233	1.00	4556.00000	0.2280
1,2-Dichlorobenzene	0.300	3851.00000	0.9984	0.400	4985.00000	1.034	1.00	14644.0000	1.239
1,2-Dichloroethane	0.300	2937.00000	0.3258	0.400	3769.00000	0.3416	1.00	9255.00000	0.3436
1,3,5-Trimethylbenzene	0.300	6624.00000	1.717	0.400	8024.00000	1.665	1.00	20954.0000	1.773
1,3-Dichlorobenzene	0.300	3934.00000	1.020	0.400	5081.00000	1.054	1.00	14415.0000	1.220
1,3-Dichloropropane	0.300	2631.00000	0.3974	0.400	2780.00000	0.3398	1.00	8081.00000	0.4043
1,4-Dichlorobenzene	0.300	4405.00000	1.142	0.400	5545.00000	1.151	1.00	15452.0000	1.308
2,2-Dichloropropane	NA	NA	NA	0.400	2913.00000	0.2640	1.00	8271.00000	0.3070
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	0.300	5919.00000	1.535	0.400	8093.00000	1.679	1.00	21830.0000	1.847
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	0.300	5404.00000	1.401	0.400	7061.00000	1.465	1.00	18687.0000	1.581
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	0.300	7568.00000	0.8394	0.400	10376.0000	0.9404	1.00	23157.0000	0.8596
Bromobenzene	0.300	1998.00000	0.5180	0.400	2831.00000	0.5874	1.00	8023.00000	0.6789
Bromochloromethane	NA	NA	NA	0.400	1051.00000	0.09530	1.00	3994.00000	0.1483
Bromodichloromethane	0.300	2434.00000	0.2700	0.400	3181.00000	0.2883	1.00	7857.00000	0.2917
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	3324.00000	0.1234
Carbon Disulfide	NA	NA	NA	0.400	8212.00000	0.7443	1.00	18595.0000	0.6903
Carbon Tetrachloride	0.300	2833.00000	0.3142	0.400	3659.00000	0.3316	1.00	8851.00000	0.3286

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Login Number: L09040142
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-05			WG298037-06			WG298037-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	21570.0000	0.3961	5.00	51488.0000	0.3721	20.0	226996.000	0.3864
1,2-Dichloropropane	2.00	12685.0000	0.2330	5.00	33353.0000	0.2411	20.0	141144.000	0.2403
Chloroform	2.00	21736.0000	0.3992	5.00	55453.0000	0.4008	20.0	242256.000	0.4124
Ethylbenzene	2.00	16794.0000	0.4185	5.00	44194.0000	0.4318	20.0	194797.000	0.4489
Toluene	2.00	44869.0000	1.118	5.00	118515.000	1.158	20.0	513241.000	1.183
Vinyl Chloride	2.00	14022.0000	0.2575	5.00	38249.0000	0.2764	20.0	143709.000	0.2446
1,1,2,2-Tetrachloroethane	2.00	9958.00000	0.4163	5.00	24982.0000	0.4063	20.0	111431.000	0.4160
1,1-Dichloroethane	2.00	23379.0000	0.4293	5.00	61103.0000	0.4416	20.0	264204.000	0.4497
Bromoform	2.00	7059.00000	0.1759	5.00	18778.0000	0.1835	20.0	87467.0000	0.2016
Chlorobenzene	2.00	33031.0000	0.8231	5.00	82344.0000	0.8046	20.0	362749.000	0.8360
Chloromethane	2.00	21970.0000	0.4035	5.00	54749.0000	0.3957	20.0	222718.000	0.3791
1,1,1,2-Tetrachloroethane	2.00	12532.0000	0.3123	5.00	31645.0000	0.3092	20.0	139860.000	0.3223
1,1,1-Trichloroethane	2.00	20352.0000	0.3738	5.00	49150.0000	0.3552	20.0	219434.000	0.3735
1,1,2-Trichloroethane	2.00	8234.00000	0.2052	5.00	21416.0000	0.2093	20.0	93848.0000	0.2163
1,1-Dichloropropene	2.00	15568.0000	0.2859	5.00	40102.0000	0.2898	20.0	180268.000	0.3069
1,2,3-Trichlorobenzene	2.00	15072.0000	0.6302	5.00	39382.0000	0.6405	20.0	182843.000	0.6826
1,2,3-Trichloropropane	2.00	3046.00000	0.1274	5.00	8018.00000	0.1304	20.0	34059.0000	0.1271
1,2,4-Trichlorobenzene	2.00	16117.0000	0.6738	5.00	43286.0000	0.7039	20.0	199370.000	0.7443
1,2,4-Trimethylbenzene	2.00	41131.0000	1.720	5.00	106953.000	1.739	20.0	491767.000	1.836
1,2-Dibromo-3-Chloropropane	2.00	1683.00000	0.07040	5.00	4552.00000	0.07400	20.0	21913.0000	0.08180
1,2-Dibromoethane	2.00	8930.00000	0.2225	5.00	21760.0000	0.2126	20.0	100437.000	0.2315
1,2-Dichlorobenzene	2.00	23061.0000	0.9642	5.00	61778.0000	1.005	20.0	277112.000	1.035
1,2-Dichloroethane	2.00	18581.0000	0.3412	5.00	47378.0000	0.3424	20.0	197856.000	0.3368
1,3,5-Trimethylbenzene	2.00	40103.0000	1.677	5.00	104856.000	1.705	20.0	479389.000	1.790
1,3-Dichlorobenzene	2.00	24767.0000	1.036	5.00	62198.0000	1.012	20.0	298856.000	1.116
1,3-Dichloropropane	2.00	14980.0000	0.3733	5.00	39443.0000	0.3854	20.0	173817.000	0.4006
1,4-Dichlorobenzene	2.00	26415.0000	1.104	5.00	67318.0000	1.095	20.0	306622.000	1.145
2,2-Dichloropropane	2.00	17438.0000	0.3202	5.00	44562.0000	0.3221	20.0	196822.000	0.3350
2-Butanone	2.00	5706.00000	0.1048	5.00	14049.0000	0.1015	20.0	56974.0000	0.09700
2-Chloroethyl Vinyl Ether	2.00	3796.00000	0.06970	5.00	10861.0000	0.07850	20.0	48512.0000	0.08260
2-Chlorotoluene	2.00	41875.0000	1.751	5.00	101410.000	1.649	20.0	459280.000	1.715
2-Hexanone	2.00	7109.00000	0.1771	5.00	19942.0000	0.1949	20.0	86136.0000	0.1985
4-Chlorotoluene	2.00	33676.0000	1.408	5.00	83893.0000	1.364	20.0	382158.000	1.427
4-Methyl-2-Pentanone	2.00	2805.00000	0.05150	5.00	9293.00000	0.06720	20.0	39939.0000	0.06800
Acetone	2.00	4678.00000	0.08590	5.00	10667.0000	0.07710	20.0	41729.0000	0.07100
Benzene	2.00	44436.0000	0.8161	5.00	112881.000	0.8158	20.0	484162.000	0.8242
Bromobenzene	2.00	13352.0000	0.5582	5.00	36839.0000	0.5991	20.0	157508.000	0.5880
Bromochloromethane	2.00	6913.00000	0.1270	5.00	19222.0000	0.1389	20.0	82749.0000	0.1409
Bromodichloromethane	2.00	16701.0000	0.3067	5.00	41802.0000	0.3021	20.0	185127.000	0.3151
Bromomethane	2.00	6477.00000	0.1189	5.00	14663.0000	0.1060	20.0	63201.0000	0.1076
Carbon Disulfide	2.00	37881.0000	0.6957	5.00	95415.0000	0.6896	20.0	414465.000	0.7055
Carbon Tetrachloride	2.00	18594.0000	0.3415	5.00	46155.0000	0.3336	20.0	202157.000	0.3441

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Login Number: L09040142
Analytical Method: 8260BInstrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-08			WG298037-09			WG298037-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	579803.000	0.3935	100	1169071.00	0.3930	200	2689288.00	0.4016
1,2-Dichloropropane	50.0	360129.000	0.2444	100	729056.000	0.2451	200	1701370.00	0.2541
Chloroform	50.0	610626.000	0.4144	100	1242530.00	0.4177	200	2898430.00	0.4329
Ethylbenzene	50.0	512660.000	0.4623	100	1078105.00	0.4813	200	2756336.00	0.5291
Toluene	50.0	1322122.00	1.192	100	2703446.00	1.207	200	6236990.00	1.197
Vinyl Chloride	50.0	333082.000	0.2260	100	616817.000	0.2073	200	1146578.00	0.1712
1,1,2,2-Tetrachloroethane	50.0	280586.000	0.3973	100	566584.000	0.3822	200	1302476.00	0.3892
1,1-Dichloroethane	50.0	676772.000	0.4593	100	1364129.00	0.4586	200	3169469.00	0.4733
Bromoform	50.0	222973.000	0.2011	100	473119.000	0.2112	200	1120148.00	0.2150
Chlorobenzene	50.0	935028.000	0.8432	100	1944261.00	0.8680	200	4735611.00	0.9090
Chloromethane	50.0	576649.000	0.3913	100	1218284.00	0.4095	200	2541115.00	0.3795
1,1,1,2-Tetrachloroethane	50.0	367760.000	0.3317	100	767901.000	0.3428	200	1922695.00	0.3691
1,1,1-Trichloroethane	50.0	558801.000	0.3792	100	1134828.00	0.3815	200	2629019.00	0.3926
1,1,2-Trichloroethane	50.0	236883.000	0.2136	100	478386.000	0.2136	200	1102879.00	0.2117
1,1-Dichloropropene	50.0	462034.000	0.3136	100	934681.000	0.3142	200	2150648.00	0.3212
1,2,3-Trichlorobenzene	50.0	480908.000	0.6810	100	1026647.00	0.6926	200	2551783.00	0.7624
1,2,3-Trichloropropane	50.0	85818.0000	0.1215	100	175922.000	0.1187	200	403057.000	0.1204
1,2,4-Trichlorobenzene	50.0	541248.000	0.7664	100	1198242.00	0.8083	200	3015983.00	0.9011
1,2,4-Trimethylbenzene	50.0	1340621.00	1.898	100	2891139.00	1.950	200	6579879.00	1.966
1,2-Dibromo-3-Chloropropane	50.0	55182.0000	0.07810	100	117388.000	0.07920	200	266536.000	0.07960
1,2-Dibromoethane	50.0	246569.000	0.2224	100	495834.000	0.2214	200	1151459.00	0.2210
1,2-Dichlorobenzene	50.0	736080.000	1.042	100	1616491.00	1.091	200	3857106.00	1.152
1,2-Dichloroethane	50.0	497068.000	0.3373	100	992038.000	0.3335	200	2285845.00	0.3414
1,3,5-Trimethylbenzene	50.0	1277250.00	1.809	100	2721136.00	1.836	200	6311769.00	1.886
1,3-Dichlorobenzene	50.0	798713.000	1.131	100	1740447.00	1.174	200	4223390.00	1.262
1,3-Dichloropropane	50.0	423411.000	0.3818	100	867789.000	0.3874	200	2003180.00	0.3845
1,4-Dichlorobenzene	50.0	824841.000	1.168	100	1799972.00	1.214	200	4376516.00	1.308
2,2-Dichloropropane	50.0	504906.000	0.3426	100	1035330.00	0.3480	200	2381786.00	0.3557
2-Butanone	50.0	140668.000	0.09550	100	291787.000	0.09810	200	624244.000	0.09320
2-Chloroethyl Vinyl Ether	50.0	118727.000	0.08060	100	227306.000	0.07640	200	513097.000	0.07660
2-Chlorotoluene	50.0	1233005.00	1.746	100	2386086.00	1.610	200	5510822.00	1.647
2-Hexanone	50.0	215176.000	0.1940	100	442642.000	0.1976	200	949208.000	0.1822
4-Chlorotoluene	50.0	1009271.00	1.429	100	2195338.00	1.481	200	5223151.00	1.561
4-Methyl-2-Pentanone	50.0	97499.0000	0.06620	100	195515.000	0.06570	200	427783.000	0.06390
Acetone	50.0	103793.000	0.07040	100	198400.000	0.06670	200	417770.000	0.06240
Benzene	50.0	1236698.00	0.8393	100	2542879.00	0.8548	200	5916147.00	0.8835
Bromobenzene	50.0	413545.000	0.5856	100	864663.000	0.5833	200	2115016.00	0.6319
Bromochloromethane	50.0	207150.000	0.1406	100	419994.000	0.1412	200	977698.000	0.1460
Bromodichloromethane	50.0	464083.000	0.3149	100	948152.000	0.3187	200	2209297.00	0.3299
Bromomethane	50.0	177078.000	0.1202	100	369246.000	0.1241	200	893855.000	0.1335
Carbon Disulfide	50.0	1076752.00	0.7307	100	2236798.00	0.7519	200	5220967.00	0.7797
Carbon Tetrachloride	50.0	520656.000	0.3533	100	1068298.00	0.3591	200	2450326.00	0.3659

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Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-11		
	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	937378.000	0.09140
2-Chloroethyl Vinyl Ether	300	1007067.00	0.09820
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1408699.00	0.1893
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	657989.000	0.06410
Acetone	300	619565.000	0.06040
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

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Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-02			WG298037-03			WG298037-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	0.400	1591.00000	0.1442	1.00	4023.00000	0.1493
Dibromochloromethane	0.300	1554.00000	0.2347	0.400	1902.00000	0.2325	1.00	6180.00000	0.3092
Dibromomethane	NA	NA	NA	0.400	1430.00000	0.1296	1.00	3106.00000	0.1153
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	7638.00000	0.2835
Hexachlorobutadiene	NA	NA	NA	0.400	1452.00000	0.3013	1.00	4088.00000	0.3459
Isopropylbenzene	0.300	7791.00000	1.177	0.400	10394.00000	1.271	1.00	25953.00000	1.299
Methylene Chloride	NA	NA	NA	0.400	5061.00000	0.4587	1.00	8729.00000	0.3240
Naphthalene	NA	NA	NA	0.400	5766.00000	1.196	1.00	22693.00000	1.920
Styrene	0.300	4320.00000	0.6525	0.400	5795.00000	0.7083	1.00	15937.00000	0.7974
Tetrachloroethene	0.300	1867.00000	0.2820	0.400	1715.00000	0.2096	1.00	5009.00000	0.2506
Trichloroethene	0.300	2446.00000	0.2713	0.400	2630.00000	0.2384	1.00	6349.00000	0.2357
Trichlorofluoromethane	NA	NA	NA	0.400	3368.00000	0.3053	1.00	9359.00000	0.3474
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	0.300	1938.00000	0.2150	0.400	2496.00000	0.2262	1.00	6364.00000	0.2362
cis-1,3-Dichloropropene	0.300	2397.00000	0.2659	0.400	3366.00000	0.3051	1.00	9199.00000	0.3415
m-,p-Xylene	0.600	5971.00000	0.4509	0.800	8495.00000	0.5192	2.00	21142.00000	0.5289
n-Butylbenzene	0.300	5802.00000	1.504	0.400	6853.00000	1.422	1.00	20028.00000	1.695
n-Propylbenzene	0.300	8603.00000	2.230	0.400	10982.00000	2.279	1.00	30872.00000	2.612
o-Xylene	0.300	2899.00000	0.4379	0.400	4062.00000	0.4965	1.00	10073.00000	0.5040
p-Isopropyltoluene	0.300	7068.00000	1.832	0.400	8894.00000	1.846	1.00	24605.00000	2.082
sec-Butylbenzene	0.300	7167.00000	1.858	0.400	9968.00000	2.068	1.00	25893.00000	2.191
tert-Butylbenzene	0.300	1166.00000	0.3023	0.400	1702.00000	0.3532	1.00	4532.00000	0.3835
trans-1,2-Dichloroethene	0.300	1583.00000	0.1756	0.400	2336.00000	0.2117	1.00	6420.00000	0.2383
trans-1,3-Dichloropropene	NA	NA	NA	0.400	2731.00000	0.3338	1.00	8277.00000	0.4141

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Instrument ID: HPMS11
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Analyte	WG298037-05			WG298037-06			WG298037-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	8827.00000	0.1621	5.00	22797.00000	0.1648	20.0	100745.000	0.1715
Dibromochloromethane	2.00	10886.00000	0.2713	5.00	29047.00000	0.2838	20.0	133218.000	0.3070
Dibromomethane	2.00	6590.00000	0.1210	5.00	16142.00000	0.1167	20.0	69432.00000	0.1182
Dichlorodifluoromethane	2.00	15967.00000	0.2932	5.00	39866.00000	0.2881	20.0	171248.000	0.2915
Hexachlorobutadiene	2.00	7958.00000	0.3327	5.00	20881.00000	0.3396	20.0	91575.00000	0.3419
Isopropylbenzene	2.00	49598.00000	1.236	5.00	129423.000	1.265	20.0	565628.000	1.304
Methylene Chloride	2.00	14485.00000	0.2660	5.00	32452.00000	0.2345	20.0	130660.000	0.2224
Naphthalene	2.00	32553.00000	1.361	5.00	83151.00000	1.352	20.0	386437.000	1.443
Styrene	2.00	29800.00000	0.7426	5.00	82444.00000	0.8056	20.0	377805.000	0.8707
Tetrachloroethene	2.00	9691.00000	0.2415	5.00	25828.00000	0.2524	20.0	108977.000	0.2511
Trichloroethene	2.00	12266.00000	0.2253	5.00	32335.00000	0.2337	20.0	139644.000	0.2377
Trichlorofluoromethane	2.00	20730.00000	0.3807	5.00	51091.00000	0.3693	20.0	227329.000	0.3870
Vinyl Acetate	2.00	16910.00000	0.3105	5.00	44728.00000	0.3233	20.0	210518.000	0.3584
cis-1,2-Dichloroethene	2.00	12735.00000	0.2339	5.00	30824.00000	0.2228	20.0	136012.000	0.2315
cis-1,3-Dichloropropene	2.00	17008.00000	0.3123	5.00	47625.00000	0.3442	20.0	209061.000	0.3559
m-,p-Xylene	4.00	40850.00000	0.5090	10.0	106016.000	0.5180	40.0	473660.000	0.5458
n-Butylbenzene	2.00	38115.00000	1.594	5.00	101722.000	1.654	20.0	468852.000	1.750
n-Propylbenzene	2.00	59196.00000	2.475	5.00	153835.000	2.502	20.0	701331.000	2.618
o-Xylene	2.00	19552.00000	0.4872	5.00	51505.00000	0.5033	20.0	228640.000	0.5269
p-Isopropyltoluene	2.00	46142.00000	1.929	5.00	118438.000	1.926	20.0	548088.000	2.046
sec-Butylbenzene	2.00	52104.00000	2.178	5.00	130440.000	2.121	20.0	588368.000	2.196
tert-Butylbenzene	2.00	10248.00000	0.4285	5.00	24179.00000	0.3932	20.0	110738.000	0.4134
trans-1,2-Dichloroethene	2.00	11788.00000	0.2165	5.00	27663.00000	0.1999	20.0	126921.000	0.2160
trans-1,3-Dichloropropene	2.00	15986.00000	0.3983	5.00	43124.00000	0.4214	20.0	193520.000	0.4460

Login Number: L09040142
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-08			WG298037-09			WG298037-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	254145.000	0.1725	100	530648.000	0.1784	200	1044373.00	0.1560
Dibromochloromethane	50.0	333344.000	0.3006	100	686985.000	0.3067	200	1619686.00	0.3109
Dibromomethane	50.0	175585.000	0.1192	100	350247.000	0.1177	200	806815.000	0.1205
Dichlorodifluoromethane	50.0	425773.000	0.2889	100	877873.000	0.2951	200	1731352.00	0.2586
Hexachlorobutadiene	50.0	249092.000	0.3527	100	546064.000	0.3684	200	1344885.00	0.4018
Isopropylbenzene	50.0	1502158.00	1.355	100	3156212.00	1.409	200	7165388.00	1.375
Methylene Chloride	50.0	331551.000	0.2250	100	666355.000	0.2240	200	1511421.00	0.2257
Naphthalene	50.0	1011880.00	1.433	100	2168885.00	1.463	200	4991829.00	1.491
Styrene	50.0	1007269.00	0.9084	100	2151247.00	0.9604	200	5225880.00	1.003
Tetrachloroethene	50.0	279346.000	0.2519	100	579303.000	0.2586	200	1393088.00	0.2674
Trichloroethene	50.0	350891.000	0.2381	100	727250.000	0.2445	200	1716867.00	0.2564
Trichlorofluoromethane	50.0	550441.000	0.3735	100	1172659.00	0.3942	200	2579083.00	0.3852
Vinyl Acetate	50.0	559518.000	0.3797	100	910134.000	0.3060	200	1642451.00	0.2453
cis-1,2-Dichloroethene	50.0	349043.000	0.2369	100	703764.000	0.2366	200	1652152.00	0.2467
cis-1,3-Dichloropropene	50.0	532139.000	0.3611	100	1078562.00	0.3626	200	2537448.00	0.3790
m-,p-Xylene	100	1263585.00	0.5698	200	2708056.00	0.6045	400	6480254.00	0.6220
n-Butylbenzene	50.0	1282046.00	1.815	100	2821605.00	1.903	200	6251511.00	1.868
n-Propylbenzene	50.0	1831752.00	2.594	100	3834960.00	2.587	200	8094142.00	2.418
o-Xylene	50.0	599725.000	0.5408	100	1256006.00	0.5608	200	3103348.00	0.5957
p-Isopropyltoluene	50.0	1484149.00	2.102	100	3245750.00	2.190	200	7247294.00	2.165
sec-Butylbenzene	50.0	1579952.00	2.237	100	3401770.00	2.295	200	7581033.00	2.265
tert-Butylbenzene	50.0	290047.000	0.4107	100	610353.000	0.4117	200	1539178.00	0.4599
trans-1,2-Dichloroethene	50.0	320489.000	0.2175	100	655428.000	0.2203	200	1542208.00	0.2303
trans-1,3-Dichloropropene	50.0	494943.000	0.4463	100	995016.000	0.4442	200	2342864.00	0.4497

Login Number: L09040142
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 24-MAR-09 16:13
Column ID: F

Analyte	WG298037-11		
	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: L09040142 Run Date: 03/24/2009 Sample ID: WG298037-12
Instrument ID: HPMS11 Run Time: 18:17 Method: 8260B
File ID: 11M58029 Analyst: WTD QC Key: STD
Ical Workgroup: WG298037 Cal ID: HPMS11 - 24-MAR-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	20.2	ug/L	0.418	1.00	30	
1,1-Dichloroethene	CCC	20.0	20.5	ug/L	0.390	2.60	30	
1,2-Dichloropropane	CCC	20.0	20.4	ug/L	0.248	2.00	30	
Ethylbenzene	CCC	20.0	19.7	ug/L	0.442	1.30	30	
Toluene	CCC	20.0	20.1	ug/L	1.18	0.500	30	
Vinyl Chloride	CCC	20.0	18.8	ug/L	0.224	6.00	30	
Bromoform	SPCC	20.0	18.7	ug/L	0.189	6.60	30	
Chlorobenzene	SPCC	20.0	19.4	ug/L	0.823	3.10	30	
Chloromethane	SPCC	20.0	18.6	ug/L	0.370	6.80	30	
1,1-Dichloroethane	SPCC	20.0	20.8	ug/L	0.458	3.90	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	21.4	ug/L	0.422	7.10	30	
Acetone		20.0	21.2	ug/L	0.0748	5.90	30	
Benzene		20.0	19.6	ug/L	0.836	2.00	30	
Bromobenzene		20.0	20.3	ug/L	0.600	1.40	30	
Bromochloromethane		20.0	21.3	ug/L	0.143	6.30	30	
Bromodichloromethane		20.0	21.5	ug/L	0.326	7.30	30	
Bromomethane		20.0	20.2	ug/L	0.120	1.00	30	
2-Butanone		20.0	20.3	ug/L	0.0987	1.30	30	
n-Butylbenzene		20.0	21.1	ug/L	1.78	5.60	30	
sec-Butylbenzene		20.0	20.8	ug/L	2.24	4.00	30	
tert-Butylbenzene		20.0	20.9	ug/L	0.413	4.40	30	
Carbon Disulfide		20.0	19.0	ug/L	0.689	4.80	30	
Carbon Tetrachloride		20.0	20.5	ug/L	0.349	2.30	30	
Dibromochloromethane		20.0	20.5	ug/L	0.291	2.60	30	
Chloroethane		20.0	21.0	ug/L	0.170	5.00	30	
2-Chloroethyl Vinyl Ether		20.0	21.6	ug/L	0.0870	8.20	30	
2-Chlorotoluene		20.0	21.0	ug/L	1.77	5.20	30	
4-Chlorotoluene		20.0	19.9	ug/L	1.45	0.400	30	
1,2-Dibromo-3-Chloropropane		20.0	20.8	ug/L	0.0803	4.10	30	
1,2-Dibromoethane		20.0	20.4	ug/L	0.222	1.90	30	
Dibromomethane		20.0	19.9	ug/L	0.119	0.600	30	
1,2-Dichlorobenzene		20.0	19.5	ug/L	1.04	2.40	30	
1,3-Dichlorobenzene		20.0	19.9	ug/L	1.11	0.300	30	
1,4-Dichlorobenzene		20.0	19.2	ug/L	1.13	4.10	30	
Dichlorodifluoromethane		20.0	20.2	ug/L	0.288	0.900	30	
1,2-Dichloroethane		20.0	20.1	ug/L	0.340	0.600	30	
cis-1,2-Dichloroethene		20.0	20.9	ug/L	0.242	4.30	30	
trans-1,2-Dichloroethene		20.0	20.2	ug/L	0.216	1.10	30	
1,3-Dichloropropane		20.0	20.4	ug/L	0.391	1.90	30	
2,2-Dichloropropane		20.0	20.7	ug/L	0.336	3.70	30	
cis-1,3-Dichloropropene		20.0	20.7	ug/L	0.349	3.60	30	
trans-1,3-Dichloropropene		20.0	18.4	ug/L	0.386	7.90	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1362423
Report generated 04/09/2009 15:22



Login Number: L09040142 Run Date: 03/24/2009 Sample ID: WG298037-12
Instrument ID: HPMS11 Run Time: 18:17 Method: 8260B
File ID: 11M58029 Analyst: WTD QC Key: STD
ICal Workgroup: WG298037 Cal ID: HPMS11 - 24-MAR-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	20.5	ug/L	0.312	2.70	30	
2-Hexanone	20.0	20.6	ug/L	0.197	3.20	30	
Hexachlorobutadiene	20.0	19.9	ug/L	0.345	0.700	30	
Isopropylbenzene	20.0	17.6	ug/L	1.15	11.8	30	
p-Isopropyltoluene	20.0	19.9	ug/L	2.01	0.300	30	
4-Methyl-2-Pentanone	20.0	20.6	ug/L	0.0658	3.10	30	
Methylene Chloride	20.0	20.4	ug/L	0.230	2.00	30	
Naphthalene	20.0	19.8	ug/L	1.44	1.20	30	
n-Propylbenzene	20.0	21.2	ug/L	2.63	5.90	30	
Styrene	20.0	20.9	ug/L	0.866	4.60	30	
1,1,1,2-Tetrachloroethane	20.0	20.3	ug/L	0.320	1.60	30	
Tetrachloroethene	20.0	19.8	ug/L	0.250	0.900	30	
1,2,3-Trichlorobenzene	20.0	19.9	ug/L	0.676	0.500	30	
1,2,4-Trichlorobenzene	20.0	20.3	ug/L	0.752	1.40	30	
1,1,1-Trichloroethane	20.0	20.7	ug/L	0.380	3.50	30	
1,1,2-Trichloroethane	20.0	20.7	ug/L	0.217	3.40	30	
Trichloroethene	20.0	19.1	ug/L	0.232	4.30	30	
Trichlorofluoromethane	20.0	20.6	ug/L	0.380	3.20	30	
1,2,3-Trichloropropane	20.0	19.8	ug/L	0.129	0.800	30	
1,2,4-Trimethylbenzene	20.0	21.0	ug/L	1.92	5.10	30	
1,3,5-Trimethylbenzene	20.0	20.8	ug/L	1.83	3.90	30	
Vinyl Acetate	20.0	28.5	ug/L	0.456	42.4	40	*
o-Xylene	20.0	20.3	ug/L	0.525	1.60	30	
m-,p-Xylene	40.0	40.6	ug/L	0.549	1.40	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09040142	Run Date: 04/07/2009	Sample ID: WG299155-02
Instrument ID: HPMS11	Run Time: 11:20	Method: 8260B
File ID: 11M58371	Analyst: WTD	QC Key: STD
Workgroup (AAB#): WG299157	Cal ID: HPMS11 - 24-MAR-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	54.5	ug/L	0.451	9.02	20	
1,1-Dichloroethene	CCC	50.0	56.4	ug/L	0.428	12.8	20	
1,2-Dichloropropane	CCC	50.0	54.2	ug/L	0.263	8.42	20	
Ethylbenzene	CCC	50.0	54.4	ug/L	0.487	8.80	20	
Toluene	CCC	50.0	53.3	ug/L	1.25	6.64	20	
Vinyl Chloride	CCC	50.0	53.2	ug/L	0.254	6.33	20	
Bromoform	SPCC	50.0	47.9	ug/L	0.194	4.13	40	
Chlorobenzene	SPCC	50.0	52.0	ug/L	0.883	4.06	40	
Chloromethane	SPCC	50.0	54.1	ug/L	0.430	8.28	40	
1,1-Dichloroethane	SPCC	50.0	56.3	ug/L	0.496	12.6	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	53.6	ug/L	0.418	7.12	40	
Acetone		50.0	51.1	ug/L	0.0721	2.18	40	
Benzene		50.0	52.8	ug/L	0.900	5.58	40	
Bromobenzene		50.0	50.0	ug/L	0.592	0.0992	40	
Bromochloromethane		50.0	51.9	ug/L	0.140	3.87	40	
Bromodichloromethane		50.0	55.8	ug/L	0.340	11.7	40	
Bromomethane		50.0	49.2	ug/L	0.117	1.53	40	
2-Butanone		50.0	49.3	ug/L	0.0961	1.32	40	
n-Butylbenzene		50.0	62.1	ug/L	2.10	24.1	40	
sec-Butylbenzene		50.0	57.3	ug/L	2.47	14.5	40	
tert-Butylbenzene		50.0	54.9	ug/L	0.434	9.75	40	
Carbon Disulfide		50.0	54.3	ug/L	0.785	8.53	40	
Carbon Tetrachloride		50.0	57.5	ug/L	0.392	15.0	40	
Dibromochloromethane		50.0	54.0	ug/L	0.307	8.04	40	
Chloroethane		50.0	53.4	ug/L	0.174	6.87	40	
2-Chloroethyl Vinyl Ether		50.0	73.4	ug/L	0.118	46.8	40	*
2-Chlorotoluene		50.0	54.0	ug/L	1.82	8.10	40	
4-Chlorotoluene		50.0	57.4	ug/L	1.67	14.8	40	
1,2-Dibromo-3-Chloropropane		50.0	55.1	ug/L	0.0850	10.1	40	
1,2-Dibromoethane		50.0	51.3	ug/L	0.223	2.51	40	
Dibromomethane		50.0	52.0	ug/L	0.125	4.04	40	
1,2-Dichlorobenzene		50.0	49.9	ug/L	1.06	0.134	40	
1,3-Dichlorobenzene		50.0	52.5	ug/L	1.17	5.02	40	
1,4-Dichlorobenzene		50.0	51.1	ug/L	1.21	2.21	40	
Dichlorodifluoromethane		50.0	46.3	ug/L	0.265	7.31	40	
1,2-Dichloroethane		50.0	54.1	ug/L	0.366	8.19	40	
cis-1,2-Dichloroethene		50.0	53.2	ug/L	0.247	6.41	40	
trans-1,2-Dichloroethene		50.0	54.4	ug/L	0.233	8.82	40	
1,3-Dichloropropane		50.0	52.1	ug/L	0.400	4.30	40	
2,2-Dichloropropane		50.0	63.4	ug/L	0.411	26.8	40	
cis-1,3-Dichloropropene		50.0	57.4	ug/L	0.386	14.7	40	
trans-1,3-Dichloropropene		50.0	56.7	ug/L	0.476	13.5	40	

CCV - Modified 03/05/2008
 PDF File ID: 1362425
 Report generated 04/09/2009 15:22



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299155-02
Instrument ID: HPMS11 Run Time: 11:20 Method: 8260B
File ID: 11M58371 Analyst: WTD QC Key: STD
Workgroup (AAB#): WG299157 Cal ID: HPMS11 - 24-MAR-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	55.8	ug/L	0.340	11.7	40	
2-Hexanone	50.0	51.2	ug/L	0.195	2.30	40	
Hexachlorobutadiene	50.0	53.4	ug/L	0.372	6.83	40	
Isopropylbenzene	50.0	54.8	ug/L	1.42	9.63	40	
p-Isopropyltoluene	50.0	56.9	ug/L	2.29	13.9	40	
4-Methyl-2-Pentanone	50.0	51.2	ug/L	0.0654	2.47	40	
Methylene Chloride	50.0	53.3	ug/L	0.239	6.55	40	
Naphthalene	50.0	48.9	ug/L	1.43	2.10	40	
n-Propylbenzene	50.0	58.4	ug/L	2.90	16.8	40	
Styrene	50.0	57.5	ug/L	0.951	14.9	40	
1,1,1,2-Tetrachloroethane	50.0	56.1	ug/L	0.353	12.3	40	
Tetrachloroethene	50.0	50.9	ug/L	0.256	1.88	40	
1,2,3-Trichlorobenzene	50.0	50.4	ug/L	0.684	0.755	40	
1,2,4-Trichlorobenzene	50.0	52.8	ug/L	0.783	5.62	40	
1,1,1-Trichloroethane	50.0	56.0	ug/L	0.411	12.1	40	
1,1,2-Trichloroethane	50.0	51.2	ug/L	0.215	2.32	40	
Trichloroethene	50.0	49.2	ug/L	0.239	1.54	40	
Trichlorofluoromethane	50.0	53.3	ug/L	0.392	6.57	40	
1,2,3-Trichloropropane	50.0	47.1	ug/L	0.123	5.77	40	
1,2,4-Trimethylbenzene	50.0	56.5	ug/L	2.07	13.0	40	
1,3,5-Trimethylbenzene	50.0	56.7	ug/L	2.00	13.5	40	
Vinyl Acetate	50.0	60.7	ug/L	0.389	21.3	40	
o-Xylene	50.0	54.7	ug/L	0.566	9.41	40	
m-,p-Xylene	100	113	ug/L	0.609	12.6	40	
1,2-Dichloroethene	100	108	ug/L	0.240	7.61	40	
Xylenes	150	167	ug/L	0.587	11.5	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09040142	Run Date: 04/08/2009	Sample ID: WG299280-02
Instrument ID: HPMS11	Run Time: 11:42	Method: 8260B
File ID: 11M58399	Analyst: WTD	QC Key: STD
Workgroup (AAB#): WG299281	Cal ID: HPMS11 - 24-MAR-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	55.8	ug/L	0.462	11.7	20	
1,1-Dichloroethene	CCC	50.0	59.2	ug/L	0.449	18.4	20	
1,2-Dichloropropane	CCC	50.0	54.5	ug/L	0.264	8.95	20	
Ethylbenzene	CCC	50.0	54.2	ug/L	0.485	8.38	20	
Toluene	CCC	50.0	54.0	ug/L	1.27	7.91	20	
Vinyl Chloride	CCC	50.0	53.3	ug/L	0.254	6.55	20	
Bromoform	SPCC	50.0	49.0	ug/L	0.198	1.95	40	
Chlorobenzene	SPCC	50.0	52.1	ug/L	0.884	4.16	40	
Chloromethane	SPCC	50.0	53.8	ug/L	0.427	7.63	40	
1,1-Dichloroethane	SPCC	50.0	57.8	ug/L	0.510	15.7	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	52.0	ug/L	0.406	4.02	40	
Acetone		50.0	48.7	ug/L	0.0687	2.69	40	
Benzene		50.0	53.6	ug/L	0.915	7.27	40	
Bromobenzene		50.0	51.5	ug/L	0.610	2.94	40	
Bromochloromethane		50.0	54.0	ug/L	0.146	8.01	40	
Bromodichloromethane		50.0	56.8	ug/L	0.346	13.6	40	
Bromomethane		50.0	38.9	ug/L	0.0928	22.1	40	
2-Butanone		50.0	49.3	ug/L	0.0960	1.43	40	
n-Butylbenzene		50.0	62.0	ug/L	2.10	24.0	40	
sec-Butylbenzene		50.0	58.0	ug/L	2.50	15.9	40	
tert-Butylbenzene		50.0	56.3	ug/L	0.445	12.6	40	
Carbon Disulfide		50.0	55.8	ug/L	0.808	11.7	40	
Carbon Tetrachloride		50.0	57.1	ug/L	0.390	14.2	40	
Dibromochloromethane		50.0	54.9	ug/L	0.312	9.74	40	
Chloroethane		50.0	56.8	ug/L	0.184	13.5	40	
2-Chloroethyl Vinyl Ether		50.0	71.9	ug/L	0.116	43.9	40	*
2-Chlorotoluene		50.0	54.0	ug/L	1.82	7.95	40	
4-Chlorotoluene		50.0	59.3	ug/L	1.73	18.6	40	
1,2-Dibromo-3-Chloropropane		50.0	56.6	ug/L	0.0874	13.3	40	
1,2-Dibromoethane		50.0	52.6	ug/L	0.229	5.28	40	
Dibromomethane		50.0	53.0	ug/L	0.127	6.02	40	
1,2-Dichlorobenzene		50.0	50.8	ug/L	1.08	1.55	40	
1,3-Dichlorobenzene		50.0	53.6	ug/L	1.19	7.19	40	
1,4-Dichlorobenzene		50.0	51.8	ug/L	1.22	3.65	40	
Dichlorodifluoromethane		50.0	50.1	ug/L	0.286	0.153	40	
1,2-Dichloroethane		50.0	55.6	ug/L	0.376	11.2	40	
cis-1,2-Dichloroethene		50.0	54.7	ug/L	0.254	9.50	40	
trans-1,2-Dichloroethene		50.0	55.9	ug/L	0.239	11.8	40	
1,3-Dichloropropane		50.0	53.9	ug/L	0.414	7.87	40	
2,2-Dichloropropane		50.0	61.0	ug/L	0.396	22.0	40	
cis-1,3-Dichloropropene		50.0	57.1	ug/L	0.384	14.2	40	
trans-1,3-Dichloropropene		50.0	57.3	ug/L	0.480	14.6	40	

CCV - Modified 03/05/2008
PDF File ID: 1362425
Report generated 04/09/2009 15:22



Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299280-02
Instrument ID: HPMS11 Run Time: 11:42 Method: 8260B
File ID: 11M58399 Analyst: WTD QC Key: STD
Workgroup (AAB#): WG299281 Cal ID: HPMS11 - 24-MAR-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	55.8	ug/L	0.340	11.6	40	
2-Hexanone	50.0	51.3	ug/L	0.195	2.58	40	
Hexachlorobutadiene	50.0	53.6	ug/L	0.373	7.13	40	
Isopropylbenzene	50.0	54.9	ug/L	1.43	9.87	40	
p-Isopropyltoluene	50.0	57.6	ug/L	2.32	15.3	40	
4-Methyl-2-Pentanone	50.0	51.4	ug/L	0.0656	2.89	40	
Methylene Chloride	50.0	55.5	ug/L	0.249	11.0	40	
Naphthalene	50.0	49.3	ug/L	1.44	1.31	40	
n-Propylbenzene	50.0	59.3	ug/L	2.94	18.5	40	
Styrene	50.0	57.8	ug/L	0.957	15.6	40	
1,1,1,2-Tetrachloroethane	50.0	56.2	ug/L	0.354	12.5	40	
Tetrachloroethene	50.0	51.0	ug/L	0.257	2.05	40	
1,2,3-Trichlorobenzene	50.0	50.6	ug/L	0.687	1.23	40	
1,2,4-Trichlorobenzene	50.0	52.4	ug/L	0.777	4.82	40	
1,1,1-Trichloroethane	50.0	57.1	ug/L	0.419	14.1	40	
1,1,2-Trichloroethane	50.0	52.5	ug/L	0.221	5.00	40	
Trichloroethene	50.0	51.6	ug/L	0.250	3.17	40	
Trichlorofluoromethane	50.0	55.7	ug/L	0.410	11.4	40	
1,2,3-Trichloropropane	50.0	49.2	ug/L	0.128	1.69	40	
1,2,4-Trimethylbenzene	50.0	57.6	ug/L	2.11	15.2	40	
1,3,5-Trimethylbenzene	50.0	57.3	ug/L	2.02	14.7	40	
Vinyl Acetate	50.0	38.5	ug/L	0.247	23.0	40	
o-Xylene	50.0	55.0	ug/L	0.569	10.1	40	
m-,p-Xylene	100	113	ug/L	0.610	12.9	40	
1,2-Dichloroethene	100	111	ug/L	0.247	10.7	40	
Xylenes	150	168	ug/L	0.590	11.9	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09040142
Instrument ID: HPMS11
Workgroup (AAB#): WG299157

CCV Number: WG299155-02
CAL ID: HPMS11 - 24-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG299155-02	NA	NA	393839	633480	848898
Upper Limit	NA	NA	787678	1266960	1697796
Lower Limit	NA	NA	196920	316740	424449
<u>L09040142-05</u>	<u>1.00</u>	<u>01</u>	<u>285430</u>	<u>505780</u>	<u>689993</u>
L09040142-08	1.00	01	263184	473742	646897
WG299157-01	1.00	01	338112	602883	826107
WG299157-02	1.00	01	392138	650621	862196
WG299157-03	1.00	01	341492	598433	817866
WG299157-04	1.00	01	403142	671216	900883
WG299157-05	1.00	01	410960	685879	915913

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

Underline = Response outside limits

Login Number: L09040142
Instrument ID: HPMS11
Workgroup (AAB#): WG299281

CCV Number: WG299280-02
CAL ID: HPMS11 - 24-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG299280-02	NA	NA	384836	628148	858609
Upper Limit	NA	NA	769672	1256296	1717218
Lower Limit	NA	NA	192418	314074	429305
<u>L09040142-01</u>	<u>100</u>	<u>DL02</u>	<u>294609</u>	<u>519328</u>	<u>723119</u>
L09040142-02	50.0	DL02	284509	503857	695024
L09040142-03	50.0	DL02	273755	493455	673602
L09040142-04	5.00	DL02	266859	480460	656298
WG299281-01	1.00	01	323543	566098	778198
WG299281-02	1.00	01	379413	632066	834141
WG299281-03	1.00	01	398744	657801	869799

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

Underline = Response outside limits

Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00103841

Login Number: L09040142
Instrument ID: HPMS11
Workgroup (AAB#): WG299157

CCV Number: WG299155-02
CAL ID: HPMS11 - 24-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG299155-02	NA	NA	16.48	13.68	10.06
Upper Limit	NA	NA	16.98	14.18	10.56
Lower Limit	NA	NA	15.98	13.18	9.56
<u>L09040142-05</u>	<u>1.00</u>	<u>01</u>	<u>16.482</u>	<u>13.68</u>	<u>10.071</u>
L09040142-08	1.00	01	16.482	13.68	10.061
WG299157-01	1.00	01	16.482	13.68	10.071
WG299157-02	1.00	01	16.481	13.679	10.061
WG299157-03	1.00	01	16.481	13.679	10.071
WG299157-04	1.00	01	16.482	13.679	10.061
WG299157-05	1.00	01	16.481	13.679	10.061

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

Underline = Response outside limits



Login Number: L09040142
Instrument ID: HPMS11
Workgroup (AAB#): WG299281

CCV Number: WG299280-02
CAL ID: HPMS11 - 24-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG299280-02	NA	NA	16.48	13.68	10.07
Upper Limit	NA	NA	16.98	14.18	10.57
Lower Limit	NA	NA	15.98	13.18	9.57
L09040142-01	100	DL02	16.481	13.679	10.071
L09040142-02	50.0	DL02	16.482	13.68	10.071
L09040142-03	50.0	DL02	16.481	13.679	10.071
L09040142-04	5.00	DL02	16.481	13.679	10.06
WG299281-01	1.00	01	16.482	13.68	10.071
WG299281-02	1.00	01	16.482	13.68	10.071
WG299281-03	1.00	01	16.481	13.679	10.071

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

Underline = Response outside limits

2.2 Metals Data

2.2.1 Metals I C P Data

2.2.1.1 Summary Data

LABORATORY REPORT

L09040142

00103846

04/13/09 09:35

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
49WW06-040409	L09040142-07	6010B	1	07-APR-09



Report Number: **L09040142**Report Date : **April 13, 2009**

00103847

Sample Number: **L09040142-07**
Client ID: **49WW06-040409**
Matrix: **Water**
Workgroup Number: **WG299317**
Collect Date: **04/04/2009 17:15**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **JYH/PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **04/08/2009 06:32**
Cal Date: **04/08/2009 10:07**
Run Date: **04/08/2009 11:08**
File ID: **P2.040809.110853**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Iron, Total	7439-89-6	0.0551	J	0.100	0.0250

U Not detected at or above adjusted sample detection limit

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

2.2.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system in ug/mL (ppm)

Vf = Final volume (mL)

Vi = Initial volume (mL)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/mL (mg/L)

Example:

0.1

50

50

1

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (mg/L) (ppm)

Vf = Final volume (mL)

Vi = Initial weight (g)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/g (mg/kg)

Example:

0.1

50

1

1

5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (mg/kg)

Example:

5

80

6.25

Example 6010 Calculations
Thermo Scientific IRIS Advantage

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system in ug/mL (ppm)

Vf = Final volume (mL)

Vi = Initial volume (mL)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/mL (mg/L)

Example:

0.1

50

50

1

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (mg/L) (ppm)

Vf = Final volume (mL)

Vi = Initial weight (g)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/g (mg/kg)

Example:

0.1

50

1

1

5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (mg/kg)

Example:

5

80

6.25

Example 6010 Calculations
Thermo Scientific iCAP 6500

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and four standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system in ug/mL (ppm)

Vf = Final volume (mL)

Vi = Initial volume (mL)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/mL (mg/L)

Example:

0.1

50

50

1

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (mg/L) (ppm)

Vf = Final volume (mL)

Vi = Initial weight (g)

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in ug/g (mg/kg)

Example:

0.1

50

1

1

5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (mg/kg)

Example:

5

80

6.25

Workgroup: WG299269

Analyst: REK

Spike Analyst: REK

Method: 3005A

Run Date: 04/08/2009 06:32

Hotblock Start Temp: 95 @ 05:30

Hotblock End Temp: 94.9 @ 09:30

SOP: ME401 Revision 13

Spike Solution: STD27613

Spike Witness: SDL

Digest tubes Lot #: COA13696

HCL Lot #: COA13765

HN03 Lot #: COA13771

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG299269-02	BLANK	1	50 mL	50 mL		
2	WG299117-01	FBLK	18	50 mL	50 mL		
3	WG299269-03	LCS	1	50 mL	50 mL	5 mL	
4	L09040090-03	SAMP	18	50 mL	50 mL		04/10/09
5	L09040090-05	SAMP	18	50 mL	50 mL		04/10/09
6	L09040090-07	SAMP	18	50 mL	50 mL		04/10/09
7	L09040090-09	SAMP	18	50 mL	50 mL		04/10/09
8	L09040090-11	SAMP	18	50 mL	50 mL		04/10/09
9	L09040130-01	SAMP	1	50 mL	50 mL		04/14/09
10	L09040130-02	SAMP	1	50 mL	50 mL		04/14/09
11	L09040130-03	SAMP	1	50 mL	50 mL		04/14/09
12	L09040130-04	SAMP	1	50 mL	50 mL		04/14/09
13	L09040130-05	SAMP	1	50 mL	50 mL		04/14/09
14	L09040130-06	SAMP	1	50 mL	50 mL		04/14/09
15	L09040141-01	SAMP	1	50 mL	50 mL		04/14/09
16	WG299269-01	REF	1	50 mL	50 mL		
17	L09040142-07	SAMP	1	50 mL	50 mL		04/08/09
18	WG299269-04	MS	1	50 mL	50 mL	5 mL	
19	WG299269-05	MSD	1	50 mL	50 mL	5 mL	

Analyst: 

Reviewer: 

Microbac Laboratories Inc.
Instrument Run Log

Instrument: PE-ICP2 Dataset: 040809H.CSV
 Analyst1: JYH Analyst2: PDM
 Method: 6010B SOP: ME600E Rev: 9
 Maintenance Log ID: 28274

Calibration Std: STD32077 ICV/CCV Std: STD32039 Post Spike: STD27612
 ICSA: STD32053 ICSAB: STD32155

Workgroups: 299317,299344,299203

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.040809.094238	WG299351-01	Calibration Point		1		04/08/09 09:42
2	P2.040809.094850	WG299351-02	Calibration Point		1		04/08/09 09:48
3	P2.040809.095505	WG299351-03	Calibration Point		1		04/08/09 09:55
4	P2.040809.100122	WG299351-04	Calibration Point		1		04/08/09 10:01
5	P2.040809.100741	WG299351-05	Calibration Point		1		04/08/09 10:07
6	P2.040809.101418	WG299351-06	Initial Calibration Verification		1		04/08/09 10:14
7	P2.040809.102036	WG299351-07	Initial Calib Blank		1		04/08/09 10:20
8	P2.040809.102652	WG299351-08	Interference Check		1		04/08/09 10:26
9	P2.040809.103212	WG299351-09	Interference Check		1		04/08/09 10:32
10	P2.040809.103733	WG299351-10	CCV		1		04/08/09 10:37
11	P2.040809.104350	WG299351-11	CCB		1		04/08/09 10:43
12	P2.040809.105007	WG299269-02	Method/Prep Blank	50/50	1		04/08/09 10:50
13	P2.040809.105620	WG299269-03	Laboratory Control S	50/50	1		04/08/09 10:56
14	P2.040809.110241	WG299117-01	Fluid Blank		1		04/08/09 11:02
15	P2.040809.110853	WG299269-01	Reference Sample		1	L09040142-07	04/08/09 11:08
16	P2.040809.111516	WG299269-04	Matrix Spike	50/50	1	L09040142-07	04/08/09 11:15
17	P2.040809.112142	WG299269-05	Matrix Spike Duplica	50/50	1	L09040142-07	04/08/09 11:21
18	P2.040809.112801	WG299317-01	Post Digestion Spike		1	L09040142-07	04/08/09 11:28
19	P2.040809.113429	WG299317-02	Serial Dilution		5	L09040142-07	04/08/09 11:34
20	P2.040809.114054	WG299351-12	CCV		1		04/08/09 11:40
21	P2.040809.114712	WG299351-13	CCB		1		04/08/09 11:47
22	P2.040809.115330	L09040090-03	AV-NCB-PE-VIS-38-C1-0402	50/50	1		04/08/09 11:53
23	P2.040809.115948	L09040090-05	AV-NCB-AS-VIS-7-040209	50/50	1		04/08/09 11:59
24	P2.040809.120605	L09040090-07	AV-NCB-PE-UNK-38-C3-040	50/50	1		04/08/09 12:06
25	P2.040809.121226	L09040090-09	AV-NCB-PE-UNK-38-C3D-04	50/50	1		04/08/09 12:12
26	P2.040809.121848	L09040090-11	AV-NCB-AS-UNK-156-04020	50/50	1		04/08/09 12:18
27	P2.040809.122502	L09040130-01	13306-W0001	50/50	1		04/08/09 12:25
28	P2.040809.123124	L09040130-02	13306-W0002	50/50	1		04/08/09 12:31
29	P2.040809.123744	L09040130-03	13307-W0001	50/50	1		04/08/09 12:37
30	P2.040809.124357	L09040130-04	13310-W0001	50/50	1		04/08/09 12:43
31	P2.040809.125020	L09040130-05	13314-W0001	50/50	1		04/08/09 12:50
32	P2.040809.125640	WG299351-14	CCV		1		04/08/09 12:56
33	P2.040809.130258	WG299351-15	CCB		1		04/08/09 13:02
34	P2.040809.130916	L09040130-06	14153-W0001	50/50	1		04/08/09 13:09
35	P2.040809.131534	L09040141-01	SANITARY LEACHATE	50/50	1		04/08/09 13:15
36	P2.040809.132052	WG299351-16	CCV		1		04/08/09 13:20
37	P2.040809.132710	WG299351-17	CCB		1		04/08/09 13:27

Page: 1 Approved: April 09, 2009

Maren Beery



Microbac Laboratories Inc.
Instrument Run Log

00103854

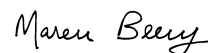
Instrument: PE-ICP2 Dataset: 040809H.CSV
 Analyst1: JYH Analyst2: PDM
 Method: 6010B SOP: ME600E Rev: 9
 Maintenance Log ID: 28274

Calibration Std: STD32077 ICV/CCV Std: STD32039 Post Spike: STD27612
 ICSA: STD32053 ICSAB: STD32155
 Workgroups: 299317,299344,299203

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	P2.040809.133443	WG299170-02	Method/Prep Blank	5/50	1		04/08/09 13:34
39	P2.040809.134057	WG299170-03	Laboratory Control S	5/50	1		04/08/09 13:40
40	P2.040809.134720	WG299170-01	Reference Sample		1	L09040106-01	04/08/09 13:47
41	P2.040809.135345	WG299170-04	Matrix Spike	5/50	1	L09040106-01	04/08/09 13:53
42	P2.040809.140004	WG299170-05	Matrix Spike Duplica	5/50	1	L09040106-01	04/08/09 14:00
43	P2.040809.140630	L09040087-01	GRIT	5/50	1		04/08/09 14:06
44	P2.040809.141254	L09040087-02	BAGHOUSE DUST	5/50	1		04/08/09 14:12
45	P2.040809.141912	L09040087-03	PAINT DUST	5/50	1		04/08/09 14:19
46	P2.040809.142537	WG299344-01	Post Digestion Spike		1	L09040087-03	04/08/09 14:25
47	P2.040809.143202	WG299344-02	Serial Dilution		5	L09040087-03	04/08/09 14:32
48	P2.040809.143827	WG299351-18	CCV		1		04/08/09 14:38
49	P2.040809.144444	WG299351-19	CCB		1		04/08/09 14:44
50	P2.040809.145102	WG299123-01	Fluid Blank		1		04/08/09 14:51
51	P2.040809.145516	L09040100-01	0904-036-1	50/50	1		04/08/09 14:55
52	P2.040809.150039	WG299203-03	Post Digestion Spike		1	L09040100-01	04/08/09 15:00
53	P2.040809.150610	WG299203-04	Serial Dilution		5	L09040100-01	04/08/09 15:06
54	P2.040809.151232	WG299351-20	CCV		1		04/08/09 15:12
55	P2.040809.151853	WG299351-21	CCB		1		04/08/09 15:18

Page: 2 Approved: April 09, 2009




Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 040809H2R.CSV
 Analyst1: JYH Analyst2: PDM
 Method: 6010B SOP: 600E Rev: 9
 Maintenance Log ID: 28274

Calibration Std: STD32077 ICV/CCV Std: STD32039 Post Spike: STD27612
 ICSA: STD32053 ICSAB: STD32155

Workgroups: 299317

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.040809.160620	WG299480-01	Calibration Point		1		04/08/09 16:06
2	P2.040809.161233	WG299480-02	Calibration Point		1		04/08/09 16:12
3	P2.040809.161845	WG299480-03	Calibration Point		1		04/08/09 16:18
4	P2.040809.162501	WG299480-04	Calibration Point		1		04/08/09 16:25
5	P2.040809.163121	WG299480-05	Calibration Point		1		04/08/09 16:31
6	P2.040809.163745	WG299480-06	Initial Calibration Verification		1		04/08/09 16:37
7	P2.040809.164406	WG299480-07	Initial Calib Blank		1		04/08/09 16:44
8	P2.040809.165025	WG299480-08	Interference Check		1		04/08/09 16:50
9	P2.040809.165545	WG299480-09	Interference Check		1		04/08/09 16:55
10	P2.040809.170107	WG299480-10	CCV		1		04/08/09 17:01
11	P2.040809.170727	WG299480-11	CCB		1		04/08/09 17:07
12	P2.040809.172000	WG299269-02	Method/Prep Blank	50/50	1		04/08/09 17:20
13	P2.040809.172616	WG299269-03	Laboratory Control S	50/50	1		04/08/09 17:26
14	P2.040809.173238	WG299117-01	Fluid Blank		1		04/08/09 17:32
15	P2.040809.173857	WG299269-01	Reference Sample		1	L09040142-07	04/08/09 17:38
16	P2.040809.174515	WG299269-04	Matrix Spike	50/50	1	L09040142-07	04/08/09 17:45
17	P2.040809.175140	WG299269-05	Matrix Spike Duplica	50/50	1	L09040142-07	04/08/09 17:51
18	P2.040809.175802	L09040090-03	AV-NCB-PE-VIS-38-C1-0402	50/50	1		04/08/09 17:58
19	P2.040809.180416	WG299317-03	Post Digestion Spike		1	L09040090-03	04/08/09 18:04
20	P2.040809.181037	WG299317-04	Serial Dilution		5	L09040090-03	04/08/09 18:10
21	P2.040809.181654	WG299480-12	CCV		1		04/08/09 18:16
22	P2.040809.182315	WG299480-13	CCB		1		04/08/09 18:23
23	P2.040809.182933	L09040090-05	AV-NCB-AS-VIS-7-040209	50/50	1		04/08/09 18:29
24	P2.040809.183556	L09040090-07	AV-NCB-PE-UNK-38-C3-040	50/50	1		04/08/09 18:35
25	P2.040809.184210	L09040090-09	AV-NCB-PE-UNK-38-C3D-04	50/50	1		04/08/09 18:42
26	P2.040809.184834	L09040090-11	AV-NCB-AS-UNK-156-04020	50/50	1		04/08/09 18:48
27	P2.040809.185455	WG299480-14	CCV		1		04/08/09 18:54
28	P2.040809.190113	WG299480-15	CCB		1		04/08/09 19:01

Page: 1 Approved: April 10, 2009

Maren Beery



Microbac Laboratories Inc.

