

LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 12 of 13

2009

Bate Stamp Numbers

00081177 – 00082172

Prepared for

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

1976 – 2009

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

VOLUME 12 of 13

2009

- A. Title: Report (Continued) – Final Feasibility Study, LHAAP-35A(58), Shops Area,
 Group 4, Longhorn Army Ammunition Plant, Karnack, Texas
 Author(s): Shaw Environmental, Inc., Houston, Texas
 Recipient: All Stakeholders
 Date: December 21, 2009
 Bate Stamp: 00081177 - 00082172

2.2.3 Metals CVAA Data (Mercury)

2.2.3.1 Summary Data

LABORATORY REPORT

00081179

L08110782

12/09/08 09:06

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
35AWW01-111908	L08110782-01	7470A	1	25-NOV-08
LHSMW06-111908	L08110782-02	7470A	1	25-NOV-08
LHSMW03-111908	L08110782-03	7470A	1	25-NOV-08
LHSMW07-111908	L08110782-04	7470A	1	25-NOV-08
35AWW05-112108	L08110782-05	7470A	1	25-NOV-08
03SB11- (10-11)	L08110782-06	7471A	1	25-NOV-08
03SB11- (BOTTOM)	L08110782-07	7471A	1	25-NOV-08



Report Number: **L08110782**Report Date : **December 9, 2008**

00081180

Sample Number: **L08110782-01**
Client ID: **35AWW01-111908**
Matrix: **Water**
Workgroup Number: **WG289327**
Collect Date: **11/19/2008 15:15**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **12/01/2008 14:22**
Cal Date: **12/01/2008 15:12**
Run Date: **12/01/2008 15:25**
File ID: **HY.120108.152502**

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: **L08110782**Report Date : **December 9, 2008**

00081181

Sample Number: **L08110782-02**
Client ID: **LHSMW06-111908**
Matrix: **Water**
Workgroup Number: **WG289327**
Collect Date: **11/19/2008 12:40**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **12/01/2008 14:22**
Cal Date: **12/01/2008 15:12**
Run Date: **12/01/2008 15:28**
File ID: **HY.120108.152852**

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: **L08110782**Report Date : **December 9, 2008**

00081182

Sample Number: **L08110782-03**
Client ID: **LHSMW03-111908**
Matrix: **Water**
Workgroup Number: **WG289327**
Collect Date: **11/19/2008 09:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **12/01/2008 14:22**
Cal Date: **12/01/2008 15:12**
Run Date: **12/01/2008 15:31**
File ID: **HY.120108.153126**

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: **L08110782**Report Date : **December 9, 2008**

00081183

Sample Number: **L08110782-04**
Client ID: **LHSMW07-111908**
Matrix: **Water**
Workgroup Number: **WG289327**
Collect Date: **11/21/2008 13:05**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **12/01/2008 14:22**
Cal Date: **12/01/2008 15:12**
Run Date: **12/01/2008 15:33**
File ID: **HY.120108.153322**

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: **L08110782**Report Date : **December 9, 2008**

00081184

Sample Number: **L08110782-05**
Client ID: **35AWW05-112108**
Matrix: **Water**
Workgroup Number: **WG289327**
Collect Date: **11/21/2008 17:30**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **7470A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **12/01/2008 14:22**
Cal Date: **12/01/2008 15:12**
Run Date: **12/01/2008 15:35**
File ID: **HY.120108.153515**

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: **L08110782**Report Date : **December 9, 2008**

00081185

Sample Number: **L08110782-06**
Client ID: **03SB11-(10-11)**
Matrix: **Soil**
Workgroup Number: **WG289319**
Collect Date: **11/18/2008 09:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **7471A**
Analytical Method: **7471A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/kg**

Instrument: **HYDRA**
Prep Date: **12/01/2008 10:05**
Cal Date: **12/01/2008 14:25**
Run Date: **12/01/2008 14:38**
File ID: **HY.120108.143811**
Percent Solid: **89.3**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Mercury, Total	7439-97-6		U	0.279	0.0112

U Not detected at or above adjusted sample detection limit

Sample Number: **L08110782-07**
Client ID: **03SB11-(BOTTOM)**
Matrix: **Soil**
Workgroup Number: **WG289319**
Collect Date: **11/18/2008 10:15**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **7471A**
Analytical Method: **7471A**
Analyst: **ADC**
Dilution: **1**
Units: **mg/kg**

Instrument: **HYDRA**
Prep Date: **12/01/2008 10:10**
Cal Date: **12/01/2008 14:25**
Run Date: **12/01/2008 14:45**
File ID: **HY.120108.144551**
Percent Solid: **84.9**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Mercury, Total	7439-97-6	0.406		0.294	0.0118

2.2.3.2 QC Summary Data

Example Cold Vapor Mercury Calculations

Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters

The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from 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 = Diluted to Volume (mL)

Vi = Aliquot Volume (mL)

D = Manual dilution factor, if required (10X = 10)

Example:

0.1

40

40

1

Cx = Concentration of element in ppb (ug/L)

0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:

Cs = Concentration computed by the data system (ug/L)

Vf = Diluted to volume (mL)

Ws = Aliquot weight (g)

D = Manual dilution factor

Example:

0.1

40

0.6

1

Cx = Concentration of element in ug/kg

6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)

Px = Percent solids of sample (%wt)

6.67

80

$Cdry$ = Concentration calculated as dry weight (ug/kg)

8.33

8.33 ug/kg = 0.00833 mg/kg

Workgroup: WG289276
Analyst: PDM
Spike Analyst: VC
Method: 7471A
Run Date: 12/01/2008 10:10
Hotblock Start Temp: 92.4 @ 10:25
Hotblock End Temp: 92.9 @ 10:55

SOP: ME405 Revision 8
Spike Solution: STD30092
Spike Witness: SDL
HN03 Lot #: COA13530
hcl Lot #: COA13324
KMn04 1:1 Lot #: RGT13349
HG SOIL STD 10PPM Lot #: STD30099
HG SOILS ICV Lot #: STD30100
Digest tubes Lot #: COA13407

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG289276-02	BLANK	7	.6 g	40 mL		
2	WG289276-03	LCS	7	.6 g	40 mL	4 mL	
3	WG289276-01	REF	7	.602 g	40 mL		
4	L08110782-06	SAMP	7	.602 g	40 mL		12/05/08
5	L08110782-07	SAMP	7	.601 g	40 mL		12/05/08
6	WG289276-04	MS	7	.602 g	40 mL	4 mL	
7	WG289276-05	MSD	7	.602 g	40 mL	4 mL	

Analyst: Pierce Morris

Reviewer: Veeha Callum

Workgroup: WG289304
Analyst: ED
Spike Analyst: ED
Method: METHOD
Run Date: 12/01/2008 14:22
Hotblock Start Temp: 92.9 @ 12:00
Hotblock End Temp: 93.5 @ 14:00

SOP: 7040 Revision 11
Spike Solution: STD30101
Spike Witness: VC
HN03 Lot #: COA13530
KMn04 1:1 Lot #: RGT13349
H2S04 Lot #: COA13254
K2S208 1:1 Lot #: RGT13338
HG H2O STDS 10PPM Lot #: STD30109

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG289304-02	BLANK	1	40 mL	40 mL		
2	WG289304-03	LCS	1	40 mL	40 mL	4 mL	
3	L08110782-01	SAMP	1	40 mL	40 mL		12/05/08
4	L08110782-02	SAMP	1	40 mL	40 mL		12/05/08
5	L08110782-03	SAMP	1	40 mL	40 mL		12/05/08
6	L08110782-04	SAMP	1	40 mL	40 mL		12/05/08
7	WG289304-01	REF	1	40 mL	40 mL		
8	L08110782-05	SAMP	1	40 mL	40 mL		12/05/08
9	WG289304-04	MS	1	36 mL	40 mL	4 mL	
10	WG289304-05	MSD	1	36 mL	40 mL	4 mL	

Analyst: Emily Decker

Reviewer: Veeha Collier

00081191

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 120108A.PRN
 Analyst1: ADC Analyst2: N/A
 Method: 7471A SOP: 405 Rev: 8
 Maintenance Log ID: 26797

Calibration Std: STD30099 ICV/CCV Std: STD30100 Post Spike: STD30099
 ICSA: N/A ICSAB: N/A

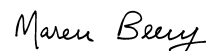
Workgroups: 289319

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.120108.141543	WG289437-01	Calibration Point		1		12/01/08 14:15
2	HY.120108.141735	WG289437-02	Calibration Point		1		12/01/08 14:17
3	HY.120108.141922	WG289437-03	Calibration Point		1		12/01/08 14:19
4	HY.120108.142115	WG289437-04	Calibration Point		1		12/01/08 14:21
5	HY.120108.142300	WG289437-05	Calibration Point		1		12/01/08 14:23
6	HY.120108.142505	WG289437-06	Calibration Point		1		12/01/08 14:25
7	HY.120108.142700	WG289437-07	Initial Calibration Verification		1		12/01/08 14:27
8	HY.120108.142851	WG289437-08	Initial Calib Blank		1		12/01/08 14:28
9	HY.120108.143047	WG289437-09	CCV		1		12/01/08 14:30
10	HY.120108.143254	WG289437-10	CCB		1		12/01/08 14:32
11	HY.120108.143445	WG289276-02	Method/Prep Blank	.6/40	1		12/01/08 14:34
12	HY.120108.143628	WG289276-03	Laboratory Control S	.6/40	1		12/01/08 14:36
13	HY.120108.143811	L08110782-06	03SB11-(10-11)	.602/40	1		12/01/08 14:38
14	HY.120108.144018	WG289319-01	Post Digestion Spike		1	L08110782-06	12/01/08 14:40
15	HY.120108.144358	WG289319-01	Post Digestion Spike		1	L08110782-06	12/01/08 14:43
16	HY.120108.144551	L08110782-07	03SB11-(BOTTOM)	.601/40	1	WG289244-01	12/01/08 14:45
17	HY.120108.144735	WG289276-04	Matrix Spike	.602/40	1	L08110782-06	12/01/08 14:47
18	HY.120108.144932	WG289276-05	Matrix Spike Duplica	.602/40	1	L08110782-06	12/01/08 14:49
19	HY.120108.145127	WG289319-02	Serial Dilution		1		12/01/08 14:51
20	HY.120108.145321	WG289437-11	CCV		1		12/01/08 14:53
21	HY.120108.145508	WG289437-12	CCB		1		12/01/08 14:55

Comments

Seq.	Rerun	Dil.	Reason	Analytes
14	X		marginal post spike failure	HG




Microbac Laboratories Inc.

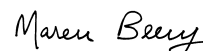
Instrument Run Log

Instrument: HYDRA Dataset: 120108B.PRN
 Analyst1: ADC Analyst2: N/A
 Method: 7470A SOP: 404 Rev: 11
 Maintenance Log ID: 26797

Calibration Std: STD30109 ICV/CCV Std: STD30103 Post Spike: STD30109
 ICSA: N/A ICSAB: N/A
 Workgroups: 289327

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.120108.150300	WG289505-01	Calibration Point		1		12/01/08 15:03
2	HY.120108.150453	WG289505-02	Calibration Point		1		12/01/08 15:04
3	HY.120108.150635	WG289505-03	Calibration Point		1		12/01/08 15:06
4	HY.120108.150818	WG289505-04	Calibration Point		1		12/01/08 15:08
5	HY.120108.151002	WG289505-05	Calibration Point		1		12/01/08 15:10
6	HY.120108.151236	WG289505-06	Calibration Point		1		12/01/08 15:12
7	HY.120108.151422	WG289505-07	Initial Calibration Verification		1		12/01/08 15:14
8	HY.120108.151625	WG289505-08	Initial Calib Blank		1		12/01/08 15:16
9	HY.120108.151808	WG289505-09	CCV		1		12/01/08 15:18
10	HY.120108.151952	WG289505-10	CCB		1		12/01/08 15:19
11	HY.120108.152135	WG289304-02	Method/Prep Blank	40/40	1		12/01/08 15:21
12	HY.120108.152319	WG289304-03	Laboratory Control S	40/40	1		12/01/08 15:23
13	HY.120108.152502	L08110782-01	35AWW01-111908	40/40	1		12/01/08 15:25
14	HY.120108.152648	WG289327-01	Post Digestion Spike		1	L08110782-01	12/01/08 15:26
15	HY.120108.152852	L08110782-02	LHSMW06-111908	40/40	1		12/01/08 15:28
16	HY.120108.153126	L08110782-03	LHSMW03-111908	40/40	1		12/01/08 15:31
17	HY.120108.153322	L08110782-04	LHSMW07-111908	40/40	1		12/01/08 15:33
18	HY.120108.153515	L08110782-05	35AWW05-112108	40/40	1	WG289304-01	12/01/08 15:35
19	HY.120108.153658	WG289304-04	Matrix Spike	36/40	1	L08110782-05	12/01/08 15:36
20	HY.120108.153851	WG289304-05	Matrix Spike Duplica	36/40	1	L08110782-05	12/01/08 15:38
21	HY.120108.154036	WG289505-11	CCV		1		12/01/08 15:40
22	HY.120108.154223	WG289505-12	CCB		1		12/01/08 15:42




Microbac Laboratories Inc.

Data Checklist

Date: 01-DEC-2008

Analyst: ADC

Analyst: NA

Method: 7471A

Instrument: HYDRA

Curve Workgroup: 289437

Runlog ID: 25502

Analytical Workgroups: 289319

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0782
Client Forms	X
Level X	
Level 3	0782
Level 4	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	ADC
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
02-DEC-2008



Secondary Reviewer:
05-DEC-2008



Microbac Laboratories Inc.

Data Checklist

Date: 01-DEC-2008

Analyst: ADC

Analyst: NA

Method: 7470A

Instrument: HYDRA

Curve Workgroup: 289505

Runlog ID: 25507

Analytical Workgroups: 289327

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0782
Client Forms	X
Level X	
Level 3	0782
Level 4	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	ADC
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
03-DEC-2008



Secondary Reviewer:
05-DEC-2008



Analytical Method: 7471A

AAB#: WG289319

Login Number: L08110782

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
03SB11- (BOTTOM)	11/18/08	11/25/08	12/01/08	28	13.0	12/01/08	28	0.191	
03SB11- (10-11)	11/18/08	11/25/08	12/01/08	28	13.0	12/01/08	28	0.189	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 7470A

AAB#: W6289327

Login Number: L08110782

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
35AWW01-111908	11/19/08	11/25/08	12/01/08	28	12.0	12/01/08	28	0.0433	
35AWW05-112108	11/21/08	11/25/08	12/01/08	28	9.87	12/01/08	28	0.0504	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	28	12.1	12/01/08	28	0.0459	
LHSMW03-111908	11/19/08	11/25/08	12/01/08	28	12.2	12/01/08	28	0.0477	
LHSMW07-111908	11/21/08	11/25/08	12/01/08	28	10.1	12/01/08	28	0.0491	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: <u>L08110782</u>	Work Group: <u>WG289319</u>
Blank File ID: <u>HY.120108.143445</u>	Blank Sample ID: <u>WG289276-02</u>
Prep Date: <u>12/01/08 10:10</u>	Instrument ID: <u>HYDRA</u>
Analyzed Date: <u>12/01/08 14:34</u>	Method: <u>7471A</u>
Analyst: <u>ADC</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG289276-03	HY.120108.143628	12/01/08 14:36	01
03SB11-(10-11)	L08110782-06	HY.120108.143811	12/01/08 14:38	01
03SB11-(BOTTOM)	L08110782-07	HY.120108.144551	12/01/08 14:45	01

Report Name: BLANK_SUMMARY
PDF File ID: 1265152
Report generated 12/08/2008 16:40



METHOD BLANK SUMMARY

Login Number: L08110782
Blank File ID: HY.120108.152135
Prep Date: 12/01/08 14:22
Analyzed Date: 12/01/08 15:21
Analyst: ADC

Work Group: WG289327
Blank Sample ID: WG289304-02
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	WG289304-03	HY.120108.152319	12/01/08 15:23	01
35AWW01-111908	L08110782-01	HY.120108.152502	12/01/08 15:25	01
LHSMW06-111908	L08110782-02	HY.120108.152852	12/01/08 15:28	01
LHSMW03-111908	L08110782-03	HY.120108.153126	12/01/08 15:31	01
LHSMW07-111908	L08110782-04	HY.120108.153322	12/01/08 15:33	01
35AWW05-112108	L08110782-05	HY.120108.153515	12/01/08 15:35	01

Report Name: BLANK_SUMMARY
PDF File ID: 1265152
Report generated 12/08/2008 16:40



Login Number: L08110782 Prep Date: 12/01/08 10:10 Sample ID: WG289276-02
Instrument ID: HYDRA Run Date: 12/01/08 14:34 Prep Method: 7471A
File ID: HY.120108.143445 Analyst: ADC Method: 7471A
Workgroup (AAB#): WG289319 Matrix: Soil Units: mg/kg
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 01-DEC-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Mercury, Total	0.0100	0.250	0.0100	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: 1265153
08-DEC-2008 16:40



Login Number: L08110782 Prep Date: 12/01/08 14:22 Sample ID: WG289304-02
Instrument ID: HYDRA Run Date: 12/01/08 15:21 Prep Method: METHOD
File ID: HY.120108.152135 Analyst: ADC Method: 7470A
Workgroup (AAB#): WG289327 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: HYDRA - 01-DEC-08

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: 1265153
08-DEC-2008 16:40



Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289276-03
Instrument ID: HYDRA Run Time: 14:36 Prep Method: 7471A
File ID: HY.120108.143628 Analyst: ADC Method: 7471A
Workgroup (AAB#): WG289319 Matrix: Soil Units: mg/kg
QC Key: STD Lot#: STD30092 Cal ID: HYDRA - 01-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Total	0.267	0.260	97.5	80 - 120	

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289304-03
Instrument ID: HYDRA Run Time: 15:23 Prep Method: METHOD
File ID: HY.120108.152319 Analyst: ADC Method: 7470A
Workgroup (AAB#): WG289327 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD30101 Cal ID: HYDRA - 01-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00423	106	85 - 115	

Loginnum: L08110782 Cal ID: HYDRA - Worknum: WG289319
 Instrument ID: HYDRA Contract #: DACA56-94-D-0020 Method: 7471A
 Parent ID: WG289276-01 File ID: HY.120108.143811 Dil: 1 Matrix: SOLID
 Sample ID: WG289276-04 MS File ID: HY.120108.144735 Dil: 1 Units: mg/kg
 Sample ID: WG289276-05 MSD File ID: HY.120108.144932 Dil: 1 Percent Solid: 89.3

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Total	ND	0.298	0.303	102	0.298	0.302	102	0.246	75 - 125	25	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: L08110782 Cal ID: HYDRA - Worknum: WG289327
 Instrument ID: HYDRA Contract #: DACA56-94-D-0020 Method: 7470A
 Parent ID: WG289304-01 File ID: HY.120108.153515 Dil: 1 Matrix: WATER
 Sample ID: WG289304-04 MS File ID: HY.120108.153658 Dil: 1 Units: mg/L
 Sample ID: WG289304-05 MSD File ID: HY.120108.153851 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00456	103	0.00444	0.00464	105	1.93	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 Worknum: WG289319
Instrument: HYDRA Method: 7471A
Serial Dil: WG289319-02 File ID: HY.120108.145127 Dil: 5 Units: ug/L
Sample: L08110782-07 File ID: HY.120108.144551 Dil: 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Mercury	5.18		5	F	3.47	

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 25 times the MDL.

E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 25 times the MDL.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 1269158

12/08/2008 16:40



Sample Login ID: L08110782

Worknum: WG289319

Instrument ID: HYDRA

Method: 7471A

Post Spike ID: WG289319-01

File ID: HY.120108.144358

Dil: 1

Units: ug/L

Sample ID: L08110782-06

File ID: HY.120108.143811

Dil: 1

Matrix: Soil

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.14	F	0	.15	1	114.0	85 - 115	

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

Sample Login ID: L08110782
Instrument ID: HYDRA
Post Spike ID: WG289327-01
Sample ID: L08110782-01

Worknum: WG289327
Method: 7470A
Units: ug/L
Matrix: Water
File ID: HY.120108.152648 Dil: 1
File ID: HY.120108.152502 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	0.930		0	.1	1	93.0	85 - 115	

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

Login Number: L08110782
Analytical Method: 7471A
ICAL Worknum: WG289437

Workgroup (AAB#): WG289319
Instrument ID: HYDRA
Initial Calibration Date: 12/01/2008 14:25

Analyte	WG289437-01		WG289437-02		WG289437-03		WG289437-04		WG289437-05		WG289437-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	2362	0.200	12728	1.00	60329	2.00	121354	5.00	309866	10.0	603237

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

Login Number: L08110782
Analytical Method: 7471A
ICAL Worknum: WG289437

Workgroup (AAB#): WG289319
Instrument ID: HYDRA
Initial Calibration Date: 12/01/2008 14:25

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; $R < 0.995$

Login Number: L08110782
Analytical Method: 7470A
ICAL Worknum: WG289505

Workgroup (AAB#): WG289327
Instrument ID: HYDRA
Initial Calibration Date: 12/01/2008 15:12

Analyte	WG289505-01		WG289505-02		WG289505-03		WG289505-04		WG289505-05		WG289505-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	2690	0.200	12405	1.00	55240	2.00	111155	5.00	275583	10.0	548566

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

Login Number: L08110782
Analytical Method: 7470A
ICAL Worknum: WG289505

Workgroup (AAB#): WG289327
Instrument ID: HYDRA
Initial Calibration Date: 12/01/2008 15:12

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; $R < 0.995$

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1265156
Report generated 12/08/2008 16:40



Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-08
Instrument ID: HYDRA Run Time: 14:28 Method: 7471
File ID: HY.120108.142851 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.15	3.75	.15	U

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-08
Instrument ID: HYDRA Run Time: 15:16 Method: 7471
File ID: HY.120108.151625 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-10
Instrument ID: HYDRA Run Time: 14:32 Method: 7471A
File ID: HY.120108.143254 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.150	3.75	0.150	U

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

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-12
Instrument ID: HYDRA Run Time: 14:55 Method: 7471A
File ID: HY.120108.145508 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.150	3.75	0.150	U

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

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-10
Instrument ID: HYDRA Run Time: 15:19 Method: 7470A
File ID: HY.120108.151952 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	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: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-12
 Instrument ID: HYDRA Run Time: 15:42 Method: 7470A
 File ID: HY.120108.154223 Analyst: ADC Units: ug/L
 Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
 Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	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: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-07
Instrument ID: HYDRA Run Time: 14:27 Method: 7471A
File ID: HY.120108.142700 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	2.21	111	90 - 110	*

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-07
Instrument ID: HYDRA Run Time: 15:14 Method: 7470A
File ID: HY.120108.151422 Analyst: ADC Units: ug/L
Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Mercury	2	2.01	101	90 - 110	

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-09
Instrument ID: HYDRA Run Time: 14:30 Method: 7471A
File ID: HY.120108.143047 Analyst: ADC QC Key: STD
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00215	mg/L	108	80 - 120	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289437-11
Instrument ID: HYDRA Run Time: 14:53 Method: 7471A
File ID: HY.120108.145321 Analyst: ADC QC Key: STD
Workgroup (AAB#): WG289319 Cal ID: HYDRA - 01-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00219	mg/L	110	80 - 120	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-09
Instrument ID: HYDRA Run Time: 15:18 Method: 7470A
File ID: HY.120108.151808 Analyst: ADC QC Key: STD
Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00210	mg/L	105	80 - 120	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289505-11
Instrument ID: HYDRA Run Time: 15:40 Method: 7470A
File ID: HY.120108.154036 Analyst: ADC QC Key: STD
Workgroup (AAB#): WG289327 Cal ID: HYDRA - 01-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Mercury, Total	0.00200	0.00196	mg/L	98.0	80 - 120	

* Exceeds LIMITS Criteria

2.3 General Chemistry Data

2.3.1 Percent Solids Data

2.3.1.1 Raw Data

LABORATORY REPORT

00081227

L08110782

12/09/08 09:06

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
03SB11-(10-11)	L08110782-06	D2216-90	1	25-NOV-08
03SB11-(BOTTOM)	L08110782-07	D2216-90	1	25-NOV-08



Sample Number: **L08110782-06**
Client ID: **03SB11-(10-11)**
Matrix: **Soil**
Workgroup Number: **WG289169**
Collect Date: **11/18/2008 09:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **D2216-90**
Analytical Method: **D2216-90**
Analyst: **JDH**
Dilution: **1**
Units: **weight %**

Instrument: **BAL001**
Prep Date: **12/01/2008 09:29**
Cal Date:
Run Date: **12/01/2008 09:29**
File ID: **B1.289169-0149**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Percent Solids	10-02-6	89.3		1.00	1.00

Sample Number: **L08110782-07**
Client ID: **03SB11-(BOTTOM)**
Matrix: **Soil**
Workgroup Number: **WG289169**
Collect Date: **11/18/2008 10:15**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **D2216-90**
Analytical Method: **D2216-90**
Analyst: **JDH**
Dilution: **1**
Units: **weight %**

Instrument: **BAL001**
Prep Date: **12/01/2008 09:29**
Cal Date:
Run Date: **12/01/2008 09:29**
File ID: **B1.289169-0150**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Percent Solids	10-02-6	84.9		1.00	1.00

Example Percent Solids Calculations**1.0 Calculating the percent solids of a sample.**

$$\%Solids = \frac{WT3 - WT1}{WT2 - WT1} \times F$$

Where:

WT1 = Weight, in grams, of the empty container

1.30 g

WT2 = Weight, in grams, of the container and wet sample

21.274 g

WT3 = Weight, in grams, of the container and dried sample

5.21 g

F = Factor to get units as percent weight

100

%Solids = Percent solids present in sample.

19.58%

2.0 Calculating the percent moisture of a sample.

$$\% \text{ Moisture} = 100 - \% \text{ Solids from 1.0 calculation}$$

PERCENT SOLIDS

Workgroup (AAB#): WG289169
 Method: D2216-90
 SOP: K0003 Rev: 9

Analyst: JDH
 Instrument: BAL001

ADT(on): 11/26/2008 15:47
 ADT(off): 12/01/2008 09:29

SAMPLE NUMBER	EMPTY PAN WT 1	WET WT 2	DRY WT 3A	DRY WT 3B	DRY WT 3C	PERCENT SOLID	PERCENT MOISTURE
L08110548-01	1.32	26.24	25.85			98.43	
L08110548-02	1.31	32.29	31.87			98.64	
L08110548-03	1.32	19.52	19.5			99.89	
L08110548-04	1.27	28.93	28.56			98.66	
L08110548-05	1.28	31.06	30.65			98.62	
L08110548-06	1.3	38.82	38.27			98.53	
L08110548-07	1.29	30.24	29.92			98.89	
L08110548-08	1.28	31.87	31.47			98.69	
L08110548-09	1.28	31.87	31.47			98.69	
L08110548-10	1.28	31.87	31.47			98.69	
L08110548-11	1.31	25.08	24.74			98.57	
L08110548-12	1.29	28.86	28.58			98.98	
L08110548-13	1.29	34.94	34.5			98.69	
L08110548-14	1.29	34.49	34.13			98.92	
L08110548-15	1.27	38.72	38.4			99.15	
L08110548-16	1.29	21.5	21.28			98.91	
L08110548-17	1.29	27.14	26.88			98.99	
L08110548-18	1.3	29.61	29.18			98.48	
L08110548-19	1.3	28.9	28.44			98.33	
L08110548-20	1.3	27.93	27.47			98.27	
L08110548-21	1.29	24.41	24.17			98.96	
L08110548-22	1.3	26.67	26.59			99.68	
L08110548-23	1.29	31.89	31.4			98.40	
L08110548-24	1.29	33.49	33			98.48	
L08110550-01	1.29	28.98	28.51			98.30	
L08110550-02	1.3	33.63	33.16			98.55	
L08110550-03	1.3	33.63	33.16			98.55	
L08110550-04	1.3	33.63	33.16			98.55	
L08110550-05	1.29	26.74	26.38			98.59	
L08110550-06	1.29	26.2	25.82			98.47	
L08110550-07	1.29	30.55	30.26			99.01	
L08110550-08	1.3	31.34	30.91			98.57	
L08110550-09	1.28	28.66	28.11			97.99	
L08110550-10	1.3	25.84	25.21			97.43	
L08110550-11	1.29	33.47	33.1			98.85	
L08110550-12	1.29	26.37	26.01			98.56	
L08110550-13	1.31	24.45	24.01			98.10	
L08110550-14	1.29	22.77	22.44			98.46	
L08110550-15	1.31	31.2	30.65			98.16	
L08110550-16	1.32	28.88	28.43			98.37	
L08110550-17	1.31	32.51	31.96			98.24	
L08110550-18	1.32	28.62	28.3			98.83	

PERCENT SOLIDS - Modified 04/24/2008
 PDF ID: 1262277
 Report generated: 12/01/2008 09:40



PERCENT SOLIDS

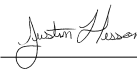
Workgroup (AAB#): WG289169
 Method: D2216-90
 SOP: K0003 Rev: 9

Analyst: JDH
 Instrument: BAL001

ADT(on): 11/26/2008 15:47
 ADT(off): 12/01/2008 09:29

SAMPLE NUMBER	EMPTY PAN WT 1	WET WT 2	DRY WT 3A	DRY WT 3B	DRY WT 3C	PERCENT SOLID	PERCENT MOISTURE
L08110550-19	1.33	24.99	24.64			98.52	
L08110550-20	1.3	32.49	32.11			98.78	
L08110550-21	1.32	30.65	30.05			97.95	
L08110550-22	1.31	20.69	20.44			98.71	
L08110550-23	1.31	34.07	33.66			98.75	
L08110550-25	1.3	32.85	32.27			98.16	
L08110747-01	1.3	35.12	25.05			70.22	
L08110747-02	1.32	30.25	21.61			70.13	
L08110782-06	1.29	28.73	25.8			89.32	
L08110782-07	1.3	24.03	20.59			84.87	
WG289169-01	1.3	32.49	32.11			98.78	1.218
WG289169-02	1.29	28.86	28.58			98.98	1.016
WG289169-03	1.3	35.12	25.05			70.22	29.78
WG289169-04	1.28	22.69	22.49			99.07	0.9341
WG289169-05	1.28	32.73	32.42			99.01	0.9857
WG289169-06	1.28	29.53	20.89			69.42	30.58

Analyst: _____



3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
December 9, 2008

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	DSF - DEBRA S. FREDERICK	EAB - EDDIE A. BYERS
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	EDA - ERIN D. AGEES
EDH - ETHAN D. MORRIS	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY
JC - JOHN L. CONLEY	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
KJW - KATIE J. WIEFERICH	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	SMH - SHAUNA M. HYDE
TDH - TRICIA D. HUCK	TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER	WTD - WADE T. DELONG

List of Valid Qualifiers

December 09, 2008

Qualifier: 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.



00081237

NO. 5725

Chain of Custody



Shaw Environmental & Infrastructure, Inc.

3010 Briarpark Drive, Suite 400

Houston, TX 77042

(713) 996-4400

Laboratory Name: MICROBAC LABS		Address: 158 Starlite Drive Mannetta, Ohio		Contact: Stephanie Mossburg							
Project Name: Longhorn AAP		Project Location: Karnack, Texas		Analysis and Method Desired (Indicate separate containers)							
Project No.: 117591.63500000		Project Contact: Allen Willmore		Project Telephone No.: 713 247 9292							
Point of Contact: Jennifer Hoang		Project Manager/Supervisor: Praveen Srivastav		Number of Containers							
Telephone No.: 713 996 4408											
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	VOCs	TAL METALS	PERCHLORATE	Remarks
1	04PZ01-112108	11/24/08	10:05		✓	W	SITE 04			✓	Please hold extra soil for SPLP possible SPLP analysis later. Analyze soil for Metals on 7-day TAT
2	04PZ02-112008	11/20/08	15:00		✓	W	SITE 04			✓	
3	04PZ03-112008	11/20/08	12:30		✓	W	SITE 04			✓	
4	04PZ04-112008	11/20/08	09:15		✓	W	SITE 04			✓	
5	35ANW01-111908	11/19/08	15:15		✓	W	SITE 35A	4	✓	✓	
6	LHSMW06-111908	11/19/08	12:46		✓	W	SITE 35A	4	✓	✓	
7	LHSMW03-111908	11/19/08	09:45		✓	W	SITE 35A	4	✓	✓	
8	LHSMW07-112108	11/21/08	13:05		✓	W	SITE 35A	4	✓	✓	
9	35ANW05-112108	11/21/08	17:50		✓	W	SITE 35A	4	✓	✓	
10	03SR11-111808	11/18/08	09:45		✓	S	SITE 03	2		✓	Please hold for SPLP later
10	03SR11- (bottom of vadose)	11/18/08	10:15		✓	S	SITE 03	2		✓	
Transfers Relinquished By (signature)		Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions			
<i>[Signature]</i>		11/24/08 17:30		<i>[Signature]</i>				7-day TAT			
								FedEx Airbill No.:			
				Laboratory: <i>[Signature]</i>		11-25-08 940		Sampler's Signature: <i>[Signature]</i>			
TAT: _____ Standard _____ Rush Date _____		Seals Intact? _____ Y _____ N _____		Received Good Condition _____ Y _____ N _____		Cold _____					

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

381

Form Number: 433_2

Rev. 10-19-07

Client:	(RK) Microbac Shaw - Texas		
Workorder Number:	B		
Date Received:	11-25-08		
Delivered by:	() Fedx	(X) UPS	() Client () Courier Time: 940
Opened by:	RLK		
IR Temp Gun:	(X) D	() G	
Logged by:	RLK	L	08110782

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
3156	1	17 401 663 22 1005 5885	5725	

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)	✓			
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

(1) Sample LHSmw03 - 111908 (3 voas) time on sample is 12:40 - time on COC is 945.
Added (2) Trip Blanks - Received but not on COC.

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

Login: L08110782

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 05-DEC-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-01	531241	826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:01	TMB	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:01	TMB	ERE

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-04	531247	826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	ERE

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-05	531249	826-L0W

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	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

Login: L08110782

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 05-DEC-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-08	531251	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	29-NOV-2008 11:23	AM	RLK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	29-NOV-2008 11:23	AM	RLK

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-01	531242	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	26-NOV-2008 15:09	RLK	
2	PREP	W1	DIG	01-DEC-2008 06:45	VC	ERE
3	EXTRACT	DIG	METALS	01-DEC-2008 09:49		VC

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-02	531244	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	26-NOV-2008 15:09	RLK	
2	PREP	W1	DIG	01-DEC-2008 06:45	VC	ERE
3	EXTRACT	DIG	METALS	01-DEC-2008 09:49		VC

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-05	531250	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	26-NOV-2008 15:09	RLK	
2	PREP	W1	DIG	01-DEC-2008 06:45	VC	ERE
3	EXTRACT	DIG	METALS	01-DEC-2008 09:49		VC

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

Login: L08110782

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 05-DEC-2008

Samplenum **Container ID** **Products**
L08110782-03 531245 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:02	TMB	ERE

Samplenum **Container ID** **Products**
L08110782-03 531246 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	26-NOV-2008 15:09	RLK	
2	PREP	W1	DIG	01-DEC-2008 06:45	VC	ERE
3	EXTRACT	DIG	METALS	01-DEC-2008 09:49		VC

Samplenum **Container ID** **Products**
L08110782-04 531248 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	26-NOV-2008 15:09	RLK	
2	PREP	W1	DIG	01-DEC-2008 06:45	VC	ERE
3	EXTRACT	DIG	METALS	01-DEC-2008 09:49		VC

Samplenum **Container ID** **Products**
L08110782-06 531252 AG AL AS-MS BA BE CA CD CO CR CU DIG-ICP FE HC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	26-NOV-2008 15:15	RLK	
2	ANALYZ	W1	WET	26-NOV-2008 15:33	JDH	RLK
3	EXTRACT	DIG	METALS	01-DEC-2008 08:31		PDM

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

Login: L08110782

Account: 2773

Project: 2773.025

Samples: 8

Due Date: 05-DEC-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-02	531243	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:01	TMB	ERE

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	26-NOV-2008 15:09	RLK	
2	ANALYZ	V1	ORG4	28-NOV-2008 17:01	TMB	ERE

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08110782-07	531253	AG AL AS-MS BA BE CA CD CO CR CU DIG-ICP FE HC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	26-NOV-2008 15:15	RLK	
2	ANALYZ	W1	WET	26-NOV-2008 15:33	JDH	RLK
3	EXTRACT	DIG	METALS	01-DEC-2008 08:31		PDM

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





04/10/07

Technical Report for

Shaw E & I, Inc.

Longhorn Army Ammunition Plant

PROJECT #117591

Accutest Job Number: T16411

Sampling Date: 02/20/07

Report to:

Shaw E & I, Inc.

diane.meyer@shawgrp.com

ATTN: Diane Meyer

Total number of pages in report: 173



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

Ron Martino
Laboratory Manager

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Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T16411

Longhorn Army Ammunition Plant
Project No: PROJECT #117591

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T16411-1	02/20/07	08:50 SO	02/22/07	AQ	Ground Water	LHSMW22-FEB2007
T16411-2	02/20/07	15:10 SO	02/22/07	AQ	Ground Water	17WW01-FEB2007
T16411-3	02/20/07	15:10 SO	02/22/07	AQ	Ground Water	17WW01-FEB2007-FD
T16411-4	02/20/07	09:51 SO	02/22/07	AQ	Ground Water	LHSMW19-FEB2007
T16411-5	02/20/07	09:34 SO	02/22/07	AQ	Ground Water	46WW02-FEB2007
T16411-6	02/20/07	12:23 SO	02/22/07	AQ	Ground Water	47WW14-FEB2007
T16411-7	02/20/07	12:23 SO	02/22/07	AQ	Ground Water	47WW14-FEB2007-FD
T16411-8	02/20/07	15:54 SO	02/22/07	AQ	Ground Water	47WW13-FEB2007
T16411-9	02/20/07	15:30 SO	02/22/07	AQ	Ground Water	LHSMW04-FEB2007
T16411-10	02/20/07	00:00 SO	02/22/07	AQ	Ground Water	LHSMW18-FEB2007
T16411-10D	02/20/07	00:00 SO	02/22/07	AQ	Water Dup/MSD	LHSMW18-FEB2007
T16411-10S	02/20/07	00:00 SO	02/22/07	AQ	Water Matrix Spike	LHSMW18-FEB2007
T16411-11	02/20/07	00:00 SO	02/22/07	AQ	Trip Blank Water	TRIP BLANK



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc.

Job No T16411

Site: Longhorn Army Ammunition Plant

Report Date 3/14/2007 4:06:05 PM

10 Samples and 1 Trip Blank were collected on 02/20/2007 and were received at Accutest on 02/22/2007 properly preserved, at 5.8 Deg. C and intact. These Samples received an Accutest job number of T16411. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VF2305

- All samples were analyzed within the recommended method holding time.
- Sample(s) T16395-2MS, T16395-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix AQ	Batch ID: VF2306

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

Matrix AQ	Batch ID: VF2307

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16431-22MS, T16431-22MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Styrene are outside control limits. Probable cause due to matrix interference.

Matrix AQ	Batch ID: VF2309

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T16440-7MS, T16440-7MSD were used as the QC samples indicated.

Matrix AQ	Batch ID: VF2311

- All samples were analyzed within the recommended method holding time.
- Sample(s) T16440-12MS, T16440-12MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method RSKSOP-147/175

Matrix AQ	Batch ID: F:GXY991

- Analysis performed at Accutest Laboratories, Orlando, FL.

Wet Chemistry By Method EPA 120.1**Matrix** AQ**Batch ID:** F:R17941

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

Matrix AQ**Batch ID:** GN11341

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

Wet Chemistry By Method EPA 150.1/9040**Matrix** AQ**Batch ID:** GN11285

- Sample(s) T16411-10DUP were used as the QC samples for pH.

Wet Chemistry By Method EPA 310.1**Matrix** AQ**Batch ID:** GN11336

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

Wet Chemistry By Method EPA 314**Matrix** AQ**Batch ID:** F:GP9043

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

Wet Chemistry By Method EPA 325.3**Matrix** AQ**Batch ID:** GN11331

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

Wet Chemistry By Method EPA 353.2**Matrix** AQ**Batch ID:** GN11283

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

Matrix AQ**Batch ID:** GN11291

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

Wet Chemistry By Method EPA 375.3**Matrix** AQ**Batch ID:** GN11356

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

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

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

Wet Chemistry By Method EPA 415.1/9060**Matrix** AQ**Batch ID:** GN11296

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

Matrix AQ**Batch ID:** GN11304

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

Wet Chemistry By Method SM18 4500NO3E/NO2B**Matrix** AQ**Batch ID:** R15439

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

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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T16411

Site: ITTXHO: Longhorn Army Ammunition Plant

Report Date: 3/13/2007 11:33:51

10 Samples were collected on 02/20/2007 and were received at Accutest SE on 02/23/2007 properly preserved, at 3.0 Deg. C and intact. These Samples had an Accutest job number of T16411. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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

Volatiles by GC by Method RSKSOP-147/175

Matrix: AQ

Batch ID: GXY991

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16411-10DUP, T16411-10MS were used as the QC samples indicated.

Extractables by GC by Method SW846 8330A

Matrix: AQ

Batch ID: OP19630

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47423-3MS, F47423-3MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery for RDX is outside control limits. Probable cause: due to matrix interference.

Wet Chemistry by Method EPA 314

Matrix: AQ

Batch ID: GP9043

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16411-10DUP, T16411-10MS, T16411-1DUP, T16411-1MS were used as the QC samples for Perchlorate.

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

Narrative prepared by:

Date: March 13, 2007

Ellen Pampel, Inorganic QA (signature on file)

Tuesday, March 13, 2007



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LHSMW22-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-1	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0078982.D	1	03/01/07	LJ	n/a	n/a	VF2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.3	50	2.8	ug/l	J
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW22-FEB2007**Lab Sample ID:** T16411-1**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		73-139%
17060-07-0	1,2-Dichloroethane-D4	99%		66-139%
2037-26-5	Toluene-D8	112%		77-148%
460-00-4	4-Bromofluorobenzene	130%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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3

Client Sample ID: LHSMW22-FEB2007							
Lab Sample ID: T16411-1				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025235.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.56	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSMW22-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-1	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 16:06	AFL	EPA 314
Alkalinity, Total as CaCO ₃	218	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	1380	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	1530	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.35	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.40	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.050	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	7580	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	3020	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	13.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	5.5			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW01-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-2	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0078983.D	1	03/01/07	LJ	n/a	n/a	VF2305
Run #2	F0079008.D	100	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	J
71-43-2	Benzene	1.6	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	9.7	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	32.6	2.0	0.68	ug/l	J
107-06-2	1,2-Dichloroethane	44.9	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	17.4	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	6.5	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	J
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.89	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	J
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	5970 ^a	200	63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW01-FEB2007**Lab Sample ID:** T16411-2**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	101%	73-139%
17060-07-0	1,2-Dichloroethane-D4	100%	95%	66-139%
2037-26-5	Toluene-D8	109%	108%	77-148%
460-00-4	4-Bromofluorobenzene	132%	131%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 17WW01-FEB2007							
Lab Sample ID: T16411-2				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025236.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	9.73	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW01-FEB2007		
Lab Sample ID:	T16411-2	Date Sampled:	02/20/07
Matrix:	AQ - Ground Water	Date Received:	02/22/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020170.D	1	02/28/07	AFL	02/26/07	F:OP19630	F:GGG904
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.061 U	0.20	0.061	ug/l	
121-82-4	RDX	0.076 U	0.20	0.076	ug/l	
99-65-0	1,3-Dinitrobenzene	0.071 U	0.20	0.071	ug/l	
606-20-2	2,6-Dinitrotoluene	0.066 U	0.20	0.066	ug/l	
121-14-2	2,4-Dinitrotoluene	0.076 U	0.20	0.076	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.071 U	0.20	0.071	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.081 U	0.20	0.081	ug/l	
98-95-3	Nitrobenzene	0.061 U	0.20	0.061	ug/l	
88-72-2	o-Nitrotoluene	0.061 U	0.20	0.061	ug/l	
99-08-1	m-Nitrotoluene	0.076 U	0.20	0.076	ug/l	
99-99-0	p-Nitrotoluene	0.076 U	0.20	0.076	ug/l	
479-45-8	Tetryl	0.076 U	0.20	0.076	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.096 U	0.20	0.096	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.081 U	0.20	0.081	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	98%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW01-FEB2007

Lab Sample ID: T16411-2

Matrix: AQ - Ground Water

Date Sampled: 02/20/07

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 16:21	AFL	EPA 314
Alkalinity, Total as CaCO ₃	145	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	375	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	1250	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.38	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.40	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.020 B	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	3930	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate ^c	89.0	3.0	0.66	mg/l	1	04/03/07 07:15	RM	EPA 375.2
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	5.9			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

(c) Confirmation analysis. Sample analyzed outside of the analytical holding time.

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW01-FEB2007-FD	Date Sampled:	02/20/07
Lab Sample ID:	T16411-3	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0078984.D	1	03/01/07	LJ	n/a	n/a	VF2305
Run #2	F0079009.D	100	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	1.5	2.0	0.23	ug/l	J
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	9.3	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	31.8	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	44.0	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	16.9	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	6.6	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	1.0	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	6240 ^a	200	63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW01-FEB2007-FD**Lab Sample ID:** T16411-3**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	107%	73-139%
17060-07-0	1,2-Dichloroethane-D4	96%	101%	66-139%
2037-26-5	Toluene-D8	109%	112%	77-148%
460-00-4	4-Bromofluorobenzene	134%	125%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW01-FEB2007-FD			Date Sampled:	02/20/07		
Lab Sample ID:	T16411-3			Date Received:	02/22/07		
Matrix:	AQ - Ground Water			Percent Solids:	n/a		
Method:	RSKSOP-147/175						
Project:	Longhorn Army Ammunition Plant						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025237.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	10.1	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW01-FEB2007-FD	Date Sampled:	02/20/07
Lab Sample ID:	T16411-3	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020171.D	1	02/28/07	AFL	02/26/07	F:OP19630	F:GGG904
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	96%		70-136%

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW01-FEB2007-FD	Date Sampled: 02/20/07
Lab Sample ID: T16411-3	Date Received: 02/22/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Longhorn Army Ammunition Plant	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 16:35	AFL	EPA 314
Alkalinity, Total as CaCO ₃	149	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	380	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	1310	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.10	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.020 B	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	4000	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	107	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	5.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	5.9			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSMW19-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-4	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079001.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	85.5	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW19-FEB2007**Lab Sample ID:** T16411-4**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		73-139%
17060-07-0	1,2-Dichloroethane-D4	94%		66-139%
2037-26-5	Toluene-D8	110%		77-148%
460-00-4	4-Bromofluorobenzene	127%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: LHSMW19-FEB2007							
Lab Sample ID: T16411-4				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025238.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.30 U	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW19-FEB2007

Lab Sample ID: T16411-4

Matrix: AQ - Ground Water

Date Sampled: 02/20/07

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 17:18	AFL	EPA 314
Alkalinity, Total as CaCO ₃	138	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	110	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	161	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.010 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.010 B	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	1360	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	309	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	5.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	6.4			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	46WW02-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-5	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079002.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	1.3	2.0	0.68	ug/l	J
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.4	2.0	0.83	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	28.9	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 46WW02-FEB2007**Lab Sample ID:** T16411-5**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		73-139%
17060-07-0	1,2-Dichloroethane-D4	92%		66-139%
2037-26-5	Toluene-D8	108%		77-148%
460-00-4	4-Bromofluorobenzene	126%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: 46WW02-FEB2007							
Lab Sample ID: T16411-5				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025245.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.42	0.50	0.30	ug/l	J
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 46WW02-FEB2007

Lab Sample ID: T16411-5

Matrix: AQ - Ground Water

Date Sampled: 02/20/07

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 17:33	AFL	EPA 314
Alkalinity, Total as CaCO ₃	7.0	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	175	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	30.0	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.19	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.010 B	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	558	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	238	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	9.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	4.9			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	47WW14-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-6	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079006.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2	F0079007.D	5	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	2.2	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	3.6	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	334 ^a	10	4.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	31.1	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	346 ^a	10	3.2	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW14-FEB2007**Lab Sample ID:** T16411-6**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	28.1	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	101%	73-139%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	66-139%
2037-26-5	Toluene-D8	106%	109%	77-148%
460-00-4	4-Bromofluorobenzene	129%	132%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.6
3

Client Sample ID: 47WW14-FEB2007							
Lab Sample ID: T16411-6				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025241.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	44.8	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW14-FEB2007

Lab Sample ID: T16411-6

Matrix: AQ - Ground Water

Date Sampled: 02/20/07

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 17:47	AFL	EPA 314
Alkalinity, Total as CaCO ₃	315	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	40.0	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	190	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.20	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	1410	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	178	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	3.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	7.2			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	47WW14-FEB2007-FD	Date Sampled:	02/20/07
Lab Sample ID:	T16411-7	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079060.D	1	03/03/07	RR	n/a	n/a	VF2309
Run #2	F0079061.D	50	03/03/07	RR	n/a	n/a	VF2309

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	2.0	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	3.2	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	359 ^a	100	42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	24.4	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	378 ^a	100	32	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW14-FEB2007-FD**Lab Sample ID:** T16411-7**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	20.5	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	107%	73-139%
17060-07-0	1,2-Dichloroethane-D4	90%	88%	66-139%
2037-26-5	Toluene-D8	108%	114%	77-148%
460-00-4	4-Bromofluorobenzene	128%	138%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.7
3

Client Sample ID: 47WW14-FEB2007-FD							
Lab Sample ID: T16411-7				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025242.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	42.7	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW14-FEB2007-FD

Lab Sample ID: T16411-7

Date Sampled: 02/20/07

Matrix: AQ - Ground Water

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:02	AFL	EPA 314
Alkalinity, Total as CaCO ₃	258	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	26.0	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	200	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.20	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	1460	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	160	20	2.6	mg/l	2	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	2.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	7.3			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	47WW13-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-8	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079035.D	1	03/02/07	LJ	n/a	n/a	VF2307
Run #2	F0079109.D	50	03/05/07	LJ	n/a	n/a	VF2311

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	J
71-43-2	Benzene	0.37	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	3.4	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	4.2	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1160 ^a	100	42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	14.5	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	565 ^a	100	32	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW13-FEB2007**Lab Sample ID:** T16411-8**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	36.0	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	85%	102%	66-139%
2037-26-5	Toluene-D8	107%	105%	77-148%
460-00-4	4-Bromofluorobenzene	136%	112%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID:	47WW13-FEB2007		
Lab Sample ID:	T16411-8	Date Sampled:	02/20/07
Matrix:	AQ - Ground Water	Date Received:	02/22/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025243.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	20.6	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW13-FEB2007	Date Sampled: 02/20/07
Lab Sample ID: T16411-8	Date Received: 02/22/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Longhorn Army Ammunition Plant	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:16	AFL	EPA 314
Alkalinity, Total as CaCO ₃	67.0	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	110	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	13.0	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.98	0.30	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	1.0	0.20	0.0050	mg/l	4	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.020 B	0.10	0.0030	mg/l	2	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	143	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	1440	1000	2.6	mg/l	100	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	5.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.1			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSMW04-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-9	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079063.D	1	03/03/07	RR	n/a	n/a	VF2309
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.60	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	6.4	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	4.6	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW04-FEB2007**Lab Sample ID:** T16411-9**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		73-139%
17060-07-0	1,2-Dichloroethane-D4	91%		66-139%
2037-26-5	Toluene-D8	116%		77-148%
460-00-4	4-Bromofluorobenzene	145%		84-150%

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW04-FEB2007							
Lab Sample ID: T16411-9				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025244.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	7.75	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW04-FEB2007

Lab Sample ID: T16411-9

Matrix: AQ - Ground Water

Date Sampled: 02/20/07

Date Received: 02/22/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:30	AFL	EPA 314
Alkalinity, Total as CaCO ₃	54	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	170	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	1530	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.020 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	5530	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	316	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	11.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	5.8			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSMW18-FEB2007	Date Sampled:	02/20/07
Lab Sample ID:	T16411-10	Date Received:	02/22/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.5	2.0	0.83	ug/l	J
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	4.8	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSMW18-FEB2007		
Lab Sample ID:	T16411-10	Date Sampled:	02/20/07
Matrix:	AQ - Ground Water	Date Received:	02/22/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		73-139%
17060-07-0	1,2-Dichloroethane-D4	97%		66-139%
2037-26-5	Toluene-D8	107%		77-148%
460-00-4	4-Bromofluorobenzene	119%		84-150%

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW18-FEB2007							
Lab Sample ID: T16411-10				Date Sampled: 02/20/07			
Matrix: AQ - Ground Water				Date Received: 02/22/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025246.D	1	02/26/07	AFL	n/a	n/a	F:GXY991
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.30 U	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW18-FEB2007**Lab Sample ID:** T16411-10**Date Sampled:** 02/20/07**Matrix:** AQ - Ground Water**Date Received:** 02/22/07**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:45	AFL	EPA 314
Alkalinity, Total as CaCO ₃	158	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	100	5.0		mg/l	1	03/06/07	RM	SM18 4500CO2D
Chloride	410	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.19	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.010 B	0.050	0.0030	mg/l	1	02/22/07 12:22	LN	EPA 353.2
Specific Conductivity ^a	3300	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	1260	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	18.0	1.0	0.092	mg/l	1	02/26/07 07:46	LN	EPA 415.1/9060
pH	6.5			su	1	02/23/07 08:15	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/20/07
Lab Sample ID:	T16411-11	Date Received:	02/22/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079059.D	1	03/03/07	RR	n/a	n/a	VF2309
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/20/07
Lab Sample ID:	T16411-11	Date Received:	02/22/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		73-139%
17060-07-0	1,2-Dichloroethane-D4	89%		66-139%
2037-26-5	Toluene-D8	110%		77-148%
460-00-4	4-Bromofluorobenzene	134%		84-150%

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form



Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10931

Team 3-02B

L16411

Laboratory Name: Accutest Address: 10165 Harwin #150 Contact: Agnes (713) 271-4700
Hou, TX 77036

Project Name: LHAAP Project Location: Karnack, TX Analysis and Method Desired (Indicate separate containers):
 Project No.: 117591 Project Contact: K. Everett Project Telephone No.: (713) 996-4421 Remarks:
 Point of contact: D. Meyers Project Manager/Supervisor: P. Srivastav
 Telephone No.: (713) 996-4408

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	NOC	8260	Anion	300	Sulfides	376.2	Perchlorate	314	Cases	175	Alkalinity	310.1	TOC	415.1	EXPLOSIVES	8530
1	LHSMW22-Febr 2007	2/21/07	8:50		X	W	Groundwater	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	17 WWO1-Febr 2007	2/21/07	15:10		X	W	Groundwater	13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	17 WWO1-Febr 2007	2/21/07	15:10		X	W	Groundwater	14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Transfers Relinquished By (Signature): Agnes Allen Date/Time: 02/21/07 Transfers Accepted By (Signature): Scott Beesinger Date/Time: 2-21-07 08:10 Special Instructions: Do sample for Alkalinity in 17 WWO1-Febr 2007. CO2 for 211005CS.

Transfers Relinquished By (Signature): Scott Beesinger Date/Time: 2-21-07 08:30 Transfers Accepted By (Signature): Agnes Allen Date/Time: 2-21-07 08:30 Special Instructions: Do sample for Alkalinity in 17 WWO1-Febr 2007. CO2 for 211005CS.

Laboratory: Accutest Sample Signature: Agnes Allen

TAT: ☒ Standard ☐ Rush Due: ☐ Seals Intact? ☒ Y ☐ N Received Good Condition: ☒ Y ☐ N ☐ Cold

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

T16411: Chain of Custody

Page 1 of 7

T16411



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Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10949

Laboratory Name: Accutest				Address: 10165 Harwin Dr. #150				Contact: Agnes										
Project Name: Longhorn Army Ammunition Plant				Project Location: KARWACK, TX				Analysis and Method Desired (Indicate separate containers)										
Project No.: 117591				Project Contact: Kay Everette				Project Telephone No.: 713-996-4421										
Point of contact: Diane Meyer				Project Manager/Supervisor: Raveen Srivastava				Remarks										
Telephone No.: 713-996-4408																		
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC-8260B	ANIONS 300.0	376.2	Sulfides	314.0	Perchlorate	Gases 202-RSK50P12	310.1	ALKALINITY	TOC 415.1
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	3	✓									
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	3							✓			
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	3										✓
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	1					✓					
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	1			✓							
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	1		✓								
4	LHSMW19-Feb2007	2/20/07	0950		✓	GW	GW-Site 46	1								✓		
8																		
9																		
10																		
Transfers Relinquished By (Signature)				Date/Time		Transfers Accepted By (Signature)				Date/Time		Special Instructions						
<i>Sherry M. Padoa</i>				2-20-07 1630		<i>Scott Blesinger</i>				2/21/07 1810								
<i>Scott Blesinger</i>				2-21-07 0830														
						<i>J. Rodney</i>				2/21/07		UPS						
						Laboratory				Sampler's Signature		<i>Sherry M. Padoa</i>						
TAT: _____ Standard _____ Rush Due: _____				Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☒ Cold												

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T16411: Chain of Custody

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T16411



Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10914

Laboratory Name: <u>Accutest</u>		Address: <u>10165 Harwin DR #150</u> <u>Houston, TX 77036</u>		Contact: <u>Agnes - 713-271-4700</u>												
Project Name: <u>Longhorn Army Ammunition Plant</u>		Project Location: <u>Karnack, TX</u>		Analysis and Method Desired (Indicate separate containers)												
Project No.: <u>117591</u>		Project Contact: <u>Ken Everette</u>		Project Telephone No.: <u>713-996-4401</u>												
Point of contact: <u>Diane Meyer</u>		Project Manager/Supervisor: <u>PRAVEEN SRIVASTAV</u>		Remarks												
Telephone No.: <u>713-996-4408</u>																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC's by 8240	ANIONS 300	Sulfides 376.2	Grasses 175	310.1	ALKALINITY	TDC 415.1	Perchlorate 217.0
5	46WW02-FEB 2007	2/20/07	0937		X	W	46WW02	13	X	X	X	X	X	X	X	X
6	47WW14-FEB 2007	2/20/07	1223		X	W	47WW14	13	X	X	X	X	X	X	X	X
7	47WW14-FEB 2007-FD	2/20/07	1223		X	W	47WW14-FD	13	X	X	X	X	X	X	X	X
8	47WW13-FEB 2007	2/20/07	1554		X	W	47WW13	13	X	X	X	X	X	X	X	X
9																
10																
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions								
<u>Scott Beesinger</u>		2-21-07 08:30		<u>Scott Beesinger</u>		2-21-07 08:10		HB								
								FBI Lab No.: 1266V 7250192598203								
TAT: <u>X</u> Standard <u>3</u> Rush Due: _____		Seals Intact? <u>Y</u> <u>N</u>		Received Good Condition <u>Y</u> <u>N</u>		Cold <u>Y</u> <u>N</u>		Laboratory: <u>Accutest</u> Sampler's Signature: <u>[Signature]</u>								

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CHAIN-OF-CUSTODY

No. 10948

Laboratory Name: Accutest		Address: 10145 HARWIN DR. #150		Contact: Agnes																	
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK, TX		Project Telephone No.: 713-996-4421																	
Project No.: 117591		Project Contact: Kay Everett		Project Telephone No.: 713-996-4421																	
Point of contact: Diane Meyer		Project Manager/Supervisor: TRAVEN SRAIVASTAV		Telephone No.: 713-996-4408																	
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC-8260 B	Anions 360.9	376.2	Sulfides	314.0	Perchlorate	Gases (PSK) 602 (601.175)	310.1	Alkalinity	TOC 415.1	Remarks		
1	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	3	✓												
2	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	3							✓						
3	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	3										✓			
4	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	1		✓											
5	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	1			✓										
6	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	1									✓				
7	LHSMW04-Feb2007	2/20/07	1530		✓	W	GW, Site 35A	1				✓									
8																					
9																					
10																					
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions													
<i>Sherry M. Peden</i>		2-20-07 16:30		<i>Scott Bessinger</i>		2-21-07 08:10		US													
<i>Scott Bessinger</i>		2-21-07 08:30						FedEx Airbill No.: 1Z WLV 72501 9759 8205													
				Laboratory		<i>A. Reding</i>		2/21/07 19:58		Sampler's Signature		<i>Sherry M. Peden</i>									
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☐ Cold																	

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772411



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CHAIN-OF-CUSTODY

No. 10952

Laboratory Name: Accutest				Address: 10165 HARWIN DR. #150 Houston, TX 77036				Contact: Agnes 713-271-4700												
Project Name: Longhorn Army Ammunition Plant				Project Location: KARNACK, TX				Analysis and Method Desired (Indicate separate containers)				Remarks								
Project No. 117591				Project Contact: Kay Everette				Project Telephone No. 713-9964421				ms/msd								
Point of contact: Diane Meyer				Project Manager/Supervisor: PRAVEEN SRIVASTAV				Number of Containers: 3												
Telephone No. 713-996-4408																				
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location		Number of Containers	ANIONS 300.0	376.2	Sulfides	34.0	PERCHLORATE	GASES/ASK DOZ (SPIN)	310.1	ALKALINITY	TOC 415.1	VOC-8260B	Remarks
1	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3										✓	ms/msd
2	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3					✓						ms/msd
3	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3									✓		ms/msd
4	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3	✓										ms/msd
5	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3		✓									ms/msd
6	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3			✓								ms/msd
7	LHSMW18-Feb-2007	2/20			✓	W	GW Site 46		3							✓				ms/msd
8	AP-2-22-07																			
9	AP-2-22-07																			
10	AP-2-22-07																			
Transfers Relinquished By (Signature)				Date/Time				Transfers Accepted By (Signature)				Date/Time				Special Instructions				
Sherry M.F. Adoo				2-20-07 16:30				Scott Beersinger				2-21-07 06:10				If need be, please lab needs more sample volume for a parameter from/for. Please take from a vial labeled for a different parameter.				
Scott Beersinger				2-21-07 08:30												Lab Bill No. 17166V7250192598203				
								Laboratory				A. Padua				Sample's Signature Sherry M.F. Adoo				
TAT: Standard Rush Due:				Seals Intact? Y N				Received Good Condition Y N				Cold								

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T16411: Chain of Custody

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VARIANCE MEMO SAMPLE LOG-IN			
SAMPLE(S) PROJECT FILED BY	VARIANTS CHAP AR	DATE 2/22/07	LAB NO. T16411
VARIANCE - Check applicable items(s):			
Insufficient sample sent for proper analysis;		received approx. _____	
Sample bottle received broken and/or cap not intact.			
Samples received without paperwork; paperwork received without samples.			
Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: _____			
Illegible sample number or label missing from bottle.			
Numbers on sample not the same as numbers on paper work.			
Incomplete instructions received with sample(s) ie, no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____			
Samples received in improper container or lacking proper preservation.			
Physical characteristics different than those on sampling sheets;			
Describe: _____			
Rush samples on hold because of incomplete paperwork.			
Other (specify) <u>Sample numbers 1,4, and 5 were all received extending hold times.</u>			
CORRECTIVE ACTION TAKEN			
<u>Diave M.</u> Person Contacted		By phone. <u>SP</u>	
Client informed verbally.		Samples processed for information only and noted on report.	
☒ Client informed by <u>memotetter. email</u>		Samples processed with higher detection limits accepted.	
Samples processed as is.		Samples rejected.	
Samples preserved by lab.			
Client will resample and resubmit.			
Notes: <u>Proceed w/ Analysis</u>			
ROUTING			
TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:			
Project Manager:	<u>2/22/07</u>	<u>AS</u>	
Comments:			

Form: SMO02

T16411: Chain of Custody

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ACCUTEST.
SAMPLE RECEIPT LOG

 JOB #: T110411

 DATETIME RECEIVED: 2/22/07 09:58

 CLIENT: Shaw

 INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. ☒ N Sample received in undamaged condition. ☒ N Samples received within temp. range.
 3. ☒ N Sample received with proper pH. ☒ N Sample received in proper containers.
 5. ☒ N Sample volume sufficient for analysis. ☒ N Sample received with chain of custody.
 7. ☒ N Chain of Custody matches sample IDs and analysis on containers.
 8. ☒ N Samples Headspace acceptable.
 9. ☒ N NA Custody seal received intact and tamper not evident on cooler.
 10. ☒ Y ☒ NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1-9	1-6	2/20	AQ	40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	7-9			↓	2H	1,2,3,4,5,6	U, <2, >12, NA
	10			P1000		1,2,3,4,5,6	U, <2, >12, NA
	11			P500		1,2,3,4,5,6	U, <2, >12, NA
	12-13			↓		1,2,3,4,5,6	U, <2, >12, NA
2,3	14			A1000	SUB	1,2,3,4,5,6	U, <2, >12, NA
10	1-18			40ml	VREF	1,2,3,4,5,6	U, <2, >12, NA
	19-27			↓	2H	1,2,3,4,5,6	U, <2, >12, NA
	28-30			P1000		1,2,3,4,5,6	U, <2, >12, NA
	31-33			P500		1,2,3,4,5,6	U, <2, >12, NA
	34-39			↓		1,2,3,4,5,6	U, <2, >12, NA
(+b) 11, 12	1-2	N/A		40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
~~02/22/07~~							

LOCATION: WL: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NaOH 6: Other

Comments:

 pH of waters checked excluding volatiles
 pH of soils N/A

 Delivery method: Courier: UPS

 COOLER TEMP: 2.2 COOLER TEMP: 2.1
 COOLER TEMP: 3.6 COOLER TEMP: 5.8
 Form: SM012, Rev.07/28/06, QAO

T16411: Chain of Custody

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Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

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

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

Ron Martino



Lab Director

3/14/2007

Name (Printed)

Signature

Official Title (printed)

Date

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 3/14/2007				
Project Name: Longhorn			Laboratory Job Number: T16411				
Reviewer Name: Ron Martino			Prep Batch Number(s):				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				

2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast

LRC Date: 3/14/2007

Project Name: Longhorn

Laboratory Job Number: T16411

Reviewer Name: Ron Martino

Prep Batch Number(s):

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

[illegible]

RG-366/TRRP-13 December 2002



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Page 1 of 2

Job Number: T16411**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2305-MB	F0078974.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16411-1, T16411-2, T16411-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2305-MB	F0078974.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples: Method: SW846 8260B
T16411-1, T16411-2, T16411-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 73-139%
17060-07-0	1,2-Dichloroethane-D4	93% 66-139%
2037-26-5	Toluene-D8	106% 77-148%
460-00-4	4-Bromofluorobenzene	113% 84-150%

Method Blank Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-10

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 73-139%
17060-07-0	1,2-Dichloroethane-D4	94% 66-139%
2037-26-5	Toluene-D8	110% 77-148%
460-00-4	4-Bromofluorobenzene	119% 84-150%

Method Blank Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2307-MB	F0079026.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2307-MB	F0079026.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 73-139%
17060-07-0	1,2-Dichloroethane-D4	96% 66-139%
2037-26-5	Toluene-D8	107% 77-148%
460-00-4	4-Bromofluorobenzene	129% 84-150%

Method Blank Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2309-MB	F0079058.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-7, T16411-9, T16411-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2309-MB	F0079058.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples: Method: SW846 8260B
T16411-7, T16411-9, T16411-11

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 73-139%
17060-07-0	1,2-Dichloroethane-D4	88% 66-139%
2037-26-5	Toluene-D8	109% 77-148%
460-00-4	4-Bromofluorobenzene	126% 84-150%

Method Blank Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2311-MB	F0079093.D	1	03/05/07	LJ	n/a	n/a	VF2311

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 73-139%
17060-07-0	1,2-Dichloroethane-D4	98% 66-139%
2037-26-5	Toluene-D8	107% 77-148%
460-00-4	4-Bromofluorobenzene	120% 84-150%

Blank Spike Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2305-BS	F0078972.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-1, T16411-2, T16411-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	93.3	75	31-158
71-43-2	Benzene	25	22.5	90	67-118
75-27-4	Bromodichloromethane	25	20.4	82	66-115
75-25-2	Bromoform	25	21.2	85	57-119
108-90-7	Chlorobenzene	25	21.9	88	72-116
75-00-3	Chloroethane	25	25.0	100	61-135
67-66-3	Chloroform	25	22.7	91	66-117
75-15-0	Carbon disulfide	25	21.6	86	39-136
56-23-5	Carbon tetrachloride	25	25.2	101	67-131
75-34-3	1,1-Dichloroethane	25	22.7	91	63-125
75-35-4	1,1-Dichloroethylene	25	23.2	93	52-143
107-06-2	1,2-Dichloroethane	25	21.9	88	61-120
78-87-5	1,2-Dichloropropane	25	21.8	87	64-118
124-48-1	Dibromochloromethane	25	20.9	84	67-117
156-59-2	cis-1,2-Dichloroethylene	25	21.3	85	65-116
10061-01-5	cis-1,3-Dichloropropene	25	21.6	86	67-118
156-60-5	trans-1,2-Dichloroethylene	25	23.0	92	66-128
10061-02-6	trans-1,3-Dichloropropene	25	22.4	90	73-126
100-41-4	Ethylbenzene	25	22.2	89	71-119
591-78-6	2-Hexanone	125	99.1	79	45-132
108-10-1	4-Methyl-2-pentanone	125	101	81	46-127
74-83-9	Methyl bromide	25	21.6	86	51-126
74-87-3	Methyl chloride	25	21.3	85	47-130
75-09-2	Methylene chloride	25	19.5	78	53-130
78-93-3	Methyl ethyl ketone	125	96.9	78	47-128
100-42-5	Styrene	25	18.8	75	69-115
71-55-6	1,1,1-Trichloroethane	25	23.6	94	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	20.8	83	57-121
79-00-5	1,1,2-Trichloroethane	25	21.7	87	62-117
127-18-4	Tetrachloroethylene	25	24.5	98	72-128
108-88-3	Toluene	25	22.5	90	70-121
79-01-6	Trichloroethylene	25	23.6	94	69-120
75-01-4	Vinyl chloride	25	23.0	92	59-145
1330-20-7	Xylene (total)	75	67.4	90	72-120

Blank Spike Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2305-BS	F0078972.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-1, T16411-2, T16411-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	73-139%
17060-07-0	1,2-Dichloroethane-D4	94%	66-139%
2037-26-5	Toluene-D8	102%	77-148%
460-00-4	4-Bromofluorobenzene	102%	84-150%

Blank Spike Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-BS2	F0078998.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	73-139%
17060-07-0	1,2-Dichloroethane-D4	93%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	106%	84-150%

Blank Spike Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2307-BS	F0079025.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	99.0	79	31-158
71-43-2	Benzene	25	23.6	94	67-118
75-27-4	Bromodichloromethane	25	22.3	89	66-115
75-25-2	Bromoform	25	21.2	85	57-119
108-90-7	Chlorobenzene	25	22.9	92	72-116
75-00-3	Chloroethane	25	25.6	102	61-135
67-66-3	Chloroform	25	24.3	97	66-117
75-15-0	Carbon disulfide	25	22.4	90	39-136
56-23-5	Carbon tetrachloride	25	26.9	108	67-131
75-34-3	1,1-Dichloroethane	25	24.8	99	63-125
75-35-4	1,1-Dichloroethylene	25	25.3	101	52-143
107-06-2	1,2-Dichloroethane	25	24.6	98	61-120
78-87-5	1,2-Dichloropropane	25	23.9	96	64-118
124-48-1	Dibromochloromethane	25	21.3	85	67-117
10061-01-5	cis-1,3-Dichloropropene	25	22.6	90	67-118
156-60-5	trans-1,2-Dichloroethylene	25	24.0	96	66-128
10061-02-6	trans-1,3-Dichloropropene	25	22.8	91	73-126
100-41-4	Ethylbenzene	25	23.0	92	71-119
591-78-6	2-Hexanone	125	104	83	45-132
108-10-1	4-Methyl-2-pentanone	125	110	88	46-127
74-83-9	Methyl bromide	25	23.1	92	51-126
74-87-3	Methyl chloride	25	23.8	95	47-130
75-09-2	Methylene chloride	25	22.4	90	53-130
78-93-3	Methyl ethyl ketone	125	104	83	47-128
100-42-5	Styrene	25	19.0	76	69-115
71-55-6	1,1,1-Trichloroethane	25	26.0	104	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	20.1	80	57-121
79-00-5	1,1,2-Trichloroethane	25	21.4	86	62-117
127-18-4	Tetrachloroethylene	25	25.2	101	72-128
108-88-3	Toluene	25	23.5	94	70-121
75-01-4	Vinyl chloride	25	25.7	103	59-145
1330-20-7	Xylene (total)	75	69.3	92	72-120

Blank Spike Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2307-BS	F0079025.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	73-139%
17060-07-0	1,2-Dichloroethane-D4	97%	66-139%
2037-26-5	Toluene-D8	102%	77-148%
460-00-4	4-Bromofluorobenzene	99%	84-150%

Blank Spike Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2309-BS	F0079056.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-7, T16411-9, T16411-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	72.4	58	31-158
71-43-2	Benzene	25	23.9	96	67-118
75-27-4	Bromodichloromethane	25	21.6	86	66-115
75-25-2	Bromoform	25	20.5	82	57-119
108-90-7	Chlorobenzene	25	24.4	98	72-116
75-00-3	Chloroethane	25	23.6	94	61-135
67-66-3	Chloroform	25	24.5	98	66-117
75-15-0	Carbon disulfide	25	20.4	82	39-136
56-23-5	Carbon tetrachloride	25	27.5	110	67-131
75-34-3	1,1-Dichloroethane	25	23.9	96	63-125
75-35-4	1,1-Dichloroethylene	25	22.5	90	52-143
107-06-2	1,2-Dichloroethane	25	21.3	85	61-120
78-87-5	1,2-Dichloropropane	25	23.3	93	64-118
124-48-1	Dibromochloromethane	25	21.1	84	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.1	92	65-116
10061-01-5	cis-1,3-Dichloropropene	25	23.2	93	67-118
156-60-5	trans-1,2-Dichloroethylene	25	22.8	91	66-128
10061-02-6	trans-1,3-Dichloropropene	25	22.0	88	73-126
100-41-4	Ethylbenzene	25	24.4	98	71-119
591-78-6	2-Hexanone	125	78.5	63	45-132
108-10-1	4-Methyl-2-pentanone	125	83.3	67	46-127
74-83-9	Methyl bromide	25	19.8	79	51-126
74-87-3	Methyl chloride	25	18.5	74	47-130
75-09-2	Methylene chloride	25	19.5	78	53-130
78-93-3	Methyl ethyl ketone	125	75.7	61	47-128
100-42-5	Styrene	25	20.0	80	69-115
71-55-6	1,1,1-Trichloroethane	25	26.6	106	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	18.9	76	57-121
79-00-5	1,1,2-Trichloroethane	25	20.6	82	62-117
127-18-4	Tetrachloroethylene	25	28.1	112	72-128
108-88-3	Toluene	25	24.7	99	70-121
79-01-6	Trichloroethylene	25	25.1	100	69-120
75-01-4	Vinyl chloride	25	19.7	79	59-145
1330-20-7	Xylene (total)	75	74.6	99	72-120

Blank Spike Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2309-BS	F0079056.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-7, T16411-9, T16411-11

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	92%	66-139%
2037-26-5	Toluene-D8	106%	77-148%
460-00-4	4-Bromofluorobenzene	106%	84-150%

Blank Spike Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2311-BS	F0079092.D	1	03/05/07	LJ	n/a	n/a	VF2311

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	22.9	92	65-116
79-01-6	Trichloroethylene	25	24.3	97	69-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	105%	66-139%
2037-26-5	Toluene-D8	105%	77-148%
460-00-4	4-Bromofluorobenzene	104%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16411**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16395-2MS	F0078979.D	1	02/28/07	LJ	n/a	n/a	VF2305
T16395-2MSD	F0078980.D	1	02/28/07	LJ	n/a	n/a	VF2305
T16395-2	F0078978.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16411-1, T16411-2, T16411-3