00103856

Data Checklist

Date: 08-APR-2009

Analyst: JYH

Analyst: PDM

Method: 6010B

Instrument: PE-ICP 2

Curve Workgroup: 299351

Runlog ID: 27460

Analytical Workgroups: 299317,299344,299203

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0090,0130,0142,0106,0100,0113
Client Forms	X
Level X	
Level 3	0142
Level 4	0090,0130,0113
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	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
09-APR-2009

Secondary Reviewer:
09-APR-2009

Pierre Morris *Maren Berry*



Microbac Laboratories Inc.

00103857

Data Checklist

Date: 08-APR-2009

Analyst: JYH

Analyst: PDM

Method: 6010B

Instrument: PE-ICP 2

Curve Workgroup: 299480

Runlog ID: 27493

Analytical Workgroups: 299317

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0090
Client Forms	X
Level X	
Level 3	
Level 4	0090
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	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
10-APR-2009

Secondary Reviewer:
10-APR-2009

Pierce Morris *Maren Berry*



Analytical Method: 6010B

AAB#: WG299317

Login Number: L09040142

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
49WW06-040409	04/04/09	04/07/09	04/08/09	180	3.55	04/08/09	180	0.192	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: L09040142 Work Group: WG299317
Blank File ID: P2.040809.105007 Blank Sample ID: WG299269-02
Prep Date: 04/08/09 06:32 Instrument ID: PE-ICP2
Analyzed Date: 04/08/09 10:50 Method: 6010B
Analyst: JYH/PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG299269-03	P2.040809.105620	04/08/09 10:56	01
49WW06-040409	L09040142-07	P2.040809.110853	04/08/09 11:08	01

Report Name: BLANK_SUMMARY
PDF File ID: 1361663
Report generated 04/08/2009 13:57



Login Number: L09040142 Prep Date: 04/08/09 06:32 Sample ID: WG299269-02
Instrument ID: PE-ICP2 Run Date: 04/08/09 10:50 Prep Method: 3005A
File ID: P2.040809.105007 Analyst: JYH/PDM Method: 6010B
Workgroup (AAB#): WG299317 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 08-APR-09

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1361664
08-APR-2009 13:57



Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299269-03
Instrument ID: PE-ICP2 Run Time: 10:56 Prep Method: 3005A
File ID: P2.040809.105620 Analyst: JYH/PDM Method: 6010B
Workgroup (AAB#): WG299317 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD27613 Cal ID: PE-ICP - 08-APR-09

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	4.91	98.1	85 - 115	
Iron, Total	2.00	2.03	102	85 - 115	

Loginnum: L09040142 Cal ID: PE-ICP2 - Worknum: WG299317
 Instrument ID: PE-ICP2 Contract #: DACA56-94-D-0020 Method: 6010B
 Parent ID: WG299269-01 File ID: P2.040809.110853 Dil: 1 Matrix: WATER
 Sample ID: WG299269-04 MS File ID: P2.040809.111516 Dil: 1 Units: mg/L
 Sample ID: WG299269-05 MSD File ID: P2.040809.112142 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	ND	5.00	4.80	96.1	5.00	5.02	100	4.39	80 - 120	20	
Iron, Total	0.0551	2.00	1.93	93.6	2.00	2.02	98.1	4.59	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Login: L09040142 Worknum: WG299317
Instrument: PE-ICP2 Method: 6010B
Serial Dil: WG299317-02 File ID: P2.040809.113429 Dil: 5 Units: mg/L
Sample: L09040142-07 File ID: P2.040809.110853 Dil: 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Iron	.0551	F	ND	U		

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to 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.

Sample Login ID: L09040142

Worknum: WG299317

Instrument ID: PE-ICP2

Method: 6010B

Post Spike ID: WG299317-01

File ID: P2.040809.112801

Dil: 1

Units: mg/L

Sample ID: L09040142-07

File ID: P2.040809.110853

Dil: 1

Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	4.90		0	U	5	98.0	75 - 125	
IRON	1.98		0.0551	F	2	96.3	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation

Microbac Laboratories Inc.
Initial Calibration Summary

00103865

Login:	<u>L09040142</u>	Workgroup (AAB#):	<u>WG299317</u>
Analytical Method:	<u>6010B</u>	Instrument ID:	<u>PE-ICP2</u>
ICAL Worknum:	<u>WG299351</u>	Initial Calibration Date:	<u>08-APR-2009 10:07</u>

	WG299351-01		WG299351-02		WG299351-03		WG299351-04		WG299351-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-124	.1	839	.2	1710	10	81800	20	164000	.999999	
IRON	0	1.05	.04	18.2	.08	39.3	4	1840	8	3700	.999995	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-07
Instrument ID: PE-ICP2 Run Time: 10:20 Method: 6010
File ID: P2.040809.102036 Analyst: JYH/PDM Units: mg/L
Workgroup (AAB#): WG299317 Cal ID: PE-ICP2 - 08-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
IRON	.025	.1	.025	U

Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-11
Instrument ID: PE-ICP2 Run Time: 10:43 Method: 6010B
File ID: P2.040809.104350 Analyst: JYH/PDM Units: mg/L
Workgroup (AAB#): WG299317 Cal ID: PE-ICP - 08-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Iron	0.0250	0.100	0.0250	U

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

Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-13
Instrument ID: PE-ICP2 Run Time: 11:47 Method: 6010B
File ID: P2.040809.114712 Analyst: JYH/PDM Units: mg/L
Workgroup (AAB#): WG299317 Cal ID: PE-ICP - 08-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Iron	0.0250	0.100	0.0250	U

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

Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

00103869

Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-06
Instrument ID: PE-ICP2 Run Time: 10:14 Method: 6010B
File ID: P2.040809.101418 Analyst: JYH/PDM Units: mg/L
Workgroup (AAB#): WG299317 Cal ID: PE-ICP - 08-APR-09
QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	10.1	101	90 - 110	
Iron	4	4.16	104	90 - 110	

* Exceeds LIMITS Limit

Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-10
Instrument ID: PE-ICP2 Run Time: 10:37 Method: 6010B
File ID: P2.040809.103733 Analyst: JYH/PDM QC Key: STD
Workgroup (AAB#): WG299317 Cal ID: PE-ICP - 08-APR-09
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.93	mg/L	99.3	90 - 110		
Iron		4.00	4.12	mg/L	103	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L09040142 Run Date: 04/08/2009 Sample ID: WG299351-12
Instrument ID: PE-ICP2 Run Time: 11:40 Method: 6010B
File ID: P2.040809.114054 Analyst: JYH/PDM QC Key: STD
Workgroup (AAB#): WG299317 Cal ID: PE-ICP - 08-APR-09
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Iron		4.00	4.22	mg/L	106	90 - 110		

* Exceeds LIMITS Criteria

Login number: L09040142
Instrument ID: PE-ICP2
Sol. A : WG299351-08
Sol. AB : WG299351-09

File ID: P2.040809.102652
File ID: P2.040809.103212

Workgroup (AAB#): WG299317
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	250	100	250	245	98.0	
Iron	100	97.7	97.7	100	94.5	94.5	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login Number: L09040142
Instrument ID: PE-ICP2

Date: 02/02/2009
Method: 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	-0.00216	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	-0.370	0.0414	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-1.07
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.107	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.207	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0.0753	0	0	0

Login Number: L09040142

Date: 02/02/2009

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0.274	0	0	0
ANTIMONY	206.84	0	0	0	0	19.8
ARSENIC	188.98	0	-0.00673	-0.0875	0	-2.91
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0105
BORON	249.68	0	0	50.1	3.51	1.50
CADMIUM	228.80	0	0	0	-5.41	0
CALCIUM	227.55	0	0	0	126	-21.8
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0.156
COPPER	327.39	0	0	0	0.380	-0.0467
IRON	239.56	0	0.0227	0	1.91	0.331
LEAD	220.35	0	-0.0247	0	0.666	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.638	0	0	0
MANGANESE	257.61	-1.04	0.0280	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0.623	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.0190	0	-0.633	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	-0.0100	0	0.953	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0233	0	0	0.297
VANADIUM	290.88	0	-0.00100	0	0	0
ZINC	206.20	0	-0.0333	15.3	0	-7.08

Login Number: L09040142
Instrument ID: PE-ICP2

Date: 02/02/2009
Method: 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	0.108	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0.00251	0	0	0
BARIUM	233.53	0	0.0520	0	0	0
BERYLLIUM	234.86	0	0.152	0	0	0
BORON	249.68	0	-4.02	0	0	0
CADMIUM	228.80	0	-0.00274	0	0	0
CALCIUM	227.55	-2.44	-4.01	0	0	0.104
CHROMIUM	267.72	0	-0.0239	0	0	0
COBALT	228.62	0	0.00949	0	0	0
COPPER	327.39	0	-0.0851	0	0.154	0.0143
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.551	0.103	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.174	0	0	0
MANGANESE	257.61	-0.0457	-0.156	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	-0.0451	0	0	0
SELENIUM	196.03	0	-1.01	0	0	-0.0113
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	-0.00209	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.138	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.0715	0	0	-0.0400
ZINC	206.20	-0.200	-0.0563	0	0	0

Login Number: L09040142

Date: 02/02/2009

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	32.9	0	0	0
ANTIMONY	206.84	0	-17.4	0	0	0
ARSENIC	188.98	0	3.66	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-0.529	0	-0.00974	0
BORON	249.68	0	-2.08	0	0	0
CADMIUM	228.80	0	0.0112	0	-0.0299	0
CALCIUM	227.55	0	-18.6	0	-1090	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.835	0	0.129	0
COPPER	327.39	0.136	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.0756	-2.50	0	-0.174	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.58	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.199	0	0.0799	0
SILICON	251.61	0	12.9	0	0	0
SILVER	328.07	0.130	0.0781	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-0.00100	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

Login Number: L09040142
Instrument ID: PE-ICP2

Date: 02/02/2009
Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	-10.6	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	2.79	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

Login Number: L09040142
Instrument ID: PE-ICP2

Date: 02/02/2009
Method: 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	-3.59	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-1.83	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0940	0
CALCIUM	227.55	0	0	19.1	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.603	0
IRON	239.56	0	0	0	-0.0613
LEAD	220.35	-0.441	0	-0.150	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	-0.0280	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0553
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	0.823	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-5.47	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-4.00	0	0	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

Login Number: L09040142

Date: 03/25/2009

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	9.0
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	1.8
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	90.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	9.0
Sodium	10.00	180.0
Strontium	10.00	4.5
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	45.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:

All analytes passed acceptance criteria at the specified concentration.

2.2.2 Metals ICP-MS Data

2.2.2.1 Summary Data

LABORATORY REPORT

L09040142

00103882

04/13/09 09:36

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
49WW06-040409	L09040142-07	6020	5	07-APR-09



Report Number: **L09040142**Report Date : **April 13, 2009**

00103883

Sample Number: **L09040142-07**
Client ID: **49WW06-040409**
Matrix: **Water**
Workgroup Number: **WG299242**
Collect Date: **04/04/2009 17:15**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **5**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **04/07/2009 12:22**
Cal Date: **04/07/2009 13:59**
Run Date: **04/07/2009 16:30**
File ID: **EL.040709.163005**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.0139		0.00500	0.00125

1 of 1



2.2.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer ELAN 6100

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/L)

Example:

0.1

100

40

1

0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Final volume

Vi = Initial volume

D = Dilution factor as a multiplier (10X = 10)

Cx = Concentration of element in (ug/kg)

Example:

0.1

200

0.5

1

40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:

Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

$Cdry$ = Concentration calculated as dry weight (ug/kg)

Example:

40

80

50

50 ug/kg = 0.050 mg/kg

STANDARDS KEY

QC Std 1 - ICV

QC Std 2 - ICB

QC Std 3 - CRI - Soil

QC Std 4 - CRI - Water

QC Std 5 - ICSA

QC Std 6 - ICSAB

QC Std 7 - CCV

QC Std 8 - CCB

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.0004	0.05	0.1
Sb	10	0	0.0004	0.05	0.1
As	10	0	0.0004	0.05	0.1
Ba	10	0	0.0004	0.05	0.1
Be	10	0	0.0004	0.05	0.1
Ca	1000	0	0.04	5	10
Cd	10	0	0.0004	0.05	0.1
Cr	10	0	0.0004	0.05	0.1
Co	10	0	0.0004	0.05	0.1
Cu	10	0	0.0004	0.05	0.1
Fe	1000	0	0.04	5	10
Pb	10	0	0.0004	0.05	0.1
Mg	1000	0	0.04	5	10
Mn	10	0	0.0004	0.05	0.1
Ni	10	0	0.0004	0.05	0.1
K	1000	0	0.04	5	10
Se	10	0	0.0004	0.05	0.1
Ag	10	0	0.0004	0.05	0.1
Na	1000	0	0.04	5	10
Tl	10	0	0.0004	0.05	0.1
V	10	0	0.0004	0.05	0.1
Zn	10	0	0.0004	0.05	0.1

Workgroup: WG299169
Analyst: VC
Spike Analyst: VC
Run Date: 04/07/2009 10:10
Method: 3015

SOP: ME407 Revision 10
Spike Solution: STD30482
Spike Witness: SDL
HNO3 Lot #: COA13771
Digest tubes Lot #: COA13696

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG299169-02	BLANK	1	40 mL	100 mL	205.758 g	205.756 g		
2	WG299117-01	FBLK	18	40 mL	100 mL	208.837 g	208.815 g		
3	WG299169-03	LCS	1	40 mL	100 mL	206.053 g	206.049 g	.25 mL	
4	L09040090-03	SAMP	18	40 mL	100 mL	205.709 g	205.672 g		04/10/09
5	L09040090-05	SAMP	18	40 mL	100 mL	205.402 g	205.387 g		04/10/09
6	L09040090-07	SAMP	18	40 mL	100 mL	205.974 g	205.96 g		04/10/09
7	L09040090-09	SAMP	18	40 mL	100 mL	206.221 g	206.215 g		04/10/09
8	L09040090-11	SAMP	18	40 mL	100 mL	206.487 g	206.477 g		04/10/09
9	L09040090-12	SAMP	1	40 mL	100 mL	206.437 g	206.43 g		04/10/09
10	L09040125-01	SAMP	1	40 mL	100 mL	205.552 g	205.553 g		04/14/09
11	L09040126-01	SAMP	1	40 mL	100 mL	205.873 g	205.879 g		04/14/09
12	L09040126-02	SAMP	1	40 mL	100 mL	204.812 g	204.806 g		04/14/09
13	L09040126-03	SAMP	1	40 mL	100 mL	206.864 g	206.856 g		04/14/09
14	WG299169-01	REF	2	40 mL	100 mL	205.802 g	205.791 g		
15	L09040128-01	SAMP	2	40 mL	100 mL	205.802 g	205.791 g		04/13/09
16	L09040142-07	SAMP	1	40 mL	100 mL	205.401 g	205.382 g		04/08/09
17	WG299169-06	DUP	1	40 mL	100 mL	206.49 g	206.478 g		
18	WG299169-04	MS	1	40 mL	100 mL	207.18 g	207.17 g	.25 mL	
19	WG299169-05	MSD	1	40 mL	100 mL	206.222 g	206.216 g	.25 mL	

Analyst: _____

Vicki Collins

Reviewer: _____

Shelly Dent

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 040709B.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: _____
 Maintenance Log ID: 28254

Calibration Std: STD31921 ICV/CCV Std: STD32127 Post Spike: STD27580
 ICSA: STD31706 ICSAB: STD31705

Workgroups: 299242

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.040709.133714	Blank	Blank		1		04/07/09 13:37
2	EL.040709.134254	WG299305-01	Calibration Point		1		04/07/09 13:42
3	EL.040709.134834	WG299305-02	Calibration Point		1		04/07/09 13:48
4	EL.040709.135416	WG299305-03	Calibration Point		1		04/07/09 13:54
5	EL.040709.135958	WG299305-04	Calibration Point		1		04/07/09 13:59
6	EL.040709.140540	WG299305-05	Initial Calibration Verification		1		04/07/09 14:05
7	EL.040709.141232	WG299305-06	Initial Calib Blank		1		04/07/09 14:12
8	EL.040709.141925	WG299305-07	CRQL Check Solid		1		04/07/09 14:19
9	EL.040709.142621	WG299305-08	CRQL Check Water		1		04/07/09 14:26
10	EL.040709.143316	WG299305-09	Interference Check		1		04/07/09 14:33
11	EL.040709.144009	WG299305-10	Interference Check		1		04/07/09 14:40
12	EL.040709.144703	WG299305-11	CCV		1		04/07/09 14:47
13	EL.040709.145354	WG299305-12	CCB		1		04/07/09 14:53
14	EL.040709.155350	WG299169-02	Method/Prep Blank	40/100	1		04/07/09 15:53
15	EL.040709.155952	WG299117-01	Fluid Blank		1		04/07/09 15:59
16	EL.040709.160554	WG299169-03	Laboratory Control S	40/100	1		04/07/09 16:05
17	EL.040709.161156	WG299169-01	Reference Sample		1	L09040128-01	04/07/09 16:11
18	EL.040709.161759	WG299169-04	Matrix Spike	40/100	1	L09040128-01	04/07/09 16:17
19	EL.040709.162402	WG299169-05	Matrix Spike Duplica	40/100	1	L09040128-01	04/07/09 16:24
20	EL.040709.163005	L09040142-07	49WW06-040409	40/100	5		04/07/09 16:30
21	EL.040709.163609	WG299242-01	Post Digestion Spike		5	L09040142-07	04/07/09 16:36
22	EL.040709.164213	WG299242-02	Serial Dilution		25	L09040142-07	04/07/09 16:42
23	EL.040709.164817	L09040090-03	AV-NCB-PE-VIS-38-C1-0402	40/100	1		04/07/09 16:48
24	EL.040709.165441	WG299305-13	CCV		1		04/07/09 16:54
25	EL.040709.170132	WG299305-14	CCB		1		04/07/09 17:01

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Instrument Run Log

Instrument: ELAN-ICP Dataset: 040809B.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: _____
 Maintenance Log ID: 28254

Calibration Std: STD31921 ICV/CCV Std: STD32127 Post Spike: STD27580
 ICSA: STD32228 ICSAB: STD32229
 Workgroups: 299298,299242,299218,299219

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.040809.112358	Blank	Blank		1		04/08/09 11:23
2	EL.040809.112938	WG299428-01	Calibration Point		1		04/08/09 11:29
3	EL.040809.113518	WG299428-02	Calibration Point		1		04/08/09 11:35
4	EL.040809.114059	WG299428-03	Calibration Point		1		04/08/09 11:40
5	EL.040809.114641	WG299428-04	Calibration Point		1		04/08/09 11:46
6	EL.040809.115224	WG299428-05	Initial Calibration Verification		1		04/08/09 11:52
7	EL.040809.115915	WG299428-06	Initial Calib Blank		1		04/08/09 11:59
8	EL.040809.120608	WG299428-07	CRQL Check Solid		1		04/08/09 12:06
9	EL.040809.121304	WG299428-08	CRQL Check Water		1		04/08/09 12:13
10	EL.040809.121958	WG299428-09	Interference Check		1		04/08/09 12:19
11	EL.040809.122652	WG299428-10	Interference Check		1		04/08/09 12:26
12	EL.040809.123453	WG299428-11	Interference Check		1		04/08/09 12:34
13	EL.040809.124146	WG299428-12	CCV		1		04/08/09 12:41
14	EL.040809.124838	WG299428-13	CCB		1		04/08/09 12:48
15	EL.040809.125508	WG299268-02	Method/Prep Blank	.5/200	1		04/08/09 12:55
16	EL.040809.130108	WG299268-03	Laboratory Control S	.5/200	1		04/08/09 13:01
17	EL.040809.130709	WG299268-01	Reference Sample		1	L09040158-07	04/08/09 13:07
18	EL.040809.131310	WG299268-04	Matrix Spike	.506/200	1	L09040158-07	04/08/09 13:13
19	EL.040809.131911	WG299268-05	Matrix Spike Duplica	.506/200	1	L09040158-07	04/08/09 13:19
20	EL.040809.132512	L09040146-01	FTMD02-PM-BF01C	.519/200	1		04/08/09 13:25
21	EL.040809.133114	L09040146-02	FTMD02-PM-BF02C	.518/200	1		04/08/09 13:31
22	EL.040809.133716	L09040146-03	FTMD02-PM-BF03C	.515/200	1		04/08/09 13:37
23	EL.040809.134319	WG299298-01	Post Digestion Spike		1	L09040146-03	04/08/09 13:43
24	EL.040809.134921	WG299298-02	Serial Dilution		5	L09040146-03	04/08/09 13:49
25	EL.040809.135544	WG299428-14	CCV		1		04/08/09 13:55
26	EL.040809.140236	WG299428-15	CCB		1		04/08/09 14:02
27	EL.040809.140907	L09040158-01	A2BS1078D001	.539/200	1		04/08/09 14:09
28	EL.040809.141511	L09040158-02	A2BS1078S001	.531/200	1		04/08/09 14:15
29	EL.040809.142113	L09040158-03	A2BS1079S001	.509/200	1		04/08/09 14:21
30	EL.040809.142713	L09040158-04	A2BS1082S001	.516/200	1		04/08/09 14:27
31	EL.040809.143314	L09040158-05	A2BS1088S001	.506/200	1		04/08/09 14:33
32	EL.040809.143916	L09040158-06	A2BS1091S002		1		04/08/09 14:39
33	EL.040809.144517	WG299268-01	Reference Sample		10	L09040158-07	04/08/09 14:45
34	EL.040809.145118	WG299268-04	Matrix Spike	.506/200	10	L09040158-07	04/08/09 14:51
35	EL.040809.145719	WG299268-05	Matrix Spike Duplica	.506/200	10	L09040158-07	04/08/09 14:57
36	EL.040809.150321	L09040146-01	FTMD02-PM-BF01C	.519/200	50		04/08/09 15:03
37	EL.040809.150943	WG299428-16	CCV		1		04/08/09 15:09

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Instrument Run Log

Instrument: ELAN-ICP Dataset: 040809B.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: _____
 Maintenance Log ID: 28254

Calibration Std: STD31921 ICV/CCV Std: STD32127 Post Spike: STD27580
 ICSA: STD32228 ICSAB: STD32229
 Workgroups: 299298,299242,299218,299219

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	EL.040809.151634	WG299428-17	CCB		1		04/08/09 15:16
39	EL.040809.152305	L09040146-02	FTMD02-PM-BF02C	.518/200	50		04/08/09 15:23
40	EL.040809.152907	L09040146-03	FTMD02-PM-BF03C	.515/200	50		04/08/09 15:29
41	EL.040809.153510	WG299298-01	Post Digestion Spike		50	L09040146-03	04/08/09 15:35
42	EL.040809.154112	WG299298-02	Serial Dilution		250	L09040146-03	04/08/09 15:41
43	EL.040809.154735	WG299428-18	CCV		1		04/08/09 15:47
44	EL.040809.155427	WG299428-19	CCB		1		04/08/09 15:54
45	EL.040809.160155	L09040158-06	A2BS1091S002	.511/200	10		04/08/09 16:01
46	EL.040809.162748	L09040090-03	AV-NCB-PE-VIS-38-C1-0402		1		04/08/09 16:27
47	EL.040809.163412	WG299428-20	CCV		1		04/08/09 16:34
48	EL.040809.164103	WG299428-21	CCB		1		04/08/09 16:41
49	EL.040809.164736	L09040090-05	AV-NCB-AS-VIS-7-040209	40/100	1		04/08/09 16:47
50	EL.040809.165341	L09040090-07	AV-NCB-PE-UNK-38-C3-040	40/100	1		04/08/09 16:53
51	EL.040809.165944	L09040090-09	AV-NCB-PE-UNK-38-C3D-04	40/100	1		04/08/09 16:59
52	EL.040809.170547	L09040090-11	AV-NCB-AS-UNK-156-04020	40/100	1		04/08/09 17:05
53	EL.040809.171149	L09040090-12	AV-NCB-EB-1-040209	40/100	1		04/08/09 17:11
54	EL.040809.171752	L09040125-01	EBQW1838Q001	40/100	1		04/08/09 17:17
55	EL.040809.172355	L09040126-01	EBQW1840Q001	40/100	1		04/08/09 17:23
56	EL.040809.172959	L09040126-02	EBQW1841Q001	40/100	1		04/08/09 17:29
57	EL.040809.173603	L09040126-03	EBQW1842Q001	40/100	1		04/08/09 17:36
58	EL.040809.174207	WG299169-06	Duplicate	40/100	1	L09040128-01	04/08/09 17:42
59	EL.040809.174831	WG299428-22	CCV		1		04/08/09 17:48
60	EL.040809.175522	WG299428-23	CCB		1		04/08/09 17:55
61	EL.040809.180152	WG299146-02	Method/Prep Blank	.5/200	1		04/08/09 18:01
62	EL.040809.180752	WG299146-03	Laboratory Control S	.5/200	1		04/08/09 18:07
63	EL.040809.181352	WG299146-01	Reference Sample		1	L09040123-09	04/08/09 18:13
64	EL.040809.181953	WG299146-04	Matrix Spike	.515/200	1	L09040123-09	04/08/09 18:19
65	EL.040809.182554	WG299146-05	Matrix Spike Duplica	.515/200	1	L09040123-09	04/08/09 18:25
66	EL.040809.183156	L09040123-01	APBS1028D001	.502/200	5		04/08/09 18:31
67	EL.040809.183758	L09040123-02	APBS1028S001	.511/200	5		04/08/09 18:37
68	EL.040809.184400	L09040123-03	APBS1030S001	.515/200	5		04/08/09 18:44
69	EL.040809.185002	L09040123-04	APBS1030S002	.536/200	5		04/08/09 18:50
70	EL.040809.185605	L09040123-05	LXBS1033S001	.502/200	5		04/08/09 18:56
71	EL.040809.190228	WG299428-24	CCV		1		04/08/09 19:02
72	EL.040809.190920	WG299428-25	CCB		1		04/08/09 19:09
73	EL.040809.191551	L09040123-06	LXBS1034S001	.508/200	5		04/08/09 19:15
74	EL.040809.192155	L09040123-07	LXBS1044S001	.546/200	1		04/08/09 19:21

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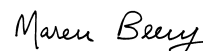
Microbac Laboratories Inc.
Instrument Run Log

Instrument: ELAN-ICP Dataset: 040809B.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: _____
 Maintenance Log ID: 28254

Calibration Std: STD31921 ICV/CCV Std: STD32127 Post Spike: STD27580
 ICSA: STD32228 ICSAB: STD32229
 Workgroups: 299298,299242,299218,299219

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	EL.040809.192757	WG299218-01	Post Digestion Spike		1	L09040123-07	04/08/09 19:27
76	EL.040809.193358	WG299218-02	Serial Dilution		5	L09040123-07	04/08/09 19:33
77	EL.040809.193959	L09040123-08	LXBS1038S001	.514/200	5		04/08/09 19:39
78	EL.040809.194601	L09040123-12	LXBS1045S001	.537/200	1		04/08/09 19:46
79	EL.040809.195203	L09040123-13	LXBS1046S001	.505/200	1		04/08/09 19:52
80	EL.040809.195805	L09040123-14	LXBS1037D001	.511/200	1		04/08/09 19:58
81	EL.040809.200408	L09040123-15	LXBS1037S001	.547/200	5		04/08/09 20:04
82	EL.040809.201011	L09040123-16	LXBS1047S001	.523/200	5		04/08/09 20:10
83	EL.040809.201634	WG299428-26	CCV		1		04/08/09 20:16
84	EL.040809.202326	WG299428-27	CCB		1		04/08/09 20:23
85	EL.040809.202957	L09040123-17	LXBS1048S001	.507/200	1		04/08/09 20:29
86	EL.040809.203601	L09040123-18	LXBS1039S001	.541/200	1		04/08/09 20:36
87	EL.040809.204205	L09040123-19	LXBS1035S001	.505/200	5		04/08/09 20:42
88	EL.040809.204809	WG299147-02	Method/Prep Blank	.5/200	1		04/08/09 20:48
89	EL.040809.205412	WG299147-03	Laboratory Control S	.5/200	1		04/08/09 20:54
90	EL.040809.210014	WG299147-01	Reference Sample		1	L09040123-27	04/08/09 21:00
91	EL.040809.210615	WG299147-04	Matrix Spike	.517/200	1	L09040123-27	04/08/09 21:06
92	EL.040809.211217	WG299147-05	Matrix Spike Duplica	.517/200	1	L09040123-27	04/08/09 21:12
93	EL.040809.211819	L09040123-20	LXBS1040S001	.55/200	1	WG299209-01	04/08/09 21:18
94	EL.040809.212422	L09040123-21	LXBS1049S001	.544/200	1		04/08/09 21:24
95	EL.040809.213045	WG299428-28	CCV		1		04/08/09 21:30
96	EL.040809.213737	WG299428-29	CCB		1		04/08/09 21:37
97	EL.040809.214408	L09040123-22	LXBS1049S002	.507/200	1		04/08/09 21:44
98	EL.040809.215011	WG299219-01	Post Digestion Spike		1	L09040123-22	04/08/09 21:50
99	EL.040809.215615	WG299219-02	Serial Dilution		5	L09040123-22	04/08/09 21:56
100	EL.040809.220219	L09040123-23	LXBS1050S001	.515/200	1		04/08/09 22:02
101	EL.040809.220823	L09040123-24	LXBS1042S001	.509/200	1		04/08/09 22:08
102	EL.040809.221428	L09040123-25	LXBS1041S001	.513/200	1		04/08/09 22:14
103	EL.040809.222031	L09040123-26	LXBS1051S001	.506/200	1		04/08/09 22:20
104	EL.040809.222633	L09040123-30	A2BS1090S001		1		04/08/09 22:26
105	EL.040809.223235	L09040123-31	A2BS1090S002	.55/200	1		04/08/09 22:32
106	EL.040809.223837	L09040123-32	A2BS1089S001	.522/200	1		04/08/09 22:38
107	EL.040809.224500	WG299428-30	CCV		1		04/08/09 22:45
108	EL.040809.225152	WG299428-31	CCB		1		04/08/09 22:51
109	EL.040809.225823	L09040123-33	A2BS1089S002		1		04/08/09 22:58
110	EL.040809.230426	L09040123-34	A2BS1092S001	.516/200	1		04/08/09 23:04
111	EL.040809.231030	L09040123-35	A2BS1092S002	.545/200	1		04/08/09 23:10




Microbac Laboratories Inc.
Instrument Run Log

00103892

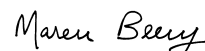
Instrument: ELAN-ICP Dataset: 040809B.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: _____
 Maintenance Log ID: 28254

Calibration Std: STD31921 ICV/CCV Std: STD32127 Post Spike: STD27580
 ICSA: STD32228 ICSAB: STD32229
 Workgroups: 299298,299242,299218,299219

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
112	EL.040809.231634	L09040124-01	APBS1029S001	.507/200	1		04/08/09 23:16
113	EL.040809.232238	L09040124-02	APBS1029D002	.55/200	1		04/08/09 23:22
114	EL.040809.232842	L09040124-03	APBS1029S002	.535/200	1	WG299209-02	04/08/09 23:28
115	EL.040809.233506	WG299428-32	CCV		1		04/08/09 23:35
116	EL.040809.234158	WG299428-33	CCB		1		04/08/09 23:41

Page: 4 Approved: April 09, 2009




Microbac Laboratories Inc.

00103893

Data Checklist

Date: 07-APR-2009

Analyst: JYH

Analyst: NA

Method: 6020

Instrument: ELAN

Curve Workgroup: 299305

Runlog ID: 27444

Analytical Workgroups: 299242

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	
Case Narrative	090,128,142
Client Forms	X
Level X	
Level 3	142
Level 4	090
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	
Comments	

Primary Reviewer:

Secondary Reviewer:

Microbac Laboratories Inc.

00103894

Data Checklist

Date: 08-APR-2009

Analyst: JYH

Analyst: NA

Method: 6020

Instrument: ELAN

Curve Workgroup: 299428

Runlog ID: 27471

Analytical Workgroups: 299298,299242,299218,299219

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	
Case Narrative	146,158,090,125,126,123,124
Client Forms	X
Level X	
Level 3	
Level 4	146,158,090,125,126,123,124
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	MMB
Comments	

Primary Reviewer:

*J. J. H.*Secondary Reviewer:
09-APR-2009*Maren Berry*

Analytical Method: 6020

AAB#: WG299242

Login Number: L09040142

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
49WW06-040409	04/04/09	04/07/09	04/07/09	180	2.80	04/07/09	180	0.172	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number:	<u>L09040142</u>	Work Group:	<u>WG299242</u>
Blank File ID:	<u>EL.040709.155350</u>	Blank Sample ID:	<u>WG299169-02</u>
Prep Date:	<u>04/07/09 10:10</u>	Instrument ID:	<u>ELAN-ICP</u>
Analyzed Date:	<u>04/07/09 15:53</u>	Method:	<u>6020</u>
Analyst:	<u>JYH</u>		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG299169-03	EL.040709.160554	04/07/09 16:05	01
49WW06-040409	L09040142-07	EL.040709.163005	04/07/09 16:30	DL01

Login Number: L09040142 Prep Date: 04/07/09 10:10 Sample ID: WG299169-02
Instrument ID: ELAN-ICP Run Date: 04/07/09 15:53 Prep Method: 3015
File ID: EL.040709.155350 Analyst: JYH Method: 6020
Workgroup (AAB#): WG299242 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 07-APR-09

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Arsenic, Total	0.000250	0.00100	0.000250	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1360876
08-APR-2009 09:12



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299169-03
Instrument ID: ELAN-ICP Run Time: 16:05 Prep Method: 3015
File ID: EL.040709.160554 Analyst: JYH Method: 6020
Workgroup (AAB#): WG299242 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD30482 Cal ID: ELAN-I - 07-APR-09

Analytes	Expected	Found	% Rec	LCS Limits	Q
Arsenic, Total	0.0625	0.0639	102	80 - 120	

Loginnum: L09040142 Cal ID: ELAN-ICP - Worknum: WG299242
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG299169-01 File ID: EL.040709.161156 Dil: 1 Matrix: WATER
 Sample ID: WG299169-04 MS File ID: EL.040709.161759 Dil: 1 Units: mg/L
 Sample ID: WG299169-05 MSD File ID: EL.040709.162402 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Arsenic	0.00124	0.0625	0.0611	95.8	0.0625	0.0615	96.4	0.642	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Login: L09040142 Worknum: WG299242
Instrument: ELAN-ICP Method: 6020
Serial Dil: WG299242-02 File ID: EL.040709.164213 Dil: 25 Units: ug/L
Sample: L09040142-07 File ID: EL.040709.163005 Dil: 5

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Arsenic	5.55	X	8.075	F	45.50	

U = Result is below MDL.

F = Result is greater than or equal to MDL and less than the RL.

X = Result is greater than or equal to 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.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 1360872

04/08/2009 09:12



Sample Login ID: L09040142
Instrument ID: ELAN-ICP
Post Spike ID: WG299242-01
Sample ID: L09040142-07

Worknum: WG299242
Method: 6020
File ID: EL.040709.163609 Dil: 5 Units: ug/L
File ID: EL.040709.163005 Dil: 5 Matrix: Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ARSENIC	54.4		1.11		50	106.6	75 - 125	

N = % Recovery exceeds control limits

F = Result is between MDL and RL

U = Sample result is below MDL. A value of zero is used in the calculation

Microbac Laboratories Inc.
Initial Calibration Summary

00103902

Login:	<u>L09040142</u>	Workgroup (AAB#):	<u>WG299242</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ELAN-ICP</u>
ICAL Worknum:	<u>WG299305</u>	Initial Calibration Date:	<u>07-APR-2009 13:59</u>

	WG299305-01		WG299305-02		WG299305-03		WG299305-04		R	Q
	Conc	INT	Conc	INT	Conc	INT	Conc	INT		
ARSENIC	0	-331	.4	393	50	84000	100	162000	.999933	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-06
Instrument ID: ELAN-ICP Run Time: 14:12 Method: 6020
File ID: EL.040709.141232 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG299242 Cal ID: ELAN-ICP - 07-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.1	.4	.1	U

Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-12
Instrument ID: ELAN-ICP Run Time: 14:53 Method: 6020
File ID: EL.040709.145354 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG299242 Cal ID: ELAN-I - 07-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.100	0.400	0.100	U

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

Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-14
Instrument ID: ELAN-ICP Run Time: 17:01 Method: 6020
File ID: EL.040709.170132 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG299242 Cal ID: ELAN-I - 07-APR-09
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.100	0.400	0.100	U

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

Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

00103906

Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-05
Instrument ID: ELAN-ICP Run Time: 14:05 Method: 6020
File ID: EL.040709.140540 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG299242 Cal ID: ELAN-I - 07-APR-09
QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Arsenic	50	50.2	100	90 - 110	

* Exceeds LIMITS Limit



Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-11
Instrument ID: ELAN-ICP Run Time: 14:47 Method: 6020
File ID: EL.040709.144703 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG299242 Cal ID: ELAN-I - 07-APR-09
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Arsenic	50.0	49.3	ug/L	98.6	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L09040142 Run Date: 04/07/2009 Sample ID: WG299305-13
Instrument ID: ELAN-ICP Run Time: 16:54 Method: 6020
File ID: EL.040709.165441 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG299242 Cal ID: ELAN-I - 07-APR-09
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Arsenic	50.0	49.9	ug/L	99.9	90 - 110	

* Exceeds LIMITS Criteria

Login number: L09040142
Instrument ID: ELAN-ICP
Sol. A : WG299305-09
Sol. AB : WG299305-10

File ID: EL.040709.143316
File ID: EL.040709.144009

Workgroup (AAB#): WG299242
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Arsenic	NS	-0.0290	NS	100	104	104	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login: L09040142 Analytical Method: 6020
 Analytical Workgroup: WG299242 Matrix: 1
 Instrument: ELAN-ICP Analyst: JYH
 ICAL Date: 07-APR-2009 13:42

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L09040142-07	SAMP	07-APR-2009 16:30	99.393	104.171	100.808	103.844
WG299117-01	FBLK	07-APR-2009 15:59	103.291	104.522	99.751	101.196
WG299169-01	REF	07-APR-2009 16:11	101.606	102.95	98.821	99.624
WG299169-02	BLANK	07-APR-2009 15:53	104.685	105.008	100.968	101.621
WG299169-03	LCS	07-APR-2009 16:05	103.661	105.634	99.498	101.117
WG299169-04	MS	07-APR-2009 16:17	101.427	104.114	99.832	102.479
WG299169-05	MSD	07-APR-2009 16:24	102.464	105.931	101.517	103.609
WG299242-01	PSPK	07-APR-2009 16:36	104.064	101.226	101.571	104.635
WG299242-02	SERIAL	07-APR-2009 16:42	106.243	102.526	104.251	105.891
WG299305-05	ICV	07-APR-2009 14:05	105.311	100.568	108.182	106.988
WG299305-06	ICB	07-APR-2009 14:12	105.532	102.063	105.084	104.366
WG299305-11	CCV	07-APR-2009 14:47	105.78	108.23	109.868	106.376
WG299305-12	CCB	07-APR-2009 14:53	103.12	104.366	101.68	102.498
WG299305-13	CCV	07-APR-2009 16:54	111.105	103.017	104.378	107.052
WG299305-14	CCB	07-APR-2009 17:01	110.903	103.347	102.848	108.469

Acceptance criteria: 30% - 120%
 Underlined recoveries are out of range

INT_STD_ICPMS - Modified 03/05/2008
 PDF File ID: 1360881
 Report generated: 04/08/2009 09:12



Login Number: L09040142

Date: 04/01/2009

Instrument ID: ELAN-ICP

Method: 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:

All analytes passed acceptance criteria at the specified concentration.

2.3 General Chemistry Data

2.3.1 Nitrate Data

2.3.1.1 Summary Data

LABORATORY REPORT

L09040142

00103915

04/13/09 09:36

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
49WW04-040409	L09040142-06	353.2	1	07-APR-09



Report Number: **L09040142**Report Date : **April 13, 2009**

00103916

Sample Number: **L09040142-06**
Client ID: **49WW04-040409**
Matrix: **Water**
Workgroup Number: **WG299288**
Collect Date: **04/04/2009 14:05**

PrePrep Method: **NONE**
Prep Method: **353.2**
Analytical Method: **353.2**
Analyst: **JBK**
Dilution: **1**
Units: **mg/L**

Instrument: **SMARTCHEM**
Prep Date: **04/08/2009 09:00**
Cal Date: **04/07/2009 16:16**
Run Date: **04/08/2009 09:00**
File ID: **SC09040816082401**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Nitrogen, Nitrate-Nitrite		0.141		0.0500	0.0250

1 of 1



2.3.1.2 QC Summary Data

Example Nitrate Calculations

$$(\text{absorbance} - \text{intercept}) / (\text{slope} * \text{dilution}) = \text{mg/L}$$

where:

absorbance = reading from the spectrophotometer

intercept = calculated from calibration standard absorbencies

slope = calculated from calibration standard absorbencies

dilution = dilution of the distillate in decimal form (ex. 1/5 dilution = 0.2)

Microbac Laboratories Inc.

00103919

Data Checklist

Date: 08-APR-2009

Analyst: JBK

Analyst: NA

Method: NO3

Instrument: SMARTCHEM

Curve Workgroup: NA

Runlog ID: _____

Analytical Workgroups: WG299288

Calibration/Linearity	04/08/2009
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	
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	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
08-APR-2009



Secondary Reviewer:
08-APR-2009



Analytical Method: 353.2

AAB#: WG299288

Login Number: L09040142

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
49WW04-040409	04/04/09	04/07/09	04/08/09	28	3.79	04/08/09	28	3.79	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: L09040142
Blank File ID: SC09040816071001
Prep Date: 04/08/09 09:00
Analyzed Date: 04/08/09 09:00
Analyst: JBK

Work Group: WG299288
Blank Sample ID: WG299288-01
Instrument ID: SMARTCHEM
Method: 353.2

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS2	WG299288-03	SC09040816072601	04/08/09 09:00	
49WW04-040409	L09040142-06	SC09040816082401	04/08/09 09:00	
DUP	WG299288-05	SC09040816074401	04/08/09 09:00	
LCS	WG299288-02	SC09040816072001	04/08/09 09:00	

Report Name: BLANK_SUMMARY
PDF File ID: 1361772
Report generated 04/08/2009 16:22



Login Number: L09040142 Prep Date: 04/08/09 09:00 Sample ID: WG299288-01
Instrument ID: SMARTCHEM Run Date: 04/08/09 09:00 Prep Method: 353.2
File ID: SC09040816071001 Analyst: JBK Method: 353.2
Workgroup (AAB#): WG299288 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: SMARTC - 07-APR-09

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Nitrogen, Nitrate-Nitrite	0.0250	0.0500	0.0250	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1361773
08-APR-2009 16:22



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00103923

Login Number: L09040142 Analyst: JBK Prep Method: 353.2
Instrument ID: SMARTCHEM Matrix: Water Method: 353.2
Workgroup (AAB#): WG299288 Units: mg/L
QC Key: STD Lot #: STD32005
Sample ID: WG299288-02 LCS File ID: SC09040816072001 Run Date: 04/08/2009 09:00
Sample ID: WG299288-03 LCS2 File ID: SC09040816072601 Run Date: 04/08/2009 09:00

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrogen, Nitrate-Nitrite	1.00	0.965	96.5	1.00	0.989	98.9	2.46	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1361774
Report generated: 04/08/2009 16:22



2.3.1.3 Raw Data

WORKGROUP: WG299288

SMARTCHEM RUN LOG

Daily Check

- ☒ Lamp On
☒ Probe Rinse Full
☒ DI Water > 1/2 Full
☒ Wash Solution > 1/2 Full
☒ NO3 Reagent bottle connected / purged
☒ NO3 pH adj to pH 5-9
- ☒ WBL Run
☒ Reagents Full
☒ Dilution H₂O Full
☒ Waste Container Check

- 1) Workgroup _____
Plan # 20090408001
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte	1	2	3
User Prepared Curve			
SC Prepared Curve			
Position			
1-1	ICV 1.5		
1-2	Blank		
1-3	LCS 1		
1-4	LCS Dup		
1-5	NO2 1		
1-6	04-142-06		
1-7	04-128-01		
1-8	04-154-08	1/5	color
1-9	-09	1/50	
1-10	04-153-01		.
1-11	Dup 128-01		
1-12	MS ↓		
1-13			
1-14			
1-15			
1-16			
1-17			
1-18			
1-19			
1-20			
1-21			
1-22			
2-1			
2-2			
2-3			

Analyte	1	2	3
Position			
2-4			
2-5			
2-6			
2-7			
2-8			
2-9			
2-10			
2-11			
2-12			
2-13			
2-14			
2-15			
2-16			
2-17			
2-18			
2-19			
2-20			
2-21			
2-22			
2-23			
2-24			
2-25			
2-26			
3-1			
3-2			

NOTES:

- * Run NO2 std on NO3 runs
- * LCS/LCS Dup all parameters
- * MS/MSD (NO3, TKN, NH3)

DCN#78969



Danna Kesson

Approved: April 08, 2009

WORKGROUP: WG299288

SMARTCHEM RUN LOG

Analyte	1	2	3
Position			
3-3			
3-4			
3-5			
3-6			
3-7			
3-8			
3-9			
3-10			
3-11			
3-12			
3-13			
3-14			
3-15			

Analyte	1	2	3
Position			
3-16			
3-17			
3-18			
3-19			
3-20			
3-21			
3-22			
3-23			
3-24			
3-25			
3-26			
3-27			
3-28			

☐ Chloride EPA 325.2/SM 4500-Cl⁻ E
☐ Sulfate EPA 375.4
☐ Alkalinity EPA 310.2
☒ Nitrate-Nitrite EPA 353.2/SM 4500-NO₃ F

☐ Ammonia EPA 350.1/SM 4500-NH₃ B
☐ TKN EPA 351.2
☐ Phos EPA 365.4

Analyte	NO ₂		
SOP & Revision	✓ 3532		
Curve Stock (SC made)	Std 32002		
Curve ID (user made)		NO ₂ Std 31928	
ICV	Std 32003		
CCV	Std 2300432004		
LCS	Std 32005		
MS	Std 30016		
	Dilution 0.1/25/5 = 0.5		

Comments: _____

Analyst: _____

Date: _____

DCN#78969



Approved: April 08, 2009

MICROBAC (OVD)

SMARTCHEM REPORT

UNITS: MG/L

Method : WNO3 -Unit [mg/L] - EPA 353.2 Nitrate-NitrItte

Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.000	0.0134	0.00		9:00:04 AM
DIL-1	RBL	0.000	0.0104	0.00		9:01:16 AM
DIL-1	RBL	0.000	0.0104	0.00		9:02:28 AM
DIL-1	Std-1	0.000	-0.0024	0.00	INV	9:03:40 AM
SR5-1	Std-2	0.040	0.0090	0.00		9:04:52 AM
SR5-2	Std-3	0.100	0.0236	0.00		9:06:04 AM
SR5-3	Std-4	0.500	0.1268	0.00		9:07:16 AM
SR5-4	Std-5	1.000	0.2663	0.00		9:08:28 AM
ST-1	Std-6	2.000	0.5200	0.00		9:09:40 AM
1	ICV 1.5	1.502	0.3919	0.00		9:10:52 AM
2	WG299288-01 BLANK	0.004	-0.0007	0.00	INV	9:12:04 AM
3	WG299288-02 LCS1	0.965	0.2510	0.00		9:13:16 AM
4	WG299288-03 LCSDUP	0.989	0.2575	0.00		9:14:28 AM
5	NO2	1.014	0.2641	0.00		9:15:40 AM
6	L09040142-06	0.141	0.0351	0.00		9:16:53 AM
7	L09040128-01	0.388	0.0998	0.00		9:18:04 AM
8	L09040154-08 (5)	0.075	0.0178	0.00		9:19:16 AM
9	L09040154-09 (50)	1.189	0.3099	0.00		9:20:28 AM
10	L09040153-01	4.702 X	1.2306	0.00	><,LH	9:21:40 AM
ST-2	CCV (1 mg/L)	0.986	0.2567	98.62		9:22:52 AM
ST-3	CCB (0 mg/L)	-0.015	-0.0058	0.00	INV,><,LL	9:24:04 AM
11	DUP 128-01	0.278	0.0711	0.00		9:25:16 AM
12	MS 128-01	0.825	0.2144	0.00		9:26:28 AM
13	ID 13	-0.008 X	-0.0040	0.00	INV,><,LL	9:27:40 AM
14	ID 14	-0.018 X	-0.0065	0.00	INV,><,LL	9:28:52 AM
15	ID 15	-0.016 X	-0.0060	0.00	INV,><,LL	9:30:05 AM
ST-2	CCV (1 mg/L)	0.947	0.2463	94.65		9:31:16 AM
ST-3	CCB (0 mg/L)	-0.018	-0.0065	0.00	INV,><,LL	9:32:28 AM
10-[1/4]	L09040153-01	4.754	0.3097	0.00	LH NO ₂ = 0.001	9:41:28 AM
ST-2	CCV (0 mg/L) (1 mg/L)	0.981	0.2553	-0.00 98.1		9:42:22 AM
ST-3	CCB (0 mg/L)	-0.003	-0.0027	0.00	INV,><,LL	9:43:35 AM

Report Date :04/08/2009

Run Date :4/8/2009

Operator : WESTCO

Plan # :20090408001

Plan Description : NO3-A-JBK/04/08/2009

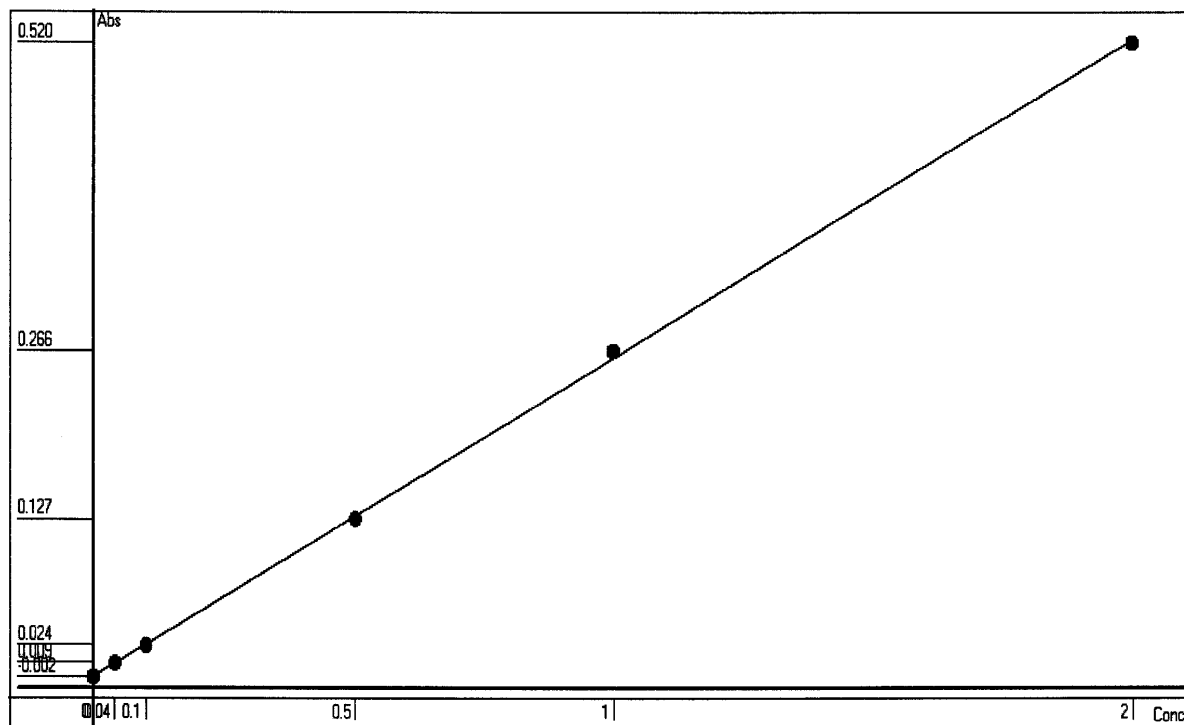


Approved: April 08, 2009

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:1/1/2010 User:Westco Scientific

Plan #: 20090408001 Description : [NO3-A-JBK/04/08/2009] Unit



Point	OD	Conc	Recalc Conc	% Error
1	-0.0024	0	-0.0023	-0.23
2	0.0090	0.04	0.0412	3.00
3	0.0236	0.1	0.0969	-3.10
4	0.1268	0.5	0.4907	-1.86
5	0.2663	1	1.0229	2.29
6	0.5200	2	1.9908	-0.46

Conc= +3.8151*Abso +0.0069 R²=0.9998

RBL
0.0104
0

Report Date 4/8/2009 Run Date 4/8/2009

Danna Johnson

Approved: April 08, 2009

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
April 13, 2009

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
AM - ALISON J. MILLER	AML - ANTHONY M. LONG	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
CMS - CRYSTAL M. STEPHENS	CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL
CTB - CHRIS T. BUCINA	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	ECL - ERIC C. LAWSON	EDA - ERIN D. AGEES
ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR
HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON
JKP - JACQUELINE K. PARSONS	JKT - JANE K. THOMPSON	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATHRYN E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LHT - LANCE H. THOMPSON
LKN - LINDA K. NEDEFF	LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON
MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	NPM - NATHANIEL P. MILLER
PDM - PIERCE D. MORRIS	RAH - ROY A. HALSTEAD	RB - ROBERT BUCHANAN
REK - ROBERT E. KYER	RLK - ROBIN L. KLINGER	RWC - RODNEY W. CAMPBELL
SAV - SARAH A. VANDENBERG	SDH - SHANA D. HINYARD	SDL - SHELLEY D. LENT
SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF	TDH - TRICIA D. HUCK
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

Qualkey: STD

Qualifier	Description
*	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
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
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
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
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
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
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 (RL).
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.

177

00103933

Client: <u>Shaw-</u>			
Workorder Number: <u>B</u>			
Date Received: <u>4-7-09</u>			
Delivered by: ☐ Fedx ☒ UPS ☐ Client ☐ Courier Time: <u>0924</u>			
Opened by: <u>RLK</u>			
IR Temp Gun: ☐ G ☒ H			
Logged by: <u>RLK</u> <u>L 09040142</u>			

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
<u>556</u>	<u>4</u>	<u>1Z 401 663 22 1010 352</u>	<u>/</u>	<u>water / 24 hr. TAT</u>

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?	☐	☒	☐	①
Were the correct containers and volumes received?	☒	☐	☐	
Were correct preservatives used? (water only) <u>JKT</u>	☒	☒	☐	②
Were pH ranges acceptable? (voa's excluded)	☒	☐	☐	
Were VOA samples free of headspace (< 6mm)?	☒	☐	☐	
Were samples received within EPA hold times?	☒	☐	☐	

Discrepancy/Comments/Other Problems

<u>Donley Rec'd 2 trips instead of 3</u>
<u>② NO3NO2 PH6 added 1 ml H2SO4 Lot# RGT13641</u>
<u>PH < 2 now. JKT</u>

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

00103934

Login: L09040142

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 08-APR-2009

Samplenum **Container ID** **Products**
L09040142-07 569453 AL AS-MS FE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	07-APR-2009 11:17	ERE	
2	PREP	W1	DIG	07-APR-2009 11:31	REK	RLK
3	EXTRACT	DIG	METALS	07-APR-2009 12:18		VC
4	STORE	DIG	A1	08-APR-2009 10:06	RLK	REK

Samplenum **Container ID** **Products**
L09040142-06 569452 N03N02

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	07-APR-2009 11:17	ERE	
2	ANALYZ	W1	WET	07-APR-2009 11:25	JDH	RLK

Samplenum **Container ID** **Products**
L09040142-03 569449 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

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



Internal Chain of Custody Report

00103935

Login: L09040142

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 08-APR-2009

Samplenum **Container ID** **Products**
L09040142-05 569451 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Samplenum **Container ID** **Products**
L09040142-08 569454 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Samplenum **Container ID** **Products**
L09040142-02 569448 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

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



Internal Chain of Custody Report

00103936

Login: L09040142

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 08-APR-2009

Samplenum **Container ID** **Products**
L09040142-01 569447 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:28	MRT	RLK

Samplenum **Container ID** **Products**
L09040142-04 569450 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	07-APR-2009 11:17	ERE	
2	ANALYZ	V1	ORG4	07-APR-2009 11:29	MRT	RLK

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





158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • <http://www.microbac.com>

Laboratory Report Number: L09040570

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac'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.

Kathy Albertson	<i>Team Chemist/Data Specialist</i>	kalbertson@microbac.com
Stephanie Mossburg	<i>Team Chemist/Data Specialist</i>	smossburg@microbac.com
Tony Long	<i>Team Chemist/Data Specialist</i>	tlong@microbac.com
Amanda Fickiesen	<i>Client Services Specialist</i>	afickiesen@microbac.com
Annie Brown	<i>Client Services Specialist</i>	abrown@microbac.com

This report was reviewed on April 30, 2009.

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 accrediting authority listed below. 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 Microbac Laboratories.

This report was certified on April 30, 2009.

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

David Vandenberg - Managing Director

State of origin: Texas

Accrediting authority: Texas Commission on Environmental Quality ID:T104704252-07-TX

QAPP: Microbac OVD

This report contains a total of 87 pages.

Look closer. Go further. Do more.



Microbac REPORT L09040570
PREPARED FOR Shaw E I, Inc.
WORK ID:

1.0 Introduction	3
2.1 Volatiles Data	9
2.1.1 Volatiles GCMS Data (8260)	10
2.1.1.1 Summary Data	11
2.1.1.2 QC Summary Data	19
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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L09040570

CHAIN OF CUSTODY: The chain of custody number was 5728

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

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., 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: 24-APR-09

<i>Stephane Morabuz</i>

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.

MARY E. SCHILLING



April 29, 2009

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L09040570
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 300778, 300852
 Reviewer Name: MARY E. SCHILLING
 LRC Date: April 29, 2009

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?		✓			2
Was the ICAL curve verified for each analyte?		✓			3
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?	✓				

00103944

EXCEPTIONS REPORT

ER# - Description

#1: The RPD for bromomethane exceeded the upper advisory limit in the LCS/LCSD analyzed 04/28/09 on HPMS-6. The #2: Vinyl acetate exceeded the upper control limit in the CCV analyzed 04/27/09 on HPMS-11. Bromomethane was below the lower control limit in the CCV analyzed 04/28/09 on HPMS-6.

#3: Carbon disulfide exceeded the upper control limit in the alternate source analyzed 04/21/09 on HPMS-11.

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

L09040570

00103948

04/30/09 10:01

Submitted By

Microbac Laboratories Inc.
158 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: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 389869/ 390836(GWTP)

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW12 042209	L09040570-01	8260B	1	23-APR-09
47WW16 042209	L09040570-02	8260B	1	23-APR-09
TRIP BLANK	L09040570-03	8260B	1	23-APR-09



Sample Number: **L09040570-01**
 Client ID: **47WW12 042209**
 Matrix: **Water**
 Workgroup Number: **WG300852**
 Collect Date: **04/22/2009 13:00**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **04/28/2009 17:12**
 Cal Date: **03/19/2009 14:09**
 Run Date: **04/28/2009 17:12**
 File ID: **6M83130**

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	0.538	J	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
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	0.150
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	0.360	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L09040570**Report Date : **April 30, 2009**

00103950

Sample Number: **L09040570-01**
 Client ID: **47WW12 042209**
 Matrix: **Water**
 Workgroup Number: **WG300852**
 Collect Date: **04/22/2009 13:00**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **04/28/2009 17:12**
 Cal Date: **03/19/2009 14:09**
 Run Date: **04/28/2009 17:12**
 File ID: **6M83130**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	101	86	118		
1,2-Dichloroethane-d4	99.0	80	120		
Toluene-d8	98.9	88	110		
4-Bromofluorobenzene	107	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

Sample Number: L09040570-02
 Client ID: 47WW16 042209
 Matrix: Water
 Workgroup Number: WG300852
 Collect Date: 04/22/2009 13:26
 Sample Tag: 01

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

Instrument: HPMS6
 Prep Date: 04/28/2009 17:45
 Cal Date: 03/19/2009 14:09
 Run Date: 04/28/2009 17:45
 File ID: 6M83131

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
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	0.150
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

Report Number: **L09040570**Report Date : **April 30, 2009**

00103952

Sample Number: **L09040570-02**
 Client ID: **47WW16 042209**
 Matrix: **Water**
 Workgroup Number: **WG300852**
 Collect Date: **04/22/2009 13:26**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **04/28/2009 17:45**
 Cal Date: **03/19/2009 14:09**
 Run Date: **04/28/2009 17:45**
 File ID: **6M83131**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	97.2	86	118		
1,2-Dichloroethane-d4	96.8	80	120		
Toluene-d8	93.3	88	110		
4-Bromofluorobenzene	99.7	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: L09040570-03
 Client ID: TRIP BLANK
 Matrix: Water
 Workgroup Number: WG300778
 Collect Date: 04/22/2009 00:01
 Sample Tag: 01

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

Instrument: HPMS11
 Prep Date: 04/27/2009 20:47
 Cal Date: 04/21/2009 17:05
 Run Date: 04/27/2009 20:47
 File ID: 11M58772

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	2.54	J	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	0.460	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	0.150
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

Report Number: **L09040570**Report Date : **April 30, 2009**

00103954

Sample Number: **L09040570-03**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG300778**
 Collect Date: **04/22/2009 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **04/27/2009 20:47**
 Cal Date: **04/21/2009 17:05**
 Run Date: **04/27/2009 20:47**
 File ID: **11M58772**

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	93.1	86	118		
1,2-Dichloroethane-d4	86.9	80	120		
Toluene-d8	99.8	88	110		
4-Bromofluorobenzene	107	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

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

Microbac Laboratories Inc.
Instrument Run Log

00103958

Instrument: HPMS6 Dataset: 031909
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 7
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Maintenance Log ID: 27140

Internal Standard: STD31689 Surrogate Standard: STD31866
 CCV: STD31874 LCS: STD31848 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG297666

Comments: Not reporting second tune-archon errored.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M82294	BLANK	NA	1	1		03/19/09 07:38
2	6M82295	WG297666-01 50NG BFB STD 8260	NA	1	1	STD31709	03/19/09 08:08
3	6M82296	WG297666-02 0.3ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 08:39
4	6M82297	WG297666-03 0.4ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 09:12
5	6M82298	WG297666-04 1 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 09:44
6	6M82299	WG297666-05 2 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 10:53
7	6M82300	WG297666-06 5 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 11:25
8	6M82301	WG297666-07 20 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 12:01
9	6M82302	WG297666-08 50 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 12:33
10	6M82303	WG297666-09 100 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 13:05
11	6M82304	WG297666-10 200 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 13:37
12	6M82305	WG297666-11 300 ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 14:09
13	6M82306	SYSTEM BLANK	NA	1	1		03/19/09 14:44
14	6M82307	WG297666-12 20ug/L ALT SOURCE	NA	1	1	STD31848	03/19/09 15:21
15	6M82308	WG297666-13 100ug/L ALT SOURCE	NA	1	1	STD31848	03/19/09 15:54
16	6M82309	WG297666-12 20ug/L ALT SOURCE	NA	1	1	STD31848	03/19/09 16:26
17	6M82310	WG297778-01 50NG BFB STD 8260	NA	1	1	STD31709	03/19/09 16:54
18	6M82311	WG297778-02 50ug/L WATER STD 8260	NA	1	1	STD31874	03/19/09 17:20
19	6M82312	WG297779-01 VBLK0319 BLANK 8260	NA	1	1		03/19/09 17:52
20	6M82313	WG297779-01 VBLK0319 BLANK 8260	NA	1	1		03/19/09 18:24
21	6M82314	WG297779-02 20ug/L LCS 8260	NA	1	1	STD31848	03/19/09 18:57
22	6M82315	L09030327-16 A 826-SPE	NA	1	1		03/19/09 19:29
23	6M82316	L09030424-08 A 826-A9	NA	1	1		03/19/09 20:01

Comments

Seq.	Rerun	Dil.	Reason	Analytes
14				
File ID: 6M82307				
RR for SS.				

Approved: March 20, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103959

Instrument: HPMS11 Dataset: 042109
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28445

Internal Standard: STD32372 Surrogate Standard: STD32280
 CCV: STD32377 LCS: STD32400 MS/MSD: STD32400
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: 300248

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M58633	WG300248-01 50ng BFB STD 8260	NA	1	1	STD32213	04/21/09 11:05
2	11M58634	SYSTEM BLANK	NA	1	1		04/21/09 11:30
3	11M58635	WG300248-01 50ng BFB STD 8260	NA	1	1	STD32213	04/21/09 12:06
4	11M58636	WG300248-02 0.3 ug/L STD	NA	1	1	STD32377	04/21/09 12:23
5	11M58637	WG300248-03 0.4 ug/L STD	NA	1	1	STD32377	04/21/09 12:56
6	11M58638	WG300248-04 1.0 ug/L STD	NA	1	1	STD32377	04/21/09 13:27
7	11M58639	WG300248-05 2.0 ug/L STD	NA	1	1	STD32377	04/21/09 13:58
8	11M58640	WG300248-06 5.0 ug/L STD	NA	1	1	STD32377	04/21/09 14:29
9	11M58641	WG300248-07 20 ug/L STD	NA	1	1	STD32377	04/21/09 15:00
10	11M58642	WG300248-08 50 ug/L STD	NA	1	1	STD32377	04/21/09 15:31
11	11M58643	WG300248-09 100 ug/L STD	NA	1	1	STD32377	04/21/09 16:03
12	11M58644	WG300248-10 200 ug/L STD	NA	1	1	STD32377	04/21/09 16:34
13	11M58645	WG300248-11 300 ug/L STD	NA	1	1	STD32377	04/21/09 17:05
14	11M58646	SYSTEM BLANK	NA	1	1	STD32377	04/21/09 17:36
15	11M58647	SYSTEM BLANK	NA	1	1	STD32377	04/21/09 18:07
16	11M58648	SYSTEM BLANK	NA	1	1	STD32377	04/21/09 18:38
17	11M58649	WG300248-12 ALT SRC 20ug/L	NA	1	1	STD32400	04/21/09 19:10
18	11M58650	WG300248-12 OXY ALT SRC	NA	1	1	STD32399	04/21/09 19:41
19	11M58651	SYSTEM BLANK	NA	1	1		04/21/09 20:12
20	11M58652	SYSTEM BLANK	NA	1	1		04/21/09 20:43

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2				
File ID: 11M58634				
IS response too high adjusted EM volts.				
17				
File ID: 11M58649				
Acrolein double spiked.				

Approved: April 22, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103960

Instrument: HPMS11 Dataset: 042709
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28504

Internal Standard: STD32372 Surrogate Standard: STD32280
 CCV: STD32480 LCS: STD32485 MS/MSD: STD32485
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG300778

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M58754	WG300777-01 50ng BFB STD 8260	NA	1	1	STD32213	04/27/09 11:34
2	11M58755	WG300777-02 CCV 50ug/L STD	NA	1	1	STD32480	04/27/09 11:59
3	11M58756	WG300778-01 BLANK 8260	NA	1	1		04/27/09 12:31
4	11M58757	WG300778-01 BLANK 8260	NA	1	1		04/27/09 13:02
5	11M58758	WG300778-02 LCS 20ug/L 8260	NA	1	1	STD32400	04/27/09 13:33
6	11M58759	WG300778-03 LCSD 20ug/L 8260	NA	1	1	STD32400	04/27/09 14:04
7	11M58760	SYSTEM BLANK	NA	1	1		04/27/09 14:35
8	11M58761	L09040520-02 A 826-SPE	<2	1	1		04/27/09 15:06
9	11M58762	L09040520-01 B 826-SPE	<2	1	1		04/27/09 15:37
10	11M58763	L09040520-03 B 10X 826-SPE	<2	1	10		04/27/09 16:07
11	11M58764	L09040520-05 B 10X 826-SPE	<2	1	10		04/27/09 16:38
12	11M58765	L09040543-01 B 1000X 826-SPE	<2	1	1000		04/27/09 17:10
13	11M58766	L09040543-02 B 1000X 826-SPE	<2	1	1000		04/27/09 17:40
14	11M58767	L09040610-01 A 826-SPE1	<2	1	1		04/27/09 18:11
15	11M58768	L09040610-03 A 826-SPE1	<2	1	1		04/27/09 18:43
16	11M58769	L09040610-05 A 826-SPE1	<2	1	1		04/27/09 19:14
17	11M58770	L09040610-07 A 826-SPE1	<2	1	1		04/27/09 19:45
18	11M58771	L09040610-09 A 826-SPE1	<2	1	1		04/27/09 20:16
19	11M58772	L09040570-03 A 826-LOW	<2	1	1		04/27/09 20:47
20	11M58773	L09040598-15 A 826-LOW	<2	1	1		04/27/09 21:18
21	11M58774	L09040598-16 A 826-LOW	<2	1	1		04/27/09 21:49
22	11M58775	L09040598-17 A 826-LOW	<2	1	1		04/27/09 22:20
23	11M58776	L09040598-18 A 826-LOW	<2	1	1		04/27/09 22:51
24	11M58777	L09040598-19 A 826-LOW	<2	1	1		04/27/09 23:22
25	11M58778	SYSTEM BLANK	NA	1	1		04/27/09 23:53
26	11M58779	SYSTEM BLANK	NA	1	1		04/28/09 00:24

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M58756				
dnr				
12	X	5000	Over Calibration Range	chlorobenzene

Approved: April 28, 2009

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Tiffany Bailey



Microbac Laboratories Inc.
Instrument Run Log

00103961

Instrument: HPMS11 Dataset: 042709
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 28504

Internal Standard: STD32372 Surrogate Standard: STD32280
 CCV: STD32480 LCS: STD32485 MS/MSD: STD32485
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG300778

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M58765				
14	X	1	Carry-over contamination	
File ID: 11M58767				
dnr				
24	X	10	Over Calibration Range	m+p-xylene, o-xylene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene
File ID: 11M58777				
Only one vial recieved.				

Approved: April 28, 2009

Page: 2

Tiffany Bailey



Microbac Laboratories Inc.
Instrument Run Log

00103962

Instrument: HPMS6 Dataset: 042809
Analyst1: MES Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 28523

Internal Standard: STD32171 Surrogate Standard: STD32264
CCV: STD32480/STD32078 LCS: STD32485 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG300852

Comments: 598-01 and -14 analyzed with headspace per client.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M83111	BLANK	NA	1	1		04/28/09 07:35
2	6M83112	WG300851-01 50NG BFB STD 8260	NA	1	1	STD32213	04/28/09 08:03
3	6M83113	WG300851-02 50ug/L WATER STD 8260	NA	1	1	STD32480	04/28/09 08:31
4	6M83114	WG300853-01 100ug/L APPIX/FOO STD	NA	1	1	STD32078	04/28/09 09:03
5	6M83115	WG300852-01 VBLK0428 BLANK 8260	NA	1	1		04/28/09 09:36
6	6M83116	WG300852-02 20ug/L LCS 8260	NA	1	1	STD32485	04/28/09 10:08
7	6M83117	WG300852-03 20ug/L LCSDUP 8260	NA	1	1	STD32485	04/28/09 10:40
8	6M83118	WG300852-02 20ug/L LCS 8260	NA	1	1	STD32485	04/28/09 11:14
9	6M83119	WG300852-01 VBLK0428 BLANK 8260	NA	1	1		04/28/09 11:46
10	6M83120	L09040617-01 B D1 20X 826-SPE	<2	1	20		04/28/09 12:18
11	6M83121	L09040541-03 B 826-SPE1	<2	1	1		04/28/09 12:50
12	6M83122	L09040541-05 B 826-SPE1	<2	1	1		04/28/09 13:23
13	6M83123	L09040541-01 B 200X 826-SPE1	<2	1	200		04/28/09 13:55
14	6M83124	L09040541-07 B 50X 826-SPE1	<2	1	50		04/28/09 14:28
15	6M83125	L09040567-02 B 826-SPE	<2	1	1		04/28/09 15:00
16	6M83126	L09040567-04 B 826-SPE	<2	1	1		04/28/09 15:33
17	6M83127	L09040617-02 B D1 20X 826-SPE	<2	1	20		04/28/09 16:07
18	6M83128	L09040617-08 B D1 50X 826-SPE	<2	1	50		04/28/09 16:39
19	6M83130	L09040570-01 A 826-LOW	<2	1	1		04/28/09 17:12
20	6M83131	L09040570-02 A 826-LOW	<2	1	1		04/28/09 17:45
21	6M83132	L09040506-04 A 25X 8260	<2	12	25		04/28/09 18:17
22	6M83133	L09040598-10 A A1 826-LOW	<2	1	1		04/28/09 18:50
23	6M83134	L09040598-14 A A1 826-LOW	<2	1	1		04/28/09 19:23
24	6M83135	L09040593-01 A D1 100X 8260	<2	1	100		04/28/09 19:55
25	6M83136	SYSTEM BLANK	NA	1	1		04/28/09 20:28
26	6M83137	SYSTEM BLANK	NA	1	1		04/28/09 21:00

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5				
File ID: 6M83115				
DNR-carryover.				
6				

Approved: April 29, 2009

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Microbac Laboratories Inc.
Instrument Run Log

00103963

Instrument: HPMS6 Dataset: 042809
Analyst1: MES Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 28523

Internal Standard: STD32171 Surrogate Standard: STD32264
CCV: STD32480/STD32078 LCS: STD32485 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG300852

Comments: 598-01 and -14 analyzed with headspace per client.

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M83116				
RR for 14-dioxane				
14	X	25	Analyzed too dilute	
File ID: 6M83124				
DNR				

Approved: April 29, 2009

Page: 2

Tiffany Bailey

Microbac Laboratories Inc.

00103964

Data Checklist

Date: 19-MAR-2009

Analyst: MES

Analyst: NA

Method: 8260/624

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 27140

Analytical Workgroups: WG297666

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
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:
20-MAR-2009

Secondary Reviewer:
20-MAR-2009





Microbac Laboratories Inc.

00103965

Data Checklist

Date: 21-APR-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 27690

Analytical Workgroups: 300248

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	
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	
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	
Reruns	NA
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
22-APR-2009

Secondary Reviewer:
22-APR-2009



Microbac Laboratories Inc.

00103966

Data Checklist

Date: 27-APR-2009

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

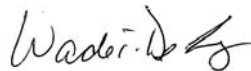
Curve Workgroup: NA

Runlog ID: 27777

Analytical Workgroups: 300778

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

Primary Reviewer:
28-APR-2009



Secondary Reviewer:
28-APR-2009




Microbac Laboratories Inc.

00103967

Data Checklist

Date: 28-APR-2009

Analyst: MES

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 27811

Analytical Workgroups: WG300852

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	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	NA
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	TMB
Check for compliance with method and project specific requirements	
Check the completeness of reported information	
Check the information for the report narrative	
Check the reasonableness of the results	

Primary Reviewer:
29-APR-2009



Secondary Reviewer:
29-APR-2009




Analytical Method: 8260B

AAB#: WG300778

Login Number: L09040570

Client ID	Date Collected	Date Received	Date Extracted	Max Hold Time Ext.	Time Held Ext.	Date Analyzed	Max Hold Time Anal	Time Held Anal.	Q
TRIP BLANK	04/22/09	04/23/09	04/27/09	14	5.87	04/27/09	14	5.87	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG300852

Login Number: L09040570

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
47WW16 042209	04/22/09	04/23/09	04/28/09	14	6.18	04/28/09	14	6.18	
47WW12 042209	04/22/09	04/23/09	04/28/09	14	6.18	04/28/09	14	6.18	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L09040570
Instrument Id: HPMS6
Workgroup (AAB#): WG300852

Method: 8260
CAL ID: HPMS6 - 19-MAR-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09040570-01	1.00	01	99.0	101	107	98.9
L09040570-02	1.00	01	96.8	97.2	99.7	93.3
WG300852-01	1.00	01	80.2	89.3	96.3	92.3
WG300852-02	1.00	01	82.7	92.2	99.8	99.3
WG300852-03	1.00	01	85.2	96.7	104	102

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: L09040570
Instrument Id: HPMS11
Workgroup (AAB#): WG300778

Method: 8260
CAL ID: HPMS11 - 21-APR-09
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L09040570-03	1.00	01	86.9	93.1	107	99.8
WG300778-01	1.00	01	83.2	93.3	105	97.3
WG300778-02	1.00	01	86.6	95.4	103	97.8
WG300778-03	1.00	01	86.3	95.0	101	97.7

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

METHOD BLANK SUMMARY

Login Number: L09040570
Blank File ID: 11M58757
Prep Date: 04/27/09 13:02
Analyzed Date: 04/27/09 13:02
Analyst: WTD

Work Group: WG300778
Blank Sample ID: WG300778-01
Instrument ID: HPMS11
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG300778-02	11M58758	04/27/09 13:33	01
LCS2	WG300778-03	11M58759	04/27/09 14:04	01
TRIP BLANK	L09040570-03	11M58772	04/27/09 20:47	01

Report Name: BLANK_SUMMARY
PDF File ID: 1378566
Report generated 04/29/2009 16:06



METHOD BLANK SUMMARY

Login Number: <u>L09040570</u>	Work Group: <u>WG300852</u>
Blank File ID: <u>6M83119</u>	Blank Sample ID: <u>WG300852-01</u>
Prep Date: <u>04/28/09 11:46</u>	Instrument ID: <u>HPMS6</u>
Analyzed Date: <u>04/28/09 11:46</u>	Method: <u>8260B</u>
Analyst: <u>MES</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS2	WG300852-03	6M83117	04/28/09 10:40	01
LCS	WG300852-02	6M83118	04/28/09 11:14	01
47WW12 042209	L09040570-01	6M83130	04/28/09 17:12	01
47WW16 042209	L09040570-02	6M83131	04/28/09 17:45	01



Login Number: L09040570 Prep Date: 04/27/09 13:02 Sample ID: WG300778-01
 Instrument ID: HPMS11 Run Date: 04/27/09 13:02 Prep Method: 5030B
 File ID: 11M58757 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG300778 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 21-APR-09

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	0.250	1	U

Report Name: BLANK

PDF ID: 1378567

29-APR-2009 16:06



Login Number: L09040570 Prep Date: 04/27/09 13:02 Sample ID: WG300778-01
 Instrument ID: HPMS11 Run Date: 04/27/09 13:02 Prep Method: 5030B
 File ID: 11M58757 Analyst: WTD Method: 8260B
 Workgroup (AAB#): WG300778 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 21-APR-09

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	0.200	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	0.150	1.00	0.150	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	0.500	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	93.3	86 - 118	PASS
1,2-Dichloroethane-d4	83.2	80 - 120	PASS
Toluene-d8	97.3	88 - 110	PASS
4-Bromofluorobenzene	105	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1378567

29-APR-2009 16:06



Login Number: L09040570 Prep Date: 04/28/09 11:46 Sample ID: WG300852-01
 Instrument ID: HPMS6 Run Date: 04/28/09 11:46 Prep Method: 5030B
 File ID: 6M83119 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG300852 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 19-MAR-09

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	0.250	1	U

Report Name: BLANK

PDF ID: 1378567

29-APR-2009 16:06



Login Number: L09040570 Prep Date: 04/28/09 11:46 Sample ID: WG300852-01
 Instrument ID: HPMS6 Run Date: 04/28/09 11:46 Prep Method: 5030B
 File ID: 6M83119 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG300852 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 19-MAR-09

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	0.200	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	0.150	1.00	0.150	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	0.500	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	89.3	86 - 118	PASS
1,2-Dichloroethane-d4	80.2	80 - 120	PASS
Toluene-d8	92.3	88 - 110	PASS
4-Bromofluorobenzene	96.3	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1378567

29-APR-2009 16:06



Login Number: L09040570 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG300852 Units: ug/L
QC Key: STD Lot #: STD32485

Sample ID: WG300852-02 LCS File ID: 6M83118 Run Date: 04/28/2009 11:14
Sample ID: WG300852-03 LCS2 File ID: 6M83117 Run Date: 04/28/2009 10:40

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	21.0	105	20.0	24.8	124	16.7	40 - 142	20	
Benzene	20.0	21.6	108	20.0	20.6	103	5.08	80 - 121	20	
Bromobenzene	20.0	21.9	110	20.0	21.1	105	4.01	80 - 120	20	
Bromochloromethane	20.0	22.6	113	20.0	22.3	112	1.38	65 - 130	20	
Bromodichloromethane	20.0	21.1	106	20.0	20.4	102	3.55	80 - 131	20	
Bromoform	20.0	18.0	90.2	20.0	18.2	91.1	1.00	70 - 130	20	
Bromomethane	20.0	11.4	56.9	20.0	14.4	72.0	23.4	30 - 145	20	#
2-Butanone	20.0	19.5	97.7	20.0	22.1	111	12.3	30 - 150	20	
n-Butylbenzene	20.0	23.2	116	20.0	22.1	110	4.90	80 - 131	20	
sec-Butylbenzene	20.0	22.0	110	20.0	20.9	104	5.00	80 - 127	20	
tert-Butylbenzene	20.0	21.5	108	20.0	20.5	102	5.10	80 - 126	20	
Carbon disulfide	20.0	19.5	97.4	20.0	18.7	93.5	4.15	58 - 138	20	
Carbon tetrachloride	20.0	19.9	99.3	20.0	18.7	93.5	6.07	65 - 140	20	
Chlorobenzene	20.0	20.6	103	20.0	19.8	98.9	4.28	80 - 120	20	
Chlorodibromomethane	20.0	21.1	105	20.0	20.8	104	1.29	60 - 135	20	
Chloroethane	20.0	20.3	102	20.0	19.3	96.7	4.89	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	22.2	111	20.0	22.2	111	0.0399	58 - 151	20	
Chloroform	20.0	20.1	100	20.0	19.5	97.3	3.09	80 - 125	20	
Chloromethane	20.0	19.3	96.3	20.0	22.2	111	14.3	40 - 125	20	
2-Chlorotoluene	20.0	20.9	104	20.0	19.9	99.5	4.72	80 - 127	20	
4-Chlorotoluene	20.0	21.1	106	20.0	20.4	102	3.55	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	20.5	102	20.0	21.4	107	4.56	50 - 130	20	
1,2-Dibromoethane	20.0	21.6	108	20.0	21.0	105	2.98	80 - 125	20	
Dibromomethane	20.0	21.0	105	20.0	20.8	104	1.07	75 - 125	20	
1,2-Dichlorobenzene	20.0	21.4	107	20.0	20.7	104	3.24	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.8	104	20.0	20.0	100	3.98	80 - 120	20	
1,4-Dichlorobenzene	20.0	20.0	100	20.0	19.5	97.7	2.47	80 - 120	20	
Dichlorodifluoromethane	20.0	17.0	85.2	20.0	16.0	80.2	5.99	50 - 133	20	
1,1-Dichloroethane	20.0	20.8	104	20.0	20.0	100	3.72	80 - 125	20	
1,2-Dichloroethane	20.0	19.1	95.5	20.0	18.6	92.9	2.84	80 - 129	20	
1,1-Dichloroethene	20.0	20.1	100	20.0	18.9	94.6	5.93	80 - 132	20	
cis-1,2-Dichloroethene	20.0	23.1	115	20.0	21.8	109	5.69	70 - 125	20	
trans-1,2-Dichloroethene	20.0	23.9	120	20.0	23.1	115	3.50	80 - 127	20	
1,2-Dichloropropane	20.0	22.4	112	20.0	21.2	106	5.53	80 - 120	20	
1,3-Dichloropropane	20.0	21.1	106	20.0	20.6	103	2.37	80 - 120	20	
2,2-Dichloropropane	20.0	20.4	102	20.0	19.2	95.8	6.45	80 - 133	20	
cis-1,3-Dichloropropene	20.0	22.5	113	20.0	21.4	107	4.97	70 - 130	20	
trans-1,3-Dichloropropene	20.0	18.5	92.7	20.0	18.2	91.0	1.82	80 - 130	20	
1,1-Dichloropropene	20.0	21.9	109	20.0	20.5	102	6.51	75 - 130	20	
Ethylbenzene	20.0	21.7	109	20.0	20.5	102	5.86	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1376904
Report generated: 04/29/2009 16:06



Login Number: L09040570 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG300852 Units: ug/L
QC Key: STD Lot #: STD32485

Sample ID: WG300852-02 LCS File ID: 6M83118 Run Date: 04/28/2009 11:14
Sample ID: WG300852-03 LCS2 File ID: 6M83117 Run Date: 04/28/2009 10:40

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	19.3	96.4	20.0	19.9	99.7	3.31	55 - 130	20	
Hexachlorobutadiene	20.0	20.6	103	20.0	19.5	97.3	5.56	72 - 132	20	
Isopropylbenzene	20.0	16.8	84.0	20.0	16.0	80.2	4.60	80 - 122	20	
p-Isopropyltoluene	20.0	21.7	109	20.0	20.8	104	4.20	80 - 122	20	
4-Methyl-2-pentanone	20.0	21.0	105	20.0	21.3	106	1.16	64 - 140	20	
Methylene chloride	20.0	20.5	102	20.0	22.9	115	11.3	80 - 123	20	
Naphthalene	20.0	25.8	129	20.0	26.7	134	3.42	59 - 149	20	
n-Propylbenzene	20.0	22.5	113	20.0	21.5	108	4.36	80 - 129	20	
Styrene	20.0	19.2	95.8	20.0	18.5	92.6	3.43	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.8	104	20.0	20.3	102	2.23	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	19.9	99.4	20.0	20.1	101	1.31	79 - 125	20	
Tetrachloroethene	20.0	21.3	107	20.0	20.1	101	5.84	80 - 124	20	
Toluene	20.0	22.0	110	20.0	20.8	104	5.93	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	24.4	122	20.0	24.4	122	0.0115	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	24.2	121	20.0	24.0	120	0.872	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.1	101	20.0	18.9	94.3	6.52	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.7	108	20.0	20.9	104	3.67	80 - 125	20	
Trichloroethene	20.0	22.3	112	20.0	21.3	107	4.52	80 - 122	20	
Trichlorofluoromethane	20.0	17.2	86.1	20.0	16.4	82.1	4.78	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.0	105	20.0	21.3	106	1.04	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	22.3	111	20.0	21.5	108	3.26	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	19.3	96.3	20.0	18.6	92.8	3.70	80 - 127	20	
Vinyl acetate	20.0	14.3	71.7	20.0	14.3	71.6	0.0812	10 - 150	20	
Vinyl chloride	20.0	16.1	80.5	20.0	15.0	75.2	6.82	65 - 140	20	
o-Xylene	20.0	22.6	113	20.0	21.7	109	3.85	80 - 122	20	
m-, p-Xylene	40.0	43.5	109	40.0	41.7	104	4.42	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	82.7	85.2	80 - 120	PASS
Dibromofluoromethane	92.2	96.7	86 - 118	PASS
4-Bromofluorobenzene	99.8	104	86 - 115	PASS
Toluene-d8	99.3	102	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1376904
Report generated: 04/29/2009 16:06



Login Number: L09040570 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG300778 Units: ug/L
QC Key: STD Lot #: STD32400

Sample ID: WG300778-02 LCS File ID: 11M58758 Run Date: 04/27/2009 13:33
Sample ID: WG300778-03 LCS2 File ID: 11M58759 Run Date: 04/27/2009 14:04

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	16.2	80.8	20.0	19.1	95.3	16.4	40 - 142	20	
Benzene	20.0	19.9	99.7	20.0	20.1	101	1.01	80 - 121	20	
Bromobenzene	20.0	20.4	102	20.0	21.1	106	3.20	80 - 120	20	
Bromochloromethane	20.0	19.6	98.2	20.0	20.2	101	2.83	65 - 130	20	
Bromodichloromethane	20.0	20.3	102	20.0	20.8	104	2.36	80 - 131	20	
Bromoform	20.0	16.2	81.1	20.0	16.4	82.2	1.30	70 - 130	20	
Bromomethane	20.0	22.0	110	20.0	23.5	117	6.26	30 - 145	20	
2-Butanone	20.0	16.2	81.1	20.0	16.9	84.3	3.98	30 - 150	20	
n-Butylbenzene	20.0	20.4	102	20.0	20.9	105	2.58	80 - 131	20	
sec-Butylbenzene	20.0	20.8	104	20.0	21.4	107	2.83	80 - 127	20	
tert-Butylbenzene	20.0	20.4	102	20.0	21.2	106	3.75	80 - 126	20	
Carbon disulfide	20.0	26.8	134	20.0	27.8	139	3.85	58 - 138	20	*
Carbon tetrachloride	20.0	21.6	108	20.0	22.0	110	1.94	65 - 140	20	
Chlorobenzene	20.0	19.5	97.5	20.0	19.7	98.5	1.11	80 - 120	20	
Chlorodibromomethane	20.0	19.3	96.3	20.0	19.5	97.3	1.04	60 - 135	20	
Chloroethane	20.0	18.8	94.1	20.0	19.0	95.0	0.973	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	17.7	88.7	20.0	18.2	90.9	2.46	58 - 151	20	
Chloroform	20.0	19.4	97.1	20.0	19.5	97.7	0.636	80 - 125	20	
Chloromethane	20.0	12.0	59.9	20.0	12.4	61.8	2.98	40 - 125	20	
2-Chlorotoluene	20.0	19.5	97.4	20.0	19.5	97.5	0.0569	80 - 127	20	
4-Chlorotoluene	20.0	22.1	111	20.0	22.9	115	3.38	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	18.1	90.4	20.0	18.6	93.0	2.79	50 - 130	20	
1,2-Dibromoethane	20.0	19.5	97.5	20.0	19.7	98.4	0.831	80 - 125	20	
Dibromomethane	20.0	19.3	96.5	20.0	19.6	98.2	1.73	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.2	96.1	20.0	19.6	98.2	2.15	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.5	97.5	20.0	19.8	99.0	1.53	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.3	96.6	20.0	19.4	97.2	0.605	80 - 120	20	
Dichlorodifluoromethane	20.0	18.4	91.8	20.0	19.2	95.8	4.27	50 - 133	20	
1,1-Dichloroethane	20.0	19.4	97.1	20.0	20.1	101	3.51	80 - 125	20	
1,2-Dichloroethane	20.0	18.9	94.4	20.0	19.1	95.5	1.10	80 - 129	20	
1,1-Dichloroethene	20.0	19.5	97.4	20.0	20.0	100	2.77	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.5	102	20.0	20.6	103	0.860	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.4	107	20.0	21.9	109	2.39	80 - 127	20	
1,2-Dichloropropane	20.0	19.6	97.9	20.0	19.8	99.2	1.24	80 - 120	20	
1,3-Dichloropropane	20.0	18.4	91.8	20.0	18.5	92.4	0.565	80 - 120	20	
2,2-Dichloropropane	20.0	20.7	103	20.0	21.1	106	2.26	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.4	102	20.0	20.4	102	0.294	70 - 130	20	
trans-1,3-Dichloropropene	20.0	17.6	87.9	20.0	17.6	88.0	0.0897	80 - 130	20	
1,1-Dichloropropene	20.0	20.1	101	20.0	21.1	106	4.92	75 - 130	20	
Ethylbenzene	20.0	19.5	97.3	20.0	19.9	99.7	2.42	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1376904
Report generated: 04/29/2009 16:06



Login Number: L09040570 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG300778 Units: ug/L
QC Key: STD Lot #: STD32400

Sample ID: WG300778-02 LCS File ID: 11M58758 Run Date: 04/27/2009 13:33
Sample ID: WG300778-03 LCS2 File ID: 11M58759 Run Date: 04/27/2009 14:04

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	16.6	83.2	20.0	17.3	86.3	3.64	55 - 130	20	
Hexachlorobutadiene	20.0	20.4	102	20.0	21.1	106	3.49	72 - 132	20	
Isopropylbenzene	20.0	17.6	88.2	20.0	18.1	90.4	2.42	80 - 122	20	
p-Isopropyltoluene	20.0	20.4	102	20.0	20.9	104	2.22	80 - 122	20	
4-Methyl-2-pentanone	20.0	17.0	85.0	20.0	17.6	88.1	3.62	64 - 140	20	
Methylene chloride	20.0	19.0	94.8	20.0	19.4	96.9	2.22	80 - 123	20	
Naphthalene	20.0	19.3	96.7	20.0	19.9	99.4	2.79	59 - 149	20	
n-Propylbenzene	20.0	21.0	105	20.0	21.8	109	3.45	80 - 129	20	
Styrene	20.0	20.3	101	20.0	20.8	104	2.29	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	19.2	95.8	20.0	19.6	98.1	2.38	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	19.0	95.0	20.0	19.7	98.6	3.71	79 - 125	20	
Tetrachloroethene	20.0	19.8	99.1	20.0	20.2	101	2.01	80 - 124	20	
Toluene	20.0	20.1	101	20.0	20.6	103	2.35	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.5	92.7	20.0	19.0	94.9	2.29	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.0	94.9	20.0	19.6	97.8	3.03	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.2	101	20.0	20.7	103	2.31	80 - 134	20	
1,1,2-Trichloroethane	20.0	18.8	94.0	20.0	18.9	94.6	0.591	80 - 125	20	
Trichloroethene	20.0	18.2	90.8	20.0	18.8	94.0	3.39	80 - 122	20	
Trichlorofluoromethane	20.0	17.9	89.5	20.0	18.9	94.3	5.24	62 - 151	20	
1,2,3-Trichloropropane	20.0	19.3	96.7	20.0	19.0	94.9	1.84	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.3	106	20.0	21.6	108	1.35	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	20.7	104	20.0	21.4	107	3.20	80 - 127	20	
Vinyl acetate	20.0	19.9	99.7	20.0	19.9	99.7	0.0023	10 - 150	20	
Vinyl chloride	20.0	17.8	89.1	20.0	16.6	82.8	7.35	65 - 140	20	
o-Xylene	20.0	19.5	97.3	20.0	19.9	99.4	2.08	80 - 122	20	
m-, p-Xylene	40.0	39.9	99.7	40.0	41.0	102	2.71	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	86.6	86.3	80 - 120	PASS
Dibromofluoromethane	95.4	95.0	86 - 118	PASS
4-Bromofluorobenzene	103	101	86 - 115	PASS
Toluene-d8	97.8	97.7	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1376904
Report generated: 04/29/2009 16:06



BFB

Login Number: L09040570
Instrument: HPMS11
Analyst: WTD
Workgroup: WG300248

Tune ID: WG300248-01
Run Date: 04/21/2009
Run Time: 12:06
File ID: 11M58635

Cal ID: HPMS11-21-APR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	24.6	2305	PASS
75.0	95.0	30.0	60.0	47.1	4418	PASS
95.0	95.0	100	100	100	9375	PASS
96.0	95.0	5.00	9.00	6.78	636	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	85.7	8039	PASS
175	174	5.00	9.00	6.75	543	PASS
176	174	95.0	101	98.6	7927	PASS
177	176	5.00	9.00	6.82	541	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG300248-02	STD	01	04/21/2009 12:23	
WG300248-03	STD	01	04/21/2009 12:56	
WG300248-04	STD	01	04/21/2009 13:27	
WG300248-05	STD	01	04/21/2009 13:58	
WG300248-06	STD	01	04/21/2009 14:29	
WG300248-07	STD	01	04/21/2009 15:00	
WG300248-08	STD-CCV	01	04/21/2009 15:31	
WG300248-09	STD	01	04/21/2009 16:03	
WG300248-10	STD	01	04/21/2009 16:34	
WG300248-11	STD	01	04/21/2009 17:05	
WG300248-12	SSCV	01	04/21/2009 19:10	
WG300248-12	SSCV	02	04/21/2009 19:41	

* Sample past 12 hour tune limit

BFB

Login Number: L09040570
Instrument: HPMS11
Analyst: WTD
Workgroup: WG300777

Tune ID: WG300777-01
Run Date: 04/27/2009
Run Time: 11:34
File ID: 11M58754

Cal ID: HPMS11-21-APR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.0	5266	PASS
75.0	95.0	30.0	60.0	51.2	10007	PASS
95.0	95.0	100	100	100	19536	PASS
96.0	95.0	5.00	9.00	7.00	1368	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	80.4	15716	PASS
175	174	5.00	9.00	7.99	1256	PASS
176	174	95.0	101	100	15741	PASS
177	176	5.00	9.00	7.41	1167	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG300777-02	CCV	01	04/27/2009 11:59	
WG300778-01	BLANK	01	04/27/2009 13:02	
WG300778-02	LCS	01	04/27/2009 13:33	
WG300778-03	LCS2	01	04/27/2009 14:04	
L09040570-03	TRIP BLANK	01	04/27/2009 20:47	

* Sample past 12 hour tune limit

BFB

Login Number: L09040570
Instrument: HPMS6
Analyst: MES
Workgroup: WG297666

Tune ID: WG297666-01
Run Date: 03/19/2009
Run Time: 08:08
File ID: 6M82295

Cal ID: HPMS6 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	22.6	11981	PASS
75.0	95.0	30.0	60.0	51.4	27264	PASS
95.0	95.0	100	100	100	53002	PASS
96.0	95.0	5.00	9.00	6.66	3531	PASS
173	174	0	2.00	0.525	206	PASS
174	95.0	50.0	100	74.0	39226	PASS
175	174	5.00	9.00	7.55	2963	PASS
176	174	95.0	101	98.3	38552	PASS
177	176	5.00	9.00	6.43	2479	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG297666-02	STD	01	03/19/2009 08:39	
WG297666-03	STD	01	03/19/2009 09:12	
WG297666-04	STD	01	03/19/2009 09:44	
WG297666-05	STD	01	03/19/2009 10:53	
WG297666-06	STD	01	03/19/2009 11:25	
WG297666-07	STD	01	03/19/2009 12:01	
WG297666-08	STD-CCV	01	03/19/2009 12:33	
WG297666-09	STD	01	03/19/2009 13:05	
WG297666-10	STD	01	03/19/2009 13:37	
WG297666-11	STD	01	03/19/2009 14:09	
WG297666-13	SSCV	01	03/19/2009 15:54	
WG297666-12	SSCV	01	03/19/2009 16:26	

* Sample past 12 hour tune limit

BFB

Login Number: L09040570
Instrument: HPMS6
Analyst: MES
Workgroup: WG300851

Tune ID: WG300851-01
Run Date: 04/28/2009
Run Time: 08:03
File ID: 6M83112

Cal ID: HPMS6 - 19-MAR-09

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.2	9134	PASS
75.0	95.0	30.0	60.0	49.1	22237	PASS
95.0	95.0	100	100	100	45309	PASS
96.0	95.0	5.00	9.00	7.14	3237	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	77.3	35029	PASS
175	174	5.00	9.00	6.95	2435	PASS
176	174	95.0	101	95.6	33496	PASS
177	176	5.00	9.00	6.53	2188	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG300851-02	CCV	01	04/28/2009 08:31	
WG300852-03	LCS2	01	04/28/2009 10:40	
WG300852-02	LCS	01	04/28/2009 11:14	
WG300852-01	BLANK	01	04/28/2009 11:46	
L09040570-01	47WW12 042209	01	04/28/2009 17:12	
L09040570-02	47WW16 042209	01	04/28/2009 17:45	

* Sample past 12 hour tune limit

Login Number: L09040570
Analytical Method: 8260B
ICAL Workgroup: WG300248

Instrument ID: HPMS11
Initial Calibration Date: 21-APR-09 17:05
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.4071	3.21		
1,2-Dichloropropane	CCC	0.2658	6.38		
Chloroform	CCC	0.4291	5.54		
Ethylbenzene	CCC	0.4533	11.2		
Toluene	CCC	1.196	3.92		
Vinyl Chloride	CCC	0.3660	22.4		0.99900
1,1,2,2-Tetrachloroethane	SPCC	0.3759	20.5		0.99900
1,1-Dichloroethane	SPCC	0.4830	4.04		
Bromoform	SPCC	0.1731	27.2		0.99900
Chlorobenzene	SPCC	0.7889	5.76		
Chloromethane	SPCC	0.9699	24.2		0.99900
1,1,1,2-Tetrachloroethane		0.3058	13.1		
1,1,1-Trichloroethane		0.3765	7.70		
1,1,2-Trichloroethane		0.2178	6.10		
1,1-Dichloropropene		0.3128	5.40		
1,2,3-Trichlorobenzene		0.7320	9.27		
1,2,3-Trichloropropane		0.1353	5.82		
1,2,4-Trichlorobenzene		0.8217	11.1		
1,2,4-Trimethylbenzene		2.004	6.59		
1,2-Dibromo-3-Chloropropane		0.08384	8.30		
1,2-Dibromoethane		0.2066	9.37		
1,2-Dichlorobenzene		1.167	5.32		
1,2-Dichloroethane		0.3674	4.16		
1,3,5-Trimethylbenzene		1.948	5.08		
1,3-Dichlorobenzene		1.237	5.19		
1,3-Dichloropropane		0.3965	4.77		
1,4-Dichlorobenzene		1.287	5.13		
2,2-Dichloropropane		0.3440	10.7		
2-Butanone		0.1155	5.93		
2-Chloroethyl Vinyl Ether		0.1180	8.40		
2-Chlorotoluene		1.871	5.12		
2-Hexanone		0.2105	6.84		
4-Chlorotoluene		1.585	3.44		
4-Methyl-2-Pentanone		0.08026	5.76		
Acetone		0.07663	14.4		
Benzene		0.9163	3.37		
Bromobenzene		0.5993	4.58		
Bromochloromethane		0.1397	9.03		
Bromodichloromethane		0.3108	7.43		
Bromomethane		0.09219	34.4		0.99800
Carbon Disulfide		0.5083	8.56		
Carbon Tetrachloride		0.3322	13.9		
Chloroethane		0.1893	7.76		
Dibromochloromethane		0.2767	12.4		
Dibromomethane		0.1232	9.61		

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Login Number: L09040570
Analytical Method: 8260B
ICAL Workgroup: WG300248

Instrument ID: HPMS11
Initial Calibration Date: 21-APR-09 17:05
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.3190	7.80		
Hexachlorobutadiene	0.3313	13.1		
Isopropylbenzene	1.335	8.81		
Methylene Chloride	0.3515	48.3		0.99900
Naphthalene	1.403	13.7		
Styrene	0.8618	14.6		
Tetrachloroethene	0.2482	8.42		
Trichloroethene	0.2501	6.02		
Trichlorofluoromethane	0.3979	4.61		
Vinyl Acetate	0.2370	18.0		0.99900
cis-1,2-Dichloroethene	0.2443	4.96		
cis-1,3-Dichloropropene	0.3442	10.7		
m-,p-Xylene	0.5369	10.7		
n-Butylbenzene	1.968	7.26		
n-Propylbenzene	2.772	8.57		
o-Xylene	0.5276	10.9		
p-Isopropyltoluene	2.028	7.80		
sec-Butylbenzene	2.415	7.18		
tert-Butylbenzene	0.3997	11.3		
trans-1,2-Dichloroethene	0.2246	5.15		
trans-1,3-Dichloropropene	0.3974	11.5		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09040570
Analytical Method: 8260B
ICAL Workgroup: WG297666

Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.4149	3.89		
1,2-Dichloropropane	CCC	0.2157	8.34		
Chloroform	CCC	0.5369	4.81		
Ethylbenzene	CCC	0.4508	7.74		
Toluene	CCC	1.178	7.46		
Vinyl Chloride	CCC	0.3085	20.9		1.00000
1,1,2,2-Tetrachloroethane	SPCC	0.3701	6.63		
1,1-Dichloroethane	SPCC	0.4764	2.88		
Bromoform	SPCC	0.1705	16.1	1.00000	
Chlorobenzene	SPCC	0.8634	4.49		
Chloromethane	SPCC	0.3499	13.7		
1,1,1,2-Tetrachloroethane		0.3144	6.38		
1,1,1-Trichloroethane		0.5079	4.28		
1,1,2-Trichloroethane		0.1997	8.94		
1,1-Dichloropropene		0.3461	8.18		
1,2,3-Trichlorobenzene		0.5770	11.4		
1,2,3-Trichloropropane		0.1258	10.3		
1,2,4-Trichlorobenzene		0.6604	10.2		
1,2,4-Trimethylbenzene		2.049	9.17		
1,2-Dibromo-3-Chloropropane		0.07748	12.6		
1,2-Dibromoethane		0.2099	9.18		
1,2-Dichlorobenzene		1.110	7.07		
1,2-Dichloroethane		0.4087	6.30		
1,3,5-Trimethylbenzene		1.890	16.5		1.00000
1,3-Dichlorobenzene		1.246	5.10		
1,3-Dichloropropane		0.3624	4.64		
1,4-Dichlorobenzene		1.324	4.45		
2,2-Dichloropropane		0.4689	5.46		
2-Butanone		0.06572	7.80		
2-Chloroethyl Vinyl Ether		0.1035	9.69		
2-Chlorotoluene		2.112	8.84		
2-Hexanone		0.1105	5.66		
4-Chlorotoluene		1.822	8.07		
4-Methyl-2-Pentanone		0.04957	9.41		
Acetone		0.04855	8.06		
Benzene		0.9502	3.75		
Bromobenzene		0.5976	9.39		
Bromochloromethane		0.1514	8.26		
Bromodichloromethane		0.3788	4.59		
Bromomethane		0.1899	8.62		
Carbon Disulfide		0.7977	3.57		
Carbon Tetrachloride		0.4486	4.60		
Chloroethane		0.1792	4.78		
Dibromochloromethane		0.2809	11.2		
Dibromomethane		0.1374	6.22		

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Login Number: L09040570
Analytical Method: 8260B
ICAL Workgroup: WG297666

Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane	0.4392	14.1		
Hexachlorobutadiene	0.2921	6.66		
Isopropylbenzene	1.349	16.1		1.00000
Methylene Chloride	0.3532	39.9	1.00000	
Naphthalene	0.9455	22.0	1.00000	
Styrene	0.8897	16.7		1.00000
Tetrachloroethene	0.3191	5.30		
Trichloroethene	0.2518	6.60		
Trichlorofluoromethane	0.5676	9.36		
Vinyl Acetate	0.3763	5.30		
cis-1,2-Dichloroethene	0.2584	7.64		
cis-1,3-Dichloropropene	0.3610	13.9		
m-,p-Xylene	0.5677	8.16		
n-Butylbenzene	1.670	12.1		
n-Propylbenzene	2.644	14.4		
o-Xylene	0.5236	13.5		
p-Isopropyltoluene	1.967	11.5		
sec-Butylbenzene	2.266	11.4		
tert-Butylbenzene	0.4135	8.19		
trans-1,2-Dichloroethene	0.2380	10.1		
trans-1,3-Dichloropropene	0.4283	11.0		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

Login Number: L09040570
Analytical Method: 8260BInstrument ID: HPMS11
Initial Calibration Date: 21-APR-09 17:05
Column ID: F

Analyte	WG300248-02			WG300248-03			WG300248-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	0.300	5256.00000	0.4223	0.400	6331.00000	0.3850	1.00	16714.0000	0.4167
1,2-Dichloropropane	0.300	3546.00000	0.2849	0.400	3869.00000	0.2353	1.00	10875.0000	0.2711
Chloroform	0.300	6002.00000	0.4822	0.400	7026.00000	0.4273	1.00	16765.0000	0.4180
Ethylbenzene	0.300	4290.00000	0.4380	0.400	5273.00000	0.4152	1.00	12935.0000	0.4133
Toluene	0.300	11854.0000	1.210	0.400	14505.0000	1.142	1.00	37032.0000	1.183
Vinyl Chloride	NA	NA	NA	0.400	7208.00000	0.4384	1.00	19014.0000	0.4741
1,1,2,2-Tetrachloroethane	0.300	1513.00000	0.2742	0.400	1668.00000	0.2409	1.00	5636.00000	0.3299
1,1-Dichloroethane	0.300	6256.00000	0.5026	0.400	7445.00000	0.4528	1.00	19916.0000	0.4965
Bromoform	0.300	945.000000	0.09650	0.400	1479.00000	0.1165	1.00	5130.00000	0.1639
Chlorobenzene	0.300	7570.00000	0.7729	0.400	10383.0000	0.8175	1.00	22942.0000	0.7330
Chloromethane	NA	NA	NA	0.400	21161.0000	1.287	1.00	46966.0000	1.171
1,1,1,2-Tetrachloroethane	0.300	2636.00000	0.2691	0.400	3265.00000	0.2571	1.00	8788.00000	0.2808
1,1,1-Trichloroethane	0.300	4735.00000	0.3804	0.400	5022.00000	0.3054	1.00	15789.0000	0.3937
1,1,2-Trichloroethane	0.300	1952.00000	0.1993	0.400	2451.00000	0.1930	1.00	6920.00000	0.2211
1,1-Dichloropropene	0.300	3651.00000	0.2933	0.400	4697.00000	0.2857	1.00	12423.0000	0.3097
1,2,3-Trichlorobenzene	0.300	3692.00000	0.6692	0.400	4837.00000	0.6985	1.00	12128.0000	0.7099
1,2,3-Trichloropropane	NA	NA	NA	0.400	813.000000	0.1174	1.00	2395.00000	0.1402
1,2,4-Trichlorobenzene	0.300	4202.00000	0.7616	0.400	5591.00000	0.8074	1.00	12765.0000	0.7472
1,2,4-Trimethylbenzene	0.300	10300.0000	1.867	0.400	13058.0000	1.886	1.00	33476.0000	1.960
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	1.00	1222.00000	0.07150
1,2-Dibromoethane	0.300	1775.00000	0.1812	0.400	2189.00000	0.1724	1.00	6496.00000	0.2075
1,2-Dichlorobenzene	0.300	6469.00000	1.173	0.400	8013.00000	1.157	1.00	19171.0000	1.122
1,2-Dichloroethane	0.300	4526.00000	0.3636	0.400	5478.00000	0.3332	1.00	15177.0000	0.3784
1,3,5-Trimethylbenzene	0.300	10078.0000	1.827	0.400	13001.0000	1.878	1.00	33468.0000	1.959
1,3-Dichlorobenzene	0.300	6713.00000	1.217	0.400	8876.00000	1.282	1.00	20102.0000	1.177
1,3-Dichloropropane	0.300	3455.00000	0.3528	0.400	4921.00000	0.3875	1.00	12772.0000	0.4081
1,4-Dichlorobenzene	0.300	7152.00000	1.296	0.400	9293.00000	1.342	1.00	21265.0000	1.245
2,2-Dichloropropane	0.300	4968.00000	0.3991	0.400	4376.00000	0.2661	1.00	12910.0000	0.3219
2-Butanone	NA	NA	NA	NA	NA	NA	1.00	5177.00000	0.1291
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	4111.00000	0.1025
2-Chlorotoluene	0.300	10991.0000	1.992	0.400	12587.0000	1.818	1.00	32904.0000	1.926
2-Hexanone	NA	NA	NA	NA	NA	NA	1.00	5993.00000	0.1915
4-Chlorotoluene	0.300	9081.00000	1.646	0.400	10730.0000	1.550	1.00	27524.0000	1.611
4-Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	1.00	2929.00000	0.07300
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	0.300	11978.0000	0.9623	0.400	15082.0000	0.9172	1.00	36365.0000	0.9067
Bromobenzene	0.300	3120.00000	0.5655	0.400	4265.00000	0.6159	1.00	10462.0000	0.6124
Bromochloromethane	0.300	1565.00000	0.1257	0.400	1941.00000	0.1180	1.00	5579.00000	0.1391
Bromodichloromethane	0.300	3873.00000	0.3112	0.400	4830.00000	0.2937	1.00	10986.0000	0.2739
Bromomethane	NA	NA	NA	0.400	979.000000	0.05950	1.00	3021.00000	0.07530
Carbon Disulfide	NA	NA	NA	0.400	9364.00000	0.5695	1.00	21129.0000	0.5268
Carbon Tetrachloride	0.300	3993.00000	0.3208	0.400	3817.00000	0.2321	1.00	12410.0000	0.3094

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Analytical Method: 8260B

Instrument ID: HPMS11
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Column ID: F