CAS No.	Compound	T16395-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U	125	107	86	97.6	78	9	39-130/26
71-43-2	Benzene	2.0 U	25	24.7	99	25.2	101	2	65-122/15
75-27-4	Bromodichloromethane	2.0 U	25	22.6	90	23.2	93	3	64-119/22
75-25-2	Bromoform	2.0 U	25	23.9	96	22.7	91	5	50-123/28
108-90-7	Chlorobenzene	2.0 U	25	24.3	97	25.0	100	3	72-118/20
75-00-3	Chloroethane	2.0 U	25	25.7	103	25.4	102	1	60-136/25
67-66-3	Chloroform	2.0 U	25	25.0	100	25.3	101	1	65-120/20
75-15-0	Carbon disulfide	2.0 U	25	23.8	95	24.2	97	2	37-140/24
56-23-5	Carbon tetrachloride	2.0 U	25	27.6	110	28.0	112	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0 U	25	25.8	103	26.6	106	3	65-126/21
75-35-4	1,1-Dichloroethylene	2.0 U	25	25.8	103	25.6	102	1	55-140/25
107-06-2	1,2-Dichloroethane	2.0 U	25	25.4	102	24.2	97	5	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U	25	24.6	98	25.0	100	2	63-121/22
124-48-1	Dibromochloromethane	2.0 U	25	23.1	92	22.8	91	1	60-123/23
156-59-2	cis-1,2-Dichloroethylene	2.0 U	25	23.6	94	24.2	97	3	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U	25	23.3	93	24.0	96	3	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U	25	25.0	100	25.5	102	2	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U	25	24.4	98	24.8	99	2	65-129/23
100-41-4	Ethylbenzene	2.0 U	25	24.3	97	24.9	100	2	70-123/18
591-78-6	2-Hexanone	10 U	125	119	95	111	89	7	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U	125	124	99	115	92	8	41-133/22
74-83-9	Methyl bromide	2.0 U	25	23.7	95	22.6	90	5	47-129/27
74-87-3	Methyl chloride	2.0 U	25	24.1	96	22.2	89	8	45-133/24
75-09-2	Methylene chloride	5.0 U	25	23.4	94	23.2	93	1	49-128/21
78-93-3	Methyl ethyl ketone	10 U	125	114	91	105	84	8	43-125/29
100-42-5	Styrene	2.0 U	25	20.3	81	20.7	83	2	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U	25	26.5	106	27.2	109	3	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U	25	22.6	90	21.1	84	7	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U	25	23.7	95	23.5	94	1	58-120/22
127-18-4	Tetrachloroethylene	2.0 U	25	26.6	106	27.4	110	3	69-132/21
108-88-3	Toluene	2.0 U	25	24.6	98	25.5	102	4	70-123/18
79-01-6	Trichloroethylene	2.0 U	25	25.0	100	25.4	102	2	70-120/19
75-01-4	Vinyl chloride	2.0 U	25	25.7	103	24.0	96	7	51-147/24
1330-20-7	Xylene (total)	6.0 U	75	74.5	99	76.1	101	2	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16395-2MS	F0078979.D	1	02/28/07	LJ	n/a	n/a	VF2305
T16395-2MSD	F0078980.D	1	02/28/07	LJ	n/a	n/a	VF2305
T16395-2	F0078978.D	1	02/28/07	LJ	n/a	n/a	VF2305

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-1, T16411-2, T16411-3

CAS No.	Surrogate Recoveries	MS	MSD	T16395-2	Limits
1868-53-7	Dibromofluoromethane	99%	104%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	98%	97%	101%	66-139%
2037-26-5	Toluene-D8	103%	107%	109%	77-148%
460-00-4	4-Bromofluorobenzene	100%	100%	118%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16411**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-10

CAS No.	Compound	T16411-10 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	96.7	77	84.7	68	13	39-130/26
71-43-2	Benzene	2.0 U		25	24.3	97	24.5	98	1	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.3	89	22.3	89	0	64-119/22
75-25-2	Bromoform	2.0 U		25	20.9	84	19.9	80	5	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	23.5	94	23.6	94	0	72-118/20
75-00-3	Chloroethane	2.0 U		25	26.6	106	25.2	101	5	60-136/25
67-66-3	Chloroform	2.0 U		25	24.8	99	24.9	100	0	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	22.6	90	22.7	91	0	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	27.1	108	27.3	109	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0 U		25	25.5	102	25.1	100	2	65-126/21
75-35-4	1,1-Dichloroethylene	2.0 U		25	25.6	102	24.8	99	3	55-140/25
107-06-2	1,2-Dichloroethane	2.0 U		25	24.2	97	22.4	90	8	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.9	96	23.7	95	1	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.6	86	21.0	84	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	1.5	J	25	23.8	89	24.4	92	2	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	19.7	79	20.0	80	2	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U		25	24.2	97	24.2	97	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	19.8	79	19.5	78	2	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.8	91	22.9	92	0	70-123/18
591-78-6	2-Hexanone	10 U		125	102	82	97.3	78	5	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	109	87	103	82	6	41-133/22
74-83-9	Methyl bromide	2.0 U		25	23.4	94	21.9	88	7	47-129/27
74-87-3	Methyl chloride	2.0 U		25	25.8	103	23.3	93	10	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.7	91	22.2	89	2	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	98.2	79	90.5	72	8	43-125/29
100-42-5	Styrene	2.0 U		25	1.8	7*	2.0	8*	11	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	27.0	108	27.0	108	0	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	19.8	79	19.0	76	4	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U		25	21.3	85	20.8	83	2	58-120/22
127-18-4	Tetrachloroethylene	2.0 U		25	24.8	99	25.2	101	2	69-132/21
108-88-3	Toluene	2.0 U		25	23.3	93	23.9	96	3	70-123/18
79-01-6	Trichloroethylene	4.8		25	29.4	98	29.6	99	1	70-120/19
75-01-4	Vinyl chloride	2.0 U		25	26.8	107	24.9	100	7	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	69.9	93	69.3	92	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-10

CAS No.	Surrogate Recoveries	MS	MSD	T16411-10	Limits
1868-53-7	Dibromofluoromethane	104%	104%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	99%	97%	97%	66-139%
2037-26-5	Toluene-D8	105%	103%	107%	77-148%
460-00-4	4-Bromofluorobenzene	100%	101%	119%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16431-22MS	F0079032.D	1	03/02/07	LJ	n/a	n/a	VF2307
T16431-22MSD	F0079033.D	1	03/02/07	LJ	n/a	n/a	VF2307
T16431-22 ^a	F0079031.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples:

Method: SW846 8260B

T16411-8

CAS No.	Compound	T16431-22 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	4.8	J	125	87.9	66	83.2	63	5	39-130/26
71-43-2	Benzene	ND		25	22.1	88	19.7	79	11	65-122/15
75-27-4	Bromodichloromethane	ND		25	20.6	82	18.8	75	9	64-119/22
75-25-2	Bromoform	ND		25	18.9	76	17.1	68	10	50-123/28
108-90-7	Chlorobenzene	ND		25	21.3	85	19.0	76	11	72-118/20
75-00-3	Chloroethane	ND		25	26.8	107	23.2	93	14	60-136/25
67-66-3	Chloroform	ND		25	22.9	92	20.3	81	12	65-120/20
75-15-0	Carbon disulfide	ND		25	20.7	83	17.4	70	17	37-140/24
56-23-5	Carbon tetrachloride	ND		25	25.0	100	20.1	80	22	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	23.7	95	21.2	85	11	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	23.0	92	18.9	76	20	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	22.3	89	19.9	80	11	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	22.5	90	21.0	84	7	63-121/22
124-48-1	Dibromochloromethane	ND		25	18.8	75	17.8	71	5	60-123/23
10061-01-5	cis-1,3-Dichloropropene	ND		25	20.4	82	18.3	73	11	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	21.7	87	19.1	76	13	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	20.1	80	18.0	72	11	65-129/23
100-41-4	Ethylbenzene	ND		25	21.4	86	18.5	74	15	70-123/18
591-78-6	2-Hexanone	ND		125	89.2	71	83.2	67	7	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	99.1	79	90.4	72	9	41-133/22
74-83-9	Methyl bromide	ND		25	23.8	95	21.9	88	8	47-129/27
74-87-3	Methyl chloride	ND		25	26.1	104	23.1	92	12	45-133/24
75-09-2	Methylene chloride	ND		25	21.6	86	20.0	80	8	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	91.4	73	84.5	68	8	43-125/29
100-42-5	Styrene	ND		25	16.4	66	14.2	57*	14	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	24.5	98	19.8	79	21	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	19.4	78	18.7	75	4	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	19.3	77	18.3	73	5	58-120/22
127-18-4	Tetrachloroethylene	ND		25	22.5	90	18.9	76	17	69-132/21
108-88-3	Toluene	ND		25	21.9	88	19.7	79	11	70-123/18
75-01-4	Vinyl chloride	ND		25	27.1	108	21.9	88	21	51-147/24
1330-20-7	Xylene (total)	ND		75	64.8	86	56.0	75	15	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16431-22MS	F0079032.D	1	03/02/07	LJ	n/a	n/a	VF2307
T16431-22MSD	F0079033.D	1	03/02/07	LJ	n/a	n/a	VF2307
T16431-22 ^a	F0079031.D	1	03/02/07	LJ	n/a	n/a	VF2307

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Surrogate Recoveries	MS	MSD	T16431-22	Limits
1868-53-7	Dibromofluoromethane	104%	98%	103%	73-139%
17060-07-0	1,2-Dichloroethane-D4	99%	89%	96%	66-139%
2037-26-5	Toluene-D8	106%	106%	109%	77-148%
460-00-4	4-Bromofluorobenzene	110%	113%	129%	84-150%

(a) Suspected laboratory contaminant.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: T16411**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16440-7MS	F0079071.D	1	03/03/07	RR	n/a	n/a	VF2309
T16440-7MSD	F0079072.D	1	03/03/07	RR	n/a	n/a	VF2309
T16440-7	F0079070.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples:**Method:** SW846 8260B

T16411-7, T16411-9, T16411-11

CAS No.	Compound	T16440-7 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	62.7	50	57.7	46	8	39-130/26
71-43-2	Benzene	ND		25	23.6	94	23.5	94	0	65-122/15
75-27-4	Bromodichloromethane	ND		25	20.8	83	20.3	81	2	64-119/22
75-25-2	Bromoform	ND		25	15.9	64	17.1	68	7	50-123/28
108-90-7	Chlorobenzene	ND		25	23.3	93	23.5	94	1	72-118/20
75-00-3	Chloroethane	ND		25	24.4	98	24.3	97	0	60-136/25
67-66-3	Chloroform	ND		25	23.8	95	24.1	96	1	65-120/20
75-15-0	Carbon disulfide	ND		25	20.9	84	21.3	85	2	37-140/24
56-23-5	Carbon tetrachloride	ND		25	26.5	106	26.9	108	1	64-135/23
75-34-3	1,1-Dichloroethane	4.2		25	28.2	96	28.4	97	1	65-126/21
75-35-4	1,1-Dichloroethylene	6.4		25	28.2	87	28.0	86	1	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	19.9	80	19.6	78	2	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	22.7	91	22.7	91	0	63-121/22
124-48-1	Dibromochloromethane	ND		25	18.5	74	18.0	72	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	31.9		25	53.1	85	53.6	87	1	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	20.3	81	20.8	83	2	61-119/23
156-60-5	trans-1,2-Dichloroethylene	0.97	J	25	23.6	91	24.0	92	2	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	19.5	78	19.3	77	1	65-129/23
100-41-4	Ethylbenzene	ND		25	23.7	95	23.6	94	0	70-123/18
591-78-6	2-Hexanone	ND		125	63.9	51	64.5	52	1	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	73.5	59	71.9	58	2	41-133/22
74-83-9	Methyl bromide	ND		25	21.2	85	20.3	81	4	47-129/27
74-87-3	Methyl chloride	ND		25	21.1	84	20.0	80	5	45-133/24
75-09-2	Methylene chloride	ND		25	20.7	83	20.6	82	0	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	66.3	53	64.8	52	2	43-125/29
100-42-5	Styrene	ND		25	17.8	71	17.6	70	1	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	25.6	102	26.3	105	3	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	16.9	68	17.1	68	1	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	18.1	72	17.9	72	1	58-120/22
127-18-4	Tetrachloroethylene	ND		25	26.4	106	26.4	106	0	69-132/21
108-88-3	Toluene	ND		25	24.1	96	24.1	96	0	70-123/18
79-01-6	Trichloroethylene	35.2		25	59.0	95	58.8	94	0	70-120/19
75-01-4	Vinyl chloride	ND		25	22.8	91	21.7	87	5	51-147/24
1330-20-7	Xylene (total)	ND		75	71.6	95	71.9	96	0	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16440-7MS	F0079071.D	1	03/03/07	RR	n/a	n/a	VF2309
T16440-7MSD	F0079072.D	1	03/03/07	RR	n/a	n/a	VF2309
T16440-7	F0079070.D	1	03/03/07	RR	n/a	n/a	VF2309

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-7, T16411-9, T16411-11

CAS No.	Surrogate Recoveries	MS	MSD	T16440-7	Limits
1868-53-7	Dibromofluoromethane	103%	101%	103%	73-139%
17060-07-0	1,2-Dichloroethane-D4	85%	84%	86%	66-139%
2037-26-5	Toluene-D8	107%	106%	113%	77-148%
460-00-4	4-Bromofluorobenzene	109%	106%	143%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16440-12MS	F0079096.D	1	03/05/07	LJ	n/a	n/a	VF2311
T16440-12MSD	F0079097.D	1	03/05/07	LJ	n/a	n/a	VF2311
T16440-12	F0079095.D	1	03/05/07	LJ	n/a	n/a	VF2311

The QC reported here applies to the following samples: Method: SW846 8260B

T16411-8

CAS No.	Compound	T16440-12 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethylene	ND	25	23.7	95	22.8	91	4	62-120/24
79-01-6	Trichloroethylene	ND	25	25.1	100	23.7	95	6	70-120/19

CAS No.	Surrogate Recoveries	MS	MSD	T16440-12	Limits
1868-53-7	Dibromofluoromethane	110%	106%	110%	73-139%
17060-07-0	1,2-Dichloroethane-D4	106%	105%	105%	66-139%
2037-26-5	Toluene-D8	105%	103%	111%	77-148%
460-00-4	4-Bromofluorobenzene	100%	100%	123%	84-150%

Instrument Performance Check (BFB)

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-BFB	Injection Date: 02/12/07
Lab File ID: F0078488.D	Injection Time: 17:39
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10313	15.8	Pass
75	30.0 - 60.0% of mass 95	24771	38.0	Pass
95	Base peak, 100% relative abundance	65123	100.0	Pass
96	5.0 - 9.0% of mass 95	4343	6.7	Pass
173	Less than 2.0% of mass 174	344	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	51261	78.7	Pass
175	5.0 - 9.0% of mass 174	3763	5.8 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	49896	76.6 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3355	5.2 (6.7) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2276-IC2276	F0078490.D	02/12/07	18:42	01:03	Initial cal 200
VF2276-IC2276	F0078491.D	02/12/07	19:14	01:35	Initial cal 400
VF2276-ICC2276	F0078492.D	02/12/07	19:46	02:07	Initial cal 1000
VF2276-IC2276	F0078493.D	02/12/07	20:18	02:39	Initial cal 2000
VF2276-IC2276	F0078494.D	02/12/07	20:49	03:10	Initial cal 4000
VF2276-IC2276	F0078495.D	02/12/07	21:21	03:42	Initial cal 10000

Instrument Performance Check (BFB)

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-BFB	Injection Date: 02/28/07
Lab File ID: F0078963.D	Injection Time: 14:36
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7281	16.0	Pass
75	30.0 - 60.0% of mass 95	18364	40.3	Pass
95	Base peak, 100% relative abundance	45541	100.0	Pass
96	5.0 - 9.0% of mass 95	2793	6.1	Pass
173	Less than 2.0% of mass 174	107	0.23 (0.27) ^a	Pass
174	50.0 - 100.0% of mass 95	39123	85.9	Pass
175	5.0 - 9.0% of mass 174	3023	6.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	37355	82.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2802	6.2 (7.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2305-IC2305	F0078964.D	02/28/07	15:10	00:34	Initial cal 2
VF2305-IC2305	F0078965.D	02/28/07	15:41	01:05	Initial cal 5
VF2305-IC2305	F0078966.D	02/28/07	16:12	01:36	Initial cal 20
VF2305-ICC2305	F0078967.D	02/28/07	16:44	02:08	Initial cal 40
VF2305-IC2305	F0078968.D	02/28/07	17:16	02:40	Initial cal 70
VF2305-IC2305	F0078969.D	02/28/07	17:46	03:10	Initial cal 100
VF2305-IC2305	F0078970.D	02/28/07	18:18	03:42	Initial cal 200
VF2305-BS	F0078972.D	02/28/07	19:21	04:45	Blank Spike
VF2305-MB	F0078974.D	02/28/07	20:24	05:48	Method Blank
ZZZZZZ	F0078975.D	02/28/07	20:55	06:19	(unrelated sample)
ZZZZZZ	F0078976.D	02/28/07	21:26	06:50	(unrelated sample)
ZZZZZZ	F0078977.D	02/28/07	21:58	07:22	(unrelated sample)
T16395-2	F0078978.D	02/28/07	22:30	07:54	(used for QC only; not part of job T16411)
T16395-2MS	F0078979.D	02/28/07	23:00	08:24	Matrix Spike
T16395-2MSD	F0078980.D	02/28/07	23:32	08:56	Matrix Spike Duplicate
ZZZZZZ	F0078981.D	03/01/07	00:03	09:27	(unrelated sample)
T16411-1	F0078982.D	03/01/07	00:35	09:59	LHSMW22-FEB2007
T16411-2	F0078983.D	03/01/07	01:06	10:30	17WW01-FEB2007
T16411-3	F0078984.D	03/01/07	01:38	11:02	17WW01-FEB2007-FD
ZZZZZZ	F0078989.D	03/01/07	04:15	13:39	(unrelated sample)
ZZZZZZ	F0078990.D	03/01/07	04:47	14:11	(unrelated sample)
ZZZZZZ	F0078991.D	03/01/07	05:19	14:43	(unrelated sample)
ZZZZZZ	F0078992.D	03/01/07	05:50	15:14	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-BFB
Lab File ID: F0078994.D
Instrument ID: GCMSF
Injection Date: 03/01/07
Injection Time: 07:50

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6679	18.1	Pass
75	30.0 - 60.0% of mass 95	15417	41.8	Pass
95	Base peak, 100% relative abundance	36917	100.0	Pass
96	5.0 - 9.0% of mass 95	2620	7.1	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	32187	87.2	Pass
175	5.0 - 9.0% of mass 174	2345	6.4 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	31168	84.4 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2163	5.9 (6.9) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2306-CC2305	F0078995.D	03/01/07	08:23	00:33	Continuing cal 20
VF2306-CC2276	F0078996.D	03/01/07	08:55	01:05	Continuing cal 1000
VF2306-BS1	F0078997.D	03/01/07	09:31	01:41	Blank Spike
VF2306-BS2	F0078998.D	03/01/07	10:02	02:12	Blank Spike
VF2306-MB	F0078999.D	03/01/07	10:34	02:44	Method Blank
ZZZZZZ	F0079000.D	03/01/07	11:06	03:16	(unrelated sample)
T16411-4	F0079001.D	03/01/07	11:37	03:47	LHSMW19-FEB2007
T16411-5	F0079002.D	03/01/07	12:09	04:19	46WW02-FEB2007
ZZZZZZ	F0079003.D	03/01/07	12:41	04:51	(unrelated sample)
ZZZZZZ	F0079004.D	03/01/07	13:12	05:22	(unrelated sample)
ZZZZZZ	F0079005.D	03/01/07	13:44	05:54	(unrelated sample)
T16411-6	F0079006.D	03/01/07	14:16	06:26	47WW14-FEB2007
T16411-6	F0079007.D	03/01/07	14:47	06:57	47WW14-FEB2007
T16411-2	F0079008.D	03/01/07	15:18	07:28	17WW01-FEB2007
T16411-3	F0079009.D	03/01/07	15:50	08:00	17WW01-FEB2007-FD
ZZZZZZ	F0079010.D	03/01/07	16:22	08:32	(unrelated sample)
ZZZZZZ	F0079011.D	03/01/07	16:54	09:04	(unrelated sample)
ZZZZZZ	F0079012.D	03/01/07	17:26	09:36	(unrelated sample)
ZZZZZZ	F0079013.D	03/01/07	17:57	10:07	(unrelated sample)
T16411-10	F0079014.D	03/01/07	18:28	10:38	LHSMW18-FEB2007
T16411-10MS	F0079015.D	03/01/07	19:01	11:11	Matrix Spike
T16411-10MSD	F0079016.D	03/01/07	19:33	11:43	Matrix Spike Duplicate
ZZZZZZ	F0079020.D	03/01/07	21:39	13:49	(unrelated sample)
ZZZZZZ	F0079021.D	03/01/07	22:12	14:22	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2307-BFB	Injection Date: 03/01/07
Lab File ID: F0079023.D	Injection Time: 23:15
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6479	18.5	Pass
75	30.0 - 60.0% of mass 95	14099	40.3	Pass
95	Base peak, 100% relative abundance	34960	100.0	Pass
96	5.0 - 9.0% of mass 95	2866	8.2	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	29845	85.4	Pass
175	5.0 - 9.0% of mass 174	1962	5.6 (6.6) ^a	Pass
176	95.0 - 101.0% of mass 174	28971	82.9 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	1954	5.6 (6.7) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2307-CC2305	F0079024.D	03/01/07	23:47	00:32	Continuing cal 20
VF2307-BS	F0079025.D	03/02/07	00:19	01:04	Blank Spike
VF2307-MB	F0079026.D	03/02/07	00:51	01:36	Method Blank
ZZZZZZ	F0079027.D	03/02/07	01:23	02:08	(unrelated sample)
ZZZZZZ	F0079028.D	03/02/07	01:54	02:39	(unrelated sample)
ZZZZZZ	F0079029.D	03/02/07	02:26	03:11	(unrelated sample)
ZZZZZZ	F0079030.D	03/02/07	02:57	03:42	(unrelated sample)
T16431-22	F0079031.D	03/02/07	03:29	04:14	(used for QC only; not part of job T16411)
T16431-22MS	F0079032.D	03/02/07	04:00	04:45	Matrix Spike
T16431-22MSD	F0079033.D	03/02/07	07:41	08:26	Matrix Spike Duplicate
T16411-8	F0079035.D	03/02/07	08:46	09:31	47WW13-FEB2007

Instrument Performance Check (BFB)

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2309-BFB	Injection Date: 03/03/07
Lab File ID: F0079054.D	Injection Time: 08:32
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7788	16.9	Pass
75	30.0 - 60.0% of mass 95	18301	39.8	Pass
95	Base peak, 100% relative abundance	45997	100.0	Pass
96	5.0 - 9.0% of mass 95	3005	6.5	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	38365	83.4	Pass
175	5.0 - 9.0% of mass 174	2849	6.2 (7.4) ^a	Pass
176	95.0 - 101.0% of mass 174	37640	81.8 (98.1) ^a	Pass
177	5.0 - 9.0% of mass 176	2468	5.4 (6.6) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2309-CC2305	F0079055.D	03/03/07	09:18	00:46	Continuing cal 40
VF2309-BS	F0079056.D	03/03/07	10:03	01:31	Blank Spike
VF2309-MB	F0079058.D	03/03/07	11:19	02:47	Method Blank
T16411-11	F0079059.D	03/03/07	11:50	03:18	TRIP BLANK
T16411-7	F0079060.D	03/03/07	12:22	03:50	47WW14-FEB2007-FD
T16411-7	F0079061.D	03/03/07	12:53	04:21	47WW14-FEB2007-FD
T16411-9	F0079063.D	03/03/07	13:57	05:25	LHSMW04-FEB2007
ZZZZZZ	F0079064.D	03/03/07	14:29	05:57	(unrelated sample)
ZZZZZZ	F0079065.D	03/03/07	15:01	06:29	(unrelated sample)
ZZZZZZ	F0079066.D	03/03/07	15:32	07:00	(unrelated sample)
ZZZZZZ	F0079067.D	03/03/07	16:04	07:32	(unrelated sample)
ZZZZZZ	F0079069.D	03/03/07	17:08	08:36	(unrelated sample)
T16440-7	F0079070.D	03/03/07	17:39	09:07	(used for QC only; not part of job T16411)
T16440-7MS	F0079071.D	03/03/07	18:10	09:38	Matrix Spike
T16440-7MSD	F0079072.D	03/03/07	18:42	10:10	Matrix Spike Duplicate
ZZZZZZ	F0079073.D	03/03/07	19:14	10:42	(unrelated sample)
ZZZZZZ	F0079074.D	03/03/07	19:46	11:14	(unrelated sample)
ZZZZZZ	F0079075.D	03/03/07	20:18	11:46	(unrelated sample)

Instrument Performance Check (BFB)

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2311-BFB	Injection Date: 03/05/07
Lab File ID: F0079089.D	Injection Time: 12:14
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	8160	15.5	Pass
75	30.0 - 60.0% of mass 95	19856	37.7	Pass
95	Base peak, 100% relative abundance	52613	100.0	Pass
96	5.0 - 9.0% of mass 95	3596	6.8	Pass
173	Less than 2.0% of mass 174	204	0.39 (0.45) ^a	Pass
174	50.0 - 100.0% of mass 95	45728	86.9	Pass
175	5.0 - 9.0% of mass 174	2949	5.6 (6.4) ^a	Pass
176	95.0 - 101.0% of mass 174	43893	83.4 (96.0) ^a	Pass
177	5.0 - 9.0% of mass 176	2888	5.5 (6.6) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2311-CC2305	F0079091.D	03/05/07	13:28	01:14	Continuing cal 40
VF2311-BS	F0079092.D	03/05/07	14:00	01:46	Blank Spike
VF2311-MB	F0079093.D	03/05/07	14:31	02:17	Method Blank
ZZZZZZ	F0079094.D	03/05/07	15:16	03:02	(unrelated sample)
T16440-12	F0079095.D	03/05/07	15:47	03:33	(used for QC only; not part of job T16411)
T16440-12MS	F0079096.D	03/05/07	16:18	04:04	Matrix Spike
T16440-12MSD	F0079097.D	03/05/07	16:48	04:34	Matrix Spike Duplicate
ZZZZZZ	F0079098.D	03/05/07	17:19	05:05	(unrelated sample)
ZZZZZZ	F0079099.D	03/05/07	17:51	05:37	(unrelated sample)
ZZZZZZ	F0079100.D	03/05/07	18:22	06:08	(unrelated sample)
ZZZZZZ	F0079104.D	03/05/07	20:27	08:13	(unrelated sample)
ZZZZZZ	F0079105.D	03/05/07	20:59	08:45	(unrelated sample)
ZZZZZZ	F0079106.D	03/05/07	21:30	09:16	(unrelated sample)
ZZZZZZ	F0079107.D	03/05/07	22:01	09:47	(unrelated sample)
ZZZZZZ	F0079108.D	03/05/07	22:32	10:18	(unrelated sample)
T16411-8	F0079109.D	03/05/07	23:03	10:49	47WW13-FEB2007
ZZZZZZ	F0079110.D	03/05/07	23:35	11:21	(unrelated sample)
ZZZZZZ	F0079111.D	03/06/07	00:06	11:52	(unrelated sample)

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2305-ICC2305	Injection Date: 02/28/07
Lab File ID: F0078967.D	Injection Time: 16:44
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	813923	11.95	609604	16.02	248865	19.30
Upper Limit ^a	1627846	12.45	1219208	16.52	497730	19.80
Lower Limit ^b	406962	11.45	304802	15.52	124433	18.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2305-BS	933349	11.95	693096	16.03	262848	19.30
VF2305-MB	854827	11.95	606091	16.03	192974	19.31
ZZZZZZ	838395	11.96	594327	16.03	175579	19.31
ZZZZZZ	800333	11.95	570162	16.03	179344	19.31
ZZZZZZ	787212	11.95	565898	16.03	182794	19.30
T16395-2	744997	11.95	527050	16.03	160154	19.30
T16395-2MS	776605	11.96	577525	16.04	224433	19.31
T16395-2MSD	784273	11.95	577802	16.03	226133	19.30
ZZZZZZ	804224	11.96	558124	16.03	150968	19.31
T16411-1	737116	11.96	512441	16.04	137912	19.31
T16411-2	744233	11.95	534298	16.03	142004	19.32
T16411-3	741736	11.95	529029	16.04	136149	19.31
ZZZZZZ	712319	11.96	491313	16.04	123437*	19.31
ZZZZZZ	669573	11.96	465362	16.04	116108*	19.32
ZZZZZZ	694687	11.96	481226	16.03	122927*	19.31
ZZZZZZ	687951	11.95	478773	16.04	125041	19.31

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2306-CC2305	Injection Date: 03/01/07
Lab File ID: F0078995.D	Injection Time: 08:23
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	699201	11.94	525986	16.02	192418	19.30
Upper Limit ^a	1398402	12.44	1051972	16.52	384836	19.80
Lower Limit ^b	349601	11.44	262993	15.52	96209	18.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2306-BS1	777387	11.94	579705	16.01	219016	19.30
VF2306-BS2	816000	11.93	591535	16.01	206818	19.28
VF2306-MB	806821	11.93	553209	16.02	163421	19.28
ZZZZZZ	782363	11.93	537014	16.01	147308	19.28
T16411-4	758389	11.93	519002	16.01	140295	19.27
T16411-5	730503	11.92	505963	16.01	133214	19.28
ZZZZZZ	713902	11.93	493376	16.00	130066	19.28
ZZZZZZ	709648	11.93	489247	16.02	126540	19.28
ZZZZZZ	697001	11.93	477711	16.00	126547	19.28
T16411-6	693179	11.93	488543	16.01	121877	19.29
T16411-6	684656	11.93	471501	16.01	114404	19.28
T16411-2	670434	11.93	467470	16.00	117612	19.28
T16411-3	610736	11.91	425298	16.00	114844	19.26
ZZZZZZ	638047	11.92	449783	15.99	118479	19.26
ZZZZZZ	598577	11.91	425000	16.00	114851	19.27
ZZZZZZ	618266	11.91	428138	16.00	108080	19.26
ZZZZZZ	597863	11.91	425430	15.99	116121	19.25
T16411-10	617663	11.91	436613	15.99	122528	19.25
T16411-10MS	620696	11.90	469833	15.98	178265	19.24
T16411-10MSD	655046	11.90	491723	15.97	183495	19.25
ZZZZZZ	625983	11.89	448435	15.97	117429	19.24
ZZZZZZ	617306	11.89	441010	15.97	117597	19.24

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

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Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2307-CC2305	Injection Date: 03/01/07
Lab File ID: F0079024.D	Injection Time: 23:47
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	653774	11.90	495815	15.97	181399	19.25
Upper Limit ^a	1307548	12.40	991630	16.47	362798	19.75
Lower Limit ^b	326887	11.40	247908	15.47	90700	18.75

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT
VF2307-BS	690510	11.91	521367	15.98	194408	19.25
VF2307-MB	694833	11.90	485269	15.98	127001	19.25
ZZZZZZ	677005	11.90	476761	15.98	127977	19.25
ZZZZZZ	654215	11.90	460526	15.97	120232	19.25
ZZZZZZ	642432	11.90	448048	15.98	115949	19.25
ZZZZZZ	664112	11.90	457185	15.98	118763	19.24
T16431-22	660969	11.90	462517	15.98	117947	19.25
T16431-22MS	668468	11.90	497979	15.98	171406	19.25
T16431-22MSD	796527	11.90	575274	15.98	184297	19.25
T16411-8	751685	11.89	528008	15.96	123192	19.23

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2309-CC2305	Injection Date: 03/03/07
Lab File ID: F0079055.D	Injection Time: 09:18
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	856065	11.86	647343	15.95	243630	19.21
Upper Limit ^a	1712130	12.36	1294686	16.45	487260	19.71
Lower Limit ^b	428033	11.36	323672	15.45	121815	18.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2309-BS	850094	11.87	644670	15.95	227453	19.22
VF2309-MB	789590	11.86	562372	15.94	142145	19.20
T16411-11	820057	11.87	579683	15.94	137048	19.21
T16411-7	767835	11.86	555857	15.94	136452	19.20
T16411-7	757674	11.87	529581	15.95	121676*	19.21
T16411-9	733284	11.87	511411	15.94	113906*	19.21
ZZZZZZ	777911	11.87	544746	15.95	119440*	19.21
ZZZZZZ	752118	11.87	536590	15.95	121221*	19.21
ZZZZZZ	738953	11.87	510669	15.95	108449*	19.21
ZZZZZZ	751492	11.86	525891	15.95	110744*	19.21
ZZZZZZ	737938	11.87	505327	15.94	102412*	19.20
T16440-7	724119	11.86	498319	15.95	103801*	19.20
T16440-7MS	747145	11.86	556580	15.93	179743	19.20
T16440-7MSD	739001	11.86	549609	15.93	179404	19.19
ZZZZZZ	741787	11.86	522075	15.93	116359*	19.20
ZZZZZZ	748904	11.85	530486	15.92	119956*	19.18
ZZZZZZ	741037	11.85	511621	15.92	104181*	19.19

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2311-CC2305	Injection Date: 03/05/07
Lab File ID: F0079091.D	Injection Time: 13:28
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	883433	11.84	684892	15.91	274132	19.18
Upper Limit ^a	1766866	12.34	1369784	16.41	548264	19.68
Lower Limit ^b	441717	11.34	342446	15.41	137066	18.68

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2311-BS	922896	11.85	704898	15.92	266538	19.18
VF2311-MB	908467	11.85	659603	15.92	188680	19.19
ZZZZZZ	880440	11.84	650126	15.91	201227	19.18
T16440-12	816522	11.86	600592	15.93	179209	19.19
T16440-12MS	836970	11.85	650900	15.93	253396	19.18
T16440-12MSD	875382	11.85	676070	15.93	260377	19.18
ZZZZZZ	874022	11.85	643153	15.93	195970	19.18
ZZZZZZ	836383	11.85	615621	15.93	185917	19.18
ZZZZZZ	827669	11.85	609833	15.92	179587	19.18
ZZZZZZ	772734	11.85	573293	15.92	174293	19.18
ZZZZZZ	758882	11.85	559207	15.92	170192	19.19
ZZZZZZ	766389	11.84	555443	15.92	167777	19.18
ZZZZZZ	775040	11.86	570653	15.93	170057	19.19
ZZZZZZ	766991	11.85	579545	15.92	178449	19.18
T16411-8	756328	11.85	557341	15.92	174801	19.18
ZZZZZZ	735049	11.84	537155	15.92	167476	19.18
ZZZZZZ	711087	11.84	519531	15.92	156748	19.19

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 2

Job Number: T16411**Account:** ITTXHO Shaw E & I, Inc.**Project:** Longhorn Army Ammunition Plant**Method:** SW846 8260B**Matrix:** AQ**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3	S4
T16411-1	F0078982.D	104.0	99.0	112.0	130.0
T16411-2	F0079008.D	101.0	95.0	108.0	131.0
T16411-2	F0078983.D	105.0	100.0	109.0	132.0
T16411-3	F0079009.D	107.0	101.0	112.0	125.0
T16411-3	F0078984.D	104.0	96.0	109.0	134.0
T16411-4	F0079001.D	101.0	94.0	110.0	127.0
T16411-5	F0079002.D	100.0	92.0	108.0	126.0
T16411-6	F0079007.D	101.0	95.0	109.0	132.0
T16411-6	F0079006.D	102.0	94.0	106.0	129.0
T16411-7	F0079061.D	107.0	88.0	114.0	138.0
T16411-7	F0079060.D	105.0	90.0	108.0	128.0
T16411-8	F0079109.D	104.0	102.0	105.0	112.0
T16411-8	F0079035.D	99.0	85.0	107.0	136.0
T16411-9	F0079063.D	108.0	91.0	116.0	145.0
T16411-10	F0079014.D	102.0	97.0	107.0	119.0
T16411-11	F0079059.D	104.0	89.0	110.0	134.0
T16395-2MS	F0078979.D	99.0	98.0	103.0	100.0
T16395-2MSD	F0078980.D	104.0	97.0	107.0	100.0
T16411-10MS	F0079015.D	104.0	99.0	105.0	100.0
T16411-10MSD	F0079016.D	104.0	97.0	103.0	101.0
T16431-22MS	F0079032.D	104.0	99.0	106.0	110.0
T16431-22MSD	F0079033.D	98.0	89.0	106.0	113.0
T16440-12MS	F0079096.D	110.0	106.0	105.0	100.0
T16440-12MSD	F0079097.D	106.0	105.0	103.0	100.0
T16440-7MS	F0079071.D	103.0	85.0	107.0	109.0
T16440-7MSD	F0079072.D	101.0	84.0	106.0	106.0
VF2305-BS	F0078972.D	99.0	94.0	102.0	102.0
VF2305-MB	F0078974.D	100.0	93.0	106.0	113.0
VF2306-BS2	F0078998.D	98.0	93.0	103.0	106.0
VF2306-MB	F0078999.D	101.0	94.0	110.0	119.0
VF2307-BS	F0079025.D	103.0	97.0	102.0	99.0
VF2307-MB	F0079026.D	101.0	96.0	107.0	129.0
VF2309-BS	F0079056.D	105.0	92.0	106.0	106.0
VF2309-MB	F0079058.D	105.0	88.0	109.0	126.0
VF2311-BS	F0079092.D	106.0	105.0	105.0	104.0
VF2311-MB	F0079093.D	104.0	98.0	107.0	120.0

**Surrogate
Compounds****Recovery
Limits**

Volatile Surrogate Recovery Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Method: SW846 8260B	Matrix: AQ

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	73-139%
S2 = 1,2-Dichloroethane-D4	66-139%
S3 = Toluene-D8	77-148%
S4 = 4-Bromofluorobenzene	84-150%

5.6
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Initial Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-ICC2276
Lab FileID: F0078492.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2276GW.M (RTE Integrator)
Title : SW846 8260B and EPA 624
Last Update : Tue Feb 13 07:54:50 2007
Response via : Initial Calibration

Calibration Files

200 =F0078490.D 400 =F0078491.D 1000 =F0078492.D
 2000 =F0078493.D 4000 =F0078494.D 9000 =F0078495.D

	Compound	200	400	1000	2000	4000	9000	Avg	%RSD
1) I	Fluorobenzene	-----ISTD-----							
2) S	Dibromofluoromethan	0.287	0.281	0.280	0.278	0.270	0.256	0.275	4.06
3) S	1,2-Dichloroethane-	0.212	0.207	0.211	0.211	0.212	0.209	0.210	0.87
4) I	Chlorobenzene-d5	-----ISTD-----							
5) S	Toluene-d8	1.047	1.037	1.041	1.022	1.035	1.039	1.037	0.83
6) I	1,4-Dichlorobenzene-d	-----ISTD-----							
7) S	4-Bromofluorobenzen	0.808	0.807	0.790	0.802	0.804	0.865	0.813	3.25
8) I	1,4-Dichlorobenzene-d	-----ISTD-----							
9) H	TPH-GRO (C6-C10)	1.214	0.770	0.582	0.475	0.429	0.392	0.644	E1 48.27
----- Linear regression -----		Coefficient = 0.9997							
Response Ratio = 37.35716 + 3.74928 *A									

 (#) = Out of Range

VF2276GW.M

Tue Feb 13 09:27:02 2007

Initial Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Initial Calibration

Calibration Files

1 =F0078964.D 2 =F0078965.D 3 =F0078966.D
 4 =F0078967.D 5 =F0078968.D 6 =F0078969.D 7 =F0078970.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.157	0.162	0.153	0.171	0.181	0.178	0.196	0.171	8.89
3)P Chloromethane	0.353	0.368	0.326	0.309	0.319	0.297	0.331	0.329	7.50
4)C Vinyl Chloride	0.279	0.316	0.268	0.280	0.287	0.269	0.300	0.286	6.01
5) Bromomethane	0.275	0.253	0.223	0.215	0.216	0.204	0.190	0.225	12.95
6) Chloroethane	0.203	0.232	0.219	0.222	0.222	0.210	0.211	0.217	4.37
7) Trichlorofluorome	0.137	0.154	0.142	0.159	0.166	0.162	0.164	0.155	7.23
8) Acrolein	0.030	0.030	0.031	0.036	0.036	0.033	0.033	0.033	8.00
9)C 1,1-Dichloroethen	0.287	0.299	0.298	0.320	0.322	0.306	0.312	0.306	4.04
10) Freon 113	0.174	0.190	0.191	0.225	0.225	0.213	0.216	0.205	9.65
11) Acetone	0.065	0.062	0.057	0.052	0.053	0.053	0.052	0.056	9.61
12) Iodomethane	0.405	0.432	0.438	0.436	0.447	0.434	0.445	0.434	3.22
13) Methyl acetate	0.199	0.203	0.197	0.179	0.188	0.186	0.185	0.191	4.56
14) Carbon Disulfide	0.833	0.878	0.869	0.908	0.930	0.885	0.918	0.889	3.74
15) Methylene Chlorid	0.410	0.424	0.407	0.404	0.396	0.378	0.376	0.399	4.34
16) Tert Butyl Alchoh	0.015	0.018	0.018	0.015	0.017	0.018	0.018	0.017	8.14
17) trans-1,2-Dichlor	0.328	0.340	0.340	0.344	0.351	0.337	0.344	0.341	2.11
18) Acrylonitrile	0.086	0.099	0.097	0.091	0.097	0.098	0.097	0.095	4.82
19) Methyl Tert Butyl	0.577	0.603	0.572	0.555	0.578	0.587	0.594	0.581	2.70
20) Hexane	0.300	0.281	0.283	0.341	0.346	0.320	0.315	0.312	8.32
21)P 1,1-Dichloroethan	0.428	0.457	0.436	0.445	0.450	0.430	0.435	0.440	2.44
22) Vinyl acetate	0.513	0.554	0.582	0.564	0.569	0.552	0.517	0.550	4.74
23) Di-isopropyl ethe	0.944	1.012	0.992	0.981	0.988	0.943	0.934	0.971	3.09
24) Ethyl tert-butyl	0.721	0.735	0.733	0.737	0.753	0.739	0.749	0.738	1.43
25) 2,2-Dichloropropa	0.208	0.200	0.197	0.210	0.209	0.202	0.195	0.203	2.91
26) cis-1,2-Dichloroe	0.282	0.305	0.302	0.308	0.307	0.302	0.307	0.302	3.03
27) 2-Butanone	0.113	0.118	0.120	0.105	0.111	0.112	0.109	0.113	4.48
28) Bromochloromethan	0.124	0.142	0.145	0.146	0.147	0.149	0.150	0.143	6.13
29)C Chloroform	0.343	0.363	0.358	0.362	0.364	0.353	0.362	0.358	2.09
30) Tetrahydrofuran	0.048	0.035	0.033	0.030	0.031	0.031	0.029	0.034	19.44
----- Linear regression ----- Coefficient = 0.9988									
Response Ratio = 0.00148 + 0.02898 *A									
31) 1,1,1-Trichloroet	0.196	0.201	0.204	0.213	0.218	0.210	0.215	0.208	3.79
32)S Dibromofluorometh	0.211	0.221	0.210	0.217	0.221	0.221	0.226	0.218	2.61
33) Cyclohexane	0.390	0.405	0.413	0.479	0.485	0.453	0.447	0.439	8.43
34) 1,1-Dichloropropo	0.283	0.279	0.292	0.313	0.321	0.312	0.316	0.302	5.61
35) Carbon Tetrachlor	0.142	0.161	0.164	0.176	0.181	0.177	0.183	0.169	8.57
36)S 1,2-Dichloroethan	0.159	0.173	0.166	0.161	0.165	0.162	0.166	0.165	2.76
37) Benzene	1.089	1.108	1.092	1.113	1.134	1.098	1.119	1.108	1.43
38) 1,2-Dichloroethan	0.181	0.193	0.200	0.205	0.200	0.204	0.201	0.198	4.13
39) tert-amyl methyl	0.712	0.774	0.759	0.736	0.767	0.769	0.782	0.757	3.26
40) Trichloroethene	0.212	0.223	0.218	0.229	0.233	0.229	0.236	0.226	3.78
41) Methylcyclohexane	0.318	0.332	0.335	0.391	0.401	0.384	0.388	0.364	9.38
42)C 1,2-Dichloropropa	0.320	0.304	0.310	0.316	0.320	0.310	0.318	0.314	1.90
43) Dibromomethane	0.129	0.147	0.169	0.160	0.166	0.165	0.170	0.158	9.61

Initial Calibration Summary

Job Number: T16411
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	17.15
	----- Linear regression -----	Coefficient = 0.9989								
	Response Ratio =	-0.00341 + 0.00271 *A								
45)	Bromodichlorometh	0.287	0.300	0.298	0.307	0.311	0.306	0.317	0.304	3.19
46)	2-Nitropropane	0.046	0.042	0.041	0.037	0.038	0.039	0.038	0.040	7.95
47)	2-Chloroethyl vin	0.094	0.104	0.122	0.125	0.136	0.143	0.152	0.125	16.72
	----- Linear regression -----	Coefficient = 0.9983								
	Response Ratio =	-0.06248 + 0.15260 *A								
48)	4-Methyl-2-pentan	0.229	0.239	0.249	0.234	0.246	0.246	0.237	0.240	3.06
49)	cis-1,3-Dichlorop	0.369	0.397	0.420	0.427	0.443	0.439	0.454	0.421	6.95
50)	I Chlorobenzene-d5	-----ISTD-----								
51)	S Toluene-d8	1.147	1.122	1.060	1.073	1.083	1.079	1.120	1.098	2.89
52)	C Toluene	1.382	1.408	1.358	1.387	1.384	1.367	1.417	1.386	1.51
53)	trans-1,3-Dichlor	0.340	0.364	0.391	0.402	0.406	0.409	0.428	0.391	7.65
54)	1,1,2-Trichloroet	0.263	0.295	0.289	0.279	0.283	0.284	0.289	0.283	3.62
55)	Tetrachloroethene	0.272	0.280	0.293	0.302	0.309	0.299	0.307	0.294	4.70
56)	2-hexanone	0.170	0.180	0.203	0.194	0.206	0.211	0.208	0.196	8.04
57)	1,3-Dichloropropa	0.605	0.605	0.602	0.593	0.592	0.591	0.602	0.599	1.05
58)	Dibromochlorometh	0.254	0.312	0.303	0.296	0.299	0.304	0.315	0.298	6.92
59)	1,2-Dibromoethane	0.283	0.310	0.305	0.302	0.314	0.320	0.331	0.309	4.87
60)	1-Chlorohexane	0.464	0.467	0.465	0.505	0.517	0.509	0.535	0.495	5.83
61)	P Chlorobenzene	0.877	0.857	0.851	0.870	0.877	0.867	0.897	0.871	1.73
62)	1,1,1,2-Tetrachlo	0.264	0.284	0.283	0.282	0.281	0.279	0.288	0.280	2.74
63)	C Ethylbenzene	1.475	1.458	1.433	1.493	1.499	1.470	1.518	1.478	1.90
64)	m,p-Xylene	0.970	0.990	1.008	1.040	1.057	1.039	1.067	1.025	3.51
65)	o-Xylene	1.021	1.033	1.058	1.084	1.107	1.077	1.111	1.070	3.23
66)	Styrene	0.796	0.855	0.910	0.960	0.983	0.978	1.013	0.928	8.44
67)	P Bromoform	0.142	0.077	0.184	0.179	0.195	0.199	0.205	0.169	26.85
	----- Linear regression -----	Coefficient = 0.9995								
	Response Ratio =	-0.01246 + 0.20679 *A								
68)	I 1,4-Dichlorobenze	-----ISTD-----								
69)	Isopropylbenzene	3.394	3.422	2.803	2.838	2.780	2.731	2.618	2.941	11.11
70)	Cyclohexanone	0.023	0.030	0.027	0.025	0.026	0.029	0.027	0.027	8.23
71)	S 4-Bromofluorobenz	1.169	1.004	0.864	0.853	0.853	0.860	0.845	0.921	13.32
72)	Bromobenzene	0.997	0.963	0.842	0.837	0.823	0.822	0.788	0.867	9.15
73)	P 1,1,2,2-Tetrachlo	1.339	1.320	1.146	1.011	1.011	1.030	0.983	1.120	13.59
74)	Trans-1,4-Dichlor	0.143	0.182	0.177	0.182	0.188	0.192	0.192	0.179	9.42
75)	1,2,3-Trichloropr	0.257	0.296	0.253	0.232	0.230	0.236	0.225	0.247	10.10
76)	n-Propylbenzene	4.567	4.426	4.010	4.105	4.023	3.954	3.865	4.136	6.29
77)	2-Chlorotoluene	3.164	2.888	2.531	2.500	2.416	2.351	2.285	2.591	12.31
78)	4-Chlorotoluene	2.569	2.376	2.183	2.187	2.133	2.116	2.076	2.234	7.90
79)	1,3,5-Trimethylbe	2.668	2.535	2.320	2.351	2.287	2.250	2.168	2.368	7.33
80)	sec-Butylbenzene	3.329	3.252	3.038	3.232	3.150	3.042	2.937	3.140	4.47
81)	1,3-Dichlorobenze	1.316	1.426	1.364	1.413	1.441	1.419	1.422	1.400	3.16
82)	4-Isopropyltoluen	2.408	2.304	2.224	2.403	2.346	2.277	2.220	2.312	3.37
83)	1,4-Dichlorobenze	1.528	1.430	1.389	1.429	1.420	1.423	1.424	1.435	3.04
84)	tert-Butylbenzene	0.533	0.438	0.430	0.445	0.436	0.429	0.410	0.446	8.90
85)	n-Butylbenzene	1.465	1.572	1.892	2.173	2.149	2.132	2.214	1.942	15.91
	----- Linear regression -----	Coefficient = 0.9997								
	Response Ratio =	-0.08322 + 2.22219 *A								
86)	1,2-Dichlorobenze	1.206	1.332	1.314	1.336	1.345	1.359	1.369	1.323	4.14
87)	1,2,4-Trimethylbe	2.566	2.449	2.311	2.410	2.354	2.310	2.242	2.377	4.53
88)	1,2-Dibromo-3-Chl	0.068	0.106	0.082	0.072	0.077	0.089	0.088	0.083	15.22
	----- Linear regression -----	Coefficient = 0.9968								

Initial Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Ratio = -0.00467 + 0.08863 *A										
89)	1,2,4-Trichlorobe	0.166	0.135	0.302	0.403	0.468	0.530	0.585	0.370	47.33
----- Linear regression -----		Coefficient = 0.9944								
		Response Ratio = -0.09820 + 0.59565 *A								
90)	Hexachlorobutadie	0.058	0.088	0.170	0.207	0.204	0.208	0.202	0.162	38.83
----- Linear regression -----		Coefficient = 0.9993								
		Response Ratio = -0.00579 + 0.20548 *A								
91)	Naphthalene	0.526	0.280	0.475	0.606	0.781	0.975	1.125	0.681	43.48
----- Quadratic regression -----		Coefficient = 0.9974								
		Response Ratio = -0.07686 + 0.74236 *A + 0.10172 *A^2								
92)	1,2,3-Trichlorobe	0.167	0.113	0.217	0.276	0.334	0.389	0.421	0.274	41.95
----- Linear regression -----		Coefficient = 0.9938								
		Response Ratio = -0.07169 + 0.43007 *A								

(#) = Out of Range

VF2305C.M Thu Mar 01 07:44:03 2007

5.7
5

Continuing Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
Lab FileID: F0078995.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078995.D Vial: 3
 Acq On : 1 Mar 2007 8:23 am Operator: lydiaj
 Sample : cc2305-20 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	88	-0.01
2	Dichlorodifluoromethane	0.171	0.152	11.1	88	0.00
3 P	Chloromethane	0.329	0.325	1.2	88	0.00
4 C	Vinyl Chloride	0.286	0.274	4.2	90	-0.01
5	Bromomethane	0.225	0.219	2.7	86	-0.01
6	Chloroethane	0.217	0.214	1.4	86	0.00
7	Trichlorofluoromethane	0.155	0.152	1.9	94	0.00
8	Acrolein	0.033	0.032	3.0	92	-0.01
9 C	1,1-Dichloroethene	0.306	0.283	7.5	83	0.00
10	Freon 113	0.205	0.189	7.8	87	0.00
11	Acetone	0.056	0.048	14.3	74	0.00
12	Iodomethane	0.434	0.403	7.1	81	0.00
13	Methyl acetate	0.191	0.170	11.0	76	0.00
14	Carbon Disulfide	0.889	0.799	10.1	81	0.00
15	Methylene Chloride	0.399	0.393	1.5	85	0.00
16	Tert Butyl Alcohol	0.017	0.014	17.6	67	-0.01
17	trans-1,2-Dichloroethene	0.341	0.314	7.9	81	-0.01
18	Acrylonitrile	0.095	0.081	14.7	73	0.00
19	Methyl Tert Butyl Ether	0.581	0.533	8.3	82	0.00
20	Hexane	0.312	0.302	3.2	94	-0.01
21 P	1,1-Dichloroethane	0.440	0.438	0.5	88	0.00
22	Vinyl acetate	0.550	0.534	2.9	81	0.00
23	Di-isopropyl ether	0.971	0.992	-2.2	88	0.00
24	Ethyl tert-butyl ether	0.738	0.716	3.0	86	0.00
25	2,2-Dichloropropane	0.203	0.207	-2.0	92	0.00
26	cis-1,2-Dichloroethene	0.302	0.289	4.3	84	-0.01
27	2-Butanone	0.113	0.098	13.3	72	-0.01
28	Bromochloromethane	0.143	0.139	2.8	84	0.00
29 C	Chloroform	0.358	0.357	0.3	88	-0.01
30	Tetrahydrofuran	0.034	0.031	8.8	84	0.00
31	1,1,1-Trichloroethane	0.208	0.200	3.8	86	0.00
32 S	Dibromofluoromethane	0.218	0.214	1.8	90	0.00
33	Cyclohexane	0.439	0.415	5.5	88	0.00
34	1,1-Dichloropropene	0.302	0.283	6.3	85	-0.01
35	Carbon Tetrachloride	0.169	0.164	3.0	88	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.162	1.8	86	-0.01
37	Benzene	1.108	1.070	3.4	86	0.00
38	1,2-Dichloroethane	0.198	0.207	-4.5	91	0.00
39	tert-amyl methyl ether	0.757	0.696	8.1	81	0.00
40	Trichloroethene	0.226	0.213	5.8	86	0.00
41	Methylcyclohexane	0.364	0.329	9.6	87	0.00
42 C	1,2-Dichloropropane	0.314	0.306	2.5	87	0.00

Continuing Calibration Summary

Page 2 of 2

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
Lab FileID: F0078995.D

43	Dibromomethane	0.158	0.161	-1.9	84	-0.01
44	1,4-Dioxane	0.002	0.002	0.0	79	-0.02
45	Bromodichloromethane	0.304	0.296	2.6	87	0.00
46	2-Nitropropane	0.040	0.035	12.5	75	0.00
47	2-Chloroethyl vinyl ether	0.125	0.095	24.0#	69	0.00
48	4-Methyl-2-pentanone	0.240	0.215	10.4	76	-0.01
49	cis-1,3-Dichloropropene	0.421	0.416	1.2	87	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
51 S	Toluene-d8	1.098	1.054	4.0	90	0.00
52 C	Toluene	1.386	1.315	5.1	87	0.00
53	trans-1,3-Dichloropropene	0.391	0.366	6.4	85	0.00
54	1,1,2-Trichloroethane	0.283	0.265	6.4	83	0.00
55	Tetrachloroethene	0.294	0.285	3.1	88	-0.01
56	2-hexanone	0.196	0.165	15.8	73	0.00
57	1,3-Dichloropropane	0.599	0.560	6.5	84	0.00
58	Dibromochloromethane	0.298	0.283	5.0	84	0.00
59	1,2-Dibromoethane	0.309	0.278	10.0	82	0.00
60	1-Chlorohexane	0.495	0.444	10.3	86	-0.01
61 P	Chlorobenzene	0.871	0.844	3.1	90	-0.01
62	1,1,1,2-Tetrachloroethane	0.280	0.275	1.8	88	-0.01
63 C	Ethylbenzene	1.478	1.399	5.3	88	-0.01
64	m,p-Xylene	1.025	0.993	3.1	89	-0.01
65	o-Xylene	1.070	1.039	2.9	89	-0.01
66	Styrene	0.928	0.889	4.2	88	0.00
67 P	Bromoform	0.169	0.154	8.9	76	-0.01
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
69	Isopropylbenzene	2.941	2.895	1.6	88	0.00
70	Cyclohexanone	0.027	0.049	-81.5#	155	-0.02
71 S	4-Bromofluorobenzene	0.921	0.906	1.6	89	0.00
72	Bromobenzene	0.867	0.893	-3.0	90	0.00
73 P	1,1,2,2-Tetrachloroethane	1.120	1.016	9.3	75	0.00
74	Trans-1,4-Dichloro-2-Butene	0.179	0.156	12.8	75	-0.01
75	1,2,3-Trichloropropane	0.247	0.237	4.0	80	-0.01
76	n-Propylbenzene	4.136	4.044	2.2	86	0.00
77	2-Chlorotoluene	2.591	2.595	-0.2	87	0.00
78	4-Chlorotoluene	2.234	2.210	1.1	86	-0.01
79	1,3,5-Trimethylbenzene	2.368	2.371	-0.1	87	0.00
80	sec-Butylbenzene	3.140	3.061	2.5	86	0.00
81	1,3-Dichlorobenzene	1.400	1.423	-1.6	89	0.00
82	4-Isopropyltoluene	2.312	2.227	3.7	85	0.00
83	1,4-Dichlorobenzene	1.435	1.395	2.8	85	0.00
84	tert-Butylbenzene	0.446	0.416	6.7	82	-0.01
85	n-Butylbenzene	1.942	1.782	8.2	80	0.00
86	1,2-Dichlorobenzene	1.323	1.297	2.0	84	-0.01
87	1,2,4-Trimethylbenzene	2.377	2.379	-0.1	88	0.00
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	71	-0.02
89	1,2,4-Trichlorobenzene	0.370	0.253	31.6#	71	0.00
90	Hexachlorobutadiene	0.162	0.147	9.3	74	-0.02
91	Naphthalene	0.681	0.379	44.3#	68	0.00
92	1,2,3-Trichlorobenzene	0.274	0.174	36.5#	68	0.00

Average % D = 7.6

(#) = Out of Range
F0078966.D VF2305CG.M

SPCC's out = 0 CCC's out = 0
Fri Mar 02 07:49:36 2007

Continuing Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2276
Lab FileID: F0078996.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078996.D Vial: 4
 Acq On : 1 Mar 2007 8:55 am Operator: lydiaj
 Sample : cc2276-1000 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	92	-0.01
32 S	Dibromofluoromethane	0.218	0.547	-150.9#	239#	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.404	-144.8#	223#	-0.01
50 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51 S	Toluene-d8	1.098	2.827	-157.5#	244#	0.00
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
71 S	4-Bromofluorobenzene	0.921	2.369	-157.2#	233#	-0.01
93 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	0.02
94 H	TPH-GRO (C6-C10)	6.436	7.083	-10.1	73	0.49

Average % D = 87.6

(#) = Out of Range
 F0078996.D VF2305CG.M

SPCC's out = 5 CCC's out = 5
 Fri Mar 02 07:49:41 2007

Continuing Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2307-CC2305
Lab FileID: F0079024.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0079024.D Vial: 32
 Acq On : 1 Mar 2007 11:47 pm Operator: lydiaj
 Sample : cc2305-20 Inst : GC/MS F
 Misc : ms3874,vf2307,,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:29:02 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	82	-0.05
2	Dichlorodifluoromethane	0.171	0.156	8.8	84	-0.03
3 P	Chloromethane	0.329	0.359	-9.1	91	-0.04
4 C	Vinyl Chloride	0.286	0.302	-5.6	93	-0.05
5	Bromomethane	0.225	0.241	-7.1	89	-0.05
6	Chloroethane	0.217	0.226	-4.1	85	-0.04
7	Trichlorofluoromethane	0.155	0.165	-6.5	96	-0.05
8	Acrolein	0.033	0.029	12.1	78	-0.05
9 C	1,1-Dichloroethene	0.306	0.299	2.3	82	-0.05
10	Freon 113	0.205	0.193	5.9	83	-0.05
11	Acetone	0.056	0.050	10.7	71	-0.04
12	Iodomethane	0.434	0.434	0.0	81	-0.05
13	Methyl acetate	0.191	0.186	2.6	78	-0.05
14	Carbon Disulfide	0.889	0.858	3.5	81	-0.05
15	Methylene Chloride	0.399	0.413	-3.5	83	-0.05
16	Tert Butyl Alcohol	0.017	0.016	5.9	73	-0.05
17	trans-1,2-Dichloroethene	0.341	0.345	-1.2	84	-0.05
18	Acrylonitrile	0.095	0.086	9.5	73	-0.04
19	Methyl Tert Butyl Ether	0.581	0.573	1.4	82	-0.04
20	Hexane	0.312	0.281	9.9	82	-0.05
21 P	1,1-Dichloroethane	0.440	0.457	-3.9	86	-0.05
22	Vinyl acetate	0.550	0.554	-0.7	78	-0.05
23	Di-isopropyl ether	0.971	1.076	-10.8	89	-0.04
24	Ethyl tert-butyl ether	0.738	0.769	-4.2	86	-0.04
25	2,2-Dichloropropane	0.203	0.176	13.3	73	-0.04
26	cis-1,2-Dichloroethene	0.302	0.309	-2.3	84	-0.06
27	2-Butanone	0.113	0.107	5.3	74	-0.05
28	Bromochloromethane	0.143	0.144	-0.7	81	-0.05
29 C	Chloroform	0.358	0.366	-2.2	84	-0.05
30	Tetrahydrofuran	0.034	0.033	2.9	84	-0.05
31	1,1,1-Trichloroethane	0.208	0.215	-3.4	87	-0.05
32 S	Dibromofluoromethane	0.218	0.235	-7.8	92	-0.05
33	Cyclohexane	0.439	0.440	-0.2	88	-0.05
34	1,1-Dichloropropene	0.302	0.299	1.0	84	-0.05
35	Carbon Tetrachloride	0.169	0.171	-1.2	86	-0.04
36 S	1,2-Dichloroethane-d4	0.165	0.171	-3.6	85	-0.05
37	Benzene	1.108	1.138	-2.7	86	-0.04
38	1,2-Dichloroethane	0.198	0.208	-5.1	86	-0.05
39	tert-amyl methyl ether	0.757	0.761	-0.5	82	-0.05
40	Trichloroethene	0.226	0.226	0.0	85	-0.05
41	Methylcyclohexane	0.364	0.348	4.4	86	-0.05
42 C	1,2-Dichloropropane	0.314	0.324	-3.2	86	-0.05

Continuing Calibration Summary

Page 2 of 2

Job Number: T16411
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2307-CC2305
 Lab FileID: F0079024.D

43		Dibromomethane	0.158	0.159	-0.6	78	-0.05
44		1,4-Dioxane	0.002	0.002	0.0	77	-0.06
45		Bromodichloromethane	0.304	0.315	-3.6	87	-0.04
46		2-Nitropropane	0.040	0.037	7.5	76	-0.05
47		2-Chloroethyl vinyl ether	0.125	0.100	20.0	68	-0.05
48		4-Methyl-2-pentanone	0.240	0.240	0.0	79	-0.05
49		cis-1,3-Dichloropropene	0.421	0.422	-0.2	83	-0.05
50	I	Chlorobenzene-d5	1.000	1.000	0.0	85	-0.05
51	S	Toluene-d8	1.098	1.097	0.1	88	-0.05
52	C	Toluene	1.386	1.387	-0.1	87	-0.05
53		trans-1,3-Dichloropropene	0.391	0.368	5.9	80	-0.04
54		1,1,2-Trichloroethane	0.283	0.281	0.7	83	-0.05
55		Tetrachloroethene	0.294	0.293	0.3	85	-0.06
56		2-hexanone	0.196	0.178	9.2	75	-0.05
57		1,3-Dichloropropane	0.599	0.577	3.7	82	-0.05
58		Dibromochloromethane	0.298	0.299	-0.3	84	-0.05
59		1,2-Dibromoethane	0.309	0.286	7.4	80	-0.05
60		1-Chlorohexane	0.495	0.467	5.7	85	-0.05
61	P	Chlorobenzene	0.871	0.873	-0.2	87	-0.05
62		1,1,1,2-Tetrachloroethane	0.280	0.284	-1.4	85	-0.05
63	C	Ethylbenzene	1.478	1.474	0.3	88	-0.05
64		m,p-Xylene	1.025	1.000	2.4	84	-0.05
65		o-Xylene	1.070	1.073	-0.3	86	-0.05
66		Styrene	0.928	0.907	2.3	85	-0.05
67	P	Bromoform	0.169	0.156	7.7	72	-0.05
68	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	80	-0.05
69		Isopropylbenzene	2.941	2.954	-0.4	85	-0.05
70		Cyclohexanone	0.027	0.043	-59.3#	126	-0.05
71	S	4-Bromofluorobenzene	0.921	0.929	-0.9	86	-0.06
72		Bromobenzene	0.867	0.917	-5.8	87	-0.06
73	P	1,1,2,2-Tetrachloroethane	1.120	1.066	4.8	75	-0.05
74		Trans-1,4-Dichloro-2-Butene	0.179	0.153	14.5	70	-0.06
75		1,2,3-Trichloropropane	0.247	0.238	3.6	75	-0.06
76		n-Propylbenzene	4.136	4.222	-2.1	84	-0.06
77		2-Chlorotoluene	2.591	2.718	-4.9	86	-0.05
78		4-Chlorotoluene	2.234	2.258	-1.1	83	-0.06
79		1,3,5-Trimethylbenzene	2.368	2.402	-1.4	83	-0.05
80		sec-Butylbenzene	3.140	3.138	0.1	83	-0.05
81		1,3-Dichlorobenzene	1.400	1.441	-2.9	85	-0.06
82		4-Isopropyltoluene	2.312	2.241	3.1	81	-0.05
83		1,4-Dichlorobenzene	1.435	1.376	4.1	79	-0.06
84		tert-Butylbenzene	0.446	0.445	0.2	83	-0.06
85		n-Butylbenzene	1.942	1.808	6.9	77	-0.06
86		1,2-Dichlorobenzene	1.323	1.301	1.7	79	-0.06
87		1,2,4-Trimethylbenzene	2.377	2.423	-1.9	84	-0.05
88		1,2-Dibromo-3-Chloropropane	0.083	0.068	18.1	66	-0.05
89		1,2,4-Trichlorobenzene	0.370	0.235	36.5#	62	-0.06
90		Hexachlorobutadiene	0.162	0.081	50.0#	38#	-0.06
91		Naphthalene	0.681	0.366	46.3#	62	-0.06
92		1,2,3-Trichlorobenzene	0.274	0.175	36.1#	65	-0.06

Average % D = 6.5

(#) = Out of Range
 F0078966.D VF2305C.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 02 08:30:25 2007

Continuing Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2309-CC2305
Lab FileID: F0079055.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2309\F0079055.D Vial: 2
 Acq On : 3 Mar 2007 9:18 am Operator: richardr
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3874,vf2309,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	105	-0.09
2	Dichlorodifluoromethane	0.171	0.158	7.6	97	-0.05
3 P	Chloromethane	0.329	0.286	13.1	97	-0.05
4 C	Vinyl Chloride	0.286	0.252	11.9	95	-0.07
5	Bromomethane	0.225	0.200	11.1	98	-0.07
6	Chloroethane	0.217	0.212	2.3	101	-0.06
7	Trichlorofluoromethane	0.155	0.159	-2.6	105	-0.07
8	Acrolein	0.033	0.033	0.0	99	-0.08
9 C	1,1-Dichloroethene	0.306	0.286	6.5	94	-0.07
10	Freon 113	0.205	0.208	-1.5	97	-0.07
11	Acetone	0.056	0.036	35.7#	73	-0.07
12	Iodomethane	0.434	0.425	2.1	103	-0.08
13	Methyl acetate	0.191	0.126	34.0#	74	-0.08
14	Carbon Disulfide	0.889	0.880	1.0	102	-0.09
15	Methylene Chloride	0.399	0.363	9.0	94	-0.08
16	Tert Butyl Alcohol	0.017	0.012	29.4#	82	-0.08
17	trans-1,2-Dichloroethene	0.341	0.320	6.2	98	-0.08
18	Acrylonitrile	0.095	0.064	32.6#	73	-0.08
19	Methyl Tert Butyl Ether	0.581	0.478	17.7	91	-0.08
20	Hexane	0.312	0.322	-3.2	99	-0.08
21 P	1,1-Dichloroethane	0.440	0.433	1.6	102	-0.08
22	Vinyl acetate	0.550	0.430	21.8#	80	-0.08
23	Di-isopropyl ether	0.971	0.931	4.1	100	-0.07
24	Ethyl tert-butyl ether	0.738	0.686	7.0	98	-0.07
25	2,2-Dichloropropane	0.203	0.232	-14.3	116	-0.08
26	cis-1,2-Dichloroethene	0.302	0.303	-0.3	103	-0.09
27	2-Butanone	0.113	0.075	33.6#	75	-0.08
28	Bromochloromethane	0.143	0.136	4.9	98	-0.08
29 C	Chloroform	0.358	0.356	0.6	104	-0.08
30	Tetrahydrofuran	0.034	0.023	32.4#	83	-0.09
31	1,1,1-Trichloroethane	0.208	0.213	-2.4	105	-0.08
32 S	Dibromofluoromethane	0.218	0.226	-3.7	110	-0.08
33	Cyclohexane	0.439	0.449	-2.3	99	-0.08
34	1,1-Dichloropropene	0.302	0.310	-2.6	104	-0.09
35	Carbon Tetrachloride	0.169	0.173	-2.4	103	-0.08
36 S	1,2-Dichloroethane-d4	0.165	0.148	10.3	97	-0.09
37	Benzene	1.108	1.097	1.0	104	-0.08
38	1,2-Dichloroethane	0.198	0.180	9.1	92	-0.08
39	tert-amyl methyl ether	0.757	0.674	11.0	96	-0.08
40	Trichloroethene	0.226	0.229	-1.3	105	-0.09
41	Methylcyclohexane	0.364	0.374	-2.7	100	-0.08
42 C	1,2-Dichloropropane	0.314	0.307	2.2	102	-0.09

Continuing Calibration Summary

Page 2 of 2

Job Number: T16411
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2309-CC2305
 Lab FileID: F0079055.D

43	Dibromomethane	0.158	0.136	13.9	89	-0.09
44	1,4-Dioxane	0.002	0.002	0.0	81	-0.09
45	Bromodichloromethane	0.304	0.295	3.0	101	-0.08
46	2-Nitropropane	0.040	0.026	35.0#	73	-0.08
47	2-Chloroethyl vinyl ether	0.125	0.084	32.8#	71	-0.08
48	4-Methyl-2-pentanone	0.240	0.173	27.9#	78	-0.09
49	cis-1,3-Dichloropropene	0.421	0.416	1.2	102	-0.08
50 I	Chlorobenzene-d5	1.000	1.000	0.0	106	-0.08
51 S	Toluene-d8	1.098	1.115	-1.5	110	-0.08
52 C	Toluene	1.386	1.388	-0.1	106	-0.09
53	trans-1,3-Dichloropropene	0.391	0.354	9.5	94	-0.08
54	1,1,2-Trichloroethane	0.283	0.238	15.9	91	-0.09
55	Tetrachloroethene	0.294	0.307	-4.4	108	-0.09
56	2-hexanone	0.196	0.135	31.1#	74	-0.08
57	1,3-Dichloropropane	0.599	0.499	16.7	89	-0.08
58	Dibromochloromethane	0.298	0.267	10.4	96	-0.09
59	1,2-Dibromoethane	0.309	0.246	20.4#	87	-0.09
60	1-Chlorohexane	0.495	0.507	-2.4	107	-0.09
61 P	Chlorobenzene	0.871	0.862	1.0	105	-0.09
62	1,1,1,2-Tetrachloroethane	0.280	0.275	1.8	104	-0.09
63 C	Ethylbenzene	1.478	1.482	-0.3	105	-0.09
64	m,p-Xylene	1.025	1.035	-1.0	106	-0.09
65	o-Xylene	1.070	1.092	-2.1	107	-0.09
66	Styrene	0.928	0.918	1.1	102	-0.08
67 P	Bromoform	0.169	0.154	8.9	91	-0.09
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	-0.09
69	Isopropylbenzene	2.941	3.034	-3.2	105	-0.08
70	Cyclohexanone	0.027	0.059	-118.5#	229#	-0.10
71 S	4-Bromofluorobenzene	0.921	0.928	-0.8	106	-0.09
72	Bromobenzene	0.867	0.876	-1.0	102	-0.10
73 P	1,1,2,2-Tetrachloroethane	1.120	0.827	26.2#	80	-0.09
74	Trans-1,4-Dichloro-2-Butene	0.179	0.141	21.2#	76	-0.10
75	1,2,3-Trichloropropane	0.247	0.190	23.1#	80	-0.10
76	n-Propylbenzene	4.136	4.329	-4.7	103	-0.09
77	2-Chlorotoluene	2.591	2.651	-2.3	104	-0.09
78	4-Chlorotoluene	2.234	2.272	-1.7	102	-0.10
79	1,3,5-Trimethylbenzene	2.368	2.468	-4.2	103	-0.09
80	sec-Butylbenzene	3.140	3.262	-3.9	99	-0.09
81	1,3-Dichlorobenzene	1.400	1.421	-1.5	98	-0.10
82	4-Isopropyltoluene	2.312	2.390	-3.4	97	-0.09
83	1,4-Dichlorobenzene	1.435	1.372	4.4	94	-0.10
84	tert-Butylbenzene	0.446	0.438	1.8	96	-0.10
85	n-Butylbenzene	1.942	2.042	-5.1	92	-0.10
86	1,2-Dichlorobenzene	1.323	1.241	6.2	91	-0.09
87	1,2,4-Trimethylbenzene	2.377	2.449	-3.0	100	-0.09
88	1,2-Dibromo-3-Chloropropane	0.083	0.046	44.6#	62	-0.09
89	1,2,4-Trichlorobenzene	0.370	0.230	37.8#	56	-0.10
90	Hexachlorobutadiene	0.162	0.184	-13.6	87	-0.10
91	Naphthalene	0.681	0.268	60.6#	43#	-0.12
92	1,2,3-Trichlorobenzene	0.274	0.133	51.5#	47#	-0.12

Average % D = 12.2

(#) = Out of Range
 F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
 Mon Mar 05 09:22:40 2007

Continuing Calibration Summary

Job Number: T16411
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2311-CC2305
Lab FileID: F0079091.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2311\F0079091.D Vial: 3
 Acq On : 5 Mar 2007 1:28 pm Operator: lydiaj
 Sample : cc2305-40 Inst : GC/MS F
 Misc : ms3876,vf2311,,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	109	-0.11
2	Dichlorodifluoromethane	0.171	0.156	8.8	99	-0.07
3 P	Chloromethane	0.329	0.269	18.2	94	-0.07
4 C	Vinyl Chloride	0.286	0.234	18.2	91	-0.09
5	Bromomethane	0.225	0.198	12.0	100	-0.10
6	Chloroethane	0.217	0.218	-0.5	107	-0.09
7	Trichlorofluoromethane	0.155	0.171	-10.3	117	-0.09
8	Acrolein	0.033	0.033	0.0	100	-0.11
9 C	1,1-Dichloroethene	0.306	0.299	2.3	102	-0.10
10	Freon 113	0.205	0.214	-4.4	103	-0.10
11	Acetone	0.056	0.048	14.3	101	-0.10
12	Iodomethane	0.434	0.444	-2.3	110	-0.11
13	Methyl acetate	0.191	0.163	14.7	99	-0.10
14	Carbon Disulfide	0.889	0.884	0.6	106	-0.10
15	Methylene Chloride	0.399	0.376	5.8	101	-0.11
16	Tert Butyl Alcohol	0.017	0.016	5.9	110	-0.11
17	trans-1,2-Dichloroethene	0.341	0.337	1.2	106	-0.10
18	Acrylonitrile	0.095	0.089	6.3	106	-0.10
19	Methyl Tert Butyl Ether	0.581	0.559	3.8	109	-0.11
20	Hexane	0.312	0.310	0.6	99	-0.11
21 P	1,1-Dichloroethane	0.440	0.425	3.4	104	-0.11
22	Vinyl acetate	0.550	0.508	7.6	98	-0.11
23	Di-isopropyl ether	0.971	0.910	6.3	101	-0.10
24	Ethyl tert-butyl ether	0.738	0.722	2.2	106	-0.10
25	2,2-Dichloropropane	0.203	0.208	-2.5	108	-0.11
26	cis-1,2-Dichloroethene	0.302	0.309	-2.3	109	-0.11
27	2-Butanone	0.113	0.096	15.0	99	-0.11
28	Bromochloromethane	0.143	0.148	-3.5	110	-0.11
29 C	Chloroform	0.358	0.363	-1.4	109	-0.11
30	Tetrahydrofuran	0.034	0.029	14.7	106	-0.10
31	1,1,1-Trichloroethane	0.208	0.214	-2.9	109	-0.11
32 S	Dibromofluoromethane	0.218	0.232	-6.4	116	-0.11
33	Cyclohexane	0.439	0.449	-2.3	102	-0.11
34	1,1-Dichloropropene	0.302	0.309	-2.3	107	-0.11
35	Carbon Tetrachloride	0.169	0.173	-2.4	107	-0.11
36 S	1,2-Dichloroethane-d4	0.165	0.169	-2.4	114	-0.11
37	Benzene	1.108	1.109	-0.1	108	-0.11
38	1,2-Dichloroethane	0.198	0.201	-1.5	106	-0.11
39	tert-amyl methyl ether	0.757	0.756	0.1	112	-0.11
40	Trichloroethene	0.226	0.232	-2.7	110	-0.11
41	Methylcyclohexane	0.364	0.381	-4.7	106	-0.11
42 C	1,2-Dichloropropane	0.314	0.311	1.0	107	-0.11