Analyte	WG300248-05			WG300248-06			WG300248-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	32184.0000	0.4059	5.00	79692.0000	0.3952	20.0	333375.000	0.3932
1,2-Dichloropropane	2.00	19958.0000	0.2517	5.00	51860.0000	0.2572	20.0	218459.000	0.2577
Chloroform	2.00	32476.0000	0.4096	5.00	82871.0000	0.4110	20.0	346041.000	0.4081
Ethylbenzene	2.00	25103.0000	0.4098	5.00	65389.0000	0.4256	20.0	280006.000	0.4329
Toluene	2.00	71821.0000	1.172	5.00	184121.000	1.198	20.0	766815.000	1.186
Vinyl Chloride	2.00	34410.0000	0.4340	5.00	78209.0000	0.3879	20.0	280725.000	0.3311
1,1,2,2-Tetrachloroethane	2.00	12624.0000	0.3728	5.00	36385.0000	0.4209	20.0	162059.000	0.4356
1,1-Dichloroethane	2.00	37166.0000	0.4687	5.00	95015.0000	0.4712	20.0	393677.000	0.4643
Bromoform	2.00	9128.00000	0.1490	5.00	27318.0000	0.1778	20.0	118708.000	0.1835
Chlorobenzene	2.00	45875.0000	0.7488	5.00	116657.000	0.7592	20.0	487351.000	0.7535
Chloromethane	2.00	94489.0000	1.192	5.00	203560.000	1.010	20.0	728792.000	0.8596
1,1,1,2-Tetrachloroethane	2.00	17567.0000	0.2867	5.00	45550.0000	0.2965	20.0	193499.000	0.2992
1,1,1-Trichloroethane	2.00	30540.0000	0.3852	5.00	75152.0000	0.3727	20.0	312147.000	0.3682
1,1,2-Trichloroethane	2.00	13528.0000	0.2208	5.00	33774.0000	0.2198	20.0	140381.000	0.2170
1,1-Dichloropropene	2.00	24570.0000	0.3099	5.00	63520.0000	0.3150	20.0	260811.000	0.3076
1,2,3-Trichlorobenzene	2.00	23285.0000	0.6876	5.00	59725.0000	0.6909	20.0	257322.000	0.6917
1,2,3-Trichloropropane	2.00	4723.00000	0.1395	5.00	12358.0000	0.1430	20.0	49511.0000	0.1331
1,2,4-Trichlorobenzene	2.00	25470.0000	0.7522	5.00	66175.0000	0.7655	20.0	289393.000	0.7779
1,2,4-Trimethylbenzene	2.00	64750.0000	1.912	5.00	174953.000	2.024	20.0	757745.000	2.037
1,2-Dibromo-3-Chloropropane	2.00	2631.00000	0.07770	5.00	7230.00000	0.08360	20.0	32850.0000	0.08830
1,2-Dibromoethane	2.00	12351.0000	0.2016	5.00	32124.0000	0.2091	20.0	135706.000	0.2098
1,2-Dichlorobenzene	2.00	37226.0000	1.099	5.00	96733.0000	1.119	20.0	414554.000	1.114
1,2-Dichloroethane	2.00	29359.0000	0.3703	5.00	74043.0000	0.3672	20.0	303324.000	0.3578
1,3,5-Trimethylbenzene	2.00	62710.0000	1.852	5.00	170367.000	1.971	20.0	739995.000	1.989
1,3-Dichlorobenzene	2.00	40521.0000	1.197	5.00	103044.000	1.192	20.0	432956.000	1.164
1,3-Dichloropropane	2.00	24523.0000	0.4003	5.00	60764.0000	0.3955	20.0	252798.000	0.3908
1,4-Dichlorobenzene	2.00	41443.0000	1.224	5.00	106041.000	1.227	20.0	448007.000	1.204
2,2-Dichloropropane	2.00	26698.0000	0.3367	5.00	68839.0000	0.3414	20.0	291514.000	0.3438
2-Butanone	2.00	9232.00000	0.1164	5.00	23797.0000	0.1180	20.0	92024.0000	0.1085
2-Chloroethyl Vinyl Ether	2.00	8796.00000	0.1109	5.00	22736.0000	0.1128	20.0	94772.0000	0.1118
2-Chlorotoluene	2.00	63361.0000	1.871	5.00	165956.000	1.920	20.0	706347.000	1.899
2-Hexanone	2.00	12095.0000	0.1974	5.00	31887.0000	0.2075	20.0	135764.000	0.2099
4-Chlorotoluene	2.00	53172.0000	1.570	5.00	132785.000	1.536	20.0	566182.000	1.522
4-Methyl-2-Pentanone	2.00	6187.00000	0.07800	5.00	15704.0000	0.07790	20.0	65266.0000	0.07700
Acetone	NA	NA	NA	5.00	19461.0000	0.09650	20.0	61587.0000	0.07260
Benzene	2.00	69728.0000	0.8794	5.00	179089.000	0.8881	20.0	744657.000	0.8783
Bromobenzene	2.00	20171.0000	0.5957	5.00	51294.0000	0.5933	20.0	214171.000	0.5757
Bromochloromethane	2.00	11146.0000	0.1406	5.00	27832.0000	0.1380	20.0	116301.000	0.1372
Bromodichloromethane	2.00	23200.0000	0.2926	5.00	62466.0000	0.3098	20.0	260475.000	0.3072
Bromomethane	2.00	5915.00000	0.07460	5.00	13977.0000	0.06930	20.0	63140.0000	0.07450
Carbon Disulfide	2.00	35594.0000	0.4489	5.00	91574.0000	0.4541	20.0	406364.000	0.4793
Carbon Tetrachloride	2.00	25798.0000	0.3254	5.00	66720.0000	0.3309	20.0	287950.000	0.3396

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Login Number: L09040570
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 21-APR-09 17:05
Column ID: F

Analyte	WG300248-08			WG300248-09			WG300248-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	877840.000	0.4112	100	1740458.00	0.4149	200	3998695.00	0.4192
1,2-Dichloropropane	50.0	575221.000	0.2694	100	1157933.00	0.2760	200	2752822.00	0.2886
Chloroform	50.0	904341.000	0.4236	100	1817821.00	0.4333	200	4278229.00	0.4485
Ethylbenzene	50.0	785692.000	0.4783	100	1691577.00	0.5118	200	4391621.00	0.5549
Toluene	50.0	2054076.00	1.251	100	4240583.00	1.283	200	9025882.00	1.141
Vinyl Chloride	50.0	704334.000	0.3299	100	1261086.00	0.3006	200	2210179.00	0.2317
1,1,2,2-Tetrachloroethane	50.0	444255.000	0.4402	100	936091.000	0.4322	200	2135863.00	0.4365
1,1-Dichloroethane	50.0	1037632.00	0.4860	100	2077644.00	0.4952	200	4862576.00	0.5098
Bromoform	50.0	348024.000	0.2119	100	759467.000	0.2298	200	1814471.00	0.2293
Chlorobenzene	50.0	1330433.00	0.8100	100	2800868.00	0.8475	200	6784126.00	0.8573
Chloromethane	50.0	1817003.00	0.8511	100	3276824.00	0.7811	200	5802056.00	0.6083
1,1,1,2-Tetrachloroethane	50.0	547829.000	0.3335	100	1156710.00	0.3500	200	2998749.00	0.3789
1,1,1-Trichloroethane	50.0	818362.000	0.3833	100	1656119.00	0.3947	200	3865522.00	0.4053
1,1,2-Trichloroethane	50.0	379297.000	0.2309	100	760195.000	0.2300	200	1806468.00	0.2283
1,1-Dichloropropene	50.0	693642.000	0.3249	100	1386426.00	0.3305	200	3227595.00	0.3384
1,2,3-Trichlorobenzene	50.0	771694.000	0.7647	100	1735360.00	0.8013	200	4276486.00	0.8739
1,2,3-Trichloropropane	50.0	139314.000	0.1381	100	292644.000	0.1351	200	666498.000	0.1362
1,2,4-Trichlorobenzene	50.0	857903.000	0.8501	100	1985986.00	0.9170	200	4972696.00	1.016
1,2,4-Trimethylbenzene	50.0	2220038.00	2.200	100	4824469.00	2.228	200	9415515.00	1.924
1,2-Dibromo-3-Chloropropane	50.0	92268.0000	0.09140	100	190251.000	0.08780	200	423976.000	0.08660
1,2-Dibromoethane	50.0	367426.000	0.2237	100	749631.000	0.2268	200	1800902.00	0.2276
1,2-Dichlorobenzene	50.0	1202082.00	1.191	100	2702423.00	1.248	200	6243478.00	1.276
1,2-Dichloroethane	50.0	798632.000	0.3741	100	1580873.00	0.3768	200	3675417.00	0.3853
1,3,5-Trimethylbenzene	50.0	2123080.00	2.104	100	4505039.00	2.080	200	9170773.00	1.874
1,3-Dichlorobenzene	50.0	1259729.00	1.248	100	2838382.00	1.311	200	6597357.00	1.348
1,3-Dichloropropane	50.0	679908.000	0.4139	100	1365883.00	0.4133	200	3217980.00	0.4066
1,4-Dichlorobenzene	50.0	1306534.00	1.295	100	2974627.00	1.374	200	6734997.00	1.376
2,2-Dichloropropane	50.0	755411.000	0.3538	100	1528729.00	0.3644	200	3514698.00	0.3685
2-Butanone	50.0	250310.000	0.1172	100	487750.000	0.1163	200	1060620.00	0.1112
2-Chloroethyl Vinyl Ether	50.0	259906.000	0.1217	100	525700.000	0.1253	200	1225789.00	0.1285
2-Chlorotoluene	50.0	1963229.00	1.946	100	3865957.00	1.785	200	8217819.00	1.679
2-Hexanone	50.0	376194.000	0.2290	100	773023.000	0.2339	200	1635196.00	0.2066
4-Chlorotoluene	50.0	1644901.00	1.630	100	3612367.00	1.668	200	7505406.00	1.534
4-Methyl-2-Pentanone	50.0	180467.000	0.08450	100	366407.000	0.08730	200	784961.000	0.08230
Acetone	50.0	168812.000	0.07910	100	325246.000	0.07750	200	661384.000	0.06930
Benzene	50.0	1977085.00	0.9261	100	3996445.00	0.9526	200	8927977.00	0.9360
Bromobenzene	50.0	594297.000	0.5889	100	1272320.00	0.5875	200	3225157.00	0.6591
Bromochloromethane	50.0	314667.000	0.1474	100	642021.000	0.1530	200	1514126.00	0.1587
Bromodichloromethane	50.0	693520.000	0.3248	100	1399887.00	0.3337	200	3340186.00	0.3502
Bromomethane	50.0	229906.000	0.1077	100	558644.000	0.1332	200	1367572.00	0.1434
Carbon Disulfide	50.0	1095114.00	0.5129	100	2219255.00	0.5290	200	5208752.00	0.5461
Carbon Tetrachloride	50.0	781307.000	0.3660	100	1589857.00	0.3790	200	3683811.00	0.3862

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Analytical Method: 8260B

Instrument ID: HPMS11
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Analyte	WG300248-11		
	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	1543248.00	0.1074
2-Chloroethyl Vinyl Ether	300	1873704.00	0.1304
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	2328643.00	0.2083
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	1179473.00	0.08210
Acetone	300	931354.000	0.06480
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

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Analyte	WG300248-02			WG300248-03			WG300248-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	0.400	2631.00000	0.1600	1.00	7817.00000	0.1949
Dibromochloromethane	0.300	2308.00000	0.2356	0.400	2974.00000	0.2342	1.00	7912.00000	0.2528
Dibromomethane	0.300	1469.00000	0.1180	0.400	1583.00000	0.09630	1.00	4858.00000	0.1211
Dichlorodifluoromethane	NA	NA	NA	0.400	4486.00000	0.2728	1.00	13631.00000	0.3399
Hexachlorobutadiene	0.300	1808.00000	0.3277	0.400	1892.00000	0.2732	1.00	5391.00000	0.3156
Isopropylbenzene	0.300	12978.00000	1.325	0.400	14563.00000	1.147	1.00	40544.00000	1.295
Methylene Chloride	0.300	8682.00000	0.6975	0.400	9410.00000	0.5723	1.00	14995.00000	0.3739
Naphthalene	NA	NA	NA	0.400	7482.00000	1.081	1.00	20475.00000	1.199
Styrene	0.300	6844.00000	0.6988	0.400	9653.00000	0.7601	1.00	23694.00000	0.7570
Tetrachloroethene	0.300	2306.00000	0.2354	0.400	2599.00000	0.2046	1.00	7728.00000	0.2469
Trichloroethene	0.300	3426.00000	0.2752	0.400	4319.00000	0.2627	1.00	9953.00000	0.2481
Trichlorofluoromethane	NA	NA	NA	0.400	5906.00000	0.3592	1.00	16740.00000	0.4174
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	0.300	3101.00000	0.2491	0.400	3697.00000	0.2248	1.00	9742.00000	0.2429
cis-1,3-Dichloropropene	0.300	3645.00000	0.2928	0.400	5061.00000	0.3078	1.00	12601.00000	0.3142
m-,p-Xylene	0.600	9815.00000	0.5011	0.800	11507.00000	0.4530	2.00	32478.00000	0.5188
n-Butylbenzene	0.300	11509.00000	2.086	0.400	11950.00000	1.726	1.00	33317.00000	1.950
n-Propylbenzene	0.300	16438.00000	2.979	0.400	17997.00000	2.599	1.00	49715.00000	2.910
o-Xylene	0.300	4669.00000	0.4767	0.400	6184.00000	0.4869	1.00	14717.00000	0.4702
p-Isopropyltoluene	0.300	11127.00000	2.017	0.400	12328.00000	1.780	1.00	33244.00000	1.946
sec-Butylbenzene	0.300	14191.00000	2.572	0.400	14684.00000	2.121	1.00	42087.00000	2.464
tert-Butylbenzene	0.300	1890.00000	0.3426	0.400	2346.00000	0.3388	1.00	6999.00000	0.4097
trans-1,2-Dichloroethene	0.300	2838.00000	0.2280	0.400	3382.00000	0.2057	1.00	8806.00000	0.2196
trans-1,3-Dichloropropene	0.300	3065.00000	0.3129	0.400	4319.00000	0.3401	1.00	12037.00000	0.3846

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Analytical Method: 8260B

Instrument ID: HPMS11
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Column ID: F

Analyte	WG300248-05			WG300248-06			WG300248-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	15488.0000	0.1953	5.00	35890.0000	0.1780	20.0	158911.000	0.1874
Dibromochloromethane	2.00	15617.0000	0.2549	5.00	42911.0000	0.2793	20.0	184272.000	0.2849
Dibromomethane	2.00	9810.00000	0.1237	5.00	25108.0000	0.1245	20.0	104642.000	0.1234
Dichlorodifluoromethane	2.00	27100.0000	0.3418	5.00	63357.0000	0.3142	20.0	265022.000	0.3126
Hexachlorobutadiene	2.00	9870.00000	0.2915	5.00	27042.0000	0.3128	20.0	119766.000	0.3219
Isopropylbenzene	2.00	77949.0000	1.272	5.00	202930.000	1.321	20.0	867421.000	1.341
Methylene Chloride	2.00	24439.0000	0.3082	5.00	51306.0000	0.2544	20.0	191335.000	0.2257
Naphthalene	2.00	45697.0000	1.350	5.00	122569.000	1.418	20.0	531594.000	1.429
Styrene	2.00	48165.0000	0.7862	5.00	128449.000	0.8360	20.0	567681.000	0.8777
Tetrachloroethene	2.00	15210.0000	0.2483	5.00	37455.0000	0.2438	20.0	160827.000	0.2486
Trichloroethene	2.00	19313.0000	0.2436	5.00	48275.0000	0.2394	20.0	193254.000	0.2279
Trichlorofluoromethane	2.00	32784.0000	0.4135	5.00	79010.0000	0.3918	20.0	331476.000	0.3910
Vinyl Acetate	2.00	14874.0000	0.1876	5.00	44310.0000	0.2197	20.0	230436.000	0.2718
cis-1,2-Dichloroethene	2.00	18947.0000	0.2390	5.00	48585.0000	0.2409	20.0	198009.000	0.2335
cis-1,3-Dichloropropene	2.00	26107.0000	0.3293	5.00	69716.0000	0.3457	20.0	295466.000	0.3485
m-,p-Xylene	4.00	60614.0000	0.4947	10.0	161114.000	0.5243	40.0	687383.000	0.5314
n-Butylbenzene	2.00	63847.0000	1.886	5.00	169678.000	1.963	20.0	726941.000	1.954
n-Propylbenzene	2.00	94168.0000	2.781	5.00	244133.000	2.824	20.0	1063812.00	2.860
o-Xylene	2.00	30268.0000	0.4941	5.00	78086.0000	0.5082	20.0	333101.000	0.5150
p-Isopropyltoluene	2.00	65858.0000	1.945	5.00	173457.000	2.007	20.0	768800.000	2.067
sec-Butylbenzene	2.00	80596.0000	2.380	5.00	207890.000	2.405	20.0	907851.000	2.440
tert-Butylbenzene	2.00	12672.0000	0.3742	5.00	34199.0000	0.3956	20.0	148981.000	0.4005
trans-1,2-Dichloroethene	2.00	17612.0000	0.2221	5.00	44394.0000	0.2202	20.0	182888.000	0.2157
trans-1,3-Dichloropropene	2.00	24406.0000	0.3984	5.00	62033.0000	0.4037	20.0	265171.000	0.4100

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Analytical Method:8260B

Instrument ID:HPMS11
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Analyte	WG300248-08			WG300248-09			WG300248-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	427615.000	0.2003	100	870355.000	0.2075	200	1823096.00	0.1911
Dibromochloromethane	50.0	508578.000	0.3096	100	1056639.00	0.3197	200	2529687.00	0.3197
Dibromomethane	50.0	280457.000	0.1314	100	557297.000	0.1328	200	1310922.00	0.1374
Dichlorodifluoromethane	50.0	724338.000	0.3393	100	1404298.00	0.3347	200	2825843.00	0.2963
Hexachlorobutadiene	50.0	351607.000	0.3484	100	806401.000	0.3723	200	2045967.00	0.4181
Isopropylbenzene	50.0	2441719.00	1.487	100	5099652.00	1.543	200	10132723.0	1.280
Methylene Chloride	50.0	506163.000	0.2371	100	1030656.00	0.2457	200	2372902.00	0.2488
Naphthalene	50.0	1626872.00	1.612	100	3537253.00	1.633	200	7364241.00	1.505
Styrene	50.0	1607784.00	0.9788	100	3484746.00	1.054	200	7969318.00	1.007
Tetrachloroethene	50.0	427745.000	0.2604	100	885899.000	0.2681	200	2197588.00	0.2777
Trichloroethene	50.0	508984.000	0.2384	100	1048598.00	0.2499	200	2531281.00	0.2654
Trichlorofluoromethane	50.0	850009.000	0.3981	100	1715695.00	0.4090	200	3845496.00	0.4032
Vinyl Acetate	50.0	634991.000	0.2974	100	1103119.00	0.2629	200	2228684.00	0.2337
cis-1,2-Dichloroethene	50.0	527613.000	0.2471	100	1069591.00	0.2549	200	2542534.00	0.2666
cis-1,3-Dichloropropene	50.0	801252.000	0.3753	100	1606228.00	0.3829	200	3824129.00	0.4009
m-,p-Xylene	100	1958181.00	0.5961	200	4240403.00	0.6415	400	9039970.00	0.5712
n-Butylbenzene	50.0	2141246.00	2.122	100	4717524.00	2.178	200	9023904.00	1.844
n-Propylbenzene	50.0	2990915.00	2.964	100	6101712.00	2.817	200	10838000.0	2.215
o-Xylene	50.0	935381.000	0.5695	100	1976168.00	0.5979	200	4981401.00	0.6295
p-Isopropyltoluene	50.0	2262996.00	2.243	100	4973094.00	2.296	200	9563988.00	1.954
sec-Butylbenzene	50.0	2624177.00	2.600	100	5598318.00	2.585	200	10602650.0	2.167
tert-Butylbenzene	50.0	424863.000	0.4210	100	931456.000	0.4301	200	2372862.00	0.4849
trans-1,2-Dichloroethene	50.0	488239.000	0.2287	100	990170.000	0.2360	200	2338017.00	0.2451
trans-1,3-Dichloropropene	50.0	729438.000	0.4441	100	1467792.00	0.4441	200	3470245.00	0.4385

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Instrument ID: HPMS11
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Analyte	WG300248-11		
	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	300	2668874.00	0.1857
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

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Analytical Method: 8260BInstrument ID: HPMS6
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Analyte	WG297666-02			WG297666-03			WG297666-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	4765.00000	0.4056	1.00	12012.0000	0.3972
1,2-Dichloropropane	NA	NA	NA	0.400	2083.00000	0.1773	1.00	6489.00000	0.2146
Chloroform	0.300	4806.00000	0.4925	0.400	6554.00000	0.5579	1.00	16609.0000	0.5492
Ethylbenzene	NA	NA	NA	0.400	3943.00000	0.3850	1.00	11625.0000	0.4373
Toluene	NA	NA	NA	0.400	11017.0000	1.076	1.00	29078.0000	1.094
Vinyl Chloride	NA	NA	NA	0.400	4796.00000	0.4082	1.00	10937.0000	0.3616
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2063.00000	0.3293	1.00	5927.00000	0.3597
1,1-Dichloroethane	NA	NA	NA	0.400	5385.00000	0.4584	1.00	14185.0000	0.4690
Bromoform	NA	NA	NA	NA	NA	NA	1.00	3506.00000	0.1319
Chlorobenzene	NA	NA	NA	0.400	9211.00000	0.8993	1.00	23929.0000	0.9002
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	11851.0000	0.3919
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	3034.00000	0.2962	1.00	8119.00000	0.3054
1,1,1-Trichloroethane	NA	NA	NA	0.400	6021.00000	0.5125	1.00	15778.0000	0.5217
1,1,2-Trichloroethane	NA	NA	NA	0.400	1629.00000	0.1590	1.00	5257.00000	0.1978
1,1-Dichloropropene	NA	NA	NA	0.400	3495.00000	0.2975	1.00	9834.00000	0.3252
1,2,3-Trichlorobenzene	0.300	2213.00000	0.4440	0.400	3361.00000	0.5365	1.00	9028.00000	0.5479
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	1663.00000	0.1009
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	3878.00000	0.6191	1.00	9683.00000	0.5877
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	1.00	29099.0000	1.766
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	1922.00000	0.1876	1.00	5179.00000	0.1948
1,2-Dichlorobenzene	0.300	4700.00000	0.9429	0.400	6857.00000	1.095	1.00	18018.0000	1.094
1,2-Dichloroethane	NA	NA	NA	0.400	5091.00000	0.4333	1.00	12897.0000	0.4264
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	8526.00000	1.361	1.00	25341.0000	1.538
1,3-Dichlorobenzene	NA	NA	NA	0.400	7396.00000	1.181	1.00	19490.0000	1.183
1,3-Dichloropropane	NA	NA	NA	0.400	3533.00000	0.3449	1.00	9553.00000	0.3594
1,4-Dichlorobenzene	0.300	6648.00000	1.334	0.400	8695.00000	1.388	1.00	21030.0000	1.276
2,2-Dichloropropane	NA	NA	NA	0.400	5025.00000	0.4277	1.00	14395.0000	0.4760
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	NA	NA	NA	0.400	11718.0000	1.871	1.00	32484.0000	1.972
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	10312.0000	1.646	1.00	28572.0000	1.734
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	11369.0000	0.9677	1.00	28760.0000	0.9510
Bromobenzene	0.300	2337.00000	0.4689	0.400	3561.00000	0.5685	1.00	9609.00000	0.5832
Bromochloromethane	NA	NA	NA	0.400	1468.00000	0.1250	1.00	4353.00000	0.1439
Bromodichloromethane	NA	NA	NA	0.400	4269.00000	0.3634	1.00	11138.0000	0.3683
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4889.00000	0.1617
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	22769.0000	0.7529
Carbon Tetrachloride	NA	NA	NA	0.400	5091.00000	0.4333	1.00	14345.0000	0.4743

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Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-05			WG297666-06			WG297666-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	25393.0000	0.4226	5.00	63335.0000	0.4004	20.0	296729.000	0.4464
1,2-Dichloropropane	2.00	12643.0000	0.2104	5.00	33065.0000	0.2091	20.0	152553.000	0.2295
Chloroform	2.00	33599.0000	0.5592	5.00	86559.0000	0.5473	20.0	375841.000	0.5654
Ethylbenzene	2.00	23798.0000	0.4566	5.00	59650.0000	0.4333	20.0	287584.000	0.5000
Toluene	2.00	60707.0000	1.165	5.00	160942.000	1.169	20.0	761485.000	1.324
Vinyl Chloride	2.00	20348.0000	0.3386	5.00	44348.0000	0.2804	20.0	195803.000	0.2945
1,1,2,2-Tetrachloroethane	2.00	11131.0000	0.3433	5.00	31812.0000	0.3718	20.0	141927.000	0.3967
1,1-Dichloroethane	2.00	28686.0000	0.4774	5.00	74338.0000	0.4700	20.0	336110.000	0.5056
Bromoform	2.00	7175.00000	0.1377	5.00	21692.0000	0.1576	20.0	110202.000	0.1916
Chlorobenzene	2.00	45297.0000	0.8691	5.00	114501.000	0.8317	20.0	519728.000	0.9037
Chloromethane	2.00	25223.0000	0.4198	5.00	56601.0000	0.3579	20.0	244090.000	0.3672
1,1,1,2-Tetrachloroethane	2.00	14937.0000	0.2866	5.00	42196.0000	0.3065	20.0	199097.000	0.3462
1,1,1-Trichloroethane	2.00	29713.0000	0.4945	5.00	78391.0000	0.4956	20.0	362621.000	0.5455
1,1,2-Trichloroethane	2.00	10257.0000	0.1968	5.00	27709.0000	0.2013	20.0	125039.000	0.2174
1,1-Dichloropropene	2.00	20194.0000	0.3361	5.00	52658.0000	0.3329	20.0	254110.000	0.3822
1,2,3-Trichlorobenzene	2.00	17999.0000	0.5551	5.00	48722.0000	0.5694	20.0	233772.000	0.6534
1,2,3-Trichloropropane	2.00	3870.00000	0.1194	5.00	10625.0000	0.1242	20.0	50345.0000	0.1407
1,2,4-Trichlorobenzene	2.00	19096.0000	0.5889	5.00	51181.0000	0.5982	20.0	260003.000	0.7267
1,2,4-Trimethylbenzene	2.00	65700.0000	2.026	5.00	173426.000	2.027	20.0	824029.000	2.303
1,2-Dibromo-3-Chloropropane	2.00	1927.00000	0.05940	5.00	6309.00000	0.07370	20.0	30916.0000	0.08640
1,2-Dibromoethane	2.00	9523.00000	0.1827	5.00	28769.0000	0.2090	20.0	134122.000	0.2332
1,2-Dichlorobenzene	2.00	35961.0000	1.109	5.00	95616.0000	1.118	20.0	443956.000	1.241
1,2-Dichloroethane	2.00	24474.0000	0.4073	5.00	66677.0000	0.4216	20.0	289231.000	0.4351
1,3,5-Trimethylbenzene	2.00	60452.0000	1.864	5.00	167453.000	1.957	20.0	815909.000	2.281
1,3-Dichlorobenzene	2.00	40739.0000	1.256	5.00	104499.000	1.221	20.0	489727.000	1.369
1,3-Dichloropropane	2.00	17605.0000	0.3378	5.00	48567.0000	0.3528	20.0	222671.000	0.3872
1,4-Dichlorobenzene	2.00	43416.0000	1.339	5.00	111536.000	1.304	20.0	508526.000	1.421
2,2-Dichloropropane	2.00	27489.0000	0.4575	5.00	70962.0000	0.4487	20.0	337916.000	0.5083
2-Butanone	NA	NA	NA	5.00	11652.0000	0.07370	20.0	40964.0000	0.06160
2-Chloroethyl Vinyl Ether	NA	NA	NA	5.00	13329.0000	0.08430	20.0	70567.0000	0.1062
2-Chlorotoluene	2.00	70545.0000	2.176	5.00	185289.000	2.166	20.0	862901.000	2.412
2-Hexanone	NA	NA	NA	5.00	14098.0000	0.1024	20.0	61496.0000	0.1069
4-Chlorotoluene	2.00	61388.0000	1.893	5.00	158404.000	1.851	20.0	741193.000	2.072
4-Methyl-2-Pentanone	NA	NA	NA	5.00	6623.00000	0.04190	20.0	31030.0000	0.04670
Acetone	NA	NA	NA	5.00	8246.00000	0.05210	20.0	36407.0000	0.05480
Benzene	2.00	56215.0000	0.9355	5.00	144197.000	0.9117	20.0	670547.000	1.009
Bromobenzene	2.00	19711.0000	0.6079	5.00	52193.0000	0.6100	20.0	239524.000	0.6695
Bromochloromethane	2.00	8905.00000	0.1482	5.00	25000.0000	0.1581	20.0	109820.000	0.1652
Bromodichloromethane	2.00	21529.0000	0.3583	5.00	58577.0000	0.3704	20.0	272867.000	0.4105
Bromomethane	2.00	12103.0000	0.2014	5.00	27160.0000	0.1717	20.0	129472.000	0.1948
Carbon Disulfide	2.00	48535.0000	0.8077	5.00	127916.000	0.8088	20.0	559429.000	0.8415
Carbon Tetrachloride	2.00	27291.0000	0.4542	5.00	68679.0000	0.4342	20.0	318185.000	0.4786

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Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-08			WG297666-09			WG297666-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	794754.000	0.4199	100	1700228.00	0.4215	200	3515000.00	0.4053
1,2-Dichloropropane	50.0	421300.000	0.2226	100	937564.000	0.2324	200	1992209.00	0.2297
Chloroform	50.0	1007525.00	0.5323	100	2124705.00	0.5268	200	4352108.00	0.5019
Ethylbenzene	50.0	774809.000	0.4736	100	1659010.00	0.4767	200	3364428.00	0.4439
Toluene	50.0	2049095.00	1.252	100	4307987.00	1.238	200	8356830.00	1.103
Vinyl Chloride	50.0	479217.000	0.2532	100	900434.000	0.2232	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	385573.000	0.3767	100	844618.000	0.3863	200	1829474.00	0.3968
1,1-Dichloroethane	50.0	901542.000	0.4763	100	1942999.00	0.4817	200	4100398.00	0.4728
Bromoform	50.0	305732.000	0.1869	100	675675.000	0.1941	200	1467329.00	0.1936
Chlorobenzene	50.0	1398300.00	0.8547	100	2979637.00	0.8561	200	6003701.00	0.7921
Chloromethane	50.0	605459.000	0.3199	100	1235266.00	0.3063	200	2484614.00	0.2865
1,1,1,2-Tetrachloroethane	50.0	539965.000	0.3300	100	1155386.00	0.3320	200	2366524.00	0.3122
1,1,1-Trichloroethane	50.0	972964.000	0.5140	100	2049997.00	0.5082	200	4088858.00	0.4715
1,1,2-Trichloroethane	50.0	336769.000	0.2058	100	733066.000	0.2106	200	1585664.00	0.2092
1,1-Dichloropropene	50.0	698388.000	0.3690	100	1496210.00	0.3709	200	3080526.00	0.3552
1,2,3-Trichlorobenzene	50.0	639353.000	0.6247	100	1394962.00	0.6379	200	2876146.00	0.6238
1,2,3-Trichloropropane	50.0	132722.000	0.1297	100	287971.000	0.1317	200	616942.000	0.1338
1,2,4-Trichlorobenzene	50.0	731246.000	0.7145	100	1594767.00	0.7293	200	3313964.00	0.7187
1,2,4-Trimethylbenzene	50.0	2246394.00	2.195	100	4716372.00	2.157	200	8607927.00	1.867
1,2-Dibromo-3-Chloropropane	50.0	83170.0000	0.08130	100	177934.000	0.08140	200	381264.000	0.08270
1,2-Dibromoethane	50.0	364890.000	0.2230	100	783263.000	0.2251	200	1695184.00	0.2237
1,2-Dichlorobenzene	50.0	1181536.00	1.155	100	2506813.00	1.146	200	5024943.00	1.090
1,2-Dichloroethane	50.0	753713.000	0.3982	100	1558956.00	0.3865	200	3132726.00	0.3613
1,3,5-Trimethylbenzene	50.0	2201995.00	2.152	100	4632325.00	2.118	200	8523889.00	1.849
1,3-Dichlorobenzene	50.0	1310803.00	1.281	100	2785439.00	1.274	200	5530791.00	1.200
1,3-Dichloropropane	50.0	601663.000	0.3677	100	1316409.00	0.3782	200	2809949.00	0.3708
1,4-Dichlorobenzene	50.0	1351048.00	1.320	100	2873245.00	1.314	200	5619967.00	1.219
2,2-Dichloropropane	50.0	922104.000	0.4872	100	1962867.00	0.4866	200	3982622.00	0.4593
2-Butanone	50.0	112603.000	0.05950	100	258334.000	0.06400	200	595354.000	0.06870
2-Chloroethyl Vinyl Ether	50.0	194469.000	0.1027	100	423910.000	0.1051	200	973262.000	0.1122
2-Chlorotoluene	50.0	2265249.00	2.213	100	4812150.00	2.201	200	8698852.00	1.887
2-Hexanone	50.0	174498.000	0.1067	100	391409.000	0.1125	200	876467.000	0.1156
4-Chlorotoluene	50.0	1970282.00	1.925	100	3962014.00	1.812	200	7556527.00	1.639
4-Methyl-2-Pentanone	50.0	93794.0000	0.04960	100	207483.000	0.05140	200	470077.000	0.05420
Acetone	50.0	88043.0000	0.04650	100	186332.000	0.04620	200	401136.000	0.04630
Benzene	50.0	1823494.00	0.9634	100	3902330.00	0.9675	200	7766872.00	0.8957
Bromobenzene	50.0	643755.000	0.6290	100	1368537.00	0.6258	200	2838056.00	0.6155
Bromochloromethane	50.0	297251.000	0.1570	100	633826.000	0.1571	200	1361030.00	0.1570
Bromodichloromethane	50.0	738015.000	0.3899	100	1577051.00	0.3910	200	3281948.00	0.3785
Bromomethane	50.0	377386.000	0.1994	100	821723.000	0.2037	200	1701848.00	0.1963
Carbon Disulfide	50.0	1501626.00	0.7933	100	3252820.00	0.8065	200	6704614.00	0.7732
Carbon Tetrachloride	50.0	856589.000	0.4525	100	1784696.00	0.4425	200	3631513.00	0.4188

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Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-11		
	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	894282.000	0.06680
2-Chloroethyl Vinyl Ether	300	1477742.00	0.1103
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1321877.00	0.1190
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	717844.000	0.05360
Acetone	300	607882.000	0.04540
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

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Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-02			WG297666-03			WG297666-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	5413.00000	0.1790
Dibromochloromethane	NA	NA	NA	0.400	2355.00000	0.2299	1.00	6955.00000	0.2616
Dibromomethane	NA	NA	NA	0.400	1404.00000	0.1195	1.00	4289.00000	0.1418
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	14741.00000	0.4874
Hexachlorobutadiene	NA	NA	NA	0.400	1578.00000	0.2519	1.00	4813.00000	0.2921
Isopropylbenzene	NA	NA	NA	0.400	10088.00000	0.9849	1.00	30554.00000	1.149
Methylene Chloride	NA	NA	NA	0.400	7857.00000	0.6688	1.00	12525.00000	0.4141
Naphthalene	NA	NA	NA	0.400	4070.00000	0.6497	1.00	12314.00000	0.7474
Styrene	NA	NA	NA	0.400	6646.00000	0.6488	1.00	19123.00000	0.7194
Tetrachloroethene	NA	NA	NA	0.400	2941.00000	0.2871	1.00	8743.00000	0.3289
Trichloroethene	NA	NA	NA	0.400	2668.00000	0.2271	1.00	7882.00000	0.2606
Trichlorofluoromethane	NA	NA	NA	0.400	5672.00000	0.4828	1.00	17680.00000	0.5846
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2755.00000	0.2345	1.00	6836.00000	0.2260
cis-1,3-Dichloropropene	NA	NA	NA	0.400	3332.00000	0.2836	1.00	9866.00000	0.3262
m-,p-Xylene	NA	NA	NA	0.800	10483.00000	0.5117	2.00	28196.00000	0.5303
n-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	22042.00000	1.338
n-Propylbenzene	NA	NA	NA	0.400	13267.00000	2.118	1.00	36470.00000	2.214
o-Xylene	NA	NA	NA	0.400	4261.00000	0.4160	1.00	11681.00000	0.4394
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	26095.00000	1.584
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	30226.00000	1.835
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	5789.00000	0.3514
trans-1,2-Dichloroethene	NA	NA	NA	0.400	2212.00000	0.1883	1.00	7156.00000	0.2366
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	9597.00000	0.3610

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Instrument ID:HPMS6
Initial Calibration Date:19-MAR-09 14:09
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Analyte	WG297666-05			WG297666-06			WG297666-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	11298.0000	0.1880	5.00	25614.0000	0.1620	20.0	123075.000	0.1851
Dibromochloromethane	2.00	13064.0000	0.2506	5.00	37666.0000	0.2736	20.0	179020.000	0.3113
Dibromomethane	2.00	7975.00000	0.1327	5.00	22265.0000	0.1408	20.0	98928.0000	0.1488
Dichlorodifluoromethane	2.00	31989.0000	0.5324	5.00	68568.0000	0.4335	20.0	313152.000	0.4711
Hexachlorobutadiene	2.00	9957.00000	0.3071	5.00	23960.0000	0.2800	20.0	112621.000	0.3148
Isopropylbenzene	2.00	68790.0000	1.320	5.00	188393.000	1.368	20.0	940468.000	1.635
Methylene Chloride	2.00	23194.0000	0.3860	5.00	46393.0000	0.2933	20.0	186298.000	0.2802
Naphthalene	2.00	24926.0000	0.7687	5.00	74862.0000	0.8749	20.0	396737.000	1.109
Styrene	2.00	43431.0000	0.8333	5.00	123130.000	0.8944	20.0	609095.000	1.059
Tetrachloroethene	2.00	16567.0000	0.3179	5.00	42895.0000	0.3116	20.0	197690.000	0.3437
Trichloroethene	2.00	14089.0000	0.2345	5.00	37204.0000	0.2352	20.0	177374.000	0.2668
Trichlorofluoromethane	2.00	39592.0000	0.6589	5.00	89634.0000	0.5667	20.0	406574.000	0.6116
Vinyl Acetate	NA	NA	NA	5.00	54237.0000	0.3429	20.0	254003.000	0.3821
cis-1,2-Dichloroethene	2.00	15544.0000	0.2587	5.00	39917.0000	0.2524	20.0	187625.000	0.2822
cis-1,3-Dichloropropene	2.00	18828.0000	0.3133	5.00	54305.0000	0.3434	20.0	270786.000	0.4073
m-,p-Xylene	4.00	59601.0000	0.5718	10.0	153946.000	0.5591	40.0	735984.000	0.6399
n-Butylbenzene	2.00	51169.0000	1.578	5.00	132314.000	1.546	20.0	678615.000	1.897
n-Propylbenzene	2.00	88570.0000	2.732	5.00	234163.000	2.737	20.0	1137587.00	3.180
o-Xylene	2.00	25854.0000	0.4960	5.00	70863.0000	0.5147	20.0	350176.000	0.6089
p-Isopropyltoluene	2.00	61487.0000	1.896	5.00	161334.000	1.886	20.0	801903.000	2.241
sec-Butylbenzene	2.00	71251.0000	2.197	5.00	190178.000	2.223	20.0	930174.000	2.600
tert-Butylbenzene	2.00	13054.0000	0.4026	5.00	33915.0000	0.3964	20.0	162722.000	0.4548
trans-1,2-Dichloroethene	2.00	13573.0000	0.2259	5.00	36316.0000	0.2296	20.0	173908.000	0.2616
trans-1,3-Dichloropropene	2.00	19722.0000	0.3784	5.00	55519.0000	0.4033	20.0	276796.000	0.4813

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Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-08			WG297666-09			WG297666-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	337456.000	0.1783	100	742878.000	0.1842	200	1539345.00	0.1775
Dibromochloromethane	50.0	492598.000	0.3011	100	1082979.00	0.3112	200	2332525.00	0.3078
Dibromomethane	50.0	263486.000	0.1392	100	562369.000	0.1394	200	1188941.00	0.1371
Dichlorodifluoromethane	50.0	767384.000	0.4054	100	1581348.00	0.3921	200	3053905.00	0.3522
Hexachlorobutadiene	50.0	300559.000	0.2937	100	664703.000	0.3040	200	1351881.00	0.2932
Isopropylbenzene	50.0	2536525.00	1.550	100	5277329.00	1.516	200	9630691.00	1.271
Methylene Chloride	50.0	490177.000	0.2590	100	1058306.00	0.2624	200	2268112.00	0.2616
Naphthalene	50.0	1141256.00	1.115	100	2525383.00	1.155	200	5275750.00	1.144
Styrene	50.0	1668821.00	1.020	100	3553600.00	1.021	200	6983576.00	0.9214
Tetrachloroethene	50.0	535081.000	0.3270	100	1137665.00	0.3269	200	2344915.00	0.3094
Trichloroethene	50.0	492817.000	0.2604	100	1082783.00	0.2684	200	2268633.00	0.2616
Trichlorofluoromethane	50.0	1048033.00	0.5537	100	2240689.00	0.5555	200	4566972.00	0.5267
Vinyl Acetate	50.0	708278.000	0.3742	100	1579678.00	0.3916	200	3387663.00	0.3907
cis-1,2-Dichloroethene	50.0	510963.000	0.2699	100	1104030.00	0.2737	200	2341333.00	0.2700
cis-1,3-Dichloropropene	50.0	754690.000	0.3987	100	1655621.00	0.4105	200	3509454.00	0.4047
m-,p-Xylene	100	1990421.00	0.6083	200	4188402.00	0.6017	400	7862457.00	0.5187
n-Butylbenzene	50.0	1880075.00	1.837	100	4035081.00	1.845	200	7614594.00	1.651
n-Propylbenzene	50.0	3055991.00	2.986	100	6230804.00	2.849	200	10764533.0	2.335
o-Xylene	50.0	953145.000	0.5826	100	2042713.00	0.5869	200	4126708.00	0.5445
p-Isopropyltoluene	50.0	2197833.00	2.148	100	4679648.00	2.140	200	8645826.00	1.875
sec-Butylbenzene	50.0	2532030.00	2.474	100	5311196.00	2.429	200	9688379.00	2.101
tert-Butylbenzene	50.0	441794.000	0.4317	100	952791.000	0.4357	200	1945809.00	0.4220
trans-1,2-Dichloroethene	50.0	479096.000	0.2531	100	1027509.00	0.2547	200	2207206.00	0.2545
trans-1,3-Dichloropropene	50.0	755054.000	0.4615	100	1621741.00	0.4660	200	3382522.00	0.4463

INT_CAL - Modified 03/06/2008
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Login Number: L09040570
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 19-MAR-09 14:09
Column ID: F

Analyte	WG297666-11		
	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: L09040570 Run Date: 04/21/2009 Sample ID: WG300248-12
Instrument ID: HPMS11 Run Time: 19:10 Method: 8260B
File ID: 11M58649 Analyst: WTD QC Key: STD
ICal Workgroup: WG300248 Cal ID: HPMS11 - 21-APR-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	19.5	ug/L	0.419	2.50	30	
1,1-Dichloroethene	CCC	20.0	20.0	ug/L	0.407	0.100	30	
1,2-Dichloropropane	CCC	20.0	20.0	ug/L	0.266	0.100	30	
Ethylbenzene	CCC	20.0	20.4	ug/L	0.463	2.20	30	
Toluene	CCC	20.0	21.1	ug/L	1.26	5.30	30	
Vinyl Chloride	CCC	20.0	17.0	ug/L	0.301	15.1	30	
Bromoform	SPCC	20.0	19.5	ug/L	0.207	2.50	30	
Chlorobenzene	SPCC	20.0	20.2	ug/L	0.796	0.900	30	
Chloromethane	SPCC	20.0	16.6	ug/L	0.761	17.0	30	
1,1-Dichloroethane	SPCC	20.0	19.8	ug/L	0.479	0.800	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	21.5	ug/L	0.466	7.70	30	
Acetone		20.0	22.3	ug/L	0.0856	11.7	30	
Benzene		20.0	20.1	ug/L	0.920	0.400	30	
Bromobenzene		20.0	20.2	ug/L	0.606	1.10	30	
Bromochloromethane		20.0	21.3	ug/L	0.149	6.30	30	
Bromodichloromethane		20.0	21.4	ug/L	0.333	7.00	30	
Bromomethane		20.0	20.0	ug/L	0.105	0	30	
2-Butanone		20.0	19.6	ug/L	0.113	2.10	30	
n-Butylbenzene		20.0	20.3	ug/L	1.99	1.30	30	
sec-Butylbenzene		20.0	21.0	ug/L	2.53	4.90	30	
tert-Butylbenzene		20.0	20.8	ug/L	0.416	4.10	30	
Carbon Disulfide		20.0	26.0	ug/L	0.662	30.2	30	*
Carbon Tetrachloride		20.0	20.9	ug/L	0.348	4.70	30	
Dibromochloromethane		20.0	21.7	ug/L	0.300	8.30	30	
Chloroethane		20.0	19.8	ug/L	0.188	0.800	30	
2-Chloroethyl Vinyl Ether		20.0	19.8	ug/L	0.117	1.00	30	
2-Chlorotoluene		20.0	21.3	ug/L	1.99	6.40	30	
4-Chlorotoluene		20.0	19.4	ug/L	1.54	3.00	30	
1,2-Dibromo-3-Chloropropane		20.0	21.0	ug/L	0.0881	5.10	30	
1,2-Dibromoethane		20.0	21.8	ug/L	0.226	9.20	30	
Dibromomethane		20.0	21.2	ug/L	0.130	5.80	30	
1,2-Dichlorobenzene		20.0	19.9	ug/L	1.16	0.300	30	
1,3-Dichlorobenzene		20.0	19.6	ug/L	1.21	1.80	30	
1,4-Dichlorobenzene		20.0	19.3	ug/L	1.24	3.50	30	
Dichlorodifluoromethane		20.0	22.5	ug/L	0.359	12.6	30	
1,2-Dichloroethane		20.0	19.9	ug/L	0.365	0.700	30	
cis-1,2-Dichloroethene		20.0	20.6	ug/L	0.252	3.10	30	
trans-1,2-Dichloroethene		20.0	20.1	ug/L	0.225	0.300	30	
1,3-Dichloropropane		20.0	21.0	ug/L	0.416	5.00	30	
2,2-Dichloropropane		20.0	18.7	ug/L	0.322	6.40	30	
cis-1,3-Dichloropropene		20.0	20.5	ug/L	0.352	2.30	30	
trans-1,3-Dichloropropene		20.0	18.7	ug/L	0.371	6.60	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1378569
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Login Number: L09040570 Run Date: 04/21/2009 Sample ID: WG300248-12
Instrument ID: HPMS11 Run Time: 19:10 Method: 8260B
File ID: 11M58649 Analyst: WTD QC Key: STD
Ical Workgroup: WG300248 Cal ID: HPMS11 - 21-APR-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	20.5	ug/L	0.320	2.30	30	
2-Hexanone	20.0	21.1	ug/L	0.223	5.70	30	
Hexachlorobutadiene	20.0	20.5	ug/L	0.340	2.70	30	
Isopropylbenzene	20.0	18.9	ug/L	1.26	5.50	30	
p-Isopropyltoluene	20.0	20.7	ug/L	2.10	3.30	30	
4-Methyl-2-Pentanone	20.0	20.6	ug/L	0.0825	2.80	30	
Methylene Chloride	20.0	20.2	ug/L	0.244	1.10	30	
Naphthalene	20.0	21.3	ug/L	1.49	6.50	30	
n-Propylbenzene	20.0	21.1	ug/L	2.92	5.30	30	
Styrene	20.0	21.6	ug/L	0.931	8.00	30	
1,1,1,2-Tetrachloroethane	20.0	20.8	ug/L	0.318	4.00	30	
Tetrachloroethene	20.0	20.6	ug/L	0.256	3.20	30	
1,2,3-Trichlorobenzene	20.0	20.2	ug/L	0.741	1.20	30	
1,2,4-Trichlorobenzene	20.0	20.0	ug/L	0.822	0	30	
1,1,1-Trichloroethane	20.0	20.1	ug/L	0.378	0.500	30	
1,1,2-Trichloroethane	20.0	21.4	ug/L	0.233	7.00	30	
Trichloroethene	20.0	18.7	ug/L	0.234	6.60	30	
Trichlorofluoromethane	20.0	18.5	ug/L	0.368	7.60	30	
1,2,3-Trichloropropane	20.0	21.6	ug/L	0.146	8.20	30	
1,2,4-Trimethylbenzene	20.0	21.4	ug/L	2.14	7.00	30	
1,3,5-Trimethylbenzene	20.0	21.1	ug/L	2.05	5.30	30	
Vinyl Acetate	20.0	24.5	ug/L	0.354	22.4	40	
o-Xylene	20.0	20.6	ug/L	0.544	3.10	30	
m-,p-Xylene	40.0	42.0	ug/L	0.563	4.90	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09040570 Run Date: 03/19/2009 Sample ID: WG297666-12
Instrument ID: HPMS6 Run Time: 16:26 Method: 8260B
File ID: 6M82309 Analyst: MES QC Key: STD
Ical Workgroup: WG297666 Cal ID: HPMS6 - 19-MAR-09

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	18.7	ug/L	0.502	6.50	30	
1,1-Dichloroethene	CCC	20.0	19.7	ug/L	0.409	1.50	30	
1,2-Dichloropropane	CCC	20.0	20.0	ug/L	0.216	0.200	30	
Ethylbenzene	CCC	20.0	21.0	ug/L	0.473	4.90	30	
Toluene	CCC	20.0	20.9	ug/L	1.23	4.50	30	
Vinyl Chloride	CCC	20.0	18.8	ug/L	0.263	6.00	30	
Bromoform	SPCC	20.0	16.4	ug/L	0.153	18.0	30	
Chlorobenzene	SPCC	20.0	19.6	ug/L	0.847	1.90	30	
Chloromethane	SPCC	20.0	20.5	ug/L	0.358	2.30	30	
1,1-Dichloroethane	SPCC	20.0	19.3	ug/L	0.460	3.50	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	19.0	ug/L	0.352	5.00	30	
Acetone		20.0	19.4	ug/L	0.0470	3.20	30	
Benzene		20.0	19.6	ug/L	0.933	1.80	30	
Bromobenzene		20.0	21.1	ug/L	0.629	5.30	30	
Bromochloromethane		20.0	20.3	ug/L	0.154	1.60	30	
Bromodichloromethane		20.0	19.1	ug/L	0.363	4.30	30	
Bromomethane		20.0	21.1	ug/L	0.201	5.60	30	
2-Butanone		20.0	17.7	ug/L	0.0581	11.6	30	
n-Butylbenzene		20.0	21.0	ug/L	1.75	4.80	30	
sec-Butylbenzene		20.0	21.6	ug/L	2.44	7.90	30	
tert-Butylbenzene		20.0	20.6	ug/L	0.426	2.90	30	
Carbon Disulfide		20.0	19.7	ug/L	0.786	1.40	30	
Carbon Tetrachloride		20.0	18.4	ug/L	0.413	7.90	30	
Dibromochloromethane		20.0	18.7	ug/L	0.262	6.60	30	
Chloroethane		20.0	21.0	ug/L	0.188	4.90	30	
2-Chloroethyl Vinyl Ether		20.0	19.0	ug/L	0.0985	4.80	30	
2-Chlorotoluene		20.0	21.0	ug/L	2.22	5.20	30	
4-Chlorotoluene		20.0	21.0	ug/L	1.91	4.90	30	
1,2-Dibromo-3-Chloropropane		20.0	18.4	ug/L	0.0711	8.20	30	
1,2-Dibromoethane		20.0	19.2	ug/L	0.202	3.90	30	
Dibromomethane		20.0	18.9	ug/L	0.130	5.50	30	
1,2-Dichlorobenzene		20.0	20.6	ug/L	1.14	2.90	30	
1,3-Dichlorobenzene		20.0	20.1	ug/L	1.25	0.600	30	
1,4-Dichlorobenzene		20.0	19.5	ug/L	1.29	2.50	30	
Dichlorodifluoromethane		20.0	22.0	ug/L	0.482	9.80	30	
1,2-Dichloroethane		20.0	17.6	ug/L	0.360	11.8	30	
cis-1,2-Dichloroethene		20.0	20.7	ug/L	0.267	3.30	30	
trans-1,2-Dichloroethene		20.0	20.2	ug/L	0.240	0.800	30	
1,3-Dichloropropane		20.0	18.9	ug/L	0.342	5.70	30	
2,2-Dichloropropane		20.0	18.7	ug/L	0.438	6.60	30	
cis-1,3-Dichloropropene		20.0	19.9	ug/L	0.359	0.400	30	
trans-1,3-Dichloropropene		20.0	17.0	ug/L	0.364	15.0	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1378569
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Login Number: L09040570 Run Date: 03/19/2009 Sample ID: WG297666-12
Instrument ID: HPMS6 Run Time: 16:26 Method: 8260B
File ID: 6M82309 Analyst: MES QC Key: STD
Ical Workgroup: WG297666 Cal ID: HPMS6 - 19-MAR-09

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	19.8	ug/L	0.343	1.10	30	
2-Hexanone	20.0	17.8	ug/L	0.0981	11.2	30	
Hexachlorobutadiene	20.0	19.5	ug/L	0.285	2.30	30	
Isopropylbenzene	20.0	16.4	ug/L	1.34	17.8	30	
p-Isopropyltoluene	20.0	20.7	ug/L	2.04	3.70	30	
4-Methyl-2-Pentanone	20.0	18.6	ug/L	0.0462	6.80	30	
Methylene Chloride	20.0	19.9	ug/L	0.268	0.700	30	
Naphthalene	20.0	18.1	ug/L	1.01	9.30	30	
n-Propylbenzene	20.0	22.5	ug/L	2.97	12.4	30	
Styrene	20.0	18.6	ug/L	0.983	6.80	30	
1,1,1,2-Tetrachloroethane	20.0	19.5	ug/L	0.306	2.70	30	
Tetrachloroethene	20.0	19.7	ug/L	0.315	1.30	30	
1,2,3-Trichlorobenzene	20.0	20.4	ug/L	0.588	1.90	30	
1,2,4-Trichlorobenzene	20.0	20.4	ug/L	0.674	2.10	30	
1,1,1-Trichloroethane	20.0	18.5	ug/L	0.471	7.30	30	
1,1,2-Trichloroethane	20.0	19.3	ug/L	0.193	3.50	30	
Trichloroethene	20.0	19.7	ug/L	0.248	1.70	30	
Trichlorofluoromethane	20.0	18.9	ug/L	0.537	5.30	30	
1,2,3-Trichloropropane	20.0	20.1	ug/L	0.126	0.500	30	
1,2,4-Trimethylbenzene	20.0	21.3	ug/L	2.18	6.50	30	
1,3,5-Trimethylbenzene	20.0	18.9	ug/L	2.13	5.50	30	
Vinyl Acetate	20.0	13.1	ug/L	0.247	34.5	40	
o-Xylene	20.0	21.7	ug/L	0.569	8.60	30	
m-,p-Xylene	40.0	42.3	ug/L	0.601	5.80	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L09040570	Run Date: 04/27/2009	Sample ID: WG300777-02
Instrument ID: HPMS11	Run Time: 11:59	Method: 8260B
File ID: 11M58755	Analyst: WTD	QC Key: STD
Workgroup (AAB#): WG300778	Cal ID: HPMS11 - 21-APR-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	50.1	ug/L	0.430	0.111	20	
1,1-Dichloroethene	CCC	50.0	53.4	ug/L	0.435	6.89	20	
1,2-Dichloropropane	CCC	50.0	49.9	ug/L	0.265	0.282	20	
Ethylbenzene	CCC	50.0	52.4	ug/L	0.475	4.88	20	
Toluene	CCC	50.0	53.6	ug/L	1.28	7.13	20	
Vinyl Chloride	CCC	50.0	47.2	ug/L	0.315	5.59	20	
Bromoform	SPCC	50.0	38.6	ug/L	0.169	22.9	40	
Chlorobenzene	SPCC	50.0	51.9	ug/L	0.820	3.89	40	
Chloromethane	SPCC	50.0	30.3	ug/L	0.541	39.3	40	
1,1-Dichloroethane	SPCC	50.0	51.3	ug/L	0.496	2.63	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.6	ug/L	0.387	10.8	40	
Acetone		50.0	39.0	ug/L	0.0599	21.9	40	
Benzene		50.0	52.1	ug/L	0.955	4.24	40	
Bromobenzene		50.0	51.4	ug/L	0.616	2.79	40	
Bromochloromethane		50.0	49.4	ug/L	0.138	1.12	40	
Bromodichloromethane		50.0	50.4	ug/L	0.314	0.868	40	
Bromomethane		50.0	60.0	ug/L	0.144	20.1	40	
2-Butanone		50.0	36.5	ug/L	0.0844	26.9	40	
n-Butylbenzene		50.0	55.9	ug/L	2.20	11.7	40	
sec-Butylbenzene		50.0	55.8	ug/L	2.69	11.6	40	
tert-Butylbenzene		50.0	54.6	ug/L	0.436	9.19	40	
Carbon Disulfide		50.0	51.4	ug/L	0.523	2.81	40	
Carbon Tetrachloride		50.0	56.4	ug/L	0.374	12.7	40	
Dibromochloromethane		50.0	48.4	ug/L	0.268	3.27	40	
Chloroethane		50.0	52.7	ug/L	0.200	5.42	40	
2-Chloroethyl Vinyl Ether		50.0	42.4	ug/L	0.100	15.1	40	
2-Chlorotoluene		50.0	49.1	ug/L	1.84	1.80	40	
4-Chlorotoluene		50.0	59.6	ug/L	1.89	19.2	40	
1,2-Dibromo-3-Chloropropane		50.0	40.3	ug/L	0.0675	19.5	40	
1,2-Dibromoethane		50.0	46.5	ug/L	0.192	6.99	40	
Dibromomethane		50.0	47.6	ug/L	0.117	4.72	40	
1,2-Dichlorobenzene		50.0	48.4	ug/L	1.13	3.14	40	
1,3-Dichlorobenzene		50.0	51.4	ug/L	1.27	2.75	40	
1,4-Dichlorobenzene		50.0	50.6	ug/L	1.30	1.16	40	
Dichlorodifluoromethane		50.0	56.4	ug/L	0.360	12.8	40	
1,2-Dichloroethane		50.0	46.1	ug/L	0.339	7.78	40	
cis-1,2-Dichloroethene		50.0	51.4	ug/L	0.251	2.80	40	
trans-1,2-Dichloroethene		50.0	53.3	ug/L	0.239	6.61	40	
1,3-Dichloropropane		50.0	44.3	ug/L	0.351	11.4	40	
2,2-Dichloropropane		50.0	56.0	ug/L	0.385	12.0	40	
cis-1,3-Dichloropropene		50.0	53.6	ug/L	0.369	7.24	40	
trans-1,3-Dichloropropene		50.0	50.6	ug/L	0.403	1.28	40	

CCV - Modified 03/05/2008

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CONTINUING CALIBRATION VERIFICATION (CCV)

00104011

Login Number: L09040570	Run Date: 04/27/2009	Sample ID: WG300777-02
Instrument ID: HPMS11	Run Time: 11:59	Method: 8260B
File ID: 11M58755	Analyst: WTD	QC Key: STD
Workgroup (AAB#): WG300778	Cal ID: HPMS11 - 21-APR-09	
Matrix: WATER		

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	54.2	ug/L	0.339	8.37	40	
2-Hexanone	50.0	37.2	ug/L	0.157	25.5	40	
Hexachlorobutadiene	50.0	55.0	ug/L	0.365	10.0	40	
Isopropylbenzene	50.0	53.5	ug/L	1.43	7.07	40	
p-Isopropyltoluene	50.0	56.8	ug/L	2.31	13.7	40	
4-Methyl-2-Pentanone	50.0	38.8	ug/L	0.0624	22.3	40	
Methylene Chloride	50.0	48.4	ug/L	0.233	3.27	40	
Naphthalene	50.0	44.6	ug/L	1.25	10.8	40	
n-Propylbenzene	50.0	56.6	ug/L	3.14	13.3	40	
Styrene	50.0	54.6	ug/L	0.941	9.25	40	
1,1,1,2-Tetrachloroethane	50.0	50.8	ug/L	0.310	1.53	40	
Tetrachloroethene	50.0	52.6	ug/L	0.261	5.25	40	
1,2,3-Trichlorobenzene	50.0	45.6	ug/L	0.668	8.75	40	
1,2,4-Trichlorobenzene	50.0	48.9	ug/L	0.804	2.17	40	
1,1,1-Trichloroethane	50.0	53.1	ug/L	0.400	6.17	40	
1,1,2-Trichloroethane	50.0	44.8	ug/L	0.195	10.3	40	
Trichloroethene	50.0	48.1	ug/L	0.241	3.79	40	
Trichlorofluoromethane	50.0	55.2	ug/L	0.439	10.4	40	
1,2,3-Trichloropropane	50.0	42.5	ug/L	0.115	14.9	40	
1,2,4-Trimethylbenzene	50.0	55.2	ug/L	2.21	10.4	40	
1,3,5-Trimethylbenzene	50.0	55.6	ug/L	2.17	11.2	40	
Vinyl Acetate	50.0	80.6	ug/L	0.450	61.2	40	*
o-Xylene	50.0	51.2	ug/L	0.541	2.46	40	
m-,p-Xylene	100	111	ug/L	0.595	10.8	40	
1,2-Dichloroethene	100	105	ug/L	0.245	4.71	40	
Xylenes	150	162	ug/L	0.568	8.00	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

PDF File ID: 1378571

Report generated 04/29/2009 16:06



Login Number: L09040570	Run Date: 04/28/2009	Sample ID: WG300851-02
Instrument ID: HPMS6	Run Time: 08:31	Method: 8260B
File ID: 6M83113	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG300852	Cal ID: HPMS6 - 19-MAR-09	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	45.6	ug/L	0.490	8.80	20	
1,1-Dichloroethene	CCC	50.0	46.5	ug/L	0.386	6.98	20	
1,2-Dichloropropane	CCC	50.0	51.4	ug/L	0.222	2.76	20	
Ethylbenzene	CCC	50.0	49.4	ug/L	0.445	1.23	20	
Toluene	CCC	50.0	50.5	ug/L	1.19	0.954	20	
Vinyl Chloride	CCC	50.0	41.2	ug/L	0.217	17.5	20	
Bromoform	SPCC	50.0	44.7	ug/L	0.171	10.7	40	
Chlorobenzene	SPCC	50.0	47.4	ug/L	0.818	5.22	40	
Chloromethane	SPCC	50.0	45.6	ug/L	0.319	8.88	40	
1,1-Dichloroethane	SPCC	50.0	47.2	ug/L	0.450	5.54	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.8	ug/L	0.346	6.49	40	
Acetone		50.0	45.3	ug/L	0.0440	9.42	40	
Benzene		50.0	49.2	ug/L	0.935	1.56	40	
Bromobenzene		50.0	50.3	ug/L	0.601	0.590	40	
Bromochloromethane		50.0	50.9	ug/L	0.154	1.81	40	
Bromodichloromethane		50.0	47.6	ug/L	0.361	4.70	40	
Bromomethane		50.0	28.9	ug/L	0.110	42.2	40	*
2-Butanone		50.0	42.6	ug/L	0.0560	14.8	40	
n-Butylbenzene		50.0	52.8	ug/L	1.76	5.59	40	
sec-Butylbenzene		50.0	50.3	ug/L	2.28	0.602	40	
tert-Butylbenzene		50.0	49.0	ug/L	0.405	2.02	40	
Carbon Disulfide		50.0	32.1	ug/L	0.512	35.8	40	
Carbon Tetrachloride		50.0	46.9	ug/L	0.420	6.27	40	
Dibromochloromethane		50.0	50.8	ug/L	0.286	1.63	40	
Chloroethane		50.0	48.5	ug/L	0.174	3.05	40	
2-Chloroethyl Vinyl Ether		50.0	49.6	ug/L	0.103	0.899	40	
2-Chlorotoluene		50.0	48.5	ug/L	2.05	2.93	40	
4-Chlorotoluene		50.0	47.0	ug/L	1.71	5.95	40	
1,2-Dibromo-3-Chloropropane		50.0	44.9	ug/L	0.0696	10.2	40	
1,2-Dibromoethane		50.0	49.6	ug/L	0.208	0.859	40	
Dibromomethane		50.0	46.6	ug/L	0.128	6.81	40	
1,2-Dichlorobenzene		50.0	48.4	ug/L	1.07	3.30	40	
1,3-Dichlorobenzene		50.0	48.0	ug/L	1.20	4.03	40	
1,4-Dichlorobenzene		50.0	46.6	ug/L	1.23	6.78	40	
Dichlorodifluoromethane		50.0	43.9	ug/L	0.386	12.1	40	
1,2-Dichloroethane		50.0	43.4	ug/L	0.355	13.1	40	
cis-1,2-Dichloroethene		50.0	50.8	ug/L	0.263	1.59	40	
trans-1,2-Dichloroethene		50.0	51.7	ug/L	0.246	3.45	40	
1,3-Dichloropropane		50.0	48.2	ug/L	0.349	3.57	40	
2,2-Dichloropropane		50.0	48.6	ug/L	0.456	2.80	40	
cis-1,3-Dichloropropene		50.0	54.0	ug/L	0.390	8.07	40	
trans-1,3-Dichloropropene		50.0	49.8	ug/L	0.427	0.338	40	

CCV - Modified 03/05/2008
 PDF File ID: 1378571
 Report generated 04/29/2009 16:06



Login Number: L09040570 Run Date: 04/28/2009 Sample ID: WG300851-02
Instrument ID: HPMS6 Run Time: 08:31 Method: 8260B
File ID: 6M83113 Analyst: MES QC Key: STD
Workgroup (AAB#): WG300852 Cal ID: HPMS6 - 19-MAR-09
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	51.0	ug/L	0.353	2.09	40	
2-Hexanone	50.0	45.0	ug/L	0.0994	10.1	40	
Hexachlorobutadiene	50.0	45.7	ug/L	0.267	8.54	40	
Isopropylbenzene	50.0	43.5	ug/L	1.40	13.0	40	
p-Isopropyltoluene	50.0	51.5	ug/L	2.03	2.99	40	
4-Methyl-2-Pentanone	50.0	49.2	ug/L	0.0488	1.53	40	
Methylene Chloride	50.0	45.8	ug/L	0.242	8.47	40	
Naphthalene	50.0	52.9	ug/L	1.20	5.87	40	
n-Propylbenzene	50.0	51.9	ug/L	2.74	3.82	40	
Styrene	50.0	44.1	ug/L	0.929	11.7	40	
1,1,1,2-Tetrachloroethane	50.0	48.4	ug/L	0.304	3.28	40	
Tetrachloroethene	50.0	50.2	ug/L	0.320	0.392	40	
1,2,3-Trichlorobenzene	50.0	51.1	ug/L	0.590	2.27	40	
1,2,4-Trichlorobenzene	50.0	52.9	ug/L	0.699	5.77	40	
1,1,1-Trichloroethane	50.0	46.7	ug/L	0.474	6.66	40	
1,1,2-Trichloroethane	50.0	49.0	ug/L	0.196	2.10	40	
Trichloroethene	50.0	52.1	ug/L	0.263	4.24	40	
Trichlorofluoromethane	50.0	45.1	ug/L	0.512	9.82	40	
1,2,3-Trichloropropane	50.0	47.0	ug/L	0.118	5.99	40	
1,2,4-Trimethylbenzene	50.0	49.8	ug/L	2.04	0.308	40	
1,3,5-Trimethylbenzene	50.0	44.6	ug/L	1.98	10.7	40	
Vinyl Acetate	50.0	47.6	ug/L	0.358	4.82	40	
o-Xylene	50.0	51.3	ug/L	0.538	2.68	40	
m-,p-Xylene	100	98.3	ug/L	0.558	1.68	40	
1,2-Dichloroethene	100	103	ug/L	0.254	2.52	40	
Xylenes	150	150	ug/L	0.548	0.229	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

PDF File ID: 1378571

Report generated 04/29/2009 16:06



Login Number: L09040570
Instrument ID: HPMS11
Workgroup (AAB#): WG300778

CCV Number: WG300777-02
CAL ID: HPMS11 - 21-APR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG300777-02	NA	NA	526970	938280	1186823
Upper Limit	NA	NA	1053940	1876560	2373646
Lower Limit	NA	NA	263485	469140	593412
<u>L09040570-03</u>	<u>1.00</u>	<u>01</u>	<u>309840</u>	<u>591885</u>	<u>748914</u>
WG300778-01	1.00	01	435945	828595	1041179
WG300778-02	1.00	01	468570	845033	1055168
WG300778-03	1.00	01	469624	853376	1068129

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

Underline = Response outside limits

Login Number: L09040570
Instrument ID: HPMS6
Workgroup (AAB#): WG300852

CCV Number: WG300851-02
CAL ID: HPMS6 - 19-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG300851-02	NA	NA	446502	738969	846917
Upper Limit	NA	NA	893004	1477938	1693834
Lower Limit	NA	NA	223251	369485	423459
L09040570-01	1.00	01	277052	468138	515229
L09040570-02	1.00	01	252819	416362	458935
WG300852-01	1.00	01	386840	643896	706929
WG300852-02	1.00	01	394218	640668	719128
WG300852-03	1.00	01	381303	618004	691902

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

Underline = Response outside limits

Microbac Laboratories Inc.
INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

00104016

Login Number: L09040570
Instrument ID: HPMS11
Workgroup (AAB#): WG300778

CCV Number: WG300777-02
CAL ID: HPMS11 - 21-APR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG300777-02	NA	NA	16.46	13.67	10.05
Upper Limit	NA	NA	16.96	14.17	10.55
Lower Limit	NA	NA	15.96	13.17	9.55
<u>L09040570-03</u>	<u>1.00</u>	<u>01</u>	<u>16.463</u>	<u>13.671</u>	<u>10.052</u>
WG300778-01	1.00	01	16.463	13.671	10.052
WG300778-02	1.00	01	16.463	13.671	10.052
WG300778-03	1.00	01	16.463	13.671	10.052

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

Underline = Response outside limits



Login Number: L09040570
Instrument ID: HPMS6
Workgroup (AAB#): WG300852

CCV Number: WG300851-02
CAL ID: HPMS6 - 19-MAR-09
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG300851-02	NA	NA	18.61	15.06	10.6
Upper Limit	NA	NA	19.11	15.56	11.1
Lower Limit	NA	NA	18.11	14.56	10.1
L09040570-01	1.00	01	18.6	15.06	10.59
L09040570-02	1.00	01	18.6	15.06	10.59
WG300852-01	1.00	01	18.6	15.06	10.59
WG300852-02	1.00	01	18.61	15.06	10.59
WG300852-03	1.00	01	18.6	15.06	10.59

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

Underline = Response outside limits

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
April 30, 2009

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
AM - ALISON J. MILLER	AML - ANTHONY M. LONG	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
CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL	CTB - CHRIS T. BUCINA
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
ECL - ERIC C. LAWSON	EDA - ERIN D. AGEE	ERP - ERIN R. PORTER
FJB - FRANCES J. BOLDEN	HAV - HEMA VILASAGAR	HJR - HOLLY J. REED
JBK - JEREMY B. KINNEY	JDH - JUSTIN D. HESSON	JKT - JANE K. THOMPSON
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	LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON
MDC - MICHAEL D. COCHRAN	MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	NPM - NATHANIEL P. MILLER
PDM - PIERCE D. MORRIS	RAH - ROY A. HALSTEAD	RB - ROBERT BUCHANAN
REK - ROBERT E. KYER	RLK - ROBIN L. KLINGER	RWC - RODNEY W. CAMPBELL
SDH - SHANA D. HINYARD	SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

Qualkey: STD

Qualifier	Description
*	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
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
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
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
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
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
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 (RL).
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.





00104021

NO. 5728

Laboratory Name: <u>Microbac</u>			Address: <u>158 Starline Dr. Marietta, OH</u>			Contact: <u>Stephanie Messburg (740) 373 4071</u>		
Project Name <u>USACE - LHAAP</u>			Project Location <u>Kaenack, TX</u>			Analysis and Method Desired (Indicate separate containers)		
Project No. <u>117591-00058004</u>			Project Contact <u>Jan Hoang</u>		Project Telephone No. <u>713 996 4408</u>		Number of Containers <u>3</u> <u>3</u>	
Point of Contact: <u>Jan Hoang</u>			Project Manager/Supervisor: <u>Praveen Srivastav</u>					
Telephone No. <u>713 996 4408</u>								
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Trip Blank in cooler
1	47 WW12 042209	04/24/09	1300		X	GW	LHAAP 47	
2	47 WW16 042209	04/24/09	1326		X	GW	LHAAP 47	
3								
4								
5								
6								
7								
8								
9								
10								
Transfers Relinquished By (signature)			Date/Time		Transfers Accepted By (signature)		Date/Time	
			04-22-09 / 1400					
							Special Instructions	
							FedEx Airbill No.:	
							Sampler's Signature	
TAT: <u>Standard</u>			Rush Date		Seals Intact? <u>N</u>		Received Good Condition <u>Y</u> <u>N</u> Cold	

00104022

Client:	Shaw			
Workorder Number:	B 3617			
Date Received:	4-23-09			
Delivered by:	() Fedx	(X) UPS	() Client	() Courier Time: 0940
Opened by:	RLK			
IR Temp Gun:	() G	(X) H		
Logged by:	RLK		L	09040570

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
B76	2	J204 777 516 6	5728	water

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?	✓		✓ RK ⊕	
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 (< 6mm)?	✓		✓ RK	
Were samples received within EPA hold times?	✓			

Discrepancy/Comments/Other Problems

*Rec'd 2 trip Blanks not on COC / Note on Side of COC.

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

00104023

Login: L09040570

Account: 2773

Project: 2773.025

Samples: 3

Due Date: 04-MAY-2009

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09040570-01	574966	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09040570-02	574967	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:41	MRT	RLK

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L09040570-03	574968	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:42	MRT	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	23-APR-2009 14:33	RLK	
2	ANALYZ	V1	ORG4	24-APR-2009 10:42	MRT	RLK

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





158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • <http://www.microbac.com>

Laboratory Report Number: L10060637

Client: Jennifer Hoang, 1401 Enclave Parkway, Houston, TX, 77077

Contract #: DACA56-94-D-0020

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac'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.

Kathy Albertson	<i>Team Chemist/Data Specialist</i>	Kathy.Albertson@microbac.com
Stephanie Mossburg	<i>Team Chemist/Data Specialist</i>	Stephanie.Mossburg@microbac.com
Tony Long	<i>Team Chemist/Data Specialist</i>	Tony.Long@microbac.com
Amanda Fickiesen	<i>Client Services Specialist</i>	Amanda.Fickiesen@microbac.com
Annie Brown	<i>Client Services Specialist</i>	Annie.Brown@microbac.com

This report was reviewed on June 28, 2010.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the accrediting authority listed below. 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 Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on June 28, 2010.

David Vandenberg - Managing Director

State of origin: Texas

Accrediting authority: Texas Commission on Environmental Quality ID:T104704252-07-TX

QAPP: Microbac OVD

This report contains a total of 54 pages.

Look closer. Go further. Do more.



The Microbac logo consists of the word "Microbac" in a white serif font, centered within a dark teal rectangular box. The text is underlined with a thin white line.

Microbac Laboratories, Inc.
Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750

Phone: 800.373.4071
Fax: 740.373.4835

Your data is now available online via our Web Access Portal!

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Click on "Online Data Access"

User ID: jdoe@abc.com

Password: demo

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LOOK CLOSER, GO FURTHER, DO MORE.

Microbac REPORT L10060637
PREPARED FOR Shaw E I, Inc.
WORK ID:

1.0 Introduction	4
2.1 General Chromatography Data	12
2.1.1 LC/MS Data (6850)	15
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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L10060637

CHAIN OF CUSTODY: The chain of custody number was 5876.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 4 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., 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: SLM

Approved: 24-JUN-10

<i>Stephani Mossburg</i>

Laboratory Data Package Cover Page

00104029

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. COCHRAN



Semivolatiles Lab Supervisor

June 28, 2010

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
Laboratory Log Number: L10060637
Project Name: 798-LONGHORN
Method: 6850
Prep Batch Number(s): WG335099
Reviewer Name: MIKE D. COCHRAN
LRC Date: June 28, 2010

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?			✓		

00104031

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L10060637
 Project Name: 798-LONGHORN
 Method: 6850
 Prep Batch Number(s): WG335099
 Reviewer Name: MIKE D. COCHRAN
 LRC Date: June 28, 2010

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L10060637
 Project Name: 798-LONGHORN
 Method: 6850
 Prep Batch Number(s): WG335099
 Reviewer Name: MIKE D. COCHRAN
 LRC Date: June 28, 2010

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L10060637
Project Name:	798-LONGHORN
Method:	6850
Prep Batch Number(s):	WG335099
Reviewer Name:	MIKE D. COCHRAN
LRC Date:	June 28, 2010

EXCEPTIONS REPORT

ER# - Description

Footnotes:

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

2.1 General Chromatography Data

LABORATORY REPORT

L10060637

00104036

06/25/10 15:24

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.
1401 Enclave Parkway
Suite 250
Houston, TX 77077
Attention: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47-LHSMW60-102206	L10060637-01	6850	10000	23-JUN-10



Report Number: **L10060637**Report Date : **June 25, 2010**

00104037

Sample Number: **L10060637-01**
Client ID: **47-LHSMW60-102206**
Matrix: **Water**
Workgroup Number: **WG335172**
Collect Date: **06/22/2010 10:30**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **6850**
Analytical Method: **6850**
Analyst: **WTD**
Dilution: **10000**
Units: **ug/L**

Instrument: **LCMS1**
Prep Date: **06/23/2010 11:06**
Cal Date: **06/11/2010 16:09**
Run Date: **06/23/2010 16:19**
File ID: **1LM.LM04082**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0	63600		2000	1000

1 of 1



2.1.1 LC/MS Data (6850)

2.1.1.1 Summary Data



Login Number: L10060637

Department: General Chromatography

Analyst: Wade DeLong

METHOD

Analysis SW-846 6850

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 that yielded a %RSD greater than 15%, linear or higher order equations were applied. 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 Spikes: All acceptance criteria were met.

SAMPLES

Samples: Samples 01, were run at a dilution.

Internal Standards: All acceptance criteria were met.

Manual Integration Reason Codes

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.

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 Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 7978

Approved By: Mike Cochran



LABORATORY REPORT

L10060637

00104042

06/28/10 14:13

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Shaw E & I, Inc.
1401 Enclave Parkway
Suite 250
Houston, TX 77077
Attention: Jennifer Hoang

Project Number: 2773.025
Project: Longhorn AAP
Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47-LHSMW60-102206	L10060637-01	6850	10000	23-JUN-10



Report Number: **L10060637**Report Date : **June 28, 2010**

00104043

Sample Number: **L10060637-01**
Client ID: **47-LHSMW60-102206**
Matrix: **Water**
Workgroup Number: **WG335172**
Collect Date: **06/22/2010 10:30**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **6850**
Analytical Method: **6850**
Analyst: **WTD**
Dilution: **10000**
Units: **ug/L**

Instrument: **LCMS1**
Prep Date: **06/23/2010 11:06**
Cal Date: **06/11/2010 16:09**
Run Date: **06/23/2010 16:19**
File ID: **1LM.LM04082**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0	63600		2000	1000

1 of 1



2.1.1.2 QC Summary Data

Example Calculation 6850 - Perchlorate**Concentration from Linear Regression****Step 1: Retrieve Curve Data From Plot, $y = mx + b$**

y = response ratio = response of analyte / response of internal standard (IS) = R_x/R_{istd}

x = amount ratio = concentration analyte/concentration internal standard (IS) = C_x / C_{istd}

m = slope from curve (1.45)

b = intercept from curve (-0.00242)

$y = 1.45x + -0.00242$

Step 2: Substitute the value for y

where $y = 12600/226000 = 0.055752$

Step 3: Solve for x

$x = (y - b)/m = 0.0040119$

Step 4: Solve for analyte concentration C_x

$C_x = (C_{is})(x) = (5 \text{ ug/L})(0.0040119) = 0.0200594 \text{ ug/L}$

Example Calculation - Water:

Slope from curve, m :	1.45
Intercept from curve, b :	-0.00242
Response of analyte, R_x :	12600
Response of Internal Standard, R_{istd} :	226000
Concentration of IS, C_{istd} (ug/L):	5.00
Response Ratio:	0.05575
Amount Ratio:	0.04012
Analyte Concentration, C_x (ug/L) :	0.200594

Example Calculation - Soil:

Analyte Concentration, C_x (ug/L):	0.20059
Amount of soil extracted (g):	5.00
Final volume of extract (mL):	50.00
Percent solids (Pct wt.)	100
Concentration in soil (ug/kg):	2.005938

Microbac Laboratories Inc.
Instrument Run Log

00104046

Instrument: LCMS1 Dataset: 061110_ADC.TXT
 Analyst1: WTD Analyst2: ADC
 Method: 6850 SOP: HPLC06 Rev: 1

Maintenance Log ID: 33441 Syringe Filter Lot#: T0405091205

Column 1 ID: KP-RPPX250 Column 2 ID: NA
 Workgroups: WG334051, WG333253
 Internal STD: COA14539 Surrogate STD: NA Calibration STD: STD39589
 Comments: QCMRL WG333253-09 = WG334051-07

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	1LM.LM03984	WG334055-01 CCB	1	1		06/11/10 14:04
2	1LM.LM03985	WG334055-02 0.1ug/L STD	1	1	STD39589	06/11/10 14:22
3	1LM.LM03986	WG334055-03 0.2ug/L STD	1	1	STD39589	06/11/10 14:40
4	1LM.LM03987	WG334055-04 0.5ug/L STD	1	1	STD39589	06/11/10 14:57
5	1LM.LM03988	WG334055-05 1.0ug/L STD	1	1	STD39589	06/11/10 15:15
6	1LM.LM03989	WG334055-06 2.0ug/L STD	1	1	STD39589	06/11/10 15:33
7	1LM.LM03990	WG334055-07 5.0ug/L STD	1	1	STD39589	06/11/10 15:51
8	1LM.LM03991	WG334055-08 10ug/L STD	1	1	STD39589	06/11/10 16:09
9	1LM.LM03992	WG334055-09 1.0ug/L ALT SRC	1	1	STD39586	06/11/10 16:27
10	1LM.LM03993	WG334050-01 CCB	1	1		06/11/10 16:45
11	1LM.LM03994	WG334050-02 1.0ug/L CCV	1	1	STD39589	06/11/10 17:02
12	1LM.LM03995	WG333253-07 0.2ug/L QCMRL	1	1	STD39589	06/11/10 17:20
13	1LM.LM03996	WG333253-01 0.2ug/L MCT	1	1	STD39589	06/11/10 17:38
14	1LM.LM03997	WG333253-02 MET BLANK	1	1		06/11/10 17:56
15	1LM.LM03998	WG333253-03 0.2ug/L LCS	1	1	STD39589	06/11/10 18:14
16	1LM.LM03999	L10060041-01	1	1	STD39589	06/11/10 18:31
17	1LM.LM04000	L10060041-02	1	1		06/11/10 18:49
18	1LM.LM04001	L10060041-03	1	1		06/11/10 19:07
19	1LM.LM04002	L10060041-04	1	1		06/11/10 19:25
20	1LM.LM04003	L10060041-05	1	1		06/11/10 19:43
21	1LM.LM04004	L10060041-06	1	1		06/11/10 20:01
52	1LM.LM04005	L10060041-07	1	1		06/11/10 20:19
23	1LM.LM04006	WG334050-03 1.0ug/L CCV	1	1	STD39589	06/11/10 20:36
24	1LM.LM04007	WG333253-08 0.2ug/L QCMRL	1	1	STD39589	06/11/10 20:54
25	1LM.LM04008	WG334050-04 CCB	1	1		06/11/10 21:12
53	1LM.LM04009	L10060041-08 MS	1	1	STD39589	06/11/10 21:30
54	1LM.LM04010	L10060041-09 MSD	1	1	STD39589	06/11/10 21:48
28	1LM.LM04011	L10060041-10	1	1		06/11/10 22:06
29	1LM.LM04012	WG334050-05 1.0ug/L CCV	1	1	STD39589	06/11/10 22:23
55	1LM.LM04013	WG334051-07 0.2ug/L QCMRL	1	1	STD39589	06/11/10 22:41
31	1LM.LM04014	WG334050-06 CCB	1	1		06/11/10 22:59
32	1LM.LM04015	WG334051-01 0.2ug/L MCT	1	1	STD39589	06/11/10 23:17
33	1LM.LM04016	WG334051-02 MET BLANK	1	1		06/11/10 23:35
34	1LM.LM04017	WG334051-03 0.2ug/L LCS	1	1	STD39589	06/11/10 23:52
35	1LM.LM04018	L10060151-01	1	1		06/12/10 00:10

Page: 1

Approved: 18-JUN-10




Microbac Laboratories Inc.
Instrument Run Log

00104047

Instrument: LCMS1 Dataset: 061110_ADC.TXT
 Analyst1: WTD Analyst2: ADC
 Method: 6850 SOP: HPLC06 Rev: 1

Maintenance Log ID: 33441 Syringe Filter Lot#: T0405091205

Column 1 ID: KP-RPPX250 Column 2 ID: NA
 Workgroups: WG334051, WG333253
 Internal STD: COA14539 Surrogate STD: NA STD39589

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
36	1LM.LM04019	L10060151-02	1	1		06/12/10 00:28
37	1LM.LM04020	L10060151-03	1	1		06/12/10 00:46
56	1LM.LM04021	L10060151-04	1	1		06/12/10 01:04
57	1LM.LM04022	L10060151-05 MS	1	1	STD39589	06/12/10 01:22
58	1LM.LM04023	L10060151-06 MSD	1	1	STD39589	06/12/10 01:40
41	1LM.LM04024	L10060151-07	1	1		06/12/10 01:57
42	1LM.LM04025	WG334050-07 1.0ug/L CCV	1	1	STD39589	06/12/10 02:15
43	1LM.LM04026	WG334051-08 0.2ug/L QCMRL	1	1	STD39589	06/12/10 02:33
44	1LM.LM04027	WG334050-08 CCB	1	1		06/12/10 02:51
45	1LM.LM04028	L10060151-08	1	1		06/12/10 03:09
46	1LM.LM04029	L10060151-09	1	1		06/12/10 03:27
47	1LM.LM04030	L10060151-10	1	1		06/12/10 03:44
48	1LM.LM04031	L10060231-02	1	1		06/12/10 04:02
49	1LM.LM04032	WG334050-09 1.0ug/L CCV	1	1	STD39589	06/12/10 04:20
50	1LM.LM04033	WG334051-09 0.2ug/L QCMRL	1	1	STD39589	06/12/10 04:38
51	1LM.LM04034	WG334050-10 CCB	1	1		06/12/10 04:56

Comments

Seq.	Rerun	Dil.	Reason	Analytes
48	X	10	Over Calibration Range	



Microbac Laboratories Inc.
Instrument Run Log

00104048

Instrument: LCMS1 Dataset: 062310_WTD.TXT
 Analyst1: WTD Analyst2: NA
 Method: 6850 SOP: HPLC06 Rev: 1

Maintenance Log ID: 33459 Syringe Filter Lot#: T0405091205

Column 1 ID: KP-RPPX250 Column 2 ID: NA

Workgroups: 335045, 335172

CCV Std: STD39589 LCS STD: STD39589
 Internal STD: COA14539 Surrogate STD: NA Calibration STD STD39589

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	1LM.LM04065	WG335099-01 CCB	1	1		06/23/10 11:06
2	1LM.LM04066	WG335099-02 1.0ug/L CCV	1	1	STD39589	06/23/10 11:23
3	1LM.LM04067	WG335045-05 0.2ug/L QCMRL	7	1	STD39589	06/23/10 11:41
4	1LM.LM04068	WG335045-01 2.0mg/kg MCT	7	1	STD39589	06/23/10 11:59
5	1LM.LM04069	WG335045-02 MET BLANK	7	1		06/23/10 12:17
6	1LM.LM04070	WG335045-03 2.0mg/kg LCS	7	1	STD39589	06/23/10 12:34
7	1LM.LM04071	WG335045-04 2.0mg/kg LCSD	7	1	STD39589	06/23/10 12:52
8	1LM.LM04072	L10060566-01	7	1		06/23/10 13:10
9	1LM.LM04073	WG335099-03 1.0ug/L CCV	1	1	STD39589	06/23/10 13:28
23	1LM.LM04074	WG335172-05 0.2mg/L QCMRL	1	1	STD39589	06/23/10 13:46
11	1LM.LM04075	WG335099-04 CCB	1	1		06/23/10 14:04
12	1LM.LM04076	WG335172-01 0.2mg/L MCT	1	1	STD39589	06/23/10 14:21
13	1LM.LM04077	WG335172-02 MET BLANK	1	1		06/23/10 14:39
14	1LM.LM04078	WG335172-03 0.2mg/L LCS	1	1	STD39589	06/23/10 14:57
15	1LM.LM04079	WG335172-04 0.2mg/L LCSD	1	1	STD39589	06/23/10 15:14
16	1LM.LM04080	L10060637-01	1		STD39589	06/23/10 15:32
17	1LM.LM04081	L10060637-01 1000x	1	1000		06/23/10 15:56
18	1LM.LM04082	L10060637-01 10000x	1	10000		06/23/10 16:19
19	1LM.LM04083	L10060637-01 100000x	1	100000		06/23/10 16:37
20	1LM.LM04084	WG335099-05 1.0ug/L CCV	1	1	STD39589	06/23/10 17:21
21	1LM.LM04085	WG335172-06 0.2mg/L QCMRL	1	1	STD39589	06/23/10 17:38
22	1LM.LM04086	WG335099-06 CCB	1	1		06/23/10 17:56

Comments

Seq.	Rerun	Dil.	Reason	Analytes
16	X	1000	Over Calibration Range	Perchlorate
17	X	10000	Over Calibration Range	Perchlorate
19				
Not needed.				




Microbac Laboratories Inc.

00104049

Data Checklist

Date: 11-JUN-2010

Analyst: WTD

Analyst: ADC

Method: 6850

Instrument: LCMS1

Curve Workgroup: NA

Runlog ID: 34784

Analytical Workgroups: WG333253, WG334051

ANALYTICAL	
System Performance Check	NA
DFTPP (GCMS)	NA
Endrin/DDT breakdown (8081/GCMS)	NA
Pentachlorophenol/benzidine tailing (GCMS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	NA
Linear regression or higher order curve	X
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (GCMS)	X
Continuing calibration blank (CCB) (IC/LCMS)	X
Limit of quantitation verification (LOQV) (LCMS)	X
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	NA
MS/MSD/Sample duplicates	X
Recoveries	NA
%RPD	NA
Interference check sample (ICS) (LCMS)	X
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	NA
Internal standard areas (MS)	X
Library searches (GCMS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	NA
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	ADC
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer:
17-JUN-2010



Secondary Reviewer:
18-JUN-2010




Microbac Laboratories Inc.

00104050

Data Checklist

Date: 23-JUN-2010

Analyst: WTD

Analyst: NA

Method: 6850

Instrument: LCMS1

Curve Workgroup: NA

Runlog ID: 34910

Analytical Workgroups: 335045, 335172

ANALYTICAL	
System Performance Check	NA
DFTPP (GCMS)	NA
Endrin/DDT breakdown (8081/GCMS)	NA
Pentachlorophenol/benzidine tailing (GCMS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	NA
Average RF	NA
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	NA
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (GCMS)	X
Continuing calibration blank (CCB) (IC/LCMS)	X
Limit of quantitation verification (LOQV) (LCMS)	X
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	NA
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Interference check sample (ICS) (LCMS)	X
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	NA
Internal standard areas (MS)	X
Library searches (GCMS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	X
Manual integrations	NA
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	WTD
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer:
24-JUN-2010

Secondary Reviewer:
25-JUN-2010

Wade D. [Signature] *Michael [Signature]*



Analytical Method: 6850

AAB#: WG335172

Login Number: L10060637

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
47-LHSMW60-102206	01	06/22/10					06/23/10	1	28		06/23/10	.2	28	

* = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: L10060637
Blank File ID: 1LM.LM04077
Prep Date: 06/23/10 11:06
Analyzed Date: 06/23/10 14:39
Analyst: WTD

Work Group: WG335172
Blank Sample ID: WG335172-02
Instrument ID: LCMS1
Method: 6850

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
QCMRL	WG335172-05	1LM.LM04074	06/23/10 13:46	01
MCT	WG335172-01	1LM.LM04076	06/23/10 14:21	01
LCS	WG335172-03	1LM.LM04078	06/23/10 14:57	01
LCS2	WG335172-04	1LM.LM04079	06/23/10 15:14	01
47-LHSMW60-102206	L10060637-01	1LM.LM04082	06/23/10 16:19	DL01
QCMRL	WG335172-06	1LM.LM04085	06/23/10 17:38	01



Login Number: L10060637 Prep Date: 06/23/10 11:06 Sample ID: WG335172-02
Instrument ID: LCMS1 Run Date: 06/23/10 14:39 Prep Method: 6850
File ID: 1LM.LM04077 Analyst: WTD Method: 6850
Workgroup (AAB#): WG335172 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: LCMS1 - 11-JUN-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Perchlorate	0.100	0.200	0.100	1	U

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1706677

25-JUN-2010 14:10



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104055

Login Number: L10060637 Analyst: WTD Prep Method: 6850
Instrument ID: LCMS1 Matrix: Water Method: 6850
Workgroup (AAB#): WG335172 Units: ug/L
QC Key: STD Lot #: STD39589
Sample ID: WG335172-03 LCS File ID: 1LM.LM04078 Run Date: 06/23/2010 14:57
Sample ID: WG335172-04 LCS2 File ID: 1LM.LM04079 Run Date: 06/23/2010 15:14

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Perchlorate	0.200	0.184	92.0	0.200	0.200	100	8.33	80 - 120	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1706678
Report generated: 06/25/2010 14:10



Login Number: L10060637
Analytical Method: 6850
ICAL Workgroup: WG334055

Instrument ID: LCMS1
Initial Calibration Date: 11-JUN-10 16:09
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R ²)
Perchlorate		1.515	11.7		

R = Correlation coefficient; 0.995 minimum
R² = Coefficient of determination; 0.99 minimum

Login Number: L10060637
Analytical Method: 6850

Instrument ID: LCMS1
Initial Calibration Date: 11-JUN-10 16:09
Column ID: F

Analyte	WG334055-02			WG334055-03			WG334055-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Perchlorate	0.100	4250.00000	1.850	0.200	7000.00000	1.532	0.500	16000.0000	1.430

Login Number: L10060637
Analytical Method: 6850

Instrument ID: LCMS1
Initial Calibration Date: 11-JUN-10 16:09
Column ID: F

Analyte	WG334055-05			WG334055-06			WG334055-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Perchlorate	1.00	33200.0000	1.465	2.00	65400.0000	1.469	5.00	157000.000	1.426

Login Number: L10060637
Analytical Method: 6850

Instrument ID: LCMS1
Initial Calibration Date: 11-JUN-10 16:09
Column ID: F

Analyte	WG334055-08		
	CONC	RESP	RF
Perchlorate	10.0	311000.000	1.433

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

00104060

Login Number: L10060637 Run Date: 06/11/2010 Sample ID: WG334055-09
Instrument ID: LCMS1 Run Time: 16:27 Method: 6850
File ID: 1LM.LM03992 Analyst: ADC QC Key: STD
ICal Workgroup: WG334055 Cal ID: LCMS1 - 11-JUN-10

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Perchlorate		1.00	1.01	ug/L	1.47	1.00	15	

* Exceeds %D Limit



Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335099-01
Instrument ID: LCMS1 Run Time: 11:06 Method: 6850
File ID: 1LM.LM04065 Analyst: WTD Units: ug/L
Workgroup (AAB#): WG335172 Cal ID: LCMS1 - 11-JUN-10
Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Perchlorate	0.100	0.200	0.100	U

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

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335099-04
Instrument ID: LCMS1 Run Time: 14:04 Method: 6850
File ID: 1LM.LM04075 Analyst: WTD Units: ug/L
Workgroup (AAB#): WG335172 Cal ID: LCMS1 - 11-JUN-10
Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Perchlorate	0.100	0.200	0.100	U

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

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335099-06
Instrument ID: LCMS1 Run Time: 17:56 Method: 6850
File ID: 1LM.LM04086 Analyst: WTD Units: ug/L
Workgroup (AAB#): WG335172 Cal ID: LCMS1 - 11-JUN-10
Matrix: WATER QAPP: STD

Analytes	MDL	RDL	Concentration	Qualifier
Perchlorate	0.100	0.200	0.100	U

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

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335099-03
Instrument ID: LCMS1 Run Time: 13:28 Method: 6850
File ID: 1LM.LM04073 Analyst: WTD QC Key: STD
Workgroup (AAB#): WG335172 Cal ID: LCMS1 - 11-JUN-10
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Perchlorate		1.00	0.999	ug/L	1.46	0.100	15	

* Exceeds %D Criteria

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335099-05
Instrument ID: LCMS1 Run Time: 17:21 Method: 6850
File ID: 1LM.LM04084 Analyst: WTD QC Key: STD
Workgroup (AAB#): WG335172 Cal ID: LCMS1 - 11-JUN-10
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Perchlorate		1.00	0.986	ug/L	1.44	1.40	15	

* Exceeds %D Criteria

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335172-05
Instrument ID: LCMS1 Run Time: 13:46 Prep Method: 6850
File ID: 1LM.LM04074 Analyst: WTD Method: 6850
Workgroup (AAB#): WG335172 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: LCMS1 - 11-JUN-10

Analytes	Expected	Found	% Rec	Limits	Q
Perchlorate	0.200	0.198	99.0	70 - 130	

Login Number: L10060637 Run Date: 06/23/2010 Sample ID: WG335172-06
Instrument ID: LCMS1 Run Time: 17:38 Prep Method: 6850
File ID: 1LM.LM04085 Analyst: WTD Method: 6850
Workgroup (AAB#): WG335172 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: LCMS1 - 11-JUN-10

Analytes	Expected	Found	% Rec	Limits	Q
Perchlorate	0.200	0.203	102	70 - 130	

Login Number: L10060637
Instrument ID: LCMS1
Workgroup (AAB#): WG335172

ICAL CCV Number: WG334055-05
CAL ID: LCMS1 - 11-JUN-10
Matrix: WATER

Sample Number	Dilution	Tag	IS-1
WG334055	NA	NA	112000
Upper Limit	NA	NA	168000
Lower Limit	NA	NA	56000
L10060637-01	10000	DL01	93300
WG335172-02	1.00	01	103000
WG335172-03	1.00	01	103000
WG335172-04	1.00	01	99200

IS-1 - 018LP

Underline = Response outside limits

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
June 28, 2010

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
AML - TONY M. LONG	BLG - BRENDA L. GREENWALT	BRG - BRENDA R. GREGORY
CAA - CASSIE A. AUGENSTEIN	CAF - CHERYL A. FLOWERS	CAH - CHUCK A. HALL
CEB - CHAD E. BARNES	CLC - CHRYS L. CRAWFORD	CLW - CHARISSA L. WINTERS
CPD - CHAD P. DAVIS	CSH - CHRIS S. HILL	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	ECL - ERIC C. LAWSON
EDA - ERIN D. AGEE	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY
JDH - JUSTIN D. HESSON	JKT - JANE K. THOMPSON	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU	KEB - KATIE E. BARNES
KHR - KIM H. RHODES	KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF
LMK - LOURAY M. KERN	LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON
MDC - MIKE D. COCHRAN	MES - MARY E. SCHILLING	MMB - MAREN M. BEERY
MRT - MICHELLE R. TAYLOR	MSW - MATT S. WILSON	PDM - PIERCE D. MORRIS
PWD - PAUL W. DENT	RAH - ROY A. HALSTEAD	RB - BOB BUCHANAN
REK - BOB E. KYER	RLK - ROBIN L. KLINGER	RWC - RODNEY W. CAMPBELL
SLM - STEPHANIE L. MOSSBURG	SLP - SHERI L. PFALZGRAF	TIP - TAE I. PARRISH
TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WTD - WADE T. DELONG		

Qualkey: STD_ND=U

Qualifier	Description
*	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
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
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
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
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
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Tentatively identified compound(TIC)
NA	Not applicable
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	Not detected at or above adjusted sample detection limit
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.





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

Chain of Custody

Laboratory Name: MICROBAC		Address: 158 STARLITE DR. MARIETTA, OH.		Contact: STEPHANIE MOSSBURG	
Project Name: LHAAP SITE 47		Project Location: KARNACK, TX.		Analysis and Method Desired (Indicate separate containers)	
Project No.: 117591.0009A220		Project Contact: JEN HOANG		Project Telephone No.: 281-531-3108	
Point of Contact: SCOTT BEESINGER		Project Manager/Supervisor: PRAVEN SRIVASTAV		Remarks	
Telephone No.: 903-679-3448					

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	Analysis and Method Desired (Indicate separate containers)	Remarks
1	47-LHSMWB6-102206	6/22/10	10:30		✓	W	SITE 47	1	PERC & LODATE EPA method 6850	
2										
3										
4										
5										
6										
7										
8										
9										
10										

Microbac OVD

Received: 06/23/2010 10:35

By: BRENDA GREENWALT

Brenda Greenwalt

221000007095

Transfers Relinquished By (signature): <i>Scott Beesinger</i>		Date/Time: 6/22/10 12:00		Transfers Accepted By (signature):		Date/Time:		Special Instructions: (3 DAY TAT)	
								FedEx Airbill No.:	
				Laboratory				Sampler's Signature: <i>Scott Beesinger</i>	

TAT: _____ Standard _____ Rush Date _____

Seals Intact? _____ Y _____ N

Received Good Condition _____ Y _____ N _____ Cold

COOLER INSPECTION



Received: 06/23/2010 10:35
Delivery Method: UPS
Opened By: Brenda Greenwalt
Comments:

Login(s): L10060637

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0014804	H	4.0	1Z66V7250198487947	5876	

- 1 Yes Were shipping coolers sealed?
- 2 Yes Were custody seals intact?
- 3 Yes Were cooler temperatures in range of 0-6?
- 4 Yes Was ice present?
- 5 Yes Were COC's received/information complete/signed and dated?
- 6 Yes Were sample containers and labels intact and match COC?
- 7 Yes Were the correct containers and volumes received?
- 8 Yes Were samples received within EPA hold times?
- 9 Yes Were correct perservatives used? (water only)
- 10 NA Were pH ranges acceptable? (voa's excluded)
- 11 NA Were VOA samples free of headspace (<6mm)?

Discrepancies:

Look closer. Go further. Do more.

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Internal Chain of Custody Report

00104074

Login: L10060637**Account:** 2773**Project:** 2773.025**Samples:** 1**Due Date:** 28-JUN-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10060637-01	707580	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	23-JUN-2010 13:04	ALB	
2	ANALYZ	W1	SEM	23-JUN-2010 13:31	WTD	RLK
3	STORE	SEM	A1	24-JUN-2010 15:26	RLK	WTD

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



NELAP Addendum - May 28, 2010

Non-NELAP LIMS Product and Description

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
 Total Halide by Bomb Combustion (TX)
 Particle Sizing - 200 Mesh (PS200)
 Sulfate (SO₄)
 Specific Gravity/Density (SPGRAV)
 Total Residual Chlorine (CL-TRL)
 Total Volatile Solids (all forms) (TVS)
 Total Coliform Bacteria (all methods)
 Fecal Coliform Bacteria (all methods)
 Sulfite (SO₃)
 Perchlorate (6850 – LCMS)
 Hexamethylphosphoramide (XMPA-LCMS)
 Thiodiglycol (TDG-LCMS)
 1,4-Dioxane – 8270C (827-DIOXANE)
 Phosphorus – 6010B
 Zirconium - 6010B

NELAP Accreditation by Laboratory SOP

NONPOTABLE WATER

OVL HPLC02/HPLC-UV

Nitroglycerin
 Nitroguanidine
 Acetic acid
 Butyric acid
 Lactic acid
 Propionic acid
 Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
 1-Methylnaphthalene
 2, 3, 4, 6-Tetrachlorophenol
 2-Chloronaphthalene
 Benzaldehyde
 Biphenyl
 Caprolactam
 Hexamethylphosphoramide (HMPA)
 Pentachlorobenzene

Pentachloroethane

OVL MSSO4/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronnol
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropyl ether
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSK01/GC-FID**

Isobutane
n-Butane
Propane
Propylene
Propyne

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV **

Nitroguanidine

OVL KNITRO-C-S/UV-VIS**

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene

Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

OVL MSS04/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronnol
Simazine
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1.3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropylether
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 9, 2010

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Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysis Time:
105-103107	SW8260B SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U			L10080026-08	21:22
			1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U			L10080026-08	21:22
			1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U			L10080026-08	21:22
			1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U			L10080026-08	21:22
			1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U			L10080026-08	21:22
			1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U			L10080026-08	21:22
			1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			2-BUTANONE	2.50	ug/L	U	N Y	U			L10080026-08	21:22
			2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U			L10080026-08	21:22
			2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			2-HEXANONE	2.50	ug/L	U	N Y	U			L10080026-08	21:22
			4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U			L10080026-08	21:22
			ACETONE	2.50	ug/L	U	N Y	U			L10080026-08	21:22
			BENZENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			BROMOBENZENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U			L10080026-08	21:22
			BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			BROMOFORM	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			BROMOMETHANE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			CARBON DISULFIDE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			CHLOROBENZENE	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			CHLOROETHANE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			CHLOROFORM	0.125	ug/L	U	N Y	U			L10080026-08	21:22
			CHLOROMETHANE	0.500	ug/L	U	N Y	U			L10080026-08	21:22
			CIS-1,2-DICHLOROETHENE	0.710	ug/L	J	Y Y	J			L10080026-08	21:22
			CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U			L10080026-08	21:22
			DIBROMOMETHANE	0.250	ug/L	U	N Y	U			L10080026-08	21:22

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use	BCF	Val	Val	Reason Codes				Lab Sample:	Analysis Time:
										Qlfr	Code:	1	2	3	4		
105-103107	SW8260B	SW5030	N 0 1	DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				ETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				ISOPROPYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				M-,P-XYLENE	0.500	ug/L	U	N	Y	U						L10080026-08	21:22
				METHYLENE CHLORIDE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				N-BUTYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				N-PROPYLBENZENE	0.125	ug/L	U	N	Y	U						L10080026-08	21:22
				NAPHTHALENE	0.200	ug/L	U	N	Y	U						L10080026-08	21:22
				O-XYLENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				SEC-BUTYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				STYRENE	0.125	ug/L	U	N	Y	U						L10080026-08	21:22
				TERT-BUTYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				TETRACHLOROETHENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				TOLUENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N	Y	U						L10080026-08	21:22
				TRICHLOROETHENE	25.8	ug/L			Y	Y						L10080026-08	21:22
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
				VINYL ACETATE	2.50	ug/L	U	N	Y	U						L10080026-08	21:22
				VINYL CHLORIDE	0.250	ug/L	U	N	Y	U						L10080026-08	21:22
47WW21-103107	SW6850	NONE	N 0 1	PERCHLORATE	0.100	ug/L	U	N	Y	U						L10080026-07	23:29
				1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROETHANE	0.125	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROETHENE	0.500	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2-DIBROMOETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2-DICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N	Y	U						L10080026-07	20:49
	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROETHANE	0.125	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROETHENE	0.500	ug/L	U	N	Y	U						L10080026-07	20:49
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N	Y	U						L10080026-07	20:49
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N	Y	U						L10080026-07	20:49

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW21-103107	SW8260B	SW5030	N 0 1	2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-07	20:49
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-07	20:49
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-07	20:49
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-07	20:49
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-07	20:49
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-07	20:49
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				CIS-1,2-DICHLOROETHENE	0.330	ug/L	J	Y Y	J						L10080026-07	20:49
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				M-,P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-07	20:49
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-07	20:49
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-07	20:49
				TRICHLOROETHENE	0.495	ug/L	J	Y Y	J						L10080026-07	20:49
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-07	20:49

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW21-103107	SW8260B	SW5030	N 0 1	VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-07	20:49
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-07	20:49
47WW27-103107	SW6850	NONE	N 0 50	PERCHLORATE	168	ug/L		Y Y							L10080026-06	08:37
	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-06	20:17
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-06	20:17
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-06	20:17
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-06	20:17
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-06	20:17
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-06	20:17
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-06	20:17
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-06	20:17

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Sample Number:	Analytical/Extraction Method:		Fit REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW27-103107	SW8260B	SW5030	N 0 1	CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				CIS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				M-,P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-06	20:17
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-06	20:17
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-06	20:17
				TRICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-06	20:17
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-06	20:17
47WW28-103107	SW6850	NONE	N 0 1	PERCHLORATE	0.302	ug/L		Y Y							L10080026-11	00:42
	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-11	22:59
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-11	22:59
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-11	22:59
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-11	22:59
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-11	22:59

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											1	2	3	4		
47WW28-103107	SW8260B	SW5030	N 0 1	1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-11	22:59
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-11	22:59
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-11	22:59
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-11	22:59
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-11	22:59
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-11	22:59
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-11	22:59
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				CIS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				M-P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-11	22:59
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-11	22:59
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW28-103107	SW8260B	SW5030	N 0 1	TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-11	22:59
				TRICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-11	22:59
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-11	22:59
47WW29-103107	SW8260B	SW5030	N 0 1	PERCHLORATE	0.100	ug/L	U	N Y	U						L10080026-09	23:53
				1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-09	21:54
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-09	21:54
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-09	21:54
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-09	21:54
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-09	21:54
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-09	21:54
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-09	21:54
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-09	21:54

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW29-103107	SW8260B	SW5030	N 0 1	CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				CIS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				HEXACHLOROBTADIENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				M-P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-09	21:54
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-09	21:54
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-09	21:54
				TRICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-09	21:54
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-09	21:54
47WW29-103107-FD	SW8260B	SW5030	N 0 1	PERCHLORATE	0.100	ug/L	U	N Y	U						L10080026-10	00:18
				1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-10	22:27
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-10	22:27

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW29-103107-FD	SW8260B	SW5030	N 0 1	1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-10	22:27
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-10	22:27
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-10	22:27
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-10	22:27
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-10	22:27
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				CIS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				M-,P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-10	22:27
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27

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Sample Number:	Analytical/Extraction Method:		Fit REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW29-103107-FD	SW8260B	SW5030	N 0 1	STYRENE	0.125	ug/L	U	N Y	U						L10080026-10	22:27
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-10	22:27
				TRICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-10	22:27
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-10	22:27
47WW32-103107	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-05	16:32
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-05	16:32
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-05	16:32
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-05	16:32
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-05	16:32
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-05	16:32
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-05	16:32
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-05	16:32

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									Qlfr	Code:	1	2	3	4		
47WW32-103107	SW8260B	SW5030	N 0 1	BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				CIS-1,2-DICHLOROETHENE	0.929	ug/L	J	Y Y	J						L10080026-05	16:32
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				M-P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-05	16:32
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-05	16:32
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-05	16:32
				TRICHLOROETHENE	30.8	ug/L		Y Y							L10080026-05	16:32
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-05	16:32
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-05	16:32
47WW33-103007	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-01	16:00
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				1,1-DICHLOROETHANE	0.240	ug/L	J	Y Y	J						L10080026-01	16:00
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-01	16:00
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-01	16:00
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-01	16:00
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-01	16:00

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use	BCF	Val	Val	Reason Codes				Lab Sample:	Analysis Time:
										Qlfr	Code:	1	2	3	4		
47WW33-103007	SW8260B	SW5030	N 0 1	1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N	Y	U						L10080026-01	16:00
				1,2-DIBROMOETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				1,2-DICHLOROETHANE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				1,2-DICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N	Y	U						L10080026-01	16:00
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				1,3-DICHLOROETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N	Y	U						L10080026-01	16:00
				1,4-DICHLOROETHANE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				2-BUTANONE	2.50	ug/L	U	N	Y	U						L10080026-01	16:00
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N	Y	U						L10080026-01	16:00
				2-CHLOROTOLUENE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				2-HEXANONE	2.50	ug/L	U	N	Y	U						L10080026-01	16:00
				4-CHLOROTOLUENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N	Y	U						L10080026-01	16:00
				ACETONE	2.50	ug/L	U	N	Y	U						L10080026-01	16:00
				BENZENE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				BROMOBENZENE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				BROMOCHLOROMETHANE	0.200	ug/L	U	N	Y	U						L10080026-01	16:00
				BROMODICHLOROMETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				BROMOFORM	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				BROMOMETHANE	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				CARBON DISULFIDE	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				CARBON TETRACHLORIDE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				CHLOROBENZENE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				CHLOROETHANE	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				CHLOROFORM	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				CHLOROMETHANE	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				CIS-1,2-DICHLOROETHENE	1.35	ug/L		Y	Y							L10080026-01	16:00
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				DIBROMOMETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				ETHYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				ISOPROPYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				M-P-XYLENE	0.500	ug/L	U	N	Y	U						L10080026-01	16:00
				METHYLENE CHLORIDE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				N-BUTYLBENZENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00
				N-PROPYLBENZENE	0.125	ug/L	U	N	Y	U						L10080026-01	16:00
				NAPHTHALENE	0.200	ug/L	U	N	Y	U						L10080026-01	16:00
				O-XYLENE	0.250	ug/L	U	N	Y	U						L10080026-01	16:00

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Pl

Run Date: September 9, 2010

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW33-103007	SW8260B	SW5030	N 0 1	P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-01	16:00
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-01	16:00
				TRICHLOROETHENE	2.21	ug/L	U	Y Y	U						L10080026-01	16:00
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-01	16:00
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-01	16:00
LHSMW38-103007	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-02	17:03
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				1,1-DICHLOROETHENE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-02	17:03
				1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-02	17:03
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-02	17:03
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-02	17:03
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-02	17:03
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-02	17:03
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-02	17:03
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-02	17:03
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-02	17:03
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-02	17:03
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-02	17:03

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Pl

Run Date: September 9, 2010

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
LHSMW38-103007	SW8260B	SW5030	N 0 1	BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				CIS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				M-,P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-02	17:03
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-02	17:03
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-02	17:03
				TRICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-02	17:03
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-02	17:03
LHSMW44-103007	SW8260B	SW5030	N 0 1	1,1,1,2-TETRACHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,1,1-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,1,2,2-TETRACHLOROETHANE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				1,1,2-TRICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,1-DICHLOROETHANE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				1,1-DICHLOROETHENE	0.526	ug/L	J	Y Y	J						L10080026-03	17:35
				1,1-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,2,3-TRICHLOROBENZENE	0.150	ug/L	U	N Y	U						L10080026-03	17:35

Validation Qualifier Data Entry Verification

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
LHSMW44-103007	SW8260B	SW5030	N 0 1	1,2,3-TRICHLOROPROPANE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				1,2,4-TRICHLOROBENZENE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				1,2,4-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,2-DIBROMO-3-CHLOROPROPANE	1.00	ug/L	U	N Y	U						L10080026-03	17:35
				1,2-DIBROMOETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,2-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				1,2-DICHLOROETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,2-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				1,3,5-TRIMETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,3-DICHLOROBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				1,3-DICHLOROPROPANE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				1,4-DICHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				2,2-DICHLOROPROPANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				2-BUTANONE	2.50	ug/L	U	N Y	U						L10080026-03	17:35
				2-CHLOROETHYL VINYL ETHER	2.00	ug/L	U	N Y	U						L10080026-03	17:35
				2-CHLOROTOLUENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				2-HEXANONE	2.50	ug/L	U	N Y	U						L10080026-03	17:35
				4-CHLOROTOLUENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				4-METHYL-2-PENTANONE	2.50	ug/L	U	N Y	U						L10080026-03	17:35
				ACETONE	2.50	ug/L	U	N Y	U						L10080026-03	17:35
				BENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				BROMOBENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				BROMOCHLOROMETHANE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				BROMODICHLOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				BROMOFORM	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				BROMOMETHANE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				CARBON DISULFIDE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				CARBON TETRACHLORIDE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				CHLOROBENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				CHLORODIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				CHLOROETHANE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				CHLOROFORM	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				CHLOROMETHANE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				CIS-1,2-DICHLOROETHENE	5.93	ug/L		Y Y							L10080026-03	17:35
				CIS-1,3-DICHLOROPROPENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				DIBROMOMETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				DICHLORODIFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				ETHYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				HEXACHLOROBUTADIENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				ISOPROPYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				M-,P-XYLENE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				METHYLENE CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				N-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				N-PROPYLBENZENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Pl

Run Date: September 9, 2010

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
LHSMW44-103007	SW8260B	SW5030	N 0 1	NAPHTHALENE	0.200	ug/L	U	N Y	U						L10080026-03	17:35
				O-XYLENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				P-ISOPROPYLTOLUENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				SEC-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				STYRENE	0.125	ug/L	U	N Y	U						L10080026-03	17:35
				TERT-BUTYLBENZENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				TETRACHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				TOLUENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				TRANS-1,2-DICHLOROETHENE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				TRANS-1,3-DICHLOROPROPENE	0.500	ug/L	U	N Y	U						L10080026-03	17:35
				TRICHLOROETHENE	26.4	ug/L		Y Y							L10080026-03	17:35
				TRICHLOROFLUOROMETHANE	0.250	ug/L	U	N Y	U						L10080026-03	17:35
				VINYL ACETATE	2.50	ug/L	U	N Y	U						L10080026-03	17:35
				VINYL CHLORIDE	0.250	ug/L	U	N Y	U						L10080026-03	17:35

11008002600104094



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

Chain of Custody

NO. 5883

EW
LHAAP-47

Laboratory Name: MICROBAC		Address: 158 STARLITE DR MARIETTA, OH.		Contact: STEPHANIA MOSSBURG														
Project Name: LHAAP		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)														
Project No.: 117591.0009A130		Project Contact: JEN HOANG		Project Telephone No.: 281-531-3108														
Point of Contact: Scott Beesinger		Project Manager/Supervisor: PRAVEEN SRIVASTAV		Telephone No.: 903-679-3448														
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	Perchlorate								
1	47WW33-103007	7/30/10	11:00		✓	W	Site 47	2	✓									
2	LHSMW38-103007	7/30/10	2:45		✓	W	Site 47	2	✓									
3	LHSMW44-103007	7/30/10	4:15		✓	W	Site 47	2	✓									
4	Equipment Rinse-103007	7/30/10	4:30		✓	W	Site 47	2	✓									
5	47WW32-103107	7/31/10	7:55		✓	W	Site 47	2	✓									
6	47WW27-103107	7/31/10	9:45		✓	W	Site 47	3	2	✓								
7	47WW21-103107	7/31/10	12:00		✓	W	Site 47	3	2	✓								
8	105-103107	7/31/10	1:10		✓	W	Site 47	2	✓									
9	47WW29-103107	7/31/10			✓	W	Site 47	3	2	1								
10	47WW29-103107-FD	7/31/10			✓	W	Site 47	3	2	1								
Transfers Relinquished By (signature)		Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions										
<i>Scott Beesinger</i>		8/2/10 8:00						5 DAY TAT										
								FedEx Airbill No.:										
								Sampler's Signature <i>Scott Beesinger</i>										
								Ived Good Condition ☐ Y ☐ N ☐ Cold										

Microbac OVD

221000007935

Received: 08/03/2010 09:49

By: ROBIN KLINGER

TAT: _____ Standard _____ Rush _____

Robin J. Klinger

Pink - File Copy

Form Number: 433_2
Rev. 10-19-07



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

Chain of Custody

Laboratory Name: MICROBAC		Address: 158 STAR LINE DR. MARICETTA, OH.		Contact: Stephanie MASSBURG														
Project Name: LHAAP		Project Location: KARNACK, TX.		Analysis and Method Desired (Indicate separate containers)														
Project No.: 117591, 0009A130		Project Contact: JEN HOANG		Project Telephone No.: 281-531-3108														
Point of Contact: Scott Beesinger		Project Manager/Supervisor: PRAVEEN SRINIVASAN																
Telephone No.: 703-679-3448																		
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	PERCHLORATE								
1	47WW28-103107	7/31/10	3:50		✓	W	Site 47	3	2	1								
2	Equipment Rinse-103107	7/31/10	4:10		✓	W	Site 47	3	2	1								
3	TRIP BLANK	7/31/10			✓	W		2	2									
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Transfers Relinquished By (signature): Scott Beesinger		Date/Time: 8/2/10 8:00		Transfers Accepted By (signature):		Date/Time:		Special Instructions: 5 DAY TAT										
								FedEx Airbill No.:										
				Laboratory				Sampler's Signature: Scott Beesinger										
TAT: _____ Standard _____ Rush Date _____		Seals Intact? _____ Y _____ N		Received Good Condition _____ Y _____ N		Cold												



1000007935

COOLER INSPECTION



Received: 08/03/2010 09:49
 Delivery Method: UPS
 Opened By: Robin Klinger
 Comments:

Login(s): L10080026]

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0014906	H	2.0	1Z66V7250193299178	5883 5884	

- 1 Yes Were shipping coolers sealed?
- 2 Yes Were custody seals intact?
- 3 Yes Were cooler temperatures in range of 0-6?
- 4 Yes Was ice present?
- 5 Yes Were COC's received/information complete/signed and dated?
- 6 Yes Were sample containers and labels intact and match COC?
- 7 Yes Were the correct containers and volumes received?
- 8 Yes Were samples received within EPA hold times?
- 9 Yes Were correct preservatives used? (water only)
- 10 NA Were pH ranges acceptable? (voa's excluded)
- 11 Yes Were VOA samples free of headspace (<6mm)?