Continuing Calibration Summary

Page 2 of 2

Job Number: T16411
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2311-CC2305
 Lab FileID: F0079091.D

43	Dibromomethane	0.158	0.162	-2.5	110	-0.11
44	1,4-Dioxane	0.002	0.002	0.0	120	-0.11
45	Bromodichloromethane	0.304	0.305	-0.3	108	-0.11
46	2-Nitropropane	0.040	0.034	15.0	100	-0.11
47	2-Chloroethyl vinyl ether	0.125	0.114	8.8	100	-0.11
48	4-Methyl-2-pentanone	0.240	0.215	10.4	100	-0.11
49	cis-1,3-Dichloropropene	0.421	0.443	-5.2	113	-0.11
50 I	Chlorobenzene-d5	1.000	1.000	0.0	112	-0.11
51 S	Toluene-d8	1.098	1.122	-2.2	117	-0.11
52 C	Toluene	1.386	1.362	1.7	110	-0.11
53	trans-1,3-Dichloropropene	0.391	0.391	0.0	109	-0.11
54	1,1,2-Trichloroethane	0.283	0.274	3.2	110	-0.11
55	Tetrachloroethene	0.294	0.299	-1.7	111	-0.12
56	2-hexanone	0.196	0.170	13.3	99	-0.11
57	1,3-Dichloropropane	0.599	0.566	5.5	107	-0.11
58	Dibromochloromethane	0.298	0.295	1.0	112	-0.11
59	1,2-Dibromoethane	0.309	0.301	2.6	112	-0.11
60	1-Chlorohexane	0.495	0.508	-2.6	113	-0.11
61 P	Chlorobenzene	0.871	0.878	-0.8	113	-0.11
62	1,1,1,2-Tetrachloroethane	0.280	0.277	1.1	111	-0.11
63 C	Ethylbenzene	1.478	1.468	0.7	110	-0.11
64	m,p-Xylene	1.025	1.025	0.0	111	-0.11
65	o-Xylene	1.070	1.076	-0.6	111	-0.11
66	Styrene	0.928	0.938	-1.1	110	-0.11
67 P	Bromoform	0.169	0.182	-7.7	115	-0.12
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	-0.12
69	Isopropylbenzene	2.941	2.831	3.7	110	-0.11
70	Cyclohexanone	0.027	0.068	-151.9#	297#	-0.13
71 S	4-Bromofluorobenzene	0.921	0.921	0.0	119	-0.12
72	Bromobenzene	0.867	0.834	3.8	110	-0.13
73 P	1,1,2,2-Tetrachloroethane	1.120	1.003	10.4	109	-0.12
74	Trans-1,4-Dichloro-2-Butene	0.179	0.172	3.9	104	-0.13
75	1,2,3-Trichloropropane	0.247	0.232	6.1	110	-0.13
76	n-Propylbenzene	4.136	4.135	0.0	111	-0.12
77	2-Chlorotoluene	2.591	2.507	3.2	110	-0.12
78	4-Chlorotoluene	2.234	2.173	2.7	109	-0.12
79	1,3,5-Trimethylbenzene	2.368	2.349	0.8	110	-0.11
80	sec-Butylbenzene	3.140	3.184	-1.4	109	-0.12
81	1,3-Dichlorobenzene	1.400	1.409	-0.6	110	-0.13
82	4-Isopropyltoluene	2.312	2.378	-2.9	109	-0.12
83	1,4-Dichlorobenzene	1.435	1.404	2.2	108	-0.12
84	tert-Butylbenzene	0.446	0.446	0.0	110	-0.13
85	n-Butylbenzene	1.942	2.118	-9.1	107	-0.13
86	1,2-Dichlorobenzene	1.323	1.313	0.8	108	-0.12
87	1,2,4-Trimethylbenzene	2.377	2.385	-0.3	109	-0.12
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	105	-0.12
89	1,2,4-Trichlorobenzene	0.370	0.377	-1.9	103	-0.13
90	Hexachlorobutadiene	0.162	0.218	-34.6#	116	-0.14
91	Naphthalene	0.681	0.547	19.7	100	-0.15
92	1,2,3-Trichlorobenzene	0.274	0.270	1.5	108	-0.14

Average % D = 6.6

(#) = Out of Range
 F0078967.D VF2305C.M

SPCC's out = 0 CCC's out = 0
 Tue Mar 06 07:56:28 2007



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO ₃	GN11336	5.0	<5.0	mg/l	xxxxxxx	2500	100.0	80-120%
Chloride	GN11331	1.0	<1.0	mg/l	xxxxxxx	1030	103.0	92-107%
Nitrogen, Nitrate + Nitrite	GN11291	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrite	GN11283	0.050	<0.050	mg/l	0.500	0.52	104.0	89-117%
Sulfate	GN11356			mg/l	100	95.0	95.0	80-120%
Sulfate	GN11356	10	<10	mg/l	xxxxxxx		*	80-120%
Sulfate	GN11528	3.0	<3.0	mg/l	xxxxxxx	88.0	88.0	80-120%
Sulfide	GN11286	0.20	<0.20	mg/l	1600	1370	86.0	80-120%
Total Organic Carbon	GN11296	1.0	<1.0	mg/l	25.0	25.0	100.0	83-110%
Total Organic Carbon	GN11304	1.0	<1.0	mg/l	25.0	26.0	104.0	83-110%

Associated Samples:

Batch GN11283: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11286: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11291: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11296: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7

Batch GN11304: T16411-8, T16411-9

Batch GN11331: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11336: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11356: T16411-1, T16411-10, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11528: T16411-2

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO ₃	GN11336	T16411-10	mg/l	158	165	4.3	0-10%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.20	0.0	0-10%
Nitrogen, Nitrite	GN11283	T16411-10	mg/l	0.010 B	<0.050	0.0	0-10%
Sulfate	GN11356	T16411-10	mg/l	1260	1200	4.7	0-20%
Sulfate	GN11528	T16728-2	mg/l	23.0	23.0	11.0	0-20%
Sulfide	GN11286	T16411-10	mg/l	U	<0.20	0.0	0-20%
Total Organic Carbon	GN11296	T16411-10	mg/l	18.0	18.0	0.0	0-11%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	6.0	0.0	0-11%
pH	GN11285	T16411-10	su	6.5	6.5	0.0	0-6.8%

Associated Samples:

Batch GN11283: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11285: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11286: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11291: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11296: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7
 Batch GN11304: T16411-8, T16411-9
 Batch GN11331: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11336: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11356: T16411-1, T16411-10, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
 Batch GN11528: T16411-2
 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN11336	T16411-10	mg/l	158	xxxxxxx	215	116.0	79-122%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrite	GN11283	T16411-10	mg/l	0.010 B	0.100	0.11	109.0	75-134%
Nitrogen, Nitrite	GN11283	T16411-10	mg/l	0.010 B	0.100	0.11	109.0	75-134%
Sulfate	GN11356	T16411-10	mg/l	1260	250	1470	87.0	75-125%
Sulfate	GN11356	T16411-10	mg/l	1260	xxxxxxx		*	75-125%
Sulfate	GN11528	T16728-2	mg/l	23.0	xxxxxxx	50.0	96.0*	75-125%
Total Organic Carbon	GN11296	T16411-10	mg/l	18.0	10.0	28.0	100.0	74-121%
Total Organic Carbon	GN11296	T16411-10	mg/l	18.0	10.0	27.0	90.0	74-121%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	10.0	16.0	100.0	74-121%

Associated Samples:

Batch GN11283: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11291: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11296: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7

Batch GN11304: T16411-8, T16411-9

Batch GN11331: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11336: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11356: T16411-1, T16411-10, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9

Batch GN11528: T16411-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit

Associated Samples:
Batch GN11336: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
(*) Outside of QC limits

6.4
6



Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

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FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # T16411

Subcontract Information		Project Information		Requested Analyses										Matrix Codes		
Company Name ALSO-ORLANDO		Send Report to: Agnesv@accutest.com		Methana, Ethane, Ethene (RSH147) Perchlorates Explosives DW - Drinking Water GW - Ground Water WW - Wastewater SO - Soil SL - Sludge OL - Oil LIQ - Other Liquid SOL - Other Solid										LAB USE ONLY		
Project Contact		Bill to														
Address		Address														
City State Zip		City State Zip														
Phone No.		Fax No.														
Accutest Purchase Order #		Accutest Job #														
Accutest Sample ID		Collection		Number of preserved bottles												
Date	Time	Matrix	# of bottles	PC	HC	HCN	HCN	HCN	HCN	HCN	HCN	HCN	HCN	HCN	HCN	HCN
T16411-1	2/20/2007	850	GW	5	2											
T16411-2	2/20/2007	1510	GW	5	2											
T16411-3	2/20/2007	1510	GW	5	2											
T16411-4	2/20/2007	951	GW	5	2											
T16411-5	2/20/2007	934	GW	5	2											
T16411-6	2/20/2007	1223	GW	5	2											
T16411-7	2/20/2007	1223	GW	5	2											
T16411-8	2/20/2007	1554	GW	5	2											
T16411-9	2/20/2007	1530	GW	5	2											
T16411-10 +MS/MSD	2/20/2007	0	GW	5	2											
Turnaround Time (Business days)		Approved By/ Date:		Data Deliverable Information										Comments / Remarks		
☒ 10 Day STANDARD ☐ 5 Day RUSH ☐ 4 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ Other				☐ Commercial "A" ☐ Commercial "B" ☒ TRRP 13 ☒ Reduced Tier1												
				☐ State Forms ☐ EDD Format ☐ Other												
				Commercial "A" = Results Only Commercial "B" = Results & Standard QC												
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	
1		1		2		2		3		3		4		4		
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	
3		3		4		4		5		5		6		6		
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	
5		5		6		6		7		7		8		8		
Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:	
FX	02-23-07	WF-d Vgo		FX	02-23-07	WF-d Vgo		FX	02-23-07	WF-d Vgo		FX	02-23-07	WF-d Vgo		
Preserved where applicable ☐ On Ice ☐ Cooler Temp. 3.0°																

T16411: Chain of Custody

Page 1 of 2

Accutest Laboratories Southeast, Inc.

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: T16411 CLIENT: ALSC PROJECT: T16411
 DATE/TIME RECEIVED: 02-23-07 09:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 3.0
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7986 1382 4380

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
 NUMBER OF 5035 FIELD KITS ? 0
 NUMBER OF LAB FILTERED METALS ? 0

SAMPLE INFORMATION

- ☐ SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
☐ CORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ TIMES ON COC DOES NOT MATCH LABEL(S)
☐ ID'S ON COC DOES NOT MATCH LABEL(S)
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING INSTRUCTIONS
☐ UNCLEAR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ % SOLIDS JAR NOT RECEIVED
☐ 5035 FIELD KIT NOT FROZEN WITHIN 48 HOURS
☐ RESIDUAL CHLORINE PRESENT
 (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: # OF BOTTLES DO NOT MATCH WITH WHAT WE RECEIVED

* SAMPLES: #1, #4-#9 RECEIVED THREE HCL VIALS AND ONE UNPRESERVED BOTTLE

* SAMPLES: #2, #3 RECEIVED THREE HCL VIALS, ONE UNPRESERVED AMBER AND ONE UNP. BOTTLE

* SAMPLE: #10 RECEIVED 6 HCL VIALS AND 2 UNPRESERVED BOTTLES

TECHNICIAN SIGNATURE/DATE W. J. V. 02-23-07 TECHNICIAN SIGNATURE/DATE _____ ASBD 10/03/06

T16411: Chain of Custody

Page 2 of 2



GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY991-MB	XY025230.D	1	02/26/07	TD	n/a	n/a	GXY991

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16411-1, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9, T16411-10

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.30	ug/l	
74-84-0	Ethane	ND	1.0	0.60	ug/l	
74-85-1	Ethene	ND	1.0	0.80	ug/l	

8.1
8

Blank Spike Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY991-BS	XY025231.D	1	02/26/07	TD	n/a	n/a	GXY991

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16411-1, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9, T16411-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	108	99.2	92	54-149
74-84-0	Ethane	219	217	99	57-143
74-85-1	Ethene	290	276	95	57-143

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Matrix Spike Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	XY025248.D 1		02/26/07	TD	n/a	n/a	GXY991
T16411-10	XY025246.D 1		02/26/07	TD	n/a	n/a	GXY991

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16411-1, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9, T16411-10

CAS No.	Compound	T16411-10 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	0.50 U	108	103	95	54-149
74-84-0	Ethane	1.0 U	219	226	103	57-143
74-85-1	Ethene	1.0 U	290	290	100	57-143



Duplicate Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10DUP	XY025247.D	1	02/26/07	TD	n/a	n/a	GXY991
T16411-10	XY025246.D	1	02/26/07	TD	n/a	n/a	GXY991

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16411-1, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9, T16411-10

CAS No.	Compound	T16411-10 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	0.50 U	ND		nc	24
74-84-0	Ethane	1.0 U	ND		nc	23
74-85-1	Ethene	1.0 U	ND		nc	10

8.4
8

Initial Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY989-ICC989
Lab FileID: XY025202.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Feb 22 15:36:18 2007
Response via : Initial Calibration

Calibration Files

1 =XY025194.D 2 =XY025195.D 3 =XY025201.D 4 =XY025197.D
 5 =XY025202.D 6 =XY025199.D 7 =XY025200.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)c Methane	1.442	0.904	1.128	1.220	0.672	0.793	0.957	1.017 E4	26.02
2)c Ethylene	2.415	1.896	1.964	2.128	1.306	1.522	1.817	1.864 E4	19.76
3)c Ethane	2.311	1.873	1.880	2.068	1.280	1.499	1.798	1.816 E4	18.87

(#) = Out of Range

RSK147XY.M

Thu Feb 22 15:38:10 2007

Initial Calibration Verification

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY989-ICV989
Lab FileID: XY025203.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\022207\XY025203.D Vial: 100
 Acq On : 22 Feb 2007 1:27 pm Operator: Trangd
 Sample : ICV989-1000 Inst : VOA5
 Misc : gc7062,gxy989,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Feb 22 15:36:18 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	1154.410	-15.4	175	0.20	0.88-	1.48
2 c	Ethylene	1000.000	1202.152	-20.2	172	0.31	2.54-	3.34
3 c	Ethane	1000.000	1245.774	-24.6	177	0.32	3.14-	3.94

(#) = Out of Range
 XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Feb 22 15:37:53 2007

Continuing Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY991-CC989
Lab FileID: XY025228.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\022607\XY025228.D Vial: 100
 Acq On : 26 Feb 2007 9:27 am Operator: Trangd
 Sample : CC989-1000 Inst : VOA5
 Misc : gc7062,gxy991,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Tue Feb 27 13:37:21 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	935.186	6.5	141	0.07	1.13-	1.73
2 c	Ethylene	1000.000	1013.727	-1.4	145	0.09	2.94-	3.74
3 c	Ethane	1000.000	1028.150	-2.8	146	0.09	3.57-	4.37

(#) = Out of Range
 XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Tue Feb 27 14:33:55 2007

Continuing Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY991-CC989
Lab FileID: XY025239.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\022607\XY025239.D Vial: 100
Acq On : 26 Feb 2007 12:29 pm Operator: Trangd
Sample : CC989-500 Inst : VOA5
Misc : gc7062,gxy991,,,,, Multiplr: 1.00
IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Tue Feb 27 13:37:21 2007
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	500.000	499.976	0.0	83	-0.02	1.13-	1.73
2 c	Ethylene	500.000	546.961	-9.4	96	0.00	2.94-	3.74
3 c	Ethane	500.000	553.481	-10.7	97	0.00	3.57-	4.37

(#) = Out of Range
XY025197.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
Tue Feb 27 14:33:29 2007

8.5

8

Continuing Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY991-ECC989
Lab FileID: XY025249.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\022607\XY025249.D Vial: 100
 Acq On : 26 Feb 2007 3:23 pm Operator: Trangd
 Sample : ECC989-1000 Inst : VOA5
 Misc : gc7062,gxy991,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Tue Feb 27 13:37:21 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c	Methane	1000.000	1134.333	-13.4	172	0.01	1.13-	1.73
2 c	Ethylene	1000.000	1229.780	-23.0	175	0.00	2.94-	3.74
3 c	Ethane	1000.000	1245.098	-24.5	177	0.00	3.57-	4.37

(#) = Out of Range
 XY025202.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Tue Feb 27 14:33:55 2007



GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19630-MB	GG020114.D 1		02/27/07	MRE	02/26/07	OP19630	GGG904

The QC reported here applies to the following samples:**Method:** SW846 8330A

T16411-2, T16411-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	117% 70-136%

Method Blank Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19630-MB	GG020188.D 1		03/01/07	MRE	02/26/07	OP19630	GGG905

The QC reported here applies to the following samples: Method: SW846 8330A

T16411-2, T16411-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	98% 70-136%

Blank Spike Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19630-BS	GG020113.D1		02/27/07	MRE	02/26/07	OP19630	GGG904

The QC reported here applies to the following samples: Method: SW846 8330A

T16411-2, T16411-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.4	108	74-152
121-82-4	RDX	5	5.4	108	80-124
99-65-0	1,3-Dinitrobenzene	5	5.4	108	84-123
606-20-2	2,6-Dinitrotoluene	5	5.1	102	84-133
121-14-2	2,4-Dinitrotoluene	5	5.3	106	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.4	108	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.3	106	84-123
98-95-3	Nitrobenzene	5	5.6	112	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.1	102	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.7	94	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.4	108	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.5	110	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	128%	70-136%

9.2
9

Blank Spike Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19630-BS	GG020187.D1		03/01/07	MRE	02/26/07	OP19630	GGG905

The QC reported here applies to the following samples: Method: SW846 8330A

T16411-2, T16411-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	6.1	122	74-152
121-82-4	RDX	5	5.6	112	80-124
99-65-0	1,3-Dinitrobenzene	5	5.4	108	84-123
606-20-2	2,6-Dinitrotoluene	5	5.2	104	84-133
121-14-2	2,4-Dinitrotoluene	5	5.3	106	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.4	108	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.2	104	84-123
98-95-3	Nitrobenzene	5	6.2	124	76-128
88-72-2	o-Nitrotoluene	5	5.1	102	76-120
99-08-1	m-Nitrotoluene	5	5.4	108	74-124
99-99-0	p-Nitrotoluene	5	5.4	108	81-125
479-45-8	Tetryl	5	4.8	96	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.7	114	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.9	118	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	112%	70-136%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: T16411**Account:** ALGC Accutest Laboratories Gulf Coast, Inc.**Project:** ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19630-MS	GG020118.D 1		02/27/07	MRE	02/26/07	OP19630	GGG904
OP19630-MSD	GG020119.D 1		02/27/07	MRE	02/26/07	OP19630	GGG904
F47423-3 ^a	GG020168.D 1		02/28/07	MRE	02/26/07	OP19630	GGG904
F47423-3 ^b	GG020190.D 1		03/01/07	MRE	02/26/07	OP19630	GGG905

The QC reported here applies to the following samples:**Method:** SW846 8330A

T16411-2, T16411-3

CAS No.	Compound	F47423-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	1.2	9.62	10.9	101	11.3	105	4	74-152/21
121-82-4	RDX	14.5	9.62	25.3	112	26.9	129*	6	80-124/20
99-65-0	1,3-Dinitrobenzene	ND	9.62	9.8	102	10.2	106	4	84-123/23
606-20-2	2,6-Dinitrotoluene	ND	9.62	9.3	97	9.7	101	4	84-133/23
121-14-2	2,4-Dinitrotoluene	ND	9.62	9.5	99	9.8	102	3	77-116/26
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	9.62	9.3	97	9.8	102	5	78-117/28
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	9.62	9.0	94	9.5	99	5	84-123/27
98-95-3	Nitrobenzene	ND	9.62	10.1	105	10.5	109	4	76-128/28
88-72-2	o-Nitrotoluene	ND	9.62	8.9	93	9.5	99	7	76-120/30
99-08-1	m-Nitrotoluene	ND	9.62	9.1	95	9.8	102	7	74-124/32
99-99-0	p-Nitrotoluene	ND	9.62	9.4	98	10.1	105	7	81-125/34
479-45-8	Tetryl	ND	9.62	7.4	77	7.8	81	5	62-117/28
99-35-4	1,3,5-Trinitrobenzene	ND	9.62	9.9	103	10.3	107	4	85-127/21
118-96-7	2,4,6-Trinitrotoluene	ND	9.62	9.6	100	10	104	4	71-128/21

CAS No.	Surrogate Recoveries	MS	MSD	F47423-3	F47423-3	Limits
610-39-9	3,4-Dinitrotoluene	94%	94%	103%	105%	70-136%

(a) All hits confirmed by reanalysis on a dissimilar column.

(b) Confirmation run.

Semivolatile Surrogate Recovery Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Method: SW846 8330A	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
T16411-2	GG020170.D	98.0
T16411-3	GG020171.D	96.0
OP19630-BS	GG020113.D	128.0
OP19630-BS	GG020187.D	112.0
OP19630-MB	GG020114.D	117.0
OP19630-MB	GG020188.D	98.0
OP19630-MS	GG020118.D	94.0
OP19630-MSD	GG020119.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

9.4
6

GC Surrogate Retention Time Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG904-CC825	Injection Date:	02/27/07
Lab File ID:	GG020112.D	Injection Time:	15:07
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.47

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP19630-BS	GG020113.D	02/27/07	15:34	13.47
OP19630-MB	GG020114.D	02/27/07	16:02	13.49
ZZZZZZ	GG020115.D	02/27/07	16:29	13.51
ZZZZZZ	GG020116.D	02/27/07	16:57	13.52
OP19630-MS	GG020118.D	02/27/07	17:52	13.51
OP19630-MSD	GG020119.D	02/27/07	18:20	13.51
ZZZZZZ	GG020120.D	02/27/07	18:47	13.51
ZZZZZZ	GG020122.D	02/27/07	19:43	13.50

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

9.5
6

GC Surrogate Retention Time Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG904-CC825	Injection Date:	02/28/07
Lab File ID:	GG020166.D	Injection Time:	16:02
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
F47423-3	GG020168.D	02/28/07	16:57	13.44
ZZZZZZ	GG020169.D	02/28/07	17:25	13.44
T16411-2	GG020170.D	02/28/07	17:52	13.45
T16411-3	GG020171.D	02/28/07	18:20	13.44
ZZZZZZ	GG020172.D	02/28/07	18:47	13.47
OP19656-BS	GG020173.D	02/28/07	19:15	13.39
OP19656-MB	GG020174.D	02/28/07	19:43	13.38
F47412-1	GG020175.D	02/28/07	20:10	13.38
OP19656-MS	GG020176.D	02/28/07	20:38	13.38
OP19656-MSD	GG020177.D	02/28/07	21:06	13.37

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG905-CC827	Injection Date:	03/01/07
Lab File ID:	GG020186.D	Injection Time:	10:47
Instrument ID:	GCGG	Method:	SW846 8330A

	S1 ^a	S1 ^b
	RT	RT
Check Std	10.70	10.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP19630-BS	GG020187.D	03/01/07	11:07	10.69	
OP19630-MB	GG020188.D	03/01/07	11:26	10.70	
ZZZZZZ	GG020189.D	03/01/07	11:46	10.69	
F47423-3	GG020190.D	03/01/07	12:05	10.70	
ZZZZZZ	GG020191.D	03/01/07	12:25	10.69	
OP19656-BS	GG020193.D	03/01/07	13:04	10.66	
OP19656-MB	GG020194.D	03/01/07	13:24	10.67	
ZZZZZZ	GG020195.D	03/01/07	13:43	10.67	
GGG905-ECC827	GG020197.D	03/01/07	14:22	10.72	10.72

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

Initial Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICC825
Lab FileID: GG018282.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Initial Calibration

Calibration Files

20 =GG018279.D 100 =GG018280.D 250 =GG018281.D 500 =GG018282.D
 750 =GG018283.D 1000=GG018284.D 2000=GG018285.D ICV =GG018286.D

Compound	20	100	250	500	750	1000	2000	ICV	Avg	%RSD
1) HMX	2.870	2.789	2.757	2.694	2.719	2.735	2.786		2.764	E3 2.09
2) TNX	5.916	6.424	6.486	6.331	6.453	6.468	6.587		6.381	E3 3.43
3) DNX	4.900	5.156	5.125	4.986	5.037	5.057	5.155		5.059	E3 1.88
4) MNX	4.909	4.991	4.972	4.807	4.886	4.901	4.995		4.923	E3 1.38
5) RDX	3.185	3.565	3.625	3.500	3.554	3.547	3.609		3.512	E3 4.27
6) 1,3,5-Trinit	7.763	7.813	7.689	7.436	7.595	7.612	7.763		7.667	E3 1.70
7) 1,3-Dinitrob	1.069	1.070	1.060	1.029	1.047	1.051	1.071		1.057	E4 1.49
8) Tetryl	6.130	6.168	6.180	6.004	6.091	6.096	6.221		6.127	E3 1.17
9) Nitrobenzene	7.057	7.032	7.019	6.708	6.915	6.920	7.082		6.962	E3 1.85
10) 3,4-Dinitrot	4.667	4.752	4.687	4.537	4.621	4.631	4.731		4.661	E3 1.56
11) 2,4,6-Trinit	7.275	7.409	7.373	7.143	7.282	7.301	7.456		7.320	E3 1.42
12) 4-Amino-2,6-	5.266	5.304	5.264	5.117	5.194	5.220	5.330		5.242	E3 1.37
13) 2-Amino-4,6-	7.249	7.203	7.187	7.006	7.130	7.155	7.311		7.177	E3 1.35
14) 2,6-Dinitrot	5.524	5.133	5.010	4.844	4.942	4.954	5.071		5.068	E3 4.37
15) 2,4-Dinitrot	1.149	1.009	0.992	0.958	0.976	0.978	0.999		1.009	E4 6.36
16) o-Nitrotolue	5.044	4.558	4.542	4.244	4.403	4.414	4.516		4.532	E3 5.53
17) p-Nitrotolue	4.102	3.815	3.790	3.596	3.734	3.734	3.831		3.800	E3 4.06
18) m-Nitrotolue	4.959	4.808	4.856	4.629	4.803	4.812	4.942		4.830	E3 2.26

Signal #2

1) HMX	8.151	8.148	8.190	8.012	8.090	8.092	8.238		8.132	E3 0.91
2) TNX	0.956	0.980	0.995	0.969	0.984	0.985	1.001		0.981	E4 1.55
3) DNX	7.525	8.044	8.332	7.974	7.996	7.991	8.136		8.000	E3 3.05
4) MNX	7.756	7.781	7.940	7.696	7.742	7.746	7.895		7.794	E3 1.14
5) RDX	4.720	5.727	5.947	5.855	5.997	5.944	6.042		5.748	E3 8.08
6) 1,3,5-Trinit	1.479	1.619	1.553	1.513	1.538	1.540	1.572		1.545	E4 2.85
7) 1,3-Dinitrob	1.225	1.286	1.279	1.246	1.265	1.272	1.295		1.267	E4 1.91
8) Tetryl	1.037	1.106	1.123	1.092	1.106	1.105	1.129		1.100	E4 2.76
9) Nitrobenzene	3.263	3.394	3.343	3.176	3.205	3.190	3.274		3.264	E3 2.50
10) 3,4-Dinitrot	6.324	6.522	6.468	6.218	6.242	6.243	6.394		6.344	E3 1.89
11) 2,4,6-Trinit	1.070	1.106	1.085	1.048	1.060	1.064	1.089		1.075	E4 1.85
12) 4-Amino-2,6-	1.430	1.457	1.434	1.391	1.407	1.413	1.444		1.425	E4 1.62
13) 2-Amino-4,6-	1.240	1.240	1.201	1.171	1.189	1.194	1.223		1.208	E4 2.20
14) 2,6-Dinitrot	8.005	7.244	6.878	6.645	6.758	6.778	6.958		7.038	E3 6.64
15) 2,4-Dinitrot	1.102	0.930	0.906	0.880	0.888	0.892	0.911		0.930	E4 8.36
16) o-Nitrotolue	5.194	4.804	4.848	4.493	4.691	4.697	4.799		4.789	E3 4.46
17) p-Nitrotolue	7.934	7.544	7.631	7.143	7.472	7.477	7.640		7.549	E3 3.15
18) m-Nitrotolue	6.835	7.097	7.192	6.782	7.103	7.117	7.290		7.060	E3 2.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

8330_EX.M

Fri Oct 20 16:25:52 2006

Initial Calibration Verification

Job Number: T16411
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
 Lab FileID: GG018286.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1A.ch
 Acq On : 18-Oct-2006, 17:39:03 Operator: MIKEE
 Sample : ICV825-500 Inst : G1315B
 Misc : OP18202,ggg825,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Oct 19 11:32:41 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	500.000	531.119	-6.2	0	0.00	3.83- 4.83
2	TNX			-----NA-----			
3	DNX			-----NA-----			
4	MXN			-----NA-----			
5	RDX	500.000	507.091	-1.4	0	0.00	6.10- 7.10
6	1,3,5-Trinitrobenzene	500.000	533.853	-6.8	0	0.00	8.41- 9.41
7	1,3-Dinitrobenzene	500.000	523.924	-4.8	0	0.00	10.38-11.38
8	Tetryl	500.000	484.365	3.1	0	0.00	11.18-12.18
9	Nitrobenzene	500.000	531.046	-6.2	0	0.00	11.86-12.86
10 S	3,4-Dinitrotoluene			-----NA-----			
11	2,4,6-Trinitrotoluene	500.000	507.486	-1.5	0	0.00	13.56-14.56
12	4-Amino-2,6-Dinitrotol	500.000	515.885	-3.2	0	0.00	14.25-15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.846	3.8	0	0.00	15.03-16.03
14	2,6-Dinitrotoluene	500.000	496.634	0.7	0	0.00	16.01-17.01
15	2,4-Dinitrotoluene	500.000	502.401	-0.5	0	0.00	16.52-17.52
16	o-Nitrotoluene	500.000	501.204	-0.2	0	0.00	19.59-20.59
17	p-Nitrotoluene	500.000	520.375	-4.1	0	0.00	20.92-21.92
18	m-Nitrotoluene	500.000	509.118	-1.8	0	0.00	22.61-23.61

***** Signal #2 *****

1	HMX	500.000	537.899	-7.6	0	0.00	3.83- 4.83
2	TNX			-----NA-----			
3	DNX			-----NA-----			
4	MXN			-----NA-----			
5	RDX	500.000	525.299	-5.1	0	0.00	6.10- 7.10
6	1,3,5-Trinitrobenzene	500.000	533.889	-6.8	0	0.00	8.41- 9.41
7	1,3-Dinitrobenzene	500.000	529.524	-5.9	0	0.00	10.38-11.38
8	Tetryl	500.000	489.295	2.1	0	0.00	11.18-12.18
9	Nitrobenzene	500.000	531.782	-6.4	0	0.00	11.86-12.86
10 S	3,4-Dinitrotoluene			-----NA-----			
11	2,4,6-Trinitrotoluene	500.000	505.844	-1.2	0	0.00	13.56-14.56
12	4-Amino-2,6-Dinitrotol	500.000	516.203	-3.2	0	0.00	14.25-15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.458	3.9	0	0.00	15.03-16.03
14	2,6-Dinitrotoluene	500.000	493.423	1.3	0	0.00	16.01-17.01
15	2,4-Dinitrotoluene	500.000	499.987	0.0	0	0.00	16.52-17.52
16	o-Nitrotoluene	500.000	503.639	-0.7	0	0.00	19.59-20.59
17	p-Nitrotoluene	500.000	523.730	-4.7	0	0.00	20.92-21.92
18	m-Nitrotoluene	500.000	512.492	-2.5	0	0.00	22.61-23.61

Initial Calibration Verification

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:26:22 2006

Initial Calibration Verification

Page 1 of 2

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1B.ch Vial: 4
Signal #2 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1A.ch
Acq On : 19-Oct-2006, 13:44:13 Operator: MIKEE
Sample : ICV825-500 Inst : G1315B
Misc : OP18222,ggg826,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX				NA			
2	TNX	500.000	514.364	-2.9	0	0.00	4.15-	5.15
3	DNX	500.000	511.166	-2.2	0	0.00	4.58-	5.58
4	MXN	500.000	518.059	-3.6	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

***** Signal #2 *****

1	HMX				NA			
2	TNX	500.000	509.991	-2.0	0	0.00	4.15-	5.15
3	DNX	500.000	523.209	-4.6	0	0.00	4.58-	5.58
4	MXN	500.000	527.451	-5.5	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

Initial Calibration Verification

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:54:56 2006

Initial Calibration Summary

Page 1 of 1

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICC827
Lab FileID: GG018316.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Initial Calibration

Calibration Files

20 =GG018313.D 100 =GG018314.D 250 =GG018315.D 500 =GG018316.D
 750 =GG018317.D 1000=GG018318.D 2000=GG018319.D

	Compound	20	100	250	500	750	1000	2000	Avg	%RSD
1)	TNX	6.022	6.861	7.022	6.686	6.915	6.925	7.121	6.793	E3 5.38
2)	HMX	2.976	2.856	2.642	2.478	2.489	2.481	2.586	2.644	E3 7.51
3)	DNX	5.820	5.904	5.816	5.437	5.628	5.545	5.823	5.710	E3 3.05
4)	MXN	4.717	4.981	5.224	5.007	5.063	4.976	5.294	5.037	E3 3.73
5)	1,3,5-Trinitroben	7.302	7.899	8.123	7.797	7.946	7.847	8.236	7.879	E3 3.78
6)	RDX	3.327	3.935	3.881	3.729	3.710	3.686	3.841	3.730	E3 5.39
7)	1,3-Dinitrobenzen	1.122	1.117	1.144	1.096	1.117	1.113	1.146	1.122	E4 1.56
8)	Nitrobenzene	6.720	7.206	7.440	7.104	7.286	7.290	7.513	7.223	E3 3.61
9)	2,4,6-Trinitrotol	7.126	7.674	7.812	7.517	7.651	7.587	7.941	7.615	E3 3.39
10)	Tetryl	5.119	5.755	6.124	6.105	6.006	5.862	6.470	5.920	E3 7.10
11)	S 3,4-Dinitrotoluen	4.973	4.941	4.969	4.829	4.912	4.883	5.055	4.938	E3 1.46
12)	2,6-Dinitrotoluen	6.023	5.649	5.657	5.415	5.544	5.538	5.672	5.643	E3 3.38
13)	2,4-Dinitrotoluen	1.200	1.036	1.034	0.995	1.012	1.007	1.038	1.046	E4 6.68
14)	o-Nitrotoluene	5.021	4.648	4.729	4.526	4.679	4.666	4.837	4.729	E3 3.36
15)	p-Nitrotoluene	4.036	3.890	3.967	3.762	3.919	3.914	4.051	3.934	E3 2.49
16)	4-Amino-2,6-Dinit	5.109	5.368	5.518	5.300	5.406	5.380	5.621	5.386	E3 3.01
17)	m-Nitrotoluene	4.743	4.946	5.173	4.937	5.131	5.119	5.324	5.053	E3 3.79
18)	2-Amino-4,6-Dinit	7.249	7.503	7.692	7.547	7.548	7.525	7.845	7.558	E3 2.42

Signal #2

1)	TNX	0.828	1.032	1.066	1.024	1.037	1.032	1.073	1.013	E4 8.25
2)	HMX	8.967	9.716	9.270	8.345	8.192	8.095	8.326	8.702	E3 7.15
3)	DNX	0.786	1.108	1.019	0.937	0.919	0.897	0.935	0.943	E4 10.65
4)	MXN	7.457	8.346	8.580	8.147	8.087	7.895	8.399	8.130	E3 4.58
5)	1,3,5-Trinitroben	1.449	1.617	1.667	1.594	1.616	1.593	1.673	1.601	E4 4.64
6)	RDX	6.077	6.386	6.563	6.283	6.229	6.181	6.460	6.311	E3 2.67
7)	1,3-Dinitrobenzen	1.294	1.326	1.427	1.333	1.365	1.364	1.397	1.358	E4 3.31
8)	Nitrobenzene	3.190	3.096	3.823	3.281	3.391	3.385	3.476	3.378	E3 6.96
9)	2,4,6-Trinitrotol	1.098	1.109	1.152	1.104	1.122	1.113	1.169	1.124	E4 2.37
10)	Tetryl	0.953	1.028	1.114	1.113	1.085	1.059	1.177	1.075	E4 6.67
11)	S 3,4-Dinitrotoluen	6.832	6.775	6.813	6.648	6.692	6.629	6.906	6.756	E3 1.53
12)	2,6-Dinitrotoluen	8.344	7.760	7.758	7.423	7.578	7.556	7.765	7.740	E3 3.83
13)	2,4-Dinitrotoluen	1.104	0.941	0.942	0.911	0.927	0.919	0.952	0.957	E4 6.94
14)	o-Nitrotoluene	3.189	2.755	2.867	2.791	2.895	2.880	3.025	2.915	E3 5.09
15)	p-Nitrotoluene	2.114	1.879	1.907	1.825	1.916	1.926	1.998	1.938	E3 4.82
16)	4-Amino-2,6-Dinit	1.431	1.486	1.522	1.459	1.490	1.484	1.552	1.489	E4 2.66
17)	m-Nitrotoluene	2.353	2.391	2.516	2.444	2.546	2.567	2.681	2.500	E3 4.52
18)	2-Amino-4,6-Dinit	1.233	1.258	1.276	1.258	1.253	1.255	1.311	1.263	E4 1.92

(#) = Out of Range

8330_RP.M

Mon Oct 23 13:34:29 2006

Initial Calibration Verification

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1A.ch
 Acq On : 20-Oct-2006, 14:03:23 Operator: MIKEE
 Sample : ICV827-250 Inst : G1315B
 Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Oct 20 14:03:32 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	250.000	258.384	-3.4	100	0.00	4.21-	5.21
2	HMX	250.000	260.989	-4.4	104	0.00	4.69-	5.69
3	DNX	250.000	254.013	-1.6	100	0.00	4.83-	5.83
4	MXN	250.000	255.142	-2.1	98	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	264.789	-5.9	103	0.00	6.12-	7.12
6	RDX	250.000	252.023	-0.8	97	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	257.308	-2.9	101	0.00	7.70-	8.70
8	Nitrobenzene	250.000	266.121	-6.4	103	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	268.228	-7.3	105	0.00	8.71-	9.71
10	Tetryl	250.000	205.504	17.8#	79	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	254.196	-1.7	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	244.946	2.0	99	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	248.278	0.7	99	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	258.872	-3.5	103	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	250.000	255.921	-2.4	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	252.478	-1.0	99	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	250.000	236.039	5.6	93	0.00	14.31-	15.31

***** Signal #2 *****

1	TNX	250.000	262.147	-4.9	100	0.00	4.22-	5.22
2	HMX	250.000	276.033	-10.4	104	0.00	4.69-	5.69
3	DNX	250.000	263.149	-5.3	97	0.00	4.83-	5.83
4	MXN	250.000	255.967	-2.4	97	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	265.613	-6.2	102	0.00	6.12-	7.12
6	RDX	250.000	248.723	0.5	96	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	276.649	-10.7	105	0.00	7.70-	8.70
8	Nitrobenzene	250.000	301.148	-20.5#	106	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	269.121	-7.6	105	0.00	8.71-	9.71
10	Tetryl	250.000	203.173	18.7#	78	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	252.008	-0.8	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	241.694	3.3	98	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	241.466	3.4	98	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	250.555	-0.2	102	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	250.000	255.253	-2.1	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	250.572	-0.2	100	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	250.000	234.881	6.0	93	0.00	14.31-	15.31

Initial Calibration Verification

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018315.D 8330_RP.M Mon Oct 23 13:35:35 2006

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020112.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\02270DS\GG020112.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\02270DS\GG020112.D\dad1A.ch
 Acq On : 27-Feb-2007, 15:07:27 Operator: MIKEE
 Sample : CC825-500 Inst : G1315B
 Misc : OP19630,ggg904,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMx	500.000	861.245	-72.2#	177	0.00	3.86-	4.86
2	TNx	500.000	510.794	-2.2	103	-0.02	4.20-	5.20
3	DNx	500.000	506.900	-1.4	103	0.00	4.60-	5.60
4	MNx	500.000	503.878	-0.8	103	0.00	5.37-	6.37
5	RDX	500.000	552.400	-10.5	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	490.330	1.9	101	0.00	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	492.556	1.5	101	0.00	10.43-	11.43
8	Tetryl	500.000	492.314	1.5	100	0.02	11.21-	12.21
9	Nitrobenzene	500.000	500.074	-0.0	104	0.00	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	486.630	2.7	100	0.02	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	498.410	0.3	102	0.02	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	490.908	1.8	101	0.03	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	498.514	0.3	102	0.03	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	480.354	3.9	101	0.02	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	487.505	2.5	103	0.02	16.60-	17.60
16	o-Nitrotoluene	500.000	485.983	2.8	104	0.00	19.73-	20.73
17	p-Nitrotoluene	500.000	496.713	0.7	105	0.00	21.06-	22.06
18	m-Nitrotoluene	500.000	498.379	0.3	104	0.00	22.76-	23.76

***** Signal #2 *****

1	HMx	500.000	880.230	-76.0#	179	0.00	3.86-	4.86
2	TNx	500.000	507.955	-1.6	103	0.00	4.18-	5.18
3	DNx	500.000	513.506	-2.7	103	0.00	4.60-	5.60
4	MNx	500.000	515.058	-3.0	104	0.00	5.37-	6.37
5	RDX	500.000	571.879	-14.4	112	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	497.471	0.5	102	0.00	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	494.537	1.1	101	0.00	10.43-	11.43
8	Tetryl	500.000	498.021	0.4	100	0.02	11.21-	12.21
9	Nitrobenzene	500.000	491.840	1.6	101	0.00	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	483.141	3.4	99	0.01	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	496.140	0.8	102	0.02	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	491.387	1.7	101	0.03	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	499.381	0.1	103	0.03	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	484.237	3.2	103	0.02	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	477.289	4.5	101	0.01	16.60-	17.60
16	o-Nitrotoluene	500.000	485.916	2.8	104	0.00	19.73-	20.73
17	p-Nitrotoluene	500.000	495.972	0.8	105	0.00	21.06-	22.06
18	m-Nitrotoluene	500.000	505.343	-1.1	105	0.00	22.77-	23.77

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020112.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Thu Mar 01 13:07:14 2007

Continuing Calibration Summary

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Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020123.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\02270DS\GG020123.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\02270DS\GG020123.D\dad1A.ch
 Acq On : 27-Feb-2007, 20:10:35 Operator: MIKEE
 Sample : CC825-500 Inst : G1315B
 Misc : OP19630,ggg904,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX	500.000	863.172	-72.6#	177	0.00	3.86-	4.86
2	TNX	500.000	510.727	-2.1	103	-0.01	4.20-	5.20
3	DNX	500.000	510.916	-2.2	104	0.01	4.60-	5.60
4	MXN	500.000	506.368	-1.3	104	0.01	5.37-	6.37
5	RDX	500.000	552.024	-10.4	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	492.210	1.6	102	0.03	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	490.970	1.8	101	0.03	10.43-	11.43
8	Tetryl	500.000	492.506	1.5	101	0.05	11.21-	12.21
9	Nitrobenzene	500.000	495.993	0.8	103	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	483.655	3.3	99	0.05	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	499.260	0.1	102	0.05	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	490.118	2.0	100	0.08	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	498.867	0.2	102	0.08	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	483.943	3.2	101	0.07	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	483.189	3.4	102	0.07	16.60-	17.60
16	o-Nitrotoluene	500.000	480.057	4.0	103	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	486.687	2.7	103	0.07	21.06-	22.06
18	m-Nitrotoluene	500.000	499.963	0.0	104	0.08	22.76-	23.76

***** Signal #2 *****

1	HMX	500.000	878.981	-75.8#	178	0.00	3.86-	4.86
2	TNX	500.000	507.479	-1.5	103	0.00	4.18-	5.18
3	DNX	500.000	515.325	-3.1	103	0.01	4.60-	5.60
4	MXN	500.000	517.495	-3.5	105	0.01	5.37-	6.37
5	RDX	500.000	573.980	-14.8	113	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	498.212	0.4	102	0.03	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	493.984	1.2	100	0.03	10.43-	11.43
8	Tetryl	500.000	498.348	0.3	100	0.05	11.21-	12.21
9	Nitrobenzene	500.000	485.381	2.9	100	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	477.388	4.5	97	0.05	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	495.190	1.0	102	0.05	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	490.438	1.9	101	0.07	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	498.460	0.3	103	0.08	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	482.315	3.5	102	0.07	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	479.653	4.1	101	0.07	16.60-	17.60
16	o-Nitrotoluene	500.000	487.394	2.5	104	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	491.569	1.7	104	0.07	21.06-	22.06
18	m-Nitrotoluene	500.000	501.875	-0.4	104	0.08	22.77-	23.77

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020123.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Thu Mar 01 13:07:14 2007

Continuing Calibration Summary

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Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020166.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\02270DS\GG020166.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\02270DS\GG020166.D\dad1A.ch
 Acq On : 28-Feb-2007, 16:02:03 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19589,ggg904,2.00,,,20,,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	976.886	2.3	99	-0.01	3.86- 4.86
2	TNX	1000.000	1020.161	-2.0	101	-0.02	4.20- 5.20
3	DNX	1000.000	1010.898	-1.1	101	0.00	4.60- 5.60
4	MXN	1000.000	1001.672	-0.2	101	-0.01	5.37- 6.37
5	RDX	1000.000	1005.151	-0.5	100	-0.03	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	983.375	1.7	99	-0.01	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	985.892	1.4	99	-0.02	10.43-11.43
8	Tetryl	1000.000	978.411	2.2	98	-0.03	11.21-12.21
9	Nitrobenzene	1000.000	981.508	1.8	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	960.214	4.0	97	-0.02	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	994.844	0.5	100	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	982.608	1.7	99	-0.02	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	1000.306	-0.0	100	-0.02	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	981.502	1.8	100	-0.01	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	969.833	3.0	100	-0.02	16.60-17.60
16	o-Nitrotoluene	1000.000	976.020	2.4	100	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	998.363	0.2	102	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1003.931	-0.4	101	-0.01	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	993.340	0.7	100	-0.01	3.86- 4.86
2	TNX	1000.000	1013.254	-1.3	101	0.00	4.18- 5.18
3	DNX	1000.000	1027.579	-2.8	103	0.00	4.60- 5.60
4	MXN	1000.000	1028.482	-2.8	103	-0.01	5.37- 6.37
5	RDX	1000.000	1079.137	-7.9	104	-0.03	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	1005.009	-0.5	101	-0.01	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	993.035	0.7	99	-0.02	10.43-11.43
8	Tetryl	1000.000	1000.774	-0.1	100	-0.03	11.21-12.21
9	Nitrobenzene	1000.000	967.926	3.2	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	961.248	3.9	98	-0.02	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	991.046	0.9	100	-0.01	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	985.363	1.5	99	-0.02	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	996.347	0.4	101	-0.02	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	970.579	2.9	101	-0.01	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	960.647	3.9	100	-0.02	16.60-17.60
16	o-Nitrotoluene	1000.000	974.674	2.5	99	-0.02	19.73-20.73
17	p-Nitrotoluene	1000.000	992.075	0.8	100	-0.02	21.06-22.06
18	m-Nitrotoluene	1000.000	1006.058	-0.6	100	-0.02	22.77-23.77

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020166.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Thu Mar 01 11:49:46 2007

Continuing Calibration Summary

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Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020178.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\02270DS\GG020178.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\02270DS\GG020178.D\dad1A.ch
 Acq On : 28-Feb-2007, 21:33:36 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19656,ggg904,2.00,,,20,,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	979.852	2.0	99	-0.01	3.86- 4.86
2	TNX	1000.000	1020.353	-2.0	101	-0.02	4.20- 5.20
3	DNX	1000.000	1021.165	-2.1	102	0.00	4.60- 5.60
4	MXN	1000.000	1009.347	-0.9	101	-0.01	5.37- 6.37
5	RDX	1000.000	1010.783	-1.1	100	-0.03	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	992.569	0.7	100	-0.01	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	987.520	1.2	99	-0.02	10.43-11.43
8	Tetryl	1000.000	991.603	0.8	100	-0.04	11.21-12.21
9	Nitrobenzene	1000.000	988.345	1.2	99	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	967.313	3.3	97	-0.03	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	998.111	0.2	100	-0.03	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	979.912	2.0	98	-0.04	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	1002.882	-0.3	101	-0.04	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	993.848	0.6	102	-0.03	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	973.356	2.7	100	-0.03	16.60-17.60
16	o-Nitrotoluene	1000.000	991.316	0.9	102	-0.03	19.73-20.73
17	p-Nitrotoluene	1000.000	1006.330	-0.6	102	-0.03	21.06-22.06
18	m-Nitrotoluene	1000.000	1006.337	-0.6	101	-0.03	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	993.457	0.7	100	-0.01	3.86- 4.86
2	TNX	1000.000	1013.005	-1.3	101	0.00	4.18- 5.18
3	DNX	1000.000	1028.970	-2.9	103	0.00	4.60- 5.60
4	MXN	1000.000	1021.470	-2.1	103	-0.01	5.37- 6.37
5	RDX	1000.000	1069.147	-6.9	103	-0.03	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	999.211	0.1	100	-0.01	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	993.686	0.6	99	-0.02	10.43-11.43
8	Tetryl	1000.000	1004.494	-0.4	100	-0.04	11.21-12.21
9	Nitrobenzene	1000.000	958.453	4.2	98	-0.01	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	955.621	4.4	97	-0.03	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	988.837	1.1	100	-0.03	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	980.065	2.0	99	-0.04	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	997.096	0.3	101	-0.04	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	976.669	2.3	101	-0.03	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	959.581	4.0	100	-0.03	16.60-17.60
16	o-Nitrotoluene	1000.000	993.323	0.7	101	-0.03	19.73-20.73
17	p-Nitrotoluene	1000.000	1004.376	-0.4	101	-0.03	21.06-22.06
18	m-Nitrotoluene	1000.000	1016.726	-1.7	101	-0.03	22.77-23.77

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG904-CC825
Lab FileID: GG020178.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Thu Mar 01 11:49:46 2007

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG905-CC827
Lab FileID: GG020186.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0301RP\GG020186.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\0301RP\GG020186.D\dad1A.ch
 Acq On : 01-Mar-2007, 10:47:39 Operator: MIKEE
 Sample : CC827-500 Inst : G1315B
 Misc : OP19630,ggg905,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	500.367	-0.1	102	0.02	4.24-	5.24
2	HMX	500.000	496.427	0.7	106	0.00	4.75-	5.75
3	DNX	500.000	482.515	3.5	101	0.00	4.87-	5.87
4	MXN	500.000	515.963	-3.2	104	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	503.148	-0.6	102	0.00	6.17-	7.17
6	RDX	500.000	499.191	0.2	100	0.01	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	491.887	1.6	101	-0.02	7.78-	8.78
8	Nitrobenzene	500.000	506.416	-1.3	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	500.527	-0.1	101	-0.03	8.80-	9.80
10	Tetryl	500.000	530.339	-6.1	103	-0.01	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	486.902	2.6	100	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	481.130	3.8	100	-0.03	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	477.442	4.5	100	-0.04	11.06-	12.06
14	o-Nitrotoluene	500.000	496.217	0.8	104	-0.03	11.86-	12.86
15	p-Nitrotoluene	500.000	501.970	-0.4	105	-0.03	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	500.000	493.489	1.3	100	-0.02	12.95-	13.95
17	m-Nitrotoluene	500.000	518.753	-3.8	106	-0.04	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	500.000	499.837	0.0	100	-0.03	14.45-	15.45

***** Signal #2 *****

1	TNX	500.000	516.090	-3.2	102	0.02	4.24-	5.24
2	HMX	500.000	476.869	4.6	99	0.00	4.75-	5.75
3	DNX	500.000	503.539	-0.7	101	0.00	4.87-	5.87
4	MXN	500.000	507.399	-1.5	101	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	502.762	-0.6	101	0.00	6.17-	7.17
6	RDX	500.000	515.962	-3.2	104	0.01	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	491.883	1.6	100	-0.02	7.78-	8.78
8	Nitrobenzene	500.000	487.140	2.6	100	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	493.768	1.2	101	-0.03	8.80-	9.80
10	Tetryl	500.000	525.509	-5.1	102	-0.01	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	478.913	4.2	97	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	476.400	4.7	99	-0.03	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	471.636	5.7	99	-0.04	11.06-	12.06
14	o-Nitrotoluene	500.000	479.488	4.1	100	-0.03	11.86-	12.86
15	p-Nitrotoluene	500.000	499.073	0.2	106	-0.02	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	500.000	493.318	1.3	101	-0.02	12.95-	13.95
17	m-Nitrotoluene	500.000	512.966	-2.6	105	-0.04	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	500.000	496.978	0.6	100	-0.03	14.45-	15.45

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG905-CC827
Lab FileID: GG020186.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Fri Mar 02 08:20:28 2007

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG905-ECC827
Lab FileID: GG020197.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0301RP\GG020197.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\0301RP\GG020197.D\dad1A.ch
 Acq On : 01-Mar-2007, 14:22:52 Operator: MIKEE
 Sample : ECC827-1000 Inst : G1315B
 Misc : OP19656,ggg905,2.00,,,20,,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	1000.000	1004.955	-0.5	99	0.02	4.24-	5.24
2	HMX	1000.000	917.636	8.2	98	0.00	4.75-	5.75
3	DNX	1000.000	1011.140	-1.1	104	0.01	4.87-	5.87
4	MXN	1000.000	1039.196	-3.9	105	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1013.030	-1.3	102	0.00	6.17-	7.17
6	RDX	1000.000	995.726	0.4	101	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	993.807	0.6	100	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1041.178	-4.1	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1069.475	-6.9	107	-0.01	8.80-	9.80
10	Tetryl	1000.000	1115.023	-11.5	113	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	985.365	1.5	100	0.01	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	971.945	2.8	99	-0.01	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	961.600	3.8	100	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	992.619	0.7	101	0.00	11.86-	12.86
15	p-Nitrotoluene	1000.000	1003.275	-0.3	101	0.00	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	1000.000	995.204	0.5	100	0.00	12.95-	13.95
17	m-Nitrotoluene	1000.000	1036.245	-3.6	102	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	1000.000	1004.422	-0.4	101	0.00	14.45-	15.45

***** Signal #2 *****

1	TNX	1000.000	1021.114	-2.1	100	0.02	4.24-	5.24
2	HMX	1000.000	925.142	7.5	99	0.00	4.75-	5.75
3	DNX	1000.000	985.766	1.4	104	0.01	4.87-	5.87
4	MXN	1000.000	1019.924	-2.0	105	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1011.841	-1.2	102	0.00	6.17-	7.17
6	RDX	1000.000	998.846	0.1	102	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	995.060	0.5	99	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1010.144	-1.0	101	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1019.746	-2.0	103	-0.01	8.80-	9.80
10	Tetryl	1000.000	1078.605	-7.9	110	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	972.193	2.8	99	0.01	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	967.138	3.3	99	-0.01	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	960.105	4.0	100	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	991.930	0.8	100	0.00	11.86-	12.86
15	p-Nitrotoluene	1000.000	1038.399	-3.8	104	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	1000.000	998.474	0.2	100	0.00	12.95-	13.95
17	m-Nitrotoluene	1000.000	1059.730	-6.0	103	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	1000.000	1004.726	-0.5	101	0.00	14.45-	15.45

Continuing Calibration Summary

Job Number: T16411
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG905-ECC827
Lab FileID: GG020197.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018318.D 8330_RP.M Fri Mar 02 08:20:14 2007



General Chemistry

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Perchlorate	GP9043/GN24390	10	<10	ug/l	50	48.0	96.0	85-115%

Associated Samples:
Batch GP9043: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	<10	0.0	0-15%
Perchlorate	GP9043/GN24390	T16411-1	ug/l	4.0 U	<10	0.0	0-15%

Associated Samples:
Batch GP9043: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
(*) Outside of QC limits

10.2
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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	50	48.4	96.8	80-120%
Perchlorate	GP9043/GN24390	T16411-1	ug/l	4.0 U	50	48.7	97.4	80-120%

Associated Samples:
Batch GP9043: T16411-1, T16411-10, T16411-2, T16411-3, T16411-4, T16411-5, T16411-6, T16411-7, T16411-8, T16411-9
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

10.3
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Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT
Analyst: MP
Parameters: Perchlorate

Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:57	GN24390-CCV1	1		
14:11	GN24390-CCB1	1		
14:25	GP9043-MB1	1		
14:40	GP9043-B1	1		
14:54	GN24390-CRI1	1		
15:09	GN24390-IPC1	1		
15:23	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:52	ZZZZZZ	1		
16:06	T16411-1	1		
16:21	T16411-2	1		
16:35	T16411-3	1		
16:50	GN24390-CCV2	1		
17:04	GN24390-CCB2	1		
17:18	T16411-4	1		
17:33	T16411-5	1		
17:47	T16411-6	1		
18:02	T16411-7	1		
18:16	T16411-8	1		
18:30	T16411-9	1		
18:45	T16411-10	1		
18:59	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:28	ZZZZZZ	1		
19:42	GN24390-CCV3	1		
19:57	GN24390-CCB3	1		
20:11	ZZZZZZ	1		
20:26	ZZZZZZ	1		
20:40	ZZZZZZ	1		
20:54	GP9043-D1	1		
21:09	GP9043-S1	1		
21:23	GP9043-D2	1		
21:38	GP9043-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Analyst: MP Run ID: GN24390
Parameters: Perchlorate

Time	Sample Description	Dilution Factor	PS Recov	Comments

21:52 GN24390-CCV4 1

22:06 GN24390-CCB4 1

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: T16411
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24390-CCV1	Perchlorate	48.0	10	4.0	50	96.0	85-115
GN24390-CCB1	Perchlorate	4.0 U	10	4.0			
GN24390-CRI1	Perchlorate	4.0 U	10	4.0	3	100.0	75-125
GN24390-IPC1	Perchlorate	22.0	10	4.0	25	88.0	80-120
GN24390-CCV2	Perchlorate	51.3	10	4.0	50	103.0	85-115
GN24390-CCB2	Perchlorate	4.0 U	10	4.0			
GN24390-CCV3	Perchlorate	53.1	10	4.0	50	106.0	85-115
GN24390-CCB3	Perchlorate	4.0 U	10	4.0			
GN24390-CCV4	Perchlorate	51.6	10	4.0	50	103.0	85-115
GN24390-CCB4	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

10.4
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04/10/07

Technical Report for

Shaw E & I, Inc.

Longhorn Army Ammunition Plant

117591

Accutest Job Number: T16432

Sampling Date: 02/21/07

Report to:

Shaw E & I, Inc.

diane.meyer@shawgrp.com

ATTN: Diane Meyer

Total number of pages in report: 137



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

Ron Martino
Laboratory Manager

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Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T16432

Longhorn Army Ammunition Plant
Project No: 117591

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



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc.

Job No T16432

Site: Longhorn Army Ammunition Plant

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

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

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

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: VF2306

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

Matrix AQ

Batch ID: VY1139

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

Matrix AQ

Batch ID: VY1140

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

Volatiles by GC By Method RSKSOP-147/175

Matrix AQ

Batch ID: F:GXY995

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

Extractables by GC By Method SW846 8330A

Matrix AQ

Batch ID: F:OP19677

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

Friday, March 09, 2007

Page 1 of 3

Wet Chemistry By Method EPA 120.1**Matrix** AQ**Batch ID:** F:R17941

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

Matrix AQ**Batch ID:** GN11341

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

Wet Chemistry By Method EPA 150.1/9040**Matrix** AQ**Batch ID:** GN11306

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

Wet Chemistry By Method EPA 310.1**Matrix** AQ**Batch ID:** GN11336

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

Wet Chemistry By Method EPA 314**Matrix** AQ**Batch ID:** F:GP9043

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

Wet Chemistry By Method EPA 325.3**Matrix** AQ**Batch ID:** GN11331

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

Wet Chemistry By Method EPA 353.2**Matrix** AQ**Batch ID:** GN11288

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

Matrix AQ**Batch ID:** GN11291

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

Wet Chemistry By Method EPA 375.3**Matrix** AQ**Batch ID:** GN11356

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

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

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

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

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

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

- Co2 was calculated from the pH and Alkalinity results.

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

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

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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Laboratories Gulf Coast, Inc.

Job No: T16432

Site: ITTXHO: Longhorn Army Ammunition Plant

Report Date: 3/9/2007 10:35:36 AM

6 Samples were collected on 02/21/2007 and were received at Accutest SE on 02/28/2007 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of T16432. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

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

Volatiles by GC by Method RSKSOP-147/175

Matrix: AQ

Batch ID: GXY995

All method blanks for this batch meet method specific criteria.

Samples T16432-4DUP, T16432-6MS were used as the QC samples indicated.

The following samples were run outside of holding time for method RSKSOP-147/175: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6.

Extractables by GC by Method SW846 8330A

Matrix: AQ

Batch ID: OP19677

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F47539-3MS, F47539-3MSD were used as the QC samples indicated.

The following samples were extracted outside of holding time for method SW846 8330A: T16432-2, T16432-3. Samples extracted beyond hold time.

T16432-2, T16432-3: Sample extracted beyond hold time.

Wet Chemistry by Method EPA 314

Matrix: AQ

Batch ID: GP9043

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples T16411-10DUP, T16411-10MS were used as the QC samples for Perchlorate.

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

Narrative prepared by:

Ellen Pampel, Inorganic QA (signature on file)

Date: March 9, 2007

Friday, March 09, 2007



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LHSMW06-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-1	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010444.D	1	02/27/07	JH	n/a	n/a	VY1139
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	1.7	2.0	0.52	ug/l	J
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.1	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.77	2.0	0.63	ug/l	J

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LHSMW06-FEB2007		
Lab Sample ID:	T16432-1	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		73-139%
17060-07-0	1,2-Dichloroethane-D4	117%		66-139%
2037-26-5	Toluene-D8	133%		77-148%
460-00-4	4-Bromofluorobenzene	158% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW06-FEB2007							
Lab Sample ID: T16432-1				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025312.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	17.0	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSMW06-FEB2007

Lab Sample ID: T16432-1

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 18:59	AFL	EPA 314
Alkalinity, Total as CaCO ₃	407	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	510	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	513	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.020 B	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	2800	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	398	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	5.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.2			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW10-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-2	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010452.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW10-FEB2007**Lab Sample ID:** T16432-2**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	124%		73-139%
17060-07-0	1,2-Dichloroethane-D4	122%		66-139%
2037-26-5	Toluene-D8	129%		77-148%
460-00-4	4-Bromofluorobenzene	153% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 17WW10-FEB2007							
Lab Sample ID: T16432-2				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025313.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	20.9	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW10-FEB2007		
Lab Sample ID:	T16432-2	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	SW846 8330A SW846 3535A	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020210.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.060 U	0.20	0.060	ug/l	
121-82-4	RDX	0.075 U	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	0.070 U	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	0.065 U	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	0.075 U	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.070 U	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.080 U	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	0.060 U	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	0.060 U	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	0.075 U	0.20	0.075	ug/l	
479-45-8	Tetryl	0.075 U	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.095 U	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.080 U	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	95%		70-136%

(a) Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW10-FEB2007

Lab Sample ID: T16432-2

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 19:14	AFL	EPA 314
Alkalinity, Total as CaCO ₃	140	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	280	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	1030	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.30	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.30	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	2670	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	142	40	2.6	mg/l	4	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.0			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	17WW12-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-3	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010453.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW12-FEB2007**Lab Sample ID:** T16432-3**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	121%		73-139%
17060-07-0	1,2-Dichloroethane-D4	118%		66-139%
2037-26-5	Toluene-D8	132%		77-148%
460-00-4	4-Bromofluorobenzene	154% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW12-FEB2007		
Lab Sample ID:	T16432-3	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	RSKSOP-147/175	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025314.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	57.1	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	17WW12-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-3	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8330A SW846 3535A		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	GG020211.D	1	03/02/07	AFL	03/01/07	F:OP19677	F:GGG906
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	0.059 U	0.20	0.059	ug/l	
121-82-4	RDX	0.074 U	0.20	0.074	ug/l	
99-65-0	1,3-Dinitrobenzene	0.069 U	0.20	0.069	ug/l	
606-20-2	2,6-Dinitrotoluene	0.064 U	0.20	0.064	ug/l	
121-14-2	2,4-Dinitrotoluene	0.074 U	0.20	0.074	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	0.069 U	0.20	0.069	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	0.079 U	0.20	0.079	ug/l	
98-95-3	Nitrobenzene	0.059 U	0.20	0.059	ug/l	
88-72-2	o-Nitrotoluene	0.059 U	0.20	0.059	ug/l	
99-08-1	m-Nitrotoluene	0.074 U	0.20	0.074	ug/l	
99-99-0	p-Nitrotoluene	0.074 U	0.20	0.074	ug/l	
479-45-8	Tetryl	0.074 U	0.20	0.074	ug/l	
99-35-4	1,3,5-Trinitrobenzene	0.094 U	0.20	0.094	ug/l	
118-96-7	2,4,6-Trinitrotoluene	0.079 U	0.20	0.079	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	97%		70-136%

(a) Sample extracted beyond hold time. Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 17WW12-FEB2007

Lab Sample ID: T16432-3

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 19:28	AFL	EPA 314
Alkalinity, Total as CaCO ₃	34.0	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	170	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	305	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.20	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.20	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	1240	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	144	10	2.6	mg/l	1	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	4.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	5.6			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	LHSM07-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-4	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010454.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2	F0079010.D	10	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	40.9	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	394 ^a	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3.6	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	1.1	2.0	0.66	ug/l	J
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	15.8	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSM07-FEB2007**Lab Sample ID:** T16432-4**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	3.0	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	127%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	117%	96%	66-139%
2037-26-5	Toluene-D8	128%	106%	77-148%
460-00-4	4-Bromofluorobenzene	150%	125%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: LHSM07-FEB2007							
Lab Sample ID: T16432-4				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025315.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.88	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LHSM07-FEB2007

Lab Sample ID: T16432-4

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:11	AFL	EPA 314
Alkalinity, Total as CaCO ₃	619	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	620	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	2750	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	10600	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	2070	200	2.6	mg/l	20	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	6.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.3			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	47WW09-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-5	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010455.D	1	02/28/07	JH	n/a	n/a	VY1140
Run #2	F0079011.D	100	03/01/07	LJ	n/a	n/a	VF2306

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	4.6	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	144	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	12.2	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	2230 ^a	200	63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW09-FEB2007**Lab Sample ID:** T16432-5**Date Sampled:** 02/21/07**Matrix:** AQ - Ground Water**Date Received:** 02/23/07**Method:** SW846 8260B**Percent Solids:** n/a**Project:** Longhorn Army Ammunition Plant

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	125%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	122%	98%	66-139%
2037-26-5	Toluene-D8	129%	106%	77-148%
460-00-4	4-Bromofluorobenzene	146%	123%	84-150%

(a) Result is from Run# 2

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW09-FEB2007							
Lab Sample ID: T16432-5				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025316.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.30 U	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 47WW09-FEB2007

Lab Sample ID: T16432-5

Matrix: AQ - Ground Water

Date Sampled: 02/21/07

Date Received: 02/23/07

Percent Solids: n/a

Project: Longhorn Army Ammunition Plant

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:26	AFL	EPA 314
Alkalinity, Total as CaCO ₃	459	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	73.0	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	585	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	< 0.10	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.0050 U	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	3750	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	946	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	6.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	7.1			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	29WW36-FEB2007	Date Sampled:	02/21/07
Lab Sample ID:	T16432-6	Date Received:	02/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0079005.D	1	03/01/07	LJ	n/a	n/a	VF2306
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	29WW36-FEB2007		
Lab Sample ID:	T16432-6	Date Sampled:	02/21/07
Matrix:	AQ - Ground Water	Date Received:	02/23/07
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		73-139%
17060-07-0	1,2-Dichloroethane-D4	95%		66-139%
2037-26-5	Toluene-D8	109%		77-148%
460-00-4	4-Bromofluorobenzene	127%		84-150%

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW36-FEB2007							
Lab Sample ID: T16432-6				Date Sampled: 02/21/07			
Matrix: AQ - Ground Water				Date Received: 02/23/07			
Method: RSKSOP-147/175				Percent Solids: n/a			
Project: Longhorn Army Ammunition Plant							

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	XY025318.D	1	03/07/07	AFL	n/a	n/a	F:GXY995
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.94	0.50	0.30	ug/l	
74-84-0	Ethane	0.60 U	1.0	0.60	ug/l	
74-85-1	Ethene	0.80 U	1.0	0.80	ug/l	

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

U = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 29WW36-FEB2007	Date Sampled: 02/21/07
Lab Sample ID: T16432-6	Date Received: 02/23/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Longhorn Army Ammunition Plant	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Perchlorate by IC								
Perchlorate ^a	4.0 U	10	4.0	ug/l	1	03/01/07 20:40	AFL	EPA 314
Alkalinity, Total as CaCO ₃	1040	5.0	0.30	mg/l	1	03/03/07 08:15	EB	EPA 310.1
Carbon Dioxide	830	5.0		mg/l	1	03/09/07	RM	SM18 4500CO2D
Chloride	565	1.0	0.57	mg/l	1	03/02/07 12:30	EB	EPA 325.3
Nitrogen, Nitrate ^b	0.30	0.10	0.0050	mg/l	1	02/26/07 09:23	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.30	0.050	0.0050	mg/l	1	02/26/07 09:23	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	02/23/07 11:30	LN	EPA 353.2
Specific Conductivity ^a	4150	0.50	0.50	umhos/cm	1	03/06/07	AFL	EPA 120.1
Sulfate	1000	100	2.6	mg/l	10	03/06/07 18:00	EB	EPA 375.3
Sulfide	U	0.20		mg/l	1	02/24/07 10:00	LN	EPA 376.1
Total Organic Carbon	10.0	1.0	0.092	mg/l	1	02/27/07 09:10	LN	EPA 415.1/9060
pH	6.4			su	1	02/27/07 10:30	EB	EPA 150.1/9040

(a) Analysis performed at Accutest Laboratories, Orlando, FL.

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

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/21/07
Lab Sample ID:	T16432-7	Date Received:	02/23/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0010443.D	1	02/27/07	JH	n/a	n/a	VY1139
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	2.8 U	50	2.8	ug/l	
71-43-2	Benzene	0.23 U	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	0.33 U	2.0	0.33	ug/l	
75-25-2	Bromoform	0.65 U	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	0.54 U	2.0	0.54	ug/l	
75-00-3	Chloroethane	0.46 U	2.0	0.46	ug/l	
67-66-3	Chloroform	0.66 U	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	0.62 U	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	0.52 U	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	0.52 U	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	0.68 U	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	0.53 U	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	0.59 U	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	0.68 U	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.83 U	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.59 U	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.75 U	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.61 U	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	0.48 U	2.0	0.48	ug/l	
591-78-6	2-Hexanone	1.9 U	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	7.3 U	10	7.3	ug/l	
74-83-9	Methyl bromide	0.47 U	2.0	0.47	ug/l	
74-87-3	Methyl chloride	0.60 U	2.0	0.60	ug/l	
75-09-2	Methylene chloride	0.67 U	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	3.0 U	10	3.0	ug/l	
100-42-5	Styrene	0.50 U	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.37 U	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.46 U	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	0.66 U	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	0.74 U	2.0	0.74	ug/l	
108-88-3	Toluene	0.54 U	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	0.63 U	2.0	0.63	ug/l	

U = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	02/21/07
Lab Sample ID:	T16432-7	Date Received:	02/23/07
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Longhorn Army Ammunition Plant		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	0.32 U	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	1.1 U	6.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		73-139%
17060-07-0	1,2-Dichloroethane-D4	114%		66-139%
2037-26-5	Toluene-D8	130%		77-148%
460-00-4	4-Bromofluorobenzene	151% ^a		84-150%

(a) Outside of control limits biased high. There were no target compounds associated with this surrogate.

U = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form



Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10497

Laboratory Name: Accutest Address: 10165 HARWIN DR. #150 Contact: Agnes
Houston, TX 77036 713-271-4700

Project Name: Longhorn Army Ammunition Plant Project Location: KARNACK, TX Analysis and Method Desired (Indicate separate containers):
Project No.: 117591 Project Contact: Kay Everett Project Telephone No.: 713-996-4421 Remarks:
Point of contact: Diane Meyer Project Manager/Supervisor: Praveen Srivastava
Telephone No.: 713-996-4408

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	Anions	Sulfides	Perchlorate	Gases-G02	Alkalinity	TOC
1	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3	✓						
2	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3				✓			
3	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	3						✓	
4	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1		✓					
5	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1			✓				
6	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1					✓		
7	LHSMW06-Feb2007	2-21-07	1020		✓	W	Site 35A, GW	1				✓			
8															
9															
10															

Transfers Relinquished By (Signature): Sherry McPhee Date/Time: 2-21-07 1730
Scott Belsing Date/Time: 2/22/07 0830

Transfers Accepted By (Signature): Scott Belsing Date/Time: 2/22/07 0750

Special Instructions: UPS

LabEx Airbill No.: 12606725019281688

Laboratory: A. Rodriguez Date/Time: 2/23/07 10:00 Sampler's Signature: Sherry McPhee

TAT: Standard Rush Due: Standard Seals Intact? X Y N Received Good Condition X Y N Cold

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

T16432: Chain of Custody

Page 1 of 7



Shaw® Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10942

Laboratory Name: Accutest **Address:** 10165 Harwin #150 Houston TX 77036 **Contact:** Agnes (713) 271 4700

Project Name: LHAAP **Project Location:** Karnack, TX

Project No.: 117591 **Project Contact:** K. Everette **Project Telephone No.:** (713) 996 4421

Point of contact: Diane Meyer **Project Manager/Supervisor:** P. Srivastav

Telephone No.: (713) 996-4408

Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	Analysis and Method Desired (Indicate separate containers)										Remarks
									NOC	Anions	Sulfides	Perchlorates	Gases	Alkalinity	TOC	Explosives			
2	17WW10-Feb 2007	2/21/07	14:58		X		Groundwater	15	3	1	1	1	3	1	3	2			
3	17WW12-Feb 2007	2/21/07	11:05		X		Groundwater	15	3	1	1	1	3	1	3	2			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Transfers Relinquished By (Signature): Susan Oller **Date/Time:** 2/21/07 17:00

Transfers Accepted By (Signature): Scott Bessinger **Date/Time:** 2/22/07 08:30

Special Instructions: Need CO₂ for gases.