Discrepancies:

Look closer. Go further. Do more.

Microbac - Ohio Valley Division
 158 Starlite Drive
 Marietta, OH 45750
 Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.**Internal Chain of Custody Report**

Login: L10080026

Account: 2773

Project: 2773.025

Samples: 13

Due Date: 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-01	721530	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:45	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-02	721531	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

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



Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080026**Account:** 2773**Project:** 2773.025**Samples:** 13**Due Date:** 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-03	721532	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-04	721533	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080026

Account: 2773

Project: 2773.025

Samples: 13

Due Date: 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-05	721534	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-06	721535	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:45	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-06	721536	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:07	RLK	WTD

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080026

Account: 2773

Project: 2773.025

Samples: 13

Due Date: 10-AUG-2010

Samplenum	Container ID	Products
L10080026-07	721537	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:50	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Samplenum	Container ID	Products
L10080026-07	721538	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:07	RLK	WTD

Samplenum	Container ID	Products
L10080026-08	721539	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

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



Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080026**Account:** 2773**Project:** 2773.025**Samples:** 13**Due Date:** 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-09	721540	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-09	721541	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:07	RLK	WTD

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-10	721542	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080026

Account: 2773

Project: 2773.025

Samples: 13

Due Date: 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-10	721543	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:06	RLK	WTD

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-11	721544	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-11	721545	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:06	RLK	WTD

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080026

Account: 2773

Project: 2773.025

Samples: 13

Due Date: 10-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-12	721546	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-12	721547	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	03-AUG-2010 14:03	JKT	
2	ANALYZ	W1	SEM	03-AUG-2010 15:32	WTD	RLK
3	STORE	SEM	A1	10-AUG-2010 08:07	RLK	WTD

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080026-13	721548	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	03-AUG-2010 14:03	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 07:49	MRT	JKT
3	STORE	ORG4	A1	05-AUG-2010 12:46	JKT	PWD
4	STORE	ORG4	A1	19-AUG-2010 07:44	JKT	MRT

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



NELAP Addendum - May 28, 2010**Non-NELAP LIMS Product and Description**

The following is a list of those tests that are not included in the Microbac – OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
 Total Halide by Bomb Combustion (TX)
 Particle Sizing - 200 Mesh (PS200)
 Sulfate (SO4)
 Specific Gravity/Density (SPGRAV)
 Total Residual Chlorine (CL-TRL)
 Total Volatile Solids (all forms) (TVS)
 Total Coliform Bacteria (all methods)
 Fecal Coliform Bacteria (all methods)
 Sulfite (SO3)
 Perchlorate (6850 – LCMS)
 Hexamethylphosphoramide (XMPA-LCMS)
 Thiodiglycol (TDG-LCMS)
 1,4-Dioxane – 8270C (827-DIOXANE)
 Phosphorus – 6010B
 Zirconium - 6010B

NELAP Accreditation by Laboratory SOP**NONPOTABLE WATER****OVL HPLC02/HPLC-UV**

Nitroglycerin
 Nitroguanidine
 Acetic acid
 Butyric acid
 Lactic acid
 Propionic acid
 Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
 1-Methylnaphthalene
 2, 3, 4, 6-Tetrachlorophenol
 2-Chloronaphthalene
 Benzaldehyde
 Biphenyl
 Caprolactam
 Hexamethylphosphoramide (HMPA)
 Pentachlorobenzene

Pentachloroethane

OVL MSSO4/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronnol
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropyl ether
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSK01/GC-FID**

Isobutane
n-Butane
Propane
Propylene
Propyne

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV **

Nitroguanidine

OVL KNITRO-C-S/UV-VIS**

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene

Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

OVL MSS04/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronnol
Simazine
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1,3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropylether
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data

LABORATORY REPORT

00104109

L10080026

08/16/10 16:54

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW33-103007	L10080026-01	8260B	1	03-AUG-10
LHSMW38-103007	L10080026-02	8260B	1	03-AUG-10
LHSMW44-103007	L10080026-03	8260B	1	03-AUG-10
EQUIPMENT RINSE-103007	L10080026-04	8260B	1	03-AUG-10
47WW32-103107	L10080026-05	8260B	1	03-AUG-10
47WW27-103107	L10080026-06	8260B	1	03-AUG-10
47WW21-103107	L10080026-07	8260B	1	03-AUG-10
105-103107	L10080026-08	8260B	1	03-AUG-10
47WW29-103107	L10080026-09	8260B	1	03-AUG-10
47WW29-103107-FD	L10080026-10	8260B	1	03-AUG-10
47WW28-103107	L10080026-11	8260B	1	03-AUG-10
EQUIPMENT RINSE-103107	L10080026-12	8260B	1	03-AUG-10
TRIP BLANK	L10080026-13	8260B	1	03-AUG-10



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-01

Client ID: 47WW33-103007

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/30/2010 11:00

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 16:00

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 16:00

File ID: 10M81095

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	0.500
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	0.240	J	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	1.35	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
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	0.200
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	0.150
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	2.21	U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-01

Client ID: 47WW33-103007

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/30/2010 11:00

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 16:00

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 16:00

File ID: 10M81095

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.9	86	118		
1,2-Dichloroethane-d4	105	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	102	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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-02
 Client ID: LHSMW38-103007
 Matrix: Water
 Workgroup Number: WG338957
 Collect Date: 07/30/2010 14:45
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B/5030C/5035
 Analytical Method: 8260B
 Analyst: TMB
 Dilution: 1
 Units: ug/L

Instrument: HPMS10
 Prep Date: 08/05/2010 17:03
 Cal Date: 06/10/2010 18:25
 Run Date: 08/05/2010 17:03
 File ID: 10M81097

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	0.500
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
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	0.200
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	0.150
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



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-02
Client ID: LHSMM38-103007
Matrix: Water
Workgroup Number: WG338957
Collect Date: 07/30/2010 14:45
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS10
Prep Date: 08/05/2010 17:03
Cal Date: 06/10/2010 18:25
Run Date: 08/05/2010 17:03
File ID: 10M81097

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	98.3	86	118		
1,2-Dichloroethane-d4	105	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	102	86	115		

U Not detected at or above adjusted sample detection limit

Handwritten signature and date: 8/10/10

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-03

Client ID: LHSMM44-103007

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/30/2010 16:15

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 17:35

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 17:35

File ID: 10M81098

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	0.500
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	0.526	J	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	5.93		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
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	0.200
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	0.150
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	26.4		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-03
Client ID: LHSMW44-103007
Matrix: Water
Workgroup Number: WG338957
Collect Date: 07/30/2010 16:15
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS10
Prep Date: 08/05/2010 17:35
Cal Date: 06/10/2010 18:25
Run Date: 08/05/2010 17:35
File ID: 10M81098

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.3	86	118		
1,2-Dichloroethane-d4	103	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	102	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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-04
Client ID: EQUIPMENT RINSE-103007
Matrix: Water
Workgroup Number: WG338957
Collect Date: 07/30/2010 16:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS10
Prep Date: 08/05/2010 15:29
Cal Date: 06/10/2010 18:25
Run Date: 08/05/2010 15:29
File ID: 10M81094

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	6.00	J	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	0.703	J	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	0.482	J	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	0.592	J	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
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
Styrene	100-42-5		U	1.00	0.250
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.200
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.416	J	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-04

Client ID: EQUIPMENT RINSE-103007

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/30/2010 16:30

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 15:29

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 15:29

File ID: 10M81094

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.3	86	118		
1,2-Dichloroethane-d4	102	80	120		
Toluene-d8	100	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: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-05

Client ID: 47WW32-103107

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/31/2010 07:55

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 16:32

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 16:32

File ID: 10M81096

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	0.500
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	0.929	J	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	0.200
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,3-Dichloropropane	142-28-9		U	1.00	0.250
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	0.250
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.200
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.250
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	0.150
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	30.8	U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-05

Client ID: 47WW32-103107

Matrix: Water

Workgroup Number: WG338957

Collect Date: 07/31/2010 07:55

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS10

Prep Date: 08/05/2010 16:32

Cal Date: 06/10/2010 18:25

Run Date: 08/05/2010 16:32

File ID: 10M81096

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	97.8	86	118		
1,2-Dichloroethane-d4	103	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	101	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: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-06

Client ID: 47WW27-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 09:45

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MRS

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 20:17

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 20:17

File ID: 6M92916

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	0.500
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-Dibromomethane	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
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	0.200
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	0.150
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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-06

Client ID: 47WW27-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 09:45

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 20:17

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 20:17

File ID: 6M92916

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.1	86	118		
1,2-Dichloroethane-d4	97.6	80	120		
Toluene-d8	97.0	88	110		
4-Bromofluorobenzene	101	86	115		

U Not detected at or above adjusted sample detection limit

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-07

Client ID: 47WW21-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 12:00

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MRS

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 20:49

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 20:49

File ID: 6M92917

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	0.500
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	0.330	J	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
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	0.200
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	0.150
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	0.495	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-07

Client ID: 47WW21-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 12:00

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 20:49

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 20:49

File ID: 6M92917

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	97.1	86	118		
1,2-Dichloroethane-d4	99.7	80	120		
Toluene-d8	95.3	88	110		
4-Bromofluorobenzene	102	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: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-08

Client ID: 105-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 13:10

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 21:22

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 21:22

File ID: 6M92918

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	0.500
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	0.710	J	1.00	0.250
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.200
1,2-Dichloropropane	78-87-5		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	1.00	0.250
2,2-Dichloropropane	594-20-7		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.500
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.250
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	0.250
1,1,1,2-Tetrachloroethane	630-20-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	1.00	0.200
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	0.150
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	25.8	U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-08

Client ID: 105-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 13:10

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 21:22

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 21:22

File ID: 6M92918

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	97.8	86	118		
1,2-Dichloroethane-d4	99.4	80	120		
Toluene-d8	96.3	88	110		
4-Bromofluorobenzene	101	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

Handwritten signature: 2/20/10

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-09

Client ID: 47WW29-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MBS

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 21:54

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 21:54

File ID: 6M92919

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	0.500
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
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	0.200
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	0.150
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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-09

Client ID: 47WW29-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 21:54

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 21:54

File ID: 6M92919

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.9	86	118		
1,2-Dichloroethane-d4	98.0	80	120		
Toluene-d8	95.8	88	110		
4-Bromofluorobenzene	102	86	115		

U Not detected at or above adjusted sample detection limit

W 90810

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-10

Client ID: 47WW29-103107-FD

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 22:27

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 22:27

File ID: 6M92920

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	0.500
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
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	0.200
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	0.150
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

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Microbac

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-10

Client ID: 47WW29-103107-PD

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 22:27

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 22:27

File ID: 6M92920

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	97.0	86	118		
1,2-Dichloroethane-d4	97.3	80	120		
Toluene-d8	94.9	88	110		
4-Bromofluorobenzene	101	86	115		

U Not detected at or above adjusted sample detection limit

L10080026

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-11

Client ID: 47WW28-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 15:30

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 22:59

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 22:59

File ID: 6M92921

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	0.500
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
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	0.200
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	0.150
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

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Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-11
Client ID: 47WW28-103107
Matrix: Water
Workgroup Number: WG339160
Collect Date: 07/31/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: MES
Dilution: 1
Units: ug/L

Instrument: HPMS6
Prep Date: 08/06/2010 22:59
Cal Date: 08/03/2010 20:48
Run Date: 08/06/2010 22:59
File ID: 6M92921

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.2	86	118		
1,2-Dichloroethane-d4	95.4	80	120		
Toluene-d8	95.4	88	110		
4-Bromofluorobenzene	103	86	115		

U Not detected at or above adjusted sample detection limit

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-12

Client ID: EQUIPMENT RINSE-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 16:10

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 23:32

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 23:32

File ID: 6M92922

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	4.55	J	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	0.785	J	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	0.395	J	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	0.536	J	1.00	0.125
Chloromethane	74-87-3		U	1.00	0.500
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
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	0.200
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.403	J	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
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

23 of 26

Microbac

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-12

Client ID: EQUIPMENT RINSE-103107

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 16:10

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 23:32

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 23:32

File ID: 6M92922

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	99.1	86	118		
1,2-Dichloroethane-d4	97.7	80	120		
Toluene-d8	95.6	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

W 910413

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-13

Client ID: TRIP BLANK

Matrix: Water

Workgroup Number: WG339160

Collect Date: 07/31/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: 08/06/2010 19:12

Cal Date: 08/03/2010 20:48

Run Date: 08/06/2010 19:12

File ID: 6M92914

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	3.10	J	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	0.500
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
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	0.200
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	0.150
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

OK
52 samples
10/7/10

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-13
Client ID: TRIP BLANK
Matrix: Water
Workgroup Number: WG339160
Collect Date: 07/31/2010 00:01
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: MRS
Dilution: 1
Units: ug/L

Instrument: HPMS6
Prep Date: 08/06/2010 19:12
Cal Date: 08/03/2010 20:48
Run Date: 08/06/2010 19:12
File ID: 6M92914

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	95.1	86	118		
1,2-Dichloroethane-d4	97.1	80	120		
Toluene-d8	96.1	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

2.1.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080026
Blank File ID: 10M81086
Prep Date: 08/05/10 11:16
Analyzed Date: 08/05/10 11:16
Analyst: TMB

Work Group: WG338957
Blank Sample ID: WG338957-01
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	WG338957-02	10M81087	08/05/10 11:47	01
LCS2	WG338957-03	10M81088	08/05/10 12:19	01
EQUIPMENT RINSE-103007	L10080026-04	10M81094	08/05/10 15:29	01
47WW33-103007	L10080026-01	10M81095	08/05/10 16:00	01
47WW32-103107	L10080026-05	10M81096	08/05/10 16:32	01
LHSMW38-103007	L10080026-02	10M81097	08/05/10 17:03	01
LHSMW44-103007	L10080026-03	10M81098	08/05/10 17:35	01

Report Name: BLANK SUMMARY
PDF File ID: 1748220
Report generated 08/10/2010 14:48



METHOD BLANK SUMMARY

Login Number: L10080026
Blank File ID: 6M92910
Prep Date: 08/06/10 17:05
Analyzed Date: 08/06/10 17:05
Analyst: MES

Work Group: WG339160
Blank Sample ID: WG339160-01
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	WG339160-02	6M92911	08/06/10 17:37	01
LCS2	WG339160-03	6M92912	08/06/10 18:08	01
TRIP BLANK	L10080026-13	6M92914	08/06/10 19:12	01
47WW27-103107	L10080026-06	6M92916	08/06/10 20:17	01
47WW21-103107	L10080026-07	6M92917	08/06/10 20:49	01
105-103107	L10080026-08	6M92918	08/06/10 21:22	01
47WW29-103107	L10080026-09	6M92919	08/06/10 21:54	01
47WW29-103107-FD	L10080026-10	6M92920	08/06/10 22:27	01
47WW28-103107	L10080026-11	6M92921	08/06/10 22:59	01
EQUIPMENT RINSE-103107	L10080026-12	6M92922	08/06/10 23:32	01

Report Name: BLANK_SUMMARY
PDF File ID: 1748220
Report generated 08/10/2010 14:48



METHOD BLANK REPORT

Login Number: L10080026 Prep Date: 08/05/10 11:16 Sample ID: WG338957-01
 Instrument ID: HPMS10 Run Date: 08/05/10 11:16 Prep Method: 5030B/5030C/503
 File ID: 10M81086 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG338957 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-10-JUN-10

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	0.500	1.00	0.500	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	0.250	1	U

Report Name: BLANK

PDF ID: 1748221

10-AUG-2010 14:48



METHOD BLANK REPORT

Login Number: L10080026 Prep Date: 08/05/10 11:16 Sample ID: WG338957-01
 Instrument ID: HPMS10 Run Date: 08/05/10 11:16 Prep Method: 5030B/5030C/503
 File ID: 10M81086 Analyst: TMB Method: 8260B
 Workgroup (AAB#): WG338957 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS10-10-JUN-10

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	0.200	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	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	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	0.500	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	96.8	86 - 118	PASS
1,2-Dichloroethane-d4	103	80 - 120	PASS
Toluene-d8	102	88 - 110	PASS
4-Bromofluorobenzene	104	86 - 115	PASS

SDL Method Detection Limit
 PQL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1748221

10-AUG-2010 14:48



METHOD BLANK REPORT

Login Number: L10080026 Prep Date: 08/06/10 17:05 Sample ID: WG339160-01
 Instrument ID: HPMS6 Run Date: 08/06/10 17:05 Prep Method: 5030B/5030C/503
 File ID: 6M92910 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG339160 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6-03-AUG-10

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	0.500	1.00	0.500	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	0.250	1	U

Report Name: BLANK

PDF ID: 1748221

10-AUG-2010 14:48



METHOD BLANK REPORT

Login Number: L10080026 Prep Date: 08/06/10 17:05 Sample ID: WG339160-01
 Instrument ID: HPMS6 Run Date: 08/06/10 17:05 Prep Method: 5030B/5030C/503
 File ID: 6M92910 Analyst: MES Method: 8260B
 Workgroup (AAB#): WG339160 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS6-03-AUG-10

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	0.200	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	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	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	0.500	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	94.9	86 - 118	PASS
1,2-Dichloroethane-d4	95.9	80 - 120	PASS
Toluene-d8	95.1	88 - 110	PASS
4-Bromofluorobenzene	102	86 - 115	PASS

SDL Method Detection Limit
 PQL Reporting/Practical Quantitation Limit
 ND Analyte Not detected at or above reporting limit
 * |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1748221

10-AUG-2010 14:48



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104143

Login Number: L10080026 Analyst: MES Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG339160 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG339160-02 LCS File ID: 6M92911 Run Date: 08/06/2010 17:37
Sample ID: WG339160-03 LCS2 File ID: 6M92912 Run Date: 08/06/2010 18:08

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	21.3	107	20.0	22.1	110	3.31	40 - 180	20	
Benzene	20.0	20.8	104	20.0	20.4	102	1.93	80 - 121	20	
Bromobenzene	20.0	21.4	107	20.0	21.5	107	0.574	80 - 120	20	
Bromochloromethane	20.0	21.3	106	20.0	20.7	104	2.80	65 - 130	20	
Bromodichloromethane	20.0	22.1	110	20.0	21.5	107	2.64	80 - 131	20	
Bromoform	20.0	21.7	109	20.0	21.0	105	3.48	70 - 130	20	
Bromomethane	20.0	16.9	84.5	20.0	16.5	82.4	2.52	30 - 145	20	
2-Butanone	20.0	21.5	107	20.0	21.8	109	1.64	10 - 170	20	
n-Butylbenzene	20.0	22.3	111	20.0	22.0	110	1.41	80 - 131	20	
sec-Butylbenzene	20.0	22.2	111	20.0	22.1	111	0.266	80 - 127	20	
tert-Butylbenzene	20.0	20.7	104	20.0	20.5	102	1.29	80 - 126	20	
Carbon disulfide	20.0	27.7	139	20.0	26.9	134	1.10	58 - 128	20	
Carbon tetrachloride	20.0	22.2	111	20.0	21.4	107	3.88	65 - 140	20	
Chlorobenzene	20.0	20.5	102	20.0	20.3	101	0.957	80 - 120	20	
Chlorodibromomethane	20.0	22.3	111	20.0	22.0	110	1.13	60 - 135	20	
Chloroethane	20.0	21.3	106	20.0	19.9	99.6	6.62	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	20.0	100	20.0	19.8	99.1	0.993	45 - 160	20	
Chloroform	20.0	20.8	104	20.0	20.3	101	2.57	80 - 125	20	
Chloromethane	20.0	18.7	93.4	20.0	18.2	90.9	2.80	40 - 125	20	
2-Chlorotoluene	20.0	19.7	98.4	20.0	21.4	107	8.25	80 - 127	20	
4-Chlorotoluene	20.0	21.8	109	20.0	20.6	103	5.64	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	19.8	98.9	20.0	19.8	98.9	0.0416	50 - 130	20	
1,2-Dibromoethane	20.0	21.4	107	20.0	21.0	105	1.98	80 - 129	20	
Dibromomethane	20.0	21.4	107	20.0	21.0	105	1.95	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.5	102	20.0	20.7	103	0.957	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.6	103	20.0	20.8	104	0.591	80 - 120	20	
1,4-Dichlorobenzene	20.0	20.3	101	20.0	20.1	101	0.753	80 - 120	20	
Dichlorodifluoromethane	20.0	17.0	84.8	20.0	16.3	81.6	3.90	40 - 160	20	
1,1-Dichloroethane	20.0	21.1	105	20.0	20.8	104	1.53	80 - 125	20	
1,2-Dichloroethane	20.0	20.9	105	20.0	20.9	105	0.0539	80 - 129	20	
1,1-Dichloroethene	20.0	20.7	104	20.0	20.4	102	1.41	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.9	104	20.0	20.2	101	3.15	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.7	103	20.0	20.1	100	2.90	80 - 127	20	
1,2-Dichloropropane	20.0	21.9	109	20.0	21.4	107	1.99	80 - 120	20	
1,3-Dichloropropane	20.0	21.5	107	20.0	21.4	107	0.482	80 - 120	20	
2,2-Dichloropropane	20.0	21.1	106	20.0	20.7	103	2.21	80 - 133	20	
cis-1,3-Dichloropropene	20.0	21.8	109	20.0	21.1	106	3.00	70 - 130	20	
trans-1,3-Dichloropropene	20.0	19.8	99.2	20.0	20.2	101	1.54	80 - 130	20	
1,1-Dichloropropene	20.0	21.5	107	20.0	20.6	103	4.42	75 - 130	20	
Ethylbenzene	20.0	19.1	95.7	20.0	18.7	93.6	2.25	80 - 122	20	

OK
52 mg/L
ND -

LCS LCS2 - Modified 03/06/2008
PDF File ID: 1745812
Report generated: 08/10/2010 14:48



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080026 Analyst: MES Prep Method: 5030B/5030C/503
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG339160 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG339160-02 LCS File ID: 6M92911 Run Date: 08/06/2010 17:37

Sample ID: WG339160-03 LCS2 File ID: 6M92912 Run Date: 08/06/2010 18:08

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	21.0	105	20.0	22.1	110	4.97	55 - 130	20	
Hexachlorobutadiene	20.0	19.2	96.0	20.0	18.2	90.8	5.53	72 - 132	20	
Isopropylbenzene	20.0	17.6	88.0	20.0	17.1	85.3	3.10	80 - 122	20	
p-Isopropyltoluene	20.0	21.0	105	20.0	20.8	104	0.974	80 - 122	20	
4-Methyl-2-pentanone	20.0	21.2	106	20.0	21.1	106	0.650	64 - 140	20	
Methylene chloride	20.0	19.6	97.9	20.0	19.5	97.6	0.328	80 - 123	20	
Naphthalene	20.0	20.1	100	20.0	20.7	104	3.15	59 - 149	20	
n-Propylbenzene	20.0	21.8	109	20.0	21.8	109	0.390	80 - 129	20	
Styrene	20.0	19.7	98.6	20.0	19.2	96.1	2.56	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	21.1	106	20.0	20.9	105	0.988	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	21.5	108	20.0	22.0	110	2.20	79 - 125	20	
Tetrachloroethene	20.0	21.2	106	20.0	21.3	107	0.290	80 - 124	20	
Toluene	20.0	21.3	107	20.0	21.2	106	0.802	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	20.6	103	20.0	20.6	103	0.287	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.8	99.1	20.0	19.8	99.0	0.111	65 - 135	20	
1,1,1-Trichloroethane	20.0	21.9	109	20.0	21.1	105	3.82	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.4	107	20.0	21.5	107	0.247	80 - 125	20	
Trichloroethene	20.0	19.6	98.0	20.0	19.1	95.4	2.75	80 - 122	20	
Trichlorofluoromethane	20.0	20.2	101	20.0	19.8	98.8	2.04	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.9	109	20.0	22.1	111	1.11	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	22.4	112	20.0	22.6	113	0.668	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.9	110	20.0	22.2	111	1.35	80 - 127	20	
Vinyl acetate	20.0	29.3	146	20.0	29.1	146	0.585	10 - 190	20	
Vinyl chloride	20.0	22.8	114	20.0	21.5	107	5.78	50 - 170	20	
o-Xylene	20.0	19.1	95.7	20.0	19.0	94.9	0.888	80 - 122	20	
m-,p-Xylene	40.0	43.2	108	40.0	41.9	105	2.92	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits		Qualifier
	% Recovery	% Recovery			
1,2-Dichloroethane-d4	93.2	94.9	80	- 120	PASS
Dibromofluoromethane	92.5	93.7	86	- 118	PASS
4-Bromofluorobenzene	98.9	102	86	- 115	PASS
Toluene-d8	96.0	99.0	88	- 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1745812
Report generated: 08/10/2010 14:48



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104145

Login Number: L10080026 Analyst: TMB Prep Method: 5030B/5030C/503
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG338957 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG338957-02 LCS File ID: 10M81087 Run Date: 08/05/2010 11:47
Sample ID: WG338957-03 LCS2 File ID: 10M81088 Run Date: 08/05/2010 12:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	26.1	130	20.0	28.7	144	9.61	40 - 180	20	
Benzene	20.0	20.8	104	20.0	20.8	104	0.0640	80 - 121	20	
Bromobenzene	20.0	19.4	96.9	20.0	19.6	97.9	1.03	80 - 120	20	
Bromochloromethane	20.0	20.9	104	20.0	21.6	108	3.52	65 - 130	20	
Bromodichloromethane	20.0	22.4	112	20.0	22.6	113	1.05	80 - 131	20	
Bromoform	20.0	21.4	107	20.0	21.9	110	2.46	70 - 130	20	
Bromomethane	20.0	22.5	112	20.0	22.4	112	0.494	30 - 145	20	
2-Butanone	20.0	27.9	140	20.0	29.9	150	6.94	10 - 170	20	
n-Butylbenzene	20.0	22.7	114	20.0	23.1	116	1.62	80 - 131	20	
sec-Butylbenzene	20.0	21.1	106	20.0	21.7	108	2.48	80 - 127	20	
tert-Butylbenzene	20.0	20.0	100	20.0	20.8	104	3.60	80 - 126	20	
Carbon disulfide	20.0	20.1	100	20.0	20.6	103	2.34	58 - 128	20	
Carbon tetrachloride	20.0	21.9	109	20.0	21.8	109	0.395	65 - 140	20	
Chlorobenzene	20.0	19.3	96.3	20.0	19.6	97.8	1.61	80 - 120	20	
Chlorodibromomethane	20.0	21.5	107	20.0	22.4	112	4.03	60 - 135	20	
Chloroethane	20.0	20.8	104	20.0	21.2	106	1.66	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	19.9	99.4	20.0	21.0	105	5.63	45 - 160	20	
Chloroform	20.0	21.3	107	20.0	21.4	107	0.267	80 - 125	20	
Chloromethane	20.0	24.8	124	20.0	23.4	117	6.15	40 - 125	20	
2-Chlorotoluene	20.0	21.3	106	20.0	21.1	106	0.639	80 - 127	20	
4-Chlorotoluene	20.0	19.0	95.2	20.0	19.8	99.2	4.16	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	21.2	106	20.0	21.7	109	2.62	50 - 130	20	
1,2-Dibromoethane	20.0	21.3	106	20.0	22.7	114	6.52	80 - 129	20	
Dibromomethane	20.0	21.7	109	20.0	22.2	111	2.12	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.7	98.7	20.0	20.0	99.9	1.21	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.4	96.8	20.0	19.8	98.8	2.06	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.7	93.4	20.0	19.1	95.4	2.11	80 - 120	20	
Dichlorodifluoromethane	20.0	17.0	84.8	20.0	17.5	87.3	2.96	40 - 160	20	
1,1-Dichloroethane	20.0	21.7	109	20.0	21.8	109	0.390	80 - 125	20	
1,2-Dichloroethane	20.0	22.9	114	20.0	22.7	113	0.764	80 - 129	20	
1,1-Dichloroethene	20.0	20.3	102	20.0	20.9	104	2.81	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.7	103	20.0	20.9	105	1.31	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.2	101	20.0	20.1	101	0.345	80 - 127	20	
1,2-Dichloropropane	20.0	21.7	109	20.0	21.7	109	0.0831	80 - 120	20	
1,3-Dichloropropane	20.0	21.8	109	20.0	22.3	111	1.92	80 - 120	20	
2,2-Dichloropropane	20.0	20.9	104	20.0	21.7	109	3.91	80 - 133	20	
cis-1,3-Dichloropropene	20.0	21.8	109	20.0	22.4	112	2.95	70 - 130	20	
trans-1,3-Dichloropropene	20.0	20.6	103	20.0	21.2	106	2.71	80 - 130	20	
1,1-Dichloropropene	20.0	20.6	103	20.0	21.0	105	1.85	75 - 130	20	
Ethylbenzene	20.0	19.8	98.8	20.0	20.2	101	2.26	80 - 122	20	

LCS LCS2 - Modified 03/06/2008
PDF File ID: 1745812
Report generated: 08/10/2010 14:48



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104146

Login Number: L10080026 Analyst: TMB Prep Method: 5030B/5030C/503
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG338957 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG338957-02 LCS File ID: 10M81087 Run Date: 08/05/2010 11:47
Sample ID: WG338957-03 LCS2 File ID: 10M81088 Run Date: 08/05/2010 12:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	27.0	135	20.0	28.0	140	3.66	55 - 130	20	*
Hexachlorobutadiene	20.0	20.9	104	20.0	21.1	105	0.976	72 - 132	20	
Isopropylbenzene	20.0	18.5	92.7	20.0	18.6	92.9	0.268	80 - 122	20	
p-Isopropyltoluene	20.0	20.7	104	20.0	21.1	106	1.90	80 - 122	20	
4-Methyl-2-pentanone	20.0	22.8	114	20.0	24.3	121	6.17	64 - 140	20	
Methylene chloride	20.0	20.5	103	20.0	20.5	103	0.0666	80 - 123	20	
Naphthalene	20.0	20.8	104	20.0	21.5	108	3.42	59 - 149	20	
n-Propylbenzene	20.0	20.6	103	20.0	21.5	108	4.10	80 - 129	20	
Styrene	20.0	21.0	105	20.0	21.1	106	0.378	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.2	101	20.0	19.9	99.5	1.58	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	22.3	112	20.0	23.8	119	6.25	79 - 125	20	
Tetrachloroethene	20.0	20.4	102	20.0	20.4	102	0.196	80 - 124	20	
Toluene	20.0	21.1	106	20.0	21.0	105	0.549	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	19.4	97.1	20.0	19.9	99.5	2.46	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.2	95.9	20.0	19.5	97.7	1.83	65 - 135	20	
1,1,1-Trichloroethane	20.0	21.1	106	20.0	21.5	108	1.79	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.6	108	20.0	23.0	115	6.20	80 - 125	20	
Trichloroethene	20.0	19.5	97.5	20.0	19.5	97.5	0.0264	80 - 122	20	
Trichlorofluoromethane	20.0	19.9	99.6	20.0	20.4	102	2.23	62 - 151	20	
1,2,3-Trichloropropane	20.0	22.1	111	20.0	23.5	117	5.94	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.4	107	20.0	21.8	109	1.47	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.2	106	20.0	21.5	107	1.18	80 - 127	20	
Vinyl acetate	20.0	43.3	217	20.0	44.0	220	1.61	10 - 190	20	*
Vinyl chloride	20.0	19.8	98.8	20.0	19.8	99.0	0.231	50 - 170	20	
o-Xylene	20.0	19.8	99.0	20.0	20.0	100	1.22	80 - 122	20	
m,p-Xylene	40.0	41.2	103	40.0	41.4	104	0.549	80 - 122	20	

Surrogates	LCS	LCS2	Surrogate Limits		Qualifier
	% Recovery	% Recovery			
1,2-Dichloroethane-d4	101	103	80	- 120	PASS
Dibromofluoromethane	96.6	96.9	86	- 118	PASS
4-Bromofluorobenzene	98.6	100	86	- 115	PASS
Toluene-d8	100	101	88	- 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1745812
Report generated: 08/10/2010 14:48



OK
9 samples
NTD

2.2.1 LC/MS Data (6850)

2.2.1.1 Summary Data

LABORATORY REPORT

00104149

L10080026

08/16/10 16:54

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW27-103107	L10080026-06	6850	50	03-AUG-10
47WW21-103107	L10080026-07	6850	1	03-AUG-10
47WW29-103107	L10080026-09	6850	1	03-AUG-10
47WW29-103107-FD	L10080026-10	6850	1	03-AUG-10
47WW28-103107	L10080026-11	6850	1	03-AUG-10
EQUIPMENT RINSE-103107	L10080026-12	6850	1	03-AUG-10

L1_A_PROD - Modified 03/06/2008

PDF File ID: 1754392

Report generated: 08/16/2010 16:54

1 OF 1



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-06
Client ID: 47WW27-103107
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 09:45
Sample Tag: DL01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 50
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/04/2010 08:37
File ID: 1LM.LM04411

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0	168		10.0	5.00

Handwritten signature and date: 080810



Report Number: L10080026
Report Date : August 16, 2010

Sample Number: L10080026-07
Client ID: 47WW21-103107
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 12:00
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/03/2010 23:29
File ID: 11M.LM04401

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

Handwritten signature and date: 7/20/10



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-09
Client ID: 47WW29-103107
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 00:01
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/03/2010 23:53
File ID: 11M.LM04402

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

W 290810

Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-10
Client ID: 47WW29-103107-FD
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 00:01
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/04/2010 00:18
File ID: 1LM.LM04403

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

W/ 10/8/10



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-11
Client ID: 47WW28-103107
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/04/2010 00:42
File ID: 1LM.LM04404

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0	0.302		0.200	0.100

h 7/28/10



Report Number: L10080026

Report Date : August 16, 2010

Sample Number: L10080026-12
Client ID: EQUIPMENT RINSE-103107
Matrix: Water
Workgroup Number: WG338784
Collect Date: 07/31/2010 16:10
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/03/2010 16:33
Cal Date: 08/03/2010 19:25
Run Date: 08/04/2010 01:06
File ID: 11M.LM04405

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

W 090610

2.2.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080026 Work Group: WG338784
Blank File ID: 1LM.LM04397 Blank Sample ID: WG338784-02
Prep Date: 08/03/10 16:33 Instrument ID: LCMS1
Analyzed Date: 08/03/10 21:51 Method: 6850
Analyst: WTD

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
QCMRL	WG338784-05	1LM.LM04395	08/03/10 21:03	01
MCT	WG338784-01	1LM.LM04396	08/03/10 21:27	01
LCS	WG338784-03	1LM.LM04398	08/03/10 22:16	01
LCS2	WG338784-04	1LM.LM04399	08/03/10 22:40	01
47WW21-103107	L10080026-07	1LM.LM04401	08/03/10 23:29	01
47WW29-103107	L10080026-09	1LM.LM04402	08/03/10 23:53	01
47WW29-103107-FD	L10080026-10	1LM.LM04403	08/04/10 00:18	01
47WW28-103107	L10080026-11	1LM.LM04404	08/04/10 00:42	01
EQUIPMENT RINSE-103107	L10080026-12	1LM.LM04405	08/04/10 01:06	01
QCMRL	WG338784-06	1LM.LM04407	08/04/10 01:55	01
47WW27-103107	L10080026-06	1LM.LM04411	08/04/10 08:37	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1742399
Report generated 08/16/2010 14:04



METHOD BLANK REPORT

Login Number: L10080026 Prep Date: 08/03/10 16:33 Sample ID: WG338784-02
Instrument ID: LCMS1 Run Date: 08/03/10 21:51 Prep Method: 6850
File ID: 1LM.LM04397 Analyst: WTD Method: 6850
Workgroup (AAB#): WG338784 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: LCMS1-03-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Perchlorate	0.100	0.200	0.100	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* [Analyte concentration] > RL

Report Name: BLANK
PDF ID: 1742400
16-AUG-2010 14:06



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104159

Login Number: L10080026 Run Date: 08/03/2010 Sample ID: WG338784-03
Instrument ID: LCMS1 Run Time: 22:16 Prep Method: 6850
File ID: 1LM.LM04398 Analyst: WTD Method: 6850
Workgroup (AAB#): WG338784 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD40370 Cal ID: LCMS1-03-AUG-10

Analytes	Expected	Found	% Rec	LCS Limits	Q
Perchlorate	0.200	0.211	106	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1753943
Report generated: 08/16/2010 14:07



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104160

Login Number: L10080026 Analyst: WTD Prep Method: 6850
Instrument ID: LCMS1 Matrix: Water Method: 6850
Workgroup (AAB#): WG338784 Units: ug/L
QC Key: STD Lot #: STD40370

Sample ID: WG338784-03 LCS File ID: 1LM.LM04398 Run Date: 08/03/2010 22:16
Sample ID: WG338784-04 LCS2 File ID: 1LM.LM04399 Run Date: 08/03/2010 22:40

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Perchlorate	0.200	0.211	106	0.200	0.218	109	3.26	80 - 120	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1742401
Report generated: 08/16/2010 14:06



Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

00104161

Run Date: September 8, 2010

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Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysis Time:
47WW09-100803	E300	NONE	N 0 20	CHLORIDE	497	mg/L	Y Y				L10080063-02	18:27
				FLUORIDE	2.00	mg/L	U N N	R			L10080063-02	18:27
				NITRATE	2.00	mg/L	U N N	R			L10080063-02	18:27
				NITRITE	2.00	mg/L	U N N	R			L10080063-02	18:27
				SULFATE	924	mg/L	Y N	R			L10080063-02	18:27
	E300	NONE	N 1 10	CHLORIDE	484	mg/L	E Y N	R			L10080063-02	18:08
				FLUORIDE	1.00	mg/L	U N Y	U			L10080063-02	18:08
				NITRATE	1.00	mg/L	U N Y	U			L10080063-02	18:08
				NITRITE	1.00	mg/L	U N Y	U			L10080063-02	18:08
				SULFATE	949	mg/L	Y Y				L10080063-02	18:08
	E310.2	NONE	N 0 2	ALKALINITY, TOTAL (AS CaCO3)	372	mg/L	Y Y				L10080063-02	11:29
	E415.1	NONE	N 0 2	TOTAL ORGANIC CARBON	13.2	mg/L	Y Y				L10080063-02	13:09
	RSK175	SW5021	N 0 1	ETHANE	1.00	ug/L	U N Y	U			L10080063-02	18:34
				ETHENE	1.00	ug/L	U N Y	U			L10080063-02	18:34
				METHANE	2.50	ug/L	J Y Y	J			L10080063-02	18:34
	SW6010B	TOTREC	N 0 5	SODIUM, TOTAL	657	mg/L	Y Y				L10080063-02	16:15
	SW6010B	TOTREC	N 1 1	ALUMINUM, TOTAL	0.0500	mg/L	U N Y	U			L10080063-02	13:44
				BERYLLIUM, TOTAL	0.000500	mg/L	U N Y	U			L10080063-02	13:44
				CALCIUM, TOTAL	91.3	mg/L	Y Y				L10080063-02	13:44
				COBALT, TOTAL	0.00250	mg/L	U N Y	U			L10080063-02	13:44
				IRON, TOTAL	0.474	mg/L	Y Y				L10080063-02	13:44
				MAGNESIUM, TOTAL	106	mg/L	Y Y				L10080063-02	13:44
				POTASSIUM, TOTAL	3.71	mg/L	Y Y				L10080063-02	13:44
				VANADIUM, TOTAL	0.00500	mg/L	U N Y	U			L10080063-02	13:44
				ZINC, TOTAL	0.00500	mg/L	U N Y	U			L10080063-02	13:44
				ANTIMONY, TOTAL	0.00125	mg/L	U N Y	U			L10080063-02	18:09
	SW6020	SW3015	N 0 5	ARSENIC, TOTAL	0.00366	mg/L	J Y Y	J			L10080063-02	18:09
				BARIUM, TOTAL	0.0107	mg/L	J Y Y	J			L10080063-02	18:09
				CADMIUM, TOTAL	0.000625	mg/L	U N Y	U			L10080063-02	18:09
				CHROMIUM, TOTAL	0.0615	mg/L	Y Y				L10080063-02	18:09
				COPPER, TOTAL	0.00250	mg/L	U N Y	U			L10080063-02	18:09
				LEAD, TOTAL	0.00125	mg/L	U N Y	U			L10080063-02	18:09
				MANGANESE, TOTAL	0.0224	mg/L	Y Y				L10080063-02	18:09
				NICKEL, TOTAL	0.00500	mg/L	U N Y	U			L10080063-02	18:09
				SELENIUM, TOTAL	0.0106	mg/L	Y Y				L10080063-02	18:09
				SILVER, TOTAL	0.00125	mg/L	U N Y	U			L10080063-02	18:09
				THALLIUM, TOTAL	0.000250	mg/L	U N Y	U			L10080063-02	18:09
	SW6850	NONE	N 0 1	PERCHLORATE	0.100	ug/L	U N Y	U			L10080063-02	03:48
	SW7470A	METHOD	N 0 1	MERCURY	0.000100	mg/L	U N Y	U			L10080063-02	13:46
	SW8260B	SW5030	N 0 10	1,1,1,2-TETRACHLOROETHANE	2.50	ug/L	U N Y	U			L10080063-02	11:48
				1,1,1-TRICHLOROETHANE	2.50	ug/L	U N Y	U			L10080063-02	11:48
				1,1,2,2-TETRACHLOROETHANE	2.00	ug/L	U N Y	U			L10080063-02	11:48

LHAW-47
MNA
08/03/10

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plant

Run Date: September 8, 2010

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW09-100803	SW8260B	SW5030	N 0 10	1,1,2-TRICHLOROETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,1-DICHLOROETHANE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				1,1-DICHLOROPROPENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,2,3-TRICHLOROBENZENE	1.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,2,3-TRICHLOROPROPANE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				1,2,4-TRICHLOROBENZENE	2.00	ug/L	U	N Y	U						L10080063-02	11:48
				1,2,4-TRIMETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,2-DIBROMO-3-CHLOROPROPANE	10.0	ug/L	U	N Y	U						L10080063-02	11:48
				1,2-DIBROMOETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,2-DICHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				1,2-DICHLOROETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,2-DICHLOROPROPANE	2.00	ug/L	U	N Y	U						L10080063-02	11:48
				1,3,5-TRIMETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,3-DICHLOROBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				1,3-DICHLOROPROPANE	2.00	ug/L	U	N Y	U						L10080063-02	11:48
				1,4-DICHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				2,2-DICHLOROPROPANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				2-BUTANONE	25.0	ug/L	U	N Y	U						L10080063-02	11:48
				2-CHLOROETHYL VINYL ETHER	20.0	ug/L	U	N Y	U						L10080063-02	11:48
				2-CHLOROTOLUENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				2-HEXANONE	25.0	ug/L	U	N Y	U						L10080063-02	11:48
				4-CHLOROTOLUENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				4-METHYL-2-PENTANONE	25.0	ug/L	U	N Y	U						L10080063-02	11:48
				ACETONE	25.0	ug/L	U	N Y	U						L10080063-02	11:48
				BENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				BROMOBENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				BROMOCHLOROMETHANE	2.00	ug/L	U	N Y	U						L10080063-02	11:48
				BROMODICHLOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				BROMOFORM	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				BROMOMETHANE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				CARBON DISULFIDE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				CARBON TETRACHLORIDE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				CHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				CHLORODIBROMOMETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				CHLOROETHANE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				CHLOROFORM	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				CHLOROMETHANE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				CIS-1,2-DICHLOROETHENE	86.5	ug/L		Y Y							L10080063-02	11:48
				CIS-1,3-DICHLOROPROPENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				DIBROMOMETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				DICHLORODIFLUOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				ETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				HEXACHLOROBUTADIENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48

Validation Qualifier Data Entry Verification

Longhorn Army Ammunition Plk

Run Date: September 8, 2010

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val	Val	Reason Codes				Lab Sample:	Analysis Time:
									Qlfr	Code:	1	2	3	4		
47WW09-100803	SW8260B	SW5030	N 0 10	ISOPROPYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				M-P-XYLENE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				METHYLENE CHLORIDE	9.94	ug/L	J	Y Y	J						L10080063-02	11:48
				N-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				N-PROPYLBENZENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				NAPHTHALENE	2.00	ug/L	U	N Y	U						L10080063-02	11:48
				O-XYLENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				P-ISOPROPYLTOLUENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				SEC-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				STYRENE	1.25	ug/L	U	N Y	U						L10080063-02	11:48
				TERT-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				TETRACHLOROETHENE	9.08	ug/L	J	Y Y	J						L10080063-02	11:48
				TOLUENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				TRANS-1,2-DICHLOROETHENE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U						L10080063-02	11:48
				TRICHLOROETHENE	1720	ug/L		Y Y							L10080063-02	11:48
				TRICHLOROFLUOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
				VINYL ACETATE	25.0	ug/L	U	N Y	U						L10080063-02	11:48
				VINYL CHLORIDE	2.50	ug/L	U	N Y	U						L10080063-02	11:48
SW8270C	SW3510	N 0 1	1,2,4-TRICHLOROBENZENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			1,2-DICHLOROBENZENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			1,3-DICHLOROBENZENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			1,4-DICHLOROBENZENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,4,5-TRICHLOROPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,4,6-TRICHLOROPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,4-DICHLOROPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,4-DIMETHYLPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,4-DINITROPHENOL	12.5	ug/L	U	N Y	U							L10080063-02	21:03
			2,4-DINITROTOLUENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2,6-DINITROTOLUENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2-CHLORONAPHTHALENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2-CHLOROPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2-METHYLNAPHTHALENE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2-METHYLPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			2-NITROANILINE	12.5	ug/L	U	N Y	U							L10080063-02	21:03
			2-NITROPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			3,3'-DICHLOROBENZIDINE	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			3,4-METHYLPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			3-NITROANILINE	12.5	ug/L	U	N Y	U							L10080063-02	21:03
			4,6-DINITRO-2-METHYLPHENOL	12.5	ug/L	U	N Y	U							L10080063-02	21:03
			4-BROMOPHENYL-PHENYLETHER	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			4-CHLORO-3-METHYLPHENOL	2.50	ug/L	U	N Y	U							L10080063-02	21:03
			4-CHLOROANILINE	2.50	ug/L	U	N Y	U							L10080063-02	21:03

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Longhorn Army Ammunition Plant

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Val Qlfr Code:	Reason Codes 1 2 3 4	Lab Sample:	Analysis Time:
47WW09-100803	SW8270C	SW3510	N 0 1	4-CHLOROPHENYL-PHENYL ETHER	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				4-NITROANILINE	12.5	ug/L	U	N Y	U		L10080063-02	21:03
				4-NITROPHENOL	12.5	ug/L	U	N Y	U		L10080063-02	21:03
				ACENAPHTHENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				ACENAPHTHYLENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				ANTHRACENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZO(A)ANTHRACENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZO(A)PYRENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZO(B)FLUORANTHENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZO(G,H,I)PERYLENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZO(K)FLUORANTHENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BENZOIC ACID	12.5	ug/L	U	N Y	U		L10080063-02	21:03
				BENZYL ALCOHOL	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BIS(2-CHLOROETHOXY)METHANE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BIS(2-CHLOROETHYL)ETHER	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BIS(2-CHLOROISOPROPYL)ETHER	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				BIS(2-ETHYLHEXYL)PHTHALATE	3.00	ug/L	U	N Y	U		L10080063-02	21:03
				BUTYLBENZYLPHTHALATE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				CHRYSENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DI-N-BUTYLPHTHALATE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DI-N-OCTYLPHTHALATE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DIBENZO(A,H)ANTHRACENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DIBENZOFURAN	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DIETHYLPHTHALATE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				DIMETHYLPHTHALATE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				FLUORANTHENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				FLUORENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				HEXACHLOROBENZENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				HEXACHLOROBUTADIENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				HEXACHLOROCYCLOPENTADIENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				HEXACHLOROETHANE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				INDENO(1,2,3-CD)PYRENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				ISOPHORONE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				N-NITROSODIPHENYLAMINE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				N-NITROSODIPROPYLAMINE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				NAPHTHALENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				NITROBENZENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				PENTACHLOROPHENOL	12.5	ug/L	U	N Y	U		L10080063-02	21:03
				PHENANTHRENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				PHENOL	2.50	ug/L	U	N Y	U		L10080063-02	21:03
				PYRENE	2.50	ug/L	U	N Y	U		L10080063-02	21:03
47WW34-100803	E300	NONE	N 0 1	CHLORIDE	136	mg/L	E	Y N	R		L10080063-01	17:31
				FLUORIDE	0.278	mg/L		Y Y			L10080063-01	17:31

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Sample Number:	Analytical/Extraction Method:	Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
										1	2	3	4		
47WW34-100803	E300	NONE	N 0 1	NITRATE	0.174	mg/L	J	Y Y	J	✓				L10080063-01	17:31
				NITRITE	0.100	mg/L	U	N Y	U					L10080063-01	17:31
				SULFATE	66.4	mg/L		Y Y						L10080063-01	17:31
	E300	NONE	N 1 10	CHLORIDE	184	mg/L		Y Y		✓				L10080063-01	17:50
				FLUORIDE	1.00	mg/L	U	N N	R					L10080063-01	17:50
				NITRATE	1.00	mg/L	U	N N	R					L10080063-01	17:50
				NITRITE	1.00	mg/L	U	N N	R					L10080063-01	17:50
				SULFATE	64.8	mg/L		Y N	R					L10080063-01	17:50
				ALKALINITY, TOTAL (AS CaCO3)	303	mg/L		Y Y						L10080063-01	11:29
	E415.1	NONE	N 0 2	TOTAL ORGANIC CARBON	5.94	mg/L		Y Y						L10080063-01	12:55
	RSK175	SW5021	N 0 1	ETHANE	1.00	ug/L	U	N Y	U					L10080063-01	18:22
				ETHENE	1.00	ug/L	U	N Y	U					L10080063-01	18:22
	SW6010B	TOTREC	N 0 1	METHANE	1.23	ug/L	J	Y Y	J	✓				L10080063-01	18:22
				ALUMINUM, TOTAL	0.0565	mg/L	J	Y Y	J					L10080063-01	13:26
				BERYLLIUM, TOTAL	0.000500	mg/L	U	N Y	U					L10080063-01	13:26
				CALCIUM, TOTAL	38.4	mg/L		Y Y						L10080063-01	13:26
				COBALT, TOTAL	0.00250	mg/L	U	N Y	U					L10080063-01	13:26
				IRON, TOTAL	0.0705	mg/L	J	Y Y	J					L10080063-01	13:26
				MAGNESIUM, TOTAL	18.3	mg/L		Y Y						L10080063-01	13:26
				POTASSIUM, TOTAL	20.8	mg/L		Y Y						L10080063-01	13:26
				VANADIUM, TOTAL	0.00500	mg/L	U	N Y	U					L10080063-01	13:26
				ZINC, TOTAL	0.00500	mg/L	U	N Y	U					L10080063-01	13:26
	SW6010B	TOTREC	N 1 2	SODIUM, TOTAL	220	mg/L		Y Y						L10080063-01	15:55
				ANTIMONY, TOTAL	0.00125	mg/L	U	N Y	U					L10080063-01	18:02
	SW6020	SW3015	N 0 5	ARSENIC, TOTAL	0.00182	mg/L	J	Y Y	J	✓				L10080063-01	18:02
				BARIUM, TOTAL	0.0760	mg/L		Y Y						L10080063-01	18:02
				CADMIUM, TOTAL	0.000625	mg/L	U	N Y	U					L10080063-01	18:02
				CHROMIUM, TOTAL	0.00553	mg/L	J	Y Y	J					L10080063-01	18:02
				COPPER, TOTAL	0.00250	mg/L	U	N Y	U					L10080063-01	18:02
				LEAD, TOTAL	0.00125	mg/L	U	N Y	U					L10080063-01	18:02
				MANGANESE, TOTAL	0.0172	mg/L		Y Y						L10080063-01	18:02
				NICKEL, TOTAL	0.00500	mg/L	U	N Y	U					L10080063-01	18:02
				SELENIUM, TOTAL	0.00532	mg/L		Y Y						L10080063-01	18:02
				SILVER, TOTAL	0.00125	mg/L	U	N Y	U					L10080063-01	18:02
				THALLIUM, TOTAL	0.000250	mg/L	U	N Y	U					L10080063-01	18:02
				PERCHLORATE	0.100	ug/L	U	N Y	U					L10080063-01	03:24
				MERCURY	0.000100	mg/L	U	N Y	U					L10080063-01	13:39
	SW8260B	SW5030	N 0 10	1,1,1,2-TETRACHLOROETHANE	2.50	ug/L	U	N Y	U					L10080063-01	20:27
				1,1,1-TRICHLOROETHANE	2.50	ug/L	U	N Y	U					L10080063-01	20:27
				1,1,2,2-TETRACHLOROETHANE	2.00	ug/L	U	N Y	U					L10080063-01	20:27
				1,1,2-TRICHLOROETHANE	2.50	ug/L	U	N Y	U					L10080063-01	20:27
				1,1-DICHLOROETHANE	1.25	ug/L	U	N Y	U					L10080063-01	20:27