FedEx Airbill No.: 12162V 39501 9988 1685

Laboratory: A. Rodriguez **Sample's Signature:** Susan Oller

TAT: _____ Standard _____ Rush Due: _____ Seals Intact? ☒ Y ☐ N Received Good Condition ☒ Y ☐ N ☐ Cold

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

T16432: Chain of Custody

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T16432



Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10496

Laboratory Name: Accutest		Address: 10165 HARWIN DR. # 150		Contact: Agnes											
		Houston, TX 77036		713-271-4700											
Project Name: Longhorn Army Ammunition Plant		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)											
Project No.: 117591		Project Contact: KAY EVERETT		Project Telephone No.: 713-996-4421											
Point of contact: Diane Meyer		Project Manager/Supervisor: Praveen Srivastava		Remarks											
Telephone No.: 713-996-4408															
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	ANIONS	SULFIDES	PERCHLORATE	GASES, CO2	ALKALINITY	TOC
4	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3	✓						
5	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3					✓		
6	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	3							✓
7	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1		✓					
8	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1			✓				
9	LHSMW07-Feb2007	2-21-07	1315		✓	W	GW, Site 35A	1				✓			
10															
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions							
<i>Sherry McAdoo</i>		2-21-07		<i>Scott Brannen</i>		2/22/07		UPS							
<i>Scott Brannen</i>		2/22/07 0830						FedEx Airbill No.: 17166V7250199281685							
				Laboratory <i>A. Rodriguez</i>		2/23/07/1000		Sampler's Signature <i>Sherry McAdoo</i>							
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? <i>X</i> Y _____ N _____		Received Good Condition <i>X</i> Y _____ N _____ Cold _____											

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

T16432: Chain of Custody

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T16432



Shaw® Shaw Environmental, Inc.

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

CHAIN-OF-CUSTODY

No. 10916

Laboratory Name: Accutest		Address: 10165 Harwin Dr. #150 Houston, TX 77036		Contact: Agnes: 713-271-4700													
Project Name: Longhorn Army Ammunition Plant		Project Location: Karnack, TX		Analysis and Method Desired (Indicate separate containers)													
Project No. 17591		Project Contact: Kay EVERETTE		Project Telephone No. 713-996-4421													
Point of contact: Diane Meyer		Project Manager/Supervisor: SRIVASTAV		Remarks													
Telephone No. 713-996-4408																	
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOCs 8260	PAHs 300	Sulfides 376.2	Pachlorate 314	Gases 175	Alkalinity 310.1	TOC 415.1	VOCs 8260	
5	47WW09-FEB2007	2/21/07	1422		X	W	47WW09	13	X	X	X	X	X	X	X	X	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions									
[Signature]		2/21/07 1800		[Signature]		2/22/07 07:50		WBS									
[Signature]		2/22/07 0830						FedEx Airbill No. 1266V72501992811685									
				Laboratory [Signature]		2/23/07 10:00		Sampler's Signature [Signature]									
TAT: _____ Standard _____ Rush Due: _____		Seals Intact? ☒ Y ☐ N		Received Good Condition ☒ Y ☐ N ☒ Cold													

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

T16432: Chain of Custody

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T16432

Shaw® Shaw Environmental, Inc.
 3010 Briarpark Drive, Suite 4N
 Houston, TX 77042 (713) 996-4400

CHAIN-OF-CUSTODY

No. 10495

Laboratory Name: Accutest		Address: 10165 HARWIN DR. #150		Contact: Agnes												
		HOUSTON, TX 77036		713-271-4700												
Project Name: Loughorn Army Ammunition Plant		Project Location: KARNACK, TX		Analysis and Method Desired (Indicate separate containers)												
Project No.: 117591		Project Contact: KAY EVERETTE		Project Telephone No.: 713-996-4421												
Point of contact: DIANE MEYER		Project Manager/Supervisor: RAVEEN SRIVASTAV		Remarks												
Telephone No.: 713-996-4408																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location	Number of Containers	VOC	ANIONS	SULFIDES	PERCHLORATE	GASES, CO ₂	ALKALINITY	TOC	EXPLOSIVES
1	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3	✓							
2	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3					✓			
3	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	3							✓	
4	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1		✓						
5	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1			✓					
6	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1				✓				
7	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	1						✓		
8	29WW36-Feb2007	2-21-07	1515		✓	W	Site 29, GW	2								✓
9	t.p. AR-223-07															
10	I															
Transfers Relinquished By (Signature)		Date/Time		Transfers Accepted By (Signature)		Date/Time		Special Instructions								
<i>Sherry McAdoo</i>		2-21-07		<i>Scott Belsinger</i>		2/22/07 07:50		UPS FedEx Airbill No. FEW1725099281085								
<i>Scott Belsinger</i>		2/22/07 0830														
				Laboratory		Date/Time		Sampler's Signature								
				<i>A. Rodin</i>		2/23/07 10:00		<i>Sherry McAdoo</i>								
TAT: _____ Standard _____ Rush Due: _____																
Seals Intact? ☒ Y ☐ N Received Good Condition ☒ Y ☐ N ☒ Cold																

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

T16432: Chain of Custody

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ACCUTEST.		VARIANCE MEMO SAMPLE LOG-IN	
SAMPLE(S)	VARIOUS	DATE	2/23/07
PROJECT	LHAP		
FILED BY	AK	LAB NO.	T16432
VARIANCE - Check applicable items(s):			
☐ Insufficient sample sent for proper analysis; _____ received approx. _____			
☐ Sample bottle received broken and/or cap not intact. _____			
☐ Samples received without paperwork; paperwork received without samples. _____			
☐ Samples received without proper refrigeration, when it has been deemed necessary. Temperature at receipt: _____			
☐ Illegible sample number or label missing from bottle. _____			
☐ Numbers on sample not the same as numbers on paper work. _____			
☐ Incomplete instructions received with sample(s) ie, no request for analysis, no chain of custody, incomplete billing instructions, no due date, etc. Temperature at receipt: _____			
☐ Samples received in improper container or lacking proper preservation. _____			
☐ Physical characteristics different than those on sampling sheets; Describe: _____			
☐ Rush samples on hold because of incomplete paperwork. _____			
☐ Other (specify) SK# 2 - WAS Rec'd. w/ 14 containers, not 15. _____			
☐ SK# 6 - WAS Rec'd. without any containers for explosives. _____			
☐ SK# 1 and #3 - Rec'd. Samples too close to holding times. _____			
CORRECTIVE ACTION TAKEN			
☒ <u>Diane Meyer</u> Person Contacted		☐ By phone.	
☐ Client informed verbally.		☐ Samples processed for information only and noted on report.	
☐ Client informed by <u>memotetter Email</u>		☐ Samples processed with higher detection limits accepted.	
☐ Samples processed as is.		☐ Samples rejected.	
☐ Samples preserved by lab.			
☐ Client will resample and resubmit.			
Notes: _____			
ROUTING			
TITLE	DATE	INITIALS	CORRECTED?
Sample Manager:			
Login:			
Project Manager:	2/23/07	AK	
Comments: _____			

Form: SMO06

T16432: Chain of Custody

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ACCUTEST.
SAMPLE RECEIPT LOG

 JOB #: T16432

 DATE/TIME RECEIVED: 2/23/07/10:00

 CLIENT: Shaw Env.

 INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. ☒ N Sample received in undamaged condition.
2. ☒ N Samples received within temp. range.
3. ☒ N Sample received with proper pH.
4. ☒ N Sample received in proper containers.
5. ☒ N Sample volume sufficient for analysis.
6. ☒ N Sample received with chain of custody.
7. ☒ N Chain of Custody matches sample IDs and analysis on containers.
8. ☒ N Samples Headspace acceptable
9. ☒ N NA Custody seal received intact and tamper not evident on cooler.
10. ☒ Y N NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1,4,5,6	1-3	2/21	AQ	40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	4-6			I	SUB	1,2,3,4,5,6	U, <2, >12, NA
	7-9			I	2J	1,2,3,4,5,6	U, <2, >12, NA
	10-12			P1000	I	1,2,3,4,5,6	U, <2, >12, NA
	13			P500	I	1,2,3,4,5,6	U, <2, >12, NA
2,3	1-3			40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	4-6			I	SUB	1,2,3,4,5,6	U, <2, >12, NA
	7-9			I	2J	1,2,3,4,5,6	U, <2, >12, NA
	10-11			P1000	I	1,2,3,4,5,6	U, <2, >12, NA
	12			P500	I	1,2,3,4,5,6	U, <2, >12, NA
	13-14			SUB	SUB	1,2,3,4,5,6	U, <2, >12, NA
3	12			P500	2J	1,2,3,4,5,6	U, <2, >12, NA
	13			I	I	1,2,3,4,5,6	U, <2, >12, NA
	14-15			A1000	SUB	1,2,3,4,5,6	U, <2, >12, NA
(Hb) 7,8	1-2	N/A	I	40ml.	VREF	1,2,3,4,5,6	U, <2, >12, NA
	2,3	2/23/07				1,2,3,4,5,6	U, <2, >12, NA

LOCATION: Wt: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

 pH of waters checked excluding volatiles
 pH of soils N/A

 Delivery method: Courier: WFS

 COOLER TEMP: 3.6 COOLER TEMP: 3.0

 COOLER TEMP: 4.8 COOLER TEMP: 4.8

Form: SM012, Rev.07/28/05, QAO

T16432: Chain of Custody

Page 7 of 7

Appendix A Laboratory Data Package Cover Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By 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.

Ron Martino



Lab Director

3/9/2007

Name (Printed)

Signature

Official Title (printed)

Date

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Laboratory Name: Accutest Laboratories Gulf Coast			LRC Date: 3/9/2007				
Project Name: Longhorn Army Ammunition Plant			Laboratory Job Number: T16432				
Reviewer Name: Ron Martino			Prep Batch Number(s):				
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
		Chain-of-custody (C-O-C)					
R1	OI	Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS):					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs):					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				

2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: Accutest Laboratories Gulf Coast

LRC Date: 3/9/2007

Project Name: Longhorn Army Ammunition Plant

Laboratory Job Number: T16432

Reviewer Name: Ron Martino

Prep Batch Number(s):

# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal standards (IS):					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	Tentatively identified compounds (TICs):					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?			X		
	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency test reports:					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Name: Accutest Laboratories Gulf Coast		LRC Date: 3/9/2007
Project Name: Longhorn Army Ammunition Plant		Laboratory Job Number: T16432
Reviewer Name: Ron Martino		Prep Batch Number(s):
ER #¹	DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SQL/MDL is defined in the report as the MDL.	
2	All anomalies are discussed in the case narrative.	

RG-366/TRRP-13 December 2002



GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Page 1 of 2

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-MB	Y0010442.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-MB	Y0010442.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	118% 73-139%
17060-07-0	1,2-Dichloroethane-D4	119% 66-139%
2037-26-5	Toluene-D8	131% 77-148%
460-00-4	4-Bromofluorobenzene	154%* a 84-150%

(a) Outside control limits biased high. There are no target compounds associated with this surrogate.

Method Blank Summary

Page 1 of 2

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-MB	Y0010450.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-MB	Y0010450.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	124% 73-139%
17060-07-0	1,2-Dichloroethane-D4	119% 66-139%
2037-26-5	Toluene-D8	130% 77-148%
460-00-4	4-Bromofluorobenzene	150% 84-150%

Method Blank Summary

Page 1 of 2

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.1	ug/l	

Method Blank Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-MB	F0078999.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 73-139%
17060-07-0	1,2-Dichloroethane-D4	94% 66-139%
2037-26-5	Toluene-D8	110% 77-148%
460-00-4	4-Bromofluorobenzene	119% 84-150%

5.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 2

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-BS	Y0010439.D	1	02/27/07	JH	n/a	n/a	VY1139
VY1139-BSD	Y0010440.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	125	121	97	139	111	14	31-158/30
71-43-2	Benzene	25	24.3	97	24.9	100	2	67-118/30
75-27-4	Bromodichloromethane	25	22.4	90	22.3	89	0	66-115/30
75-25-2	Bromoform	25	22.0	88	22.2	89	1	57-119/30
108-90-7	Chlorobenzene	25	22.3	89	23.3	93	4	72-116/30
75-00-3	Chloroethane	25	23.6	94	22.7	91	4	61-135/30
67-66-3	Chloroform	25	25.3	101	24.6	98	3	66-117/30
75-15-0	Carbon disulfide	25	23.7	95	24.3	97	3	39-136/30
56-23-5	Carbon tetrachloride	25	27.6	110	26.9	108	3	67-131/30
75-34-3	1,1-Dichloroethane	25	25.3	101	25.9	104	2	63-125/30
75-35-4	1,1-Dichloroethylene	25	25.8	103	25.8	103	0	52-143/30
107-06-2	1,2-Dichloroethane	25	25.0	100	25.0	100	0	61-120/30
78-87-5	1,2-Dichloropropane	25	23.4	94	23.6	94	1	64-118/30
124-48-1	Dibromochloromethane	25	22.0	88	23.0	92	4	67-117/30
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	24.0	96	4	65-116/30
10061-01-5	cis-1,3-Dichloropropene	25	24.1	96	24.7	99	2	67-118/30
156-60-5	trans-1,2-Dichloroethylene	25	25.5	102	24.4	98	4	66-128/30
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	25.0	100	0	73-126/30
100-41-4	Ethylbenzene	25	23.6	94	24.1	96	2	71-119/30
591-78-6	2-Hexanone	125	109	87	126	101	14	45-132/30
108-10-1	4-Methyl-2-pentanone	125	114	91	123	98	8	46-127/30
74-83-9	Methyl bromide	25	21.1	84	20.7	83	2	51-126/30
74-87-3	Methyl chloride	25	23.1	92	23.6	94	2	47-130/30
75-09-2	Methylene chloride	25	22.1	88	22.2	89	0	53-130/30
78-93-3	Methyl ethyl ketone	125	125	100	131	105	5	47-128/30
100-42-5	Styrene	25	19.0	76	19.7	79	4	69-115/30
71-55-6	1,1,1-Trichloroethane	25	25.1	100	26.0	104	4	67-128/30
79-34-5	1,1,2,2-Tetrachloroethane	25	23.1	92	23.5	94	2	57-121/30
79-00-5	1,1,2-Trichloroethane	25	22.9	92	23.7	95	3	62-117/30
127-18-4	Tetrachloroethylene	25	25.2	101	26.4	106	5	72-128/30
108-88-3	Toluene	25	24.5	98	25.4	102	4	70-121/30
79-01-6	Trichloroethylene	25	24.2	97	25.0	100	3	69-120/30
75-01-4	Vinyl chloride	25	24.6	98	25.1	100	2	59-145/30
1330-20-7	Xylene (total)	75	71.5	95	74.3	99	4	72-120/30

Blank Spike/Blank Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1139-BS	Y0010439.D	1	02/27/07	JH	n/a	n/a	VY1139
VY1139-BSD	Y0010440.D	1	02/27/07	JH	n/a	n/a	VY1139

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-1, T16432-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	121%	120%	73-139%
17060-07-0	1,2-Dichloroethane-D4	117%	120%	66-139%
2037-26-5	Toluene-D8	122%	129%	77-148%
460-00-4	4-Bromofluorobenzene	132%	136%	84-150%

Blank Spike Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-BS	Y0010448.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	136	109	31-158
71-43-2	Benzene	25	24.0	96	67-118
75-27-4	Bromodichloromethane	25	22.7	91	66-115
75-25-2	Bromoform	25	22.1	88	57-119
108-90-7	Chlorobenzene	25	22.8	91	72-116
75-00-3	Chloroethane	25	26.4	106	61-135
67-66-3	Chloroform	25	24.3	97	66-117
75-15-0	Carbon disulfide	25	23.2	93	39-136
56-23-5	Carbon tetrachloride	25	27.4	110	67-131
75-34-3	1,1-Dichloroethane	25	25.0	100	63-125
75-35-4	1,1-Dichloroethylene	25	24.3	97	52-143
107-06-2	1,2-Dichloroethane	25	24.7	99	61-120
78-87-5	1,2-Dichloropropane	25	22.5	90	64-118
124-48-1	Dibromochloromethane	25	22.7	91	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	65-116
10061-01-5	cis-1,3-Dichloropropene	25	23.8	95	67-118
156-60-5	trans-1,2-Dichloroethylene	25	23.7	95	66-128
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	73-126
100-41-4	Ethylbenzene	25	24.0	96	71-119
591-78-6	2-Hexanone	125	115	92	45-132
108-10-1	4-Methyl-2-pentanone	125	113	90	46-127
74-83-9	Methyl bromide	25	25.1	100	51-126
74-87-3	Methyl chloride	25	24.1	96	47-130
75-09-2	Methylene chloride	25	21.0	84	53-130
78-93-3	Methyl ethyl ketone	125	122	98	47-128
100-42-5	Styrene	25	18.7	75	69-115
71-55-6	1,1,1-Trichloroethane	25	26.4	106	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	23.4	94	57-121
79-00-5	1,1,2-Trichloroethane	25	22.2	89	62-117
127-18-4	Tetrachloroethylene	25	25.5	102	72-128
108-88-3	Toluene	25	23.9	96	70-121
79-01-6	Trichloroethylene	25	24.3	97	69-120
75-01-4	Vinyl chloride	25	24.1	96	59-145
1330-20-7	Xylene (total)	75	71.4	95	72-120

Blank Spike Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1140-BS	Y0010448.D	1	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	124%	73-139%
17060-07-0	1,2-Dichloroethane-D4	119%	66-139%
2037-26-5	Toluene-D8	128%	77-148%
460-00-4	4-Bromofluorobenzene	130%	84-150%

Blank Spike Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2306-BS2	F0078998.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	73-139%
17060-07-0	1,2-Dichloroethane-D4	93%	66-139%
2037-26-5	Toluene-D8	103%	77-148%
460-00-4	4-Bromofluorobenzene	106%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16437-6MS	Y0010469.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6MSD	Y0010470.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010467.D	5	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010468.D	50	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Compound	T16437-6 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		6250	7100	114	6910	111	3	39-130/26
71-43-2	Benzene	ND		1250	1350	108	1370	110	1	65-122/15
75-27-4	Bromodichloromethane	ND		1250	1210	97	1270	102	5	64-119/22
75-25-2	Bromoform	ND		1250	1100	88	1160	93	5	50-123/28
108-90-7	Chlorobenzene	ND		1250	1090	87	1190	95	9	72-118/20
75-00-3	Chloroethane	ND		1250	1460	117	1280	102	13	60-136/25
67-66-3	Chloroform	ND		1250	1370	110	1420	114	4	65-120/20
75-15-0	Carbon disulfide	ND		1250	1350	108	1370	110	1	37-140/24
56-23-5	Carbon tetrachloride	ND		1250	1480	118	1520	122	3	64-135/23
75-34-3	1,1-Dichloroethane	46.8		1250	1450	112	1510	117	4	65-126/21
75-35-4	1,1-Dichloroethylene	3760 ^a		1250	5190	114	5080	106	2	55-140/25
107-06-2	1,2-Dichloroethane	ND		1250	1370	110	1440	115	5	57-125/25
78-87-5	1,2-Dichloropropane	ND		1250	1250	100	1300	104	4	63-121/22
124-48-1	Dibromochloromethane	ND		1250	1070	86	1160	93	8	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		1250	1230	98	1260	101	2	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1090	87	1200	96	10	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		1250	1330	106	1370	110	3	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1100	88	1210	97	10	65-129/23
100-41-4	Ethylbenzene	ND		1250	1130	90	1290	103	13	70-123/18
591-78-6	2-Hexanone	ND		6250	5090	81	5330	85	5	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		6250	5280	84	5260	84	0	41-133/22
74-83-9	Methyl bromide	ND		1250	1340	107	1170	94	14	47-129/27
74-87-3	Methyl chloride	ND		1250	1100	88	1200	96	9	45-133/24
75-09-2	Methylene chloride	ND		1250	1250	100	1270	102	2	49-128/21
78-93-3	Methyl ethyl ketone	ND		6250	5420	87	5510	88	2	43-125/29
100-42-5	Styrene	ND		1250	921	74	1040	83	12	65-120/21
71-55-6	1,1,1-Trichloroethane	5.8	J	1250	1400	112	1380	110	1	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1100	88	1220	98	10	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		1250	1120	90	1210	97	8	58-120/22
127-18-4	Tetrachloroethylene	ND		1250	1260	101	1320	106	5	69-132/21
108-88-3	Toluene	ND		1250	1200	96	1310	105	9	70-123/18
79-01-6	Trichloroethylene	8.7	J	1250	1230	98	1310	104	6	70-120/19
75-01-4	Vinyl chloride	ND		1250	1220	98	1270	102	4	51-147/24
1330-20-7	Xylene (total)	ND		3750	3530	94	3850	103	9	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16437-6MS	Y0010469.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6MSD	Y0010470.D	50	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010467.D	5	02/28/07	JH	n/a	n/a	VY1140
T16437-6	Y0010468.D	50	02/28/07	JH	n/a	n/a	VY1140

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-2, T16432-3, T16432-4, T16432-5

CAS No.	Surrogate Recoveries	MS	MSD	T16437-6	T16437-6	Limits
1868-53-7	Dibromofluoromethane	124%	122%	129%	128%	73-139%
17060-07-0	1,2-Dichloroethane-D4	126%	117%	125%	126%	66-139%
2037-26-5	Toluene-D8	120%	119%	129%	128%	77-148%
460-00-4	4-Bromofluorobenzene	123%	129%	142%	155%* b	84-150%

- (a) Result is from Run #2.
(b) Outside of control limits biased high. There were no target compounds associated with this surrogate

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples:

Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16411-10 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	50 U		125	96.7	77	84.7	68	13	39-130/26
71-43-2	Benzene	2.0 U		25	24.3	97	24.5	98	1	65-122/15
75-27-4	Bromodichloromethane	2.0 U		25	22.3	89	22.3	89	0	64-119/22
75-25-2	Bromoform	2.0 U		25	20.9	84	19.9	80	5	50-123/28
108-90-7	Chlorobenzene	2.0 U		25	23.5	94	23.6	94	0	72-118/20
75-00-3	Chloroethane	2.0 U		25	26.6	106	25.2	101	5	60-136/25
67-66-3	Chloroform	2.0 U		25	24.8	99	24.9	100	0	65-120/20
75-15-0	Carbon disulfide	2.0 U		25	22.6	90	22.7	91	0	37-140/24
56-23-5	Carbon tetrachloride	2.0 U		25	27.1	108	27.3	109	1	64-135/23
75-34-3	1,1-Dichloroethane	2.0 U		25	25.5	102	25.1	100	2	65-126/21
75-35-4	1,1-Dichloroethylene	2.0 U		25	25.6	102	24.8	99	3	55-140/25
107-06-2	1,2-Dichloroethane	2.0 U		25	24.2	97	22.4	90	8	57-125/25
78-87-5	1,2-Dichloropropane	2.0 U		25	23.9	96	23.7	95	1	63-121/22
124-48-1	Dibromochloromethane	2.0 U		25	21.6	86	21.0	84	3	60-123/23
156-59-2	cis-1,2-Dichloroethylene	1.5	J	25	23.8	89	24.4	92	2	62-120/24
10061-01-5	cis-1,3-Dichloropropene	2.0 U		25	19.7	79	20.0	80	2	61-119/23
156-60-5	trans-1,2-Dichloroethylene	2.0 U		25	24.2	97	24.2	97	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	2.0 U		25	19.8	79	19.5	78	2	65-129/23
100-41-4	Ethylbenzene	2.0 U		25	22.8	91	22.9	92	0	70-123/18
591-78-6	2-Hexanone	10 U		125	102	82	97.3	78	5	41-137/27
108-10-1	4-Methyl-2-pentanone	10 U		125	109	87	103	82	6	41-133/22
74-83-9	Methyl bromide	2.0 U		25	23.4	94	21.9	88	7	47-129/27
74-87-3	Methyl chloride	2.0 U		25	25.8	103	23.3	93	10	45-133/24
75-09-2	Methylene chloride	5.0 U		25	22.7	91	22.2	89	2	49-128/21
78-93-3	Methyl ethyl ketone	10 U		125	98.2	79	90.5	72	8	43-125/29
100-42-5	Styrene	2.0 U		25	1.8	7*	2.0	8*	11	65-120/21
71-55-6	1,1,1-Trichloroethane	2.0 U		25	27.0	108	27.0	108	0	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	2.0 U		25	19.8	79	19.0	76	4	50-128/22
79-00-5	1,1,2-Trichloroethane	2.0 U		25	21.3	85	20.8	83	2	58-120/22
127-18-4	Tetrachloroethylene	2.0 U		25	24.8	99	25.2	101	2	69-132/21
108-88-3	Toluene	2.0 U		25	23.3	93	23.9	96	3	70-123/18
79-01-6	Trichloroethylene	4.8		25	29.4	98	29.6	99	1	70-120/19
75-01-4	Vinyl chloride	2.0 U		25	26.8	107	24.9	100	7	51-147/24
1330-20-7	Xylene (total)	6.0 U		75	69.9	93	69.3	92	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16411-10MS	F0079015.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10MSD	F0079016.D	1	03/01/07	LJ	n/a	n/a	VF2306
T16411-10	F0079014.D	1	03/01/07	LJ	n/a	n/a	VF2306

The QC reported here applies to the following samples: Method: SW846 8260B

T16432-4, T16432-5, T16432-6

CAS No.	Surrogate Recoveries	MS	MSD	T16411-10	Limits
1868-53-7	Dibromofluoromethane	104%	104%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	99%	97%	97%	66-139%
2037-26-5	Toluene-D8	105%	103%	107%	77-148%
460-00-4	4-Bromofluorobenzene	100%	101%	119%	84-150%

Instrument Performance Check (BFB)

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-BFB	Injection Date: 02/12/07
Lab File ID: F0078488.D	Injection Time: 17:39
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	10313	15.8	Pass
75	30.0 - 60.0% of mass 95	24771	38.0	Pass
95	Base peak, 100% relative abundance	65123	100.0	Pass
96	5.0 - 9.0% of mass 95	4343	6.7	Pass
173	Less than 2.0% of mass 174	344	0.53 (0.67) ^a	Pass
174	50.0 - 100.0% of mass 95	51261	78.7	Pass
175	5.0 - 9.0% of mass 174	3763	5.8 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	49896	76.6 (97.3) ^a	Pass
177	5.0 - 9.0% of mass 176	3355	5.2 (6.7) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2276-IC2276	F0078490.D	02/12/07	18:42	01:03	Initial cal 200
VF2276-IC2276	F0078491.D	02/12/07	19:14	01:35	Initial cal 400
VF2276-ICC2276	F0078492.D	02/12/07	19:46	02:07	Initial cal 1000
VF2276-IC2276	F0078493.D	02/12/07	20:18	02:39	Initial cal 2000
VF2276-IC2276	F0078494.D	02/12/07	20:49	03:10	Initial cal 4000
VF2276-IC2276	F0078495.D	02/12/07	21:21	03:42	Initial cal 10000

Instrument Performance Check (BFB)

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-BFB	Injection Date: 02/28/07
Lab File ID: F0078963.D	Injection Time: 14:36
Instrument ID: GCMSF	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	7281	16.0	Pass
75	30.0 - 60.0% of mass 95	18364	40.3	Pass
95	Base peak, 100% relative abundance	45541	100.0	Pass
96	5.0 - 9.0% of mass 95	2793	6.1	Pass
173	Less than 2.0% of mass 174	107	0.23 (0.27) ^a	Pass
174	50.0 - 100.0% of mass 95	39123	85.9	Pass
175	5.0 - 9.0% of mass 174	3023	6.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	37355	82.0 (95.5) ^a	Pass
177	5.0 - 9.0% of mass 176	2802	6.2 (7.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2305-IC2305	F0078964.D	02/28/07	15:10	00:34	Initial cal 2
VF2305-IC2305	F0078965.D	02/28/07	15:41	01:05	Initial cal 5
VF2305-IC2305	F0078966.D	02/28/07	16:12	01:36	Initial cal 20
VF2305-ICC2305	F0078967.D	02/28/07	16:44	02:08	Initial cal 40
VF2305-IC2305	F0078968.D	02/28/07	17:16	02:40	Initial cal 70
VF2305-IC2305	F0078969.D	02/28/07	17:46	03:10	Initial cal 100
VF2305-IC2305	F0078970.D	02/28/07	18:18	03:42	Initial cal 200
VF2305-BS	F0078972.D	02/28/07	19:21	04:45	Blank Spike
VF2305-MB	F0078974.D	02/28/07	20:24	05:48	Method Blank
ZZZZZZ	F0078975.D	02/28/07	20:55	06:19	(unrelated sample)
ZZZZZZ	F0078976.D	02/28/07	21:26	06:50	(unrelated sample)
ZZZZZZ	F0078977.D	02/28/07	21:58	07:22	(unrelated sample)
T16395-2	F0078978.D	02/28/07	22:30	07:54	(used for QC only; not part of job T16432)
T16395-2MS	F0078979.D	02/28/07	23:00	08:24	Matrix Spike
T16395-2MSD	F0078980.D	02/28/07	23:32	08:56	Matrix Spike Duplicate
ZZZZZZ	F0078981.D	03/01/07	00:03	09:27	(unrelated sample)
ZZZZZZ	F0078982.D	03/01/07	00:35	09:59	(unrelated sample)
ZZZZZZ	F0078983.D	03/01/07	01:06	10:30	(unrelated sample)
ZZZZZZ	F0078984.D	03/01/07	01:38	11:02	(unrelated sample)
ZZZZZZ	F0078989.D	03/01/07	04:15	13:39	(unrelated sample)
ZZZZZZ	F0078990.D	03/01/07	04:47	14:11	(unrelated sample)
ZZZZZZ	F0078991.D	03/01/07	05:19	14:43	(unrelated sample)
ZZZZZZ	F0078992.D	03/01/07	05:50	15:14	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-BFB
Lab File ID: F0078994.D
Instrument ID: GCMSF
Injection Date: 03/01/07
Injection Time: 07:50

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6679	18.1	Pass
75	30.0 - 60.0% of mass 95	15417	41.8	Pass
95	Base peak, 100% relative abundance	36917	100.0	Pass
96	5.0 - 9.0% of mass 95	2620	7.1	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	32187	87.2	Pass
175	5.0 - 9.0% of mass 174	2345	6.4 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	31168	84.4 (96.8) ^a	Pass
177	5.0 - 9.0% of mass 176	2163	5.9 (6.9) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VF2306-CC2305	F0078995.D	03/01/07	08:23	00:33	Continuing cal 20
VF2306-CC2276	F0078996.D	03/01/07	08:55	01:05	Continuing cal 1000
VF2306-BS1	F0078997.D	03/01/07	09:31	01:41	Blank Spike
VF2306-BS2	F0078998.D	03/01/07	10:02	02:12	Blank Spike
VF2306-MB	F0078999.D	03/01/07	10:34	02:44	Method Blank
ZZZZZZ	F0079000.D	03/01/07	11:06	03:16	(unrelated sample)
ZZZZZZ	F0079001.D	03/01/07	11:37	03:47	(unrelated sample)
ZZZZZZ	F0079002.D	03/01/07	12:09	04:19	(unrelated sample)
ZZZZZZ	F0079003.D	03/01/07	12:41	04:51	(unrelated sample)
ZZZZZZ	F0079004.D	03/01/07	13:12	05:22	(unrelated sample)
T16432-6	F0079005.D	03/01/07	13:44	05:54	29WW36-FEB2007
ZZZZZZ	F0079006.D	03/01/07	14:16	06:26	(unrelated sample)
ZZZZZZ	F0079007.D	03/01/07	14:47	06:57	(unrelated sample)
ZZZZZZ	F0079008.D	03/01/07	15:18	07:28	(unrelated sample)
ZZZZZZ	F0079009.D	03/01/07	15:50	08:00	(unrelated sample)
T16432-4	F0079010.D	03/01/07	16:22	08:32	LHSM07-FEB2007
T16432-5	F0079011.D	03/01/07	16:54	09:04	47WW09-FEB2007
ZZZZZZ	F0079012.D	03/01/07	17:26	09:36	(unrelated sample)
ZZZZZZ	F0079013.D	03/01/07	17:57	10:07	(unrelated sample)
T16411-10	F0079014.D	03/01/07	18:28	10:38	(used for QC only; not part of job T16432)
T16411-10MS	F0079015.D	03/01/07	19:01	11:11	Matrix Spike
T16411-10MSD	F0079016.D	03/01/07	19:33	11:43	Matrix Spike Duplicate
ZZZZZZ	F0079020.D	03/01/07	21:39	13:49	(unrelated sample)
ZZZZZZ	F0079021.D	03/01/07	22:12	14:22	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-BFB
Lab File ID: Y0010427.D
Instrument ID: GCMSY

Injection Date: 02/27/07
Injection Time: 12:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	18328	22.3	Pass
75	30.0 - 60.0% of mass 95	48184	58.6	Pass
95	Base peak, 100% relative abundance	82280	100.0	Pass
96	5.0 - 9.0% of mass 95	5435	6.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	66136	80.4	Pass
175	5.0 - 9.0% of mass 174	5281	6.4 (8.0) ^a	Pass
176	95.0 - 101.0% of mass 174	63408	77.1 (95.9) ^a	Pass
177	5.0 - 9.0% of mass 176	3916	4.8 (6.2) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1139-IC1139	Y0010431.D	02/27/07	14:37	01:58	Initial cal 20
VY1139-ICC1139	Y0010432.D	02/27/07	15:06	02:27	Initial cal 40
VY1139-IC1139	Y0010433.D	02/27/07	15:36	02:57	Initial cal 70
VY1139-IC1139	Y0010434.D	02/27/07	16:05	03:26	Initial cal 100
VY1139-IC1139	Y0010435.D	02/27/07	16:35	03:56	Initial cal 200
VY1139-IC1139	Y0010437.D	02/27/07	17:33	04:54	Initial cal 5
VY1139-IC1139	Y0010438.D	02/27/07	18:03	05:24	Initial cal 2
VY1139-BS	Y0010439.D	02/27/07	18:32	05:53	Blank Spike
VY1139-BSD	Y0010440.D	02/27/07	19:02	06:23	Blank Spike Duplicate
VY1139-MB	Y0010442.D	02/27/07	20:01	07:22	Method Blank
T16432-7	Y0010443.D	02/27/07	20:30	07:51	TRIP BLANK
T16432-1	Y0010444.D	02/27/07	21:00	08:21	LHSMW06-FEB2007

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-BFB
Lab File ID: Y0010446.D
Instrument ID: GCMSY
Injection Date: 02/28/07
Injection Time: 10:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22976	24.0	Pass
75	30.0 - 60.0% of mass 95	54920	57.5	Pass
95	Base peak, 100% relative abundance	95552	100.0	Pass
96	5.0 - 9.0% of mass 95	5753	6.0	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	67168	70.3	Pass
175	5.0 - 9.0% of mass 174	5842	6.1 (8.7) ^a	Pass
176	95.0 - 101.0% of mass 174	66456	69.5 (98.9) ^a	Pass
177	5.0 - 9.0% of mass 176	5395	5.6 (8.1) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY1140-CC1139	Y0010447.D	02/28/07	10:57	00:27	Continuing cal 20
VY1140-BS	Y0010448.D	02/28/07	11:25	00:55	Blank Spike
VY1140-MB	Y0010450.D	02/28/07	12:20	01:50	Method Blank
ZZZZZZ	Y0010451.D	02/28/07	12:47	02:17	(unrelated sample)
T16432-2	Y0010452.D	02/28/07	13:15	02:45	17WW10-FEB2007
T16432-3	Y0010453.D	02/28/07	13:42	03:12	17WW12-FEB2007
T16432-4	Y0010454.D	02/28/07	14:09	03:39	LHSM07-FEB2007
T16432-5	Y0010455.D	02/28/07	14:35	04:05	47WW09-FEB2007
ZZZZZZ	Y0010457.D	02/28/07	15:32	05:02	(unrelated sample)
ZZZZZZ	Y0010458.D	02/28/07	16:00	05:30	(unrelated sample)
ZZZZZZ	Y0010459.D	02/28/07	16:27	05:57	(unrelated sample)
ZZZZZZ	Y0010460.D	02/28/07	16:54	06:24	(unrelated sample)
ZZZZZZ	Y0010461.D	02/28/07	17:22	06:52	(unrelated sample)
ZZZZZZ	Y0010462.D	02/28/07	17:49	07:19	(unrelated sample)
ZZZZZZ	Y0010463.D	02/28/07	18:17	07:47	(unrelated sample)
ZZZZZZ	Y0010464.D	02/28/07	18:44	08:14	(unrelated sample)
ZZZZZZ	Y0010465.D	02/28/07	19:12	08:42	(unrelated sample)
ZZZZZZ	Y0010466.D	02/28/07	19:39	09:09	(unrelated sample)
T16437-6	Y0010467.D	02/28/07	20:07	09:37	(used for QC only; not part of job T16432)
T16437-6	Y0010468.D	02/28/07	20:35	10:05	(used for QC only; not part of job T16432)
T16437-6MS	Y0010469.D	02/28/07	21:02	10:32	Matrix Spike
T16437-6MSD	Y0010470.D	02/28/07	21:29	10:59	Matrix Spike Duplicate
VY1140-ECC1139	Y0010472.D	02/28/07	22:24	11:54	Ending cal 20

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VF2306-CC2305	Injection Date: 03/01/07
Lab File ID: F0078995.D	Injection Time: 08:23
Instrument ID: GCMSF	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	699201	11.94	525986	16.02	192418	19.30
Upper Limit ^a	1398402	12.44	1051972	16.52	384836	19.80
Lower Limit ^b	349601	11.44	262993	15.52	96209	18.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VF2306-BS1	777387	11.94	579705	16.01	219016	19.30
VF2306-BS2	816000	11.93	591535	16.01	206818	19.28
VF2306-MB	806821	11.93	553209	16.02	163421	19.28
ZZZZZZ	782363	11.93	537014	16.01	147308	19.28
ZZZZZZ	758389	11.93	519002	16.01	140295	19.27
ZZZZZZ	730503	11.92	505963	16.01	133214	19.28
ZZZZZZ	713902	11.93	493376	16.00	130066	19.28
ZZZZZZ	709648	11.93	489247	16.02	126540	19.28
T16432-6	697001	11.93	477711	16.00	126547	19.28
ZZZZZZ	693179	11.93	488543	16.01	121877	19.29
ZZZZZZ	684656	11.93	471501	16.01	114404	19.28
ZZZZZZ	670434	11.93	467470	16.00	117612	19.28
ZZZZZZ	610736	11.91	425298	16.00	114844	19.26
T16432-4	638047	11.92	449783	15.99	118479	19.26
T16432-5	598577	11.91	425000	16.00	114851	19.27
ZZZZZZ	618266	11.91	428138	16.00	108080	19.26
ZZZZZZ	597863	11.91	425430	15.99	116121	19.25
T16411-10	617663	11.91	436613	15.99	122528	19.25
T16411-10MS	620696	11.90	469833	15.98	178265	19.24
T16411-10MSD	655046	11.90	491723	15.97	183495	19.25
ZZZZZZ	625983	11.89	448435	15.97	117429	19.24
ZZZZZZ	617306	11.89	441010	15.97	117597	19.24

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VY1139-ICC1139	Injection Date: 02/27/07
Lab File ID: Y0010432.D	Injection Time: 15:06
Instrument ID: GCMSY	Method: SW846 8260B

	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
Check Std	528585	9.58	416756	12.71	213134	15.11
Upper Limit ^a	1057170	10.08	833512	13.21	426268	15.61
Lower Limit ^b	264293	9.08	208378	12.21	106567	14.61

Lab Sample ID	IS 1		IS 2		IS 3	
	AREA	RT	AREA	RT	AREA	RT
VY1139-BS	598294	9.58	460129	12.71	231226	15.11
VY1139-BSD	610038	9.58	454509	12.71	235602	15.11
VY1139-MB	535914	9.58	377022	12.71	139892	15.11
T16432-7	529138	9.58	362047	12.71	130297	15.11
T16432-1	516276	9.58	349440	12.71	123643	15.11

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Check Std: VY1140-CC1139	Injection Date: 02/28/07
Lab File ID: Y0010447.D	Injection Time: 10:57
Instrument ID: GCMSY	Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Check Std	514168	9.58	390760	12.71	197760	15.11
Upper Limit ^a	1028336	10.08	781520	13.21	395520	15.61
Lower Limit ^b	257084	9.08	195380	12.21	98880	14.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VY1140-BS	528114	9.58	398199	12.71	212159	15.11
VY1140-MB	477732	9.58	342871	12.71	132949	15.11
ZZZZZZ	464413	9.58	327103	12.71	124680	15.11
T16432-2	464350	9.58	318565	12.71	120370	15.11
T16432-3	470453	9.58	315840	12.71	112791	15.11
T16432-4	461116	9.58	314727	12.71	113535	15.11
T16432-5	431337	9.59	309610	12.71	127372	15.11
ZZZZZZ	405017	9.58	275190	12.71	102766	15.11
ZZZZZZ	407320	9.58	285074	12.71	101688	15.11
ZZZZZZ	403367	9.58	270362	12.71	98390*	15.11
ZZZZZZ	392945	9.58	270524	12.71	97126*	15.11
ZZZZZZ	408609	9.58	279258	12.71	99061	15.11
ZZZZZZ	402576	9.58	276931	12.71	102897	15.11
ZZZZZZ	405732	9.58	280078	12.71	95538*	15.11
ZZZZZZ	416787	9.58	275004	12.71	99665	15.11
ZZZZZZ	393479	9.58	274001	12.71	99599	15.11
ZZZZZZ	391388	9.58	271169	12.71	102103	15.11
T16437-6	392973	9.58	275722	12.71	106578	15.11
T16437-6	396432	9.58	280504	12.71	96800*	15.11
T16437-6MS	418911	9.58	340300	12.71	177835	15.11
T16437-6MSD	471794	9.58	366048	12.71	183943	15.11
VY1140-ECC1139	442011	9.58	342239	12.71	177981	15.11

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
T16432-1	Y0010444.D	121.0	117.0	133.0	158.0* ^a
T16432-2	Y0010452.D	124.0	122.0	129.0	153.0* ^a
T16432-3	Y0010453.D	121.0	118.0	132.0	154.0* ^a
T16432-4	F0079010.D	102.0	96.0	106.0	125.0
T16432-4	Y0010454.D	127.0	117.0	128.0	150.0
T16432-5	F0079011.D	104.0	98.0	106.0	123.0
T16432-5	Y0010455.D	125.0	122.0	129.0	146.0
T16432-6	F0079005.D	102.0	95.0	109.0	127.0
T16432-7	Y0010443.D	117.0	114.0	130.0	151.0* ^a
T16411-10MS	F0079015.D	104.0	99.0	105.0	100.0
T16411-10MSD	F0079016.D	104.0	97.0	103.0	101.0
T16437-6MS	Y0010469.D	124.0	126.0	120.0	123.0
T16437-6MSD	Y0010470.D	122.0	117.0	119.0	129.0
VF2306-BS2	F0078998.D	98.0	93.0	103.0	106.0
VF2306-MB	F0078999.D	101.0	94.0	110.0	119.0
VY1139-BS	Y0010439.D	121.0	117.0	122.0	132.0
VY1139-BSD	Y0010440.D	120.0	120.0	129.0	136.0
VY1139-MB	Y0010442.D	118.0	119.0	131.0	154.0* ^b
VY1140-BS	Y0010448.D	124.0	119.0	128.0	130.0
VY1140-MB	Y0010450.D	124.0	119.0	130.0	150.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	73-139%
S2 = 1,2-Dichloroethane-D4	66-139%
S3 = Toluene-D8	77-148%
S4 = 4-Bromofluorobenzene	84-150%

- (a) Outside of control limits biased high. There were no target compounds associated with this surrogate.
 (b) Outside control limits biased high. There are no target compounds associated with this surrogate.

Initial Calibration Summary

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Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2276-ICC2276
Lab FileID: F0078492.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2276GW.M (RTE Integrator)
Title : SW846 8260B and EPA 624
Last Update : Tue Feb 13 07:54:50 2007
Response via : Initial Calibration

Calibration Files

200 =F0078490.D 400 =F0078491.D 1000 =F0078492.D
 2000 =F0078493.D 4000 =F0078494.D 9000 =F0078495.D

	Compound	200	400	1000	2000	4000	9000	Avg	%RSD
1) I	Fluorobenzene	-----ISTD-----							
2) S	Dibromofluoromethan	0.287	0.281	0.280	0.278	0.270	0.256	0.275	4.06
3) S	1,2-Dichloroethane-	0.212	0.207	0.211	0.211	0.212	0.209	0.210	0.87
4) I	Chlorobenzene-d5	-----ISTD-----							
5) S	Toluene-d8	1.047	1.037	1.041	1.022	1.035	1.039	1.037	0.83
6) I	1,4-Dichlorobenzene-d	-----ISTD-----							
7) S	4-Bromofluorobenzen	0.808	0.807	0.790	0.802	0.804	0.865	0.813	3.25
8) I	1,4-Dichlorobenzene-d	-----ISTD-----							
9) H	TPH-GRO (C6-C10)	1.214	0.770	0.582	0.475	0.429	0.392	0.644	E1 48.27
		----- Linear regression ----- Coefficient = 0.9997							
		Response Ratio = 37.35716 + 3.74928 *A							

 (#) = Out of Range

VF2276GW.M

Tue Feb 13 09:27:02 2007

Initial Calibration Summary

Job Number: T16432
 Account: ITTXHO Shaw E & I, Inc.
 Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
 Lab FileID: F0078967.D

Response Factor Report GC/MS F

Method : C:\HPCHEM\1\METHODS\VF2305C.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 07:31:12 2007
 Response via : Initial Calibration

Calibration Files

1 =F0078964.D 2 =F0078965.D 3 =F0078966.D
 4 =F0078967.D 5 =F0078968.D 6 =F0078969.D 7 =F0078970.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
-----ISTD-----									
1) I Fluorobenzene									
2) Dichlorodifluorom	0.157	0.162	0.153	0.171	0.181	0.178	0.196	0.171	8.89
3)P Chloromethane	0.353	0.368	0.326	0.309	0.319	0.297	0.331	0.329	7.50
4)C Vinyl Chloride	0.279	0.316	0.268	0.280	0.287	0.269	0.300	0.286	6.01
5) Bromomethane	0.275	0.253	0.223	0.215	0.216	0.204	0.190	0.225	12.95
6) Chloroethane	0.203	0.232	0.219	0.222	0.222	0.210	0.211	0.217	4.37
7) Trichlorofluorome	0.137	0.154	0.142	0.159	0.166	0.162	0.164	0.155	7.23
8) Acrolein	0.030	0.030	0.031	0.036	0.036	0.033	0.033	0.033	8.00
9)C 1,1-Dichloroethen	0.287	0.299	0.298	0.320	0.322	0.306	0.312	0.306	4.04
10) Freon 113	0.174	0.190	0.191	0.225	0.225	0.213	0.216	0.205	9.65
11) Acetone	0.065	0.062	0.057	0.052	0.053	0.053	0.052	0.056	9.61
12) Iodomethane	0.405	0.432	0.438	0.436	0.447	0.434	0.445	0.434	3.22
13) Methyl acetate	0.199	0.203	0.197	0.179	0.188	0.186	0.185	0.191	4.56
14) Carbon Disulfide	0.833	0.878	0.869	0.908	0.930	0.885	0.918	0.889	3.74
15) Methylene Chlorid	0.410	0.424	0.407	0.404	0.396	0.378	0.376	0.399	4.34
16) Tert Butyl Alchoh	0.015	0.018	0.018	0.015	0.017	0.018	0.018	0.017	8.14
17) trans-1,2-Dichlor	0.328	0.340	0.340	0.344	0.351	0.337	0.344	0.341	2.11
18) Acrylonitrile	0.086	0.099	0.097	0.091	0.097	0.098	0.097	0.095	4.82
19) Methyl Tert Butyl	0.577	0.603	0.572	0.555	0.578	0.587	0.594	0.581	2.70
20) Hexane	0.300	0.281	0.283	0.341	0.346	0.320	0.315	0.312	8.32
21)P 1,1-Dichloroethan	0.428	0.457	0.436	0.445	0.450	0.430	0.435	0.440	2.44
22) Vinyl acetate	0.513	0.554	0.582	0.564	0.569	0.552	0.517	0.550	4.74
23) Di-isopropyl ethe	0.944	1.012	0.992	0.981	0.988	0.943	0.934	0.971	3.09
24) Ethyl tert-butyl	0.721	0.735	0.733	0.737	0.753	0.739	0.749	0.738	1.43
25) 2,2-Dichloropropa	0.208	0.200	0.197	0.210	0.209	0.202	0.195	0.203	2.91
26) cis-1,2-Dichloroe	0.282	0.305	0.302	0.308	0.307	0.302	0.307	0.302	3.03
27) 2-Butanone	0.113	0.118	0.120	0.105	0.111	0.112	0.109	0.113	4.48
28) Bromochloromethan	0.124	0.142	0.145	0.146	0.147	0.149	0.150	0.143	6.13
29)C Chloroform	0.343	0.363	0.358	0.362	0.364	0.353	0.362	0.358	2.09
30) Tetrahydrofuran	0.048	0.035	0.033	0.030	0.031	0.031	0.029	0.034	19.44
----- Linear regression ----- Coefficient = 0.9988									
Response Ratio = 0.00148 + 0.02898 *A									
31) 1,1,1-Trichloroet	0.196	0.201	0.204	0.213	0.218	0.210	0.215	0.208	3.79
32)S Dibromofluorometh	0.211	0.221	0.210	0.217	0.221	0.221	0.226	0.218	2.61
33) Cyclohexane	0.390	0.405	0.413	0.479	0.485	0.453	0.447	0.439	8.43
34) 1,1-Dichloropropo	0.283	0.279	0.292	0.313	0.321	0.312	0.316	0.302	5.61
35) Carbon Tetrachlor	0.142	0.161	0.164	0.176	0.181	0.177	0.183	0.169	8.57
36)S 1,2-Dichloroethan	0.159	0.173	0.166	0.161	0.165	0.162	0.166	0.165	2.76
37) Benzene	1.089	1.108	1.092	1.113	1.134	1.098	1.119	1.108	1.43
38) 1,2-Dichloroethan	0.181	0.193	0.200	0.205	0.200	0.204	0.201	0.198	4.13
39) tert-amyl methyl	0.712	0.774	0.759	0.736	0.767	0.769	0.782	0.757	3.26
40) Trichloroethene	0.212	0.223	0.218	0.229	0.233	0.229	0.236	0.226	3.78
41) Methylcyclohexane	0.318	0.332	0.335	0.391	0.401	0.384	0.388	0.364	9.38
42)C 1,2-Dichloropropa	0.320	0.304	0.310	0.316	0.320	0.310	0.318	0.314	1.90
43) Dibromomethane	0.129	0.147	0.169	0.160	0.166	0.165	0.170	0.158	9.61

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.002	17.15
	----- Linear regression -----	Coefficient = 0.9989								
	Response Ratio =	-0.00341 + 0.00271 *A								
45)	Bromodichlorometh	0.287	0.300	0.298	0.307	0.311	0.306	0.317	0.304	3.19
46)	2-Nitropropane	0.046	0.042	0.041	0.037	0.038	0.039	0.038	0.040	7.95
47)	2-Chloroethyl vin	0.094	0.104	0.122	0.125	0.136	0.143	0.152	0.125	16.72
	----- Linear regression -----	Coefficient = 0.9983								
	Response Ratio =	-0.06248 + 0.15260 *A								
48)	4-Methyl-2-pentan	0.229	0.239	0.249	0.234	0.246	0.246	0.237	0.240	3.06
49)	cis-1,3-Dichlorop	0.369	0.397	0.420	0.427	0.443	0.439	0.454	0.421	6.95
50)	I Chlorobenzene-d5	-----ISTD-----								
51)	S Toluene-d8	1.147	1.122	1.060	1.073	1.083	1.079	1.120	1.098	2.89
52)	C Toluene	1.382	1.408	1.358	1.387	1.384	1.367	1.417	1.386	1.51
53)	trans-1,3-Dichlor	0.340	0.364	0.391	0.402	0.406	0.409	0.428	0.391	7.65
54)	1,1,2-Trichloroet	0.263	0.295	0.289	0.279	0.283	0.284	0.289	0.283	3.62
55)	Tetrachloroethene	0.272	0.280	0.293	0.302	0.309	0.299	0.307	0.294	4.70
56)	2-hexanone	0.170	0.180	0.203	0.194	0.206	0.211	0.208	0.196	8.04
57)	1,3-Dichloropropa	0.605	0.605	0.602	0.593	0.592	0.591	0.602	0.599	1.05
58)	Dibromochlorometh	0.254	0.312	0.303	0.296	0.299	0.304	0.315	0.298	6.92
59)	1,2-Dibromoethane	0.283	0.310	0.305	0.302	0.314	0.320	0.331	0.309	4.87
60)	1-Chlorohexane	0.464	0.467	0.465	0.505	0.517	0.509	0.535	0.495	5.83
61)	P Chlorobenzene	0.877	0.857	0.851	0.870	0.877	0.867	0.897	0.871	1.73
62)	1,1,1,2-Tetrachlo	0.264	0.284	0.283	0.282	0.281	0.279	0.288	0.280	2.74
63)	C Ethylbenzene	1.475	1.458	1.433	1.493	1.499	1.470	1.518	1.478	1.90
64)	m,p-Xylene	0.970	0.990	1.008	1.040	1.057	1.039	1.067	1.025	3.51
65)	o-Xylene	1.021	1.033	1.058	1.084	1.107	1.077	1.111	1.070	3.23
66)	Styrene	0.796	0.855	0.910	0.960	0.983	0.978	1.013	0.928	8.44
67)	P Bromoform	0.142	0.077	0.184	0.179	0.195	0.199	0.205	0.169	26.85
	----- Linear regression -----	Coefficient = 0.9995								
	Response Ratio =	-0.01246 + 0.20679 *A								
68)	I 1,4-Dichlorobenzene-d	-----ISTD-----								
69)	Isopropylbenzene	3.394	3.422	2.803	2.838	2.780	2.731	2.618	2.941	11.11
70)	Cyclohexanone	0.023	0.030	0.027	0.025	0.026	0.029	0.027	0.027	8.23
71)	S 4-Bromofluorobenz	1.169	1.004	0.864	0.853	0.853	0.860	0.845	0.921	13.32
72)	Bromobenzene	0.997	0.963	0.842	0.837	0.823	0.822	0.788	0.867	9.15
73)	P 1,1,2,2-Tetrachlo	1.339	1.320	1.146	1.011	1.011	1.030	0.983	1.120	13.59
74)	Trans-1,4-Dichlor	0.143	0.182	0.177	0.182	0.188	0.192	0.192	0.179	9.42
75)	1,2,3-Trichloropr	0.257	0.296	0.253	0.232	0.230	0.236	0.225	0.247	10.10
76)	n-Propylbenzene	4.567	4.426	4.010	4.105	4.023	3.954	3.865	4.136	6.29
77)	2-Chlorotoluene	3.164	2.888	2.531	2.500	2.416	2.351	2.285	2.591	12.31
78)	4-Chlorotoluene	2.569	2.376	2.183	2.187	2.133	2.116	2.076	2.234	7.90
79)	1,3,5-Trimethylbe	2.668	2.535	2.320	2.351	2.287	2.250	2.168	2.368	7.33
80)	sec-Butylbenzene	3.329	3.252	3.038	3.232	3.150	3.042	2.937	3.140	4.47
81)	1,3-Dichlorobenze	1.316	1.426	1.364	1.413	1.441	1.419	1.422	1.400	3.16
82)	4-Isopropyltoluen	2.408	2.304	2.224	2.403	2.346	2.277	2.220	2.312	3.37
83)	1,4-Dichlorobenze	1.528	1.430	1.389	1.429	1.420	1.423	1.424	1.435	3.04
84)	tert-Butylbenzene	0.533	0.438	0.430	0.445	0.436	0.429	0.410	0.446	8.90
85)	n-Butylbenzene	1.465	1.572	1.892	2.173	2.149	2.132	2.214	1.942	15.91
	----- Linear regression -----	Coefficient = 0.9997								
	Response Ratio =	-0.08322 + 2.22219 *A								
86)	1,2-Dichlorobenze	1.206	1.332	1.314	1.336	1.345	1.359	1.369	1.323	4.14
87)	1,2,4-Trimethylbe	2.566	2.449	2.311	2.410	2.354	2.310	2.242	2.377	4.53
88)	1,2-Dibromo-3-Chl	0.068	0.106	0.082	0.072	0.077	0.089	0.088	0.083	15.22
	----- Linear regression -----	Coefficient = 0.9968								

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Project: Longhorn Army Ammunition Plant

Sample: VF2305-ICC2305
Lab FileID: F0078967.D

Response Ratio = -0.00467 + 0.08863 *A										
89)	1,2,4-Trichlorobe	0.166	0.135	0.302	0.403	0.468	0.530	0.585	0.370	47.33
----- Linear regression -----		Coefficient = 0.9944								
		Response Ratio = -0.09820 + 0.59565 *A								
90)	Hexachlorobutadie	0.058	0.088	0.170	0.207	0.204	0.208	0.202	0.162	38.83
----- Linear regression -----		Coefficient = 0.9993								
		Response Ratio = -0.00579 + 0.20548 *A								
91)	Naphthalene	0.526	0.280	0.475	0.606	0.781	0.975	1.125	0.681	43.48
----- Quadratic regression -----		Coefficient = 0.9974								
		Response Ratio = -0.07686 + 0.74236 *A + 0.10172 *A^2								
92)	1,2,3-Trichlorobe	0.167	0.113	0.217	0.276	0.334	0.389	0.421	0.274	41.95
----- Linear regression -----		Coefficient = 0.9938								
		Response Ratio = -0.07169 + 0.43007 *A								

(#) = Out of Range

VF2305C.M Thu Mar 01 07:44:03 2007

5.8
5

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
Lab FileID: F0078995.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078995.D Vial: 3
 Acq On : 1 Mar 2007 8:23 am Operator: lydiaj
 Sample : cc2305-20 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	88	-0.01
2	Dichlorodifluoromethane	0.171	0.152	11.1	88	0.00
3 P	Chloromethane	0.329	0.325	1.2	88	0.00
4 C	Vinyl Chloride	0.286	0.274	4.2	90	-0.01
5	Bromomethane	0.225	0.219	2.7	86	-0.01
6	Chloroethane	0.217	0.214	1.4	86	0.00
7	Trichlorofluoromethane	0.155	0.152	1.9	94	0.00
8	Acrolein	0.033	0.032	3.0	92	-0.01
9 C	1,1-Dichloroethene	0.306	0.283	7.5	83	0.00
10	Freon 113	0.205	0.189	7.8	87	0.00
11	Acetone	0.056	0.048	14.3	74	0.00
12	Iodomethane	0.434	0.403	7.1	81	0.00
13	Methyl acetate	0.191	0.170	11.0	76	0.00
14	Carbon Disulfide	0.889	0.799	10.1	81	0.00
15	Methylene Chloride	0.399	0.393	1.5	85	0.00
16	Tert Butyl Alcohol	0.017	0.014	17.6	67	-0.01
17	trans-1,2-Dichloroethene	0.341	0.314	7.9	81	-0.01
18	Acrylonitrile	0.095	0.081	14.7	73	0.00
19	Methyl Tert Butyl Ether	0.581	0.533	8.3	82	0.00
20	Hexane	0.312	0.302	3.2	94	-0.01
21 P	1,1-Dichloroethane	0.440	0.438	0.5	88	0.00
22	Vinyl acetate	0.550	0.534	2.9	81	0.00
23	Di-isopropyl ether	0.971	0.992	-2.2	88	0.00
24	Ethyl tert-butyl ether	0.738	0.716	3.0	86	0.00
25	2,2-Dichloropropane	0.203	0.207	-2.0	92	0.00
26	cis-1,2-Dichloroethene	0.302	0.289	4.3	84	-0.01
27	2-Butanone	0.113	0.098	13.3	72	-0.01
28	Bromochloromethane	0.143	0.139	2.8	84	0.00
29 C	Chloroform	0.358	0.357	0.3	88	-0.01
30	Tetrahydrofuran	0.034	0.031	8.8	84	0.00
31	1,1,1-Trichloroethane	0.208	0.200	3.8	86	0.00
32 S	Dibromofluoromethane	0.218	0.214	1.8	90	0.00
33	Cyclohexane	0.439	0.415	5.5	88	0.00
34	1,1-Dichloropropene	0.302	0.283	6.3	85	-0.01
35	Carbon Tetrachloride	0.169	0.164	3.0	88	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.162	1.8	86	-0.01
37	Benzene	1.108	1.070	3.4	86	0.00
38	1,2-Dichloroethane	0.198	0.207	-4.5	91	0.00
39	tert-amyl methyl ether	0.757	0.696	8.1	81	0.00
40	Trichloroethene	0.226	0.213	5.8	86	0.00
41	Methylcyclohexane	0.364	0.329	9.6	87	0.00
42 C	1,2-Dichloropropane	0.314	0.306	2.5	87	0.00

Continuing Calibration Summary

Job Number: T16432
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 Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2305
 Lab FileID: F0078995.D

43	Dibromomethane	0.158	0.161	-1.9	84	-0.01
44	1,4-Dioxane	0.002	0.002	0.0	79	-0.02
45	Bromodichloromethane	0.304	0.296	2.6	87	0.00
46	2-Nitropropane	0.040	0.035	12.5	75	0.00
47	2-Chloroethyl vinyl ether	0.125	0.095	24.0#	69	0.00
48	4-Methyl-2-pentanone	0.240	0.215	10.4	76	-0.01
49	cis-1,3-Dichloropropene	0.421	0.416	1.2	87	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
51 S	Toluene-d8	1.098	1.054	4.0	90	0.00
52 C	Toluene	1.386	1.315	5.1	87	0.00
53	trans-1,3-Dichloropropene	0.391	0.366	6.4	85	0.00
54	1,1,2-Trichloroethane	0.283	0.265	6.4	83	0.00
55	Tetrachloroethene	0.294	0.285	3.1	88	-0.01
56	2-hexanone	0.196	0.165	15.8	73	0.00
57	1,3-Dichloropropane	0.599	0.560	6.5	84	0.00
58	Dibromochloromethane	0.298	0.283	5.0	84	0.00
59	1,2-Dibromoethane	0.309	0.278	10.0	82	0.00
60	1-Chlorohexane	0.495	0.444	10.3	86	-0.01
61 P	Chlorobenzene	0.871	0.844	3.1	90	-0.01
62	1,1,1,2-Tetrachloroethane	0.280	0.275	1.8	88	-0.01
63 C	Ethylbenzene	1.478	1.399	5.3	88	-0.01
64	m,p-Xylene	1.025	0.993	3.1	89	-0.01
65	o-Xylene	1.070	1.039	2.9	89	-0.01
66	Styrene	0.928	0.889	4.2	88	0.00
67 P	Bromoform	0.169	0.154	8.9	76	-0.01
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
69	Isopropylbenzene	2.941	2.895	1.6	88	0.00
70	Cyclohexanone	0.027	0.049	-81.5#	155	-0.02
71 S	4-Bromofluorobenzene	0.921	0.906	1.6	89	0.00
72	Bromobenzene	0.867	0.893	-3.0	90	0.00
73 P	1,1,2,2-Tetrachloroethane	1.120	1.016	9.3	75	0.00
74	Trans-1,4-Dichloro-2-Butene	0.179	0.156	12.8	75	-0.01
75	1,2,3-Trichloropropane	0.247	0.237	4.0	80	-0.01
76	n-Propylbenzene	4.136	4.044	2.2	86	0.00
77	2-Chlorotoluene	2.591	2.595	-0.2	87	0.00
78	4-Chlorotoluene	2.234	2.210	1.1	86	-0.01
79	1,3,5-Trimethylbenzene	2.368	2.371	-0.1	87	0.00
80	sec-Butylbenzene	3.140	3.061	2.5	86	0.00
81	1,3-Dichlorobenzene	1.400	1.423	-1.6	89	0.00
82	4-Isopropyltoluene	2.312	2.227	3.7	85	0.00
83	1,4-Dichlorobenzene	1.435	1.395	2.8	85	0.00
84	tert-Butylbenzene	0.446	0.416	6.7	82	-0.01
85	n-Butylbenzene	1.942	1.782	8.2	80	0.00
86	1,2-Dichlorobenzene	1.323	1.297	2.0	84	-0.01
87	1,2,4-Trimethylbenzene	2.377	2.379	-0.1	88	0.00
88	1,2-Dibromo-3-Chloropropane	0.083	0.069	16.9	71	-0.02
89	1,2,4-Trichlorobenzene	0.370	0.253	31.6#	71	0.00
90	Hexachlorobutadiene	0.162	0.147	9.3	74	-0.02
91	Naphthalene	0.681	0.379	44.3#	68	0.00
92	1,2,3-Trichlorobenzene	0.274	0.174	36.5#	68	0.00

 Average % D = 7.6

(#) = Out of Range
 F0078966.D VF2305CG.M

SPCC's out = 0 CCC's out = 0
 Fri Mar 02 07:49:36 2007

Continuing Calibration Summary

Page 1 of 1

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VF2306-CC2276
Lab FileID: F0078996.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\VF2306\F0078996.D Vial: 4
 Acq On : 1 Mar 2007 8:55 am Operator: lydiaj
 Sample : cc2276-1000 Inst : GC/MS F
 Misc : ms3868,vf2306,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\VF2305CG.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Thu Mar 01 11:28:12 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	92	-0.01
32 S	Dibromofluoromethane	0.218	0.547	-150.9#	239#	0.00
36 S	1,2-Dichloroethane-d4	0.165	0.404	-144.8#	223#	-0.01
50 I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51 S	Toluene-d8	1.098	2.827	-157.5#	244#	0.00
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
71 S	4-Bromofluorobenzene	0.921	2.369	-157.2#	233#	-0.01
93 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	0.02
94 H	TPH-GRO (C6-C10)	6.436	7.083	-10.1	73	0.49

Average % D = 87.6

(#) = Out of Range
 F0078996.D VF2305CG.M

SPCC's out = 5 CCC's out = 5
 Fri Mar 02 07:49:41 2007

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

Response Factor Report GCMS_Y

Method : C:\MSDCHEM\1\METHODS\VY1139.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Wed Feb 28 14:32:23 2007
 Response via : Initial Calibration

Calibration Files

1 =Y0010438.D 2 =Y0010437.D 3 =Y0010431.D 4 =Y0010432.D
 5 =Y0010433.D 6 =Y0010434.D 7 =Y0010435.D

Compound	1	2	3	4	5	6	7	Avg	%RSD

1) I Fluorobenzene	-----ISTD-----								
2) Dichlorodifluorom	0.204	0.236	0.383	0.364	0.360	0.388	0.328	0.323	22.77
---- Linear regression ----	Coefficient = 0.9916								
Response Ratio =	0.02002 + 0.33494 *A								
3)P Chloromethane	0.539	0.497	0.538	0.515	0.513	0.509	0.415	0.504	8.32
4)C Vinyl Chloride	0.627	0.675	0.721	0.674	0.643	0.666	0.565	0.653	7.45
5) Bromomethane	0.308	0.292	0.384	0.357	0.315	0.304	0.279	0.320	11.68
6) Chloroethane	0.303	0.322	0.415	0.371	0.333	0.315	0.281	0.334	13.50
7) Trichlorofluorome	0.242	0.308	0.449	0.428	0.405	0.403	0.372	0.373	19.60
---- Linear regression ----	Coefficient = 0.9972								
Response Ratio =	0.02213 + 0.37411 *A								
8) Acrolein	0.010	0.014	0.015	0.014	0.013	0.012	0.013	14.38	
9)C 1,1-Dichloroethen	0.229	0.179	0.220	0.245	0.240	0.257	0.250	0.231	11.45
10) Freon 113	0.258	0.174	0.278	0.279	0.255	0.260	0.249	0.250	14.18
11) Acetone	0.056	0.061	0.075	0.074	0.067	0.062	0.058	0.065	11.57
12) Iodomethane	0.343	0.342	0.340	0.353	0.352	0.376	0.374	0.354	4.28
13) Methyl acetate	0.174	0.150	0.198	0.200	0.183	0.178	0.168	0.179	9.73
14) Carbon Disulfide	1.107	0.951	1.065	1.058	1.002	1.050	1.031	1.038	4.80
15) Methylene Chlorid	0.414	0.352	0.381	0.348	0.358	0.343	0.354	0.364	6.93
16) Tert Butyl Alchoh	0.017	0.018	0.023	0.023	0.023	0.024	0.024	0.022	13.25
17) trans-1,2-Dichlor	0.324	0.256	0.287	0.293	0.293	0.300	0.293	0.292	6.81
18) Acrylonitrile	0.089	0.092	0.121	0.121	0.113	0.113	0.108	0.108	11.97
19) Hexane	0.234	0.239	0.353	0.398	0.397	0.427	0.411	0.351	23.24
---- Linear regression ----	Coefficient = 0.9992								
Response Ratio =	-0.01439 + 0.41738 *A								
20) Methyl Tert Butyl	0.524	0.568	0.647	0.736	0.761	0.779	0.797	0.688	15.78
---- Linear regression ----	Coefficient = 0.9997								
Response Ratio =	-0.04096 + 0.80371 *A								
21)P 1,1-Dichloroethan	0.751	0.627	0.754	0.726	0.726	0.726	0.708	0.717	5.98
22) Vinyl acetate	0.376	0.420	0.585	0.622	0.611	0.576	0.551	0.534	18.14
---- Linear regression ----	Coefficient = 0.9977								
Response Ratio =	0.11344 + 0.55357 *A								
23) Di-isopropyl ethe	0.648	0.660	0.830	0.899	0.933	0.921	0.916	0.829	15.03
---- Linear regression ----	Coefficient = 0.9998								
Response Ratio =	-0.01640 + 0.92309 *A								
24) Ethyl tert-butyl	0.795	0.827	0.961	1.072	1.153	1.190	1.233	1.033	16.98
---- Linear regression ----	Coefficient = 0.9992								
Response Ratio =	-0.08463 + 1.24409 *A								
25) 2,2-Dichloropropa	0.358	0.369	0.384	0.403	0.399	0.384	0.382	0.383	4.08

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

26)	cis-1,2-Dichloroe	0.298	0.323	0.338	0.347	0.361	0.353	0.345	0.338	6.26
27)	2-Butanone	0.020	0.022	0.030	0.032	0.032	0.030	0.031	0.028	18.27
---- Linear regression ---- Coefficient = 0.9988										
Response Ratio = -0.00264 + 0.03144 *A										
28)	Bromochloromethan	0.133	0.119	0.136	0.143	0.138	0.135	0.137	0.134	5.57
29)C	Chloroform	0.603	0.533	0.596	0.583	0.587	0.576	0.576	0.579	3.91
30)	Tetrahydrofuran	0.049	0.033	0.054	0.056	0.063	0.060	0.059	0.053	18.67
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.00105 + 0.05985 *A										
31)	1,1,1-Trichloroet	0.444	0.358	0.434	0.443	0.432	0.443	0.434	0.427	7.20
32)S	Dibromofluorometh	0.229	0.249	0.281	0.278	0.268	0.269	0.268	0.263	6.90
33)	Cyclohexane	0.357	0.295	0.503	0.600	0.602	0.627	0.617	0.515	26.44
---- Linear regression ---- Coefficient = 0.9996										
Response Ratio = -0.02592 + 0.62605 *A										
34)	1,1-Dichloroprope	0.276	0.320	0.386	0.417	0.417	0.430	0.433	0.383	16.00
---- Linear regression ---- Coefficient = 0.9999										
Response Ratio = -0.01460 + 0.43570 *A										
35)	Carbon Tetrachlor	0.290	0.239	0.314	0.329	0.322	0.324	0.321	0.305	10.51
36)S	1,2-Dichloroethan	0.410	0.388	0.478	0.474	0.459	0.457	0.460	0.446	7.60
37)	Benzene	1.384	1.212	1.407	1.445	1.410	1.460	1.406	1.389	5.92
38)	1,2-Dichloroethan	0.545	0.453	0.591	0.568	0.563	0.540	0.525	0.541	8.20
39)	tert-amyl methyl	0.560	0.595	0.755	0.873	0.896	0.927	0.958	0.795	20.38
---- Linear regression ---- Coefficient = 0.9995										
Response Ratio = -0.06051 + 0.96643 *A										
40)	Trichloroethene	0.273	0.242	0.256	0.278	0.299	0.296	0.310	0.279	8.75
41)	Methylcyclohexane	0.255	0.209	0.345	0.410	0.411	0.423	0.440	0.356	25.50
---- Linear regression ---- Coefficient = 0.9995										
Response Ratio = -0.02902 + 0.44428 *A										
42)C	1,2-Dichloropropa	0.435	0.382	0.437	0.441	0.440	0.443	0.441	0.431	5.09
43)	Dibromomethane	0.169	0.187	0.216	0.219	0.206	0.204	0.207	0.201	8.75
44)	1,4-Dioxane	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	11.60
45)	Bromodichlorometh	0.399	0.380	0.463	0.473	0.479	0.484	0.487	0.452	9.67
46)	2-Nitropropane	0.042	0.044	0.073	0.075	0.069	0.066	0.061	0.062	21.81
---- Linear regression ---- Coefficient = 0.9957										
Response Ratio = 0.02259 + 0.06144 *A										
47)	2-Chloroethyl vin	0.076	0.097	0.167	0.187	0.190	0.201	0.217	0.162	33.39
---- Linear regression ---- Coefficient = 0.9982										
Response Ratio = -0.10189 + 0.21830 *A										
48)	4-Methyl-2-pentan	0.018	0.021	0.031	0.032	0.032	0.031	0.032	0.028	21.39
---- Linear regression ---- Coefficient = 0.9998										
Response Ratio = -0.00272 + 0.03194 *A										
49)	cis-1,3-Dichlorop	0.407	0.398	0.460	0.523	0.536	0.561	0.578	0.495	14.74
50) I	Chlorobenzene-d5	-----ISTD-----								
51)S	Toluene-d8	1.210	1.311	1.388	1.414	1.434	1.481	1.463	1.386	6.89
52)C	Toluene	0.907	0.873	1.001	1.075	1.081	1.094	1.055	1.012	8.81
53)	trans-1,3-Dichlor	0.436	0.431	0.481	0.549	0.592	0.607	0.626	0.532	15.42
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.04063 + 0.63175 *A										
54)	1,1,2-Trichloroet	0.393	0.358	0.361	0.374	0.373	0.374	0.369	0.372	3.04

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

55)	Tetrachloroethene	0.227	0.242	0.260	0.251	0.262	0.261	0.254	0.251	5.07
56)	2-hexanone	0.097	0.105	0.192	0.197	0.190	0.189	0.177	0.164	26.38
---- Linear regression ---- Coefficient = 0.9979										
Response Ratio = 0.02704 + 0.17877 *A										
57)	1,3-Dichloropropa	0.725	0.670	0.758	0.736	0.738	0.728	0.706	0.723	3.89
58)	Dibromochlorometh	0.336	0.293	0.334	0.346	0.376	0.378	0.388	0.350	9.46
59)	1,2-Dibromoethane	0.323	0.287	0.336	0.352	0.372	0.377	0.385	0.348	10.07
60)	1-Chlorohexane	0.272	0.253	0.352	0.440	0.486	0.540	0.532	0.411	29.02
---- Linear regression ---- Coefficient = 0.9981										
Response Ratio = -0.04776 + 0.54357 *A										
61)P	Chlorobenzene	1.306	1.011	1.106	1.061	1.107	1.140	1.086	1.117	8.32
62)	1,1,1,2-Tetrachlo	0.354	0.299	0.359	0.344	0.347	0.352	0.347	0.343	5.86
63)C	Ethylbenzene	1.601	1.566	1.867	1.931	1.953	2.100	2.042	1.866	11.11
64)	m,p-Xylene	0.614	0.585	0.748	0.773	0.788	0.829	0.751	0.727	12.58
65)	o-Xylene	0.512	0.499	0.624	0.743	0.752	0.831	0.785	0.678	19.68
---- Linear regression ---- Coefficient = 0.9983										
Response Ratio = -0.03174 + 0.79995 *A										
66)	Styrene	0.660	0.682	0.998	1.210	1.272	1.345	1.319	1.069	27.55
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.07570 + 1.34311 *A										
67)P	Bromoform	0.163	0.156	0.211	0.219	0.224	0.235	0.247	0.208	16.93
---- Linear regression ---- Coefficient = 0.9989										
Response Ratio = -0.01623 + 0.24771 *A										
68) I	1,4-Dichlorobenzene-d	-----ISTD-----								
69)	Isopropylbenzene	2.181	2.307	2.489	2.886	2.996	3.118	3.352	2.761	15.95
---- Linear regression ---- Coefficient = 0.9981										
Response Ratio = -0.28399 + 3.36931 *A										
70)	Cyclohexanone	0.023	0.048	0.060	0.056	0.056	0.057	0.056	0.051	25.05
---- Linear regression ---- Coefficient = 0.9997										
Response Ratio = 0.00045 + 0.05573 *A										
71)S	4-Bromofluorobenz	0.877	0.910	0.980	1.034	0.983	1.042	1.108	0.991	8.02
72)	Bromobenzene	1.003	0.949	0.921	0.890	0.871	0.886	0.846	0.910	5.85
73)P	1,1,2,2-Tetrachlo	1.328	1.049	1.200	1.203	1.097	1.080	1.133	1.156	8.28
74)	Trans-1,4-Dichlor	0.100	0.193	0.299	0.288	0.294	0.301	0.319	0.256	31.35
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.01901 + 0.31993 *A										
75)	1,2,3-Trichloropr	1.420	1.301	1.448	1.377	1.333	1.348	1.370	1.371	3.67
76)	n-Propylbenzene	3.107	3.260	3.892	4.230	4.372	4.568	4.785	4.030	15.95
---- Linear regression ---- Coefficient = 0.9990										
Response Ratio = -0.32667 + 4.81397 *A										
77)	2-Chlorotoluene	2.740	2.773	2.961	2.975	3.071	3.124	3.255	2.986	6.19
78)	4-Chlorotoluene	2.055	2.184	2.316	2.585	2.638	2.713	2.910	2.486	12.40
79)	1,3,5-Trimethylbe	2.086	2.075	2.537	2.701	2.910	2.956	3.085	2.621	15.65
---- Linear regression ---- Coefficient = 0.9993										
Response Ratio = -0.19399 + 3.10648 *A										
80)	sec-Butylbenzene	2.181	2.435	2.953	3.271	3.422	3.667	3.805	3.105	19.77
---- Linear regression ---- Coefficient = 0.9988										
Response Ratio = -0.29966 + 3.84128 *A										

Initial Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1139-ICC1139
Lab FileID: Y0010432.D

81)	1,3-Dichlorobenze	1.432	1.437	1.513	1.523	1.578	1.565	1.596	1.521	4.32
82)	4-Isopropyltoluen	1.210	1.571	1.959	2.247	2.406	2.567	2.617	2.082	25.49
	---- Linear regression ----	Coefficient = 0.9991								
	Response Ratio =	-0.20374 + 2.65246 *A								
83)	1,4-Dichlorobenze	1.888	1.480	1.591	1.609	1.596	1.547	1.577	1.613	8.00
84)	tert-Butylbenzene	1.067	1.098	1.349	1.428	1.495	1.587	1.697	1.389	17.06
	---- Linear regression ----	Coefficient = 0.9980								
	Response Ratio =	-0.14547 + 1.70580 *A								
85)	n-Butylbenzene	1.383	1.578	2.013	2.356	2.578	2.650	2.871	2.204	25.59
	---- Linear regression ----	Coefficient = 0.9980								
	Response Ratio =	-0.28821 + 2.89630 *A								
86)	1,2-Dichlorobenze	1.434	1.299	1.465	1.486	1.483	1.527	1.566	1.466	5.78
87)	1,2,4-Trimethylbe	1.871	2.205	2.648	2.818	3.001	3.097	3.255	2.699	18.55
	---- Linear regression ----	Coefficient = 0.9990								
	Response Ratio =	-0.23086 + 3.27702 *A								
88)	1,2-Dibromo-3-Chl	0.092	0.120	0.118	0.124	0.118	0.128	0.117		10.75
89)	1,2,4-Trichlorobe	0.475	0.475	0.477	0.544	0.637	0.664	0.749	0.574	19.13
	---- Linear regression ----	Coefficient = 0.9949								
	Response Ratio =	-0.09714 + 0.75368 *A								
90)	Hexachlorobutadie	0.266	0.228	0.238	0.269	0.264	0.278	0.288	0.262	8.16
91)	Naphthalene	0.925	0.827	0.817	1.050	1.250	1.404	1.653	1.132	27.97
	---- Quadratic regression ----	Coefficient = 0.9993								
	Response Ratio =	-0.06789 + 1.11655 *A + 0.13943 *A^2								
92)	1,2,3-Trichlorobe	0.421	0.427	0.446	0.469	0.526	0.532	0.605	0.489	13.81

(#) = Out of Range										

VY1139.M

Wed Feb 28 15:59:16 2007

Continuing Calibration Summary

Page 1 of 4

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VY1140\Y0010447.D Vial: 2
 Acq On : 28 Feb 2007 10:57 am Operator: jennifer
 Sample : cc1139-20 Inst : GCMS_Y
 Misc : ms3870,vy1140,,,,5,1,water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\VY1139.M (RTE Integrator)
 Title : SW846 8260B and EPA 624
 Last Update : Wed Feb 28 14:32:23 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	106	0.00	9.58
2	Dichlorodifluoromethane	20.000	18.794	6.0	101	0.00	3.82
3 P	Chloromethane	0.504	0.569	-12.9	113	0.00	4.18
4 C	Vinyl Chloride	0.653	0.773	-18.4	114	0.00	4.40
5	Bromomethane	0.320	0.405	-26.6#	112	0.00	4.98
6	Chloroethane	0.334	0.427	-27.8#	109	0.00	5.14
7	Trichlorofluoromethane	20.000	24.290	-21.4#	121	0.00	5.49
8	Acrolein	0.013	0.015	-15.4	115	0.00	6.16
9 C	1,1-Dichloroethene	0.231	0.256	-10.8	124	0.00	6.25
10	Freon 113	0.250	0.274	-9.6	105	0.01	6.18
11	Acetone	0.065	0.071	-9.2	100	0.00	6.34
12	Iodomethane	0.354	0.348	1.7	109	0.00	6.51
13	Methyl acetate	0.179	0.199	-11.2	107	0.00	6.70
14	Carbon Disulfide	1.038	1.100	-6.0	110	0.00	6.59
15	Methylene Chloride	0.364	0.371	-1.9	103	0.00	6.91
16	Tert Butyl Alcohol	0.022	0.024	-9.1	110	0.00	6.93
17	trans-1,2-Dichloroethene	0.292	0.300	-2.7	111	0.00	7.19
18	Acrylonitrile	0.108	0.117	-8.3	102	0.00	7.25
19	Hexane	20.000	20.438	-2.2	118	0.00	7.41
20	Methyl Tert Butyl Ether	20.000	20.038	-0.2	116	0.00	7.13
21 P	1,1-Dichloroethane	0.717	0.750	-4.6	106	0.00	7.74
22	Vinyl acetate	100.000	101.221	-1.2	112	0.00	7.70
23	Di-isopropyl ether	20.000	20.175	-0.9	114	0.00	7.64
24	Ethyl tert-butyl ether	20.000	20.339	-1.7	117	0.00	8.05
25	2,2-Dichloropropane	0.383	0.405	-5.7	112	0.00	8.36
26	cis-1,2-Dichloroethene	0.338	0.355	-5.0	111	0.00	8.38

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

		Amount	Calc.	%Drift			
27	2-Butanone	100.000	99.629	0.4	107	0.00	8.35
		AvgRF	CCRF	%Dev			
28	Bromochloromethane	0.134	0.139	-3.7	109	0.00	8.65
29 C	Chloroform	0.579	0.611	-5.5	109	0.00	8.70
		Amount	Calc.	%Drift			
30	Tetrahydrofuran	20.000	21.464	-7.3	122	0.00	8.66
		AvgRF	CCRF	%Dev			
31	1,1,1-Trichloroethane	0.427	0.456	-6.8	112	0.00	8.90
32 S	Dibromofluoromethane	0.263	0.309	-17.5	117	0.00	8.87
		Amount	Calc.	%Drift			
33	Cyclohexane	20.000	20.267	-1.3	121	0.00	8.92
34	1,1-Dichloropropene	20.000	19.942	0.3	110	0.00	9.07
		AvgRF	CCRF	%Dev			
35	Carbon Tetrachloride	0.305	0.343	-12.5	116	-0.01	9.05
36 S	1,2-Dichloroethane-d4	0.446	0.544	-22.0#	121	0.00	9.28
37	Benzene	1.389	1.520	-9.4	115	0.00	9.30
38	1,2-Dichloroethane	0.541	0.601	-11.1	108	0.00	9.37
		Amount	Calc.	%Drift			
39	tert-amyl methyl ether	20.000	20.501	-2.5	118	0.00	9.30
		AvgRF	CCRF	%Dev			
40	Trichloroethene	0.279	0.276	1.1	115	0.00	9.95
		Amount	Calc.	%Drift			
41	Methylcyclohexane	20.000	19.084	4.6	108	0.00	10.11
		AvgRF	CCRF	%Dev			
42 C	1,2-Dichloropropane	0.431	0.443	-2.8	108	0.00	10.24
43	Dibromomethane	0.201	0.215	-7.0	106	0.00	10.37
44	1,4-Dioxane	0.003	0.002	33.3#	118	0.00	10.31
45	Bromodichloromethane	0.452	0.483	-6.9	111	0.00	10.48
		Amount	Calc.	%Drift			
46	2-Nitropropane	100.000	97.454	2.5	104	0.00	10.75
47	2-Chloroethyl vinyl ether	100.000	99.196	0.8	106	0.00	10.72
48	4-Methyl-2-pentanone	100.000	103.359	-3.4	108	0.00	11.02
		AvgRF	CCRF	%Dev			
49	cis-1,3-Dichloropropene	0.495	0.493	0.4	114	0.00	10.93
50 I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	12.71
51 S	Toluene-d8	1.386	1.568	-13.1	121	0.00	11.18
52 C	Toluene	1.012	1.057	-4.4	113	0.00	11.25
		Amount	Calc.	%Drift			
53	trans-1,3-Dichloropropene	20.000	20.042	-0.2	118	0.00	11.49
		AvgRF	CCRF	%Dev			
54	1,1,2-Trichloroethane	0.372	0.370	0.5	109	0.00	11.70
55	Tetrachloroethene	0.251	0.255	-1.6	104	0.00	11.81
		Amount	Calc.	%Drift			

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

56	2-hexanone	100.000	96.252	3.7	103	0.00	11.86
		AvgRF	CCRF	%Dev			
57	1,3-Dichloropropane	0.723	0.771	-6.6	108	0.00	11.89
58	Dibromochloromethane	0.350	0.355	-1.4	113	0.00	12.12
59	1,2-Dibromoethane	0.348	0.345	0.9	109	0.00	12.29
		Amount	Calc.	%Drift			
60	1-Chlorohexane	20.000	18.439	7.8	116	0.00	12.60
		AvgRF	CCRF	%Dev			
61 P	Chlorobenzene	1.117	1.080	3.3	104	0.00	12.74
62	1,1,1,2-Tetrachloroethane	0.343	0.355	-3.5	106	0.00	12.80
63 C	Ethylbenzene	1.866	1.890	-1.3	108	0.00	12.77
64	m,p-Xylene	0.727	0.755	-3.9	108	0.00	12.89
		Amount	Calc.	%Drift			
65	o-Xylene	20.000	18.731	6.3	114	0.00	13.32
66	Styrene	20.000	19.452	2.7	119	0.00	13.34
67 P	Bromoform	20.000	19.980	0.1	104	0.00	13.61
		AvgRF	CCRF	%Dev			
68 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	15.11
		Amount	Calc.	%Drift			
69	Isopropylbenzene	20.000	20.248	-1.2	120	0.00	13.66
70	Cyclohexanone	100.000	115.407	-15.4	118	0.00	13.89
		AvgRF	CCRF	%Dev			
71 S	4-Bromofluorobenzene	0.991	1.121	-13.1	126	0.00	13.90
72	Bromobenzene	0.910	0.923	-1.4	110	0.00	14.10
73 P	1,1,2,2-Tetrachloroethane	1.156	1.151	0.4	106	0.00	14.02
		Amount	Calc.	%Drift			
74	Trans-1,4-Dichloro-2-Bute	20.000	21.874	-9.4	111	0.00	14.08
		AvgRF	CCRF	%Dev			
75	1,2,3-Trichloropropane	1.371	1.379	-0.6	105	0.00	14.11
		Amount	Calc.	%Drift			
76	n-Propylbenzene	20.000	19.755	1.2	112	0.00	14.08
		AvgRF	CCRF	%Dev			
77	2-Chlorotoluene	2.986	2.940	1.5	109	0.00	14.25
78	4-Chlorotoluene	2.486	2.390	3.9	114	0.00	14.37
		Amount	Calc.	%Drift			
79	1,3,5-Trimethylbenzene	20.000	19.461	2.7	110	0.00	14.25
80	sec-Butylbenzene	20.000	19.267	3.7	110	0.00	14.82
		AvgRF	CCRF	%Dev			
81	1,3-Dichlorobenzene	1.521	1.465	3.7	107	0.00	15.04
		Amount	Calc.	%Drift			
82	4-Isopropyltoluene	20.000	18.548	7.3	110	0.00	14.95
		AvgRF	CCRF	%Dev			
83	1,4-Dichlorobenzene	1.613	1.513	6.2	105	0.00	15.14

Continuing Calibration Summary

Job Number: T16432
Account: ITTXHO Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Sample: VY1140-CC1139
Lab FileID: Y0010447.D

	-----	Amount	Calc.	%Drift	-----		
84	tert-Butylbenzene	20.000	20.118	-0.6	110	0.00	14.60
85	n-Butylbenzene	20.000	19.118	4.4	112	0.00	15.38
	-----	AvgRF	CCRF	%Dev	-----		
86	1,2-Dichlorobenzene	1.466	1.489	-1.6	112	0.00	15.53
	-----	Amount	Calc.	%Drift	-----		
87	1,2,4-Trimethylbenzene	20.000	19.202	4.0	107	0.00	14.66
	-----	AvgRF	CCRF	%Dev	-----		
88	1,2-Dibromo-3-Chloropropa	0.117	0.132	-12.8	122	0.00	16.33
	-----	Amount	Calc.	%Drift	-----		
89	1,2,4-Trichlorobenzene	20.000	20.887	-4.4	126	0.00	17.16
	-----	AvgRF	CCRF	%Dev	-----		
90	Hexachlorobutadiene	0.262	0.238	9.2	110	0.00	17.24
	-----	Amount	Calc.	%Drift	-----		
91	Naphthalene	20.000	19.286	3.6	129	0.00	17.46
	-----	AvgRF	CCRF	%Dev	-----		
92	1,2,3-Trichlorobenzene	0.489	0.458	6.3	113	0.00	17.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y0010431.D VY1139.M Wed Feb 28 16:30:54 2007

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN11336	5.0	<5.0	mg/l	xxxxxxx	2500	100.0	80-120%
Chloride	GN11331	1.0	<1.0	mg/l	xxxxxxx	1030	103.0	92-107%
Nitrogen, Nitrate + Nitrite	GN11291	0.050	<0.050	mg/l	0.500	0.51	102.0	89-112%
Nitrogen, Nitrite	GN11288	0.050	<0.050	mg/l	0.500	0.54	108.0	89-117%
Sulfate	GN11356	10	<10	mg/l	100	95.0	95.0	80-120%
Sulfate	GN11356			mg/l	xxxxxxx		*	80-120%
Sulfide	GN11286	0.20	<0.20	mg/l	1600	1370	86.0	80-120%
Total Organic Carbon	GN11304	1.0	<1.0	mg/l	25.0	26.0	104.0	83-110%

Associated Samples:
Batch GN11286: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXHO - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO ₃	GN11336	T16411-10	mg/l	158	165	4.3	0-10%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.20	0.0	0-10%
Nitrogen, Nitrite	GN11288	T16432-1	mg/l	0.0030 U	<0.050	0.0	0-10%
Sulfate	GN11356	T16411-10	mg/l	1260	1200	4.7	0-20%
Sulfide	GN11286	T16432-6	mg/l	U	<0.20	0.0	0-20%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	6.0	0.0	0-11%
pH	GN11306	T16432-4	su	6.3	6.3	0.0	0-6.8%

Associated Samples:

Batch GN11286: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11306: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Alkalinity, Total as CaCO3	GN11336	T16411-10	mg/l	158	xxxxxxx	215	116.0	79-122%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrate + Nitrite	GN11291	T16411-10	mg/l	0.20	0.100	0.30	100.0	80-119%
Nitrogen, Nitrite	GN11288	T16432-1	mg/l	0.0030 U	0.100	0.090	90.0	75-134%
Sulfate	GN11356	T16411-10	mg/l	1260	250	1470	87.0	75-125%
Sulfate	GN11356	T16411-10	mg/l	1260	xxxxxxx		*	75-125%
Total Organic Carbon	GN11304	T16445-18	mg/l	6.0	10.0	16.0	100.0	74-121%

Associated Samples:
Batch GN11288: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11291: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11304: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11331: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
Batch GN11356: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ITTXH0 - Shaw E & I, Inc.
Project: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit

Associated Samples:
Batch GN11336: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

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Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody



ACCUTEST
Laboratories

T16432

CHAIN OF CUSTODY

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # T16432

Subcontract Information				Project Information				Requested Analyses										Matrix Codes					
Company Name ALSE-ORLANDO				Send Report to: Aqnesv@accutest.com														DW - Drinking Water GW - Ground Water WW - Wastewater SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid SOL - Other Solid					
Project Contact				Bill to Accutest Laboratories																			
Address				Address																			
City ORLANDO State Zip				City Houston, TX 77036 State Zip																			
Phone No. Fax No.				Phone No. 713-271-4700 / 713-271-4770 Fax No.																			
Accutest Purchase Order #																							
Accutest Sample ID		Collection		Date		Time		Matrix		# of bottles		Number of preserved bottles										LAB USE ONLY	
T16432-1		2/21/2007		1020		GW		5		2													
T16432-2		2/21/2007		1456		GW		5		2													
T16432-3		2/21/2007		1105		GW		5		2													
T16432-4		2/21/2007		1315		GW		5		2													
T16432-5		2/21/2007		1422		GW		5		2													
T16432-6		2/21/2007		1515		GW		5		2													

Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks	
☒ 10 Day STANDARD ☐ 5 Day RUSH ☐ 4 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ Other		Approved By: _____ Commercial "A" ☐ State Forms ☐ Commercial "B" ☐ EDD Format ☐ ☒ TRRP 13 ☐ Other _____ ☒ Reduced Tier1 Commercial "A" = Results Only Commercial "B" = Results & Standard QC			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY					
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:
1		1		2	
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:
3		3		4	
Relinquished by:	Date Time:	Received By:	Date Time:	Relinquished by:	Date Time:
5	02-28-07	5		4	

FX
02-28-07
wfed 163
J. R. 12 30

T16432: Chain of Custody
Page 1 of 2
Accutest Laboratories Southeast, Inc.

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: T16432 CLIENT: AL6C PROJECT: T16432
 DATE/TIME RECEIVED: 02-28-07 - 09:30 # OF COOLERS RECEIVED: 4 COOLER TEMPS: 20, 2.4, 1.8, 3.0
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 7986 1726 3857

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 2
 NUMBER OF 5035 FIELD KITS ? 2
 NUMBER OR LAB FILTERED METALS ? 2

SAMPLE INFORMATION

- ☐ SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
☐ CORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ TIMES ON COC DOES NOT MATCH LABEL(S)
☐ ID'S ON COC DOES NOT MATCH LABEL(S)
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING INSTRUCTIONS
☐ UNCLEAR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ % SOLIDS JAR NOT RECEIVED
☐ 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
☐ RESIDUAL CHLORINE PRESENT
 (APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS: * RECEIVED TWO 8330 AMBER, 3 MCL VIALS AND ONE
250 ML BOTTLE FOR SAMPLES #2 AND #3. * RECEIVED 3 MCL VIALS AND
ONE 250 ML BOTTLE FOR SAMPLES #1, #4 - #6.

TECHNICIAN SIGNATURE/DATE W. H. V. 02/28/07 TECHNICIAN SIGNATURE/DATE [Signature] 02-28-07 ASD 10/03/06

T16432: Chain of Custody

Page 2 of 2



GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY995-MB	XY025310.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.30	ug/l	
74-84-0	Ethane	ND	1.0	0.60	ug/l	
74-85-1	Ethene	ND	1.0	0.80	ug/l	

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Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY995-BS	XY025311.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	108	90.3	84	54-149
74-84-0	Ethane	219	187	85	57-143
74-85-1	Ethene	290	234	81	57-143

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Matrix Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16432-6MS	XY025319.D	1	03/07/07	TD	n/a	n/a	GXY995
T16432-6	XY025318.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16432-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	0.94	108	110	101	54-149
74-84-0	Ethane	1.0 U	219	225	103	57-143
74-85-1	Ethene	1.0 U	290	291	100	57-143



Duplicate Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T16432-4DUP	XY025317.D	1	03/07/07	TD	n/a	n/a	GXY995
T16432-4	XY025315.D	1	03/07/07	TD	n/a	n/a	GXY995

The QC reported here applies to the following samples: Method: RSKSOP-147/175

T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6

CAS No.	Compound	T16432-4 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	2.88	3.21		11	24
74-84-0	Ethane	1.0 U	ND		nc	23
74-85-1	Ethene	1.0 U	ND		nc	10

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Initial Calibration Summary

Page 1 of 1

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICC995
Lab FileID: XY025305.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
Title : Dissolved Gases in Water
Last Update : Thu Mar 08 08:31:33 2007
Response via : Initial Calibration

Calibration Files

1 =XY025301.D 2 =XY025302.D 3 =XY025304.D 4 =XY025303.D
 5 =XY025305.D 6 =XY025306.D 7 =XY025307.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1)c Methane	1.256	2.507	1.576	0.832	1.293	0.961	1.016	1.349 E4	42.09#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9983									
Response Ratio = 0.00000 + 10071.12721 *A									
2)c Ethylene	2.402	4.239	2.629	1.419	2.516	1.854	1.947	2.429 E4	37.22#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9982									
Response Ratio = 0.00000 + 19323.23175 *A									
3)c Ethane	2.241	3.960	2.584	1.355	2.483	1.825	1.918	2.338 E4	35.47#
---- Linear regr., Force(0,0) ---- Coefficient = 0.9981									
Response Ratio = 0.00000 + 19028.53933 *A									

 (#) = Out of Range

RSK147XY.M

Thu Mar 08 08:36:38 2007

Initial Calibration Verification

Page 1 of 1

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ICV995
Lab FileID: XY025308.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030707\XY025308.D Vial: 100
 Acq On : 7 Mar 2007 2:55 pm Operator: Trangd
 Sample : ICV995-1000 Inst : VOA5
 Misc : gc7128,gxy995,,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Mar 08 08:31:33 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	1000.000	950.295	5.0	74	-0.06	1.13-	1.73
2 c Ethylene	1000.000	962.910	3.7	74	-0.03	2.85-	3.65
3 c Ethane	1000.000	991.839	0.8	76	-0.03	3.48-	4.28

(#) = Out of Range
 XY025305.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 08 08:35:31 2007

Continuing Calibration Summary

Page 1 of 1

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GXY995-ECC995
Lab FileID: XY025320.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\030707\XY025320.D Vial: 100
 Acq On : 7 Mar 2007 5:27 pm Operator: Trangd
 Sample : ECC995-10000 Inst : VOA5
 Misc : gc7128,gxy995,,,, Multiplr: 1.00
 IntFile : EVENTS.E

Method : C:\HPCHEM\2\METHODS\RSK147XY.M (Chemstation Integrator)
 Title : Dissolved Gases in Water
 Last Update : Thu Mar 08 08:31:33 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1 c Methane	10000.000	8882.087	11.2	88	-0.15	1.13-	1.73
2 c Ethylene	10000.000	9414.704	5.9	93	-0.15	2.85-	3.65
3 c Ethane	10000.000	9571.545	4.3	95	-0.15	3.48-	4.28

(#) = Out of Range
 XY025307.D RSK147XY.M

SPCC's out = 0 CCC's out = 0
 Thu Mar 08 08:36:20 2007



GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020203.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	102% 70-136%

Method Blank Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MB	GG020233.D 1		03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	0.20	0.060	ug/l	
121-82-4	RDX	ND	0.20	0.075	ug/l	
99-65-0	1,3-Dinitrobenzene	ND	0.20	0.070	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	0.20	0.065	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	0.20	0.075	ug/l	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	0.20	0.070	ug/l	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	0.20	0.080	ug/l	
98-95-3	Nitrobenzene	ND	0.20	0.060	ug/l	
88-72-2	o-Nitrotoluene	ND	0.20	0.060	ug/l	
99-08-1	m-Nitrotoluene	ND	0.20	0.075	ug/l	
99-99-0	p-Nitrotoluene	ND	0.20	0.075	ug/l	
479-45-8	Tetryl	ND	0.20	0.075	ug/l	
99-35-4	1,3,5-Trinitrobenzene	ND	0.20	0.095	ug/l	
118-96-7	2,4,6-Trinitrotoluene	ND	0.20	0.080	ug/l	

CAS No.	Surrogate Recoveries	Limits
610-39-9	3,4-Dinitrotoluene	80% 70-136%

Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020202.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.3	106	74-152
121-82-4	RDX	5	5.4	108	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.3	106	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	5.5	110	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.2	104	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.3	106	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.3	106	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	124%	70-136%

9.2
9

Blank Spike Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-BS	GG020232.D	1	03/05/07	MRE	03/01/07	OP19677	GGG907

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2691-41-0	HMX	5	5.9	118	74-152
121-82-4	RDX	5	5.5	110	80-124
99-65-0	1,3-Dinitrobenzene	5	5.3	106	84-123
606-20-2	2,6-Dinitrotoluene	5	5.1	102	84-133
121-14-2	2,4-Dinitrotoluene	5	5.1	102	77-116
35572-78-2	2-amino-4,6-Dinitrotoluene	5	5.2	104	78-117
19406-51-0	4-amino-2,6-Dinitrotoluene	5	5.1	102	84-123
98-95-3	Nitrobenzene	5	6.4	128	76-128
88-72-2	o-Nitrotoluene	5	5.0	100	76-120
99-08-1	m-Nitrotoluene	5	5.3	106	74-124
99-99-0	p-Nitrotoluene	5	5.3	106	81-125
479-45-8	Tetryl	5	4.6	92	62-117
99-35-4	1,3,5-Trinitrobenzene	5	5.5	110	85-127
118-96-7	2,4,6-Trinitrotoluene	5	5.7	114	71-128

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	70-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19677-MS	GG020207.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
OP19677-MSD	GG020208.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906
F47539-3	GG020206.D 1		03/02/07	MRE	03/01/07	OP19677	GGG906

The QC reported here applies to the following samples: Method: SW846 8330A

T16432-2, T16432-3

CAS No.	Compound	F47539-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	ND	10	11.0	110	11.8	118	7	74-152/21
121-82-4	RDX	ND	10	10.3	103	10.7	107	4	80-124/20
99-65-0	1,3-Dinitrobenzene	ND	10	10.3	103	10.9	109	6	84-123/23
606-20-2	2,6-Dinitrotoluene	ND	10	9.9	99	10.6	106	7	84-133/23
121-14-2	2,4-Dinitrotoluene	ND	10	9.7	97	10.3	103	6	77-116/26
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	10	9.4	94	10.5	105	11	78-117/28
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	10	9.1	91	10.2	102	11	84-123/27
98-95-3	Nitrobenzene	ND	10	10.5	105	11.1	111	6	76-128/28
88-72-2	o-Nitrotoluene	ND	10	9.3	93	10.2	102	9	76-120/30
99-08-1	m-Nitrotoluene	ND	10	9.5	95	10.6	106	11	74-124/32
99-99-0	p-Nitrotoluene	ND	10	9.7	97	10.7	107	10	81-125/34
479-45-8	Tetryl	ND	10	7.4	74	7.9	79	7	62-117/28
99-35-4	1,3,5-Trinitrobenzene	ND	10	9.8	98	10.4	104	6	85-127/21
118-96-7	2,4,6-Trinitrotoluene	ND	10	9.8	98	10.4	104	6	71-128/21

CAS No.	Surrogate Recoveries	MS	MSD	F47539-3	Limits
610-39-9	3,4-Dinitrotoluene	94%	98%	102%	70-136%

Semivolatile Surrogate Recovery Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Method: SW846 8330A	Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
T16432-2	GG020210.D	95.0
T16432-3	GG020211.D	97.0
OP19677-BS	GG020202.D	124.0
OP19677-BS	GG020232.D	100.0
OP19677-MB	GG020203.D	102.0
OP19677-MB	GG020233.D	80.0
OP19677-MS	GG020207.D	94.0
OP19677-MSD	GG020208.D	98.0

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	70-136%

(a) Recovery from GC signal #1

9.4
6

GC Surrogate Retention Time Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG906-CC825	Injection Date:	03/02/07
Lab File ID:	GG020201.D	Injection Time:	16:17
Instrument ID:	GCGG	Method:	SW846 8330A

S1 ^a
RT

Check Std	13.50

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP19677-BS	GG020202.D	03/02/07	16:45	13.49
OP19677-MB	GG020203.D	03/02/07	17:12	13.50
ZZZZZZ	GG020204.D	03/02/07	17:27	13.50
ZZZZZZ	GG020205.D	03/02/07	17:54	13.50
F47539-3	GG020206.D	03/02/07	18:22	13.49
OP19677-MS	GG020207.D	03/02/07	18:50	13.47
OP19677-MSD	GG020208.D	03/02/07	19:17	13.46
ZZZZZZ	GG020209.D	03/02/07	19:45	13.47
T16432-2	GG020210.D	03/02/07	20:12	13.44
T16432-3	GG020211.D	03/02/07	20:40	13.43

Surrogate
Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

9.5
6

GC Surrogate Retention Time Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Check Std:	GGG907-CC827	Injection Date:	03/05/07
Lab File ID:	GG020231.D	Injection Time:	13:23
Instrument ID:	GCGG	Method:	SW846 8330A

	S1 ^a	S1 ^b
	RT	RT
Check Std	10.72	10.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP19677-BS	GG020232.D	03/05/07	13:43	10.72	
OP19677-MB	GG020233.D	03/05/07	14:02	10.72	
ZZZZZZ	GG020234.D	03/05/07	14:22	10.72	
ZZZZZZ	GG020236.D	03/05/07	15:01	10.71	
GGG907-ECC827	GG020238.D	03/05/07	15:40	10.72	10.72

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICC825
Lab FileID: GG018282.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Thu Oct 19 11:32:41 2006
Response via : Initial Calibration

Calibration Files

20 =GG018279.D 100 =GG018280.D 250 =GG018281.D 500 =GG018282.D
 750 =GG018283.D 1000=GG018284.D 2000=GG018285.D ICV =GG018286.D

Compound	20	100	250	500	750	1000	2000	ICV	Avg	%RSD
1) HMX	2.870	2.789	2.757	2.694	2.719	2.735	2.786		2.764	E3 2.09
2) TNX	5.916	6.424	6.486	6.331	6.453	6.468	6.587		6.381	E3 3.43
3) DNX	4.900	5.156	5.125	4.986	5.037	5.057	5.155		5.059	E3 1.88
4) MNX	4.909	4.991	4.972	4.807	4.886	4.901	4.995		4.923	E3 1.38
5) RDX	3.185	3.565	3.625	3.500	3.554	3.547	3.609		3.512	E3 4.27
6) 1,3,5-Trinit	7.763	7.813	7.689	7.436	7.595	7.612	7.763		7.667	E3 1.70
7) 1,3-Dinitrob	1.069	1.070	1.060	1.029	1.047	1.051	1.071		1.057	E4 1.49
8) Tetryl	6.130	6.168	6.180	6.004	6.091	6.096	6.221		6.127	E3 1.17
9) Nitrobenzene	7.057	7.032	7.019	6.708	6.915	6.920	7.082		6.962	E3 1.85
10) 3,4-Dinitrot	4.667	4.752	4.687	4.537	4.621	4.631	4.731		4.661	E3 1.56
11) 2,4,6-Trinit	7.275	7.409	7.373	7.143	7.282	7.301	7.456		7.320	E3 1.42
12) 4-Amino-2,6-	5.266	5.304	5.264	5.117	5.194	5.220	5.330		5.242	E3 1.37
13) 2-Amino-4,6-	7.249	7.203	7.187	7.006	7.130	7.155	7.311		7.177	E3 1.35
14) 2,6-Dinitrot	5.524	5.133	5.010	4.844	4.942	4.954	5.071		5.068	E3 4.37
15) 2,4-Dinitrot	1.149	1.009	0.992	0.958	0.976	0.978	0.999		1.009	E4 6.36
16) o-Nitrotolue	5.044	4.558	4.542	4.244	4.403	4.414	4.516		4.532	E3 5.53
17) p-Nitrotolue	4.102	3.815	3.790	3.596	3.734	3.734	3.831		3.800	E3 4.06
18) m-Nitrotolue	4.959	4.808	4.856	4.629	4.803	4.812	4.942		4.830	E3 2.26

Signal #2

1) HMX	8.151	8.148	8.190	8.012	8.090	8.092	8.238		8.132	E3 0.91
2) TNX	0.956	0.980	0.995	0.969	0.984	0.985	1.001		0.981	E4 1.55
3) DNX	7.525	8.044	8.332	7.974	7.996	7.991	8.136		8.000	E3 3.05
4) MNX	7.756	7.781	7.940	7.696	7.742	7.746	7.895		7.794	E3 1.14
5) RDX	4.720	5.727	5.947	5.855	5.997	5.944	6.042		5.748	E3 8.08
6) 1,3,5-Trinit	1.479	1.619	1.553	1.513	1.538	1.540	1.572		1.545	E4 2.85
7) 1,3-Dinitrob	1.225	1.286	1.279	1.246	1.265	1.272	1.295		1.267	E4 1.91
8) Tetryl	1.037	1.106	1.123	1.092	1.106	1.105	1.129		1.100	E4 2.76
9) Nitrobenzene	3.263	3.394	3.343	3.176	3.205	3.190	3.274		3.264	E3 2.50
10) 3,4-Dinitrot	6.324	6.522	6.468	6.218	6.242	6.243	6.394		6.344	E3 1.89
11) 2,4,6-Trinit	1.070	1.106	1.085	1.048	1.060	1.064	1.089		1.075	E4 1.85
12) 4-Amino-2,6-	1.430	1.457	1.434	1.391	1.407	1.413	1.444		1.425	E4 1.62
13) 2-Amino-4,6-	1.240	1.240	1.201	1.171	1.189	1.194	1.223		1.208	E4 2.20
14) 2,6-Dinitrot	8.005	7.244	6.878	6.645	6.758	6.778	6.958		7.038	E3 6.64
15) 2,4-Dinitrot	1.102	0.930	0.906	0.880	0.888	0.892	0.911		0.930	E4 8.36
16) o-Nitrotolue	5.194	4.804	4.848	4.493	4.691	4.697	4.799		4.789	E3 4.46
17) p-Nitrotolue	7.934	7.544	7.631	7.143	7.472	7.477	7.640		7.549	E3 3.15
18) m-Nitrotolue	6.835	7.097	7.192	6.782	7.103	7.117	7.290		7.060	E3 2.62

(#) = Out of Range ### Number of calibration levels exceeded format ###

8330_EX.M

Fri Oct 20 16:25:52 2006

Initial Calibration Verification

Page 1 of 2

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\10180DS\GG018286.D\dad1A.ch
 Acq On : 18-Oct-2006, 17:39:03 Operator: MIKEE
 Sample : ICV825-500 Inst : G1315B
 Misc : OP18202,ggg825,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Oct 19 11:32:41 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	500.000	531.119	-6.2	0	0.00	3.83- 4.83
2	TNX			-----NA-----			
3	DNX			-----NA-----			
4	MXN			-----NA-----			
5	RDX	500.000	507.091	-1.4	0	0.00	6.10- 7.10
6	1,3,5-Trinitrobenzene	500.000	533.853	-6.8	0	0.00	8.41- 9.41
7	1,3-Dinitrobenzene	500.000	523.924	-4.8	0	0.00	10.38-11.38
8	Tetryl	500.000	484.365	3.1	0	0.00	11.18-12.18
9	Nitrobenzene	500.000	531.046	-6.2	0	0.00	11.86-12.86
10 S	3,4-Dinitrotoluene			-----NA-----			
11	2,4,6-Trinitrotoluene	500.000	507.486	-1.5	0	0.00	13.56-14.56
12	4-Amino-2,6-Dinitrotol	500.000	515.885	-3.2	0	0.00	14.25-15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.846	3.8	0	0.00	15.03-16.03
14	2,6-Dinitrotoluene	500.000	496.634	0.7	0	0.00	16.01-17.01
15	2,4-Dinitrotoluene	500.000	502.401	-0.5	0	0.00	16.52-17.52
16	o-Nitrotoluene	500.000	501.204	-0.2	0	0.00	19.59-20.59
17	p-Nitrotoluene	500.000	520.375	-4.1	0	0.00	20.92-21.92
18	m-Nitrotoluene	500.000	509.118	-1.8	0	0.00	22.61-23.61

***** Signal #2 *****

1	HMX	500.000	537.899	-7.6	0	0.00	3.83- 4.83
2	TNX			-----NA-----			
3	DNX			-----NA-----			
4	MXN			-----NA-----			
5	RDX	500.000	525.299	-5.1	0	0.00	6.10- 7.10
6	1,3,5-Trinitrobenzene	500.000	533.889	-6.8	0	0.00	8.41- 9.41
7	1,3-Dinitrobenzene	500.000	529.524	-5.9	0	0.00	10.38-11.38
8	Tetryl	500.000	489.295	2.1	0	0.00	11.18-12.18
9	Nitrobenzene	500.000	531.782	-6.4	0	0.00	11.86-12.86
10 S	3,4-Dinitrotoluene			-----NA-----			
11	2,4,6-Trinitrotoluene	500.000	505.844	-1.2	0	0.00	13.56-14.56
12	4-Amino-2,6-Dinitrotol	500.000	516.203	-3.2	0	0.00	14.25-15.25
13	2-Amino-4,6-Dinitrotol	500.000	480.458	3.9	0	0.00	15.03-16.03
14	2,6-Dinitrotoluene	500.000	493.423	1.3	0	0.00	16.01-17.01
15	2,4-Dinitrotoluene	500.000	499.987	0.0	0	0.00	16.52-17.52
16	o-Nitrotoluene	500.000	503.639	-0.7	0	0.00	19.59-20.59
17	p-Nitrotoluene	500.000	523.730	-4.7	0	0.00	20.92-21.92
18	m-Nitrotoluene	500.000	512.492	-2.5	0	0.00	22.61-23.61

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG825-ICV825
Lab FileID: GG018286.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:26:22 2006

Initial Calibration Verification

Page 1 of 2

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1B.ch Vial: 4
 Signal #2 : G:\HPCHEM\1\DATA\10190DS\GG018300.D\dad1A.ch
 Acq On : 19-Oct-2006, 13:44:13 Operator: MIKEE
 Sample : ICV825-500 Inst : G1315B
 Misc : OP18222,ggg826,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Oct 19 11:32:41 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMX				NA			
2	TNX	500.000	514.364	-2.9	0	0.00	4.15-	5.15
3	DNX	500.000	511.166	-2.2	0	0.00	4.58-	5.58
4	MXN	500.000	518.059	-3.6	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

***** Signal #2 *****

1	HMX				NA			
2	TNX	500.000	509.991	-2.0	0	0.00	4.15-	5.15
3	DNX	500.000	523.209	-4.6	0	0.00	4.58-	5.58
4	MXN	500.000	527.451	-5.5	0	-0.01	5.34-	6.34
5	RDX				NA			
6	1,3,5-Trinitrobenzene				NA			
7	1,3-Dinitrobenzene				NA			
8	Tetryl				NA			
9	Nitrobenzene				NA			
10 S	3,4-Dinitrotoluene				NA			
11	2,4,6-Trinitrotoluene				NA			
12	4-Amino-2,6-Dinitrotoluen				NA			
13	2-Amino-4,6-Dinitrotoluen				NA			
14	2,6-Dinitrotoluene				NA			
15	2,4-Dinitrotoluene				NA			
16	o-Nitrotoluene				NA			
17	p-Nitrotoluene				NA			
18	m-Nitrotoluene				NA			

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG826-ICV825
Lab FileID: GG018300.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018286.D 8330_EX.M Fri Oct 20 16:54:56 2006

Initial Calibration Summary

Page 1 of 1

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICC827
Lab FileID: GG018316.D

Response Factor Report G1315B

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Oct 20 14:03:32 2006
Response via : Initial Calibration

Calibration Files

20 =GG018313.D 100 =GG018314.D 250 =GG018315.D 500 =GG018316.D
 750 =GG018317.D 1000=GG018318.D 2000=GG018319.D

	Compound	20	100	250	500	750	1000	2000	Avg	%RSD
1)	TNX	6.022	6.861	7.022	6.686	6.915	6.925	7.121	6.793	E3 5.38
2)	HMX	2.976	2.856	2.642	2.478	2.489	2.481	2.586	2.644	E3 7.51
3)	DNX	5.820	5.904	5.816	5.437	5.628	5.545	5.823	5.710	E3 3.05
4)	MXN	4.717	4.981	5.224	5.007	5.063	4.976	5.294	5.037	E3 3.73
5)	1,3,5-Trinitroben	7.302	7.899	8.123	7.797	7.946	7.847	8.236	7.879	E3 3.78
6)	RDX	3.327	3.935	3.881	3.729	3.710	3.686	3.841	3.730	E3 5.39
7)	1,3-Dinitrobenzen	1.122	1.117	1.144	1.096	1.117	1.113	1.146	1.122	E4 1.56
8)	Nitrobenzene	6.720	7.206	7.440	7.104	7.286	7.290	7.513	7.223	E3 3.61
9)	2,4,6-Trinitrotol	7.126	7.674	7.812	7.517	7.651	7.587	7.941	7.615	E3 3.39
10)	Tetryl	5.119	5.755	6.124	6.105	6.006	5.862	6.470	5.920	E3 7.10
11)	S 3,4-Dinitrotoluen	4.973	4.941	4.969	4.829	4.912	4.883	5.055	4.938	E3 1.46
12)	2,6-Dinitrotoluen	6.023	5.649	5.657	5.415	5.544	5.538	5.672	5.643	E3 3.38
13)	2,4-Dinitrotoluen	1.200	1.036	1.034	0.995	1.012	1.007	1.038	1.046	E4 6.68
14)	o-Nitrotoluene	5.021	4.648	4.729	4.526	4.679	4.666	4.837	4.729	E3 3.36
15)	p-Nitrotoluene	4.036	3.890	3.967	3.762	3.919	3.914	4.051	3.934	E3 2.49
16)	4-Amino-2,6-Dinit	5.109	5.368	5.518	5.300	5.406	5.380	5.621	5.386	E3 3.01
17)	m-Nitrotoluene	4.743	4.946	5.173	4.937	5.131	5.119	5.324	5.053	E3 3.79
18)	2-Amino-4,6-Dinit	7.249	7.503	7.692	7.547	7.548	7.525	7.845	7.558	E3 2.42

Signal #2

1)	TNX	0.828	1.032	1.066	1.024	1.037	1.032	1.073	1.013	E4 8.25
2)	HMX	8.967	9.716	9.270	8.345	8.192	8.095	8.326	8.702	E3 7.15
3)	DNX	0.786	1.108	1.019	0.937	0.919	0.897	0.935	0.943	E4 10.65
4)	MXN	7.457	8.346	8.580	8.147	8.087	7.895	8.399	8.130	E3 4.58
5)	1,3,5-Trinitroben	1.449	1.617	1.667	1.594	1.616	1.593	1.673	1.601	E4 4.64
6)	RDX	6.077	6.386	6.563	6.283	6.229	6.181	6.460	6.311	E3 2.67
7)	1,3-Dinitrobenzen	1.294	1.326	1.427	1.333	1.365	1.364	1.397	1.358	E4 3.31
8)	Nitrobenzene	3.190	3.096	3.823	3.281	3.391	3.385	3.476	3.378	E3 6.96
9)	2,4,6-Trinitrotol	1.098	1.109	1.152	1.104	1.122	1.113	1.169	1.124	E4 2.37
10)	Tetryl	0.953	1.028	1.114	1.113	1.085	1.059	1.177	1.075	E4 6.67
11)	S 3,4-Dinitrotoluen	6.832	6.775	6.813	6.648	6.692	6.629	6.906	6.756	E3 1.53
12)	2,6-Dinitrotoluen	8.344	7.760	7.758	7.423	7.578	7.556	7.765	7.740	E3 3.83
13)	2,4-Dinitrotoluen	1.104	0.941	0.942	0.911	0.927	0.919	0.952	0.957	E4 6.94
14)	o-Nitrotoluene	3.189	2.755	2.867	2.791	2.895	2.880	3.025	2.915	E3 5.09
15)	p-Nitrotoluene	2.114	1.879	1.907	1.825	1.916	1.926	1.998	1.938	E3 4.82
16)	4-Amino-2,6-Dinit	1.431	1.486	1.522	1.459	1.490	1.484	1.552	1.489	E4 2.66
17)	m-Nitrotoluene	2.353	2.391	2.516	2.444	2.546	2.567	2.681	2.500	E3 4.52
18)	2-Amino-4,6-Dinit	1.233	1.258	1.276	1.258	1.253	1.255	1.311	1.263	E4 1.92

(#) = Out of Range

8330_RP.M

Mon Oct 23 13:34:29 2006

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

Evaluate Continuing Calibration Report

Signal #1 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1B.ch Vial: 10
 Signal #2 : G:\HPCHEM\1\DATA\1020RP\GG018320.D\dad1A.ch
 Acq On : 20-Oct-2006, 14:03:23 Operator: MIKEE
 Sample : ICV827-250 Inst : G1315B
 Misc : OP18202,ggg827,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Oct 20 14:03:32 2006
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	250.000	258.384	-3.4	100	0.00	4.21-	5.21
2	HMX	250.000	260.989	-4.4	104	0.00	4.69-	5.69
3	DNX	250.000	254.013	-1.6	100	0.00	4.83-	5.83
4	MXN	250.000	255.142	-2.1	98	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	264.789	-5.9	103	0.00	6.12-	7.12
6	RDX	250.000	252.023	-0.8	97	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	257.308	-2.9	101	0.00	7.70-	8.70
8	Nitrobenzene	250.000	266.121	-6.4	103	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	268.228	-7.3	105	0.00	8.71-	9.71
10	Tetryl	250.000	205.504	17.8#	79	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	254.196	-1.7	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	244.946	2.0	99	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	248.278	0.7	99	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	258.872	-3.5	103	0.00	12.45-	13.45
16	4-Amino-2,6-Dinitrotol	250.000	255.921	-2.4	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	252.478	-1.0	99	0.00	13.29-	14.29
18	2-Amino-4,6-Dinitrotol	250.000	236.039	5.6	93	0.00	14.31-	15.31

***** Signal #2 *****

1	TNX	250.000	262.147	-4.9	100	0.00	4.22-	5.22
2	HMX	250.000	276.033	-10.4	104	0.00	4.69-	5.69
3	DNX	250.000	263.149	-5.3	97	0.00	4.83-	5.83
4	MXN	250.000	255.967	-2.4	97	0.00	5.66-	6.66
5	1,3,5-Trinitrobenzene	250.000	265.613	-6.2	102	0.00	6.12-	7.12
6	RDX	250.000	248.723	0.5	96	0.00	6.51-	7.51
7	1,3-Dinitrobenzene	250.000	276.649	-10.7	105	0.00	7.70-	8.70
8	Nitrobenzene	250.000	301.148	-20.5#	106	0.00	8.24-	9.24
9	2,4,6-Trinitrotoluene	250.000	269.121	-7.6	105	0.00	8.71-	9.71
10	Tetryl	250.000	203.173	18.7#	78	0.00	9.41-	10.41
11 S	3,4-Dinitrotoluene			-----NA-----				
12	2,6-Dinitrotoluene	250.000	252.008	-0.8	101	0.00	10.49-	11.49
13	2,4-Dinitrotoluene	250.000	241.694	3.3	98	0.00	10.95-	11.95
14	o-Nitrotoluene	250.000	241.466	3.4	98	0.00	11.79-	12.79
15	p-Nitrotoluene	250.000	250.555	-0.2	102	0.00	12.46-	13.46
16	4-Amino-2,6-Dinitrotol	250.000	255.253	-2.1	100	0.00	12.83-	13.83
17	m-Nitrotoluene	250.000	250.572	-0.2	100	0.00	13.28-	14.28
18	2-Amino-4,6-Dinitrotol	250.000	234.881	6.0	93	0.00	14.31-	15.31

Initial Calibration Verification

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG827-ICV827
Lab FileID: GG018320.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018315.D 8330_RP.M Mon Oct 23 13:35:35 2006

Continuing Calibration Summary

Job Number: T16432
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
 Lab FileID: GG020201.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020201.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\03020DS\GG020201.D\dad1A.ch
 Acq On : 02-Mar-2007, 16:17:48 Operator: MIKEE
 Sample : CC825-500 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	HMx	500.000	490.559	1.9	101	0.00	3.86-	4.86
2	TNx	500.000	512.293	-2.5	103	-0.01	4.20-	5.20
3	DNx	500.000	511.151	-2.2	104	0.00	4.60-	5.60
4	MNx	500.000	508.598	-1.7	104	0.01	5.37-	6.37
5	RDX	500.000	518.998	-3.8	104	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	498.455	0.3	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	498.190	0.4	102	0.02	10.43-	11.43
8	Tetryl	500.000	498.475	0.3	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	503.313	-0.7	104	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	496.619	0.7	102	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	503.597	-0.7	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	496.441	0.7	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	500.727	-0.1	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	510.258	-2.1	107	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	480.817	3.8	101	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	497.302	0.5	106	0.06	19.73-	20.73
17	p-Nitrotoluene	500.000	500.449	-0.1	106	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	506.087	-1.2	106	0.07	22.76-	23.76

***** Signal #2 *****

1	HMx	500.000	500.092	-0.0	102	0.00	3.86-	4.86
2	TNx	500.000	509.529	-1.9	103	0.00	4.18-	5.18
3	DNx	500.000	520.538	-4.1	104	0.00	4.60-	5.60
4	MNx	500.000	521.239	-4.2	106	0.01	5.37-	6.37
5	RDX	500.000	566.452	-13.3	111	0.00	6.15-	7.15
6	1,3,5-Trinitrobenzene	500.000	505.722	-1.1	103	0.02	8.43-	9.43
7	1,3-Dinitrobenzene	500.000	502.475	-0.5	102	0.02	10.43-	11.43
8	Tetryl	500.000	507.037	-1.4	102	0.03	11.21-	12.21
9	Nitrobenzene	500.000	499.803	0.0	103	0.03	11.93-	12.93
10 S	3,4-Dinitrotoluene	500.000	495.718	0.9	101	0.04	12.95-	13.95
11	2,4,6-Trinitrotoluene	500.000	500.992	-0.2	103	0.04	13.60-	14.60
12	4-Amino-2,6-Dinitrotol	500.000	497.188	0.6	102	0.05	14.37-	15.37
13	2-Amino-4,6-Dinitrotol	500.000	499.032	0.2	103	0.05	15.14-	16.14
14	2,6-Dinitrotoluene	500.000	496.978	0.6	105	0.05	16.10-	17.10
15	2,4-Dinitrotoluene	500.000	472.110	5.6	100	0.05	16.60-	17.60
16	o-Nitrotoluene	500.000	489.795	2.0	104	0.05	19.73-	20.73
17	p-Nitrotoluene	500.000	496.698	0.7	105	0.06	21.06-	22.06
18	m-Nitrotoluene	500.000	503.963	-0.8	105	0.07	22.77-	23.77

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020201.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018282.D 8330_EX.M Mon Mar 05 11:42:29 2007

Continuing Calibration Summary

Page 1 of 2

Job Number: T16432
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
 Lab FileID: GG020212.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\03020DS\GG020212.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\03020DS\GG020212.D\dad1A.ch
 Acq On : 02-Mar-2007, 21:07:57 Operator: MIKEE
 Sample : CC825-1000 Inst : G1315B
 Misc : OP19677,ggg906,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8330_EX.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Thu Mar 01 11:02:09 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	HMX	1000.000	969.184	3.1	98	0.00	3.86- 4.86
2	TNX	1000.000	1012.847	-1.3	100	-0.02	4.20- 5.20
3	DNX	1000.000	1011.041	-1.1	101	0.00	4.60- 5.60
4	MXN	1000.000	1001.768	-0.2	101	0.00	5.37- 6.37
5	RDX	1000.000	1012.522	-1.3	100	-0.01	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	982.133	1.8	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	981.873	1.8	99	0.00	10.43-11.43
8	Tetryl	1000.000	979.286	2.1	98	0.00	11.21-12.21
9	Nitrobenzene	1000.000	995.199	0.5	100	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	971.158	2.9	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	991.752	0.8	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	975.490	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	987.191	1.3	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	995.657	0.4	102	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	946.550	5.3	98	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.637	3.8	99	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	975.200	2.5	99	-0.01	21.06-22.06
18	m-Nitrotoluene	1000.000	997.451	0.3	100	0.00	22.76-23.76

***** Signal #2 *****

1	HMX	1000.000	984.283	1.6	99	0.00	3.86- 4.86
2	TNX	1000.000	1002.891	-0.3	100	0.00	4.18- 5.18
3	DNX	1000.000	1012.877	-1.3	101	0.00	4.60- 5.60
4	MXN	1000.000	1004.320	-0.4	101	0.00	5.37- 6.37
5	RDX	1000.000	1044.793	-4.5	101	-0.02	6.15- 7.15
6	1,3,5-Trinitrobenzene	1000.000	984.579	1.5	99	0.00	8.43- 9.43
7	1,3-Dinitrobenzene	1000.000	989.010	1.1	99	0.00	10.43-11.43
8	Tetryl	1000.000	997.573	0.2	99	0.00	11.21-12.21
9	Nitrobenzene	1000.000	992.439	0.8	102	0.00	11.93-12.93
10 S	3,4-Dinitrotoluene	1000.000	962.803	3.7	98	0.00	12.95-13.95
11	2,4,6-Trinitrotoluene	1000.000	983.229	1.7	99	0.00	13.60-14.60
12	4-Amino-2,6-Dinitrotol	1000.000	974.885	2.5	98	0.00	14.37-15.37
13	2-Amino-4,6-Dinitrotol	1000.000	978.179	2.2	99	0.00	15.14-16.14
14	2,6-Dinitrotoluene	1000.000	974.861	2.5	101	0.00	16.10-17.10
15	2,4-Dinitrotoluene	1000.000	935.023	6.5	97	0.00	16.60-17.60
16	o-Nitrotoluene	1000.000	961.820	3.8	98	-0.01	19.73-20.73
17	p-Nitrotoluene	1000.000	982.213	1.8	99	0.00	21.06-22.06
18	m-Nitrotoluene	1000.000	1002.440	-0.2	99	-0.01	22.77-23.77

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG906-CC825
Lab FileID: GG020212.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018284.D 8330_EX.M Mon Mar 05 11:42:13 2007

Continuing Calibration Summary

Job Number: T16432
 Account: ALGC Accutest Laboratories Gulf Coast, Inc.
 Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
 Lab FileID: GG020231.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020231.D\dad1B.ch Vial: 2
 Signal #2 : G:\DATA\0305RP\GG020231.D\dad1A.ch
 Acq On : 05-Mar-2007, 13:23:34 Operator: MIKEE
 Sample : CC827-500 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	500.000	551.245	-10.2	112	0.02	4.24-	5.24
2	HMX	500.000	527.482	-5.5	113	0.00	4.75-	5.75
3	DNX	500.000	526.884	-5.4	111	0.01	4.87-	5.87
4	MXN	500.000	525.950	-5.2	106	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	507.541	-1.5	103	0.00	6.17-	7.17
6	RDX	500.000	498.345	0.3	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	495.147	1.0	101	0.00	7.78-	8.78
8	Nitrobenzene	500.000	509.807	-2.0	104	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	506.824	-1.4	103	-0.01	8.80-	9.80
10	Tetryl	500.000	535.862	-7.2	104	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	492.695	1.5	101	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	489.618	2.1	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.678	3.3	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	502.970	-0.6	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	503.359	-0.7	105	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	500.000	502.155	-0.4	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	523.547	-4.7	107	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	500.000	503.929	-0.8	101	-0.03	14.45-	15.45

***** Signal #2 *****

1	TNX	500.000	539.038	-7.8	107	0.02	4.24-	5.24
2	HMX	500.000	501.388	-0.3	105	0.00	4.75-	5.75
3	DNX	500.000	520.169	-4.0	105	0.01	4.87-	5.87
4	MXN	500.000	520.287	-4.1	104	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	500.000	508.259	-1.7	102	0.00	6.17-	7.17
6	RDX	500.000	496.557	0.7	100	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	500.000	499.335	0.1	102	0.00	7.78-	8.78
8	Nitrobenzene	500.000	521.041	-4.2	107	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	500.000	510.092	-2.0	104	-0.01	8.80-	9.80
10	Tetryl	500.000	533.664	-6.7	103	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	500.000	488.383	2.3	99	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	500.000	487.517	2.5	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	500.000	483.800	3.2	102	-0.02	11.06-	12.06
14	o-Nitrotoluene	500.000	519.246	-3.8	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	500.000	515.868	-3.2	110	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	500.000	499.988	0.0	102	-0.03	12.95-	13.95
17	m-Nitrotoluene	500.000	538.963	-7.8	110	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	500.000	499.905	0.0	100	-0.03	14.45-	15.45

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-CC827
Lab FileID: GG020231.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018316.D 8330_RP.M Tue Mar 06 10:57:51 2007

Continuing Calibration Summary

Page 1 of 2

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0305RP\GG020238.D\dad1B.ch Vial: 3
 Signal #2 : G:\DATA\0305RP\GG020238.D\dad1A.ch
 Acq On : 05-Mar-2007, 15:40:35 Operator: MIKEE
 Sample : ECC827-1000 Inst : G1315B
 Misc : OP19677,ggg907,1000,,,10,,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8330_RP.M (Chemstation Integrator)
 Title : Explosives by 8330
 Last Update : Fri Jan 26 08:35:20 2007
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT	Window
1	TNX	1000.000	1064.078	-6.4	104	0.02	4.24-	5.24
2	HMX	1000.000	1064.872	-6.5	113	0.00	4.75-	5.75
3	DNX	1000.000	1029.858	-3.0	106	0.00	4.87-	5.87
4	MXN	1000.000	1052.110	-5.2	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1020.840	-2.1	102	0.00	6.17-	7.17
6	RDX	1000.000	1020.894	-2.1	103	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1005.302	-0.5	101	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1031.078	-3.1	102	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1033.117	-3.3	104	-0.01	8.80-	9.80
10	Tetryl	1000.000	1104.790	-10.5	112	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1016.218	-1.6	103	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	998.411	0.2	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	987.663	1.2	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1040.619	-4.1	105	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1034.751	-3.5	104	-0.01	12.53-	13.53
16	4-Amino-2,6-Dinitrotol	1000.000	1018.262	-1.8	102	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1063.626	-6.4	105	-0.02	13.38-	14.38
18	2-Amino-4,6-Dinitrotol	1000.000	1018.025	-1.8	102	-0.02	14.45-	15.45

***** Signal #2 *****

1	TNX	1000.000	1065.753	-6.6	105	0.02	4.24-	5.24
2	HMX	1000.000	959.987	4.0	103	0.00	4.75-	5.75
3	DNX	1000.000	1023.085	-2.3	108	0.01	4.87-	5.87
4	MXN	1000.000	1036.881	-3.7	107	0.00	5.72-	6.72
5	1,3,5-Trinitrobenzene	1000.000	1018.352	-1.8	102	0.00	6.17-	7.17
6	RDX	1000.000	995.036	0.5	102	0.02	6.56-	7.56
7	1,3-Dinitrobenzene	1000.000	1003.575	-0.4	100	0.00	7.78-	8.78
8	Nitrobenzene	1000.000	1035.575	-3.6	103	0.00	8.29-	9.29
9	2,4,6-Trinitrotoluene	1000.000	1043.825	-4.4	105	-0.01	8.80-	9.80
10	Tetryl	1000.000	1097.433	-9.7	111	0.00	9.52-	10.52
11 S	3,4-Dinitrotoluene	1000.000	1002.293	-0.2	102	0.00	10.21-	11.21
12	2,6-Dinitrotoluene	1000.000	991.509	0.8	102	-0.02	10.59-	11.59
13	2,4-Dinitrotoluene	1000.000	990.702	0.9	103	-0.02	11.06-	12.06
14	o-Nitrotoluene	1000.000	1071.751	-7.2	108	-0.01	11.86-	12.86
15	p-Nitrotoluene	1000.000	1073.626	-7.4	108	0.00	12.54-	13.54
16	4-Amino-2,6-Dinitrotol	1000.000	1006.760	-0.7	101	-0.02	12.95-	13.95
17	m-Nitrotoluene	1000.000	1093.803	-9.4	107	-0.02	13.37-	14.37
18	2-Amino-4,6-Dinitrotol	1000.000	1006.963	-0.7	101	-0.02	14.45-	15.45

Continuing Calibration Summary

Job Number: T16432
Account: ALGC Accutest Laboratories Gulf Coast, Inc.
Project: ITTXHO: Longhorn Army Ammunition Plant

Sample: GGG907-ECC827
Lab FileID: GG020238.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG018318.D 8330_RP.M Tue Mar 06 10:58:20 2007



General Chemistry

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Perchlorate	GP9043/GN24390	10	<10	ug/l	50	48.0	96.0	85-115%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

10.1
10

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	<10	0.0	0-15%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits

10.2
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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Perchlorate	GP9043/GN24390	T16411-10	ug/l	4.0 U	50	48.4	96.8	80-120%

Associated Samples:
Batch GP9043: T16432-1, T16432-2, T16432-3, T16432-4, T16432-5, T16432-6
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

10.3
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Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT
Analyst: MP
Parameters: Perchlorate

Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:57	GN24390-CCV1	1		
14:11	GN24390-CCB1	1		
14:25	GP9043-MB1	1		
14:40	GP9043-B1	1		
14:54	GN24390-CRI1	1		
15:09	GN24390-IPC1	1		
15:23	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:52	ZZZZZZ	1		
16:06	T16411-1	1		(sample used for QC only; not part of login T16432)
16:21	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:50	GN24390-CCV2	1		
17:04	GN24390-CCB2	1		
17:18	ZZZZZZ	1		
17:33	ZZZZZZ	1		
17:47	ZZZZZZ	1		
18:02	ZZZZZZ	1		
18:16	ZZZZZZ	1		
18:30	ZZZZZZ	1		
18:45	T16411-10	1		(sample used for QC only; not part of login T16432)
18:59	T16432-1	1		
19:14	T16432-2	1		
19:28	T16432-3	1		
19:42	GN24390-CCV3	1		
19:57	GN24390-CCB3	1		
20:11	T16432-4	1		
20:26	T16432-5	1		
20:40	T16432-6	1		
20:54	GP9043-D1	1		
21:09	GP9043-S1	1		
21:23	GP9043-D2	1		
21:38	GP9043-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Analyst: MP Run ID: GN24390
Parameters: Perchlorate

Time	Sample Description	Dilution Factor	PS Recov	Comments

21:52 GN24390-CCV4 1

22:06 GN24390-CCB4 1

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: T16432
Account: ALGC - Accutest Laboratories Gulf Coast, Inc.
Project: ITTXH0: Longhorn Army Ammunition Plant

File ID: 207030101.TXT Date Analyzed: 03/01/07 Methods: EPA 314
Run ID: GN24390 Units: ug/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN24390-CCV1	Perchlorate	48.0	10	4.0	50	96.0	85-115
GN24390-CCB1	Perchlorate	4.0 U	10	4.0			
GN24390-CRI1	Perchlorate	4.0 U	10	4.0	3	100.0	75-125
GN24390-IPC1	Perchlorate	22.0	10	4.0	25	88.0	80-120
GN24390-CCV2	Perchlorate	51.3	10	4.0	50	103.0	85-115
GN24390-CCB2	Perchlorate	4.0 U	10	4.0			
GN24390-CCV3	Perchlorate	53.1	10	4.0	50	106.0	85-115
GN24390-CCB3	Perchlorate	4.0 U	10	4.0			
GN24390-CCV4	Perchlorate	51.6	10	4.0	50	103.0	85-115
GN24390-CCB4	Perchlorate	4.0 U	10	4.0			

(!) Outside of QC limits

10.4
10

Quick Facts



Look closer. Go further. Do more.

Corporate Information:

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President & CEO: J. Trevor Boyce

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DUNS#: 048192892

Incorporated in the State of PA -- May 1, 1969

Employees Corporate-Wide: 467

Facilities Corporate -Wide: 18 Divisions, 28 locations across 15 states



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Please note these administrative changes for our Ohio Valley Division laboratory in Marietta, OH (formerly KEMRON Environmental Services, Inc.), in particular the address, which is a revised routing of remittances on our invoices. All invoices dated April 1, 2008 or later will reflect this change, and will be highlighted with an attention-getting sticker during our transition. Please adjust your records to ensure proper routing of payments.



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

Laboratory Report Number: L08100263

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 October 23, 2008.

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

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the 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 October 23, 2008.

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 214 pages.

Look closer. Go further. Do more.



Microbac REPORT L08100263
PREPARED FOR Shaw E I, Inc.
WORK ID: LHAAP

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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L08100263

CHAIN OF CUSTODY: The chain of custody number was 5544.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 1 degree 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: 13-OCT-08

<i>Stephanie Mossburg</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.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

October 23, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08100263
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): 284781,284869,285197,285281,285327,284799
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: October 23, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?		✓			1
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?		✓			2
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?		✓			3
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)	NA(2)	IRIS
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?		✓			4
Was the ICAL curve verified for each analyte?		✓			5
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: 4-Bromofluorobenzene exceeded the upper control limit in the dilution analysis of sample 04.

Toluene-d8 exceeded the upper control limit in the dilution analysis of sample 06.

1,2-Dichloroethane-d4 and toluene-d8 exceeded the upper control limits in the analyses of samples 06 and 09.

#2: Bromomethane was detected in the method blank analyzed 10/17/08 on HPMS-14 at a concentration greater than the reporting limit.

#3: 1,1,2,2-Tetrachloroethane exceeded the upper advisory limit and surrogate toluene-d8 exceeded the upper control limit in the LCS analyzed 10/14/08 on HPMS-10. 1,1-Dichloroethene and trichloroethene were below the lower advisory limits and 1,1,2,2-tetrachloroethane exceeded the upper advisory limit and surrogate toluene-d8 exceeded the upper control limit in the LCS analyzed 10/16/08 on HPMS-10. n-Butylbenzene, 2-chloroethyl vinyl ether, hexachlorobutadiene, p-isopropyltoluene, naphthalene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene exceeded the upper advisory limits in the LCS analyzed 10/17/08 on HPMS-14.

1,1,2,2-Tetrachloroethane exceeded the upper advisory limit and trichloroethene was below the lower advisory limit in the LCS/LCSD analyzed 10/13/08 on HPMS-10. p-Isopropyltoluene exceeded the upper advisory limit and surrogate 1,2-dichloroethane-d4 was below the lower control limit in the LCS/LCSD analyzed 10/14/08 on HPMS-6. 1,1-Dichloroethene and trichloroethene were below the lower control limits and surrogate toluene-d8 exceeded the upper control limit in the LCS/LCSD analyzed 10/17/08 on HPMS-10.

#4: n-Butylbenzene, 2-chloroethyl vinyl ether, and naphthalene exceeded the upper control limits in the CCV analyzed 10/17/08 on HPMS-14.

#5: 2-Chloroethyl vinyl ether exceeded the upper control limit in the alternate source analyzed 10/11/08 on HPMS-14.

Dichlorodifluoromethane exceeded the upper control limit in the alternate source analyzed 09/26/08 on HPMS-6.

Footnotes:

(1) NA = Not applicable to method or project

(2) NR = Not reviewed

(3) ER# = Exception report number

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

October 14, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08100263
 Project Name: 798-LONGHORN
 Method: NITRATE-NITRITE
 Prep Batch Number(s): WG284561
 Reviewer Name: DEANNA I. HESSON
 LRC Date: October 14, 2008

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

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08100263
 Project Name: 798-LONGHORN
 Method: NITRATE-NITRITE
 Prep Batch Number(s): WG284561
 Reviewer Name: DEANNA I. HESSON
 LRC Date: October 14, 2008

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: L08100263
 Project Name: 798-LONGHORN
 Method: NITRATE-NITRITE
 Prep Batch Number(s): WG284561
 Reviewer Name: DEANNA I. HESSON
 LRC Date: October 14, 2008

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:	L08100263
Project Name:	798-LONGHORN
Method:	NITRATE-NITRITE
Prep Batch Number(s):	WG284561
Reviewer Name:	DEANNA I. HESSON
LRC Date:	October 14, 2008

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

00081571

L08100263

10/23/08 15:29

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: Larry Duty

Project Number: 2773.025Project: Longhorn AAPSite: LHAAPP.O. Number: 389869/ 390836(GWTP)**Sample Analysis Summary**

Client ID	Lab ID	Method	Dilution	Date Received
58DPT-08	L08100263-01	8260B	1	09-OCT-08
58DPT-01	L08100263-02	8260B	1	09-OCT-08
58DPT-07	L08100263-03	8260B	1	09-OCT-08
58DPT-04	L08100263-04	8260B	10	09-OCT-08
58DPT-04	L08100263-04	8260B	1	09-OCT-08
58DPT-05	L08100263-05	8260B	1	09-OCT-08
18/24DPT-C	L08100263-06	8260B	50	09-OCT-08
18/24DPT-C	L08100263-06	8260B	1	09-OCT-08
DUP-01	L08100263-07	8260B	1	09-OCT-08
TRIP BLANK	L08100263-09	8260B	1	09-OCT-08
TRIP BLANK	L08100263-09	8260B	1	09-OCT-08



Sample Number: **L08100263-01**
 Client ID: **58DPT-08**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 13:30**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 17:10**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 17:10**
 File ID: **6M78791**

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: **L08100263-01**
 Client ID: **58DPT-08**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 13:30**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 17:10**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 17:10**
 File ID: **6M78791**

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	100	86	118		
1,2-Dichloroethane-d4	84.2	80	120		
Toluene-d8	98.9	88	110		
4-Bromofluorobenzene	111	86	115		

U Not detected at or above adjusted sample detection limit

Sample Number: **L08100263-02**
Client ID: **58DPT-01**
Matrix: **Water**
Workgroup Number: **WG284799**
Collect Date: **10/02/2008 09:45**
Sample Tag: **01**

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

Instrument: **HPMS6**
Prep Date: **10/14/2008 17:43**
Cal Date: **09/25/2008 20:37**
Run Date: **10/14/2008 17:43**
File ID: **6M78792**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	3.61	J	10.0	2.50
Benzene	71-43-2	0.201	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	15.6		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	0.680	J	1.00	0.125
1,3-Dichlorobenzene	541-73-1	0.442	J	1.00	0.250
1,4-Dichlorobenzene	106-46-7	2.03		1.00	0.125
Dichlorodifluoromethane	75-71-8	0.716	J	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	1.20		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	0.285	J	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,4-Trichlorobenzene	120-82-1	0.562	J	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	0.263	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Sample Number: **L08100263-02**
 Client ID: **58DPT-01**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 09:45**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 17:43**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 17:43**
 File ID: **6M78792**

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	0.754	J	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	85.3	80	120		
Toluene-d8	97.3	88	110		
4-Bromofluorobenzene	111	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: **L08100263-03**
Client ID: **58DPT-07**
Matrix: **Water**
Workgroup Number: **WG284799**
Collect Date: **10/02/2008 12:45**
Sample Tag: **01**

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

Instrument: **HPMS6**
Prep Date: **10/14/2008 18:17**
Cal Date: **09/25/2008 20:37**
Run Date: **10/14/2008 18:17**
File ID: **6M78793**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	17.8		10.0	2.50
Benzene	71-43-2	0.337	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	0.144	J	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	0.531	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

Sample Number: **L08100263-03**
 Client ID: **58DPT-07**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 12:45**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 18:17**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 18:17**
 File ID: **6M78793**

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	88.0	80	120		
Toluene-d8	97.6	88	110		
4-Bromofluorobenzene	112	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: **L08100263-04**
Client ID: **58DPT-04**
Matrix: **Water**
Workgroup Number: **WG284869**
Collect Date: **10/01/2008 09:55**
Sample Tag: **DL01**

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

Instrument: **HPMS10**
Prep Date: **10/14/2008 14:58**
Cal Date: **09/16/2008 22:24**
Run Date: **10/14/2008 14:58**
File ID: **10M67767**

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	2.50
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	2.59	J	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	1.57	J	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		U	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		U	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	5.05	J	10.0	1.25
Tetrachloroethene	127-18-4	520		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	72.9		10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50

Report Number: **L08100263**

00081579

Report Date : **October 23, 2008**

Sample Number: **L08100263-04**
 Client ID: **58DPT-04**
 Matrix: **Water**
 Workgroup Number: **WG284869**
 Collect Date: **10/01/2008 09:55**
 Sample Tag: **DL01**

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

Instrument: **HPMS10**
 Prep Date: **10/14/2008 14:58**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/14/2008 14:58**
 File ID: **10M67767**

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	136777-61-2		U	10.0	5.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	96.6	86	118		
1,2-Dichloroethane-d4	97.5	80	120		
Toluene-d8	110	88	110		
4-Bromofluorobenzene	118	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

* Surrogate or spike compound out of range

Sample Number: L08100263-04
 Client ID: 58DPT-04
 Matrix: Water
 Workgroup Number: WG284781
 Collect Date: 10/01/2008 09:55
 Sample Tag: 01

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

Instrument: HPMS10
 Prep Date: 10/14/2008 08:57
 Cal Date: 09/16/2008 22:24
 Run Date: 10/14/2008 08:57
 File ID: 10M67756

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	7.49	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	2.62	J	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	0.293	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	606	I	1.00	0.250
Toluene	108-88-3	0.290	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	93.1		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Sample Number: **L08100263-04**
 Client ID: **58DPT-04**
 Matrix: **Water**
 Workgroup Number: **WG284781**
 Collect Date: **10/01/2008 09:55**
 Sample Tag: **01**

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

Instrument: **HPMS10**
 Prep Date: **10/14/2008 08:57**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/14/2008 08:57**
 File ID: **10M67756**

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	99.5	86	118		
1,2-Dichloroethane-d4	103	80	120		
Toluene-d8	108	88	110		
4-Bromofluorobenzene	114	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: **L08100263-05**
 Client ID: **58DPT-05**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 09:15**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 18:50**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 18:50**
 File ID: **6M78794**

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	0.333	J	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1	0.166	J	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	0.921	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	1.43		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	3.31		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Sample Number: **L08100263-05**
 Client ID: **58DPT-05**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 09:15**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 18:50**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 18:50**
 File ID: **6M78794**

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	99.7	86	118		
1,2-Dichloroethane-d4	86.2	80	120		
Toluene-d8	98.9	88	110		
4-Bromofluorobenzene	113	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: **L08100263-06**
Client ID: **18/24DPT-C**
Matrix: **Water**
Workgroup Number: **WG285281**
Collect Date: **10/08/2008 08:45**
Sample Tag: **DL01**

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

Instrument: **HPMS10**
Prep Date: **10/17/2008 15:57**
Cal Date: **09/16/2008 22:24**
Run Date: **10/17/2008 15:57**
File ID: **10M67894**

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	72.2		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	16.3	J	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	11.3	J	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	30.6	J	50.0	12.5
1,1-Dichloroethene	75-35-4		U	50.0	25.0
cis-1,2-Dichloroethene	156-59-2	119		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	18.9	J	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	19.2	J	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	23.4	J	50.0	7.50
1,2,4-Trichlorobenzene	120-82-1	18.0	J	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	1780		50.0	12.5
Trichlorofluoromethane	75-69-4		U	50.0	12.5

Sample Number: **L08100263-06**
 Client ID: **18/24DPT-C**
 Matrix: **Water**
 Workgroup Number: **WG285281**
 Collect Date: **10/08/2008 08:45**
 Sample Tag: **DL01**

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

Instrument: **HPMS10**
 Prep Date: **10/17/2008 15:57**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/17/2008 15:57**
 File ID: **10M67894**

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	95.9	86	118		
1,2-Dichloroethane-d4	96.9	80	120		
Toluene-d8	112	88	110	*	
4-Bromofluorobenzene	112	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

* Surrogate or spike compound out of range

Sample Number: **L08100263-06**
 Client ID: **18/24DPT-C**
 Matrix: **Water**
 Workgroup Number: **WG285197**
 Collect Date: **10/08/2008 08:45**
 Sample Tag: **01**

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

Instrument: **HPMS10**
 Prep Date: **10/17/2008 02:00**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/17/2008 02:00**
 File ID: **10M67868**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	585	I	10.0	2.50
Benzene	71-43-2	5.14		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	7.70		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	22.4		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	3.07		1.00	0.125
1,2-Dichloroethane	107-06-2	44.3		1.00	0.250
1,1-Dichloroethene	75-35-4	32.9		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	176		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	1.93		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	2.89	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	3.21		1.00	0.250
Toluene	108-88-3	0.644	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	0.251	J	1.00	0.250
1,1,2-Trichloroethane	79-00-5	1.61		1.00	0.250
Trichloroethene	79-01-6	2890	I	1.00	0.250
Trichlorofluoromethane	75-69-4	0.499	J	1.00	0.250

Sample Number: **L08100263-06**
 Client ID: **18/24DPT-C**
 Matrix: **Water**
 Workgroup Number: **WG285197**
 Collect Date: **10/08/2008 08:45**
 Sample Tag: **01**

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

Instrument: **HPMS10**
 Prep Date: **10/17/2008 02:00**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/17/2008 02:00**
 File ID: **10M67868**

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	4.98		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	108	86	118		
1,2-Dichloroethane-d4	121	80	120	*	
Toluene-d8	111	88	110	*	
4-Bromofluorobenzene	115	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
 * Surrogate or spike compound out of range
 I Semiquantitative result (out of instrument calibration range)

Sample Number: **L08100263-07**
Client ID: **DUP-01**
Matrix: **Water**
Workgroup Number: **WG284799**
Collect Date: **10/02/2008 00:01**
Sample Tag: **01**

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

Instrument: **HPMS6**
Prep Date: **10/14/2008 19:23**
Cal Date: **09/25/2008 20:37**
Run Date: **10/14/2008 19:23**
File ID: **6M78795**

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	0.852	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	1.34		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	3.26		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Sample Number: **L08100263-07**
 Client ID: **DUP-01**
 Matrix: **Water**
 Workgroup Number: **WG284799**
 Collect Date: **10/02/2008 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/14/2008 19:23**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/14/2008 19:23**
 File ID: **6M78795**

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	100	86	118		
1,2-Dichloroethane-d4	88.9	80	120		
Toluene-d8	98.3	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: **L08100263-09**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG285327**
 Collect Date: **10/08/2008 00:01**
 Sample Tag: **02**

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

Instrument: **HPMS14**
 Prep Date: **10/18/2008 02:36**
 Cal Date: **10/11/2008 03:19**
 Run Date: **10/18/2008 02:36**
 File ID: **14M08952**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	5.01	J	10.0	2.50
Benzene	71-43-2	0.234	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	2.66	B	1.00	0.500
2-Butanone	78-93-3		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	1.00	0.125
Chlorodibromomethane	124-48-1		U	1.00	0.250
Chloroethane	75-00-3		U	1.00	0.500
2-Chloroethyl vinyl ether	110-75-8		U	10.0	2.00
Chloroform	67-66-3		U	1.00	0.125
Chloromethane	74-87-3	0.411	J	1.00	0.250
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
1,2-Dibromo-3-chloropropane	96-12-8		U	5.00	1.00
1,2-Dibromoethane	106-93-4		U	1.00	0.250
Dibromomethane	74-95-3		U	1.00	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,4-Dichlorobenzene	106-46-7		U	1.00	0.125
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
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	0.401	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L08100263**Report Date : **October 23, 2008**

00081591

Sample Number: **L08100263-09**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG285327**
 Collect Date: **10/08/2008 00:01**
 Sample Tag: **02**

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

Instrument: **HPMS14**
 Prep Date: **10/18/2008 02:36**
 Cal Date: **10/11/2008 03:19**
 Run Date: **10/18/2008 02:36**
 File ID: **14M08952**

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	111	80	120		
Toluene-d8	101	88	110		
4-Bromofluorobenzene	99.6	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

B Analyte present in method blank

Sample Number: **L08100263-09**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG285197**
 Collect Date: **10/08/2008 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS10**
 Prep Date: **10/17/2008 00:28**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/17/2008 00:28**
 File ID: **10M67865**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	3.69	J	10.0	2.50
Benzene	71-43-2	0.210	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		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: **L08100263-09**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG285197**
 Collect Date: **10/08/2008 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS10**
 Prep Date: **10/17/2008 00:28**
 Cal Date: **09/16/2008 22:24**
 Run Date: **10/17/2008 00:28**
 File ID: **10M67865**

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	108	86	118		
1,2-Dichloroethane-d4	121	80	120	*	
Toluene-d8	112	88	110	*	
4-Bromofluorobenzene	114	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
 * Surrogate or spike compound out of range

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

Instrument: HPMS10 Dataset: 091608
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25838

Internal Standard: STD28479 Surrogate Standard: STD28797
 CCV: STD28794 LCS: STD28800 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG282416

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M66895	system blank	NA	1	1		09/16/08 09:18
2	10M66896	CCV CHECK	NA	1	1		09/16/08 09:48
3	10M66897	WG282416-01 50ng BFB STD 8260	NA	1	1	STD28704	09/16/08 11:33
4	10M66898	WG282416-02 0.3ug/L STD 8260	NA	1	1	STD28794	09/16/08 12:13
5	10M66899	WG282416-03 0.4ug/L STD 8260	NA	1	1	STD28794	09/16/08 12:42
6	10M66900	WG282416-04 1ug/L STD 8260	NA	1	1	STD28794	09/16/08 13:16
7	10M66901	WG282416-05 2ug/L STD 8260	NA	1	1	STD28794	09/16/08 14:07
8	10M66902	WG282416-06 5ug/L STD 8260	NA	1	1	STD28794	09/16/08 14:40
9	10M66903	WG282416-04 1ug/L STD 8260	NA	1	1	STD28794	09/16/08 15:58
10	10M66904	WG282416-01 50ng BFB STD 8260	NA	1	1	STD28704	09/16/08 16:43
11	10M66905	WG282416-01 50ng BFB STD 8260	NA	1	1	STD28704	09/16/08 16:58
12	10M66906	SYSTEM BLANK	NA	1	1		09/16/08 17:24
13	10M66907	WG282416-02 0.3ug/L STD 8260	NA	1	1	STD28794	09/16/08 17:54
14	10M66908	WG282416-03 0.4ug/L STD 8260	NA	1	1	STD28794	09/16/08 18:24
15	10M66909	WG282416-04 1ug/L STD 8260	NA	1	1	STD28794	09/16/08 18:54
16	10M66910	WG282416-05 2ug/L STD 8260	NA	1	1	STD28794	09/16/08 19:24
17	10M66911	WG282416-06 5ug/L STD 8260	NA	1	1	STD28794	09/16/08 19:54
18	10M66912	WG282416-07 20ug/L STD 8260	NA	1	1	STD28794	09/16/08 20:24
19	10M66913	WG282416-08 50ug/L STD 8260	NA	1	1	STD28794	09/16/08 20:54
20	10M66914	WG282416-09 100ug/L STD 8260	NA	1	1	STD28794	09/16/08 21:24
21	10M66915	WG282416-10 200ug/L STD 8260	NA	1	1	STD28794	09/16/08 21:54
22	10M66916	WG282416-11 300ug/L STD 8260	NA	1	1	STD28794	09/16/08 22:24
23	10M66917	SYSTEM BLANK	NA	1	1		09/16/08 22:54
24	10M66918	SYSTEM BLANK	NA	1	1		09/16/08 23:31

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X			1122pca
File ID: 10M66898				
Responces low.				
5	X			1122pca
File ID: 10M66899				
Last p compound low. DNR.				
6	X			1122pca

Approved: September 17, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 091608
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25838

Internal Standard: STD28479 Surrogate Standard: STD28797
 CCV: STD28794 LCS: STD28800 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG282416

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M66900				
Last p compound low. DNR.				
7	X			1122pca
File ID: 10M66901				
Last p compound low. DNR.				
8	X			1122pca
File ID: 10M66902				
Last p compound low. DNR.				
9	X			
File ID: 10M66903				
Increased the abundance. Restarting a new curve.				
10	X			
File ID: 10M66904				
Tune failed. DNR.				
24				
File ID: 10M66918				
Weird error. There was water in the sparge tube at the end of the run. The alt src was scheduled to run. But was reran on 9/1708 on HPMS10.				