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Sample Number:	Analytical/Extraction Method:		Flt REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW34-100803	SW8260B	SW5030	N 0 10	1,1-DICHLOROETHENE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				1,1-DICHLOROPROPENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,2,3-TRICHLOROBENZENE	1.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,2,3-TRICHLOROPROPANE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				1,2,4-TRICHLOROBENZENE	2.00	ug/L	U	N Y	U						L10080063-01	20:27
				1,2,4-TRIMETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,2-DIBROMO-3-CHLOROPROPANE	10.0	ug/L	U	N Y	U						L10080063-01	20:27
				1,2-DIBROMOETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,2-DICHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				1,2-DICHLOROETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,2-DICHLOROPROPANE	2.00	ug/L	U	N Y	U						L10080063-01	20:27
				1,3,5-TRIMETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,3-DICHLOROBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				1,3-DICHLOROPROPANE	2.00	ug/L	U	N Y	U						L10080063-01	20:27
				1,4-DICHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				2,2-DICHLOROPROPANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				2-BUTANONE	25.0	ug/L	U	N Y	U						L10080063-01	20:27
				2-CHLOROETHYL VINYL ETHER	20.0	ug/L	U	N Y	U						L10080063-01	20:27
				2-CHLOROTOLUENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				2-HEXANONE	25.0	ug/L	U	N Y	U						L10080063-01	20:27
				4-CHLOROTOLUENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				4-METHYL-2-PENTANONE	25.0	ug/L	U	N Y	U						L10080063-01	20:27
				ACETONE	25.0	ug/L	U	N Y	U						L10080063-01	20:27
				BENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				BROMOBENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				BROMOCHLOROMETHANE	2.00	ug/L	U	N Y	U						L10080063-01	20:27
				BROMODICHLOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				BROMOFORM	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				BROMOMETHANE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				CARBON DISULFIDE	21.8	ug/L		Y Y							L10080063-01	20:27
				CARBON TETRACHLORIDE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				CHLOROBENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				CHLORODIBROMOMETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				CHLOROETHANE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				CHLOROFORM	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				CHLOROMETHANE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				CIS-1,2-DICHLOROETHENE	136	ug/L		Y Y							L10080063-01	20:27
				CIS-1,3-DICHLOROPROPENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				DIBROMOMETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				DICHLORODIFLUOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				ETHYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				HEXACHLOROBUTADIENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				ISOPROPYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				M-P-XYLENE	5.00	ug/L	U	N Y	U						L10080063-01	20:27

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Sample Number:	Analytical/Extraction Method:		Flt REX Dtl:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW34-100803	SW8260B	SW5030	N 0 10	METHYLENE CHLORIDE	2.63	ug/L	J	Y Y	U-MB						L10080063-01	20:27
				N-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				N-PROPYLBENZENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				NAPHTHALENE	2.00	ug/L	U	N Y	U						L10080063-01	20:27
				O-XYLENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				P-ISOPROPYLTOLUENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				SEC-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				STYRENE	1.25	ug/L	U	N Y	U						L10080063-01	20:27
				TERT-BUTYLBENZENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				TETRACHLOROETHENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				TOLUENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				TRANS-1,2-DICHLOROETHENE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				TRANS-1,3-DICHLOROPROPENE	5.00	ug/L	U	N Y	U						L10080063-01	20:27
				TRICHLOROETHENE	1340	ug/L		Y Y							L10080063-01	20:27
				TRICHLOROFLUOROMETHANE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
				VINYL ACETATE	25.0	ug/L	U	N Y	U						L10080063-01	20:27
				VINYL CHLORIDE	2.50	ug/L	U	N Y	U						L10080063-01	20:27
	SW8270C	SW3510	N 0 1	1,2,4-TRICHLOROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				1,2-DICHLOROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				1,3-DICHLOROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				1,4-DICHLOROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,4,5-TRICHLOROPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,4,6-TRICHLOROPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,4-DICHLOROPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,4-DIMETHYLPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,4-DINITROPHENOL	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				2,4-DINITROTOLUENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2,6-DINITROTOLUENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2-CHLORONAPHTHALENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2-CHLOROPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2-METHYLNAPHTHALENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2-METHYLPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				2-NITROANILINE	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				2-NITROPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				3,3'-DICHLOROBENZIDINE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				3,4-METHYLPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				3-NITROANILINE	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				4,6-DINITRO-2-METHYLPHENOL	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				4-BROMOPHENYL-PHENYLETHER	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				4-CHLORO-3-METHYLPHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				4-CHLOROANILINE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				4-CHLOROPHENYL-PHENYL ETHER	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				4-NITROANILINE	12.8	ug/L	U	N Y	U						L10080063-01	20:28

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Sample Number:	Analytical/Extraction Method:		Fit REX Dil:	Parameter:	Result:	Units:	Qlfr:	Hit Use BCF	Val Qlfr	Val Code:	Reason Codes				Lab Sample:	Analysis Time:
											1	2	3	4		
47WW34-100803	SW8270C	SW3510	N 0 1	4-NITROPHENOL	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				ACENAPHTHENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				ACENAPHTHYLENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				ANTHRACENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZO(A)ANTHRACENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZO(A)PYRENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZO(B)FLUORANTHENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZO(G,H,I)PERYLENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZO(K)FLUORANTHENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BENZOIC ACID	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				BENZYL ALCOHOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BIS(2-CHLOROETHOXY)METHANE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BIS(2-CHLOROETHYL)ETHER	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BIS(2-CHLOROISOPROPYL)ETHER	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				BIS(2-ETHYLHEXYL)PHTHALATE	3.06	ug/L	U	N Y	U						L10080063-01	20:28
				BUTYLBENZYLPHTHALATE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				CHRYSENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DI-N-BUTYLPHTHALATE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DI-N-OCTYLPHTHALATE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DIBENZO(A,H)ANTHRACENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DIBENZOFURAN	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DIETHYLPHTHALATE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				DIMETHYLPHTHALATE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				FLUORANTHENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				FLUORENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				HEXACHLOROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				HEXACHLOROBUTADIENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				HEXACHLOROCYCLOPENTADIENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				HEXACHLOROETHANE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				INDENO(1,2,3-CD)PYRENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				ISOPHORONE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				N-NITROSODIPHENYLAMINE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				N-NITROSODIPROPYLAMINE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				NAPHTHALENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				NITROBENZENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				PENTACHLOROPHENOL	12.8	ug/L	U	N Y	U						L10080063-01	20:28
				PHENANTHRENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				PHENOL	2.55	ug/L	U	N Y	U						L10080063-01	20:28
				PYRENE	2.55	ug/L	U	N Y	U						L10080063-01	20:28



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

Chain of Custody

L10080063 00104169
LHAAP-47 NO. 5885
(MNT)

Laboratory Name: MICROBAC		Address: 158 STARLITE DR. MARIETTA, OH.		Contact: Stephanie Mossburg											
Project Name: LHAAP		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)											
Project No.: 117591.0009A130		Project Contact: Jen Hoang		Project Telephone No.: 281-531-3108											
Point of Contact: Scott Beesinger		Project Manager/Supervisor: Praveen Brinastay		Number of Containers											
Telephone No.: 903-679-3448															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	VOC	CHLORIDES	SVOC	ANIONS	ALCALINITY	TOTAL METALS	NITRATE/NITRITE	Remarks
1	47WW34-100803	8/3/10	1:00		✓		SITE 47	10	2	3	1	1	1	1	
2	47WW09-100803	8/3/10	2:50		✓		SITE 47	10	2	3	1	1	1	1	
3	Equipment Rinse-100803	8/3/10	3:30		✓		SITE 47	10	2	3	1	1	1	1	
4	TRIP Blank	8/3/10						2	2						
5															
6															
7															
8															
9															
10															

Microbac OVD
Received: 08/04/2010 10:23
By: ROBIN KLINGER
Robin L. Klinger

221000007983

5 DAY TAT

Transfers Relinquished By (signature): <i>Scott Beesinger</i>		Date/Time: 8/3/10 5:00		Special Instructions:	
				FedEx Airbill No.:	
		Laboratory		Sampler's Signature: <i>Scott Beesinger</i>	

TAT: _____ Standard _____ Rush Date _____

Seals Intact? _____ Y _____ N _____

Received Good Condition _____ Y _____ N _____ Cold _____



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

Chain of Custody

Laboratory Name: MICROBAC		Address: 158 StarLita Dr. MARIETTA, OH		Contact: Stephanie Mossburg																
Project Name: LHAAP		Project Location: KARNACK, TX.		Analysis and Method Desired (Indicate separate containers)																
Project No.: 117591-0009A130		Project Contact: Jen Hoang		Project Telephone No.: 281-531-3108																
Point of Contact: Scott Beesinger		Project Manager/Supervisor: PRAVEN SRIVASTAV		Number of Containers: method-6850 Peach Lignite																
Telephone No.: 903-674-3448																				
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location													
1	47WW34-100803	8/3/10	1:00		✓		SITE 47	1	1											
2	47WW09-100803	8/3/10	2:50		✓		SITE 47	1	1											
3	Equipment Rinse-100803	8/3/10	3:30		✓		SITE 47	1	1											
4																				
5																				
6																				
7																				
8																				
9																				
10																				
Transfers Relinquished By (signature)		Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions												
Scott Beesinger		8/3/10 5:00						5 DAY TAT												
								FedEx Airbill No.:												
								Sampler's Signature Scott Beesinger												
								Condition ☐ Y ☐ N ☐ Cold												
TAT: ☐ Standard ☐ Rush Date																				



Microbac OVD
Received: 08/04/2010 10:23
By: ROBIN KLINGER

221000007983

Robin L. Klinger

Copy

Form Number: 433_2
Rev. 10-19-07



1000007983

COOLER INSPECTION



Received: 08/04/2010 10:23
 Delivery Method: UPS
 Opened By: Robin Klinger
 Comments:

Login(s): L10080063]

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0013736	H	4.0	1Z66V7250194826195	5885	

- 1 Yes Were shipping coolers sealed?
- 2 Yes Were custody seals intact?
- 3 Yes Were cooler temperatures in range of 0-6?
- 4 Yes Was ice present?
- 5 Yes Were COC's received/information complete/signed and dated?
- 6 No Were sample containers and labels intact and match COC?
- 7 Yes Were the correct containers and volumes received?
- 8 Yes Were samples received within EPA hold times?
- 9 Yes Were correct preservatives used? (water only)
- 10 Yes Were pH ranges acceptable? (voa's excluded)
- 11 No Were VOA samples free of headspace (<6mm)?

Discrepancies:

- 6 Received 2 RSK's broken for ID Equipment Blank-100803.
 Rec'd bottle and on COC, NO3NO2, but client doesn't need. JKT
- 11 Trip Blanks have headspace >6mm.

Look closer. Go further. Do more.

Microbac - Ohio Valley Division
 158 Starlite Drive
 Marietta, OH 45750
 Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080063**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 11-AUG-2010**Samplenum Container ID Products****L10080063-01 721820****Bottle: 1**

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

Samplenum Container ID Products**L10080063-01 721821 RSK175****Bottle: 1**

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

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



Microbac Laboratories Inc.**Internal Chain of Custody Report**

Login: L10080063

Account: 2773

Project: 2773.025

Samples: 4

Due Date: 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721822	300 826-LOW 8270

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	EXT	05-AUG-2010 06:45	CEB	AZH
3	ANALYZ*	EXT	SEMI	06-AUG-2010 08:31	CAA	CEB

*Sample extract/digestate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER		04-AUG-2010 13:31	JKT	

*Sample extract/digestate

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721823	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	TCL	04-AUG-2010 13:31	JKT	
2	ANALYZ	TCL	SEM	04-AUG-2010 13:46	HAV	RLK
Comments: Products cancelled.						
3	STORE	SEM	A1	09-AUG-2010 11:44	RLK	JWR

Comments: Products cancelled.

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721824	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	06-AUG-2010 08:33	DIH	RLK
3	STORE	WET	A1	16-AUG-2010 08:45	RLK	DIH

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721825	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	SEM	10-AUG-2010 13:38	WTD	RLK
3	STORE	SEM	A1	12-AUG-2010 15:34	RLK	WTD

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



Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080063**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721826	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	05-AUG-2010 09:33	JBK	RLK
3	STORE	WET	A1	09-AUG-2010 08:27	JKT	JBK

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-01	721827	AG-MS AL AS-MS BA-MS BE-AX CA CD-MS CO-AX CR-M

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	DIG	05-AUG-2010 05:40	REK	AZH
3	ANALYZ*	DIG	METALS	05-AUG-2010 10:55	JYH	REK
4	STORE	DIG	A1	05-AUG-2010 13:24	RLK	BRG

**Sample extract/digestate*

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721828	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080063

Account: 2773

Project: 2773.025

Samples: 4

Due Date: 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721829	RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721830	300 826-LOW 8270

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	EXT	05-AUG-2010 06:45	CEB	AZH
3	ANALYZ*	EXT	SEMI	06-AUG-2010 08:31	CAA	CEB

*Sample extract/digestate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER		04-AUG-2010 13:31	JKT	

*Sample extract/digestate

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721831	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	TCL	04-AUG-2010 13:31	JKT	
2	ANALYZ	TCL	SEM	04-AUG-2010 13:46	HAV	RLK

Comments:Products cancelled.

3	STORE	SEM	A1	09-AUG-2010 11:44	RLK	JWR

Comments:Products cancelled.

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080063

Account: 2773

Project: 2773.025

Samples: 4

Due Date: 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721832	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	06-AUG-2010 08:33	DIH	RLK
3	STORE	WET	A1	16-AUG-2010 08:45	RLK	DIH

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721833	6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	SEM	10-AUG-2010 13:38	WTD	RLK
3	STORE	SEM	A1	12-AUG-2010 15:34	RLK	WTD

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721834	TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	05-AUG-2010 09:33	JBK	RLK
3	STORE	WET	A1	09-AUG-2010 08:27	JKT	JBK

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-02	721835	AG-MS AL AS-MS BA-MS BE-AX CA CD-MS CO-AX CR-I

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	DIG	05-AUG-2010 05:40	REK	AZH
3	ANALYZ*	DIG	METALS	05-AUG-2010 10:55	JYH	REK
4	STORE	DIG	A1	05-AUG-2010 13:24	RLK	BRG

*Sample extract/digestate

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



Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L10080063

Account: 2773

Project: 2773.025

Samples: 4

Due Date: 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-03	721836	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Comments: Products cancelled.

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-03	721837	RSK175

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:36	PWD	JKT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-03	721838	300 826-LOW 8270

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	EXT	05-AUG-2010 06:45	CEB	AZH
3	ANALYZ*	EXT	SEMI	06-AUG-2010 08:31	CAA	CEB

*Sample extract/digestate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER		04-AUG-2010 13:31	JKT	

*Sample extract/digestate

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

Microbac

Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080063**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 11-AUG-2010

Samplenum Container ID Products
 L10080063-03 721839

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	TCL	04-AUG-2010 13:31	JKT	
2	ANALYZ	TCL	SEM	04-AUG-2010 13:46	HAV	RLK
Comments: Products cancelled.						
3	STORE	SEM	A1	09-AUG-2010 11:44	RLK	JWR
Comments: Products cancelled.						

Samplenum Container ID Products
 L10080063-03 721840 ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	06-AUG-2010 08:33	DIH	RLK
3	STORE	WET	A1	16-AUG-2010 08:45	RLK	DIH

Samplenum Container ID Products
 L10080063-03 721841 6850

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	SEM	10-AUG-2010 13:38	WTD	RLK
3	STORE	SEM	A1	12-AUG-2010 15:34	RLK	WTD

Samplenum Container ID Products
 L10080063-03 721842 TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	ANALYZ	W1	WET	05-AUG-2010 09:33	JBK	RLK
3	STORE	WET	A1	09-AUG-2010 08:27	JKT	JBK

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



Microbac Laboratories Inc.**Internal Chain of Custody Report****Login:** L10080063**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 11-AUG-2010

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-03	721843	AG-MS AL AS-MS BA-MS BE-AX CA CD-MS CO-AX CR-M

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	04-AUG-2010 13:31	JKT	
2	PREP	W1	DIG	05-AUG-2010 05:40	REK	AZH
3	ANALYZ*	DIG	METALS	05-AUG-2010 10:55	JYH	REK
4	STORE	DIG	A1	05-AUG-2010 13:25	RLK	BRG

**Sample extract/digestate*

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L10080063-04	721844	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	04-AUG-2010 13:31	JKT	
2	ANALYZ	V1	ORG4	04-AUG-2010 15:34	PWD	JKT

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



NELAP Addendum - May 28, 2010**Non-NELAP LIMS Product and Description**

The following is a list of those tests that are not included in the Microbac -- OVL NELAP Scope of Accreditation:

Heat of Combustion (BTU)
 Total Halide by Bomb Combustion (TX)
 Particle Sizing - 200 Mesh (PS200)
 Sulfate (SO₄)
 Specific Gravity/Density (SPGRAV)
 Total Residual Chlorine (CL-TRL)
 Total Volatile Solids (all forms) (TVS)
 Total Coliform Bacteria (all methods)
 Fecal Coliform Bacteria (all methods)
 Sulfite (SO₃)
 Perchlorate (6850 - LCMS)
 Hexamethylphosphoramide (XMPA-LCMS)
 Thiodiglycol (TDG-LCMS)
 1,4-Dioxane - 8270C (827-DIOXANE)
 Phosphorus - 6010B
 Zirconium - 6010B

NELAP Accreditation by Laboratory SOP**NONPOTABLE WATER****OVL HPLC02/HPLC-UV**

Nitroglycerin
 Nitroguanidine
 Acetic acid
 Butyric acid
 Lactic acid
 Propionic acid
 Pyruvic acid

OVL KNITRO-C-WUV-VIS

Nitrocellulose

OVL MSS01/GC-MS

1,4-Phenylenediamine
 1-Methylnaphthalene
 2, 3, 4, 6-Tetrachlorophenol
 2-Chloronaphthalene
 Benzaldehyde
 Biphenyl
 Caprolactam
 Hexamethylphosphoramide (HMPA)
 Pentachlorobenzene

Pentachloroethane

OVL MSSO4/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronne
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1, 1, 2-Trichloro-1,2,2-trifluoroethane
1,3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropyl ether
Methylacetate
Methylcyclohexane
T-amylmethylether (TAME)
Tetrahydrofuran (THF)

OVL RSK01/GC-FID**

Isobutane
n-Butane
Propane
Propylene
Propyne

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV **

Nitroguanidine

OVL KNITRO-C-S/UV-VIS**

OVL MSS01/GC-MS

1,4-Phenylenediamine
1-Methylnaphthalene

Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

OVL MSS04/GC-MS

Atrazine
Bolstar (Sulprofos)
Chlorpyrifos
Diazinon
Ethoprop
Merphos
Ronnol
Simazine
Tokuthion (Prothiophos)
Trichloronate

OVL MSV01/GC-MS

1,3-Butadiene
alpha-Methylstyrene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Isopropylether
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data

LABORATORY REPORT

00104185

L10080063

08/18/10 10:50

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta , OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	8260B	10	04-AUG-10
47WW09-100803	L10080063-02	8260B	10	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	8260B	1	04-AUG-10
TRIP BLANK	L10080063-04	8260B	1	04-AUG-10

LI_A_PROD - Modified 03/06/2008

PDF File ID: 1755595

Report generated: 08/18/2010 10:50

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01

Client ID: 47WW34-100803

Matrix: Water

Workgroup Number: WG339194

Collect Date: 08/03/2010 13:00

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: ADC

Dilution: 10

Units: ug/L

Instrument: HPMS8

Prep Date: 08/07/2010 20:27

Cal Date: 08/05/2010 19:10

Run Date: 08/07/2010 20:27

File ID: 8M363127

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	100	25.0
Benzene	71-43-2		U	10.0	1.25
Bromobenzene	108-86-1		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
2-Butanone	78-93-3		U	100	25.0
n-Butylbenzene	104-51-8		U	10.0	2.50
sec-Butylbenzene	135-98-8		U	10.0	2.50
tert-Butylbenzene	98-06-6		U	10.0	2.50
Carbon disulfide	75-15-0	21.8		10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7		U	10.0	1.25
Chlorodibromomethane	124-48-1		U	10.0	2.50
Chloroethane	75-00-3		U	10.0	5.00
2-Chloroethyl vinyl ether	110-75-8		U	100	20.0
Chloroform	67-66-3		U	10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00
2-Chlorotoluene	95-49-8		U	10.0	1.25
4-Chlorotoluene	106-43-4		U	10.0	2.50
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
Dibromomethane	74-95-3		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
1,1-Dichloroethene	75-35-4		U	10.0	5.00
cis-1,2-Dichloroethene	156-59-2	136		10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichloropropane	142-28-9		U	10.0	2.00
2,2-Dichloropropane	594-20-7		U	10.0	2.50
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
1,1-Dichloropropene	563-58-6		U	10.0	2.50
Ethylbenzene	100-41-4		U	10.0	2.50
2-Hexanone	591-78-6		U	100	25.0
Hexachlorobutadiene	87-68-3		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
p-Isopropyltoluene	99-87-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	100	25.0
Methylene chloride	75-09-2	2.63	J	50.0	2.50
Naphthalene	91-20-3		U	10.0	2.00
n-Propylbenzene	103-65-1		U	10.0	1.25
Styrene	100-42-5		U	10.0	1.25
1,1,1,2-Tetrachloroethane	630-20-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
Tetrachloroethene	127-18-4		U	10.0	2.50
Toluene	108-88-3		U	10.0	2.50
1,2,3-Trichlorobenzene	87-61-6		U	10.0	1.50
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50
Trichloroethene	79-01-6	1340		10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50

1 of 8

Microbac

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01

Client ID: 47WM34-100803

Matrix: Water

Workgroup Number: WG339194

Collect Date: 08/03/2010 13:00

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: ADC

Dilution: 10

Units: ug/L

Instrument: HPMS8

Prep Date: 08/07/2010 20:27

Cal Date: 08/05/2010 19:10

Run Date: 08/07/2010 20:27

File ID: 8M363127

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	10.0	5.00
1,2,4-Trimethylbenzene	95-63-6		U	10.0	2.50
1,3,5-Trimethylbenzene	108-67-8		U	10.0	2.50
Vinyl acetate	108-05-4		U	100	25.0
Vinyl chloride	75-01-4		U	10.0	2.50
o-Xylene	95-47-6		U	10.0	2.50
m,p-Xylene	179601-23-1		U	10.0	5.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	104	80	120		
Toluene-d8	99.3	88	110		
4-Bromofluorobenzene	96.5	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

090610

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47W09-100803

Matrix: Water

Workgroup Number: WG339327

Collect Date: 08/03/2010 14:50

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 10

Units: ug/L

Instrument: HPMS8

Prep Date: 08/10/2010 11:48

Cal Date: 08/05/2010 19:10

Run Date: 08/10/2010 11:48

File ID: 8M363183

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	100	25.0
Benzene	71-43-2		U	10.0	1.25
Bromobenzene	108-86-1		U	10.0	1.25
Bromochloromethane	74-97-5		U	10.0	2.00
Bromodichloromethane	75-27-4		U	10.0	2.50
Bromoform	75-25-2		U	10.0	5.00
Bromomethane	74-83-9		U	10.0	5.00
2-Butanone	78-93-3		U	100	25.0
n-Butylbenzene	104-51-8		U	10.0	2.50
sec-Butylbenzene	135-98-8		U	10.0	2.50
tert-Butylbenzene	98-06-6		U	10.0	2.50
Carbon disulfide	75-15-0		U	10.0	5.00
Carbon tetrachloride	56-23-5		U	10.0	2.50
Chlorobenzene	108-90-7		U	10.0	1.25
Chlorodibromomethane	124-48-1		U	10.0	2.50
Chloroethane	75-00-3		U	10.0	5.00
2-Chloroethyl vinyl ether	110-75-8		U	100	20.0
Chloroform	67-66-3		U	10.0	1.25
Chloromethane	74-87-3		U	10.0	5.00
2-Chlorotoluene	95-49-8		U	10.0	1.25
4-Chlorotoluene	106-43-4		U	10.0	2.50
1,2-Dibromo-3-chloropropane	96-12-8		U	50.0	10.0
1,2-Dibromoethane	106-93-4		U	10.0	2.50
Dibromomethane	74-95-3		U	10.0	2.50
1,2-Dichlorobenzene	95-50-1		U	10.0	1.25
1,3-Dichlorobenzene	541-73-1		U	10.0	2.50
1,4-Dichlorobenzene	106-46-7		U	10.0	1.25
Dichlorodifluoromethane	75-71-8		U	10.0	2.50
1,1-Dichloroethane	75-34-3		U	10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
1,1-Dichloroethene	75-35-4		U	10.0	5.00
cis-1,2-Dichloroethene	156-59-2	86.5		10.0	2.50
trans-1,2-Dichloroethene	156-60-5		U	10.0	2.50
1,2-Dichloropropane	78-87-5		U	10.0	2.00
1,3-Dichloropropane	142-28-9		U	10.0	2.00
2,2-Dichloropropane	594-20-7		U	10.0	2.50
cis-1,3-Dichloropropene	10061-01-5		U	10.0	2.50
trans-1,3-Dichloropropene	10061-02-6		U	10.0	5.00
1,1-Dichloropropene	563-58-6		U	10.0	2.50
Ethylbenzene	100-41-4		U	10.0	2.50
2-Hexanone	591-78-6		U	100	25.0
Hexachlorobutadiene	87-68-3		U	10.0	2.50
Isopropylbenzene	98-82-8		U	10.0	2.50
p-Isopropyltoluene	99-87-6		U	10.0	2.50
4-Methyl-2-pentanone	108-10-1		U	100	25.0
Methylene chloride	75-09-2	9.94	J	50.0	2.50
Naphthalene	91-20-3		U	10.0	2.00
n-Propylbenzene	103-65-1		U	10.0	1.25
Styrene	100-42-5		U	10.0	1.25
1,1,1,2-Tetrachloroethane	630-20-6		U	10.0	2.50
1,1,2,2-Tetrachloroethane	79-34-5		U	10.0	2.00
Tetrachloroethene	127-18-4	9.08	J	10.0	2.50
Toluene	108-88-3		U	10.0	2.50
1,2,3-Trichlorobenzene	87-61-6		U	10.0	1.50
1,2,4-Trichlorobenzene	120-82-1		U	10.0	2.00
1,1,1-Trichloroethane	71-55-6		U	10.0	2.50
1,1,2-Trichloroethane	79-00-5		U	10.0	2.50
Trichloroethene	79-01-6	1720		10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50

3 of 8



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47WW09-100803

Matrix: Water

Workgroup Number: WG339327

Collect Date: 08/03/2010 14:50

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: MES

Dilution: 10

Units: ug/L

Instrument: HPMS8

Prep Date: 08/10/2010 11:48

Cal Date: 08/05/2010 19:10

Run Date: 08/10/2010 11:48

File ID: 8M363183

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,3-Trichloropropane	96-18-4		U	10.0	5.00
1,2,4-Trimethylbenzene	95-63-6		U	10.0	2.50
1,3,5-Trimethylbenzene	108-67-8		U	10.0	2.50
Vinyl acetate	108-05-4		U	100	25.0
Vinyl chloride	75-01-4		U	10.0	2.50
o-Xylene	95-47-6		U	10.0	2.50
m-,p-Xylene	179601-23-1		U	10.0	5.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	99.9	80	120		
Toluene-d8	98.0	88	110		
4-Bromofluorobenzene	96.7	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: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03

Client ID: EQUIPMENT RINSE -100803

Matrix: Water

Workgroup Number: WG339194

Collect Date: 08/03/2010 15:30

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: ADC

Dilution: 1

Units: ug/L

Instrument: HPMS8

Prep Date: 08/07/2010 19:23

Cal Date: 08/05/2010 19:10

Run Date: 08/07/2010 19:23

File ID: 8M363125

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	0.500
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
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	0.200
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	0.150
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

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Microbac

Report Number: L10080063
Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG339194
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 5030B/5030C/5035
Analytical Method: 8260B
Analyst: ADC
Dilution: 1
Units: ug/L

Instrument: HPMS8
Prep Date: 08/07/2010 19:23
Cal Date: 08/05/2010 19:10
Run Date: 08/07/2010 19:23
File ID: 8M363125

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	103	86	118		
1,2-Dichloroethane-d4	105	80	120		
Toluene-d8	100	88	110		
4-Bromofluorobenzene	97.3	86	115		

U Not detected at or above adjusted sample detection limit.

L. Adams

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-04
 Client ID: TRIP BLANK
 Matrix: Water
 Workgroup Number: WG339194
 Collect Date: 08/03/2010 00:01
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 5030B/5030C/5035
 Analytical Method: 8260B
 Analyst: ADC
 Dilution: 1
 Units: ug/L

Instrument: HPMS8
 Prep Date: 08/07/2010 18:50
 Cal Date: 08/05/2010 19:10
 Run Date: 08/07/2010 18:50
 File ID: 8M363124

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	2.76	J	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	0.500
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
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	0.200
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	0.150
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

OK
 54's
 ND-

7 of 8

W
 2/20/10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-04

Client ID: TRIP BLANK

Matrix: Water

Workgroup Number: WG339194

Collect Date: 08/03/2010 00:01

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 5030B/5030C/5035

Analytical Method: 8260B

Analyst: ADC

Dilution: 1

Units: ug/L

Instrument: HPMS8

Prep Date: 08/07/2010 18:50

Cal Date: 08/05/2010 19:10

Run Date: 08/07/2010 18:50

File ID: 8M363124

Analyte	CAS. Number	Result	Qual	PQL	SDL
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	179601-23-1		U	1.00	0.500
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	101	86	118		
1,2-Dichloroethane-d4	103	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	97.3	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

Handwritten signature

2.1.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: 8M363119
Prep Date: 08/07/10 16:09
Analyzed Date: 08/07/10 16:09
Analyst: ADC

Work Group: WG339194
Blank Sample ID: WG339194-01
Instrument ID: HPMS8
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG339194-02	8M363120	08/07/10 16:41	01
LCS2	WG339194-03	8M363121	08/07/10 17:14	01
TRIP BLANK	L10080063-04	8M363124	08/07/10 18:50	01
EQUIPMENT RINSE -100803	L10080063-03	8M363125	08/07/10 19:23	01
47WW34-100803	L10080063-01	8M363127	08/07/10 20:27	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1750393
Report generated 08/11/2010 15:00



METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: 8M363179
Prep Date: 08/10/10 09:39
Analyzed Date: 08/10/10 09:39
Analyst: MES

Work Group: WG339327
Blank Sample ID: WG339327-01
Instrument ID: HPMS8
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG339327-02	8M363180	08/10/10 10:11	01
LCS2	WG339327-03	8M363181	08/10/10 10:44	01
47WW09-100803	L10080063-02	8M363183	08/10/10 11:48	DL01
DUP	WG339327-05	8M363198	08/10/10 19:55	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1750393
Report generated : 08/11/2010 15:00



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104197

Login Number: L10080063 Prep Date: 08/07/10 16:09 Sample ID: WG339194-01
Instrument ID: HPMS8 Run Date: 08/07/10 16:09 Prep Method: 5030B/5030C/503
File ID: 8M363119 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG339194 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS8-05-AUG-10

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	0.500	1.00	0.500	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	0.250	1	U

Report Name: BLANK
PDF ID: 1750394
11-AUG-2010 15:00



METHOD BLANK REPORT

Login Number: L10080063 Prep Date: 08/07/10 16:09 Sample ID: WG339194-01
 Instrument ID: HPMS8 Run Date: 08/07/10 16:09 Prep Method: 5030B/5030C/503
 File ID: 8M363119 Analyst: ADC Method: 8260B
 Workgroup (AAB#): WG339194 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS8-05-AUG-10

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	0.278	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	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	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	0.500	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	101	86 - 118	PASS
1,2-Dichloroethane-d4	101	80 - 120	PASS
Toluene-d8	99.4	88 - 110	PASS
4-Bromofluorobenzene	96.9	86 - 115	PASS

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1750394

11-AUG-2010 15:00



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104199

Login Number: L10080063 Prep Date: 08/10/10 09:39 Sample ID: WG339327-01
Instrument ID: HPMS8 Run Date: 08/10/10 09:39 Prep Method: 5030B/5030C/503
File ID: 8M363179 Analyst: MES Method: 8260B
Workgroup (AAB#): WG339327 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS8-05-AUG-10

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	0.500	1.00	0.500	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	0.250	1	U

Report Name: BLANK
PDF ID: 1750394
11-AUG-2010 15:00



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104200

Login Number: L10080063 Prep Date: 08/10/10 09:39 Sample ID: WG339327-01
Instrument ID: HPMS8 Run Date: 08/10/10 09:39 Prep Method: 5030B/5030C/503
File ID: 8M363179 Analyst: MES Method: 8260B
Workgroup (AAB#): WG339327 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS8-05-AUG-10

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	0.350	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	0.200	1.00	0.200	1	U
Tetrachloroethene	0.250	1.00	0.250	1	U
Toluene	0.250	1.00	0.250	1	U
1,2,3-Trichlorobenzene	0.150	1.00	0.150	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	0.500	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	100	86 - 118	PASS
1,2-Dichloroethane-d4	97.8	80 - 120	PASS
Toluene-d8	95.6	88 - 110	PASS
4-Bromofluorobenzene	96.2	86 - 115	PASS

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1750394
11-AUG-2010 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: MES Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG339327 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG339327-02 LCS File ID: 8M363180 Run Date: 08/10/2010 10:11

Sample ID: WG339327-03 LCS2 File ID: 8M363181 Run Date: 08/10/2010 10:44

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD	
	Known	Found	% REC	Known	Found	% REC			Lmt	Q
Acetone	20.0	19.0	94.8	20.0	18.4	91.8	3.23	40 - 180	20	
Benzene	20.0	20.6	103	20.0	19.9	99.5	3.37	80 - 121	20	
Bromobenzene	20.0	20.8	104	20.0	20.7	103	0.573	80 - 120	20	
Bromochloromethane	20.0	21.8	109	20.0	21.1	106	3.14	65 - 130	20	
Bromodichloromethane	20.0	22.3	112	20.0	21.7	108	3.00	80 - 131	20	
Bromoform	20.0	21.0	105	20.0	20.8	104	1.23	70 - 130	20	
Bromomethane	20.0	21.0	105	20.0	19.9	99.5	5.25	30 - 145	20	
2-Butanone	20.0	19.5	97.6	20.0	18.8	93.9	3.90	10 - 170	20	
n-Butylbenzene	20.0	21.4	107	20.0	20.4	102	4.59	80 - 131	20	
sec-Butylbenzene	20.0	21.0	105	20.0	20.5	103	2.27	80 - 127	20	
tert-Butylbenzene	20.0	21.0	105	20.0	20.8	104	0.843	80 - 126	20	
Carbon disulfide	20.0	18.0	90.1	20.0	17.4	87.0	3.50	58 - 128	20	
Carbon tetrachloride	20.0	22.2	111	20.0	21.3	106	4.28	65 - 140	20	
Chlorobenzene	20.0	20.6	103	20.0	20.0	99.8	3.15	80 - 120	20	
Chlorodibromomethane	20.0	21.3	106	20.0	20.7	104	2.47	60 - 135	20	
Chloroethane	20.0	21.5	107	20.0	20.7	104	3.54	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	20.5	103	20.0	20.0	100	2.49	45 - 160	20	
Chloroform	20.0	20.5	103	20.0	19.9	99.5	3.04	80 - 125	20	
Chloromethane	20.0	19.5	97.3	20.0	18.4	92.2	5.36	40 - 125	20	
2-Chlorotoluene	20.0	20.3	102	20.0	19.9	99.5	2.22	80 - 127	20	
4-Chlorotoluene	20.0	20.4	102	20.0	20.2	101	0.656	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	19.2	96.2	20.0	18.6	92.8	3.65	50 - 130	20	
1,2-Dibromoethane	20.0	21.6	108	20.0	20.7	104	4.46	80 - 129	20	
Dibromomethane	20.0	21.9	110	20.0	21.2	106	3.55	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.5	103	20.0	20.1	100	2.21	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.4	102	20.0	20.1	101	1.19	80 - 128	20	
1,4-Dichlorobenzene	20.0	20.3	102	20.0	19.9	99.7	1.81	80 - 120	20	
Dichlorodifluoromethane	20.0	14.9	74.6	20.0	14.1	70.6	5.46	40 - 160	20	
1,1-Dichloroethane	20.0	21.4	107	20.0	20.7	103	3.40	80 - 125	20	
1,2-Dichloroethane	20.0	21.3	106	20.0	20.5	102	3.82	80 - 129	20	
1,1-Dichloroethene	20.0	20.9	104	20.0	19.9	99.4	5.02	80 - 132	20	
cis-1,2-Dichloroethene	20.0	21.3	106	20.0	20.7	103	3.07	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.7	109	20.0	20.6	103	5.37	80 - 127	20	
1,2-Dichloropropane	20.0	21.5	108	20.0	20.6	103	4.39	80 - 120	20	
1,3-Dichloropropane	20.0	21.5	107	20.0	20.8	104	3.06	80 - 120	20	
2,2-Dichloropropane	20.0	21.7	108	20.0	19.8	99.0	8.99	80 - 133	20	
cis-1,3-Dichloropropene	20.0	21.1	106	20.0	20.3	102	3.84	70 - 130	20	
trans-1,3-Dichloropropene	20.0	19.2	95.8	20.0	18.7	93.3	2.65	80 - 130	20	
1,1-Dichloropropene	20.0	21.2	106	20.0	20.5	102	3.29	75 - 130	20	
Ethylbenzene	20.0	21.2	106	20.0	20.7	103	2.41	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747689
Report generated: 08/11/2010 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: MES Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG339327 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG339327-02 LCS File ID: 8M363180 Run Date: 08/10/2010 10:11

Sample ID: WG339327-03 LCS2 File ID: 8M363181 Run Date: 08/10/2010 10:44

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	20.2	101	20.0	18.5	92.4	8.92	55 - 130	20	
Hexachlorobutadiene	20.0	21.0	105	20.0	19.8	99.1	5.59	72 - 132	20	
Isopropylbenzene	20.0	18.6	93.0	20.0	17.9	89.3	4.03	80 - 122	20	
p-Isopropyltoluene	20.0	20.6	103	20.0	20.0	99.9	3.22	80 - 122	20	
4-Methyl-2-pentanone	20.0	19.6	98.0	20.0	19.3	96.6	1.50	64 - 140	20	
Methylene chloride	20.0	19.1	95.4	20.0	19.0	95.0	0.391	80 - 123	20	
Naphthalene	20.0	19.5	97.5	20.0	18.7	93.4	4.23	59 - 149	20	
n-Propylbenzene	20.0	20.7	104	20.0	20.1	100	2.99	80 - 129	20	
Styrene	20.0	20.3	101	20.0	19.7	98.4	3.00	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	21.9	109	20.0	21.3	106	2.81	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	21.4	107	20.0	21.2	106	1.08	79 - 125	20	
Tetrachloroethene	20.0	22.4	112	20.0	21.5	107	4.10	80 - 124	20	
Toluene	20.0	20.7	104	20.0	20.1	100	3.35	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.8	94.1	20.0	18.2	91.0	3.33	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	19.9	99.5	20.0	19.3	96.6	3.04	65 - 135	20	
1,1,1-Trichloroethane	20.0	21.9	110	20.0	21.0	105	4.24	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.4	107	20.0	21.0	105	1.96	80 - 125	20	
Trichloroethene	20.0	21.5	107	20.0	21.2	106	1.13	80 - 122	20	
Trichlorofluoromethane	20.0	20.5	103	20.0	19.2	96.0	6.62	62 - 151	20	
1,2,3-Trichloropropane	20.0	20.6	103	20.0	20.4	102	1.23	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.5	108	20.0	21.0	105	2.38	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	20.7	104	20.0	20.4	102	1.54	80 - 127	20	
Vinyl acetate	20.0	15.7	78.4	20.0	14.9	74.5	5.14	10 - 190	20	
Vinyl chloride	20.0	21.3	106	20.0	20.1	100	5.91	50 - 170	20	
o-Xylene	20.0	20.5	102	20.0	19.8	98.9	3.43	80 - 122	20	
m-,p-Xylene	40.0	41.9	105	40.0	40.2	101	4.04	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	99.1	95.7	80 - 120	PASS
Dibromofluoromethane	100	99.9	86 - 118	PASS
4-Bromofluorobenzene	95.7	97.3	86 - 115	PASS
Toluene-d8	98.7	98.1	88 - 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747689
Report generated: 08/11/2010 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063
Instrument ID: HPMS8
Workgroup (AAB#): WG339194
QC Key: STD

Analyst: ADC
Matrix: Water
Lot #: STD40337

Prep Method: 5030B/5030C/503
Method: 8260B
Units: ug/L

Sample ID: WG339194-02 LCS File ID: 8M363120 Run Date: 08/07/2010 16:41
Sample ID: WG339194-03 LCS2 File ID: 8M363121 Run Date: 08/07/2010 17:14

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	19.3	96.3	20.0	18.7	93.5	2.97	40 - 180	20	
Benzene	20.0	20.4	102	20.0	19.9	99.3	2.78	80 - 121	20	
Bromobenzene	20.0	20.5	102	20.0	20.5	103	0.0605	80 - 120	20	
Bromochloromethane	20.0	21.4	107	20.0	21.0	105	2.16	65 - 130	20	
Bromodichloromethane	20.0	22.0	110	20.0	21.7	108	1.34	80 - 131	20	
Bromoform	20.0	20.8	104	20.0	20.9	105	0.616	70 - 130	20	
Bromomethane	20.0	19.4	97.0	20.0	19.3	96.7	0.254	30 - 145	20	
2-Butanone	20.0	19.0	95.1	20.0	18.4	91.9	3.41	10 - 170	20	
n-Butylbenzene	20.0	21.2	106	20.0	20.5	103	3.16	80 - 131	20	
sec-Butylbenzene	20.0	20.8	104	20.0	20.3	101	2.66	80 - 127	20	
tert-Butylbenzene	20.0	20.8	104	20.0	20.6	103	1.10	80 - 126	20	
Carbon disulfide	20.0	16.1	80.7	20.0	15.5	77.5	4.00	58 - 128	20	
Carbon tetrachloride	20.0	23.0	115	20.0	21.8	109	5.47	65 - 140	20	
Chlorobenzene	20.0	20.1	101	20.0	19.7	98.4	2.18	80 - 120	20	
Chlorodibromomethane	20.0	21.3	107	20.0	20.9	104	2.13	60 - 135	20	
Chloroethane	20.0	21.3	106	20.0	20.7	104	2.46	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	20.1	101	20.0	19.6	98.0	2.76	45 - 160	20	
Chloroform	20.0	20.4	102	20.0	19.9	99.6	2.52	80 - 125	20	
Chloromethane	20.0	19.2	96.0	20.0	18.5	92.3	4.01	40 - 125	20	
2-Chlorotoluene	20.0	20.0	100	20.0	20.2	101	0.945	80 - 127	20	
4-Chlorotoluene	20.0	20.4	102	20.0	19.3	96.5	5.35	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	19.4	97.1	20.0	19.5	97.6	0.491	50 - 130	20	
1,2-Dibromoethane	20.0	21.4	107	20.0	21.2	106	0.924	80 - 129	20	
Dibromomethane	20.0	22.0	110	20.0	21.6	108	2.01	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.3	102	20.0	20.1	101	1.15	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.1	101	20.0	20.0	100	0.443	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.8	99.1	20.0	19.7	98.3	0.900	80 - 120	20	
Dichlorodifluoromethane	20.0	17.3	86.7	20.0	16.5	82.7	4.76	40 - 160	20	
1,1-Dichloroethane	20.0	21.6	108	20.0	20.9	105	3.04	80 - 125	20	
1,2-Dichloroethane	20.0	21.4	107	20.0	21.0	105	1.76	80 - 129	20	
1,1-Dichloroethene	20.0	21.1	106	20.0	19.9	99.7	5.68	80 - 132	20	
cis-1,2-Dichloroethene	20.0	21.2	106	20.0	20.6	103	2.88	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.2	106	20.0	20.3	102	4.14	80 - 127	20	
1,2-Dichloropropane	20.0	20.9	105	20.0	20.3	102	2.85	80 - 120	20	
1,3-Dichloropropane	20.0	21.0	105	20.0	21.0	105	0.269	80 - 120	20	
2,2-Dichloropropane	20.0	21.6	108	20.0	20.4	102	5.79	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.6	103	20.0	20.5	102	0.796	70 - 130	20	
trans-1,3-Dichloropropene	20.0	19.1	95.7	20.0	18.9	94.7	1.06	80 - 130	20	
1,1-Dichloropropene	20.0	21.3	106	20.0	20.5	102	3.95	75 - 130	20	
Ethylbenzene	20.0	21.1	105	20.0	20.1	101	4.76	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747689
Report generated: 08/11/2010 15:00



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: ADC Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG339194 Units: ug/L
QC Key: STD Lot #: STD40337

Sample ID: WG339194-02 LCS File ID: 8M363120 Run Date: 08/07/2010 16:41
Sample ID: WG339194-03 LCS2 File ID: 8M363121 Run Date: 08/07/2010 17:14

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	20.4	102	20.0	19.9	99.3	2.87	55 - 130	20	
Hexachlorobutadiene	20.0	21.0	105	20.0	20.5	102	2.53	72 - 132	20	
Isopropylbenzene	20.0	18.4	92.2	20.0	17.9	89.6	2.93	80 - 122	20	
p-Isopropyltoluene	20.0	20.5	103	20.0	19.8	99.0	3.46	80 - 122	20	
4-Methyl-2-pentanone	20.0	20.3	102	20.0	18.9	94.4	7.29	64 - 140	20	
Methylene chloride	20.0	18.7	93.3	20.0	18.4	92.1	1.29	80 - 123	20	
Naphthalene	20.0	20.3	102	20.0	20.4	102	0.467	59 - 149	20	
n-Propylbenzene	20.0	20.4	102	20.0	19.9	99.5	2.22	80 - 129	20	
Styrene	20.0	20.1	100	20.0	19.4	97.2	3.23	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	21.5	107	20.0	21.1	106	1.65	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	21.5	108	20.0	21.4	107	0.374	79 - 125	20	
Tetrachloroethene	20.0	21.9	109	20.0	21.3	106	2.69	80 - 124	20	
Toluene	20.0	20.6	103	20.0	20.0	100	2.81	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	19.7	98.5	20.0	19.6	98.0	0.501	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	20.2	101	20.0	20.0	100	0.916	65 - 135	20	
1,1,1-Trichloroethane	20.0	22.1	110	20.0	21.1	106	4.33	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.0	105	20.0	20.8	104	1.21	80 - 125	20	
Trichloroethene	20.0	21.4	107	20.0	20.7	103	3.49	80 - 122	20	
Trichlorofluoromethane	20.0	20.7	103	20.0	19.8	98.8	4.61	62 - 151	20	
1,2,3-Trichloropropane	20.0	20.1	101	20.0	20.4	102	1.59	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.4	107	20.0	20.9	105	2.32	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	20.8	104	20.0	20.3	101	2.30	80 - 127	20	
Vinyl acetate	20.0	5.29	26.5	20.0	5.19	26.0	1.91	10 - 190	20	
Vinyl chloride	20.0	22.4	112	20.0	21.3	106	5.39	50 - 170	20	
o-Xylene	20.0	20.2	101	20.0	19.8	99.1	1.71	80 - 122	20	
m,p-Xylene	40.0	40.8	102	40.0	40.0	100	1.84	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	101	101	80 - 120	PASS
Dibromofluoromethane	101	101	86 - 118	PASS
4-Bromofluorobenzene	96.2	96.6	86 - 115	PASS
Toluene-d8	99.1	98.7	88 - 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747689
Report generated: 08/11/2010 15:00



2.1.2 RSK 175

2.1.2.1 Summary Data

LABORATORY REPORT

00104207

L10080063

08/18/10 10:50

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	RSK175	1	04-AUG-10
47WW09-100803	L10080063-02	RSK175	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	RSK175	1	04-AUG-10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG339163
Collect Date: 08/03/2010 13:00
Sample Tag: 01

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

Instrument: HP16
Prep Date: 08/06/2010 18:22
Cal Date: 05/25/2010 12:59
Run Date: 08/06/2010 18:22
File ID: 16G22719

Analyte	CAS. Number	Result	Qual	PQL	SDL
methane	74-82-8	1.23	J	5.00	1.00
ethene	74-85-1		U	5.00	1.00
ethane	74-84-0		U	5.00	1.00

U Not detected at or above adjusted sample detection limit

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

2/90600

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WM09-100803
Matrix: Water
Workgroup Number: WG339163
Collect Date: 08/03/2010 14:50
Sample Tag: 01

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

Instrument: HP16
Prep Date: 08/06/2010 18:34
Cal Date: 05/25/2010 12:59
Run Date: 08/06/2010 18:34
File ID: 16G22720

Analyte	CAS. Number	Result	Qual	PQL	SDL
methane	74-82-8	2.50	J	5.00	1.00
ethene	74-85-1		U	5.00	1.00
ethane	74-84-0		U	5.00	1.00

U Not detected at or above adjusted sample detection limit

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

W
090610

Report Number: L10080063
Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG339163
Collect Date: 08/03/2010 15:30
Sample Tag: 01

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

Instrument: HP16
Prep Date: 08/06/2010 18:59
Cal Date: 05/25/2010 12:59
Run Date: 08/06/2010 18:59
File ID: 16G22722

Analyte	CAS. Number	Result	Qual	PQL	SDL
methane	74-82-8		U	5.00	1.00
ethene	74-85-1		U	5.00	1.00
ethane	74-84-0		U	5.00	1.00

U Not detected at or above adjusted sample detection limit

[Handwritten signature]



2.1.2.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: 16G22711
Prep Date: 08/06/10 16:13
Analyzed Date: 08/06/10 16:13
Analyst: FJB

Work Group: WG339163
Blank Sample ID: WG339163-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG339163-02	16G22712	08/06/10 16:25	01
LCS2	WG339163-03	16G22713	08/06/10 16:38	01
47WW34-100803	L10080063-01	16G22719	08/06/10 18:22	01
47WW09-100803	L10080063-02	16G22720	08/06/10 18:34	01
EQUIPMENT RINSE -100803	L10080063-03	16G22722	08/06/10 18:59	01

Report Name: BLANK_SUMMARY
PDF File ID: 1746743
Report generated 08/09/2010 13:37



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104213

Login Number: L10080063 Prep Date: 08/06/10 16:13 Sample ID: WG339163-01
Instrument ID: HP16 Run Date: 08/06/10 16:13 Prep Method: 5021
File ID: 16G22711 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG339163 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HP16-25-MAY-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
methane	1.00	5.00	1.00	1	U
ethene	1.00	5.00	1.00	1	U
ethane	1.00	5.00	1.00	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1746744
09-AUG-2010 13:37



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: FJB Prep Method: 5021
Instrument ID: HP16 Matrix: Water Method: RSK175
Workgroup (AAB#): WG339163 Units: ug/L
QC Key: STD Lot #: STD38726

Sample ID: WG339163-02 LCS File ID: 16G22712 Run Date: 08/06/2010 16:25
Sample ID: WG339163-03 LCS2 File ID: 16G22713 Run Date: 08/06/2010 16:38

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
methane	114	109	95.1	114	104	90.9	4.52	56 - 140	40	
ethene	200	209	105	200	199	99.8	4.81	56 - 140	40	
ethane	214	217	101	214	207	96.8	4.77	56 - 137	40	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1746745
Report generated: 08/09/2010 13:37



2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data

LABORATORY REPORT

00104217

L10080063

08/18/10 10:50

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	8270C	1	04-AUG-10
47WW09-100803	L10080063-02	8270C	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	8270C	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008

PDF File ID: 1755597

Report generated: 08/18/2010 10:50

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
 Client ID: 47WW34-100803
 Matrix: Water
 Workgroup Number: WG339078
 Collect Date: 08/03/2010 13:00
 Sample Tag: 01

PrePrep Method: NONE
 Prep Method: 3510C
 Analytical Method: 8270C
 Analyst: ADC
 Dilution: 1
 Units: ug/L

Instrument: HPMS4
 Prep Date: 08/05/2010 08:05
 Cal Date: 07/29/2010 13:27
 Run Date: 08/09/2010 20:28
 File ID: 4M52520

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,4-Trichlorobenzene	120-82-1	U	U	5.10	2.55
1,2-Dichlorobenzene	95-50-1	U	U	5.10	2.55
1,3-Dichlorobenzene	541-73-1	U	U	5.10	2.55
1,4-Dichlorobenzene	106-46-7	U	U	5.10	2.55
2,4,5-Trichlorophenol	95-95-4	U	U	5.10	2.55
2,4,6-Trichlorophenol	88-06-2	U	U	5.10	2.55
2,4-Dichlorophenol	120-83-2	U	U	5.10	2.55
2,4-Dimethylphenol	105-67-9	U	U	5.10	2.55
2,4-Dinitrophenol	51-28-5	U	U	25.5	12.8
2,4-Dinitrotoluene	121-14-2	U	U	5.10	2.55
2,6-Dinitrotoluene	606-20-2	U	U	5.10	2.55
2-Chloronaphthalene	91-58-7	U	U	5.10	2.55
2-Chlorophenol	95-57-8	U	U	5.10	2.55
2-Methylnaphthalene	91-57-6	U	U	5.10	2.55
2-Methylphenol	95-48-7	U	U	5.10	2.55
2-Nitroaniline	88-74-4	U	U	25.5	12.8
2-Nitrophenol	88-75-5	U	U	5.10	2.55
3,3'-Dichlorobenzidine	91-94-1	U	U	10.2	2.55
3-,4-Methylphenol	106-44-5	U	U	5.10	2.55
3-Nitroaniline	99-09-2	U	U	25.5	12.8
4,6-Dinitro-2-methylphenol	534-52-1	U	U	25.5	12.8
4-Bromophenyl-phenylether	101-55-3	U	U	5.10	2.55
4-Chloro-3-methylphenol	59-50-7	U	U	5.10	2.55
4-Chloroaniline	106-47-8	U	U	5.10	2.55
4-Chlorophenyl-phenyl ether	7005-72-3	U	U	5.10	2.55
4-Nitroaniline	100-01-6	U	U	25.5	12.8
4-Nitrophenol	100-02-7	U	U	25.5	12.8
Acenaphthene	83-32-9	U	U	5.10	2.55
Acenaphthylene	208-96-8	U	U	5.10	2.55
Anthracene	120-12-7	U	U	5.10	2.55
Benzo(a)anthracene	56-55-3	U	U	5.10	2.55
Benzo(a)pyrene	50-32-8	U	U	5.10	2.55
Benzo(b)fluoranthene	205-99-2	U	U	5.10	2.55
Benzo(g,h,i)Perylene	191-24-2	U	U	5.10	2.55
Benzo(k)fluoranthene	207-08-9	U	U	5.10	2.55
Benzoic acid	65-85-0	U	U	25.5	12.8
Benzyl alcohol	100-51-6	U	U	5.10	2.55
Bis(2-Chloroethoxy)Methane	111-91-1	U	U	5.10	2.55
Bis(2-Chloroethyl) ether	111-44-4	U	U	5.10	2.55
bis(2-Chloroisopropyl) ether	108-60-1	U	U	5.10	2.55
bis(2-Ethylhexyl)phthalate	117-81-7	U	U	10.2	3.06
Butylbenzylphthalate	85-68-7	U	U	5.10	2.55
Chrysene	218-01-9	U	U	5.10	2.55
Di-N-Butylphthalate	84-74-2	U	U	5.10	2.55
Di-n-octylphthalate	117-84-0	U	U	5.10	2.55
Dibenzo(a,h)Anthracene	53-70-3	U	U	5.10	2.55
Dibenzofuran	132-64-9	U	U	5.10	2.55
Diethylphthalate	84-66-2	U	U	5.10	2.55
Dimethylphthalate	131-11-3	U	U	5.10	2.55
Fluoranthene	206-44-0	U	U	5.10	2.55
Fluorene	86-73-7	U	U	5.10	2.55
Hexachlorobenzene	118-74-1	U	U	5.10	2.55
Hexachlorobutadiene	87-68-3	U	U	5.10	2.55
Hexachlorocyclopentadiene	77-47-4	U	U	5.10	2.55
Hexachloroethane	67-72-1	U	U	5.10	2.55
Indeno(1,2,3-cd)pyrene	193-39-5	U	U	5.10	2.55
Isophorone	78-59-1	U	U	5.10	2.55
N-Nitrosodiphenylamine	86-30-6	U	U	5.10	2.55
N-Nitrosodipropylamine	621-64-7	U	U	5.10	2.55

1 of 6



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG339078
Collect Date: 08/03/2010 13:00
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 3510C
Analytical Method: 8270C
Analyst: ADC
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 08/05/2010 08:05
Cal Date: 07/29/2010 13:27
Run Date: 08/09/2010 20:28
File ID: 4M52520

Analyte	CAS. Number	Result	Qual	PQL	SDL
Naphthalene	91-20-3		U	5.10	2.55
Nitrobenzene	98-95-3		U	5.10	2.55
Pentachlorophenol	87-86-5		U	25.5	12.8
Phenanthrene	85-01-8		U	5.10	2.55
Phenol	108-95-2		U	5.10	2.55
Pyrene	129-00-0		U	5.10	2.55
Surrogate	% Recovery	Lower	Upper	Qual	
2,4,6-Tribromophenol	75.4	10	123		
2-Fluorobiphenyl	61.4	43	116		
2-Fluorophenol	40.4	21	100		
Nitrobenzene-d5	60.6	35	114		
p-Terphenyl-d14	60.6	33	141		
Phenol-d5	25.0	10	94		