Approved: September 17, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 091708
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25840

Internal Standard: STD28479 Surrogate Standard: STD28797
 CCV: STD28794 LCS: STD28800 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG282416, WG282545

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M66921	SYSTEM BLANK	NA	1	1		09/17/08 11:25
2	10M66922	SYSTEM BLANK	NA	1	1		09/17/08 11:55
3	10M66923	WG282544-01 50ng BFB STD 8260	NA	1	1	STD28704	09/17/08 12:48
4	10M66924	WG282544-01 50ng BFB STD 8260	NA	1	1	STD28704	09/17/08 13:03
9	10M66925	WG282544-02 50ug/L CCV STD 8260	NA	1	1	STD28794	09/17/08 13:32
5	10M66926	WG282545-01 VBLK0917 BLANK STD 826	NA	1	1		09/17/08 14:04
6	10M66927	WG282545-01 VBLK0917 BLANK STD 826	NA	1	1		09/17/08 14:34
7	10M66928	WG282416-12 20ug/L ALT SRC STD 8260	NA	1	1	STD28800	09/17/08 15:04
8	10M66929	WG282545-02 20ug/L LCS STD 8260	NA	1	1	STD28800	09/17/08 15:34
10	10M66930	L08090277-02 A 826-LOW	<2	1	1		09/17/08 16:04
11	10M66931	L08090277-04 A 826-LOW	<2	1	1		09/17/08 16:34
12	10M66932	WG282545-03 20ug/L LCSDUP STD 8260	NA	1	1	STD28800	09/17/08 17:04
13	10M66933	L08090113-05 A 826-SPE	<2	1	1		09/17/08 17:34
14	10M66934	L08090301-11 A 826-SPE	<2	1	1		09/17/08 18:05
15	10M66935	L08090157-03 A 826-SPE	<2	1	1		09/17/08 18:35
16	10M66936	L08090112-01 B 826-SPE	<2	1	1		09/17/08 19:05
17	10M66937	L08090112-03 B 826-SPE	<2	1	1		09/17/08 19:35
18	10M66938	L08090112-05 B 826-SPE	<2	1	1		09/17/08 20:05
19	10M66939	L08090112-07 B 826-SPE	<2	1	1		09/17/08 20:35
20	10M66940	L08090112-09 B 826-SPE	<2	1	1		09/17/08 21:05
21	10M66941	L08090112-11 B 826-SPE	<2	1	1		09/17/08 21:35
22	10M66942	L08090113-01 A 10X 826-SPE	7	1	10		09/17/08 22:05
23	10M66943	L08090113-03 A 826-SPE	<2	1	1		09/17/08 22:35
24	10M66944	L08090157-01 A 10X 826-TC	NA	17	10		09/17/08 23:06
25	10M66945	L08090157-02 A 10X 826-TC	NA	17	10		09/17/08 23:35
26	10M66946	L08090258-01 A 826-SPE	<2	1	1		09/18/08 00:05
27	10M66947	SYSTEM BLANK	NA	1	1		09/18/08 00:36
28	10M66948	SYSTEM BLANK	NA	1	1		09/18/08 01:05
29	10M66949	L08080733-03 B 826-REF-BLK A1	<2	1	1		09/18/08 01:36
30	10M66950	L08080733-05 B 826-REF-BLK A1	<2	1	1		09/18/08 02:06

Comments

Seq.	Rerun	Dil.	Reason	Analytes

Approved: September 18, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 091708
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25840

Internal Standard: STD28479 Surrogate Standard: STD28797
 CCV: STD28794 LCS: STD28800 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG282416, WG282545

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X			
File ID: 10M66923				
Tune failed. DNR.				
5	X	1	Carry-over contamination	
File ID: 10M66926				
DNR.				
17	X	1	Surrogate standard failure	
File ID: 10M66937				
18	X	1	Surrogate standard failure	
File ID: 10M66938				
19	X	5	Over Calibration Range	cb
File ID: 10M66939				
21	X	1	Surrogate standard failure	
File ID: 10M66941				
22	X	1	Surrogate standard failure	
File ID: 10M66942				
Was also ran too dilute.				
23	X	1	Surrogate standard failure	
File ID: 10M66943				

Approved: September 18, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092508
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25957

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090

Comments: [CAI:VC to 100.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M78188	SYSTEM BLANK	NA	1	1		09/25/08 09:54
2	6M78189	SYSTEM BLANK	NA	1	1		09/25/08 10:27
3	6M78190	SYSTEM BLANK	NA	1	1		09/25/08 11:24
4	6M78191	SYSTEM BLANK	NA	1	1		09/25/08 12:02
5	6M78192	SYSTEM CHECK	NA	1	1		09/25/08 12:35
6	6M78193	WG283090-01 BFB 50ng STD 8260	NA	1	1	STD28704	09/25/08 13:21
7	6M78194	WG283090-02 50ug/L STD 8260	NA	1	1	STD28878	09/25/08 13:51
8	6M78195	WG283090-02 50ug/L STD 8260	NA	1	1	STD28878	09/25/08 14:30
9	6M78196	SYSTEM BLANK	NA	1	1		09/25/08 15:03
10	6M78197	WG283090-02 0.30ug/L STD 8260	NA	1	1	STD28949	09/25/08 15:39
11	6M78198	WG283090-03 0.40ug/L STD 8260	NA	1	1	STD28949	09/25/08 16:12
12	6M78199	WG283090-04 1ug/L STD 8260	NA	1	1	STD28949	09/25/08 16:44
13	6M78200	WG283090-05 2ug/L STD 8260	NA	1	1	STD28949	09/25/08 17:17
14	6M78201	WG283090-06 5ug/L STD 8260	NA	1	1	STD28949	09/25/08 17:50
15	6M78202	WG283090-07 20ug/L STD 8260	NA	1	1	STD28949	09/25/08 18:24
16	6M78203	WG283090-08 50ug/L STD 8260	NA	1	1	STD28949	09/25/08 18:57
17	6M78204	WG283090-09 100ug/L STD 8260	NA	1	1	STD28949	09/25/08 19:30
18	6M78205	WG283090-10 200ug/L STD 8260	NA	1	1	STD28949	09/25/08 20:04
19	6M78206	WG283090-11 300ug/L STD 8260	NA	1	1	STD28949	09/25/08 20:37
20	6M78207	SYSTEM BLANK	NA	1	1		09/25/08 21:10
21	6M78208	SYSTEM BLANK	NA	1	1		09/25/08 21:44
22	6M78209	WG283090-12 20ug/L Alt Source STD 8260	NA	1	1	STD28892	09/25/08 22:17
23	6M78210	SYSTEM BLANK	NA	1	1		09/25/08 22:50

Comments

Seq.	Rerun	Dil.	Reason	Analytes
7	X			
File ID: 6M78194				
WG283090-02 50ug/L STD 8260 - Megamix low.				
8	X			
File ID: 6M78195				
WG283090-02 50ug/L STD 8260 - Megamix high.				
22	X			

Approved: September 26, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092508
Analyst1: CAA Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25957

Internal Standard: STD28881 Surrogate Standard: STD28639
CCV: STD28949 LCS: STD28915 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG283090

Comments: ICAI:VC to 100.Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M78209				
WG283090-12 20ug/L Alt Source STD 8260 - Bad gas mix.				

Approved: September 26, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092608
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25968

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090, WG283267

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M78211	SYSTEM BLANK	NA	1	1		09/26/08 08:53
2	6M78212	WG283266-01 BFB 50ng STD 8260	NA	1	1	STD28704	09/26/08 09:24
3	6M78213	WG283266-02 50ug/L STD 8260	NA	1	1	STD28915	09/26/08 09:52
4	6M78214	WG283267-01 VBLK0926 BLANK 8260	NA	1	1		09/26/08 10:26
5	6M78215	WG283267-01 VBLK0926 BLANK 8260	NA	1	1		09/26/08 10:59
6	6M78216	WG283090-12 20ug/L Alt Source STD 8260	NA	1	1	STD28915	09/26/08 11:32
7	6M78217	WG283267-02 20ug/L LCS STD 8260	NA	1	1	STD28915	09/26/08 12:06
8	6M78218	WG283267-03 20ug/L LCS DUP STD 8260	NA	1	1	STD28915	09/26/08 12:39
9	6M78219	L08090397-21 C 100X 826-SPE	<2	1	100		09/26/08 13:12
10	6M78220	L08090397-24 B 10X 826-SPE	<2	1	10		09/26/08 13:45
11	6M78221	L08090397-17 B 50X 826-SPE	<2	1	50		09/26/08 14:18
12	6M78222	L08090426-06 A 826-SPE	<2	1	1		09/26/08 14:51
13	6M78223	L08090426-11 A 826-SPE	<2	1	1		09/26/08 15:25
14	6M78224	L08090397-23 B 826-SPE	<2	1	1		09/26/08 15:58
15	6M78225	L08090397-26 A 826-SPE	<2	1	1		09/26/08 16:31
16	6M78226	L08090426-07 B 826-SPE	<2	1	1		09/26/08 17:04
17	6M78227	L08090426-10 A 826-SPE	<2	1	1		09/26/08 17:38
18	6M78228	L08090426-01 A 2X 826-SPE	<2	1	2		09/26/08 18:11
19	6M78229	L08090426-02 A 2.5X 826-SPE	<2	1	2.5		09/26/08 18:44
20	6M78230	L08090426-03 A 20X 826-SPE	<2	1	20		09/26/08 19:18
21	6M78231	L08090426-04 A 50X 826-SPE	<2	1	50		09/26/08 19:51
22	6M78232	L08090426-05 A 50X 826-SPE	<2	1	50		09/26/08 20:24
23	6M78233	L08090426-08 A 50X 826-SPE	<2	1	50		09/26/08 20:57
24	6M78234	L08090426-09 A 2X 826-SPE	<2	1	2		09/26/08 21:31
25	6M78235	SYSTEM BLANK	NA	1	1		09/26/08 22:04
26	6M78236	SYSTEM BLANK	NA	1	1		09/26/08 22:37

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X		Carry-over contamination	
File ID: 6M78214				
WG283267-01 VBLK0926 BLANK 8260				
17	X	2.5	Over Calibration Range	VC

Approved: September 29, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092608
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25968

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090, WG283267

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M78227				
L08090426-10 A 826-SPE				
19	X	20	Over Calibration Range	1,1-DCA
File ID: 6M78229				
L08090426-02 A 2.5X 826-SPE				
21	X	10	Analyzed too dilute	
File ID: 6M78231				
L08090426-04 A 50X 826-SPE				
22	X	10	Analyzed too dilute	
File ID: 6M78232				
L08090426-05 A 50X 826-SPE				
24	X		Missed Tune	
File ID: 6M78234				
L08090426-09 A 2X 826-SPE - Rerun at 10x for VC, cis-1,2-DCE.				

Approved: September 29, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 101008
 Analyst1: MDA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: STD29209 Surrogate Standard: STD29108
 CCV: STD29205 LCS: STD29154 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284610

Comments: _____

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	14M08677	WG284468-01 50ng BFB	NA	1	1	STD29166	10/10/08 09:29
2	14M08678	WG284468-02 50ug/L STD 8260	NA	1	1		10/10/08 10:04
3	14M08682	WG284467-01 50ng BFB	NA	1	1	STD29166	10/10/08 12:35
4	14M08683	WG284467-02 50ug/L STD 8260	NA	1	1	STD29145	10/10/08 12:59
5	14M08684	WG284468-03 100ug/L App-IX STD	NA	1	1	STD29124	10/10/08 13:30
6	14M08685	WG284469-01 vblk1010 BLANK 8260	NA	1	1		10/10/08 14:02
7	14M08686	WG284469-01 VBLK1010 BLANK 8260	NA	1	1		10/10/08 14:31
8	14M08687	WG284610-01 50ng BFB	NA	1	1	STD29166	10/10/08 16:05
9	14M08688	WG284610-02 0.3ug/L STD 8260	NA	1	1	STD29205	10/10/08 16:28
10	14M08689	WG284610-03 0.4ug/L STD 8260	NA	1	1	STD29205	10/10/08 17:00
11	14M08690	WG284610-04 1ug/L STD 8260	NA	1	1	STD29205	10/10/08 17:31
12	14M08691	WG284610-05 2ug/L STD 8260	NA	1	1	STD29205	10/10/08 18:02
13	14M08692	WG284610-06 5ug/L STD 8260	NA	1	1	STD29205	10/10/08 18:33
14	14M08693	WG284610-07 20ug/L STD 8260	NA	1	1	STD29205	10/10/08 19:04
15	14M08694	WG284610-08 50ug/L STD 8260	NA	1	1	STD29205	10/10/08 19:35
16	14M08695	WG284610-09 100ug/L STD 8260	NA	1	1	STD29205	10/10/08 20:06
17	14M08696	WG284610-10 200ug/L STD 8260	NA	1	1	STD29205	10/10/08 20:37
18	14M08697	WG284610-11 300ug/L STD 8260	NA	1	1	STD29205	10/10/08 21:08
19	14M08698	RINSE	NA	1	1		10/10/08 21:39
20	14M08699	RINSE	NA	1	1		10/10/08 22:09
21	14M08700	RINSE	NA	1	1		10/10/08 22:40
22	14M08701	WG284610-12 20ug/L ICV 8260	NA	1	1	STD29154	10/10/08 23:11
23	14M08702	WG284610-13 100ug/L APP-IX STD	NA	1	1	STD29154	10/10/08 23:45
24	14M08703	WG284610-13 vblk1010 blank 8260	NA	1	1		10/11/08 00:31
25	14M08704	rinse	NA	1	1		10/11/08 01:08
26	14M08705	rinse	NA	1	1		10/11/08 01:54
27	14M08706	rinse	NA	1	1		10/11/08 02:36
28	14M08707	WG284610-02 0.3ug/L STD 8260	NA	1	1	STD29205	10/11/08 03:19
29	14M08708	WG284610-12 20UG/L ICV 8260	NA		1	STD29154	10/11/08 03:50

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9				

Approved:



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 101008
Analyst1: MDA Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: STD29209 Surrogate Standard: STD29108
CCV: STD29205 LCS: STD29154 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG284610

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 14M08688				
DNR RR				
22				
File ID: 14M08701				
DNR RR				

Approved:

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS10 Dataset: 101308
 Analyst1: TMB Analyst2: MDA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26202

Internal Standard: STD28959 Surrogate Standard: STD28797
 CCV: STD29205 LCS: STD29154 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284683; WG284781

Comments: There was no data collected for file number 10M67722 and 10M67731.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M67706	WG284682-01 50ng BFB STD 8260	NA	1	1	STD29166	10/13/08 08:43
2	10M67707	WG284682-01 50ng BFB STD 8260	NA	1	1	STD29166	10/13/08 08:58
3	10M67708	WG284682-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 09:23
4	10M67709	WG284682-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 09:59
5	10M67710	WG284683-01 EXT BLK 8260 5g/10mL	NA	7	50		10/13/08 10:29
6	10M67711	WG284683-02 EXT LCS 8260 5g/10mL	NA	7	50		10/13/08 11:00
7	10M67712	WG284683-03 EXT LCSDUP 8260 5g/10m	NA	7	50		10/13/08 11:30
8	10M67713	L08100009-11 C 200X 826-SPE A1	NA	7	100		10/13/08 12:00
9	10M67714	L08100009-21 C 100X 826-SPE A1	NA	7	50		10/13/08 12:31
10	10M67715	L08100009-18 C 500X 826-SPE A1	NA	7	250		10/13/08 13:01
11	10M67716	L08100009-14 C 200X 826-SPE A1	NA	7	100		10/13/08 13:32
12	10M67717	SYSTEM BLANK	NA	1	1		10/13/08 14:02
13	10M67718	L08100255-01 826-BETX	NA	7	50		10/13/08 14:43
14	10M67719	L08100255-02 826-BETX	NA	7	50		10/13/08 15:13
15	10M67720	L08100255-03 826-BETX	NA	7	50		10/13/08 15:43
16	10M67721	L08100255-04 826-BETX	NA	7	50		10/13/08 16:13
17	10M67723	WG284780-01 50ng BFB STD 8260	NA	1	1	STD29166	10/13/08 16:50
18	10M67724	WG284780-01 50ng BFB STD 8260	NA	1	1	STD29166	10/13/08 17:02
19	10M67725	WG284780-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 17:28
20	10M67726	WG284780-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 18:02
21	10M67727	SYSTEM BLANK	NA	1	1		10/13/08 18:35
22	10M67728	WG284780-01 50ng BFB STD 8260	NA	1	1	STD29166	10/13/08 19:13
23	10M67729	WG284780-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 19:45
24	10M67730	WG284780-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/13/08 20:15
25	10M67732	WG284780-01 50ng BFB	NA	1	1	STD29166	10/13/08 20:56
26	10M67733	WG284780-01 50ng BFB	NA	1	1	STD29166	10/13/08 21:09
27	10M67734	WG284780-02 50uG/L STD 8260	NA	1	1	STD29205	10/13/08 21:37
28	10M67735	WG284781-01 VBLK1013 BLANK 8260	NA	1	1		10/13/08 22:13
29	10M67736	WG284781-01 VBLK1013 BLANK 8260	NA	1	1		10/13/08 22:43
30	10M67737	WG284781-02 LCS1013 8260	NA	1	1		10/13/08 23:14
31	10M67738	L08090677-11 B 00 500X 8260	<2	1	500		10/13/08 23:44
32	10M67739	WG284781-02 LCSDUP1013 8260	NA	1	1		10/14/08 00:15
33	10M67740	L08100056-10 A 826-LOW	<2	1	1		10/14/08 00:46
34	10M67741	L08100056-11 A 826-LOW	<2	1	1		10/14/08 01:17

Approved: October 17, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS10 Dataset: 101308
 Analyst1: TMB Analyst2: MDA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26202

Internal Standard: STD28959 Surrogate Standard: STD28797
 CCV: STD29205 LCS: STD29154 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284683; WG284781

Comments: There was no data collected for file number 10M67722 and 10M67731.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	10M67742	L08100056-12 A 826-LOW	<2	1	1		10/14/08 01:48
36	10M67743	L08100056-13 A 826-LOW	<2	1	1		10/14/08 02:18
37	10M67744	L08100056-17 A 826-LOW	<2	1	1		10/14/08 02:49
38	10M67745	L08100056-19 A 826-LOW	<2	1	1		10/14/08 03:20
39	10M67746	L08100056-18 A 826-LOW	<2	1	1		10/14/08 03:50
40	10M67747	L08100099-01 A 826-SPE	<2	1	1		10/14/08 04:21
41	10M67748	L08100099-02 A 826-SPE	<2	1	1		10/14/08 04:52
42	10M67749	L08100099-03 A 826-SPE	<2	1	1		10/14/08 05:22
43	10M67750	L08100099-04 A 826-SPE	<2	1	1		10/14/08 05:53
44	10M67751	L08100099-05 A 826-SPE	<2	1	1		10/14/08 06:23
45	10M67752	L08100099-06 A 826-SPE	<2	1	1		10/14/08 06:54
46	10M67753	L08100099-07 A 826-SPE	<2	1	1		10/14/08 07:25
47	10M67754	L08100099-08 A 826-SPE	<2	1	1		10/14/08 07:55
48	10M67755	L08100099-09 A 826-SPE	<2	1	1		10/14/08 08:27
49	10M67756	L0810263-04 A 826-LOW	<2	1	1		10/14/08 08:57
50	10M67757	SYSTEM BLANK	NA	1	1		10/14/08 09:48
51	10M67758	SYSTEM BLANK	NA	1	1		10/14/08 10:22

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
File ID: 10M67706				
Tune failed. DNR.				
3	X			
File ID: 10M67708				
Compounds over 20% DNR.				
17	X			
File ID: 10M67723				
Tune failed. DNR.				
19	X		Over Calibration Range	vc
File ID: 10M67725				
vc was low. DNR.				
20	X		Over Calibration Range	vc
File ID: 10M67726				

Approved: October 17, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 101308
 Analyst1: TMB Analyst2: MDA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26202

Internal Standard: STD28959 Surrogate Standard: STD28797
 CCV: STD29205 LCS: STD29154 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284683; WG284781

Comments: There was no data collected for file number 10M67722 and 10M67731.

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			vc was low. DNR.	
23	X		Over Calibration Range	vc
File ID: 10M67729				
			vc was low. DNR.	
25	X			
File ID: 10M67732				
			Tune failed. DNR.	
28	X	1	Carry-over contamination	
File ID: 10M67735				
			dnr.	
33	X	1	Surrogate standard failure	
File ID: 10M67740				
34	X	1	Surrogate standard failure	
File ID: 10M67741				
35	X	1	Surrogate standard failure	
File ID: 10M67742				
37	X	1	Surrogate standard failure	
File ID: 10M67744				
38	X	1	Surrogate standard failure	
File ID: 10M67745				
49	X	10	Over Calibration Range	pce
File ID: 10M67756				

Approved: October 17, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 101408
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 26231

Internal Standard: STD29107 Surrogate Standard: STD29108
 CCV: STD29205 LCS: STD29233 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284799

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M78774	WG284798-01 BFB 50ng STD 8260	NA	1	1	STD29166	10/14/08 07:46
2	6M78775	WG284798-02 50ug/L STD 8260	NA	1	1	STD29205	10/14/08 08:22
3	6M78776	WG284799-01 VBLK1014 BLANK 8260	NA	1	1		10/14/08 08:55
4	6M78777	WG284799-01 VBLK1014 BLANK 8260	NA	1	1		10/14/08 09:28
5	6M78778	WG284799-02 20ug/L LCS STD 8260	NA	1	1	STD29233	10/14/08 10:01
6	6M78779	WG284799-03 20ug/L LCS DUP STD 8260	NA	1	1	STD29233	10/14/08 10:34
7	6M78780	L08100222-04 A 826-BETX	<2	1	1		10/14/08 11:07
8	6M78781	L08100160-08 A 826-SPE3	<2	1	1		10/14/08 11:40
9	6M78782	L08100056-10 B 826-LOW	<2	1	1		10/14/08 12:13
10	6M78783	L08100056-11 B 826-LOW	<2	1	1		10/14/08 12:46
11	6M78784	L08100056-12 B 826-LOW	<2	1	1		10/14/08 13:19
12	6M78785	L08100056-17 B 826-LOW	<2	1	1		10/14/08 13:52
13	6M78786	L08100056-19 B 826-LOW	<2	1	1		10/14/08 14:25
14	6M78787	L08100160-10 A 826-SPE3	<2	1	1		10/14/08 14:58
15	6M78788	L08100160-09 A 25X 826-SPE3	<2	1	25		10/14/08 15:31
16	6M78789	L08100208-02 A 826-LOW	<2	1	1		10/14/08 16:04
17	6M78790	L08100208-03 A 826-LOW	<2	1	1		10/14/08 16:37
18	6M78791	L08100263-01 A 826-LOW	<2	1	1		10/14/08 17:10
19	6M78792	L08100263-02 A 826-LOW	<2	1	1		10/14/08 17:43
20	6M78793	L08100263-03 A 826-LOW	<2	1	1		10/14/08 18:17
21	6M78794	L08100263-05 A 826-LOW	<2	1	1		10/14/08 18:50
22	6M78795	L08100263-07 A 826-LOW	<2	1	1		10/14/08 19:23
23	6M78796	SYSTEM BLANK	NA	1	1		10/14/08 19:56
24	6M78797	WG284799-04 624 BLK	NA	2	1		10/14/08 20:29
25	6M78798	L08100302-09 B 624-SPE	=7	2	1		10/14/08 21:02
26	6M78799	L08100295-07 B 250X 624-SPE	=7	2	250		10/14/08 21:36
27	6M78800	L08100302-03 B 624-SPE	=7	2	1		10/14/08 22:09
28	6M78801	L08100281-01 A 624-SPE1	=7	2	1		10/14/08 22:42
29	6M78802	SYSTEM BLANK	NA	1	1		10/14/08 23:15
30	6M78803	SYSTEM CHECK	NA	1	1		10/14/08 23:49

Comments

Seq.	Rerun	Dil.	Reason	Analytes

Approved: October 20, 2008

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Aseli Bucina



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 101408
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11
 Method: 624 SOP: MSV10 Rev: 7
 Maintenance Log ID: 26231

Internal Standard: STD29107 Surrogate Standard: STD29108
 CCV: STD29205 LCS: STD29233 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284799

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 6M78776				
WG284799-01 VBLK1014 BLANK 8260				
6				
File ID: 6M78779				
WG284799-03 20ug/L LCS DUP STD 8260 - SS DCA low.				
7				
File ID: 6M78780				
L08100222-04 A 826-BETX - SS DCA low.				
8				
File ID: 6M78781				
L08100160-08 A 826-SPE3 - SS DCA low.				
9				
File ID: 6M78782				
L08100056-10 B 826-LOW - SS DCA low.				
14	X	20	Over Calibration Range	tert-butyl alcohol
File ID: 6M78787				
L08100160-10 A 826-SPE3				

Approved: October 20, 2008

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Alexis Bucina



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS10 Dataset: 101408
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26205

Internal Standard: STD28959 Surrogate Standard: STD28977
 CCV: STD29205 LCS: STD29233 MS/MSD: STD29233
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284869

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M67761	SYSTEM CHECK	NA	1	1		10/14/08 11:56
2	10M67762	WG284867-01 50ng BFB STD 8260	NA	1	1	STD29166	10/14/08 12:30
3	10M67763	WG284867-02 50ug/L CCV STD 8260	NA	1	1	STD29205	10/14/08 12:56
4	10M67764	WG284869-01 VBLK1014 BLANK STD 826	NA	1	1		10/14/08 13:26
5	10M67765	WG284869-01 VBLK1014 BLANK STD 826	NA	1	1		10/14/08 13:57
6	10M67766	WG284869-02 20ug/L LCS STD 8260	NA	1	1	STD29233	10/14/08 14:27
7	10M67767	L08100263-04 B 10X D1 826-LOW	<2	1	10		10/14/08 14:58
8	10M67768	L08100132-02 A 826-SPE	<2	1	1		10/14/08 15:28
9	10M67769	L08100132-01 A 826-SPE	<2	1	1		10/14/08 15:59
10	10M67770	L08100118-03 A 826-SPE	<2	1	1		10/14/08 16:29
11	10M67771	L08100118-04 A 826-SPE	<2	1	1		10/14/08 16:59
12	10M67772	L08100118-05 A 826-SPE	<2	1	1		10/14/08 17:30
13	10M67773	L08100228-01 A 826-SPE	<2	1	1		10/14/08 18:01
14	10M67774	L08100132-03 B 826-SPE	<2	1	1		10/14/08 18:31
15	10M67775	L08100132-04 A 826-SPE	<2	1	1		10/14/08 19:02
16	10M67776	L08100132-05 A 826-SPE	<2	1	1		10/14/08 19:32
17	10M67777	L08100132-06 A MS 826-SPE	<2	1	1	STD29233	10/14/08 20:03
18	10M67778	L08100132-07 A MSD 826-SPE	<2	1	1	STD29233	10/14/08 20:33
19	10M67779	L08100132-08 A 826-SPE	<2	1	1		10/14/08 21:04
20	10M67780	L08100132-09 A 826-SPE	<2	1	1		10/14/08 21:35

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X	1	Carry-over contamination	
File ID: 10M67764				
DNR.				

Approved: October 17, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS10 Dataset: 101608
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 50305035 SOP: PAT01 Rev: 12

Maintenance Log ID: 26236

Internal Standard: STD28959 Surrogate Standard: STD29321
 CCV: STD29257 LCS: STD29360 MS/MSD: STD29360
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285091, WG285197

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M67839	WG285090-01 50ng BFB STD 8260	NA	1	1	STD29166	10/16/08 09:20
2	10M67840	WG285090-01 50ng BFB STD 8260	NA	1	1	STD29166	10/16/08 09:33
3	10M67841	WG285090-02 50ug/L CCV STD 8260	NA	1	1	STD29257	10/16/08 09:59
4	10M67842	WG285091-01 VBLK1016 BLANK STD 826	NA	1	1		10/16/08 10:32
5	10M67843	WG285091-01 VBLK1016 BLANK STD 826	NA	1	1		10/16/08 11:02
6	10M67844	WG285091-02 20ug/L LCS STD 8260	NA	1	1	STD29233	10/16/08 11:33
7	10M67845	WG285091-03 20ug/L LCSDUP STD 8260	NA	1	1	STD29233	10/16/08 12:04
8	10M67846	L08100150-10 A 826-SPE	<2	1	1		10/16/08 12:35
9	10M67847	L08100190-01 A 826-SPE	<2	1	1		10/16/08 13:06
10	10M67848	L08100150-06 A 826-SPE	<2	1	1		10/16/08 13:36
11	10M67849	L08100150-07 A 826-SPE	<2	1	1		10/16/08 14:07
12	10M67850	L08100150-08 A 826-SPE	<2	1	1		10/16/08 14:38
13	10M67851	L08100150-09 A 826-SPE	<2	1	1		10/16/08 15:09
14	10M67852	L08100190-06 A 826-SPE	<2	1	1		10/16/08 15:39
15	10M67853	L08100190-07 A 826-SPE	<2	1	1		10/16/08 16:10
16	10M67854	system blank	NA	1	1		10/16/08 18:20
17	10M67855	system blank	NA	1	1		10/16/08 18:51
18	10M67856	system blank	NA	1	1		10/16/08 19:22
19	10M67857	system blank	NA	1	1		10/16/08 19:53
20	10M67858	system blank	NA	1	1		10/16/08 20:28
21	10M67859	WG285196-01 50ng BFB STD 8260	NA	1	1	STD29166	10/16/08 21:31
22	10M67860	WG285196-02 50ug/L CCV STD 8260	NA	1	1	STD29257	10/16/08 21:56
23	10M67861	WG285197-01 VBLK1016 BLANK STD 826	NA	1	1		10/16/08 22:26
24	10M67862	WG285197-01 VBLK1016 BLANK STD 826	NA	1	1		10/16/08 22:57
25	10M67863	WG285197-02 20ug/L LCS STD 8260	NA	1	1	STD29233	10/16/08 23:27
26	10M67864	L08100190-06 B D1 200X 826-SPE	<2	1	200		10/16/08 23:58
27	10M67865	L08100263-09 A 826-LOW	<2	1	1		10/17/08 00:28
28	10M67866	L08100175-04 A 826-SPE	<2	1	1		10/17/08 00:59
29	10M67867	L08100189-01 A 826-SPE	<2	1	1		10/17/08 01:30
30	10M67868	L08100263-06 A 826-LOW	<2	1	1		10/17/08 02:00
31	10M67869	L08100099-10 A 826-SP	<2	1	1		10/17/08 02:31
32	10M67870	L08100190-07 B D1 100X 826-SPE	<2	1	100		10/17/08 03:02
33	10M67871	L08100175-01 A 826-SPE	<2	1	1		10/17/08 03:32
34	10M67872	L08100175-02 A 826-SPE	<2	1	1		10/17/08 04:03

Approved: October 19, 2008

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Aseli Bucina



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 101608
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 50305035 SOP: PAT01 Rev: 12

Maintenance Log ID: 26236

Internal Standard: STD28959 Surrogate Standard: STD29321
 CCV: STD29257 LCS: STD29360 MS/MSD: STD29360
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285091, WG285197

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	10M67873	L08100175-03 A 826-SPE	<2	1	1		10/17/08 04:33
36	10M67874	L08100189-02 A 826-SPE	<2	1	1		10/17/08 05:04
37	10M67875	L08100190-04 A 826-SPE	<2	1	1		10/17/08 05:35
38	10M67876	L08100190-08 A 826-SPE	<2	1	1		10/17/08 06:06
39	10M67877	L08100190-09 A MS 826-SPE	<2	1	1	STD29233	10/17/08 06:36
40	10M67878	L08100190-10 A MSD 826-SPE	<2	1	1	STD29233	10/17/08 07:07
41	10M67879	L08100238-01 A 10X 826-TC	NA	17	10		10/17/08 07:38
42	10M67880	L08100190-11 A 826-SPE	<2	1	1		10/17/08 08:08
43	10M67881	L08100190-12 A 826-SPE	<2	1	1		10/17/08 08:39
44	10M67882	L08100190-13 A 826-SPE	<2	1	1		10/17/08 09:09
45	10M67883	SYSTEM BLANK	NA	1	1		10/17/08 09:40
46	10M67884	L08100383-01 100X 826-SPE	NA	1	1	SCREEN	10/17/08 10:11
47	10M67885	SYSTEM CHECK	NA	1	1		10/17/08 10:41

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
File ID: 10M67839				
TUNE FAILED				
4	X		Carry-over contamination	
File ID: 10M67842				
14	X	200	Over Calibration Range	CIS 12 DCE, TCE
File ID: 10M67852				
15	X	100	Over Calibration Range	TCE
File ID: 10M67853				
23	X		Carry-over contamination	
File ID: 10M67861				
27	X	1	Surrogate standard failure	
File ID: 10M67865				
30	X	50	Over Calibration Range	ACE, TCE

Approved: October 19, 2008

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Aseli Bucina



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 101608
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 50305035 SOP: PAT01 Rev: 12

Maintenance Log ID: 26236

Internal Standard: STD28959 Surrogate Standard: STD29321
 CCV: STD29257 LCS: STD29360 MS/MSD: STD29360
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285091, WG285197

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 10M67868				
31	X	1	Carry-over contamination	
File ID: 10M67869				
DNR				
32	X	25	Analyzed too dilute	
File ID: 10M67870				
33	X	1	Carry-over contamination	
File ID: 10M67871				
DNR				
34	X	1	Carry-over contamination	
File ID: 10M67872				
DNR				
35	X	1	Carry-over contamination	
File ID: 10M67873				
DNR				
36	X	1	Carry-over contamination	
File ID: 10M67874				
DNR				
44	X	10	Over Calibration Range	MTBE
File ID: 10M67882				
46	X	1	Analyzed too dilute	
File ID: 10M67884				
DNR, SCREEN				

Approved: October 19, 2008

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Alexi Bucina



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS10 Dataset: 101708
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26275

Internal Standard: STD29368 Surrogate Standard: STD29321
 CCV: STD29257 LCS: STD29233 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285281

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	10M67887	WG285280-01 50ng BFB STD 8260	NA	1	1	STD29166	10/17/08 12:17
2	10M67888	WG285280-02 50ug/L CCV STD 8260	NA	1	1	STD29257	10/17/08 12:42
3	10M67889	WG285280-02 50ug/L CCV STD 8260	NA	1	1	STD29257	10/17/08 13:21
4	10M67890	WG285281-01 VBLK1017 BLANK STD 826	NA	1	1		10/17/08 13:55
5	10M67891	WG285281-01 VBLK1017 BLANK STD 826	NA	1	1		10/17/08 14:25
6	10M67892	WG285281-02 20ug/L LCS STD 8260	NA	1	1	STD29233	10/17/08 14:56
7	10M67893	WG285281-03 20ug/L LCSDUP STD 8260	NA	1	1	STD29233	10/17/08 15:27
8	10M67894	L08100263-06 B 50X D1 826-LOW	<2	1	50		10/17/08 15:57
9	10M67895	L08100225-03 A 826-SPE	<2	1	1		10/17/08 16:27
10	10M67896	L08100099-10 B 826-SPE	<2	1	1		10/17/08 16:58
11	10M67897	L08100175-01 B 826-SPE	<2	1	1		10/17/08 17:28
12	10M67898	L08100175-02 B 826-SPE	<2	1	1		10/17/08 17:59
13	10M67899	L08100175-03 B 826-SPE	<2	1	1		10/17/08 18:30
14	10M67900	L08100189-02 B 826-SPE	<2	1	1		10/17/08 19:01
15	10M67901	L08100190-07 C 25X 826-SPE	<2	1	25		10/17/08 19:31
16	10M67902	L08100190-13 B 10X D1 826-SPE	<2	1	10		10/17/08 20:02
17	10M67903	L08100225-01 A 826-SPE	<2	1	1		10/17/08 20:33
18	10M67904	L08100225-02 A 826-SPE	<2	1	1		10/17/08 21:04
19	10M67905	L08100225-04 A 826-SPE	<2	1	1		10/17/08 21:36
20	10M67906	L08100225-05 A 826-SPE	<2	1	1		10/17/08 22:06
21	10M67907	L08100225-06 A 826-SPE	<2	1	1		10/17/08 22:38
22	10M67908	L08100225-08 A 826-SPE	<2	1	1		10/17/08 23:09
23	10M67909	L08100225-09 A 826-SPE	<2	1	1		10/17/08 23:40
24	10M67910	L08100225-07 A 826-SPE	<2	1	1		10/18/08 00:10
25	10M67911	SYSTEM BLANK	NA	1	1		10/18/08 00:41
26	10M67912	SYSTEM BLANK	NA	1	1		10/18/08 01:12
27	10M67913	L08100438-01 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 01:44
28	10M67914	L08100438-02 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 02:15
29	10M67915	L08100438-05 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 02:46
30	10M67916	L08100438-06 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 03:18
31	10M67917	L08100438-07 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 03:49
32	10M67918	L08100435-12 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 04:21
33	10M67919	L08100435-14 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 04:52
34	10M67920	L08100435-17 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 05:23

Approved: October 22, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS10 Dataset: 101708
 Analyst1: TMB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26275

Internal Standard: STD29368 Surrogate Standard: STD29321
 CCV: STD29257 LCS: STD29233 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285281

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	10M67921	L08100435-23 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 05:55
36	10M67922	L08100435-25 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 06:27
37	10M67923	L08100435-27 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 06:58
38	10M67924	L08100435-29 C 100X 826-SPE	NA	7	1	SCREEN	10/18/08 07:29
39	10M67925	SYSTEM CHECK	NA	1	1		10/18/08 08:00

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2	X			
File ID: 10M67888				
Gases were low. DNR.				
4	X	1	Carry-over contamination	
File ID: 10M67890				
dnr.				
15	X	10	Analyzed too dilute	
File ID: 10M67901				

Approved: October 22, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 101708
 Analyst1: MDA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26297

Internal Standard: STD29398 Surrogate Standard: STD29108
 CCV: STD2929205 LCS: STD28981 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285327; WG285270

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	14M08923	RINSE	NA	1	1		10/17/08 10:17
2	14M08924	RINSE	NA				10/17/08 11:02
3	14M08925	WG285269-01 50ng BFB	NA	1	1	STD29166	10/17/08 11:39
4	14M08926	WG285269-02 20ug/L 1,4-DIOXANE STD	NA	1	1	STD28974	10/17/08 12:05
5	14M08927	WG285270-01 VBLK1017 BLANK 1,4-DIOX	NA	1	1		10/17/08 12:49
6	14M08928	WG285270-01 VBLK1017 BLANK 1,4-DIOX	NA	1	1		10/17/08 13:34
7	14M08929	WG285270-02 10ug/L LCS 1,4-DIOXANE	NA	1	1	STD28975	10/17/08 14:18
8	14M08930	WG285270-03 10ug/L LCSD 1,4-DIOXANE	NA	1	1	STD28975	10/17/08 15:02
9	14M08931	L08100156-02 A 826-DIOXANE	NA	1	1		10/17/08 15:46
10	14M08932	L08100156-01 A 826-DIOXANE	NA	1	1		10/17/08 16:30
11	14M08933	WG285325-01 50ng BFB	NA	1	1	STD29166	10/17/08 17:04
12	14M08934	WG285325-01 50ng BFB	NA	1	1	STD29166	10/17/08 17:23
13	14M08935	WG285325-02 50ug/L STD 8260	NA	1	1	STD29205	10/17/08 17:47
14	14M08936	WG285327-01 VBLK1017 BLANK 8260	NA	1	1		10/17/08 18:18
15	14M08937	WG285325-01 50ug/L STD 8260	NA	1	1	STD29205	10/17/08 18:57
16	14M08938	WG285327-01 VBLK1017 BLANK 8260	NA	1	1		10/17/08 19:31
17	14M08939	WG285327-02 20ug/L LCS 8260	NA	1	1	STD28981	10/17/08 20:03
18	14M08940	WG285327-01 VBLK1017 BLANK 8260	NA	1	1		10/17/08 20:34
19	14M08941	L08100329-05 A 826-SPE	<2	1	1		10/17/08 21:05
20	14M08942	L08100329-08 A 826-SPE	<2	1	1		10/17/08 21:35
21	14M08943	L08100329-09 A 826-SPE	<2	1	1		10/17/08 22:05
22	14M08944	L08100329-12 B 826-SPE	<2	1	1		10/17/08 22:35
23	14M08945	L08100329-17 C 826-SPE	<2	1	1		10/17/08 23:05
24	14M08946	L08100327-01 A 826-SPE	<2	1	1		10/17/08 23:36
25	14M08947	L08100327-02 A 826-SPE	<2	1	1		10/18/08 00:06
26	14M08948	L08100261-23 A 826-SPE	<2	1	1		10/18/08 00:36
27	14M08949	L08100261-30 A 826-SPE	<2	1	1		10/18/08 01:06
28	14M08950	L08100261-27 A 826-SPE	<2	1	1		10/18/08 01:36
29	14M08951	L08100261-36 A 826-SPE	5	1	1		10/18/08 02:06
30	14M08952	L08100263-09 B 826-LOW	<2	1	1		10/18/08 02:36
31	14M08953	WG285327-03 20ug/L LCSD 8206	NA	1	1	STD28981	10/18/08 03:07
32	14M08954	RINSE	NA	1	1		10/18/08 03:37
33	14M08955	RINSE	NA	1	1		10/18/08 04:07
34	14M08956	WG285327-04 624 BLANK	NA	2	1		10/18/08 04:37

Approved: October 23, 2008

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Aseli Bucina



Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS14 Dataset: 101708
 Analyst1: MDA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26297

Internal Standard: STD29398 Surrogate Standard: STD29108
 CCV: STD2929205 LCS: STD28981 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG285327; WG285270

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	14M08957	L08100191-46 C 624-SPE	<2	2	1		10/18/08 05:07
36	14M08958	L08100191-47 B 624-SPE	<2	2	1		10/18/08 05:38
37	14M08959	L08100191-48 B 624-SPE	<2	2	1		10/18/08 06:08
38	14M08960	L08100191-49 B 624-SPE	<2	2	1		10/18/08 06:38
39	14M08961	L08100191-50 A 624-SPE	<2	2	1		10/18/08 07:08
40	14M08962	L08100191-51 A 624-SPE	<2	2	1		10/18/08 07:38
41	14M08963	L08100394-01 A 624-SPE4	7	2	1		10/18/08 08:09

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11	X			
File ID: 14M08933				
Tune failed. DNR.				
13	X			
File ID: 14M08935				
DNR.				
14	X		Carry-over contamination	
File ID: 14M08936				
dnr.				
16	X	1	Carry-over contamination	
File ID: 14M08938				
DNR.				

Approved: October 23, 2008

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Alexis Bucina



Microbac Laboratories Inc.

Data Checklist

Date: 16-SEP-2008

Analyst: TMB

Analyst: NA

Method: 8260

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24277

Analytical Workgroups: WG282416

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	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:
17-SEP-2008

Tiffany Bailey

Secondary Reviewer:
17-SEP-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 17-SEP-2008

Analyst: TMB

Analyst: NA

Method: 8260

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24280

Analytical Workgroups: WG282545

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	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:
17-SEP-2008

Tiffany Bailey

Secondary Reviewer:
18-SEP-2008

Non

Microbac Laboratories Inc.

Data Checklist

Date: 25-SEP-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24414

Analytical Workgroups: ICAL

System Performance Check	
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	NA
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
Results Reporting/Data Qualifiers	NA
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CAA
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-SEP-2008

Cassio D. Augenstein

Secondary Reviewer:
26-SEP-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 26-SEP-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24433

Analytical Workgroups: WG283090, WG283267

System Performance Check	
BFB	X
Initial Calibration	X
Average RF	NA
Linear Reg or Higher Order Curve	NA
Second Source standard % Difference	NA
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	X
Blanks	NA
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	NA
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	CAA
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
29-SEP-2008

Cassio D. Augenstein

Secondary Reviewer:
29-SEP-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 10-OCT-2008

Analyst: MDA

Analyst: NA

Method: 8260

Instrument: HPMS14

Curve Workgroup: NA

Runlog ID: 24813

Analytical Workgroups: WG284610

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	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	X
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MDA
Secondary Reviewer	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
21-OCT-2008



Secondary Reviewer:

Microbac Laboratories Inc.

Data Checklist

Date: 13-OCT-2008

Analyst: TMB

Analyst: NA

Method: 8260

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24719

Analytical Workgroups: WG284683; WG284781

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	NA
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:
16-OCT-2008

Tiffany Bailey

Secondary Reviewer:
17-OCT-2008

Michael A. Bailey

Microbac Laboratories Inc.

Data Checklist

Date: 14-OCT-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24756

Analytical Workgroups: WG284799

System Performance Check	X
BFB	X
Initial Calibration	NA
Average RF	NA
Linear Reg or Higher Order Curve	NA
Second Source standard % Difference	NA
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	NA
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CAA
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:
17-OCT-2008

Cassio D. Augenstein

Secondary Reviewer:
20-OCT-2008

Leslie Bucina

Microbac Laboratories Inc.

Data Checklist

Date: 14-OCT-2008

Analyst: TMB

Analyst: NA

Method: 8260

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24723

Analytical Workgroups: WG284869

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	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:
16-OCT-2008

Tiffany Bailey

Secondary Reviewer:
17-OCT-2008

Non

Microbac Laboratories Inc.

Data Checklist

Date: 16-OCT-2008

Analyst: TMB

Analyst: NA

Method: 8260B

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24767

Analytical Workgroups: WG285091, WG285197

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	FJB
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:
17-OCT-2008



Secondary Reviewer:
19-OCT-2008



Microbac Laboratories Inc.

Data Checklist

Date: 17-OCT-2008

Analyst: TMB

Analyst: NA

Method: 8260

Instrument: HPMS10

Curve Workgroup: NA

Runlog ID: 24820

Analytical Workgroups: WG285281

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:
21-OCT-2008

Tiffany Bailey

Secondary Reviewer:
22-OCT-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 17-OCT-2008

Analyst: MDA

Analyst: NA

Method: 8260

Instrument: HPMS14

Curve Workgroup: NA

Runlog ID: 24849

Analytical Workgroups: WG285327; WG285270

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	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	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:
23-OCT-2008

Tiffany Bailey

Secondary Reviewer:
23-OCT-2008

Alexis Bucina

Analytical Method: 8260B

AAB#: WG284781

Login Number: L08100263

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
58DPT-04	10/01/08	10/09/08	10/14/08	14	13.0	10/14/08	14	13.0	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B
Login Number: L08100263

AAB#: WG284799

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
DUP-01	10/02/08	10/09/08	10/14/08	14	12.8	10/14/08	14	12.8	
58DPT-01	10/02/08	10/09/08	10/14/08	14	12.3	10/14/08	14	12.3	
58DPT-08	10/02/08	10/09/08	10/14/08	14	12.2	10/14/08	14	12.2	
58DPT-05	10/02/08	10/09/08	10/14/08	14	12.4	10/14/08	14	12.4	
58DPT-07	10/02/08	10/09/08	10/14/08	14	12.2	10/14/08	14	12.2	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG284869

Login Number: L08100263

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
58DPT-04	10/01/08	10/09/08	10/14/08	14	13.2	10/14/08	14	13.2	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG285197

Login Number: L08100263

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
18/24DPT-C	10/08/08	10/09/08	10/17/08	14	8.72	10/17/08	14	8.72	
TRIP BLANK	10/08/08	10/09/08	10/17/08	14	9.02	10/17/08	14	9.02	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG285281

Login Number: L08100263

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
18/24DPT-C	10/08/08	10/09/08	10/17/08	14	9.30	10/17/08	14	9.30	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG285327

Login Number: L08100263

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	10/08/08	10/09/08	10/18/08	14	10.1	10/18/08	14	10.1	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L08100263
Instrument Id: HPMS10
Workgroup (AAB#): WG284869

Method: 8260
CAL ID: HPMS10 - 16-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-04	10.0	DL01	97.5	96.6	<u>118</u>	110
WG284869-01	1.00	01	97.7	94.8	114	110
WG284869-02	1.00	01	97.0	96.7	115	<u>111</u>

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: L08100263
Instrument Id: HPMS6
Workgroup (AAB#): WG284799

Method: 8260
CAL ID: HPMS6 - 25-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-01	1.00	01	84.2	100	111	98.9
L08100263-02	1.00	01	85.3	102	111	97.3
L08100263-03	1.00	01	88.0	101	112	97.6
L08100263-05	1.00	01	86.2	99.7	113	98.9
L08100263-07	1.00	01	88.9	100	110	98.3
WG284799-01	1.00	01	81.2	95.4	108	99.1
WG284799-02	1.00	01	81.2	99.3	109	97.8
WG284799-03	1.00	01	79.3	95.8	109	98.2
WG284799-04	1.00	01	90.2	103	109	96.0

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: L08100263
Instrument Id: HPMS10
Workgroup (AAB#): WG284781

Method: 8260
CAL ID: HPMS10 - 16-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-04	1.00	01	103	99.5	114	108
WG284781-01	1.00	01	86.9	91.5	115	108
WG284781-02	1.00	01	89.8	93.8	112	110
WG284781-03	1.00	01	89.3	92.9	114	109

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: L08100263
Instrument Id: HPMS10
Workgroup (AAB#): WG285281

Method: 8260
CAL ID: HPMS10 - 16-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-06	50.0	DL01	96.9	95.9	112	<u>112</u>
WG285281-01	1.00	01	102	99.0	113	110
WG285281-02	1.00	01	99.6	97.9	111	<u>112</u>
WG285281-03	1.00	01	94.3	97.5	115	<u>114</u>

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: L08100263
Instrument Id: HPMS10
Workgroup (AAB#): WG285197

Method: 8260
CAL ID: HPMS10 - 16-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-06	1.00	01	<u>121</u>	108	115	<u>111</u>
L08100263-09	1.00	01	<u>121</u>	108	114	<u>112</u>
WG285197-01	1.00	01	118	108	113	109
WG285197-02	1.00	01	113	105	111	<u>114</u>

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: L08100263
Instrument Id: HPMS14
Workgroup (AAB#): WG285327

Method: 8260
CAL ID: HPMS14 - 11-OCT-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100263-09	1.00	02	111	97.3	99.6	101
WG285327-01	1.00	01	106	102	98.3	102
WG285327-02	1.00	01	101	94.7	97.0	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

METHOD BLANK SUMMARY

Login Number: <u>L08100263</u>	Work Group: <u>WG284781</u>
Blank File ID: <u>10M67736</u>	Blank Sample ID: <u>WG284781-01</u>
Prep Date: <u>10/13/08 22:43</u>	Instrument ID: <u>HPMS10</u>
Analyzed Date: <u>10/13/08 22:43</u>	Method: <u>8260B</u>
Analyst: <u>TMB</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG284781-02	10M67737	10/13/08 23:14	01
LCS2	WG284781-03	10M67739	10/14/08 00:15	01
58DPT-04	L08100263-04	10M67756	10/14/08 08:57	01

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



METHOD BLANK SUMMARY

Login Number: <u>L08100263</u>	Work Group: <u>WG284869</u>
Blank File ID: <u>10M67765</u>	Blank Sample ID: <u>WG284869-01</u>
Prep Date: <u>10/14/08 13:57</u>	Instrument ID: <u>HPMS10</u>
Analyzed Date: <u>10/14/08 13:57</u>	Method: <u>8260B</u>
Analyst: <u>TMB</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG284869-02	10M67766	10/14/08 14:27	01
58DPT-04	L08100263-04	10M67767	10/14/08 14:58	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



METHOD BLANK SUMMARY

Login Number: <u>L08100263</u>	Work Group: <u>WG285197</u>
Blank File ID: <u>10M67862</u>	Blank Sample ID: <u>WG285197-01</u>
Prep Date: <u>10/16/08 22:57</u>	Instrument ID: <u>HPMS10</u>
Analyzed Date: <u>10/16/08 22:57</u>	Method: <u>8260B</u>
Analyst: <u>TMB</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG285197-02	10M67863	10/16/08 23:27	01
TRIP BLANK	L08100263-09	10M67865	10/17/08 00:28	01
18/24DPT-C	L08100263-06	10M67868	10/17/08 02:00	01

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



METHOD BLANK SUMMARY

Login Number:	<u>L08100263</u>	Work Group:	<u>WG285281</u>
Blank File ID:	<u>10M67891</u>	Blank Sample ID:	<u>WG285281-01</u>
Prep Date:	<u>10/17/08 14:25</u>	Instrument ID:	<u>HPMS10</u>
Analyzed Date:	<u>10/17/08 14:25</u>	Method:	<u>8260B</u>
Analyst:	<u>TMB</u>		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG285281-02	10M67892	10/17/08 14:56	01
LCS2	WG285281-03	10M67893	10/17/08 15:27	01
18/24DPT-C	L08100263-06	10M67894	10/17/08 15:57	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



METHOD BLANK SUMMARY

Login Number: <u>L08100263</u>	Work Group: <u>WG285327</u>
Blank File ID: <u>14M08940</u>	Blank Sample ID: <u>WG285327-01</u>
Prep Date: <u>10/17/08 20:34</u>	Instrument ID: <u>HPMS14</u>
Analyzed Date: <u>10/17/08 20:34</u>	Method: <u>8260B</u>
Analyst: <u>MDA</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG285327-02	14M08939	10/17/08 20:03	01
TRIP BLANK	L08100263-09	14M08952	10/18/08 02:36	02

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



METHOD BLANK SUMMARY

Login Number: L08100263
Blank File ID: 6M78777
Prep Date: 10/14/08 09:28
Analyzed Date: 10/14/08 09:28
Analyst: CAA

Work Group: WG284799
Blank Sample ID: WG284799-01
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	WG284799-02	6M78778	10/14/08 10:01	01
LCS2	WG284799-03	6M78779	10/14/08 10:34	01
58DPT-08	L08100263-01	6M78791	10/14/08 17:10	01
58DPT-01	L08100263-02	6M78792	10/14/08 17:43	01
58DPT-07	L08100263-03	6M78793	10/14/08 18:17	01
58DPT-05	L08100263-05	6M78794	10/14/08 18:50	01
DUP-01	L08100263-07	6M78795	10/14/08 19:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 1229648
Report generated 10/23/2008 13:36



Login Number: L08100263 Prep Date: 10/13/08 22:43 Sample ID: WG284781-01
Instrument ID: HPMS10 Run Date: 10/13/08 22:43 Prep Method: 5030B
File ID: 10M67736 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284781 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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: 1225397

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Login Number: L08100263 Prep Date: 10/13/08 22:43 Sample ID: WG284781-01
Instrument ID: HPMS10 Run Date: 10/13/08 22:43 Prep Method: 5030B
File ID: 10M67736 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284781 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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	91.5	86 - 118	PASS
1,2-Dichloroethane-d4	86.9	80 - 120	PASS
Toluene-d8	108	88 - 110	PASS
4-Bromofluorobenzene	115	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: 1225397
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Login Number: L08100263 Prep Date: 10/14/08 13:57 Sample ID: WG284869-01
Instrument ID: HPMS10 Run Date: 10/14/08 13:57 Prep Method: 5030B
File ID: 10M67765 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284869 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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: 1225397

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Login Number: L08100263 Prep Date: 10/14/08 13:57 Sample ID: WG284869-01
Instrument ID: HPMS10 Run Date: 10/14/08 13:57 Prep Method: 5030B
File ID: 10M67765 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284869 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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	0.500	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	94.8	86 - 118	PASS
1,2-Dichloroethane-d4	97.7	80 - 120	PASS
Toluene-d8	110	88 - 110	PASS
4-Bromofluorobenzene	114	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
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Login Number: L08100263 Prep Date: 10/16/08 22:57 Sample ID: WG285197-01
Instrument ID: HPMS10 Run Date: 10/16/08 22:57 Prep Method: 5030B
File ID: 10M67862 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285197 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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: 1225397

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Login Number: L08100263 Prep Date: 10/16/08 22:57 Sample ID: WG285197-01
Instrument ID: HPMS10 Run Date: 10/16/08 22:57 Prep Method: 5030B
File ID: 10M67862 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285197 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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	0.390	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	108	86 - 118	PASS
1,2-Dichloroethane-d4	118	80 - 120	PASS
Toluene-d8	109	88 - 110	PASS
4-Bromofluorobenzene	113	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: 1225397

23-OCT-2008 13:36



Login Number: L08100263 Prep Date: 10/17/08 14:25 Sample ID: WG285281-01
Instrument ID: HPMS10 Run Date: 10/17/08 14:25 Prep Method: 5030B
File ID: 10M67891 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285281 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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: 1225397

23-OCT-2008 13:36



Login Number: L08100263 Prep Date: 10/17/08 14:25 Sample ID: WG285281-01
Instrument ID: HPMS10 Run Date: 10/17/08 14:25 Prep Method: 5030B
File ID: 10M67891 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285281 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS10 - 16-SEP-08

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	0.400	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	99.0	86 - 118	PASS
1,2-Dichloroethane-d4	102	80 - 120	PASS
Toluene-d8	110	88 - 110	PASS
4-Bromofluorobenzene	113	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: 1225397

23-OCT-2008 13:36



Login Number: L08100263 Prep Date: 10/17/08 20:34 Sample ID: WG285327-01
Instrument ID: HPMS14 Run Date: 10/17/08 20:34 Prep Method: 5030B
File ID: 14M08940 Analyst: MDA Method: 8260B
Workgroup (AAB#): WG285327 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS14 - 11-OCT-08

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	3.43	1	*
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	0.336	1	J
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: 1225397

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Login Number: L08100263 Prep Date: 10/17/08 20:34 Sample ID: WG285327-01
Instrument ID: HPMS14 Run Date: 10/17/08 20:34 Prep Method: 5030B
File ID: 14M08940 Analyst: MDA Method: 8260B
Workgroup (AAB#): WG285327 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS14 - 11-OCT-08

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	0.901	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	0.378	1	J
1,2,4-Trichlorobenzene	0.200	1.00	0.339	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	102	86 - 118	PASS
1,2-Dichloroethane-d4	106	80 - 120	PASS
Toluene-d8	102	88 - 110	PASS
4-Bromofluorobenzene	98.3	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: 1225397

23-OCT-2008 13:36



Login Number: L08100263 Prep Date: 10/14/08 09:28 Sample ID: WG284799-01
Instrument ID: HPMS6 Run Date: 10/14/08 09:28 Prep Method: 5030B
File ID: 6M78777 Analyst: CAA Method: 8260B
Workgroup (AAB#): WG284799 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 25-SEP-08

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: 1225397

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Login Number: L08100263 Prep Date: 10/14/08 09:28 Sample ID: WG284799-01
Instrument ID: HPMS6 Run Date: 10/14/08 09:28 Prep Method: 5030B
File ID: 6M78777 Analyst: CAA Method: 8260B
Workgroup (AAB#): WG284799 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 25-SEP-08

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	95.4	86 - 118	PASS
1,2-Dichloroethane-d4	81.2	80 - 120	PASS
Toluene-d8	99.1	88 - 110	PASS
4-Bromofluorobenzene	108	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: 1225397
23-OCT-2008 13:36



Login Number: L08100263 Run Date: 10/14/2008 Sample ID: WG284869-02
Instrument ID: HPMS10 Run Time: 14:27 Prep Method: 5030B
File ID: 10M67766 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284869 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS10 - 16-SEP-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Acetone	20.0	21.6	108	40	-	142	
Benzene	20.0	19.2	96.2	80	-	121	
Bromobenzene	20.0	19.8	99.1	80	-	120	
Bromochloromethane	20.0	18.0	89.9	65	-	130	
Bromodichloromethane	20.0	18.9	94.3	80	-	131	
Bromoform	20.0	16.0	79.9	70	-	130	
Bromomethane	20.0	17.6	87.9	30	-	145	
2-Butanone	20.0	21.8	109	30	-	150	
n-Butylbenzene	20.0	23.0	115	80	-	131	
sec-Butylbenzene	20.0	22.8	114	80	-	127	
tert-Butylbenzene	20.0	21.6	108	80	-	126	
Carbon disulfide	20.0	18.5	92.3	58	-	138	
Carbon tetrachloride	20.0	18.4	92.2	65	-	140	
Chlorobenzene	20.0	20.1	100	80	-	120	
Chlorodibromomethane	20.0	19.6	98.2	60	-	135	
Chloroethane	20.0	23.4	117	60	-	135	
2-Chloroethyl vinyl ether	20.0	16.6	82.9	58	-	151	
Chloroform	20.0	18.2	90.9	80	-	125	
Chloromethane	20.0	17.0	85.2	40	-	125	
2-Chlorotoluene	20.0	24.4	122	80	-	127	
4-Chlorotoluene	20.0	19.7	98.5	80	-	126	
1,2-Dibromo-3-chloropropane	20.0	18.1	90.6	50	-	130	
1,2-Dibromoethane	20.0	19.9	99.7	80	-	125	
Dibromomethane	20.0	19.2	95.8	75	-	125	
1,2-Dichlorobenzene	20.0	20.8	104	80	-	125	
1,3-Dichlorobenzene	20.0	20.7	104	80	-	120	
1,4-Dichlorobenzene	20.0	20.2	101	80	-	120	
Dichlorodifluoromethane	20.0	24.2	121	50	-	133	
1,1-Dichloroethane	20.0	19.7	98.4	80	-	125	
1,2-Dichloroethane	20.0	19.6	97.8	80	-	129	
1,1-Dichloroethene	20.0	17.6	88.2	80	-	132	
cis-1,2-Dichloroethene	20.0	19.1	95.6	70	-	125	
trans-1,2-Dichloroethene	20.0	17.8	89.1	80	-	127	
1,2-Dichloropropane	20.0	19.8	98.8	80	-	120	
1,3-Dichloropropane	20.0	21.1	105	80	-	120	
2,2-Dichloropropane	20.0	18.7	93.3	80	-	133	
cis-1,3-Dichloropropene	20.0	18.0	89.9	70	-	130	
trans-1,3-Dichloropropene	20.0	18.3	91.4	80	-	130	
1,1-Dichloropropene	20.0	18.6	92.8	75	-	130	
Ethylbenzene	20.0	20.9	105	80	-	122	
2-Hexanone	20.0	21.7	109	55	-	130	

LCS - Modified 03/06/2008
PDF File ID: 1223807
Report generated: 10/23/2008 14:26



Login Number: L08100263 Run Date: 10/14/2008 Sample ID: WG284869-02
Instrument ID: HPMS10 Run Time: 14:27 Prep Method: 5030B
File ID: 10M67766 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG284869 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS10 - 16-SEP-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Hexachlorobutadiene	20.0	21.9	110	72	-	132	
Isopropylbenzene	20.0	18.4	92.1	80	-	122	
p-Isopropyltoluene	20.0	21.2	106	80	-	122	
4-Methyl-2-pentanone	20.0	17.7	88.7	64	-	140	
Methylene chloride	20.0	18.7	93.3	80	-	123	
Naphthalene	20.0	21.8	109	59	-	149	
n-Propylbenzene	20.0	23.1	115	80	-	129	
Styrene	20.0	21.0	105	80	-	123	
1,1,1,2-Tetrachloroethane	20.0	20.4	102	80	-	130	
1,1,2,2-Tetrachloroethane	20.0	25.2	126	79	-	125	*
Tetrachloroethene	20.0	19.3	96.7	80	-	124	
Toluene	20.0	21.3	107	80	-	124	
1,2,3-Trichlorobenzene	20.0	21.8	109	55	-	140	
1,2,4-Trichlorobenzene	20.0	20.3	101	65	-	135	
1,1,1-Trichloroethane	20.0	17.6	87.8	80	-	134	
1,1,2-Trichloroethane	20.0	22.0	110	80	-	125	
Trichloroethene	20.0	16.8	83.8	80	-	122	
Trichlorofluoromethane	20.0	19.6	98.2	62	-	151	
1,2,3-Trichloropropane	20.0	21.9	109	75	-	125	
1,2,4-Trimethylbenzene	20.0	22.3	112	80	-	125	
1,3,5-Trimethylbenzene	20.0	22.3	111	80	-	127	
Vinyl acetate	20.0	15.6	77.8	10	-	150	
Vinyl chloride	20.0	22.8	114	65	-	140	
o-Xylene	20.0	20.8	104	80	-	122	
m-,p-Xylene	40.0	42.0	105	80	-	122	

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	96.7	86	-	118	PASS
1,2-Dichloroethane-d4	97.0	80	-	120	PASS
Toluene-d8	111	88	-	110	FAIL
4-Bromofluorobenzene	115	86	-	115	PASS

* FAILS %REC LIMIT

Login Number: L08100263 Run Date: 10/16/2008 Sample ID: WG285197-02
Instrument ID: HPMS10 Run Time: 23:27 Prep Method: 5030B
File ID: 10M67863 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285197 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS10 - 16-SEP-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Acetone	20.0	22.3	111	40	-	142	
Benzene	20.0	18.5	92.5	80	-	121	
Bromobenzene	20.0	18.8	94.2	80	-	120	
Bromochloromethane	20.0	17.0	85.0	65	-	130	
Bromodichloromethane	20.0	19.3	96.3	80	-	131	
Bromoform	20.0	16.9	84.4	70	-	130	
Bromomethane	20.0	15.0	74.9	30	-	145	
2-Butanone	20.0	23.0	115	30	-	150	
n-Butylbenzene	20.0	23.3	117	80	-	131	
sec-Butylbenzene	20.0	22.4	112	80	-	127	
tert-Butylbenzene	20.0	21.1	105	80	-	126	
Carbon disulfide	20.0	17.5	87.6	58	-	138	
Carbon tetrachloride	20.0	19.9	99.5	65	-	140	
Chlorobenzene	20.0	20.2	101	80	-	120	
Chlorodibromomethane	20.0	20.1	101	60	-	135	
Chloroethane	20.0	20.3	102	60	-	135	
2-Chloroethyl vinyl ether	20.0	15.7	78.3	58	-	151	
Chloroform	20.0	18.8	93.9	80	-	125	
Chloromethane	20.0	14.6	73.1	40	-	125	
2-Chlorotoluene	20.0	23.6	118	80	-	127	
4-Chlorotoluene	20.0	20.1	100	80	-	126	
1,2-Dibromo-3-chloropropane	20.0	17.0	84.8	50	-	130	
1,2-Dibromoethane	20.0	19.6	97.8	80	-	125	
Dibromomethane	20.0	19.4	97.1	75	-	125	
1,2-Dichlorobenzene	20.0	20.5	103	80	-	125	
1,3-Dichlorobenzene	20.0	20.3	101	80	-	120	
1,4-Dichlorobenzene	20.0	20.3	102	80	-	120	
Dichlorodifluoromethane	20.0	15.6	77.8	50	-	133	
1,1-Dichloroethane	20.0	20.2	101	80	-	125	
1,2-Dichloroethane	20.0	21.4	107	80	-	129	
1,1-Dichloroethene	20.0	15.6	77.8	80	-	132	*
cis-1,2-Dichloroethene	20.0	17.9	89.6	70	-	125	
trans-1,2-Dichloroethene	20.0	16.2	81.1	80	-	127	
1,2-Dichloropropane	20.0	19.5	97.7	80	-	120	
1,3-Dichloropropane	20.0	21.2	106	80	-	120	
2,2-Dichloropropane	20.0	18.6	92.9	80	-	133	
cis-1,3-Dichloropropene	20.0	16.9	84.4	70	-	130	
trans-1,3-Dichloropropene	20.0	18.4	92.2	80	-	130	
1,1-Dichloropropene	20.0	17.8	88.8	75	-	130	
Ethylbenzene	20.0	20.9	105	80	-	122	
2-Hexanone	20.0	22.5	112	55	-	130	

LCS - Modified 03/06/2008
PDF File ID: 1223807
Report generated: 10/23/2008 14:26



Login Number: L08100263 Run Date: 10/16/2008 Sample ID: WG285197-02
Instrument ID: HPMS10 Run Time: 23:27 Prep Method: 5030B
File ID: 10M67863 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG285197 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS10 - 16-SEP-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Hexachlorobutadiene	20.0	21.5	108	72	-	132	
Isopropylbenzene	20.0	18.2	91.0	80	-	122	
p-Isopropyltoluene	20.0	20.7	103	80	-	122	
4-Methyl-2-pentanone	20.0	18.1	90.4	64	-	140	
Methylene chloride	20.0	17.8	89.2	80	-	123	
Naphthalene	20.0	20.4	102	59	-	149	
n-Propylbenzene	20.0	22.9	115	80	-	129	
Styrene	20.0	20.9	104	80	-	123	
1,1,1,2-Tetrachloroethane	20.0	21.0	105	80	-	130	
1,1,2,2-Tetrachloroethane	20.0	25.5	127	79	-	125	*
Tetrachloroethene	20.0	19.1	95.7	80	-	124	
Toluene	20.0	21.0	105	80	-	124	
1,2,3-Trichlorobenzene	20.0	20.8	104	55	-	140	
1,2,4-Trichlorobenzene	20.0	19.0	95.2	65	-	135	
1,1,1-Trichloroethane	20.0	18.5	92.4	80	-	134	
1,1,2-Trichloroethane	20.0	22.9	114	80	-	125	
Trichloroethene	20.0	15.6	77.8	80	-	122	*
Trichlorofluoromethane	20.0	20.0	100	62	-	151	
1,2,3-Trichloropropane	20.0	23.2	116	75	-	125	
1,2,4-Trimethylbenzene	20.0	22.6	113	80	-	125	
1,3,5-Trimethylbenzene	20.0	21.8	109	80	-	127	
Vinyl acetate	20.0	28.3	142	10	-	150	
Vinyl chloride	20.0	23.0	115	65	-	140	
o-Xylene	20.0	20.1	101	80	-	122	
m-,p-Xylene	40.0	41.7	104	80	-	122	

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	105	86	-	118	PASS
1,2-Dichloroethane-d4	113	80	-	120	PASS
Toluene-d8	114	88	-	110	FAIL
4-Bromofluorobenzene	111	86	-	115	PASS

* FAILS %REC LIMIT

Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285327-02
Instrument ID: HPMS14 Run Time: 20:03 Prep Method: 5030B
File ID: 14M08939 Analyst: MDA Method: 8260B
Workgroup (AAB#): WG285327 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS14 - 11-OCT-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Acetone	20.0	23.4	117	40	-	142	
Benzene	20.0	21.3	106	80	-	121	
Bromobenzene	20.0	20.3	101	80	-	120	
Bromochloromethane	20.0	21.5	107	65	-	130	
Bromodichloromethane	20.0	24.3	121	80	-	131	
Bromoform	20.0	23.6	118	70	-	130	
Bromomethane	20.0	15.8	79.1	30	-	145	
2-Butanone	20.0	22.2	111	30	-	150	
n-Butylbenzene	20.0	29.9	150	80	-	131	*
sec-Butylbenzene	20.0	24.0	120	80	-	127	
tert-Butylbenzene	20.0	22.7	113	80	-	126	
Carbon disulfide	20.0	17.4	87.0	58	-	138	
Carbon tetrachloride	20.0	22.1	110	65	-	140	
Chlorobenzene	20.0	22.5	112	80	-	120	
Chlorodibromomethane	20.0	24.2	121	60	-	135	
Chloroethane	20.0	21.6	108	60	-	135	
2-Chloroethyl vinyl ether	20.0	47.9	240	58	-	151	*
Chloroform	20.0	22.0	110	80	-	125	
Chloromethane	20.0	19.4	97.0	40	-	125	
2-Chlorotoluene	20.0	19.2	96.1	80	-	127	
4-Chlorotoluene	20.0	21.3	107	80	-	126	
1,2-Dibromo-3-chloropropane	20.0	22.4	112	50	-	130	
1,2-Dibromoethane	20.0	23.2	116	80	-	125	
Dibromomethane	20.0	23.5	118	75	-	125	
1,2-Dichlorobenzene	20.0	22.0	110	80	-	125	
1,3-Dichlorobenzene	20.0	21.9	109	80	-	120	
1,4-Dichlorobenzene	20.0	21.5	108	80	-	120	
Dichlorodifluoromethane	20.0	26.4	132	50	-	133	
1,1-Dichloroethane	20.0	21.3	107	80	-	125	
1,2-Dichloroethane	20.0	24.3	121	80	-	129	
1,1-Dichloroethene	20.0	20.5	102	80	-	132	
cis-1,2-Dichloroethene	20.0	20.7	104	70	-	125	
trans-1,2-Dichloroethene	20.0	19.9	99.6	80	-	127	
1,2-Dichloropropane	20.0	21.6	108	80	-	120	
1,3-Dichloropropane	20.0	23.1	115	80	-	120	
2,2-Dichloropropane	20.0	22.2	111	80	-	133	
cis-1,3-Dichloropropene	20.0	21.6	108	70	-	130	
trans-1,3-Dichloropropene	20.0	21.3	107	80	-	130	
1,1-Dichloropropene	20.0	22.1	111	75	-	130	
Ethylbenzene	20.0	22.8	114	80	-	122	
2-Hexanone	20.0	21.7	109	55	-	130	

LCS - Modified 03/06/2008
PDF File ID: 1223807
Report generated: 10/23/2008 14:26



Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285327-02
Instrument ID: HPMS14 Run Time: 20:03 Prep Method: 5030B
File ID: 14M08939 Analyst: MDA Method: 8260B
Workgroup (AAB#): WG285327 Matrix: Water Units: ug/L
QC Key: STD Lot#: STD29233 Cal ID: HPMS14 - 11-OCT-08

Analytes	Expected	Found	% Rec	LCS Limits			Q
Hexachlorobutadiene	20.0	27.6	138	72	-	132	*
Isopropylbenzene	20.0	20.6	103	80	-	122	
p-Isopropyltoluene	20.0	25.7	129	80	-	122	*
4-Methyl-2-pentanone	20.0	21.0	105	64	-	140	
Methylene chloride	20.0	20.4	102	80	-	123	
Naphthalene	20.0	33.4	167	59	-	149	*
n-Propylbenzene	20.0	23.0	115	80	-	129	
Styrene	20.0	23.1	115	80	-	123	
1,1,1,2-Tetrachloroethane	20.0	25.0	125	80	-	130	
1,1,2,2-Tetrachloroethane	20.0	21.4	107	79	-	125	
Tetrachloroethene	20.0	22.8	114	80	-	124	
Toluene	20.0	21.3	106	80	-	124	
1,2,3-Trichlorobenzene	20.0	30.0	150	55	-	140	*
1,2,4-Trichlorobenzene	20.0	30.1	151	65	-	135	*
1,1,1-Trichloroethane	20.0	23.8	119	80	-	134	
1,1,2-Trichloroethane	20.0	23.5	117	80	-	125	
Trichloroethene	20.0	21.4	107	80	-	122	
Trichlorofluoromethane	20.0	21.4	107	62	-	151	
1,2,3-Trichloropropane	20.0	21.9	109	75	-	125	
1,2,4-Trimethylbenzene	20.0	28.2	141	80	-	125	*
1,3,5-Trimethylbenzene	20.0	26.6	133	80	-	127	*
Vinyl acetate	20.0	24.7	123	10	-	150	
Vinyl chloride	20.0	26.4	132	65	-	140	
o-Xylene	20.0	23.2	116	80	-	122	
m-,p-Xylene	40.0	47.9	120	80	-	122	

Surrogates	% Recovery	Surrogate Limits			Qualifier
Dibromofluoromethane	94.7	86	-	118	PASS
1,2-Dichloroethane-d4	101	80	-	120	PASS
Toluene-d8	101	88	-	110	PASS
4-Bromofluorobenzene	97.0	86	-	115	PASS

* FAILS %REC LIMIT

Login Number: L08100263 Analyst: TMB Prep Method: 5030B
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG284781 Units: ug/L
QC Key: STD Lot #: STD29154

Sample ID: WG284781-02 LCS File ID: 10M67737 Run Date: 10/13/2008 23:14
Sample ID: WG284781-03 LCS2 File ID: 10M67739 Run Date: 10/14/2008 00:15

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	20.7	104	20.0	21.2	106	2.39	40 - 142	20	
Benzene	20.0	18.3	91.4	20.0	18.7	93.5	2.22	80 - 121	20	
Bromobenzene	20.0	19.5	97.3	20.0	20.1	100	3.09	80 - 120	20	
Bromochloromethane	20.0	18.0	90.0	20.0	17.6	88.1	2.16	65 - 130	20	
Bromodichloromethane	20.0	17.6	88.0	20.0	18.2	90.8	3.12	80 - 131	20	
Bromoform	20.0	16.4	81.8	20.0	16.4	81.9	0.135	70 - 130	20	
Bromomethane	20.0	12.4	62.2	20.0	13.7	68.5	9.51	30 - 145	20	
2-Butanone	20.0	22.7	113	20.0	22.1	111	2.54	30 - 150	20	
n-Butylbenzene	20.0	21.7	109	20.0	22.1	111	1.71	80 - 131	20	
sec-Butylbenzene	20.0	21.4	107	20.0	21.7	109	1.66	80 - 127	20	
tert-Butylbenzene	20.0	20.7	104	20.0	21.6	108	4.14	80 - 126	20	
Carbon disulfide	20.0	16.0	79.9	20.0	16.4	82.0	2.59	58 - 138	20	
Carbon tetrachloride	20.0	16.1	80.6	20.0	16.7	83.7	3.85	65 - 140	20	
Chlorobenzene	20.0	19.9	99.5	20.0	20.3	102	2.03	80 - 120	20	
Chlorodibromomethane	20.0	19.6	98.2	20.0	20.3	101	3.26	60 - 135	20	
Chloroethane	20.0	18.0	90.0	20.0	19.5	97.6	8.06	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	17.5	87.3	20.0	17.3	86.3	1.17	58 - 151	20	
Chloroform	20.0	17.0	85.2	20.0	17.5	87.4	2.51	80 - 125	20	
Chloromethane	20.0	16.5	82.6	20.0	17.0	85.2	2.99	40 - 125	20	
2-Chlorotoluene	20.0	22.9	114	20.0	23.3	116	1.68	80 - 127	20	
4-Chlorotoluene	20.0	19.1	95.5	20.0	19.8	99.0	3.66	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	20.4	102	20.0	19.8	98.9	3.14	50 - 130	20	
1,2-Dibromoethane	20.0	19.8	99.1	20.0	20.6	103	3.96	80 - 125	20	
Dibromomethane	20.0	18.5	92.7	20.0	18.7	93.5	0.940	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.6	103	20.0	21.1	106	2.44	80 - 125	20	
1,3-Dichlorobenzene	20.0	20.1	101	20.0	20.4	102	1.46	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.7	98.5	20.0	20.2	101	2.48	80 - 120	20	
Dichlorodifluoromethane	20.0	21.5	107	20.0	22.1	110	2.80	50 - 133	20	
1,1-Dichloroethane	20.0	18.8	93.8	20.0	19.3	96.5	2.79	80 - 125	20	
1,2-Dichloroethane	20.0	18.1	90.7	20.0	18.5	92.5	2.03	80 - 129	20	
1,1-Dichloroethene	20.0	17.1	85.3	20.0	17.2	86.1	1.03	80 - 132	20	
cis-1,2-Dichloroethene	20.0	18.1	90.6	20.0	18.3	91.3	0.784	70 - 125	20	
trans-1,2-Dichloroethene	20.0	16.7	83.7	20.0	17.3	86.7	3.54	80 - 127	20	
1,2-Dichloropropane	20.0	20.0	100	20.0	20.2	101	0.795	80 - 120	20	
1,3-Dichloropropane	20.0	21.6	108	20.0	21.9	110	1.63	80 - 120	20	
2,2-Dichloropropane	20.0	17.1	85.5	20.0	17.1	85.3	0.287	80 - 133	20	
cis-1,3-Dichloropropene	20.0	17.9	89.5	20.0	18.0	89.8	0.368	70 - 130	20	
trans-1,3-Dichloropropene	20.0	18.0	90.1	20.0	18.2	90.9	0.897	80 - 130	20	
1,1-Dichloropropene	20.0	17.2	86.0	20.0	17.2	86.0	0.0182	75 - 130	20	
Ethylbenzene	20.0	20.2	101	20.0	20.5	102	1.17	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1224127
Report generated: 10/23/2008 13:36



Login Number: L08100263 Analyst: TMB Prep Method: 5030B
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG284781 Units: ug/L
QC Key: STD Lot #: STD29154

Sample ID: WG284781-02 LCS File ID: 10M67737 Run Date: 10/13/2008 23:14
Sample ID: WG284781-03 LCS2 File ID: 10M67739 Run Date: 10/14/2008 00:15

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	23.4	117	20.0	22.4	112	4.56	55 - 130	20	
Hexachlorobutadiene	20.0	19.2	95.9	20.0	20.3	102	5.85	72 - 132	20	
Isopropylbenzene	20.0	17.8	88.9	20.0	18.0	90.2	1.42	80 - 122	20	
p-Isopropyltoluene	20.0	20.0	99.8	20.0	20.5	103	2.87	80 - 122	20	
4-Methyl-2-pentanone	20.0	19.4	97.0	20.0	19.0	94.8	2.29	64 - 140	20	
Methylene chloride	20.0	18.6	93.2	20.0	19.0	95.2	2.10	80 - 123	20	
Naphthalene	20.0	23.5	118	20.0	23.7	119	1.04	59 - 149	20	
n-Propylbenzene	20.0	22.0	110	20.0	22.4	112	2.00	80 - 129	20	
Styrene	20.0	20.8	104	20.0	21.3	106	2.59	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	19.6	97.9	20.0	20.2	101	3.28	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	25.9	129	20.0	26.5	132	2.20	79 - 125	20	*
Tetrachloroethene	20.0	18.3	91.3	20.0	18.9	94.3	3.18	80 - 124	20	
Toluene	20.0	20.8	104	20.0	21.0	105	0.893	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	21.5	107	20.0	22.1	110	2.86	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	20.6	103	20.0	20.8	104	0.882	65 - 135	20	
1,1,1-Trichloroethane	20.0	16.1	80.4	20.0	16.5	82.7	2.79	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.6	108	20.0	22.2	111	2.74	80 - 125	20	
Trichloroethene	20.0	15.7	78.6	20.0	16.3	81.5	3.61	80 - 122	20	*
Trichlorofluoromethane	20.0	17.2	85.9	20.0	17.7	88.3	2.74	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.9	110	20.0	22.2	111	1.16	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.4	107	20.0	21.8	109	2.11	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.1	105	20.0	21.6	108	2.48	80 - 127	20	
Vinyl acetate	20.0	17.5	87.4	20.0	17.7	88.3	1.09	10 - 150	20	
Vinyl chloride	20.0	19.7	98.6	20.0	20.3	101	2.80	65 - 140	20	
o-Xylene	20.0	20.5	102	20.0	20.9	104	1.81	80 - 122	20	
m-, p-Xylene	40.0	40.8	102	40.0	41.0	102	0.400	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	93.8	92.9	86 - 118	PASS
1,2-Dichloroethane-d4	89.8	89.3	80 - 120	PASS
Toluene-d8	110	109	88 - 110	PASS
4-Bromofluorobenzene	112	114	86 - 115	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

Login Number: L08100263 Analyst: CAA Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG284799 Units: ug/L
QC Key: STD Lot #: STD29233

Sample ID: WG284799-02 LCS File ID: 6M78778 Run Date: 10/14/2008 10:01
Sample ID: WG284799-03 LCS2 File ID: 6M78779 Run Date: 10/14/2008 10:34

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	13.4	67.2	20.0	13.7	68.5	1.88	40 - 142	20	
Benzene	20.0	19.8	98.9	20.0	19.6	98.1	0.833	80 - 121	20	
Bromobenzene	20.0	22.9	115	20.0	22.4	112	2.46	80 - 120	20	
Bromochloromethane	20.0	22.0	110	20.0	22.2	111	0.990	65 - 130	20	
Bromodichloromethane	20.0	20.6	103	20.0	20.3	102	1.31	80 - 131	20	
Bromoform	20.0	18.0	90.2	20.0	18.2	90.8	0.639	70 - 130	20	
Bromomethane	20.0	18.1	90.3	20.0	19.7	98.3	8.40	30 - 145	20	
2-Butanone	20.0	17.1	85.5	20.0	18.4	91.8	7.08	30 - 150	20	
n-Butylbenzene	20.0	23.7	118	20.0	24.0	120	1.50	80 - 131	20	
sec-Butylbenzene	20.0	25.0	125	20.0	24.9	124	0.384	80 - 127	20	
tert-Butylbenzene	20.0	21.7	108	20.0	21.9	110	1.19	80 - 126	20	
Carbon disulfide	20.0	12.8	64.0	20.0	13.6	68.2	6.45	58 - 138	20	
Carbon tetrachloride	20.0	21.5	108	20.0	21.2	106	1.40	65 - 140	20	
Chlorobenzene	20.0	20.8	104	20.0	20.6	103	0.522	80 - 120	20	
Chlorodibromomethane	20.0	22.2	111	20.0	22.0	110	0.691	60 - 135	20	
Chloroethane	20.0	21.1	106	20.0	21.5	108	1.93	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	16.1	80.6	20.0	16.5	82.6	2.52	58 - 151	20	
Chloroform	20.0	20.5	102	20.0	19.7	98.4	4.03	80 - 125	20	
Chloromethane	20.0	14.4	72.0	20.0	14.7	73.4	1.99	40 - 125	20	
2-Chlorotoluene	20.0	22.7	113	20.0	22.4	112	1.40	80 - 127	20	
4-Chlorotoluene	20.0	22.5	113	20.0	22.7	114	0.785	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	20.4	102	20.0	21.1	106	3.67	50 - 130	20	
1,2-Dibromoethane	20.0	20.3	101	20.0	20.0	99.9	1.43	80 - 125	20	
Dibromomethane	20.0	19.8	99.0	20.0	19.6	98.1	0.905	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.7	104	20.0	21.1	106	1.81	80 - 125	20	
1,3-Dichlorobenzene	20.0	21.5	107	20.0	21.2	106	1.23	80 - 120	20	
1,4-Dichlorobenzene	20.0	20.5	102	20.0	20.7	104	1.34	80 - 120	20	
Dichlorodifluoromethane	20.0	26.5	132	20.0	25.1	125	5.45	50 - 133	20	
1,1-Dichloroethane	20.0	19.4	96.9	20.0	18.8	94.0	3.04	80 - 125	20	
1,2-Dichloroethane	20.0	17.7	88.4	20.0	17.4	86.9	1.72	80 - 129	20	
1,1-Dichloroethene	20.0	16.7	83.6	20.0	16.3	81.4	2.73	80 - 132	20	
cis-1,2-Dichloroethene	20.0	22.1	111	20.0	22.2	111	0.388	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.1	106	20.0	20.8	104	1.78	80 - 127	20	
1,2-Dichloropropane	20.0	19.1	95.4	20.0	18.7	93.5	2.06	80 - 120	20	
1,3-Dichloropropane	20.0	18.3	91.4	20.0	18.3	91.3	0.0762	80 - 120	20	
2,2-Dichloropropane	20.0	19.5	97.4	20.0	18.9	94.3	3.26	80 - 133	20	
cis-1,3-Dichloropropene	20.0	18.3	91.5	20.0	18.0	90.2	1.45	70 - 130	20	
trans-1,3-Dichloropropene	20.0	16.1	80.7	20.0	16.3	81.5	0.961	80 - 130	20	
1,1-Dichloropropene	20.0	17.7	88.6	20.0	17.2	85.8	3.29	75 - 130	20	
Ethylbenzene	20.0	21.4	107	20.0	21.1	105	1.59	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1224127
Report generated: 10/23/2008 13:36



Login Number: L08100263 Analyst: CAA Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG284799 Units: ug/L
QC Key: STD Lot #: STD29233

Sample ID: WG284799-02 LCS File ID: 6M78778 Run Date: 10/14/2008 10:01
Sample ID: WG284799-03 LCS2 File ID: 6M78779 Run Date: 10/14/2008 10:34

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	16.3	81.7	20.0	15.9	79.3	2.98	55 - 130	20	
Hexachlorobutadiene	20.0	21.7	108	20.0	22.2	111	2.32	72 - 132	20	
Isopropylbenzene	20.0	19.6	98.0	20.0	18.9	94.4	3.76	80 - 122	20	
p-Isopropyltoluene	20.0	24.4	122	20.0	24.7	124	1.07	80 - 122	20	*
4-Methyl-2-pentanone	20.0	17.6	88.2	20.0	17.7	88.6	0.385	64 - 140	20	
Methylene chloride	20.0	18.3	91.3	20.0	18.2	91.0	0.308	80 - 123	20	
Naphthalene	20.0	24.5	123	20.0	25.0	125	1.90	59 - 149	20	
n-Propylbenzene	20.0	24.3	122	20.0	23.9	119	2.00	80 - 129	20	
Styrene	20.0	21.9	109	20.0	21.1	105	3.86	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	21.3	106	20.0	21.3	106	0.0104	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	21.3	107	20.0	22.1	110	3.60	79 - 125	20	
Tetrachloroethene	20.0	18.6	93.2	20.0	18.5	92.3	0.930	80 - 124	20	
Toluene	20.0	19.6	98.1	20.0	19.8	98.8	0.664	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	19.5	97.3	20.0	19.2	96.1	1.21	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	21.7	109	20.0	21.8	109	0.575	65 - 135	20	
1,1,1-Trichloroethane	20.0	21.6	108	20.0	21.0	105	3.13	80 - 134	20	
1,1,2-Trichloroethane	20.0	20.4	102	20.0	20.7	103	1.64	80 - 125	20	
Trichloroethene	20.0	22.0	110	20.0	21.9	109	0.787	80 - 122	20	
Trichlorofluoromethane	20.0	19.7	98.6	20.0	19.3	96.5	2.21	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.5	108	20.0	21.6	108	0.231	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	24.4	122	20.0	24.6	123	0.821	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	24.1	121	20.0	24.5	122	1.40	80 - 127	20	
Vinyl acetate	20.0	11.2	56.2	20.0	11.5	57.4	2.05	10 - 150	20	
Vinyl chloride	20.0	22.9	115	20.0	22.9	115	0.0130	65 - 140	20	
o-Xylene	20.0	20.8	104	20.0	20.4	102	2.15	80 - 122	20	
m-, p-Xylene	40.0	43.8	109	40.0	41.5	104	5.31	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	99.3	95.8	86 - 118	PASS
1,2-Dichloroethane-d4	81.2	79.3	80 - 120	FAIL
Toluene-d8	97.8	98.2	88 - 110	PASS
4-Bromofluorobenzene	109	109	86 - 115	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1224127
Report generated: 10/23/2008 13:36



Login Number: L08100263 Analyst: TMB Prep Method: 5030B
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG285281 Units: ug/L
QC Key: STD Lot #: STD29233

Sample ID: WG285281-02 LCS File ID: 10M67892 Run Date: 10/17/2008 14:56
Sample ID: WG285281-03 LCS2 File ID: 10M67893 Run Date: 10/17/2008 15:27

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	20.4	102	20.0	20.3	101	0.740	40 - 142	20	
Benzene	20.0	17.9	89.3	20.0	17.9	89.6	0.388	80 - 121	20	
Bromobenzene	20.0	18.7	93.4	20.0	19.2	95.8	2.55	80 - 120	20	
Bromochloromethane	20.0	16.8	84.0	20.0	16.3	81.7	2.76	65 - 130	20	
Bromodichloromethane	20.0	17.6	88.1	20.0	17.3	86.3	2.11	80 - 131	20	
Bromoform	20.0	15.6	77.9	20.0	15.0	74.9	3.94	70 - 130	20	
Bromomethane	20.0	13.7	68.5	20.0	13.4	67.0	2.17	30 - 145	20	
2-Butanone	20.0	21.5	108	20.0	17.9	89.4	18.5	30 - 150	20	
n-Butylbenzene	20.0	22.0	110	20.0	22.9	114	4.08	80 - 131	20	
sec-Butylbenzene	20.0	21.7	108	20.0	22.7	114	4.85	80 - 127	20	
tert-Butylbenzene	20.0	20.5	103	20.0	21.4	107	4.27	80 - 126	20	
Carbon disulfide	20.0	17.2	86.2	20.0	17.7	88.4	2.63	58 - 138	20	
Carbon tetrachloride	20.0	16.9	84.3	20.0	17.2	86.2	2.26	65 - 140	20	
Chlorobenzene	20.0	19.7	98.3	20.0	19.5	97.3	1.02	80 - 120	20	
Chlorodibromomethane	20.0	18.9	94.5	20.0	18.5	92.3	2.43	60 - 135	20	
Chloroethane	20.0	20.2	101	20.0	20.4	102	0.926	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	16.1	80.4	20.0	15.9	79.3	1.34	58 - 151	20	
Chloroform	20.0	16.7	83.7	20.0	17.0	85.2	1.87	80 - 125	20	
Chloromethane	20.0	12.4	61.8	20.0	11.8	58.8	4.96	40 - 125	20	
2-Chlorotoluene	20.0	23.3	117	20.0	23.6	118	1.04	80 - 127	20	
4-Chlorotoluene	20.0	18.3	91.4	20.0	19.8	98.8	7.72	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	15.9	79.6	20.0	15.4	77.2	3.08	50 - 130	20	
1,2-Dibromoethane	20.0	19.4	97.2	20.0	19.1	95.5	1.70	80 - 125	20	
Dibromomethane	20.0	18.1	90.4	20.0	17.4	86.8	4.11	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.8	98.9	20.0	20.1	100	1.48	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.8	99.2	20.0	20.0	100	0.834	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.4	97.0	20.0	19.6	98.2	1.19	80 - 120	20	
Dichlorodifluoromethane	20.0	13.2	65.8	20.0	13.1	65.7	0.281	50 - 133	20	
1,1-Dichloroethane	20.0	18.8	93.9	20.0	18.9	94.5	0.634	80 - 125	20	
1,2-Dichloroethane	20.0	18.3	91.6	20.0	17.9	89.5	2.27	80 - 129	20	
1,1-Dichloroethene	20.0	15.7	78.4	20.0	16.4	81.8	4.13	80 - 132	20	*
cis-1,2-Dichloroethene	20.0	17.4	87.0	20.0	17.5	87.4	0.360	70 - 125	20	
trans-1,2-Dichloroethene	20.0	16.2	80.8	20.0	16.6	82.8	2.49	80 - 127	20	
1,2-Dichloropropane	20.0	19.2	95.9	20.0	19.1	95.7	0.235	80 - 120	20	
1,3-Dichloropropane	20.0	21.0	105	20.0	20.5	103	2.10	80 - 120	20	
2,2-Dichloropropane	20.0	16.1	80.4	20.0	17.2	86.2	6.95	80 - 133	20	
cis-1,3-Dichloropropene	20.0	16.5	82.4	20.0	17.2	85.8	3.96	70 - 130	20	
trans-1,3-Dichloropropene	20.0	17.1	85.5	20.0	17.4	86.8	1.50	80 - 130	20	
1,1-Dichloropropene	20.0	16.8	84.1	20.0	17.4	87.2	3.70	75 - 130	20	
Ethylbenzene	20.0	19.9	99.3	20.0	20.9	104	5.04	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1224127
Report generated: 10/23/2008 13:36



Login Number: L08100263 Analyst: TMB Prep Method: 5030B
Instrument ID: HPMS10 Matrix: Water Method: 8260B
Workgroup (AAB#): WG285281 Units: ug/L
QC Key: STD Lot #: STD29233

Sample ID: WG285281-02 LCS File ID: 10M67892 Run Date: 10/17/2008 14:56
Sample ID: WG285281-03 LCS2 File ID: 10M67893 Run Date: 10/17/2008 15:27

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	22.4	112	20.0	21.3	106	5.15	55 - 130	20	
Hexachlorobutadiene	20.0	20.3	102	20.0	20.5	103	0.853	72 - 132	20	
Isopropylbenzene	20.0	17.7	88.7	20.0	18.0	89.8	1.26	80 - 122	20	
p-Isopropyltoluene	20.0	20.0	99.9	20.0	20.8	104	4.19	80 - 122	20	
4-Methyl-2-pentanone	20.0	17.9	89.7	20.0	17.8	89.0	0.833	64 - 140	20	
Methylene chloride	20.0	17.9	89.7	20.0	17.9	89.4	0.355	80 - 123	20	
Naphthalene	20.0	19.7	98.3	20.0	19.8	98.9	0.539	59 - 149	20	
n-Propylbenzene	20.0	21.9	109	20.0	23.1	115	5.29	80 - 129	20	
Styrene	20.0	20.3	102	20.0	20.1	100	1.37	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	19.5	97.4	20.0	19.4	97.1	0.275	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	24.1	121	20.0	23.7	118	1.83	79 - 125	20	
Tetrachloroethene	20.0	18.5	92.7	20.0	19.0	95.1	2.54	80 - 124	20	
Toluene	20.0	20.4	102	20.0	20.7	103	1.48	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	20.0	100	20.0	19.5	97.5	2.44	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	18.6	93.1	20.0	19.0	94.8	1.82	65 - 135	20	
1,1,1-Trichloroethane	20.0	16.5	82.4	20.0	16.4	81.9	0.679	80 - 134	20	
1,1,2-Trichloroethane	20.0	21.6	108	20.0	20.7	104	3.94	80 - 125	20	
Trichloroethene	20.0	15.1	75.4	20.0	15.7	78.5	4.11	80 - 122	20	*
Trichlorofluoromethane	20.0	17.1	85.5	20.0	17.4	87.2	2.03	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.7	108	20.0	20.7	104	4.61	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	21.3	107	20.0	22.0	110	3.06	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	21.0	105	20.0	22.1	111	5.13	80 - 127	20	
Vinyl acetate	20.0	26.6	133	20.0	23.7	119	11.4	10 - 150	20	
Vinyl chloride	20.0	19.0	95.2	20.0	18.2	91.1	4.42	65 - 140	20	
o-Xylene	20.0	19.8	99.1	20.0	20.0	100	1.14	80 - 122	20	
m-, p-Xylene	40.0	40.1	100	40.0	40.7	102	1.45	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
Dibromofluoromethane	97.9	97.5	86 - 118	PASS
1,2-Dichloroethane-d4	99.6	94.3	80 - 120	PASS
Toluene-d8	112	114	88 - 110	FAIL
4-Bromofluorobenzene	111	115	86 - 115	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1224127
Report generated: 10/23/2008 13:36



BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG282416

Tune ID: WG282416-01
Run Date: 09/16/2008
Run Time: 16:58
File ID: 10M66905

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.7	9705	PASS
75.0	95.0	30.0	60.0	50.0	22366	PASS
95.0	95.0	100	100	100	44714	PASS
96.0	95.0	5.00	9.00	6.57	2937	PASS
173	174	0	2.00	1.11	447	PASS
174	95.0	50.0	100	89.7	40109	PASS
175	174	5.00	9.00	7.48	2999	PASS
176	174	95.0	101	100	40301	PASS
177	176	5.00	9.00	6.42	2586	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG282416-02	STD	01	09/16/2008 17:54	
WG282416-03	STD	01	09/16/2008 18:24	
WG282416-04	STD	02	09/16/2008 18:54	
WG282416-05	STD	01	09/16/2008 19:24	
WG282416-06	STD	02	09/16/2008 19:54	
WG282416-07	STD	01	09/16/2008 20:24	
WG282416-08	STD-CCV	01	09/16/2008 20:54	
WG282416-09	STD	01	09/16/2008 21:24	
WG282416-10	STD	01	09/16/2008 21:54	
WG282416-11	STD	01	09/16/2008 22:24	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG282544

Tune ID: WG282544-01
Run Date: 09/17/2008
Run Time: 13:03
File ID: 10M66924

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	22.5	9426	PASS
75.0	95.0	30.0	60.0	52.6	22057	PASS
95.0	95.0	100	100	100	41906	PASS
96.0	95.0	5.00	9.00	6.49	2721	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	79.1	33157	PASS
175	174	5.00	9.00	7.96	2639	PASS
176	174	95.0	101	99.9	33129	PASS
177	176	5.00	9.00	6.56	2172	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG282416-12	SSCV	01	09/17/2008 15:04	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG284780

Tune ID: WG284780-01
Run Date: 10/13/2008
Run Time: 21:09
File ID: 10M67733

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	26.3	7981	PASS
75.0	95.0	30.0	60.0	50.4	15304	PASS
95.0	95.0	100	100	100	30386	PASS
96.0	95.0	5.00	9.00	6.93	2106	PASS
173	174	0	2.00	0.426	102	PASS
174	95.0	50.0	100	78.8	23930	PASS
175	174	5.00	9.00	7.31	1750	PASS
176	174	95.0	101	98.9	23669	PASS
177	176	5.00	9.00	7.52	1779	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG284780-02	CCV	01	10/13/2008 21:37	
WG284781-01	BLANK	01	10/13/2008 22:43	
WG284781-02	LCS	01	10/13/2008 23:14	
WG284781-03	LCS2	01	10/14/2008 00:15	
L08100263-04	58DPT-04	01	10/14/2008 08:57	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG284867

Tune ID: WG284867-01
Run Date: 10/14/2008
Run Time: 12:30
File ID: 10M67762

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.1	11359	PASS
75.0	95.0	30.0	60.0	52.0	21776	PASS
95.0	95.0	100	100	100	41877	PASS
96.0	95.0	5.00	9.00	6.93	2900	PASS
173	174	0	2.00	0.443	141	PASS
174	95.0	50.0	100	76.1	31851	PASS
175	174	5.00	9.00	7.08	2254	PASS
176	174	95.0	101	95.8	30507	PASS
177	176	5.00	9.00	5.39	1644	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG284867-02	CCV	01	10/14/2008 12:56	
WG284869-01	BLANK	01	10/14/2008 13:57	
WG284869-02	LCS	01	10/14/2008 14:27	
L08100263-04	58DPT-04	DL01	10/14/2008 14:58	
WG284869-03	REF	01	10/14/2008 19:32	
WG284869-04	MS	01	10/14/2008 20:03	
WG284869-05	MSD	01	10/14/2008 20:33	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG285196

Tune ID: WG285196-01
Run Date: 10/16/2008
Run Time: 21:31
File ID: 10M67859

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	31.8	7291	PASS
75.0	95.0	30.0	60.0	56.7	12982	PASS
95.0	95.0	100	100	100	22903	PASS
96.0	95.0	5.00	9.00	6.75	1545	PASS
173	174	0	2.00	1.52	240	PASS
174	95.0	50.0	100	68.9	15791	PASS
175	174	5.00	9.00	6.26	989	PASS
176	174	95.0	101	97.5	15404	PASS
177	176	5.00	9.00	5.08	783	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG285196-02	CCV	01	10/16/2008 21:56	
WG285197-01	BLANK	01	10/16/2008 22:57	
WG285197-02	LCS	01	10/16/2008 23:27	
L08100263-09	TRIP BLANK	01	10/17/2008 00:28	
L08100263-06	18/24DPT-C	01	10/17/2008 02:00	
WG285197-03	REF	01	10/17/2008 06:06	
WG285197-04	MS	01	10/17/2008 06:36	
WG285197-05	MSD	01	10/17/2008 07:07	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS10
Analyst: TMB
Workgroup: WG285280

Tune ID: WG285280-01
Run Date: 10/17/2008
Run Time: 12:17
File ID: 10M67887

Cal ID: HPMS10 - 16-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	28.1	12380	PASS
75.0	95.0	30.0	60.0	51.0	22512	PASS
95.0	95.0	100	100	100	44120	PASS
96.0	95.0	5.00	9.00	6.69	2952	PASS
173	174	0	2.00	1.26	399	PASS
174	95.0	50.0	100	71.8	31680	PASS
175	174	5.00	9.00	6.72	2130	PASS
176	174	95.0	101	95.7	30332	PASS
177	176	5.00	9.00	6.69	2029	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG285280-02	CCV	01	10/17/2008 13:21	
WG285281-01	BLANK	01	10/17/2008 14:25	
WG285281-02	LCS	01	10/17/2008 14:56	
WG285281-03	LCS2	01	10/17/2008 15:27	
L08100263-06	18/24DPT-C	DL01	10/17/2008 15:57	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS14
Analyst: MDA
Workgroup: WG284610

Tune ID: WG284610-01
Run Date: 10/10/2008
Run Time: 16:05
File ID: 14M08687

Cal ID: HPMS14 - 11-OCT-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	18.4	1350	PASS
75.0	95.0	30.0	60.0	48.6	3559	PASS
95.0	95.0	100	100	100	7328	PASS
96.0	95.0	5.00	9.00	6.85	502	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	82.2	6020	PASS
175	174	5.00	9.00	6.93	417	PASS
176	174	95.0	101	97.5	5867	PASS
177	176	5.00	9.00	6.37	374	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG284610-03	STD	01	10/10/2008 17:00	
WG284610-04	STD	01	10/10/2008 17:31	
WG284610-05	STD	01	10/10/2008 18:02	
WG284610-06	STD	01	10/10/2008 18:33	
WG284610-07	STD	01	10/10/2008 19:04	
WG284610-08	STD-CCV	01	10/10/2008 19:35	
WG284610-09	STD	01	10/10/2008 20:06	
WG284610-10	STD	01	10/10/2008 20:37	
WG284610-11	STD	01	10/10/2008 21:08	
WG284610-02	STD	01	10/11/2008 03:19	
WG284610-12	SSCV	01	10/11/2008 03:50	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263

Tune ID: WG285325-01

Instrument: HPMS14

Run Date: 10/17/2008

Analyst: MDA

Run Time: 17:23

Workgroup: WG285325

File ID: 14M08934

Cal ID: HPMS14 - 11-OCT-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	21.8	1618	PASS
75.0	95.0	30.0	60.0	52.5	3905	PASS
95.0	95.0	100	100	100	7439	PASS
96.0	95.0	5.00	9.00	6.53	486	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	77.6	5769	PASS
175	174	5.00	9.00	6.67	385	PASS
176	174	95.0	101	95.4	5501	PASS
177	176	5.00	9.00	6.71	369	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG285325-02	CCV	01	10/17/2008 18:57	
WG285327-02	LCS	01	10/17/2008 20:03	
WG285327-01	BLANK	01	10/17/2008 20:34	
L08100263-09	TRIP BLANK	02	10/18/2008 02:36	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS6
Analyst: CAA
Workgroup: WG283090

Tune ID: WG283090-01
Run Date: 09/25/2008
Run Time: 13:21
File ID: 6M78193

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.5	13255	PASS
75.0	95.0	30.0	60.0	56.6	27248	PASS
95.0	95.0	100	100	100	48181	PASS
96.0	95.0	5.00	9.00	6.88	3317	PASS
173	174	0	2.00	0.361	120	PASS
174	95.0	50.0	100	68.9	33200	PASS
175	174	5.00	9.00	6.56	2177	PASS
176	174	95.0	101	96.9	32184	PASS
177	176	5.00	9.00	8.06	2595	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG283090-02	STD	01	09/25/2008 15:39	
WG283090-03	STD	01	09/25/2008 16:12	
WG283090-04	STD	01	09/25/2008 16:44	
WG283090-05	STD	01	09/25/2008 17:17	
WG283090-06	STD	01	09/25/2008 17:50	
WG283090-07	STD	01	09/25/2008 18:24	
WG283090-08	STD-CCV	01	09/25/2008 18:57	
WG283090-09	STD	01	09/25/2008 19:30	
WG283090-10	STD	01	09/25/2008 20:04	
WG283090-11	STD	01	09/25/2008 20:37	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263

Tune ID: WG283266-01

Instrument: HPMS6

Run Date: 09/26/2008

Analyst: CAA

Run Time: 09:24

Workgroup: WG283266

File ID: 6M78212

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	25.3	11203	PASS
75.0	95.0	30.0	60.0	56.5	24991	PASS
95.0	95.0	100	100	100	44210	PASS
96.0	95.0	5.00	9.00	6.68	2954	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	72.1	31861	PASS
175	174	5.00	9.00	7.04	2243	PASS
176	174	95.0	101	96.6	30792	PASS
177	176	5.00	9.00	6.85	2110	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG283090-12	SSCV	01	09/26/2008 11:32	

* Sample past 12 hour tune limit

BFB

Login Number: L08100263
Instrument: HPMS6
Analyst: CAA
Workgroup: WG284798

Tune ID: WG284798-01
Run Date: 10/14/2008
Run Time: 07:46
File ID: 6M78774

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.1	10108	PASS
75.0	95.0	30.0	60.0	50.3	18746	PASS
95.0	95.0	100	100	100	37290	PASS
96.0	95.0	5.00	9.00	6.91	2576	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	69.6	25954	PASS
175	174	5.00	9.00	6.48	1683	PASS
176	174	95.0	101	97.2	25229	PASS
177	176	5.00	9.00	4.95	1250	FAIL

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG284798-02	CCV	01	10/14/2008 08:22	
WG284799-01	BLANK	01	10/14/2008 09:28	
WG284799-02	LCS	01	10/14/2008 10:01	
WG284799-03	LCS2	01	10/14/2008 10:34	
L08100263-01	58DPT-08	01	10/14/2008 17:10	
L08100263-02	58DPT-01	01	10/14/2008 17:43	
L08100263-03	58DPT-07	01	10/14/2008 18:17	
L08100263-05	58DPT-05	01	10/14/2008 18:50	
L08100263-07	DUP-01	01	10/14/2008 19:23	
WG284799-04	BLANK2	01	10/14/2008 20:29	*

* Sample past 12 hour tune limit

Login Number: L08100263
Analytical Method: 8260B
ICAL Workgroup: WG282416

Instrument ID: HPMS10
Initial Calibration Date: 16-SEP-08 22:24
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.2443	1.93		
1,2-Dichloropropane	CCC	0.2836	4.47		
Chloroform	CCC	0.5623	4.16		
Ethylbenzene	CCC	0.4379	4.26		
Toluene	CCC	1.128	2.64		
Vinyl Chloride	CCC	0.2663	19.3		1.00000
1,1,2,2-Tetrachloroethane	SPCC	0.3352	6.11		
1,1-Dichloroethane	SPCC	0.5826	2.66		
Bromoform	SPCC	0.1667	17.9		0.99900
Chlorobenzene	SPCC	0.8417	3.33		
Chloromethane	SPCC	0.3581	8.85		
1,1,1,2-Tetrachloroethane		0.3262	6.90		
1,1,1-Trichloroethane		0.5164	7.88		
1,1,2-Trichloroethane		0.1931	5.75		
1,1-Dichloropropene		0.3972	3.48		
1,2,3-Trichlorobenzene		0.6910	4.96		
1,2,3-Trichloropropane		0.1359	5.58		
1,2,4-Trichlorobenzene		0.7771	4.60		
1,2,4-Trimethylbenzene		2.030	4.45		
1,2-Dibromo-3-Chloropropane		0.08248	13.3		
1,2-Dibromoethane		0.2225	4.85		
1,2-Dichlorobenzene		1.138	3.89		
1,2-Dichloroethane		0.4757	5.25		
1,3,5-Trimethylbenzene		1.949	6.50		
1,3-Dichlorobenzene		1.213	3.13		
1,3-Dichloropropane		0.3653	3.74		
1,4-Dichlorobenzene		1.265	5.81		
2,2-Dichloropropane		0.4932	5.36		
2-Butanone		0.08638	4.09		
2-Chloroethyl Vinyl Ether		0.1399	10.7		
2-Chlorotoluene		1.677	3.72		
2-Hexanone		0.1309	4.08		
4-Chlorotoluene		1.685	3.20		
4-Methyl-2-Pentanone		0.07383	3.93		
Acetone		0.06757	11.8		
Benzene		1.018	2.27		
Bromobenzene		0.6493	4.88		
Bromochloromethane		0.1393	5.63		
Bromodichloromethane		0.3871	6.76		
Bromomethane		0.1881	13.6		
Carbon Disulfide		0.7558	4.38		
Carbon Tetrachloride		0.4690	7.27		
Chloroethane		0.1849	4.54		
Dibromochloromethane		0.2805	12.5		
Dibromomethane		0.1459	5.37		

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Login Number: L08100263
Analytical Method: 8260B
ICAL Workgroup: WG282416

Instrument ID: HPMS10
Initial Calibration Date: 16-SEP-08 22:24
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane		0.3365	9.50		
Hexachlorobutadiene		0.3045	4.74		
Isopropylbenzene		1.364	7.11		
Methylene Chloride		0.3346	35.7		1.00000
Naphthalene		1.330	10.8		
Styrene		0.8496	11.5		
Tetrachloroethene		0.2661	6.50		
Trichloroethene		0.3127	4.55		
Trichlorofluoromethane		0.5951	8.38		
Vinyl Acetate		0.2724	32.1	0.99500	
cis-1,2-Dichloroethene		0.2871	4.04		
cis-1,3-Dichloropropene		0.4022	9.44		
m-,p-Xylene		0.5400	2.79		
n-Butylbenzene		1.721	5.76		
n-Propylbenzene		2.461	7.80		
o-Xylene		0.5177	4.91		
p-Isopropyltoluene		2.037	5.15		
sec-Butylbenzene		2.338	4.62		
tert-Butylbenzene		0.4410	2.70		
trans-1,2-Dichloroethene		0.2756	3.06		
trans-1,3-Dichloropropene		0.4214	7.09		

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: L08100263
Analytical Method: 8260B
ICAL Workgroup: WG284610

Instrument ID: HPMS14
Initial Calibration Date: 11-OCT-08 03:19
Column ID: F

Analyte	AVG RF	% RSD	LINEAR (R ²)	QUAD(R 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: L08100263
Analytical Method: 8260B
ICAL Workgroup: WG283090

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3739	15.9		1.00000
1,2-Dichloropropane	CCC	0.1996	11.0		
Chloroform	CCC	0.4182	8.61		
Ethylbenzene	CCC	0.3892	9.70		
Toluene	CCC	1.107	8.39		
Vinyl Chloride	CCC	0.2002	20.1		1.00000
1,1,2,2-Tetrachloroethane	SPCC	0.3582	7.85		
1,1-Dichloroethane	SPCC	0.4280	8.89		
Bromoform	SPCC	0.1386	21.3		1.00000
Chlorobenzene	SPCC	0.7200	6.06		
Chloromethane	SPCC	0.2502	14.3		
1,1,1,2-Tetrachloroethane		0.2503	12.3		
1,1,1-Trichloroethane		0.3501	14.3		
1,1,2-Trichloroethane		0.1813	9.12		
1,1-Dichloropropene		0.3051	15.2		1.00000
1,2,3-Trichlorobenzene		0.6385	14.7		
1,2,3-Trichloropropane		0.1185	5.02		
1,2,4-Trichlorobenzene		0.6729	4.41		
1,2,4-Trimethylbenzene		1.938	8.06		
1,2-Dibromo-3-Chloropropane		0.08593	12.5		
1,2-Dibromoethane		0.1941	7.42		
1,2-Dichlorobenzene		1.012	6.54		
1,2-Dichloroethane		0.3794	8.69		
1,3,5-Trimethylbenzene		1.840	9.62		
1,3-Dichlorobenzene		1.063	5.13		
1,3-Dichloropropane		0.3824	6.58		
1,4-Dichlorobenzene		1.133	5.34		
2,2-Dichloropropane		0.3937	10.6		
2-Butanone		0.06523	6.58		
2-Chloroethyl Vinyl Ether		0.09501	18.8		1.00000
2-Chlorotoluene		1.740	3.09		
2-Hexanone		0.1388	10.3		
4-Chlorotoluene		1.803	9.16		
4-Methyl-2-Pentanone		0.05247	7.75		
Acetone		0.05407	16.9		0.99900
Benzene		0.7848	6.67		
Bromobenzene		0.4861	13.3		
Bromochloromethane		0.1080	10.0		
Bromodichloromethane		0.3046	9.96		
Bromomethane		0.1260	17.5		1.00000
Carbon Disulfide		0.6388	4.12		
Carbon Tetrachloride		0.2395	29.8		1.00000
Chloroethane		0.1321	12.2		
Dibromochloromethane		0.2229	15.1		
Dibromomethane		0.1086	5.76		

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Login Number: L08100263
Analytical Method: 8260B
ICAL Workgroup: WG283090

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane		0.2197	9.96		
Hexachlorobutadiene		0.2735	13.2		
Isopropylbenzene		1.304	11.8		
Methylene Chloride		0.2616	33.6	1.00000	
Naphthalene		1.179	5.19		
Styrene		0.8578	6.90		
Tetrachloroethene		0.2677	6.31		
Trichloroethene		0.1891	5.82		
Trichlorofluoromethane		0.3714	24.6		1.00000
Vinyl Acetate		0.3344	5.34		
cis-1,2-Dichloroethene		0.2000	12.6		
cis-1,3-Dichloropropene		0.3497	8.41		
m-,p-Xylene		0.5004	10.5		
n-Butylbenzene		1.847	12.2		
n-Propylbenzene		2.527	11.5		
o-Xylene		0.5029	6.71		
p-Isopropyltoluene		1.811	13.1		
sec-Butylbenzene		2.139	11.9		
tert-Butylbenzene		0.3732	13.4		
trans-1,2-Dichloroethene		0.1848	9.74		
trans-1,3-Dichloropropene		0.4458	9.98		

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: L08100263
Analytical Method: 8260BInstrument ID: HPMS10
Initial Calibration Date: 16-SEP-08 22:24
Column ID: F

Analyte	WG282416-02			WG282416-03			WG282416-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	3531.00000	0.2441	1.00	8767.00000	0.2438
1,2-Dichloropropane	NA	NA	NA	0.400	3748.00000	0.2591	1.00	10854.0000	0.3019
Chloroform	0.300	6824.00000	0.6050	0.400	8083.00000	0.5587	1.00	20027.0000	0.5570
Ethylbenzene	NA	NA	NA	0.400	5722.00000	0.4117	1.00	14091.0000	0.4155
Toluene	NA	NA	NA	0.400	15913.0000	1.145	1.00	37175.0000	1.096
Vinyl Chloride	NA	NA	NA	0.400	5240.00000	0.3622	1.00	9333.00000	0.2596
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2662.00000	0.3213	1.00	6091.00000	0.3026
1,1-Dichloroethane	NA	NA	NA	0.400	8331.00000	0.5758	1.00	20886.0000	0.5809
Bromoform	NA	NA	NA	NA	NA	NA	1.00	4163.00000	0.1227
Chlorobenzene	NA	NA	NA	0.400	11795.0000	0.8487	1.00	29458.0000	0.8686
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	13879.0000	0.3860
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	4004.00000	0.2881	1.00	10276.0000	0.3030
1,1,1-Trichloroethane	NA	NA	NA	0.400	6276.00000	0.4338	1.00	18795.0000	0.5227
1,1,2-Trichloroethane	NA	NA	NA	0.400	2334.00000	0.1679	1.00	6541.00000	0.1929
1,1-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	13637.0000	0.3793
1,2,3-Trichlorobenzene	0.300	4336.00000	0.6846	0.400	5813.00000	0.7017	1.00	12368.0000	0.6144
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	2473.00000	0.1228
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	5962.00000	0.7197	1.00	14962.0000	0.7432
1,2,4-Trimethylbenzene	NA	NA	NA	0.400	16127.0000	1.947	1.00	37810.0000	1.878
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	2914.00000	0.2097	1.00	7330.00000	0.2161
1,2-Dichlorobenzene	0.300	7698.00000	1.215	0.400	9699.00000	1.171	1.00	23231.0000	1.154
1,2-Dichloroethane	NA	NA	NA	0.400	6794.00000	0.4696	1.00	17855.0000	0.4966
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	14739.0000	1.779	1.00	35562.0000	1.767
1,3-Dichlorobenzene	NA	NA	NA	0.400	10551.0000	1.274	1.00	23749.0000	1.180
1,3-Dichloropropane	NA	NA	NA	0.400	5019.00000	0.3611	1.00	11634.0000	0.3430
1,4-Dichlorobenzene	0.300	9147.00000	1.444	0.400	10257.0000	1.238	1.00	25483.0000	1.266
2,2-Dichloropropane	NA	NA	NA	0.400	6447.00000	0.4456	1.00	17666.0000	0.4913
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	13529.0000	1.633	1.00	33702.0000	1.674
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	13934.0000	1.682	1.00	32231.0000	1.601
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	15054.0000	1.041	1.00	36009.0000	1.001
Bromobenzene	0.300	4457.00000	0.7037	0.400	5677.00000	0.6853	1.00	13507.0000	0.6709
Bromochloromethane	NA	NA	NA	0.400	1825.00000	0.1261	1.00	4681.00000	0.1302
Bromodichloromethane	NA	NA	NA	0.400	4920.00000	0.3401	1.00	12927.0000	0.3595
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	7550.00000	0.2100
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	25511.0000	0.7095
Carbon Tetrachloride	NA	NA	NA	0.400	5916.00000	0.4089	1.00	15638.0000	0.4349

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Login Number: L08100263
Analytical Method: 8260BInstrument ID: HPMS10
Initial Calibration Date: 16-SEP-08 22:24
Column ID: F

Analyte	WG282416-05			WG282416-06			WG282416-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	17568.0000	0.2487	5.00	43195.0000	0.2458	20.0	171137.000	0.2376
1,2-Dichloropropane	2.00	19849.0000	0.2810	5.00	49247.0000	0.2803	20.0	201400.000	0.2796
Chloroform	2.00	40391.0000	0.5717	5.00	101886.000	0.5798	20.0	396006.000	0.5498
Ethylbenzene	2.00	30143.0000	0.4475	5.00	74258.0000	0.4419	20.0	301555.000	0.4402
Toluene	2.00	75032.0000	1.114	5.00	194512.000	1.157	20.0	760626.000	1.110
Vinyl Chloride	2.00	21877.0000	0.3097	5.00	48265.0000	0.2747	20.0	182623.000	0.2536
1,1,2,2-Tetrachloroethane	2.00	12980.0000	0.3160	5.00	34323.0000	0.3372	20.0	139895.000	0.3367
1,1-Dichloroethane	2.00	41791.0000	0.5916	5.00	106732.000	0.6074	20.0	413796.000	0.5745
Bromoform	2.00	9001.00000	0.1336	5.00	26218.0000	0.1560	20.0	121725.000	0.1777
Chlorobenzene	2.00	58413.0000	0.8673	5.00	144978.000	0.8627	20.0	558732.000	0.8156
Chloromethane	2.00	28881.0000	0.4088	5.00	65307.0000	0.3717	20.0	251627.000	0.3494
1,1,1,2-Tetrachloroethane	2.00	22646.0000	0.3362	5.00	56964.0000	0.3390	20.0	233534.000	0.3409
1,1,1-Trichloroethane	2.00	39147.0000	0.5541	5.00	96654.0000	0.5501	20.0	380539.000	0.5284
1,1,2-Trichloroethane	2.00	13197.0000	0.1959	5.00	33205.0000	0.1976	20.0	133834.000	0.1954
1,1-Dichloropropene	2.00	27754.0000	0.3929	5.00	73582.0000	0.4187	20.0	285442.000	0.3963
1,2,3-Trichlorobenzene	2.00	27878.0000	0.6787	5.00	70055.0000	0.6882	20.0	292582.000	0.7042
1,2,3-Trichloropropane	2.00	5469.00000	0.1331	5.00	14944.0000	0.1468	20.0	56534.0000	0.1361
1,2,4-Trichlorobenzene	2.00	31292.0000	0.7618	5.00	79359.0000	0.7796	20.0	326651.000	0.7862
1,2,4-Trimethylbenzene	2.00	81733.0000	1.990	5.00	213857.000	2.101	20.0	861257.000	2.073
1,2-Dibromo-3-Chloropropane	2.00	2626.00000	0.06390	5.00	8043.00000	0.07900	20.0	32757.0000	0.07880
1,2-Dibromoethane	2.00	14138.0000	0.2099	5.00	37412.0000	0.2226	20.0	154541.000	0.2256
1,2-Dichlorobenzene	2.00	47574.0000	1.158	5.00	116055.000	1.140	20.0	453486.000	1.092
1,2-Dichloroethane	2.00	34979.0000	0.4951	5.00	87398.0000	0.4974	20.0	345623.000	0.4799
1,3,5-Trimethylbenzene	2.00	77422.0000	1.885	5.00	205040.000	2.014	20.0	834916.000	2.010
1,3-Dichlorobenzene	2.00	50356.0000	1.226	5.00	127008.000	1.248	20.0	486384.000	1.171
1,3-Dichloropropane	2.00	25131.0000	0.3731	5.00	64152.0000	0.3817	20.0	243307.000	0.3552
1,4-Dichlorobenzene	2.00	52453.0000	1.277	5.00	130434.000	1.281	20.0	500712.000	1.205
2,2-Dichloropropane	2.00	36148.0000	0.5117	5.00	92813.0000	0.5282	20.0	359052.000	0.4985
2-Butanone	NA	NA	NA	5.00	15990.0000	0.09100	20.0	58475.0000	0.08120
2-Chloroethyl Vinyl Ether	2.00	8000.00000	0.1132	5.00	23313.0000	0.1327	20.0	94234.0000	0.1308
2-Chlorotoluene	2.00	71514.0000	1.741	5.00	180086.000	1.769	20.0	694808.000	1.672
2-Hexanone	NA	NA	NA	5.00	20880.0000	0.1242	20.0	86746.0000	0.1266
4-Chlorotoluene	2.00	70399.0000	1.714	5.00	176435.000	1.733	20.0	700116.000	1.685
4-Methyl-2-Pentanone	NA	NA	NA	5.00	12329.0000	0.07020	20.0	50522.0000	0.07010
Acetone	NA	NA	NA	5.00	14412.0000	0.08200	20.0	47943.0000	0.06660
Benzene	2.00	72833.0000	1.031	5.00	182188.000	1.037	20.0	707118.000	0.9818
Bromobenzene	2.00	26249.0000	0.6390	5.00	66198.0000	0.6503	20.0	257056.000	0.6187
Bromochloromethane	2.00	9915.00000	0.1403	5.00	26102.0000	0.1485	20.0	99409.0000	0.1380
Bromodichloromethane	2.00	27754.0000	0.3929	5.00	67434.0000	0.3838	20.0	287854.000	0.3997
Bromomethane	2.00	16184.0000	0.2291	5.00	35668.0000	0.2030	20.0	118543.000	0.1646
Carbon Disulfide	2.00	50613.0000	0.7164	5.00	132049.000	0.7515	20.0	549884.000	0.7635
Carbon Tetrachloride	2.00	33891.0000	0.4797	5.00	88701.0000	0.5048	20.0	355705.000	0.4939

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Analyte	WG282416-08			WG282416-09			WG282416-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	456448.000	0.2451	100	930367.000	0.2513	200	1793209.00	0.2380
1,2-Dichloropropane	50.0	535598.000	0.2875	100	1094107.00	0.2955	200	2140811.00	0.2841
Chloroform	50.0	1054702.00	0.5662	100	2049682.00	0.5536	200	3910944.00	0.5190
Ethylbenzene	50.0	807011.000	0.4491	100	1637455.00	0.4684	200	3128412.00	0.4289
Toluene	50.0	2029470.00	1.130	100	4112367.00	1.176	200	7975484.00	1.094
Vinyl Chloride	50.0	460730.000	0.2474	100	855276.000	0.2310	200	1449353.00	0.1923
1,1,2,2-Tetrachloroethane	50.0	386414.000	0.3596	100	776727.000	0.3557	200	1539987.00	0.3521
1,1-Dichloroethane	50.0	1092469.00	0.5865	100	2183443.00	0.5897	200	4175709.00	0.5541
Bromoform	50.0	342359.000	0.1905	100	703541.000	0.2012	200	1349769.00	0.1851
Chlorobenzene	50.0	1487793.00	0.8280	100	2980730.00	0.8526	200	5764735.00	0.7904
Chloromethane	50.0	629116.000	0.3378	100	1211820.00	0.3273	200	2454000.00	0.3257
1,1,1,2-Tetrachloroethane	50.0	616915.000	0.3433	100	1219752.00	0.3489	200	2260199.00	0.3099
1,1,1-Trichloroethane	50.0	1002933.00	0.5384	100	1945139.00	0.5253	200	3604455.00	0.4783
1,1,2-Trichloroethane	50.0	358183.000	0.1993	100	718069.000	0.2054	200	1391026.00	0.1907
1,1-Dichloropropene	50.0	751847.000	0.4036	100	1505916.00	0.4067	200	2884993.00	0.3829
1,2,3-Trichlorobenzene	50.0	783037.000	0.7288	100	1595720.00	0.7307	200	3006434.00	0.6873
1,2,3-Trichloropropane	50.0	151212.000	0.1407	100	304319.000	0.1393	200	578827.000	0.1323
1,2,4-Trichlorobenzene	50.0	884149.000	0.8229	100	1796355.00	0.8225	200	3414202.00	0.7805
1,2,4-Trimethylbenzene	50.0	2289109.00	2.131	100	4626401.00	2.118	200	8770307.00	2.005
1,2-Dibromo-3-Chloropropane	50.0	95721.0000	0.08910	100	203460.000	0.09320	200	397548.000	0.09090
1,2-Dibromoethane	50.0	421939.000	0.2348	100	837356.000	0.2395	200	1619596.00	0.2221
1,2-Dichlorobenzene	50.0	1202546.00	1.119	100	2462199.00	1.127	200	4659954.00	1.065
1,2-Dichloroethane	50.0	892009.000	0.4789	100	1727745.00	0.4666	200	3176019.00	0.4215
1,3,5-Trimethylbenzene	50.0	2258521.00	2.102	100	4518740.00	2.069	200	8595452.00	1.965
1,3-Dichlorobenzene	50.0	1312102.00	1.221	100	2660230.00	1.218	200	5107379.00	1.168
1,3-Dichloropropane	50.0	665705.000	0.3705	100	1332931.00	0.3813	200	2600505.00	0.3566
1,4-Dichlorobenzene	50.0	1328345.00	1.236	100	2722378.00	1.247	200	5218021.00	1.193
2,2-Dichloropropane	50.0	942235.000	0.5059	100	1850249.00	0.4997	200	3499596.00	0.4644
2-Butanone	50.0	165629.000	0.08890	100	324409.000	0.08760	200	633424.000	0.08410
2-Chloroethyl Vinyl Ether	50.0	286015.000	0.1536	100	566136.000	0.1529	200	1120696.00	0.1487
2-Chlorotoluene	50.0	1830380.00	1.704	100	3606803.00	1.652	200	6869530.00	1.571
2-Hexanone	50.0	238894.000	0.1330	100	487904.000	0.1396	200	951304.000	0.1304
4-Chlorotoluene	50.0	1885442.00	1.755	100	3698263.00	1.693	200	7058249.00	1.614
4-Methyl-2-Pentanone	50.0	139218.000	0.07470	100	281578.000	0.07600	200	571158.000	0.07580
Acetone	50.0	126269.000	0.06780	100	250294.000	0.06760	200	475489.000	0.06310
Benzene	50.0	1897100.00	1.019	100	3846361.00	1.039	200	7475324.00	0.9920
Bromobenzene	50.0	683202.000	0.6359	100	1385376.00	0.6343	200	2650970.00	0.6060
Bromochloromethane	50.0	268331.000	0.1441	100	545085.000	0.1472	200	1055784.00	0.1401
Bromodichloromethane	50.0	776696.000	0.4170	100	1532659.00	0.4139	200	2937742.00	0.3899
Bromomethane	50.0	308385.000	0.1656	100	634427.000	0.1713	200	1304232.00	0.1731
Carbon Disulfide	50.0	1467741.00	0.7880	100	2950851.00	0.7969	200	5765344.00	0.7651
Carbon Tetrachloride	50.0	926595.000	0.4975	100	1786438.00	0.4825	200	3391435.00	0.4501

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Column ID: F

Analyte	WG282416-11		
	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	979679.000	0.08550
2-Chloroethyl Vinyl Ether	300	1691081.00	0.1475
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1421465.00	0.1315
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	873034.000	0.07620
Acetone	300	668192.000	0.05830
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	WG282416-02			WG282416-03			WG282416-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	6617.00000	0.1840
Dibromochloromethane	NA	NA	NA	0.400	3062.00000	0.2203	1.00	8533.00000	0.2516
Dibromomethane	NA	NA	NA	0.400	1992.00000	0.1377	1.00	5043.00000	0.1402
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	11628.00000	0.3234
Hexachlorobutadiene	NA	NA	NA	0.400	2326.00000	0.2808	1.00	6331.00000	0.3145
Isopropylbenzene	NA	NA	NA	0.400	16182.00000	1.164	1.00	43960.00000	1.296
Methylene Chloride	NA	NA	NA	0.400	8800.00000	0.6083	1.00	13696.00000	0.3809
Naphthalene	NA	NA	NA	0.400	9585.00000	1.157	1.00	23506.00000	1.168
Styrene	NA	NA	NA	0.400	9349.00000	0.6727	1.00	25729.00000	0.7586
Tetrachloroethene	NA	NA	NA	0.400	3199.00000	0.2302	1.00	9616.00000	0.2835
Trichloroethene	NA	NA	NA	0.400	4465.00000	0.3086	1.00	12268.00000	0.3412
Trichlorofluoromethane	NA	NA	NA	0.400	9266.00000	0.6405	1.00	18802.00000	0.5229
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	4451.00000	0.3077	1.00	9647.00000	0.2683
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4752.00000	0.3285	1.00	13604.00000	0.3783
m-,p-Xylene	NA	NA	NA	0.800	14524.00000	0.5225	2.00	36221.00000	0.5340
n-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	32185.00000	1.599
n-Propylbenzene	NA	NA	NA	0.400	17189.00000	2.075	1.00	45764.00000	2.273
o-Xylene	NA	NA	NA	0.400	6682.00000	0.4808	1.00	16421.00000	0.4842
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	37131.00000	1.844
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	43075.00000	2.140
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	8481.00000	0.4213
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3834.00000	0.2650	1.00	10409.00000	0.2895
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	12652.00000	0.3731

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Analytical Method: 8260B

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Analyte	WG282416-05			WG282416-06			WG282416-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	14343.0000	0.2030	5.00	32574.0000	0.1854	20.0	128971.000	0.1791
Dibromochloromethane	2.00	17369.0000	0.2579	5.00	47044.0000	0.2799	20.0	201867.000	0.2947
Dibromomethane	2.00	10131.0000	0.1434	5.00	28424.0000	0.1618	20.0	103805.000	0.1441
Dichlorodifluoromethane	2.00	25112.0000	0.3555	5.00	68984.0000	0.3926	20.0	250181.000	0.3474
Hexachlorobutadiene	2.00	13547.0000	0.3298	5.00	30287.0000	0.2975	20.0	123458.000	0.2972
Isopropylbenzene	2.00	93330.0000	1.386	5.00	239490.000	1.425	20.0	956873.000	1.397
Methylene Chloride	2.00	24182.0000	0.3423	5.00	52435.0000	0.2984	20.0	188643.000	0.2619
Naphthalene	2.00	49115.0000	1.196	5.00	133656.000	1.313	20.0	579826.000	1.396
Styrene	2.00	54143.0000	0.8039	5.00	147558.000	0.8780	20.0	606196.000	0.8849
Tetrachloroethene	2.00	18652.0000	0.2769	5.00	46416.0000	0.2762	20.0	182239.000	0.2660
Trichloroethene	2.00	21588.0000	0.3056	5.00	56531.0000	0.3217	20.0	214608.000	0.2980
Trichlorofluoromethane	2.00	44115.0000	0.6245	5.00	115035.000	0.6547	20.0	448475.000	0.6227
Vinyl Acetate	2.00	9247.00000	0.1309	5.00	36631.0000	0.2085	20.0	218082.000	0.3028
cis-1,2-Dichloroethene	2.00	20043.0000	0.2837	5.00	50763.0000	0.2889	20.0	201642.000	0.2800
cis-1,3-Dichloropropene	2.00	27561.0000	0.3901	5.00	70207.0000	0.3995	20.0	295840.000	0.4108
m-,p-Xylene	4.00	73524.0000	0.5458	10.0	184468.000	0.5488	40.0	736356.000	0.5375
n-Butylbenzene	2.00	64713.0000	1.575	5.00	174878.000	1.718	20.0	727951.000	1.752
n-Propylbenzene	2.00	102243.000	2.489	5.00	263696.000	2.591	20.0	1051630.00	2.531
o-Xylene	2.00	35226.0000	0.5230	5.00	88472.0000	0.5265	20.0	351017.000	0.5124
p-Isopropyltoluene	2.00	80620.0000	1.963	5.00	209573.000	2.059	20.0	858193.000	2.066
sec-Butylbenzene	2.00	92848.0000	2.260	5.00	245152.000	2.408	20.0	977722.000	2.353
tert-Butylbenzene	2.00	18201.0000	0.4431	5.00	44170.0000	0.4339	20.0	183457.000	0.4416
trans-1,2-Dichloroethene	2.00	19732.0000	0.2793	5.00	48842.0000	0.2780	20.0	194345.000	0.2698
trans-1,3-Dichloropropene	2.00	26559.0000	0.3943	5.00	70844.0000	0.4216	20.0	295020.000	0.4307

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Analytical Method: 8260B

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Column ID: F

Analyte	WG282416-08			WG282416-09			WG282416-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	339112.000	0.1821	100	674725.000	0.1822	200	1343323.00	0.1783
Dibromochloromethane	50.0	562442.000	0.3130	100	1135112.00	0.3247	200	2203851.00	0.3022
Dibromomethane	50.0	281206.000	0.1510	100	551085.000	0.1488	200	1055087.00	0.1400
Dichlorodifluoromethane	50.0	602491.000	0.3235	100	1187629.00	0.3207	200	2205917.00	0.2927
Hexachlorobutadiene	50.0	327541.000	0.3049	100	678733.000	0.3108	200	1314997.00	0.3006
Isopropylbenzene	50.0	2576159.00	1.434	100	5130991.00	1.468	200	9795122.00	1.343
Methylene Chloride	50.0	494051.000	0.2652	100	987189.000	0.2666	200	1910505.00	0.2535
Naphthalene	50.0	1618882.00	1.507	100	3270291.00	1.497	200	6143075.00	1.404
Styrene	50.0	1668940.00	0.9288	100	3383600.00	0.9678	200	6576205.00	0.9017
Tetrachloroethene	50.0	479555.000	0.2669	100	965269.000	0.2761	200	1842534.00	0.2526
Trichloroethene	50.0	577746.000	0.3102	100	1177663.00	0.3181	200	2247794.00	0.2983
Trichlorofluoromethane	50.0	1103943.00	0.5927	100	2130979.00	0.5755	200	3975219.00	0.5275
Vinyl Acetate	50.0	693016.000	0.3721	100	1091217.00	0.2947	200	2450466.00	0.3252
cis-1,2-Dichloroethene	50.0	543053.000	0.2915	100	1091301.00	0.2947	200	2127374.00	0.2823
cis-1,3-Dichloropropene	50.0	823197.000	0.4419	100	1647410.00	0.4449	200	3188894.00	0.4232
m-,p-Xylene	100	1981158.00	0.5513	200	3931266.00	0.5622	400	7550522.00	0.5176
n-Butylbenzene	50.0	1936701.00	1.803	100	4013158.00	1.838	200	7695592.00	1.759
n-Propylbenzene	50.0	2827134.00	2.631	100	5694121.00	2.607	200	10876208.0	2.486
o-Xylene	50.0	961224.000	0.5350	100	1948907.00	0.5575	200	3805656.00	0.5218
p-Isopropyltoluene	50.0	2296186.00	2.137	100	4686860.00	2.146	200	8952165.00	2.047
sec-Butylbenzene	50.0	2620771.00	2.439	100	5314127.00	2.433	200	10203426.0	2.333
tert-Butylbenzene	50.0	485595.000	0.4520	100	999399.000	0.4576	200	1914177.00	0.4376
trans-1,2-Dichloroethene	50.0	513381.000	0.2756	100	1044616.00	0.2821	200	2002565.00	0.2658
trans-1,3-Dichloropropene	50.0	804518.000	0.4477	100	1608662.00	0.4601	200	3078086.00	0.4220

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Analyte	WG282416-11		
	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

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Login Number: L08100263
Analytical Method: 8260B

Instrument ID: HPMS14
Initial Calibration Date: 11-OCT-08 03:19
Column ID: F

Analyte

Login Number: L08100263
Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-02			WG283090-03			WG283090-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	3715.00000	0.2434	1.00	13768.0000	0.3734
1,2-Dichloropropane	NA	NA	NA	0.400	2357.00000	0.1544	1.00	6749.00000	0.1831
Chloroform	0.300	3994.00000	0.3465	0.400	6004.00000	0.3933	1.00	15068.0000	0.4087
Ethylbenzene	NA	NA	NA	0.400	3596.00000	0.3145	1.00	11303.0000	0.4118
Toluene	NA	NA	NA	0.400	10447.0000	0.9136	1.00	31390.0000	1.144
Vinyl Chloride	NA	NA	NA	0.400	3158.00000	0.2069	1.00	9969.00000	0.2704
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2249.00000	0.2953	1.00	6814.00000	0.3740
1,1-Dichloroethane	NA	NA	NA	0.400	5414.00000	0.3547	1.00	15050.0000	0.4082
Bromoform	NA	NA	NA	NA	NA	NA	1.00	2339.00000	0.08520
Chlorobenzene	NA	NA	NA	0.400	7344.00000	0.6423	1.00	18982.0000	0.6915
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	11364.0000	0.3082
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2274.00000	0.1989	1.00	6126.00000	0.2232
1,1,1-Trichloroethane	NA	NA	NA	0.400	3627.00000	0.2376	1.00	13582.0000	0.3684
1,1,2-Trichloroethane	NA	NA	NA	0.400	1959.00000	0.1713	1.00	4008.00000	0.1460
1,1-Dichloropropene	NA	NA	NA	0.400	3093.00000	0.2026	1.00	11348.0000	0.3078
1,2,3-Trichlorobenzene	0.300	5016.00000	0.8696	0.400	5254.00000	0.6899	1.00	11280.0000	0.6192
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	2350.00000	0.1290
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4870.00000	0.6395	1.00	12045.0000	0.6612
1,2,4-Trimethylbenzene	NA	NA	NA	0.400	12897.0000	1.694	1.00	35590.0000	1.954
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	1.00	1233.00000	0.06770
1,2-Dibromoethane	NA	NA	NA	0.400	2037.00000	0.1781	1.00	4888.00000	0.1781
1,2-Dichlorobenzene	0.300	5349.00000	0.9273	0.400	8671.00000	1.139	1.00	18650.0000	1.024
1,2-Dichloroethane	NA	NA	NA	0.400	5242.00000	0.3434	1.00	12631.0000	0.3426
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	11418.0000	1.499	1.00	34632.0000	1.901
1,3-Dichlorobenzene	NA	NA	NA	0.400	7296.00000	0.9581	1.00	19378.0000	1.064
1,3-Dichloropropane	NA	NA	NA	0.400	3914.00000	0.3423	1.00	9809.00000	0.3573
1,4-Dichlorobenzene	0.300	6655.00000	1.154	0.400	8379.00000	1.100	1.00	22357.0000	1.227
2,2-Dichloropropane	NA	NA	NA	0.400	4722.00000	0.3093	1.00	15206.0000	0.4125
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	2558.00000	0.06940
2-Chlorotoluene	NA	NA	NA	0.400	13593.0000	1.785	1.00	30646.0000	1.682
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	12371.0000	1.625	1.00	33777.0000	1.854
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	10524.0000	0.6894	1.00	28717.0000	0.7789
Bromobenzene	0.300	2181.00000	0.3781	0.400	2996.00000	0.3934	1.00	8440.00000	0.4633
Bromochloromethane	NA	NA	NA	0.400	1350.00000	0.08840	1.00	3473.00000	0.09420
Bromodichloromethane	NA	NA	NA	0.400	4096.00000	0.2683	1.00	9468.00000	0.2568
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4166.00000	0.1130
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	25083.0000	0.6804
Carbon Tetrachloride	NA	NA	NA	0.400	1080.00000	0.07070	1.00	8976.00000	0.2435