U Not detected at or above adjusted sample detection limit



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47WW09-100803

Matrix: Water

Workgroup Number: WG339078

Collect Date: 08/03/2010 14:50

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 3510C

Analytical Method: 8270C

Analyst: ADC

Dilution: 1

Units: ug/L

Instrument: HPMS4

Prep Date: 08/05/2010 08:05

Cal Date: 07/29/2010 13:27

Run Date: 08/09/2010 21:03

File ID: 4M52521

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,4-Trichlorobenzene	120-82-1		U	5.00	2.50
1,2-Dichlorobenzene	95-50-1		U	5.00	2.50
1,3-Dichlorobenzene	541-73-1		U	5.00	2.50
1,4-Dichlorobenzene	106-46-7		U	5.00	2.50
2,4,5-Trichlorophenol	95-95-4		U	5.00	2.50
2,4,6-Trichlorophenol	88-06-2		U	5.00	2.50
2,4-Dichlorophenol	120-83-2		U	5.00	2.50
2,4-Dimethylphenol	105-67-9		U	5.00	2.50
2,4-Dinitrophenol	51-28-5		U	25.0	12.5
2,4-Dinitrotoluene	121-14-2		U	5.00	2.50
2,6-Dinitrotoluene	606-20-2		U	5.00	2.50
2-Chloronaphthalene	91-58-7		U	5.00	2.50
2-Chlorophenol	95-57-8		U	5.00	2.50
2-Methylnaphthalene	91-57-6		U	5.00	2.50
2-Methylphenol	95-48-7		U	5.00	2.50
2-Nitroaniline	88-74-4		U	25.0	12.5
2-Nitrophenol	88-75-5		U	5.00	2.50
3,3'-Dichlorobenzidine	91-94-1		U	10.0	2.50
3-,4-Methylphenol	106-44-5		U	5.00	2.50
3-Nitroaniline	99-09-2		U	25.0	12.5
4,6-Dinitro-2-methylphenol	534-52-1		U	25.0	12.5
4-Bromophenyl-phenylether	101-55-3		U	5.00	2.50
4-Chloro-3-methylphenol	59-50-7		U	5.00	2.50
4-Chloroaniline	106-47-8		U	5.00	2.50
4-Chlorophenyl-phenyl ether	7005-72-3		U	5.00	2.50
4-Nitroaniline	100-01-6		U	25.0	12.5
4-Nitrophenol	100-02-7		U	25.0	12.5
Acenaphthene	83-32-9		U	5.00	2.50
Acenaphthylene	208-96-8		U	5.00	2.50
Anthracene	120-12-7		U	5.00	2.50
Benzo(a)anthracene	56-55-3		U	5.00	2.50
Benzo(a)pyrene	50-32-8		U	5.00	2.50
Benzo(b)fluoranthene	205-99-2		U	5.00	2.50
Benzo(g,h,i)Perylene	191-24-2		U	5.00	2.50
Benzo(k)fluoranthene	207-08-9		U	5.00	2.50
Benzoic acid	65-85-0		U	25.0	12.5
Benzyl alcohol	100-51-6		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
Bis(2-Chloroethyl) ether	111-44-4		U	5.00	2.50
bis(2-Chloroisopropyl) ether	108-60-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7		U	10.0	3.00
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-n-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
N-Nitrosodipropylamine	621-64-7		U	5.00	2.50

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Microbac

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WW09-100803
Matrix: Water
Workgroup Number: WG339078
Collect Date: 08/03/2010 14:50
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 3510C
Analytical Method: 8270C
Analyst: ADC
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 08/05/2010 08:05
Cal Date: 07/29/2010 13:27
Run Date: 08/09/2010 21:03
File ID: 4M52521

Analyte	CAS. Number	Result	Qual	PQL	SDL
Naphthalene	91-20-3		U	5.00	2.50
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50
Surrogate	% Recovery	Lower	Upper	Qual	
2,4,6-Tribromophenol	94.6	10	123		
2-Fluorobiphenyl	72.0	43	116		
2-Fluorophenol	45.4	21	100		
Nitrobenzene-d5	70.3	35	114		
p-Terphenyl-d14	62.0	33	141		
Phenol-d5	28.2	10	94		

U Not detected at or above adjusted sample detection limit

Handwritten signature: 290610

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03

Client ID: EQUIPMENT RINSE -100803

Matrix: Water

Workgroup Number: WG339078

Collect Date: 08/03/2010 15:30

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 3510C

Analytical Method: 8270C

Analyst: ADC

Dilution: 1

Units: ug/L

Instrument: HPMS4

Prep Date: 08/05/2010 08:05

Cal Date: 07/29/2010 13:27

Run Date: 08/09/2010 21:39

File ID: 4M52522

Analyte	CAS. Number	Result	Qual	PQL	SDL
1,2,4-Trichlorobenzene	120-82-1		U	5.00	2.50
1,2-Dichlorobenzene	95-50-1		U	5.00	2.50
1,3-Dichlorobenzene	541-73-1		U	5.00	2.50
1,4-Dichlorobenzene	106-46-7		U	5.00	2.50
2,4,5-Trichlorophenol	95-95-4		U	5.00	2.50
2,4,6-Trichlorophenol	88-06-2		U	5.00	2.50
2,4-Dichlorophenol	120-83-2		U	5.00	2.50
2,4-Dimethylphenol	105-67-9		U	5.00	2.50
2,4-Dinitrophenol	51-28-5		U	25.0	12.5
2,4-Dinitrotoluene	121-14-2		U	5.00	2.50
2,6-Dinitrotoluene	606-20-2		U	5.00	2.50
2-Chloronaphthalene	91-58-7		U	5.00	2.50
2-Chlorophenol	95-57-8		U	5.00	2.50
2-Methylnaphthalene	91-57-6		U	5.00	2.50
2-Methylphenol	95-48-7		U	5.00	2.50
2-Nitroaniline	88-74-4		U	25.0	12.5
2-Nitrophenol	88-75-5		U	5.00	2.50
3,3'-Dichlorobenzidine	91-94-1		U	10.0	2.50
3-,4-Methylphenol	106-44-5		U	5.00	2.50
3-Nitroaniline	99-09-2		U	25.0	12.5
4,6-Dinitro-2-methylphenol	534-52-1		U	25.0	12.5
4-Bromophenyl-phenylether	101-55-3		U	5.00	2.50
4-Chloro-3-methylphenol	59-50-7		U	5.00	2.50
4-Chloroaniline	106-47-8		U	5.00	2.50
4-Chlorophenyl-phenyl ether	7005-72-3		U	5.00	2.50
4-Nitroaniline	100-01-6		U	25.0	12.5
4-Nitrophenol	100-02-7		U	25.0	12.5
Acenaphthene	83-32-9		U	5.00	2.50
Acenaphthylene	208-96-8		U	5.00	2.50
Anthracene	120-12-7		U	5.00	2.50
Benzo(a)anthracene	56-55-3		U	5.00	2.50
Benzo(a)pyrene	50-32-8		U	5.00	2.50
Benzo(b)fluoranthene	205-99-2		U	5.00	2.50
Benzo(g,h,i)Perylene	191-24-2		U	5.00	2.50
Benzo(k)fluoranthene	207-08-9		U	5.00	2.50
Benzoic acid	65-85-0		U	25.0	12.5
Benzyl alcohol	100-51-6		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
Bis(2-Chloroethyl) ether	111-44-4		U	5.00	2.50
bis(2-Chloroisopropyl) ether	108-60-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7		U	10.0	3.00
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-N-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
N-Nitrosodipropylamine	621-64-7		U	5.00	2.50

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Report Number: L10080063

Report Date : August 18, 2010

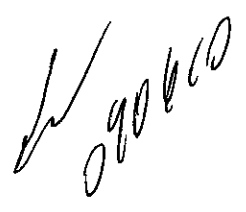
Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG339078
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 3510C
Analytical Method: 8270C
Analyst: ADC
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 08/05/2010 08:05
Cal Date: 07/29/2010 13:27
Run Date: 08/09/2010 21:39
File ID: 4M52522

Analyte	CAS. Number	Result	Qual	PQL	SDL
Naphthalene	91-20-3		U	5.00	2.50
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50
Surrogate	% Recovery	Lower	Upper	Qual	
2,4,6-Tribromophenol	93.0	10	123		
2-Fluorobiphenyl	70.4	43	116		
2-Fluorophenol	44.5	21	100		
Nitrobenzene-d5	70.0	35	114		
p-Terphenyl-d14	88.9	33	141		
Phenol-d5	26.8	10	94		

U Not detected at or above adjusted sample detection limit



2.2.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: 4M52514
Prep Date: 08/05/10 08:05
Analyzed Date: 08/09/10 16:49
Analyst: ADC

Work Group: WG339078
Blank Sample ID: WG338923-01
Instrument ID: HPMS4
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG338923-02	4M52515	08/09/10 17:26	01
LCS2	WG338923-03	4M52516	08/09/10 18:03	01
47WW34-100803	L10080063-01	4M52520	08/09/10 20:28	01
47WW09-100803	L10080063-02	4M52521	08/09/10 21:03	01
EQUIPMENT RINSE -100803	L10080063-03	4M52522	08/09/10 21:39	01

Report Name: BLANK_SUMMARY
PDF File ID: 1748733
Report generated 08/10/2010 16:10



METHOD BLANK REPORT

Login Number: L10080063 Prep Date: 08/05/10 08:05 Sample ID: WG338923-01
 Instrument ID: HPMS4 Run Date: 08/09/10 16:49 Prep Method: 3510C
 File ID: 4M52514 Analyst: ADC Method: 8270C
 Workgroup (AAB#): WG339078 Matrix: Water Units: ug/L
 Contract #: DACA56-94-D-0020 Cal ID: HPMS4-29-JUL-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
1,2,4-Trichlorobenzene	2.50	5.00	2.50	1	U
1,2-Dichlorobenzene	2.50	5.00	2.50	1	U
1,3-Dichlorobenzene	2.50	5.00	2.50	1	U
1,4-Dichlorobenzene	2.50	5.00	2.50	1	U
2,4,5-Trichlorophenol	2.50	5.00	2.50	1	U
2,4,6-Trichlorophenol	2.50	5.00	2.50	1	U
2,4-Dichlorophenol	2.50	5.00	2.50	1	U
2,4-Dimethylphenol	2.50	5.00	2.50	1	U
2,4-Dinitrophenol	12.5	25.0	12.5	1	U
2,4-Dinitrotoluene	2.50	5.00	2.50	1	U
2,6-Dinitrotoluene	2.50	5.00	2.50	1	U
2-Chloronaphthalene	2.50	5.00	2.50	1	U
2-Chlorophenol	2.50	5.00	2.50	1	U
2-Methylnaphthalene	2.50	5.00	2.50	1	U
2-Methylphenol	2.50	5.00	2.50	1	U
2-Nitroaniline	12.5	25.0	12.5	1	U
2-Nitrophenol	2.50	5.00	2.50	1	U
3,3'-Dichlorobenzidine	2.50	10.0	2.50	1	U
3,4-Methylphenol	2.50	5.00	2.50	1	U
3-Nitroaniline	12.5	25.0	12.5	1	U
4,6-Dinitro-2-methylphenol	12.5	25.0	12.5	1	U
4-Bromophenyl-phenylether	2.50	5.00	2.50	1	U
4-Chloro-3-methylphenol	2.50	5.00	2.50	1	U
4-Chloroaniline	2.50	5.00	2.50	1	U
4-Chlorophenyl-phenyl ether	2.50	5.00	2.50	1	U
4-Nitroaniline	12.5	25.0	12.5	1	U
4-Nitrophenol	12.5	25.0	12.5	1	U
Acenaphthene	2.50	5.00	2.50	1	U
Acenaphthylene	2.50	5.00	2.50	1	U
Anthracene	2.50	5.00	2.50	1	U
Benzo(a)anthracene	2.50	5.00	2.50	1	U
Benzo(a)pyrene	2.50	5.00	2.50	1	U
Benzo(b)fluoranthene	2.50	5.00	2.50	1	U
Benzo(g,h,i)Perylene	2.50	5.00	2.50	1	U
Benzo(k)fluoranthene	2.50	5.00	2.50	1	U
Benzoic acid	12.5	25.0	12.5	1	U
Benzyl alcohol	2.50	5.00	2.50	1	U
Bis(2-Chloroethoxy)Methane	2.50	5.00	2.50	1	U
Bis(2-Chloroethyl)ether	2.50	5.00	2.50	1	U
bis(2-Chloroisopropyl)ether	2.50	5.00	2.50	1	U
bis(2-Ethylhexyl)phthalate	3.00	10.0	3.00	1	U
Butylbenzylphthalate	2.50	5.00	2.50	1	U

Report Name: BLANK

PDF ID: 1748734

10-AUG-2010 16:10

Microbac

Microbac Laboratories Inc.
METHOD BLANK REPORT

00104227

Login Number: L10080063 Prep Date: 08/05/10 08:05 Sample ID: WG338923-01
Instrument ID: HPMS4 Run Date: 08/09/10 16:49 Prep Method: 3510C
File ID: 4M52514 Analyst: ADC Method: 8270C
Workgroup (AAB#): WG339078 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS4-29-JUL-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Chrysene	2.50	5.00	2.50	1	U
Di-N-Butylphthalate	2.50	5.00	2.50	1	U
Di-n-octylphthalate	2.50	5.00	2.50	1	U
Dibenzo (a,b) Anthracene	2.50	5.00	2.50	1	U
Dibenzofuran	2.50	5.00	2.50	1	U
Diethylphthalate	2.50	5.00	2.50	1	U
Dimethylphthalate	2.50	5.00	2.50	1	U
Fluoranthene	2.50	5.00	2.50	1	U
Fluorene	2.50	5.00	2.50	1	U
Hexachlorobenzene	2.50	5.00	2.50	1	U
Hexachlorobutadiene	2.50	5.00	2.50	1	U
Hexachlorocyclopentadiene	2.50	5.00	2.50	1	U
Hexachloroethane	2.50	5.00	2.50	1	U
Indeno (1,2,3-cd) pyrene	2.50	5.00	2.50	1	U
Isophorone	2.50	5.00	2.50	1	U
N-Nitrosodiphenylamine	2.50	5.00	2.50	1	U
N-Nitrosodipropylamine	2.50	5.00	2.50	1	U
Naphthalene	2.50	5.00	2.50	1	U
Nitrobenzene	2.50	5.00	2.50	1	U
Pentachlorophenol	12.5	25.0	12.5	1	U
Phenanthrene	2.50	5.00	2.50	1	U
Phenol	2.50	5.00	2.50	1	U
Pyrene	2.50	5.00	2.50	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	80.5	10 - 123	PASS
2-Fluorobiphenyl	56.8	43 - 116	PASS
2-Fluorophenol	32.8	21 - 100	PASS
Nitrobenzene-d5	54.8	35 - 114	PASS
p-Terphenyl-d14	74.7	33 - 141	PASS
Phenol-d5	20.0	10 - 94	PASS

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1748734
10-AUG-2010 16:10



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: ADC Prep Method: 3510C
Instrument ID: HPMS4 Matrix: Water Method: 8270C
Workgroup (AAB#): WG339078 Units: ug/L
QC Key: STD Lot #: STD39596

Sample ID: WG338923-02 LCS File ID: 4M52515 Run Date: 08/09/2010 17:26
Sample ID: WG338923-03 LCS2 File ID: 4M52516 Run Date: 08/09/2010 18:03

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,2,4-Trichlorobenzene	50.0	34.2	68.5	50.0	32.3	64.7	5.73	25 - 105	30	
1,2-Dichlorobenzene	50.0	31.8	63.7	50.0	30.7	61.4	3.73	25 - 110	30	
1,3-Dichlorobenzene	50.0	31.2	62.4	50.0	29.6	59.2	5.35	25 - 110	30	
1,4-Dichlorobenzene	50.0	31.3	62.7	50.0	30.0	60.0	4.36	25 - 110	30	
2,4,5-Trichlorophenol	50.0	42.7	85.5	50.0	38.6	77.2	10.2	35 - 120	30	
2,4,6-Trichlorophenol	50.0	41.1	82.3	50.0	37.5	74.9	9.35	30 - 120	30	
2,4-Dichlorophenol	50.0	37.6	75.2	50.0	34.5	69.0	8.58	20 - 110	30	
2,4-Dimethylphenol	50.0	38.2	76.3	50.0	34.9	69.8	8.97	20 - 120	30	
2,4-Dinitrophenol	50.0	50.0	99.9	50.0	45.7	91.4	8.86	20 - 140	30	
2,4-Dinitrotoluene	50.0	44.2	88.4	50.0	39.7	79.4	10.8	50 - 139	30	
2,6-Dinitrotoluene	50.0	42.4	84.9	50.0	38.8	77.6	9.03	50 - 120	30	
2-Chloronaphthalene	50.0	32.5	64.9	50.0	30.1	60.2	7.47	25 - 120	30	
2-Chlorophenol	50.0	31.7	63.3	50.0	29.5	59.1	6.98	25 - 110	30	
2-Methylnaphthalene	50.0	38.4	76.7	50.0	35.6	71.1	7.61	25 - 120	30	
2-Methylphenol	50.0	30.7	61.4	50.0	28.1	56.2	8.77	20 - 110	30	
2-Nitroaniline	50.0	44.7	89.5	50.0	40.9	81.7	9.07	45 - 115	30	
2-Nitrophenol	50.0	39.2	78.3	50.0	36.7	73.3	6.57	20 - 115	30	
3,3'-Dichlorobenzidine	50.0	42.5	85.1	50.0	44.3	88.7	4.13	30 - 140	30	
3-,4-Methylphenol	50.0	28.1	56.2	50.0	25.5	51.0	9.66	20 - 110	30	
3-Nitroaniline	50.0	47.5	95.1	50.0	43.1	86.1	9.86	40 - 120	30	
4,6-Dinitro-2-methylphenol	50.0	47.5	94.9	50.0	43.0	86.1	9.75	40 - 145	30	
4-Bromophenyl-phenylether	50.0	40.2	80.4	50.0	36.4	72.8	9.91	40 - 115	30	
4-Chloro-3-methylphenol	50.0	39.8	79.5	50.0	35.7	71.4	10.8	25 - 110	30	
4-Chloroaniline	50.0	30.8	61.5	50.0	32.4	64.8	5.28	25 - 120	30	
4-Chlorophenyl-phenyl ether	50.0	40.2	80.3	50.0	35.9	71.9	11.1	35 - 120	30	
4-Nitroaniline	50.0	44.3	88.7	50.0	39.3	78.6	12.0	53 - 135	30	
4-Nitrophenol	50.0	23.3	46.5	50.0	21.0	42.0	10.3	10 - 132	30	
Acenaphthene	50.0	39.2	78.4	50.0	36.1	72.1	8.40	30 - 120	30	
Acenaphthylene	50.0	40.7	81.3	50.0	37.3	74.7	8.52	30 - 120	30	
Anthracene	50.0	44.9	89.8	50.0	40.6	81.2	10.0	55 - 130	30	
Benzo(a)anthracene	50.0	45.1	90.1	50.0	40.9	81.8	9.67	60 - 130	30	
Benzo(a)pyrene	50.0	45.1	90.3	50.0	40.7	81.4	10.4	55 - 135	30	
Benzo(b)fluoranthene	50.0	38.8	77.5	50.0	34.2	68.5	12.4	45 - 125	30	
Benzo(g,h,i)Perylene	50.0	48.3	96.5	50.0	43.6	87.1	10.2	45 - 140	30	
Benzo(k)fluoranthene	50.0	44.3	88.5	50.0	41.1	82.3	7.31	55 - 140	30	
Benzoic acid	50.0	12.8	25.7	50.0	13.6	27.2	5.58	10 - 100	30	
Benzyl alcohol	50.0	34.3	68.7	50.0	32.0	63.9	7.19	20 - 110	30	
Bis(2-Chloroethoxy)Methane	50.0	27.2	54.3	50.0	25.4	50.8	6.69	20 - 105	30	
Bis(2-Chloroethyl)ether	50.0	30.6	61.2	50.0	29.3	58.6	4.31	25 - 110	30	
bis(2-Chloroisopropyl)ether	50.0	30.9	61.8	50.0	29.1	58.2	6.11	20 - 110	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747926
Report generated: 08/10/2010 16:10



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L10080063 Analyst: ADC Prep Method: 3510C
Instrument ID: HPMS4 Matrix: Water Method: 8270C
Workgroup (AAB#): WG339078 Units: ug/L
QC Key: STD Lot #: STD39596

Sample ID: WG338923-02 LCS File ID: 4M52515 Run Date: 08/09/2010 17:26
Sample ID: WG338923-03 LCS2 File ID: 4M52516 Run Date: 08/09/2010 18:03

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Bis(2-Ethylhexyl)phthalate	50.0	40.0	80.1	50.0	37.1	74.2	7.57	50 - 150	30	
Butylbenzylphthalate	50.0	39.2	78.4	50.0	35.8	71.6	9.11	55 - 150	30	
Chrysene	50.0	44.8	89.6	50.0	40.7	81.5	9.50	55 - 130	30	
Di-N-Butylphthalate	50.0	42.6	85.3	50.0	38.7	77.4	9.65	55 - 118	30	
Di-n-octylphthalate	50.0	38.4	76.8	50.0	35.3	70.7	8.31	40 - 146	30	
Dibenzo(a,h)Anthracene	50.0	50.3	101	50.0	45.2	90.3	10.7	45 - 125	30	
Dibenzofuran	50.0	40.3	80.6	50.0	37.3	74.7	7.68	35 - 115	30	
Diethylphthalate	50.0	43.5	86.9	50.0	39.1	78.1	10.6	45 - 120	30	
Dimethylphthalate	50.0	42.3	84.5	50.0	38.6	77.2	9.07	25 - 112	30	
Fluoranthene	50.0	46.8	93.6	50.0	42.4	84.7	9.93	50 - 137	30	
Fluorene	50.0	41.4	82.8	50.0	37.7	75.3	9.43	40 - 120	30	
Hexachlorobenzene	50.0	47.1	94.3	50.0	42.1	84.2	11.3	50 - 130	30	
Hexachlorobutadiene	50.0	36.3	72.7	50.0	33.9	67.9	6.84	24 - 105	30	
Hexachlorocyclopentadiene	50.0	29.1	58.2	50.0	25.4	50.7	13.7	20 - 143	30	
Hexachloroethane	50.0	29.2	58.4	50.0	27.6	55.3	5.51	25 - 95	30	
Indeno(1,2,3-cd)pyrene	50.0	47.5	95.0	50.0	42.1	84.2	12.1	50 - 135	30	
Isophorone	50.0	32.9	65.7	50.0	30.5	61.0	7.39	30 - 110	30	
N-Nitrosodiphenylamine	50.0	42.7	85.4	50.0	39.0	78.0	9.02	40 - 110	30	
N-Nitrosodipropylamine	50.0	35.3	70.6	50.0	33.0	66.0	6.67	28 - 120	30	
Naphthalene	50.0	35.2	70.4	50.0	33.2	66.4	5.80	25 - 110	30	
Nitrobenzene	50.0	35.4	70.9	50.0	33.3	66.6	6.23	30 - 110	30	
Pentachlorophenol	50.0	48.1	96.1	50.0	43.5	86.9	10.1	40 - 140	30	
Phenanthrene	50.0	44.0	88.1	50.0	39.7	79.3	10.4	55 - 120	30	
Phenol	50.0	14.6	29.2	50.0	13.9	27.7	5.11	10 - 120	30	
Pyrene	50.0	42.2	84.5	50.0	38.6	77.3	8.90	55 - 130	30	

Surrogates	LCS	LCS2	Surrogate Limits		Qualifier
	% Recovery	% Recovery			
2,4,6-Tribromophenol	108	92.8	10	- 123	PASS
2-Fluorobiphenyl	78.3	71.2	43	- 116	PASS
2-Fluorophenol	45.2	42.2	21	- 100	PASS
Nitrobenzene-d5	73.7	68.7	35	- 114	PASS
p-Terphenyl-d14	83.9	74.5	33	- 141	PASS
Phenol-d5	28.8	27.0	10	- 94	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1747926
Report generated: 08/10/2010 16:10



2.2.2 LC/MS Data (6850)

2.2.2.1 Summary Data

LABORATORY REPORT

00104232

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	6850	1	04-AUG-10
47WW09-100803	L10080063-02	6850	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	6850	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008
 PDF File ID: 1755598
 Report generated: 08/18/2010 10:51

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01	PrePrep Method: NONE	Instrument: LCMS1
Client ID: 47WW34-100803	Prep Method: 6850	Prep Date: 08/10/2010 13:45
Matrix: Water	Analytical Method: 6850	Cal Date: 08/10/2010 16:53
Workgroup Number: WG339397	Analyst: WTD	Run Date: 08/11/2010 03:24
Collect Date: 08/03/2010 13:00	Dilution: 1	File ID: 11M.LM04499
Sample Tag: 01	Units: ug/L	

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

1 of 3



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WW09-100803
Matrix: Water
Workgroup Number: WG339397
Collect Date: 08/03/2010 14:50
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/10/2010 13:45
Cal Date: 08/10/2010 16:53
Run Date: 08/11/2010 03:48
File ID: 1LM.LM04500

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

Handwritten signature and date:
9/20/10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG339397
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 6850
Analytical Method: 6850
Analyst: WTD
Dilution: 1
Units: ug/L

Instrument: LCMS1
Prep Date: 08/10/2010 13:45
Cal Date: 08/10/2010 16:53
Run Date: 08/11/2010 04:11
File ID: 1LM.LM04501

Analyte	CAS. Number	Result	Qual	PQL	SDL
Perchlorate	14797-73-0		U	0.200	0.100

U Not detected at or above adjusted sample detection limit

3 of 3



2.2.2.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: 1LM.LM04496
Prep Date: 08/10/10 13:45
Analyzed Date: 08/11/10 02:14
Analyst: WTD

Work Group: WG339397
Blank Sample ID: WG339397-02
Instrument ID: LCMS1
Method: 6850

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
QCMRL	WG339397-05	1LM.LM04493	08/11/10 01:04	01
MCT	WG339397-01	1LM.LM04495	08/11/10 01:51	01
LCS	WG339397-03	1LM.LM04497	08/11/10 02:38	01
LCS2	WG339397-04	1LM.LM04498	08/11/10 03:01	01
47WW34-100803	L10080063-01	1LM.LM04499	08/11/10 03:24	01
47WW09-100803	L10080063-02	1LM.LM04500	08/11/10 03:48	01
EQUIPMENT RINSE -100803	L10080063-03	1LM.LM04501	08/11/10 04:11	01
QCMRL	WG339397-06	1LM.LM04506	08/11/10 06:08	01
QCMRL	WG339397-07	1LM.LM04518	08/11/10 10:49	01

Report Name: BLANK SUMMARY
PDF File ID: 1750409
Report generated 08/17/2010 09:54



METHOD BLANK REPORT

Login Number: L10080063 Prep Date: 08/10/10 13:45 Sample ID: WG339397-02
Instrument ID: LCMS1 Run Date: 08/11/10 02:14 Prep Method: 6850
File ID: 1LM.LM04496 Analyst: WTD Method: 6850
Workgroup (AAB#): WG339397 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: LCMS1-10-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Perchlorate	0.100	0.200	0.100	1	U

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1750411

17-AUG-2010 09:54



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104239

Login Number: L10080063 Analyst: WTD Prep Method: 6850
Instrument ID: LCMS1 Matrix: Water Method: 6850
Workgroup (AAB#): WG339397 Units: ug/L
QC Key: STD Lot #: STD40370

Sample ID: WG339397-03 LCS File ID: 1LM.LM04497 Run Date: 08/11/2010 02:38
Sample ID: WG339397-04 LCS2 File ID: 1LM.LM04498 Run Date: 08/11/2010 03:01

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Perchlorate	0.200	0.212	106	0.200	0.223	112	5.06	80 - 120	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1750412
Report generated: 08/17/2010 09:54



2.3.1 Metals I C P Data

2.3.1.1 Summary Data

LABORATORY REPORT

00104243

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	6010B	2	04-AUG-10
47WW34-100803	L10080063-01	6010B	1	04-AUG-10
47WW09-100803	L10080063-02	6010B	5	04-AUG-10
47WW09-100803	L10080063-02	6010B	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	6010B	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	6010B	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008
 PDF File ID: 1755599
 Report generated: 08/18/2010 10:51

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01	PrePrep Method: NONE	Instrument: PE-ICP2
Client ID: 47WW34-100803	Prep Method: 3005A	Prep Date: 08/05/2010 07:15
Matrix: Water	Analytical Method: 6010B	Cal Date: 08/06/2010 13:20
Workgroup Number: WG338994	Analyst: PDM	Run Date: 08/06/2010 15:55
Collect Date: 08/03/2010 13:00	Dilution: 2	File ID: P2.080610.155554
Sample Tag: DL01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5	220		1.00	0.500

1 of 6



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01

Client ID: 47WW34-100803

Matrix: Water

Workgroup Number: WG338994

Collect Date: 08/03/2010 13:00

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 3005A

Analytical Method: 6010B

Analyst: PDM

Dilution: 1

Units: mg/L

Instrument: PE-ICP2

Prep Date: 08/05/2010 07:15

Cal Date: 08/05/2010 11:22

Run Date: 08/05/2010 13:26

File ID: P2.080510.132615

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5	0.0565	J	0.100	0.0500
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Calcium, Total	7440-70-2	38.4		0.200	0.100
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6	0.0705	J	0.100	0.0250
Magnesium, Total	7439-95-4	18.3		0.500	0.250
Potassium, Total	7440-09-7	20.8		1.00	0.250
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



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WW09-100803
Matrix: Water
Workgroup Number: WG338994
Collect Date: 08/03/2010 14:50
Sample Tag: DL01

PrePrep Method: NONE
Prep Method: 3005A
Analytical Method: 6010B
Analyst: PDM
Dilution: 5
Units: mg/L

Instrument: PE-ICP2
Prep Date: 08/05/2010 07:15
Cal Date: 08/06/2010 13:20
Run Date: 08/06/2010 16:15
File ID: P2.080610.161546

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5	657		2.50	1.25

Handwritten signature

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47NW09-100803

Matrix: Water

Workgroup Number: WG338994

Collect Date: 08/03/2010 14:50

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 3005A

Analytical Method: 6010B

Analyst: EDM

Dilution: 1

Units: mg/L

Instrument: PE-ICP2

Prep Date: 08/05/2010 07:15

Cal Date: 08/05/2010 11:22

Run Date: 08/05/2010 13:44

File ID: P2.080510.134412

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Calcium, Total	7440-70-2	91.3		0.200	0.100
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6	0.474		0.100	0.0250
Magnesium, Total	7439-95-4	106		0.500	0.250
Potassium, Total	7440-09-7	3.71		1.00	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500

U Not detected at or above adjusted sample detection limit

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG338994
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 3005A
Analytical Method: 6010B
Analyst: PDM
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 08/05/2010 07:15
Cal Date: 08/05/2010 11:22
Run Date: 08/05/2010 13:50
File ID: P2.080510.135057

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Calcium, Total	7440-70-2		U	0.200	0.100
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6		U	0.100	0.0250
Magnesium, Total	7439-95-4		U	0.500	0.250
Potassium, Total	7440-09-7		U	1.00	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6		U	0.0200	0.00500

U Not detected at or above adjusted sample detection limit



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03	PrePrep Method: NONE	Instrument: PE-ICP2
Client ID: EQUIPMENT RINSE -100803	Prep Method: 3005A	Prep Date: 08/05/2010 07:15
Matrix: Water	Analytical Method: 6010B	Cal Date: 08/10/2010 10:20
Workgroup Number: WG338994	Analyst: SLP	Run Date: 08/10/2010 14:11
Collect Date: 08/03/2010 15:30	Dilution: 1	File ID: P2.081010.141145
Sample Tag: 03	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5		U	0.500	0.250

U Not detected at or above adjusted sample detection limit

W 08/04/10

2.3.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: P2.080510.130720
Prep Date: 08/05/10 07:15
Analyzed Date: 08/05/10 13:07
Analyst: PDM

Work Group: WG338994
Blank Sample ID: WG338928-02
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG338928-03	P2.080510.131354	08/05/10 13:13	01
47WW34-100803	L10080063-01	P2.080510.132615	08/05/10 13:26	01
47WW09-100803	L10080063-02	P2.080510.134412	08/05/10 13:44	01
LCS	WG338928-03	P2.080610.155016	08/06/10 15:50	02
47WW34-100803	L10080063-01	P2.080610.155554	08/06/10 15:55	DL01
47WW09-100803	L10080063-02	P2.080610.161546	08/06/10 16:15	DL01
EQUIPMENT RINSE -100803	L10080063-03	P2.080610.162231	08/06/10 16:22	02
EQUIPMENT RINSE -100803	L10080063-03	P2.081010.141145	08/10/10 14:11	03

Report Name: BLANK_SUMMARY
PDF File ID: 1744497
Report generated 08/11/2010 09:37



METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: P2.080610.154344
Prep Date: 08/05/10 07:15
Analyzed Date: 08/06/10 15:43
Analyst: PDM

Work Group: WG338994
Blank Sample ID: WG338928-02
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG338928-03	P2.080510.131354	08/05/10 13:13	01
47WW34-100803	L10080063-01	P2.080510.132615	08/05/10 13:26	01
47WW09-100803	L10080063-02	P2.080510.134412	08/05/10 13:44	01
LCS	WG338928-03	P2.080610.155016	08/06/10 15:50	02
47WW34-100803	L10080063-01	P2.080610.155554	08/06/10 15:55	DL01
47WW09-100803	L10080063-02	P2.080610.161546	08/06/10 16:15	DL01
EQUIPMENT RINSE -100803	L10080063-03	P2.080610.162231	08/06/10 16:22	02
EQUIPMENT RINSE -100803	L10080063-03	P2.081010.141145	08/10/10 14:11	03

Report Name: BLANK_SUMMARY
PDF File ID: 1744497
Report generated 08/11/2010 09:37



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104253

Login Number: L10080063 Prep Date: 08/05/10 07:15 Sample ID: WG338928-02
Instrument ID: PE-ICP2 Run Date: 08/05/10 13:07 Prep Method: 3005A
File ID: P2.080510.130720 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG338994 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP-05-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Beryllium, Total	0.000500	0.00200	0.000500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Cobalt, Total	0.00250	0.00500	0.00250	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Potassium, Total	0.250	1.00	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.00500	0.0200	0.00500	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1744498
09-AUG-2010 09:13



METHOD BLANK REPORT

Login Number: L10080063 Prep Date: 08/05/10 07:15 Sample ID: WG338928-02
Instrument ID: PE-ICP2 Run Date: 08/06/10 15:43 Prep Method: 3005A
File ID: P2.080610.154344 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG338994 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP-06-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Sodium, Total	0.250	0.500	-0.373	1	U

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1744498

09-AUG-2010 09:13



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104255

Login Number: L10080063 Run Date: 08/05/2010 Sample ID: WG338928-03
Instrument ID: PE-ICP2 Run Time: 13:13 Prep Method: 3005A
File ID: P2.080510.131354 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG338994 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD39933 Cal ID: PE-ICP-05-AUG-10

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.22	104	85 - 115	
Beryllium, Total	0.0250	0.0260	104	85 - 115	
Calcium, Total	5.00	5.39	108	85 - 115	
Cobalt, Total	0.100	0.102	102	85 - 115	
Iron, Total	2.00	2.08	104	85 - 115	
Magnesium, Total	5.00	5.24	105	85 - 115	
Potassium, Total	25.0	26.3	105	85 - 115	
Vanadium, Total	0.500	0.516	103	85 - 115	
Zinc, Total	0.500	0.516	103	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 1744499
Report generated: 08/09/2010 09:13



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104256

Login Number: L10080063 Run Date: 08/06/2010 Sample ID: WG338928-03
Instrument ID: PE-ICP2 Run Time: 15:50 Prep Method: 3005A
File ID: P2.080610.155016 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG338994 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD39933 Cal ID: PE-ICP-06-AUG-10

Analytes	Expected	Found	% Rec	LCS Limits	Q
Sodium, Total	25.0	27.3	109	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 1744499
Report generated: 08/09/2010 09:13



2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

LABORATORY REPORT

00104259

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	6020	5	04-AUG-10
47WW09-100803	L10080063-02	6020	5	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	6020	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008

PDF File ID: 1755600

Report generated: 08/18/2010 10:51

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01

Client ID: 47WW34-100803

Matrix: Water

Workgroup Number: WG338982

Collect Date: 08/03/2010 13:00

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 3015

Analytical Method: 6020

Analyst: JYH

Dilution: 5

Units: mg/L

Instrument: ELAN-ICP

Prep Date: 08/05/2010 07:16

Cal Date: 08/09/2010 15:50

Run Date: 08/09/2010 18:02

File ID: EL.080910.180256

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00500	0.00125
Arsenic, Total	7440-38-2	0.00182	J	0.00500	0.00125
Barium, Total	7440-39-3	0.0760		0.0150	0.00250
Cadmium, Total	7440-43-9		U	0.00250	0.000625
Chromium, Total	7440-47-3	0.00553	J	0.0100	0.00250
Copper, Total	7440-50-8		U	0.0100	0.00250
Lead, Total	7439-92-1		U	0.00250	0.00125
Manganese, Total	7439-96-5	0.0172		0.0100	0.00250
Nickel, Total	7440-02-0		U	0.0200	0.00500
Antimony, Total	7440-36-0		U	0.00500	0.00125
Selenium, Total	7782-49-2	0.00532		0.00500	0.00250
Thallium, Total	7440-28-0		U	0.00100	0.000250

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

U Not detected at or above adjusted sample detection limit

Handwritten signature
09/06/10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47WW09-100803

Matrix: Water

Workgroup Number: WG338982

Collect Date: 08/03/2010 14:50

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 3015

Analytical Method: 6020

Analyst: JYH

Dilution: 5

Units: mg/L

Instrument: ELAN-ICP

Prep Date: 08/05/2010 07:16

Cal Date: 08/09/2010 15:50

Run Date: 08/09/2010 18:09

File ID: EL-080910-180943

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00500	0.00125
Arsenic, Total	7440-38-2	0.00366	J	0.00500	0.00125
Barium, Total	7440-39-3	0.0107	J	0.0150	0.00250
Cadmium, Total	7440-43-9		U	0.00250	0.000625
Chromium, Total	7440-47-3	0.0615		0.0100	0.00250
Copper, Total	7440-50-8		U	0.0100	0.00250
Lead, Total	7439-92-1		U	0.00250	0.00125
Manganese, Total	7439-96-5	0.0224		0.0100	0.00250
Nickel, Total	7440-02-0		U	0.0200	0.00500
Antimony, Total	7440-36-0		U	0.00500	0.00125
Selenium, Total	7782-49-2	0.0106		0.00500	0.00250
Thallium, Total	7440-28-0		U	0.00100	0.000250

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: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG338982
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 3015
Analytical Method: 6020
Analyst: JYH
Dilution: 1
Units: mg/L

Instrument: ELAN-ICP
Prep Date: 08/05/2010 07:16
Cal Date: 08/09/2010 15:50
Run Date: 08/09/2010 18:16
File ID: EL080910.181628

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250
Arsenic, Total	7440-38-2		U	0.00100	0.000250
Barium, Total	7440-39-3		U	0.00300	0.000500
Cadmium, Total	7440-43-9		U	0.000500	0.000125
Chromium, Total	7440-47-3	0.000858	J	0.00200	0.000500
Copper, Total	7440-50-8		U	0.00200	0.000500
Lead, Total	7439-92-1		U	0.000500	0.000250
Manganese, Total	7439-96-5		U	0.00200	0.000500
Nickel, Total	7440-02-0		U	0.00400	0.00100
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.0000500

10x = 0.00858

U Not detected at or above adjusted sample detection limit

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



2.3.2.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063 Work Group: WG338982
Blank File ID: EL.080910.165438 Blank Sample ID: WG338927-04
Prep Date: 08/05/10 07:16 Instrument ID: ELAN-ICP
Analyzed Date: 08/09/10 16:54 Method: 6020
Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG338927-05	EL.080910.170122	08/09/10 17:01	01
47WW34-100803	L10080063-01	EL.080910.180256	08/09/10 18:02	DL01
47WW09-100803	L10080063-02	EL.080910.180943	08/09/10 18:09	DL01
EQUIPMENT RINSE -100803	L10080063-03	EL.080910.181628	08/09/10 18:16	01
DUP	WG338927-07	EL.080910.195150	08/09/10 19:51	01

Report Name: BLANK SUMMARY
PDF File ID: 1748376
Report generated 08/10/2010 14:58



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104265

Login Number: L10080063 Prep Date: 08/05/10 07:16 Sample ID: WG338927-04
Instrument ID: ELAN-ICP Run Date: 08/09/10 16:54 Prep Method: 3015
File ID: EL.080910.165438 Analyst: JYH Method: 6020
Workgroup (AAB#): WG338982 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I-09-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Silver, Total	0.000250	0.00100	0.000250	1	U
Arsenic, Total	0.000250	0.00100	0.000250	1	U
Barium, Total	0.000500	0.00300	0.000500	1	U
Cadmium, Total	0.000125	0.000500	0.000125	1	U
Chromium, Total	0.000500	0.00200	-0.000613	1	U
Copper, Total	0.000500	0.00200	0.000500	1	U
Lead, Total	0.000250	0.000500	0.000250	1	U
Manganese, Total	0.000500	0.00200	0.000500	1	U
Nickel, Total	0.00100	0.00400	0.00100	1	U
Antimony, Total	0.000250	0.00100	0.000250	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.0000500	0.000200	0.0000500	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1748377
10-AUG-2010 14:58



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104266

Login Number: L10080063 Run Date: 08/09/2010 Sample ID: WG338927-05
Instrument ID: ELAN-ICP Run Time: 17:01 Prep Method: 3015
File ID: EL.080910.170122 Analyst: JYH Method: 6020
Workgroup (AAB#): WG338982 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD39374 Cal ID: ELAN-I-09-AUG-10

Analytes	Expected	Found	% Rec	LCS Limits	Q
Silver, Total	0.0625	0.0575	92.1	80 - 120	
Arsenic, Total	0.0625	0.0616	98.6	80 - 120	
Barium, Total	0.0625	0.0621	99.4	80 - 120	
Cadmium, Total	0.0625	0.0631	101	80 - 120	
Chromium, Total	0.0625	0.0634	101	80 - 120	
Copper, Total	0.0625	0.0637	102	80 - 120	
Lead, Total	0.0625	0.0628	101	80 - 120	
Manganese, Total	0.0625	0.0631	101	80 - 120	
Nickel, Total	0.0625	0.0623	99.6	80 - 120	
Antimony, Total	0.0625	0.0631	101	80 - 120	
Selenium, Total	0.0625	0.0597	95.5	80 - 120	
Thallium, Total	0.0625	0.0616	98.6	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1748378
Report generated: 08/10/2010 14:58



2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

LABORATORY REPORT

00104269

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	7470A	1	04-AUG-10
47WW09-100803	L10080063-02	7470A	1	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	7470A	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008
 PDF File ID: 1755601
 Report generated: 08/18/2010 10:51

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

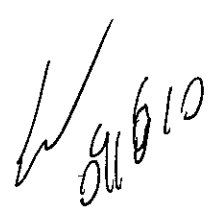
Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG338987
Collect Date: 08/03/2010 13:00
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 7470A
Analytical Method: 7470A
Analyst: PDM
Dilution: 1
Units: mg/L

Instrument: HYDRA
Prep Date: 08/05/2010 09:12
Cal Date: 08/09/2010 13:05
Run Date: 08/09/2010 13:39
File ID: HY.080910.133948

Analyte	CAS. Number	Result	Qual	PQL	SDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02	PrePrep Method: NONE	Instrument: HYDRA
Client ID: 47WW09-100803	Prep Method: 7470A	Prep Date: 08/05/2010 09:12
Matrix: Water	Analytical Method: 7470A	Cal Date: 08/09/2010 13:05
Workgroup Number: WG338987	Analyst: PDM	Run Date: 08/09/2010 13:46
Collect Date: 08/03/2010 14:50	Dilution: 1	File ID: HY.080910.134601
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03	PrePrep Method: NONE	Instrument: HYDRA
Client ID: EQUIPMENT RINSE -100803	Prep Method: 7470A	Prep Date: 08/05/2010 09:12
Matrix: Water	Analytical Method: 7470A	Cal Date: 08/09/2010 13:05
Workgroup Number: WG338987	Analyst: EDM	Run Date: 08/09/2010 13:54
Collect Date: 08/03/2010 15:30	Dilution: 1	File ID: HY.080910.135428
Sample Tag: 01	Units: mg/L	

Analyte	CAS. Number	Result	Qual	PQL	SDL
Mercury	7439-97-6		U	0.000200	0.000100

U Not detected at or above adjusted sample detection limit

Handwritten signature
090610



2.3.3.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: HY.080910.132303
Prep Date: 08/05/10 09:12
Analyzed Date: 08/09/10 13:23
Analyst: PDM

Work Group: WG338987
Blank Sample ID: WG338962-02
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	WG338962-03	HY.080910.132454	08/09/10 13:24	01
47WW34-100803	L10080063-01	HY.080910.133948	08/09/10 13:39	01
47WW09-100803	L10080063-02	HY.080910.134601	08/09/10 13:46	01
EQUIPMENT RINSE -100803	L10080063-03	HY.080910.135428	08/09/10 13:54	01

Report Name: BLANK SUMMARY
PDF File ID: 1749078
Report generated 08/11/2010 09:24



Microbac Laboratories Inc.
METHOD BLANK REPORT

00104275

Login Number: L10080063 Prep Date: 08/05/10 09:12 Sample ID: WG338962-02
Instrument ID: HYDRA Run Date: 08/09/10 13:23 Prep Method: 7470A
File ID: HY.080910.132303 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG338987 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA-09-AUG-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

SDL Method Detection Limit
PQL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name: BLANK
PDF ID: 1749079
11-AUG-2010 09:24



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104276

Login Number: L10080063 Run Date: 08/09/2010 Sample ID: WG338962-03
Instrument ID: HYDRA Run Time: 13:24 Prep Method: 7470A
File ID: HY.080910.132454 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG338987 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD40686 Cal ID: HYDRA-09-AUG-10

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00439	110	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 1749080
Report generated: 08/11/2010 09:24



2.4.1 Method 9056

2.4.1.1 Summary Data

Microbac Laboratories Inc.
COMMON ANIONS

Microbac Login No: L10080063

METHOD

Analysis: SW-846 9056/EPA 300

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

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 Spike: The MS/MSD results were not associated with sample delivery group.

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 Microbac Laboratories Inc., 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: HAV

Approved: 11-AUG-10


LABORATORY REPORT

00104280

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.

1401 Enclave Parkway

Suite 250

Houston, TX 77077

Attention: Jennifer Hoang

Project Number: 2773.025

Project: Longhorn AAP

Site: LONGHORN AAP KARNACK TX

P.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	300.0	10	04-AUG-10
47WW34-100803	L10080063-01	300.0	1	04-AUG-10
47WW09-100803	L10080063-02	300.0	20	04-AUG-10
47WW09-100803	L10080063-02	300.0	10	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	300.0	1	04-AUG-10

L1_A_PROD - Modified 03/06/2008

PDF File ID: 1755602

Report generated: 08/18/2010 10:51

1 OF 1



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01

Client ID: 47WW34-100803

Matrix: Water

Workgroup Number: WG338870

Collect Date: 08/03/2010 13:00

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 300.0

Analytical Method: 300.0

Analyst: HAV

Dilution: 10

Units: mg/L

Instrument: IC2

Prep Date: 08/04/2010 10:30

Cal Date: 07/29/2010 13:04

Run Date: 08/04/2010 17:50

File ID: I20804101750.25

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	184		2.00	1.00
Fluoride	16984-48-8		U	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	64.8		10.0	5.00

U Not detected at or above adjusted sample detection limit

090610

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG338870
Collect Date: 08/03/2010 13:00
Sample Tag: 01

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

Instrument: IC2
Prep Date: 08/04/2010 10:30
Cal Date: 07/29/2010 13:04
Run Date: 08/04/2010 17:31
File ID: I20804101731.24

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	136	I	0.200	0.100
Fluoride	16984-48-8	0.278		0.200	0.100
Nitrate	14797-55-8	0.174	J	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8	66.4		1.00	0.500

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)

L
090610



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47W09-100803

Matrix: Water

Workgroup Number: WG338870

Collect Date: 08/03/2010 14:50

Sample Tag: DL02

PrePrep Method: NONE

Prep Method: 300.0

Analytical Method: 300.0

Analyst: HAV

Dilution: 20

Units: mg/L

Instrument: IC2

Prep Date: 08/04/2010 10:30

Cal Date: 07/29/2010 13:04

Run Date: 08/04/2010 18:27

File ID: I20804101827.27

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	497		4.00	2.00
Fluoride	16984-48-8		U	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	924		20.0	10.0

U Not detected at or above adjusted sample detection limit



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02

Client ID: 47WW09-100803

Matrix: Water

Workgroup Number: WG338870

Collect Date: 08/03/2010 14:50

Sample Tag: DL01

PrePrep Method: NONE

Prep Method: 300.0

Analytical Method: 300.0

Analyst: HAV

Dilution: 10

Units: mg/L

Instrument: IC2

Prep Date: 08/04/2010 10:30

Cal Date: 07/29/2010 13:04

Run Date: 08/04/2010 18:08

File ID: I20804101808.26

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6	484	I	2.00	1.00
Fluoride	16984-48-8		U	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	949		10.0	5.00

U Not detected at or above adjusted sample detection limit

I Semiquantitative result (out of instrument calibration range)

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03

Client ID: EQUIPMENT RINSE -100803

Matrix: Water

Workgroup Number: WG338870

Collect Date: 08/03/2010 15:30

Sample Tag: 01

PrePrep Method: NONE

Prep Method: 300.0

Analytical Method: 300.0

Analyst: HAV

Dilution: 1

Units: mg/L

Instrument: IC2

Prep Date: 08/04/2010 10:30

Cal Date: 07/29/2010 13:04

Run Date: 08/04/2010 19:22

File ID: I20804101922.30

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chloride	16887-00-6		U	0.200	0.100
Fluoride	16984-48-8		U	0.200	0.100
Nitrate	14797-55-8		U	0.600	0.100
Nitrite	14797-65-0		U	0.400	0.100
Sulfate	14808-79-8		U	1.00	0.500

U Not detected at or above adjusted sample detection limit



2.4.1.2 QC Summary Data

METHOD BLANK SUMMARY

Login Number: L10080063
Blank File ID: I20804101141.05
Prep Date: 08/04/10 10:30
Analyzed Date: 08/04/10 11:41
Analyst: HAV

Work Group: WG338870
Blank Sample ID: WG338870-01
Instrument ID: IC2
Method: 300.0

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG338870-02	I20804101200.06	08/04/10 12:00	01
LCS2	WG338870-03	I20804101218.07	08/04/10 12:18	01
DUP	WG338870-09	I20804101636.21	08/04/10 16:36	01
47WW34-100803	L10080063-01	I20804101731.24	08/04/10 17:31	01
47WW34-100803	L10080063-01	I20804101750.25	08/04/10 17:50	DL01
47WW09-100803	L10080063-02	I20804101808.26	08/04/10 18:08	DL01
47WW09-100803	L10080063-02	I20804101827.27	08/04/10 18:27	DL02
EQUIPMENT RINSE -100803	L10080063-03	I20804101922.30	08/04/10 19:22	01

Report Name: BLANK SUMMARY
PDF File ID: 1745701
Report generated 08/11/2010 16:01



METHOD BLANK REPORT

Login Number: L10080063 Prep Date: 08/04/10 10:30 Sample ID: WG338870-01
Instrument ID: IC2 Run Date: 08/04/10 11:41 Prep Method: 300.0
File ID: I20804101141.05 Analyst: HAV Method: 300.0
Workgroup (AAB#): WG338870 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: IC2-29-JUL-10

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Chloride	0.100	0.200	0.100	1	U
Fluoride	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

SDL Method Detection Limit

PQL Reporting/Practical Quantitation Limit

ND Analyte Not detected at or above reporting limit

* |Analyte concentration| > RL

Report Name: BLANK

PDF ID: 1745702

11-AUG-2010 16:01



Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

00104289

Login Number: L10080063 Analyst: HAV Prep Method: 300.0
Instrument ID: IC2 Matrix: Water Method: 300.0
Workgroup (AAB#): WG338870 Units: mg/L
QC Key: STD Lot #: STD39765

Sample ID: WG338870-02 LCS File ID: I20804101200.06 Run Date: 08/04/2010 12:00
Sample ID: WG338870-03 LCS2 File ID: I20804101218.07 Run Date: 08/04/2010 12:18

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Chloride	8.00	8.03	100	8.00	8.08	101	0.720	90 - 110	20	
Fluoride	8.00	7.61	95.1	8.00	7.65	95.7	0.616	90 - 110	20	
Nitrate	5.42	5.43	100	5.42	5.47	101	0.752	90 - 110	20	
Nitrite	4.87	4.91	101	4.87	4.92	101	0.204	90 - 110	20	
Sulfate	40.0	40.0	100	40.0	40.3	101	0.715	90 - 110	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1745704
Report generated: 08/11/2010 16:01



2.4.2 Alkalinity Data

2.4.2.1 Summary Data

LABORATORY REPORT

00104292

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.1401 Enclave ParkwaySuite 250Houston, TX 77077Attention: Jennifer HoangProject Number: 2773.025Project: Longhorn AAPSite: LONGHORN AAP KARNACK TXP.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	310.2	2	04-AUG-10
47WW09-100803	L10080063-02	310.2	2	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	310.2	1	04-AUG-10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG339111
Collect Date: 08/03/2010 13:00
Sample Tag: DL01

PrePrep Method: NONE
Prep Method: 310.2
Analytical Method: 310.2
Analyst: DIH
Dilution: 2
Units: mg/L

Instrument: SMARTCHEM
Prep Date: 08/06/2010 11:29
Cal Date: 08/06/2010 11:26
Run Date: 08/06/2010 11:29
File ID: SC100806003.013

Analyte	CAS. Number	Result	Qual	PQL	SDL
Alkalinity, Total (as CaCO3)		303		20.0	10.0

Handwritten signature and date: 09/06/10

Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WW09-100803
Matrix: Water
Workgroup Number: WG339111
Collect Date: 08/03/2010 14:50
Sample Tag: DL01

PrePrep Method: NONE
Prep Method: 310.2
Analytical Method: 310.2
Analyst: DIH
Dilution: 2
Units: mg/L

Instrument: SMARTCHEM
Prep Date: 08/06/2010 11:29
Cal Date: 08/06/2010 11:26
Run Date: 08/06/2010 11:29
File ID: SCI00806003.014

Analyte	CAS. Number	Result	Qual	PQL	SDL
Alkalinity, Total (as CaCO3)		372		20.0	10.0



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG339067
Collect Date: 08/03/2010 15:30
Sample Tag: 01

PrePrep Method: NONE
Prep Method: 310.2
Analytical Method: 310.2
Analyst: DIH
Dilution: 1
Units: mg/L

Instrument: SMARTCHEM
Prep Date: 08/06/2010 09:36
Cal Date: 08/06/2010 09:27
Run Date: 08/06/2010 09:36
File ID: SC100806001.022

Analyte	CAS. Number	Result	Qual	PQL	SDL
Alkalinity, Total (as CaCO3)		24.4		10.0	5.00

 $5x = 122$

All results > 5x EQ

090600



2.4.2.2 QC Summary Data

2.4.3 Total Organic Carbon Data

2.4.3.1 Summary Data

LABORATORY REPORT

00104299

L10080063

08/18/10 10:51

Submitted By

Microbac Laboratories Inc.

158 Starlite Drive

Marietta, OH 45750

(740) 373-4071

For

Account Name: for Shaw E & I, Inc.1401 Enclave ParkwaySuite 250Houston, TX 77077Attention: Jennifer HoangProject Number: 2773.025Project: Longhorn AAPSite: LONGHORN AAP KARNACK TXP.O. Number: 557440

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
47WW34-100803	L10080063-01	415.1	2	04-AUG-10
47WW09-100803	L10080063-02	415.1	2	04-AUG-10
EQUIPMENT RINSE -100803	L10080063-03	415.1	1	04-AUG-10



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-01
Client ID: 47WW34-100803
Matrix: Water
Workgroup Number: WG338950
Collect Date: 08/03/2010 13:00
Sample Tag: DL01

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

Instrument: TOC-VWP
Prep Date: 08/06/2010 12:55
Cal Date: 06/08/2010 10:31
Run Date: 08/06/2010 12:55
File ID: TC08062010.007

Analyte	CAS. Number	Result	Qual	PQL	SDL
Total Organic Carbon		5.94		2.00	1.00

Handwritten signature and date: 090610

1 of 3



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-02
Client ID: 47WN09-100803
Matrix: Water
Workgroup Number: WG338950
Collect Date: 08/03/2010 14:50
Sample Tag: DL01

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

Instrument: TOC-VWP
Prep Date: 08/06/2010 13:09
Cal Date: 06/08/2010 10:31
Run Date: 08/06/2010 13:09
File ID: TC08062010.008

Analyte	CAS. Number	Result	Qual	PQL	SDL
Total Organic Carbon		13.2		2.00	1.00



Report Number: L10080063

Report Date : August 18, 2010

Sample Number: L10080063-03
Client ID: EQUIPMENT RINSE -100803
Matrix: Water
Workgroup Number: WG338950
Collect Date: 08/03/2010 15:30
Sample Tag: 01

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

Instrument: TOC-VWP
Prep Date: 08/06/2010 13:21
Cal Date: 06/08/2010 10:31
Run Date: 08/06/2010 13:21
File ID: TC08062010.009

Analyte	CAS. Number	Result	Qual	PQL	SDL
Total Organic Carbon			U	1.00	0.500

U Not detected at or above adjusted sample detection limit

8/9/10