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Column ID: F

Analyte	WG283090-05			WG283090-06			WG283090-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	30786.0000	0.4247	5.00	63424.0000	0.3441	20.0	312725.000	0.4151
1,2-Dichloropropane	2.00	14850.0000	0.2049	5.00	35555.0000	0.1929	20.0	160311.000	0.2128
Chloroform	2.00	32335.0000	0.4461	5.00	72598.0000	0.3939	20.0	341799.000	0.4537
Ethylbenzene	2.00	21997.0000	0.4009	5.00	48268.0000	0.3478	20.0	235960.000	0.4131
Toluene	2.00	66347.0000	1.209	5.00	151588.000	1.092	20.0	664884.000	1.164
Vinyl Chloride	2.00	16941.0000	0.2337	5.00	30633.0000	0.1662	20.0	138969.000	0.1844
1,1,2,2-Tetrachloroethane	2.00	13403.0000	0.3688	5.00	31600.0000	0.3472	20.0	139771.000	0.3633
1,1-Dichloroethane	2.00	32607.0000	0.4499	5.00	73321.0000	0.3978	20.0	339107.000	0.4501
Bromoform	2.00	7022.00000	0.1280	5.00	16747.0000	0.1207	20.0	83112.0000	0.1455
Chlorobenzene	2.00	41824.0000	0.7622	5.00	94952.0000	0.6841	20.0	432030.000	0.7564
Chloromethane	2.00	21311.0000	0.2940	5.00	40861.0000	0.2217	20.0	180807.000	0.2400
1,1,1,2-Tetrachloroethane	2.00	14472.0000	0.2637	5.00	31131.0000	0.2243	20.0	160861.000	0.2816
1,1,1-Trichloroethane	2.00	26461.0000	0.3651	5.00	60721.0000	0.3294	20.0	291226.000	0.3865
1,1,2-Trichloroethane	2.00	10439.0000	0.1902	5.00	24443.0000	0.1761	20.0	110853.000	0.1941
1,1-Dichloropropene	2.00	23859.0000	0.3292	5.00	50679.0000	0.2749	20.0	248997.000	0.3305
1,2,3-Trichlorobenzene	2.00	22070.0000	0.6073	5.00	53605.0000	0.5890	20.0	237677.000	0.6178
1,2,3-Trichloropropane	2.00	4036.00000	0.1111	5.00	11006.0000	0.1209	20.0	45792.0000	0.1190
1,2,4-Trichlorobenzene	2.00	23883.0000	0.6572	5.00	60828.0000	0.6684	20.0	273883.000	0.7119
1,2,4-Trimethylbenzene	2.00	76420.0000	2.103	5.00	170716.000	1.876	20.0	793227.000	2.062
1,2-Dibromo-3-Chloropropane	2.00	2849.00000	0.07840	5.00	8021.00000	0.08810	20.0	37707.0000	0.09800
1,2-Dibromoethane	2.00	10465.0000	0.1907	5.00	25016.0000	0.1802	20.0	120939.000	0.2117
1,2-Dichlorobenzene	2.00	38664.0000	1.064	5.00	85828.0000	0.9431	20.0	396791.000	1.031
1,2-Dichloroethane	2.00	30399.0000	0.4194	5.00	72404.0000	0.3928	20.0	312083.000	0.4142
1,3,5-Trimethylbenzene	2.00	71187.0000	1.959	5.00	160143.000	1.760	20.0	762304.000	1.981
1,3-Dichlorobenzene	2.00	39982.0000	1.100	5.00	92977.0000	1.022	20.0	416762.000	1.083
1,3-Dichloropropane	2.00	21873.0000	0.3986	5.00	49881.0000	0.3594	20.0	228471.000	0.4000
1,4-Dichlorobenzene	2.00	43085.0000	1.186	5.00	94135.0000	1.034	20.0	437060.000	1.136
2,2-Dichloropropane	2.00	30130.0000	0.4157	5.00	66469.0000	0.3606	20.0	320622.000	0.4255
2-Butanone	NA	NA	NA	5.00	10893.0000	0.05910	20.0	47556.0000	0.06310
2-Chloroethyl Vinyl Ether	2.00	5668.00000	0.07820	5.00	15279.0000	0.08290	20.0	77792.0000	0.1032
2-Chlorotoluene	2.00	64282.0000	1.769	5.00	151464.000	1.664	20.0	677190.000	1.760
2-Hexanone	NA	NA	NA	5.00	15971.0000	0.1151	20.0	75833.0000	0.1328
4-Chlorotoluene	2.00	72371.0000	1.992	5.00	164676.000	1.810	20.0	729094.000	1.895
4-Methyl-2-Pentanone	NA	NA	NA	5.00	8552.00000	0.04640	20.0	38173.0000	0.05070
Acetone	NA	NA	NA	5.00	12811.0000	0.06950	20.0	44210.0000	0.05870
Benzene	2.00	59043.0000	0.8146	5.00	133564.000	0.7246	20.0	610182.000	0.8099
Bromobenzene	2.00	20269.0000	0.5578	5.00	42703.0000	0.4692	20.0	202731.000	0.5270
Bromochloromethane	2.00	7971.00000	0.1100	5.00	20511.0000	0.1113	20.0	87861.0000	0.1166
Bromodichloromethane	2.00	21804.0000	0.3008	5.00	53800.0000	0.2919	20.0	246253.000	0.3268
Bromomethane	2.00	8307.00000	0.1146	5.00	16944.0000	0.09190	20.0	90849.0000	0.1206
Carbon Disulfide	2.00	44162.0000	0.6093	5.00	113471.000	0.6156	20.0	473060.000	0.6279
Carbon Tetrachloride	2.00	18464.0000	0.2547	5.00	41748.0000	0.2265	20.0	211649.000	0.2809

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Column ID: F

Analyte	WG283090-08			WG283090-09			WG283090-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	820324.000	0.4181	100	1648908.00	0.3978	200	3330114.00	0.3747
1,2-Dichloropropane	50.0	426724.000	0.2175	100	890725.000	0.2149	200	1924127.00	0.2165
Chloroform	50.0	888762.000	0.4530	100	1838332.00	0.4435	200	3776963.00	0.4250
Ethylbenzene	50.0	632304.000	0.4167	100	1321667.00	0.4154	200	2753446.00	0.3937
Toluene	50.0	1744305.00	1.150	100	3647462.00	1.146	200	7278197.00	1.041
Vinyl Chloride	50.0	358125.000	0.1825	100	651475.000	0.1572	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	386639.000	0.3809	100	762312.000	0.3546	200	1763164.00	0.3815
1,1-Dichloroethane	50.0	918222.000	0.4680	100	1885887.00	0.4549	200	3914018.00	0.4404
Bromoform	50.0	247613.000	0.1632	100	512783.000	0.1612	200	1163634.00	0.1664
Chlorobenzene	50.0	1141046.00	0.7520	100	2394676.00	0.7526	200	5027422.00	0.7188
Chloromethane	50.0	471357.000	0.2403	100	920061.000	0.2219	200	2004721.00	0.2256
1,1,1,2-Tetrachloroethane	50.0	422451.000	0.2784	100	871949.000	0.2740	200	1808736.00	0.2586
1,1,1-Trichloroethane	50.0	770246.000	0.3926	100	1554747.00	0.3751	200	3075480.00	0.3460
1,1,2-Trichloroethane	50.0	291178.000	0.1919	100	596870.000	0.1876	200	1352625.00	0.1934
1,1-Dichloropropene	50.0	673230.000	0.3432	100	1385617.00	0.3343	200	2828402.00	0.3182
1,2,3-Trichlorobenzene	50.0	626961.000	0.6176	100	1235546.00	0.5748	200	2594676.00	0.5614
1,2,3-Trichloropropane	50.0	122672.000	0.1208	100	244324.000	0.1137	200	532150.000	0.1151
1,2,4-Trichlorobenzene	50.0	731329.000	0.7204	100	1461693.00	0.6800	200	2977397.00	0.6442
1,2,4-Trimethylbenzene	50.0	2097217.00	2.066	100	4335898.00	2.017	200	8011238.00	1.733
1,2-Dibromo-3-Chloropropane	50.0	99629.0000	0.09810	100	183150.000	0.08520	200	397649.000	0.08600
1,2-Dibromoethane	50.0	321297.000	0.2118	100	630443.000	0.1981	200	1427034.00	0.2040
1,2-Dichlorobenzene	50.0	1042653.00	1.027	100	2155194.00	1.003	200	4402546.00	0.9525
1,2-Dichloroethane	50.0	797173.000	0.4063	100	1540374.00	0.3716	200	3065734.00	0.3449
1,3,5-Trimethylbenzene	50.0	2033968.00	2.004	100	4150985.00	1.931	200	7791643.00	1.686
1,3-Dichlorobenzene	50.0	1133355.00	1.117	100	2401022.00	1.117	200	4809866.00	1.041
1,3-Dichloropropane	50.0	620376.000	0.4089	100	1258780.00	0.3956	200	2776387.00	0.3969
1,4-Dichlorobenzene	50.0	1179568.00	1.162	100	2440372.00	1.135	200	4894301.00	1.059
2,2-Dichloropropane	50.0	848638.000	0.4326	100	1717875.00	0.4144	200	3369199.00	0.3791
2-Butanone	50.0	132146.000	0.06740	100	259834.000	0.06270	200	626280.000	0.07050
2-Chloroethyl Vinyl Ether	50.0	215088.000	0.1096	100	441513.000	0.1065	200	1024534.00	0.1153
2-Chlorotoluene	50.0	1842475.00	1.815	100	3766466.00	1.752	200	7828769.00	1.694
2-Hexanone	50.0	221291.000	0.1458	100	430291.000	0.1352	200	1039612.00	0.1486
4-Chlorotoluene	50.0	1938185.00	1.909	100	3983209.00	1.853	200	6881603.00	1.489
4-Methyl-2-Pentanone	50.0	105681.000	0.05390	100	211565.000	0.05100	200	518702.000	0.05840
Acetone	50.0	108394.000	0.05530	100	192622.000	0.04650	200	429884.000	0.04840
Benzene	50.0	1635555.00	0.8337	100	3457236.00	0.8340	200	7047384.00	0.7929
Bromobenzene	50.0	548116.000	0.5400	100	1134704.00	0.5279	200	2397034.00	0.5186
Bromochloromethane	50.0	232605.000	0.1186	100	472735.000	0.1140	200	983249.000	0.1106
Bromodichloromethane	50.0	667582.000	0.3403	100	1351392.00	0.3260	200	2893770.00	0.3256
Bromomethane	50.0	276675.000	0.1410	100	619159.000	0.1494	200	1345442.00	0.1514
Carbon Disulfide	50.0	1241202.00	0.6327	100	2644027.00	0.6378	200	5937796.00	0.6681
Carbon Tetrachloride	50.0	563091.000	0.2870	100	1162105.00	0.2803	200	2418638.00	0.2721

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Column ID: F

Analyte	WG283090-11		
	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	902432.000	0.06860
2-Chloroethyl Vinyl Ether	NA	NA	NA
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1471904.00	0.1551
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	715505.000	0.05440
Acetone	300	605154.000	0.04600
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	WG283090-02			WG283090-03			WG283090-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	3918.00000	0.1063
Dibromochloromethane	NA	NA	NA	0.400	1841.00000	0.1610	1.00	5532.00000	0.2015
Dibromomethane	NA	NA	NA	0.400	1603.00000	0.1050	1.00	3513.00000	0.09530
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8602.00000	0.2333
Hexachlorobutadiene	NA	NA	NA	0.400	1490.00000	0.1957	1.00	4761.00000	0.2613
Isopropylbenzene	NA	NA	NA	0.400	11340.0000	0.9917	1.00	36816.0000	1.341
Methylene Chloride	NA	NA	NA	0.400	7065.00000	0.4628	1.00	11198.0000	0.3037
Naphthalene	NA	NA	NA	0.400	8713.00000	1.144	1.00	20269.0000	1.113
Styrene	NA	NA	NA	0.400	8753.00000	0.7655	1.00	23285.0000	0.8483
Tetrachloroethene	NA	NA	NA	0.400	2824.00000	0.2470	1.00	7930.00000	0.2889
Trichloroethene	NA	NA	NA	0.400	2689.00000	0.1761	1.00	7063.00000	0.1916
Trichlorofluoromethane	NA	NA	NA	0.400	2708.00000	0.1774	1.00	16066.0000	0.4358
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2169.00000	0.1421	1.00	7834.00000	0.2125
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4812.00000	0.3152	1.00	11491.0000	0.3117
m-,p-Xylene	NA	NA	NA	0.800	8881.00000	0.3883	2.00	29293.0000	0.5336
n-Butylbenzene	NA	NA	NA	0.400	10652.0000	1.399	1.00	33029.0000	1.813
n-Propylbenzene	NA	NA	NA	0.400	15449.0000	2.029	1.00	49130.0000	2.697
o-Xylene	NA	NA	NA	0.400	5050.00000	0.4416	1.00	14981.0000	0.5458
p-Isopropyltoluene	NA	NA	NA	0.400	9966.00000	1.309	1.00	33908.0000	1.861
sec-Butylbenzene	NA	NA	NA	0.400	12204.0000	1.603	1.00	41725.0000	2.290
tert-Butylbenzene	NA	NA	NA	0.400	1969.00000	0.2586	1.00	7006.00000	0.3846
trans-1,2-Dichloroethene	NA	NA	NA	0.400	2363.00000	0.1548	1.00	7120.00000	0.1931
trans-1,3-Dichloropropene	NA	NA	NA	0.400	4569.00000	0.3996	1.00	10139.0000	0.3694

INT_CAL - Modified 03/06/2008
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Login Number: L08100263
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-05			WG283090-06			WG283090-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	11008.0000	0.1519	5.00	21263.0000	0.1154	20.0	103839.000	0.1378
Dibromochloromethane	2.00	11682.0000	0.2129	5.00	28610.0000	0.2061	20.0	136346.000	0.2387
Dibromomethane	2.00	8122.00000	0.1121	5.00	20258.0000	0.1099	20.0	82391.0000	0.1094
Dichlorodifluoromethane	2.00	18200.0000	0.2511	5.00	36400.0000	0.1975	20.0	174891.000	0.2321
Hexachlorobutadiene	2.00	11523.0000	0.3171	5.00	24927.0000	0.2739	20.0	113081.000	0.2939
Isopropylbenzene	2.00	77288.0000	1.409	5.00	169205.000	1.219	20.0	808518.000	1.416
Methylene Chloride	2.00	18975.0000	0.2618	5.00	39320.0000	0.2133	20.0	159480.000	0.2117
Naphthalene	2.00	40890.0000	1.125	5.00	107060.000	1.176	20.0	487687.000	1.268
Styrene	2.00	45130.0000	0.8224	5.00	110960.000	0.7995	20.0	522579.000	0.9150
Tetrachloroethene	2.00	14971.0000	0.2728	5.00	33881.0000	0.2441	20.0	160643.000	0.2813
Trichloroethene	2.00	13965.0000	0.1927	5.00	31066.0000	0.1685	20.0	146753.000	0.1948
Trichlorofluoromethane	2.00	32234.0000	0.4447	5.00	63855.0000	0.3464	20.0	302058.000	0.4009
Vinyl Acetate	NA	NA	NA	5.00	58834.0000	0.3192	20.0	252370.000	0.3350
cis-1,2-Dichloroethene	2.00	15438.0000	0.2130	5.00	34133.0000	0.1852	20.0	158115.000	0.2099
cis-1,3-Dichloropropene	2.00	25928.0000	0.3577	5.00	58803.0000	0.3190	20.0	273440.000	0.3629
m-,p-Xylene	4.00	58534.0000	0.5334	10.0	130885.000	0.4715	40.0	612729.000	0.5364
n-Butylbenzene	2.00	74199.0000	2.042	5.00	160559.000	1.764	20.0	767206.000	1.994
n-Propylbenzene	2.00	99959.0000	2.751	5.00	220910.000	2.427	20.0	1042648.00	2.710
o-Xylene	2.00	28488.0000	0.5192	5.00	64663.0000	0.4659	20.0	294776.000	0.5161
p-Isopropyltoluene	2.00	67692.0000	1.863	5.00	155620.000	1.710	20.0	765382.000	1.989
sec-Butylbenzene	2.00	82841.0000	2.280	5.00	186109.000	2.045	20.0	876700.000	2.279
tert-Butylbenzene	2.00	14943.0000	0.4112	5.00	31741.0000	0.3488	20.0	154850.000	0.4025
trans-1,2-Dichloroethene	2.00	13166.0000	0.1816	5.00	29382.0000	0.1594	20.0	147373.000	0.1956
trans-1,3-Dichloropropene	2.00	24300.0000	0.4428	5.00	59324.0000	0.4274	20.0	276154.000	0.4835

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Login Number: L08100263
Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-08			WG283090-09			WG283090-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	283167.000	0.1443	100	567341.000	0.1369	200	1171924.00	0.1319
Dibromochloromethane	50.0	390082.000	0.2571	100	802739.000	0.2523	200	1771167.00	0.2532
Dibromomethane	50.0	228591.000	0.1165	100	455329.000	0.1098	200	985444.000	0.1109
Dichlorodifluoromethane	50.0	448765.000	0.2287	100	822732.000	0.1985	200	1749942.00	0.1969
Hexachlorobutadiene	50.0	294527.000	0.2901	100	623572.000	0.2901	200	1227058.00	0.2655
Isopropylbenzene	50.0	2179301.00	1.436	100	4471314.00	1.405	200	8496147.00	1.215
Methylene Chloride	50.0	426911.000	0.2176	100	877126.000	0.2116	200	1867480.00	0.2101
Naphthalene	50.0	1294880.00	1.276	100	2526001.00	1.175	200	5350561.00	1.158
Styrene	50.0	1393868.00	0.9187	100	2933217.00	0.9219	200	6094657.00	0.8714
Tetrachloroethene	50.0	426232.000	0.2809	100	864733.000	0.2718	200	1783611.00	0.2550
Trichloroethene	50.0	391370.000	0.1995	100	824322.000	0.1989	200	1693242.00	0.1905
Trichlorofluoromethane	50.0	789973.000	0.4027	100	1624531.00	0.3919	NA	NA	NA
Vinyl Acetate	50.0	686385.000	0.3499	100	1301190.00	0.3139	200	3145558.00	0.3539
cis-1,2-Dichloroethene	50.0	416502.000	0.2123	100	885848.000	0.2137	200	1876641.00	0.2111
cis-1,3-Dichloropropene	50.0	743849.000	0.3792	100	1555583.00	0.3753	200	3346180.00	0.3765
m-,p-Xylene	100	1611228.00	0.5310	200	3377286.00	0.5307	400	6693577.00	0.4785
n-Butylbenzene	50.0	2075090.00	2.044	100	4319915.00	2.010	200	7908803.00	1.711
n-Propylbenzene	50.0	2818367.00	2.776	100	5728865.00	2.665	200	9984689.00	2.160
o-Xylene	50.0	786803.000	0.5186	100	1653337.00	0.5196	200	3473098.00	0.4966
p-Isopropyltoluene	50.0	2065028.00	2.034	100	4288763.00	1.995	200	7968489.00	1.724
sec-Butylbenzene	50.0	2370252.00	2.335	100	4948812.00	2.302	200	9138552.00	1.977
tert-Butylbenzene	50.0	408690.000	0.4026	100	850326.000	0.3956	200	1762162.00	0.3813
trans-1,2-Dichloroethene	50.0	388230.000	0.1979	100	822223.000	0.1983	200	1759840.00	0.1980
trans-1,3-Dichloropropene	50.0	751809.000	0.4955	100	1520905.00	0.4780	200	3290241.00	0.4704

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Login Number: L08100263
Analytical Method: 8260B

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-11		
	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

INT_CAL - Modified 03/06/2008
PDF File ID: 1230585
Report generated 10/23/2008 14:04



Login Number: L08100263 Run Date: 09/17/2008 Sample ID: WG282416-12
Instrument ID: HPMS10 Run Time: 15:04 Method: 8260B
File ID: 10M66928 Analyst: TMB QC Key: STD
Ical Workgroup: WG282416 Cal ID: HPMS10 - 16-SEP-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	21.2	ug/L	0.595	5.80	30	
1,1-Dichloroethene	CCC	20.0	19.7	ug/L	0.241	1.30	30	
1,2-Dichloropropane	CCC	20.0	20.9	ug/L	0.296	4.50	30	
Ethylbenzene	CCC	20.0	21.8	ug/L	0.477	8.80	30	
Toluene	CCC	20.0	22.0	ug/L	1.24	10.2	30	
Vinyl Chloride	CCC	20.0	23.8	ug/L	0.308	18.9	30	
Bromoform	SPCC	20.0	18.4	ug/L	0.177	8.10	30	
Chlorobenzene	SPCC	20.0	21.0	ug/L	0.883	4.90	30	
Chloromethane	SPCC	20.0	18.1	ug/L	0.327	9.40	30	
1,1-Dichloroethane	SPCC	20.0	21.3	ug/L	0.619	6.30	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	22.7	ug/L	0.380	13.3	30	
Acetone		20.0	20.1	ug/L	0.0680	0.600	30	
Benzene		20.0	21.4	ug/L	1.09	6.80	30	
Bromobenzene		20.0	21.2	ug/L	0.689	6.20	30	
Bromochloromethane		20.0	20.9	ug/L	0.146	4.60	30	
Bromodichloromethane		20.0	22.7	ug/L	0.439	13.4	30	
Bromomethane		20.0	19.3	ug/L	0.181	3.60	30	
2-Butanone		20.0	21.1	ug/L	0.0912	5.60	30	
n-Butylbenzene		20.0	22.8	ug/L	1.96	13.9	30	
sec-Butylbenzene		20.0	22.5	ug/L	2.63	12.5	30	
tert-Butylbenzene		20.0	22.2	ug/L	0.490	11.0	30	
Carbon Disulfide		20.0	17.4	ug/L	0.658	12.9	30	
Carbon Tetrachloride		20.0	22.3	ug/L	0.522	11.3	30	
Dibromochloromethane		20.0	22.3	ug/L	0.313	11.6	30	
Chloroethane		20.0	21.3	ug/L	0.197	6.30	30	
2-Chloroethyl Vinyl Ether		20.0	20.9	ug/L	0.146	4.30	30	
2-Chlorotoluene		20.0	23.2	ug/L	1.95	15.9	30	
4-Chlorotoluene		20.0	21.5	ug/L	1.81	7.70	30	
1,2-Dibromo-3-Chloropropane		20.0	20.4	ug/L	0.0842	2.10	30	
1,2-Dibromoethane		20.0	21.8	ug/L	0.243	9.10	30	
Dibromomethane		20.0	21.3	ug/L	0.156	6.60	30	
1,2-Dichlorobenzene		20.0	21.0	ug/L	1.20	5.20	30	
1,3-Dichlorobenzene		20.0	21.4	ug/L	1.30	6.90	30	
1,4-Dichlorobenzene		20.0	21.0	ug/L	1.33	5.20	30	
Dichlorodifluoromethane		20.0	23.5	ug/L	0.396	17.7	30	
1,2-Dichloroethane		20.0	21.2	ug/L	0.503	5.80	30	
cis-1,2-Dichloroethene		20.0	22.0	ug/L	0.315	9.80	30	
trans-1,2-Dichloroethene		20.0	20.6	ug/L	0.285	3.20	30	
1,3-Dichloropropane		20.0	21.5	ug/L	0.392	7.30	30	
2,2-Dichloropropane		20.0	22.5	ug/L	0.555	12.4	30	
cis-1,3-Dichloropropene		20.0	22.4	ug/L	0.450	12.0	30	
trans-1,3-Dichloropropene		20.0	19.6	ug/L	0.413	2.00	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1230436
Report generated 10/23/2008 15:08



Login Number: L08100263 Run Date: 09/17/2008 Sample ID: WG282416-12
Instrument ID: HPMS10 Run Time: 15:04 Method: 8260B
File ID: 10M66928 Analyst: TMB QC Key: STD
ICal Workgroup: WG282416 Cal ID: HPMS10 - 16-SEP-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	21.2	ug/L	0.421	5.90	30	
2-Hexanone	20.0	20.4	ug/L	0.134	2.00	30	
Hexachlorobutadiene	20.0	22.1	ug/L	0.336	10.4	30	
Isopropylbenzene	20.0	20.2	ug/L	1.38	0.900	30	
p-Isopropyltoluene	20.0	21.7	ug/L	2.21	8.70	30	
4-Methyl-2-Pentanone	20.0	20.6	ug/L	0.0759	2.80	30	
Methylene Chloride	20.0	20.8	ug/L	0.286	4.10	30	
Naphthalene	20.0	23.8	ug/L	1.58	19.1	30	
n-Propylbenzene	20.0	23.2	ug/L	2.86	16.1	30	
Styrene	20.0	22.5	ug/L	0.956	12.5	30	
1,1,1,2-Tetrachloroethane	20.0	22.6	ug/L	0.369	13.0	30	
Tetrachloroethene	20.0	21.4	ug/L	0.285	7.00	30	
1,2,3-Trichlorobenzene	20.0	22.8	ug/L	0.787	13.9	30	
1,2,4-Trichlorobenzene	20.0	22.5	ug/L	0.876	12.7	30	
1,1,1-Trichloroethane	20.0	21.8	ug/L	0.563	9.00	30	
1,1,2-Trichloroethane	20.0	21.6	ug/L	0.208	7.80	30	
Trichloroethene	20.0	21.0	ug/L	0.328	4.80	30	
Trichlorofluoromethane	20.0	21.9	ug/L	0.653	9.60	30	
1,2,3-Trichloropropane	20.0	21.9	ug/L	0.149	9.50	30	
1,2,4-Trimethylbenzene	20.0	22.8	ug/L	2.32	14.0	30	
1,3,5-Trimethylbenzene	20.0	23.1	ug/L	2.25	15.6	30	
Vinyl Acetate	20.0	13.1	ug/L	0.201	34.4	40	
o-Xylene	20.0	21.8	ug/L	0.564	9.00	30	
m-,p-Xylene	40.0	43.2	ug/L	0.583	8.00	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/11/2008 Sample ID: WG284610-12
Instrument ID: HPMS14 Run Time: 03:50 Method: 8260B
File ID: 14M08708 Analyst: MDA QC Key: STD
ICal Workgroup: WG284610 Cal ID: HPMS14 - 11-OCT-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	22.6	ug/L	0.413	13.1	30	
1,1-Dichloroethene	CCC	20.0	20.4	ug/L	0.321	2.20	30	
1,2-Dichloropropane	CCC	20.0	21.5	ug/L	0.210	7.40	30	
Ethylbenzene	CCC	20.0	22.7	ug/L	0.466	13.5	30	
Toluene	CCC	20.0	20.9	ug/L	1.21	4.60	30	
Vinyl Chloride	CCC	20.0	25.2	ug/L	0.160	26.1	30	
Bromoform	SPCC	20.0	21.8	ug/L	0.149	9.20	30	
Chlorobenzene	SPCC	20.0	21.9	ug/L	0.823	9.30	30	
Chloromethane	SPCC	20.0	17.2	ug/L	0.141	14.2	30	
1,1-Dichloroethane	SPCC	20.0	22.8	ug/L	0.398	14.2	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	22.2	ug/L	0.393	11.2	30	
Acetone		20.0	22.6	ug/L	0.0308	13.2	30	
Benzene		20.0	21.3	ug/L	0.820	6.40	30	
Bromobenzene		20.0	21.5	ug/L	0.732	7.40	30	
Bromochloromethane		20.0	23.8	ug/L	0.115	19.0	30	
Bromodichloromethane		20.0	23.2	ug/L	0.317	16.1	30	
Bromomethane		20.0	17.4	ug/L	0.0888	12.8	30	
2-Butanone		20.0	21.9	ug/L	0.0429	9.70	30	
n-Butylbenzene		20.0	23.1	ug/L	1.74	15.7	30	
sec-Butylbenzene		20.0	22.7	ug/L	2.90	13.6	30	
tert-Butylbenzene		20.0	22.3	ug/L	0.491	11.3	30	
Carbon Disulfide		20.0	18.9	ug/L	0.551	5.50	30	
Carbon Tetrachloride		20.0	21.2	ug/L	0.379	6.10	30	
Dibromochloromethane		20.0	22.8	ug/L	0.284	14.0	30	
Chloroethane		20.0	23.0	ug/L	0.129	15.0	30	
2-Chloroethyl Vinyl Ether		20.0	26.6	ug/L	0.0168	33.2	30	*
2-Chlorotoluene		20.0	22.9	ug/L	2.49	14.3	30	
4-Chlorotoluene		20.0	21.6	ug/L	1.85	8.10	30	
1,2-Dibromo-3-Chloropropane		20.0	21.8	ug/L	0.0756	8.90	30	
1,2-Dibromoethane		20.0	22.7	ug/L	0.191	13.7	30	
Dibromomethane		20.0	23.5	ug/L	0.104	17.4	30	
1,2-Dichlorobenzene		20.0	21.7	ug/L	1.17	8.70	30	
1,3-Dichlorobenzene		20.0	21.9	ug/L	1.35	9.40	30	
1,4-Dichlorobenzene		20.0	21.1	ug/L	1.31	5.40	30	
Dichlorodifluoromethane		20.0	25.3	ug/L	0.283	26.7	30	
1,2-Dichloroethane		20.0	23.4	ug/L	0.300	16.9	30	
cis-1,2-Dichloroethene		20.0	23.0	ug/L	0.222	14.8	30	
trans-1,2-Dichloroethene		20.0	22.8	ug/L	0.198	13.9	30	
1,3-Dichloropropane		20.0	22.5	ug/L	0.335	12.4	30	
2,2-Dichloropropane		20.0	21.3	ug/L	0.351	6.50	30	
cis-1,3-Dichloropropene		20.0	22.2	ug/L	0.312	10.9	30	
trans-1,3-Dichloropropene		20.0	21.0	ug/L	0.343	5.10	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1230436
Report generated 10/23/2008 15:08



Login Number: L08100263 Run Date: 10/11/2008 Sample ID: WG284610-12
Instrument ID: HPMS14 Run Time: 03:50 Method: 8260B
File ID: 14M08708 Analyst: MDA QC Key: STD
Ical Workgroup: WG284610 Cal ID: HPMS14 - 11-OCT-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	22.1	ug/L	0.311	10.7	30	
2-Hexanone	20.0	20.8	ug/L	0.0838	3.90	30	
Hexachlorobutadiene	20.0	23.3	ug/L	0.424	16.6	30	
Isopropylbenzene	20.0	19.9	ug/L	1.30	0.400	30	
p-Isopropyltoluene	20.0	22.2	ug/L	2.18	11.0	30	
4-Methyl-2-Pentanone	20.0	19.7	ug/L	0.0392	1.50	30	
Methylene Chloride	20.0	21.9	ug/L	0.185	9.40	30	
Naphthalene	20.0	22.9	ug/L	0.655	14.7	30	
n-Propylbenzene	20.0	22.6	ug/L	3.34	13.0	30	
Styrene	20.0	22.5	ug/L	0.860	12.3	30	
1,1,1,2-Tetrachloroethane	20.0	23.0	ug/L	0.321	14.9	30	
Tetrachloroethene	20.0	22.1	ug/L	0.343	10.6	30	
1,2,3-Trichlorobenzene	20.0	22.2	ug/L	0.442	10.8	30	
1,2,4-Trichlorobenzene	20.0	22.1	ug/L	0.529	10.4	30	
1,1,1-Trichloroethane	20.0	23.3	ug/L	0.425	16.7	30	
1,1,2-Trichloroethane	20.0	22.8	ug/L	0.188	14.1	30	
Trichloroethene	20.0	21.3	ug/L	0.241	6.40	30	
Trichlorofluoromethane	20.0	20.0	ug/L	0.426	0	30	
1,2,3-Trichloropropane	20.0	22.4	ug/L	0.142	11.8	30	
1,2,4-Trimethylbenzene	20.0	23.0	ug/L	1.90	15.0	30	
1,3,5-Trimethylbenzene	20.0	23.0	ug/L	2.02	14.8	30	
Vinyl Acetate	20.0	17.9	ug/L	0.151	10.7	40	
o-Xylene	20.0	22.5	ug/L	0.525	12.4	30	
m-,p-Xylene	40.0	45.6	ug/L	0.546	14.1	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 09/26/2008 Sample ID: WG283090-12
Instrument ID: HPMS6 Run Time: 11:32 Method: 8260B
File ID: 6M78216 Analyst: CAA QC Key: STD
ICal Workgroup: WG283090 Cal ID: HPMS6 - 25-SEP-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	21.0	ug/L	0.440	5.20	30	
1,1-Dichloroethene	CCC	20.0	18.9	ug/L	0.394	5.30	30	
1,2-Dichloropropane	CCC	20.0	20.6	ug/L	0.206	3.20	30	
Ethylbenzene	CCC	20.0	21.7	ug/L	0.422	8.50	30	
Toluene	CCC	20.0	20.5	ug/L	1.13	2.50	30	
Vinyl Chloride	CCC	20.0	24.0	ug/L	0.230	20.0	30	
Bromoform	SPCC	20.0	18.7	ug/L	0.144	6.30	30	
Chlorobenzene	SPCC	20.0	21.0	ug/L	0.755	4.80	30	
Chloromethane	SPCC	20.0	18.5	ug/L	0.231	7.60	30	
1,1-Dichloroethane	SPCC	20.0	21.3	ug/L	0.455	6.40	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.4	ug/L	0.365	1.80	30	
Acetone		20.0	20.4	ug/L	0.0576	2.10	30	
Benzene		20.0	20.2	ug/L	0.791	0.800	30	
Bromobenzene		20.0	22.0	ug/L	0.535	10.1	30	
Bromochloromethane		20.0	21.5	ug/L	0.116	7.50	30	
Bromodichloromethane		20.0	22.0	ug/L	0.335	9.90	30	
Bromomethane		20.0	19.7	ug/L	0.134	1.70	30	
2-Butanone		20.0	20.5	ug/L	0.0670	2.70	30	
n-Butylbenzene		20.0	22.0	ug/L	2.04	10.2	30	
sec-Butylbenzene		20.0	21.8	ug/L	2.33	9.10	30	
tert-Butylbenzene		20.0	21.0	ug/L	0.392	5.00	30	
Carbon Disulfide		20.0	17.2	ug/L	0.549	14.1	30	
Carbon Tetrachloride		20.0	20.1	ug/L	0.285	0.600	30	
Dibromochloromethane		20.0	21.5	ug/L	0.239	7.30	30	
Chloroethane		20.0	23.0	ug/L	0.152	15.2	30	
2-Chloroethyl Vinyl Ether		20.0	19.6	ug/L	0.100	1.90	30	
2-Chlorotoluene		20.0	20.9	ug/L	1.82	4.30	30	
4-Chlorotoluene		20.0	21.2	ug/L	1.91	6.10	30	
1,2-Dibromo-3-Chloropropane		20.0	20.9	ug/L	0.0899	4.60	30	
1,2-Dibromoethane		20.0	20.5	ug/L	0.199	2.40	30	
Dibromomethane		20.0	20.5	ug/L	0.111	2.50	30	
1,2-Dichlorobenzene		20.0	20.3	ug/L	1.03	1.30	30	
1,3-Dichlorobenzene		20.0	21.1	ug/L	1.12	5.30	30	
1,4-Dichlorobenzene		20.0	20.0	ug/L	1.13	0.200	30	
Dichlorodifluoromethane		20.0	26.1	ug/L	0.287	30.7	30	*
1,2-Dichloroethane		20.0	20.3	ug/L	0.386	1.70	30	
cis-1,2-Dichloroethene		20.0	21.3	ug/L	0.213	6.70	30	
trans-1,2-Dichloroethene		20.0	20.0	ug/L	0.185	0.100	30	
1,3-Dichloropropane		20.0	20.8	ug/L	0.398	4.20	30	
2,2-Dichloropropane		20.0	21.7	ug/L	0.428	8.70	30	
cis-1,3-Dichloropropene		20.0	20.1	ug/L	0.351	0.500	30	
trans-1,3-Dichloropropene		20.0	19.2	ug/L	0.428	4.00	30	

ALT - Modified 09/06/2007
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Login Number: L08100263 Run Date: 09/26/2008 Sample ID: WG283090-12
Instrument ID: HPMS6 Run Time: 11:32 Method: 8260B
File ID: 6M78216 Analyst: CAA QC Key: STD
Ical Workgroup: WG283090 Cal ID: HPMS6 - 25-SEP-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	19.0	ug/L	0.324	5.10	30	
2-Hexanone	20.0	19.6	ug/L	0.136	2.10	30	
Hexachlorobutadiene	20.0	21.0	ug/L	0.288	5.20	30	
Isopropylbenzene	20.0	19.5	ug/L	1.27	2.60	30	
p-Isopropyltoluene	20.0	21.6	ug/L	1.95	7.80	30	
4-Methyl-2-Pentanone	20.0	19.5	ug/L	0.0512	2.40	30	
Methylene Chloride	20.0	19.6	ug/L	0.212	1.90	30	
Naphthalene	20.0	21.5	ug/L	1.27	7.30	30	
n-Propylbenzene	20.0	21.7	ug/L	2.74	8.50	30	
Styrene	20.0	20.8	ug/L	0.894	4.20	30	
1,1,1,2-Tetrachloroethane	20.0	21.4	ug/L	0.268	7.20	30	
Tetrachloroethene	20.0	20.7	ug/L	0.277	3.60	30	
1,2,3-Trichlorobenzene	20.0	19.4	ug/L	0.620	2.80	30	
1,2,4-Trichlorobenzene	20.0	21.8	ug/L	0.733	9.00	30	
1,1,1-Trichloroethane	20.0	21.9	ug/L	0.384	9.70	30	
1,1,2-Trichloroethane	20.0	20.9	ug/L	0.190	4.50	30	
Trichloroethene	20.0	20.7	ug/L	0.196	3.40	30	
Trichlorofluoromethane	20.0	21.2	ug/L	0.428	5.80	30	
1,2,3-Trichloropropane	20.0	20.8	ug/L	0.123	3.80	30	
1,2,4-Trimethylbenzene	20.0	21.7	ug/L	2.10	8.50	30	
1,3,5-Trimethylbenzene	20.0	21.7	ug/L	1.99	8.30	30	
Vinyl Acetate	20.0	17.8	ug/L	0.297	11.2	40	
o-Xylene	20.0	20.7	ug/L	0.520	3.40	30	
m-,p-Xylene	40.0	42.5	ug/L	0.532	6.30	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/13/2008 Sample ID: WG284780-02
Instrument ID: HPMS10 Run Time: 21:37 Method: 8260B
File ID: 10M67734 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG284781 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	40.9	ug/L	0.460	18.2	20	
1,1-Dichloroethene	CCC	50.0	45.0	ug/L	0.220	9.92	20	
1,2-Dichloropropane	CCC	50.0	48.4	ug/L	0.275	3.19	20	
Ethylbenzene	CCC	50.0	50.4	ug/L	0.442	0.886	20	
Toluene	CCC	50.0	51.7	ug/L	1.17	3.41	20	
Vinyl Chloride	CCC	50.0	43.5	ug/L	0.219	13.0	20	
Bromoform	SPCC	50.0	38.8	ug/L	0.155	22.4	40	
Chlorobenzene	SPCC	50.0	48.5	ug/L	0.817	2.92	40	
Chloromethane	SPCC	50.0	48.5	ug/L	0.350	3.02	40	
1,1-Dichloroethane	SPCC	50.0	46.4	ug/L	0.540	7.24	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	59.4	ug/L	0.398	18.7	40	
Acetone		50.0	44.5	ug/L	0.0601	11.1	40	
Benzene		50.0	45.8	ug/L	0.932	8.43	40	
Bromobenzene		50.0	48.8	ug/L	0.634	2.43	40	
Bromochloromethane		50.0	41.2	ug/L	0.115	17.6	40	
Bromodichloromethane		50.0	42.3	ug/L	0.327	15.5	40	
Bromomethane		50.0	31.8	ug/L	0.120	36.4	40	
2-Butanone		50.0	46.9	ug/L	0.0811	6.11	40	
n-Butylbenzene		50.0	57.8	ug/L	1.99	15.7	40	
sec-Butylbenzene		50.0	56.6	ug/L	2.65	13.2	40	
tert-Butylbenzene		50.0	54.2	ug/L	0.478	8.38	40	
Carbon Disulfide		50.0	53.3	ug/L	0.806	6.66	40	
Carbon Tetrachloride		50.0	41.1	ug/L	0.386	17.8	40	
Dibromochloromethane		50.0	47.5	ug/L	0.267	4.91	40	
Chloroethane		50.0	56.6	ug/L	0.209	13.1	40	
2-Chloroethyl Vinyl Ether		50.0	43.4	ug/L	0.121	13.2	40	
2-Chlorotoluene		50.0	57.5	ug/L	1.93	15.0	40	
4-Chlorotoluene		50.0	50.5	ug/L	1.70	0.925	40	
1,2-Dibromo-3-Chloropropane		50.0	48.6	ug/L	0.0801	2.88	40	
1,2-Dibromoethane		50.0	46.9	ug/L	0.209	6.12	40	
Dibromomethane		50.0	42.0	ug/L	0.123	16.1	40	
1,2-Dichlorobenzene		50.0	49.7	ug/L	1.13	0.697	40	
1,3-Dichlorobenzene		50.0	50.7	ug/L	1.23	1.33	40	
1,4-Dichlorobenzene		50.0	49.2	ug/L	1.25	1.55	40	
Dichlorodifluoromethane		50.0	46.6	ug/L	0.314	6.85	40	
1,2-Dichloroethane		50.0	40.7	ug/L	0.388	18.5	40	
cis-1,2-Dichloroethene		50.0	44.2	ug/L	0.254	11.5	40	
trans-1,2-Dichloroethene		50.0	44.2	ug/L	0.244	11.6	40	
1,3-Dichloropropane		50.0	50.0	ug/L	0.365	0.0240	40	
2,2-Dichloropropane		50.0	43.6	ug/L	0.430	12.8	40	
cis-1,3-Dichloropropene		50.0	45.4	ug/L	0.365	9.25	40	
trans-1,3-Dichloropropene		50.0	49.1	ug/L	0.414	1.75	40	

CCV - Modified 03/05/2008
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Login Number: L08100263 Run Date: 10/13/2008 Sample ID: WG284780-02
Instrument ID: HPMS10 Run Time: 21:37 Method: 8260B
File ID: 10M67734 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG284781 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	44.5	ug/L	0.354	10.9	40	
2-Hexanone	50.0	53.7	ug/L	0.141	7.45	40	
Hexachlorobutadiene	50.0	49.0	ug/L	0.299	1.91	40	
Isopropylbenzene	50.0	50.5	ug/L	1.38	0.972	40	
p-Isopropyltoluene	50.0	54.7	ug/L	2.23	9.36	40	
4-Methyl-2-Pentanone	50.0	44.2	ug/L	0.0652	11.7	40	
Methylene Chloride	50.0	44.3	ug/L	0.239	11.5	40	
Naphthalene	50.0	52.0	ug/L	1.38	3.91	40	
n-Propylbenzene	50.0	58.9	ug/L	2.90	17.7	40	
Styrene	50.0	52.4	ug/L	0.891	4.89	40	
1,1,1,2-Tetrachloroethane	50.0	47.5	ug/L	0.310	5.02	40	
Tetrachloroethene	50.0	46.8	ug/L	0.249	6.39	40	
1,2,3-Trichlorobenzene	50.0	47.7	ug/L	0.660	4.53	40	
1,2,4-Trichlorobenzene	50.0	48.8	ug/L	0.759	2.34	40	
1,1,1-Trichloroethane	50.0	40.5	ug/L	0.419	18.9	40	
1,1,2-Trichloroethane	50.0	49.0	ug/L	0.189	2.03	40	
Trichloroethene	50.0	40.4	ug/L	0.253	19.1	40	
Trichlorofluoromethane	50.0	44.9	ug/L	0.534	10.2	40	
1,2,3-Trichloropropane	50.0	48.8	ug/L	0.133	2.41	40	
1,2,4-Trimethylbenzene	50.0	54.7	ug/L	2.22	9.40	40	
1,3,5-Trimethylbenzene	50.0	55.4	ug/L	2.16	10.8	40	
Vinyl Acetate	50.0	43.7	ug/L	0.278	12.5	40	
o-Xylene	50.0	51.2	ug/L	0.530	2.31	40	
m-,p-Xylene	100	101	ug/L	0.545	0.961	40	
1,2-Dichloroethene	100	88.5	ug/L	0.249	11.5	40	
Xylenes	150	152	ug/L	0.537	1.41	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/14/2008 Sample ID: WG284798-02
Instrument ID: HPMS6 Run Time: 08:22 Method: 8260B
File ID: 6M78775 Analyst: CAA QC Key: STD
Workgroup (AAB#): WG284799 Cal ID: HPMS6 - 25-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	46.2	ug/L	0.387	7.55	20	
1,1-Dichloroethene	CCC	50.0	40.5	ug/L	0.335	18.9	20	
1,2-Dichloropropane	CCC	50.0	44.3	ug/L	0.177	11.4	20	
Ethylbenzene	CCC	50.0	50.3	ug/L	0.392	0.638	20	
Toluene	CCC	50.0	46.8	ug/L	1.04	6.34	20	
Vinyl Chloride	CCC	50.0	47.7	ug/L	0.173	4.62	20	
Bromoform	SPCC	50.0	40.1	ug/L	0.127	19.8	40	
Chlorobenzene	SPCC	50.0	48.4	ug/L	0.697	3.17	40	
Chloromethane	SPCC	50.0	38.9	ug/L	0.195	22.3	40	
1,1-Dichloroethane	SPCC	50.0	44.1	ug/L	0.377	11.8	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	46.1	ug/L	0.331	7.74	40	
Acetone		50.0	31.1	ug/L	0.0334	37.8	40	
Benzene		50.0	45.9	ug/L	0.720	8.23	40	
Bromobenzene		50.0	52.2	ug/L	0.508	4.44	40	
Bromochloromethane		50.0	49.7	ug/L	0.107	0.660	40	
Bromodichloromethane		50.0	46.1	ug/L	0.281	7.77	40	
Bromomethane		50.0	43.5	ug/L	0.124	13.0	40	
2-Butanone		50.0	36.3	ug/L	0.0473	27.4	40	
n-Butylbenzene		50.0	56.7	ug/L	2.10	13.4	40	
sec-Butylbenzene		50.0	59.7	ug/L	2.55	19.4	40	
tert-Butylbenzene		50.0	52.6	ug/L	0.392	5.13	40	
Carbon Disulfide		50.0	47.9	ug/L	0.613	4.12	40	
Carbon Tetrachloride		50.0	52.2	ug/L	0.297	4.32	40	
Dibromochloromethane		50.0	50.6	ug/L	0.226	1.26	40	
Chloroethane		50.0	51.3	ug/L	0.136	2.62	40	
2-Chloroethyl Vinyl Ether		50.0	41.0	ug/L	0.0853	18.1	40	
2-Chlorotoluene		50.0	52.3	ug/L	1.82	4.67	40	
4-Chlorotoluene		50.0	53.7	ug/L	1.94	7.47	40	
1,2-Dibromo-3-Chloropropane		50.0	42.8	ug/L	0.0736	14.4	40	
1,2-Dibromoethane		50.0	43.8	ug/L	0.170	12.5	40	
Dibromomethane		50.0	43.2	ug/L	0.0937	13.7	40	
1,2-Dichlorobenzene		50.0	46.7	ug/L	0.945	6.62	40	
1,3-Dichlorobenzene		50.0	50.9	ug/L	1.08	1.79	40	
1,4-Dichlorobenzene		50.0	48.2	ug/L	1.09	3.61	40	
Dichlorodifluoromethane		50.0	50.0	ug/L	0.220	0.0452	40	
1,2-Dichloroethane		50.0	38.1	ug/L	0.289	23.7	40	
cis-1,2-Dichloroethene		50.0	51.0	ug/L	0.204	1.95	40	
trans-1,2-Dichloroethene		50.0	52.0	ug/L	0.192	3.96	40	
1,3-Dichloropropane		50.0	39.2	ug/L	0.300	21.7	40	
2,2-Dichloropropane		50.0	46.3	ug/L	0.364	7.47	40	
cis-1,3-Dichloropropene		50.0	43.5	ug/L	0.304	13.1	40	
trans-1,3-Dichloropropene		50.0	40.5	ug/L	0.361	19.1	40	

CCV - Modified 03/05/2008
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Login Number: L08100263 Run Date: 10/14/2008 Sample ID: WG284798-02
Instrument ID: HPMS6 Run Time: 08:22 Method: 8260B
File ID: 6M78775 Analyst: CAA QC Key: STD
Workgroup (AAB#): WG284799 Cal ID: HPMS6 - 25-SEP-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	41.5	ug/L	0.283	17.1	40	
2-Hexanone	50.0	34.5	ug/L	0.0956	31.1	40	
Hexachlorobutadiene	50.0	51.4	ug/L	0.281	2.77	40	
Isopropylbenzene	50.0	51.4	ug/L	1.34	2.76	40	
p-Isopropyltoluene	50.0	61.2	ug/L	2.22	22.4	40	
4-Methyl-2-Pentanone	50.0	39.6	ug/L	0.0416	20.8	40	
Methylene Chloride	50.0	42.8	ug/L	0.182	14.4	40	
Naphthalene	50.0	50.7	ug/L	1.20	1.45	40	
n-Propylbenzene	50.0	57.4	ug/L	2.90	14.9	40	
Styrene	50.0	49.4	ug/L	0.847	1.26	40	
1,1,1,2-Tetrachloroethane	50.0	50.4	ug/L	0.252	0.788	40	
Tetrachloroethene	50.0	44.2	ug/L	0.237	11.6	40	
1,2,3-Trichlorobenzene	50.0	41.6	ug/L	0.531	16.9	40	
1,2,4-Trichlorobenzene	50.0	48.0	ug/L	0.647	3.92	40	
1,1,1-Trichloroethane	50.0	51.2	ug/L	0.358	2.34	40	
1,1,2-Trichloroethane	50.0	44.2	ug/L	0.160	11.7	40	
Trichloroethene	50.0	51.5	ug/L	0.195	2.93	40	
Trichlorofluoromethane	50.0	48.7	ug/L	0.391	2.53	40	
1,2,3-Trichloropropane	50.0	45.2	ug/L	0.107	9.51	40	
1,2,4-Trimethylbenzene	50.0	57.2	ug/L	2.22	14.4	40	
1,3,5-Trimethylbenzene	50.0	58.3	ug/L	2.14	16.5	40	
Vinyl Acetate	50.0	36.7	ug/L	0.245	26.7	40	
o-Xylene	50.0	48.4	ug/L	0.487	3.25	40	
m-,p-Xylene	100	99.2	ug/L	0.496	0.830	40	
1,2-Dichloroethene	100	103	ug/L	0.198	2.96	40	
Xylenes	150	148	ug/L	0.491	1.64	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/14/2008 Sample ID: WG284867-02
Instrument ID: HPMS10 Run Time: 12:56 Method: 8260B
File ID: 10M67763 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG284869 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	42.1	ug/L	0.474	15.8	20	
1,1-Dichloroethene	CCC	50.0	43.2	ug/L	0.211	13.6	20	
1,2-Dichloropropane	CCC	50.0	47.3	ug/L	0.268	5.41	20	
Ethylbenzene	CCC	50.0	49.8	ug/L	0.436	0.362	20	
Toluene	CCC	50.0	51.9	ug/L	1.17	3.75	20	
Vinyl Chloride	CCC	50.0	44.1	ug/L	0.222	11.8	20	
Bromoform	SPCC	50.0	39.0	ug/L	0.155	22.1	40	
Chlorobenzene	SPCC	50.0	47.3	ug/L	0.796	5.46	40	
Chloromethane	SPCC	50.0	44.0	ug/L	0.318	12.0	40	
1,1-Dichloroethane	SPCC	50.0	46.8	ug/L	0.545	6.46	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	56.7	ug/L	0.380	13.4	40	
Acetone		50.0	43.8	ug/L	0.0592	12.4	40	
Benzene		50.0	45.0	ug/L	0.916	9.99	40	
Bromobenzene		50.0	46.7	ug/L	0.606	6.69	40	
Bromochloromethane		50.0	41.3	ug/L	0.115	17.3	40	
Bromodichloromethane		50.0	42.5	ug/L	0.329	15.1	40	
Bromomethane		50.0	39.6	ug/L	0.149	20.8	40	
2-Butanone		50.0	46.2	ug/L	0.0798	7.59	40	
n-Butylbenzene		50.0	57.0	ug/L	1.96	13.9	40	
sec-Butylbenzene		50.0	54.5	ug/L	2.55	9.03	40	
tert-Butylbenzene		50.0	51.7	ug/L	0.456	3.36	40	
Carbon Disulfide		50.0	50.6	ug/L	0.765	1.21	40	
Carbon Tetrachloride		50.0	42.5	ug/L	0.399	15.0	40	
Dibromochloromethane		50.0	47.7	ug/L	0.268	4.54	40	
Chloroethane		50.0	53.5	ug/L	0.198	6.90	40	
2-Chloroethyl Vinyl Ether		50.0	47.4	ug/L	0.133	5.25	40	
2-Chlorotoluene		50.0	56.4	ug/L	1.89	12.7	40	
4-Chlorotoluene		50.0	48.2	ug/L	1.62	3.64	40	
1,2-Dibromo-3-Chloropropane		50.0	44.1	ug/L	0.0728	11.8	40	
1,2-Dibromoethane		50.0	46.6	ug/L	0.208	6.71	40	
Dibromomethane		50.0	42.2	ug/L	0.123	15.6	40	
1,2-Dichlorobenzene		50.0	48.0	ug/L	1.09	4.07	40	
1,3-Dichlorobenzene		50.0	49.3	ug/L	1.20	1.38	40	
1,4-Dichlorobenzene		50.0	47.9	ug/L	1.21	4.20	40	
Dichlorodifluoromethane		50.0	45.9	ug/L	0.309	8.21	40	
1,2-Dichloroethane		50.0	43.0	ug/L	0.409	14.0	40	
cis-1,2-Dichloroethene		50.0	43.4	ug/L	0.249	13.1	40	
trans-1,2-Dichloroethene		50.0	43.5	ug/L	0.240	13.1	40	
1,3-Dichloropropane		50.0	49.2	ug/L	0.360	1.60	40	
2,2-Dichloropropane		50.0	43.9	ug/L	0.433	12.2	40	
cis-1,3-Dichloropropene		50.0	45.1	ug/L	0.363	9.76	40	
trans-1,3-Dichloropropene		50.0	49.6	ug/L	0.418	0.886	40	

CCV - Modified 03/05/2008
PDF File ID: 1230587
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Login Number: L08100263	Run Date: 10/14/2008	Sample ID: WG284867-02
Instrument ID: HPMS10	Run Time: 12:56	Method: 8260B
File ID: 10M67763	Analyst: TMB	QC Key: STD
Workgroup (AAB#): WG284869	Cal ID: HPMS10 - 16-SEP-08	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene		50.0	44.5	ug/L	0.353	11.1	40	
2-Hexanone		50.0	54.0	ug/L	0.141	7.93	40	
Hexachlorobutadiene		50.0	49.0	ug/L	0.299	1.91	40	
Isopropylbenzene		50.0	50.0	ug/L	1.36	0.00660	40	
p-Isopropyltoluene		50.0	53.5	ug/L	2.18	7.04	40	
4-Methyl-2-Pentanone		50.0	44.0	ug/L	0.0650	12.0	40	
Methylene Chloride		50.0	43.4	ug/L	0.235	13.2	40	
Naphthalene		50.0	49.0	ug/L	1.30	1.93	40	
n-Propylbenzene		50.0	56.7	ug/L	2.79	13.5	40	
Styrene		50.0	51.3	ug/L	0.872	2.59	40	
1,1,1,2-Tetrachloroethane		50.0	47.7	ug/L	0.311	4.54	40	
Tetrachloroethene		50.0	47.0	ug/L	0.250	5.97	40	
1,2,3-Trichlorobenzene		50.0	46.6	ug/L	0.645	6.72	40	
1,2,4-Trichlorobenzene		50.0	46.9	ug/L	0.728	6.29	40	
1,1,1-Trichloroethane		50.0	41.4	ug/L	0.428	17.1	40	
1,1,2-Trichloroethane		50.0	48.9	ug/L	0.189	2.21	40	
Trichloroethene		50.0	39.3	ug/L	0.246	21.3	40	
Trichlorofluoromethane		50.0	45.3	ug/L	0.539	9.50	40	
1,2,3-Trichloropropane		50.0	48.0	ug/L	0.131	3.99	40	
1,2,4-Trimethylbenzene		50.0	53.8	ug/L	2.18	7.59	40	
1,3,5-Trimethylbenzene		50.0	54.2	ug/L	2.11	8.49	40	
Vinyl Acetate		50.0	58.2	ug/L	0.372	16.5	40	
o-Xylene		50.0	50.1	ug/L	0.518	0.135	40	
m-,p-Xylene		100	99.6	ug/L	0.538	0.353	40	
1,2-Dichloroethene		100	86.9	ug/L	0.245	13.1	40	
Xylenes		150	150	ug/L	0.528	0.190	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

CCV - Modified 03/05/2008

PDF File ID: 1230587

Report generated 10/23/2008 14:04



Login Number: L08100263 Run Date: 10/16/2008 Sample ID: WG285196-02
Instrument ID: HPMS10 Run Time: 21:56 Method: 8260B
File ID: 10M67860 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG285197 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	44.3	ug/L	0.499	11.3	20	
1,1-Dichloroethene	CCC	50.0	41.3	ug/L	0.202	17.4	20	
1,2-Dichloropropane	CCC	50.0	47.6	ug/L	0.270	4.72	20	
Ethylbenzene	CCC	50.0	51.1	ug/L	0.447	2.11	20	
Toluene	CCC	50.0	52.1	ug/L	1.18	4.19	20	
Vinyl Chloride	CCC	50.0	52.6	ug/L	0.261	5.11	20	
Bromoform	SPCC	50.0	42.1	ug/L	0.168	15.9	40	
Chlorobenzene	SPCC	50.0	48.3	ug/L	0.813	3.40	40	
Chloromethane	SPCC	50.0	45.0	ug/L	0.325	10.0	40	
1,1-Dichloroethane	SPCC	50.0	48.3	ug/L	0.563	3.38	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	55.9	ug/L	0.375	11.8	40	
Acetone		50.0	51.7	ug/L	0.0699	3.44	40	
Benzene		50.0	44.7	ug/L	0.910	10.6	40	
Bromobenzene		50.0	45.7	ug/L	0.594	8.52	40	
Bromochloromethane		50.0	40.8	ug/L	0.114	18.3	40	
Bromodichloromethane		50.0	45.5	ug/L	0.353	8.94	40	
Bromomethane		50.0	37.3	ug/L	0.140	25.4	40	
2-Butanone		50.0	51.8	ug/L	0.0895	3.65	40	
n-Butylbenzene		50.0	57.8	ug/L	1.99	15.5	40	
sec-Butylbenzene		50.0	55.1	ug/L	2.58	10.3	40	
tert-Butylbenzene		50.0	52.1	ug/L	0.460	4.22	40	
Carbon Disulfide		50.0	48.4	ug/L	0.732	3.22	40	
Carbon Tetrachloride		50.0	47.7	ug/L	0.448	4.53	40	
Dibromochloromethane		50.0	50.8	ug/L	0.285	1.54	40	
Chloroethane		50.0	50.3	ug/L	0.186	0.558	40	
2-Chloroethyl Vinyl Ether		50.0	44.8	ug/L	0.125	10.4	40	
2-Chlorotoluene		50.0	56.3	ug/L	1.89	12.7	40	
4-Chlorotoluene		50.0	49.5	ug/L	1.67	0.939	40	
1,2-Dibromo-3-Chloropropane		50.0	41.0	ug/L	0.0677	18.0	40	
1,2-Dibromoethane		50.0	45.7	ug/L	0.204	8.54	40	
Dibromomethane		50.0	44.2	ug/L	0.129	11.5	40	
1,2-Dichlorobenzene		50.0	47.6	ug/L	1.08	4.80	40	
1,3-Dichlorobenzene		50.0	48.7	ug/L	1.18	2.59	40	
1,4-Dichlorobenzene		50.0	47.5	ug/L	1.20	4.91	40	
Dichlorodifluoromethane		50.0	47.4	ug/L	0.319	5.11	40	
1,2-Dichloroethane		50.0	49.1	ug/L	0.467	1.83	40	
cis-1,2-Dichloroethene		50.0	43.5	ug/L	0.250	13.1	40	
trans-1,2-Dichloroethene		50.0	41.9	ug/L	0.231	16.3	40	
1,3-Dichloropropane		50.0	50.7	ug/L	0.371	1.46	40	
2,2-Dichloropropane		50.0	46.3	ug/L	0.457	7.35	40	
cis-1,3-Dichloropropene		50.0	44.2	ug/L	0.356	11.5	40	
trans-1,3-Dichloropropene		50.0	52.5	ug/L	0.443	5.09	40	

CCV - Modified 03/05/2008
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Login Number: L08100263 Run Date: 10/16/2008 Sample ID: WG285196-02
Instrument ID: HPMS10 Run Time: 21:56 Method: 8260B
File ID: 10M67860 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG285197 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	45.3	ug/L	0.360	9.42	40	
2-Hexanone	50.0	58.7	ug/L	0.154	17.3	40	
Hexachlorobutadiene	50.0	50.5	ug/L	0.307	0.929	40	
Isopropylbenzene	50.0	52.0	ug/L	1.42	4.05	40	
p-Isopropyltoluene	50.0	53.3	ug/L	2.17	6.51	40	
4-Methyl-2-Pentanone	50.0	44.1	ug/L	0.0651	11.9	40	
Methylene Chloride	50.0	41.9	ug/L	0.227	16.1	40	
Naphthalene	50.0	45.9	ug/L	1.22	8.11	40	
n-Propylbenzene	50.0	56.7	ug/L	2.79	13.4	40	
Styrene	50.0	52.9	ug/L	0.899	5.82	40	
1,1,1,2-Tetrachloroethane	50.0	51.1	ug/L	0.334	2.24	40	
Tetrachloroethene	50.0	47.5	ug/L	0.253	5.08	40	
1,2,3-Trichlorobenzene	50.0	45.9	ug/L	0.634	8.23	40	
1,2,4-Trichlorobenzene	50.0	45.6	ug/L	0.709	8.81	40	
1,1,1-Trichloroethane	50.0	44.8	ug/L	0.463	10.4	40	
1,1,2-Trichloroethane	50.0	50.8	ug/L	0.196	1.61	40	
Trichloroethene	50.0	38.5	ug/L	0.241	23.1	40	
Trichlorofluoromethane	50.0	51.4	ug/L	0.612	2.81	40	
1,2,3-Trichloropropane	50.0	48.7	ug/L	0.132	2.65	40	
1,2,4-Trimethylbenzene	50.0	53.8	ug/L	2.19	7.64	40	
1,3,5-Trimethylbenzene	50.0	54.0	ug/L	2.10	8.00	40	
Vinyl Acetate	50.0	53.5	ug/L	0.341	6.99	40	
o-Xylene	50.0	50.5	ug/L	0.523	0.965	40	
m-,p-Xylene	100	102	ug/L	0.551	2.00	40	
1,2-Dichloroethene	100	85.3	ug/L	0.240	14.7	40	
Xylenes	150	152	ug/L	0.537	1.66	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285280-02
Instrument ID: HPMS10 Run Time: 13:21 Method: 8260B
File ID: 10M67889 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG285281 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	43.3	ug/L	0.487	13.3	20	
1,1-Dichloroethene	CCC	50.0	43.7	ug/L	0.214	12.6	20	
1,2-Dichloropropane	CCC	50.0	49.4	ug/L	0.280	1.30	20	
Ethylbenzene	CCC	50.0	51.2	ug/L	0.449	2.48	20	
Toluene	CCC	50.0	52.4	ug/L	1.18	4.85	20	
Vinyl Chloride	CCC	50.0	43.3	ug/L	0.218	13.3	20	
Bromoform	SPCC	50.0	42.1	ug/L	0.168	15.7	40	
Chlorobenzene	SPCC	50.0	48.9	ug/L	0.824	2.12	40	
Chloromethane	SPCC	50.0	40.3	ug/L	0.291	19.3	40	
1,1-Dichloroethane	SPCC	50.0	48.6	ug/L	0.566	2.81	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	61.3	ug/L	0.411	22.6	40	
Acetone		50.0	50.9	ug/L	0.0687	1.73	40	
Benzene		50.0	45.4	ug/L	0.923	9.27	40	
Bromobenzene		50.0	48.4	ug/L	0.629	3.18	40	
Bromochloromethane		50.0	42.3	ug/L	0.118	15.3	40	
Bromodichloromethane		50.0	44.5	ug/L	0.344	11.0	40	
Bromomethane		50.0	36.8	ug/L	0.138	26.5	40	
2-Butanone		50.0	48.2	ug/L	0.0833	3.52	40	
n-Butylbenzene		50.0	58.1	ug/L	2.00	16.3	40	
sec-Butylbenzene		50.0	56.4	ug/L	2.64	12.7	40	
tert-Butylbenzene		50.0	53.6	ug/L	0.473	7.22	40	
Carbon Disulfide		50.0	48.6	ug/L	0.734	2.88	40	
Carbon Tetrachloride		50.0	44.3	ug/L	0.415	11.5	40	
Dibromochloromethane		50.0	51.0	ug/L	0.286	2.03	40	
Chloroethane		50.0	52.5	ug/L	0.194	5.09	40	
2-Chloroethyl Vinyl Ether		50.0	48.5	ug/L	0.136	3.03	40	
2-Chlorotoluene		50.0	58.0	ug/L	1.95	16.0	40	
4-Chlorotoluene		50.0	49.4	ug/L	1.66	1.19	40	
1,2-Dibromo-3-Chloropropane		50.0	47.2	ug/L	0.0779	5.60	40	
1,2-Dibromoethane		50.0	50.1	ug/L	0.223	0.208	40	
Dibromomethane		50.0	44.7	ug/L	0.130	10.6	40	
1,2-Dichlorobenzene		50.0	49.5	ug/L	1.13	1.07	40	
1,3-Dichlorobenzene		50.0	50.5	ug/L	1.22	0.969	40	
1,4-Dichlorobenzene		50.0	48.8	ug/L	1.23	2.43	40	
Dichlorodifluoromethane		50.0	41.3	ug/L	0.278	17.4	40	
1,2-Dichloroethane		50.0	45.7	ug/L	0.435	8.56	40	
cis-1,2-Dichloroethene		50.0	44.4	ug/L	0.255	11.2	40	
trans-1,2-Dichloroethene		50.0	43.9	ug/L	0.242	12.2	40	
1,3-Dichloropropane		50.0	52.8	ug/L	0.385	5.51	40	
2,2-Dichloropropane		50.0	45.6	ug/L	0.450	8.84	40	
cis-1,3-Dichloropropene		50.0	46.8	ug/L	0.376	6.46	40	
trans-1,3-Dichloropropene		50.0	53.3	ug/L	0.450	6.69	40	

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Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285280-02
Instrument ID: HPMS10 Run Time: 13:21 Method: 8260B
File ID: 10M67889 Analyst: TMB QC Key: STD
Workgroup (AAB#): WG285281 Cal ID: HPMS10 - 16-SEP-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	45.5	ug/L	0.361	9.06	40	
2-Hexanone	50.0	59.6	ug/L	0.156	19.3	40	
Hexachlorobutadiene	50.0	49.6	ug/L	0.302	0.802	40	
Isopropylbenzene	50.0	51.9	ug/L	1.42	3.89	40	
p-Isopropyltoluene	50.0	54.1	ug/L	2.20	8.11	40	
4-Methyl-2-Pentanone	50.0	48.4	ug/L	0.0715	3.20	40	
Methylene Chloride	50.0	44.5	ug/L	0.241	10.9	40	
Naphthalene	50.0	52.0	ug/L	1.38	4.07	40	
n-Propylbenzene	50.0	57.8	ug/L	2.85	15.6	40	
Styrene	50.0	53.6	ug/L	0.911	7.21	40	
1,1,1,2-Tetrachloroethane	50.0	50.0	ug/L	0.326	0.0608	40	
Tetrachloroethene	50.0	47.8	ug/L	0.255	4.35	40	
1,2,3-Trichlorobenzene	50.0	50.2	ug/L	0.694	0.408	40	
1,2,4-Trichlorobenzene	50.0	49.2	ug/L	0.765	1.57	40	
1,1,1-Trichloroethane	50.0	42.7	ug/L	0.441	14.7	40	
1,1,2-Trichloroethane	50.0	52.7	ug/L	0.204	5.45	40	
Trichloroethene	50.0	39.9	ug/L	0.250	20.1	40	
Trichlorofluoromethane	50.0	45.5	ug/L	0.542	9.00	40	
1,2,3-Trichloropropane	50.0	51.1	ug/L	0.139	2.18	40	
1,2,4-Trimethylbenzene	50.0	54.5	ug/L	2.21	9.08	40	
1,3,5-Trimethylbenzene	50.0	55.1	ug/L	2.15	10.2	40	
Vinyl Acetate	50.0	54.6	ug/L	0.348	9.15	40	
o-Xylene	50.0	52.0	ug/L	0.538	3.94	40	
m-,p-Xylene	100	103	ug/L	0.554	2.67	40	
1,2-Dichloroethene	100	88.3	ug/L	0.249	11.7	40	
Xylenes	150	155	ug/L	0.546	3.09	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285325-02
Instrument ID: HPMS14 Run Time: 18:57 Method: 8260B
File ID: 14M08937 Analyst: MDA QC Key: STD
Workgroup (AAB#): WG285327 Cal ID: HPMS14 - 11-OCT-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	53.4	ug/L	0.390	6.72	20	
1,1-Dichloroethene	CCC	50.0	49.9	ug/L	0.316	0.278	20	
1,2-Dichloropropane	CCC	50.0	51.0	ug/L	0.199	1.93	20	
Ethylbenzene	CCC	50.0	54.9	ug/L	0.451	9.83	20	
Toluene	CCC	50.0	52.1	ug/L	1.20	4.27	20	
Vinyl Chloride	CCC	50.0	56.8	ug/L	0.144	13.6	20	
Bromoform	SPCC	50.0	58.3	ug/L	0.159	16.6	40	
Chlorobenzene	SPCC	50.0	53.5	ug/L	0.805	6.96	40	
Chloromethane	SPCC	50.0	60.9	ug/L	0.200	21.8	40	
1,1-Dichloroethane	SPCC	50.0	52.3	ug/L	0.365	4.58	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	48.4	ug/L	0.343	3.14	40	
Acetone		50.0	55.9	ug/L	0.0304	11.8	40	
Benzene		50.0	50.4	ug/L	0.776	0.702	40	
Bromobenzene		50.0	46.7	ug/L	0.637	6.54	40	
Bromochloromethane		50.0	48.3	ug/L	0.0930	3.45	40	
Bromodichloromethane		50.0	56.8	ug/L	0.310	13.5	40	
Bromomethane		50.0	55.4	ug/L	0.126	10.8	40	
2-Butanone		50.0	53.8	ug/L	0.0420	7.56	40	
n-Butylbenzene		50.0	71.5	ug/L	2.16	43.1	40	*
sec-Butylbenzene		50.0	56.9	ug/L	2.90	13.8	40	
tert-Butylbenzene		50.0	53.6	ug/L	0.472	7.13	40	
Carbon Disulfide		50.0	51.0	ug/L	0.594	1.92	40	
Carbon Tetrachloride		50.0	53.7	ug/L	0.378	7.49	40	
Dibromochloromethane		50.0	57.5	ug/L	0.287	15.1	40	
Chloroethane		50.0	49.6	ug/L	0.111	0.891	40	
2-Chloroethyl Vinyl Ether		50.0	152	ug/L	0.0572	203	40	*
2-Chlorotoluene		50.0	54.8	ug/L	2.39	9.55	40	
4-Chlorotoluene		50.0	51.1	ug/L	1.75	2.18	40	
1,2-Dibromo-3-Chloropropane		50.0	54.3	ug/L	0.0754	8.67	40	
1,2-Dibromoethane		50.0	52.5	ug/L	0.177	5.02	40	
Dibromomethane		50.0	54.7	ug/L	0.0966	9.34	40	
1,2-Dichlorobenzene		50.0	51.5	ug/L	1.10	2.91	40	
1,3-Dichlorobenzene		50.0	52.1	ug/L	1.28	4.29	40	
1,4-Dichlorobenzene		50.0	51.3	ug/L	1.28	2.70	40	
Dichlorodifluoromethane		50.0	57.0	ug/L	0.255	14.0	40	
1,2-Dichloroethane		50.0	57.5	ug/L	0.295	15.1	40	
cis-1,2-Dichloroethene		50.0	49.3	ug/L	0.190	1.48	40	
trans-1,2-Dichloroethene		50.0	49.0	ug/L	0.171	1.94	40	
1,3-Dichloropropane		50.0	52.1	ug/L	0.310	4.13	40	
2,2-Dichloropropane		50.0	57.3	ug/L	0.378	14.6	40	
cis-1,3-Dichloropropene		50.0	52.5	ug/L	0.296	4.97	40	
trans-1,3-Dichloropropene		50.0	56.4	ug/L	0.368	12.9	40	

CCV - Modified 03/05/2008
PDF File ID: 1230587
Report generated 10/23/2008 14:04



Login Number: L08100263 Run Date: 10/17/2008 Sample ID: WG285325-02
Instrument ID: HPMS14 Run Time: 18:57 Method: 8260B
File ID: 14M08937 Analyst: MDA QC Key: STD
Workgroup (AAB#): WG285327 Cal ID: HPMS14 - 11-OCT-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	53.1	ug/L	0.299	6.17	40	
2-Hexanone	50.0	58.7	ug/L	0.0946	17.3	40	
Hexachlorobutadiene	50.0	66.3	ug/L	0.482	32.6	40	
Isopropylbenzene	50.0	56.2	ug/L	1.47	12.5	40	
p-Isopropyltoluene	50.0	63.4	ug/L	2.49	26.7	40	
4-Methyl-2-Pentanone	50.0	55.2	ug/L	0.0439	10.4	40	
Methylene Chloride	50.0	46.1	ug/L	0.153	7.87	40	
Naphthalene	50.0	75.4	ug/L	0.862	50.9	40	*
n-Propylbenzene	50.0	54.7	ug/L	3.24	9.43	40	
Styrene	50.0	56.6	ug/L	0.867	13.3	40	
1,1,1,2-Tetrachloroethane	50.0	58.0	ug/L	0.324	15.9	40	
Tetrachloroethene	50.0	53.6	ug/L	0.333	7.15	40	
1,2,3-Trichlorobenzene	50.0	68.9	ug/L	0.549	37.7	40	
1,2,4-Trichlorobenzene	50.0	70.0	ug/L	0.670	40.0	40	
1,1,1-Trichloroethane	50.0	57.8	ug/L	0.422	15.7	40	
1,1,2-Trichloroethane	50.0	52.3	ug/L	0.172	4.56	40	
Trichloroethene	50.0	51.0	ug/L	0.231	1.92	40	
Trichlorofluoromethane	50.0	53.4	ug/L	0.454	6.72	40	
1,2,3-Trichloropropane	50.0	49.2	ug/L	0.125	1.54	40	
1,2,4-Trimethylbenzene	50.0	66.2	ug/L	2.19	32.4	40	
1,3,5-Trimethylbenzene	50.0	63.3	ug/L	2.22	26.6	40	
Vinyl Acetate	50.0	49.7	ug/L	0.159	0.561	40	
o-Xylene	50.0	56.8	ug/L	0.530	13.5	40	
m-,p-Xylene	100	116	ug/L	0.555	15.9	40	
1,2-Dichloroethene	100	98.3	ug/L	0.181	1.71	40	
Xylenes	150	173	ug/L	0.542	15.1	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG284781

CCV Number: WG284780-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284780-02	NA	NA	483983	893708	1090524
Upper Limit	NA	NA	967966	1787416	2181048
Lower Limit	NA	NA	241992	446854	545262
<u>L08100263-04</u>	<u>1.00</u>	<u>01</u>	<u>337461</u>	<u>611873</u>	<u>718145</u>
WG284781-01	1.00	01	378114	693758	851937
WG284781-02	1.00	01	423885	737580	894562
WG284781-03	1.00	01	407210	711477	864971

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS6
Workgroup (AAB#): WG284799

CCV Number: WG284798-02
CAL ID: HPMS6 - 25-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284798-02	NA	NA	406896	714130	911122
Upper Limit	NA	NA	813792	1428260	1822244
Lower Limit	NA	NA	203448	357065	455561
<u>L08100263-01</u>	<u>1.00</u>	<u>01</u>	<u>318390</u>	<u>554210</u>	<u>723614</u>
L08100263-02	1.00	01	319696	555450	723352
L08100263-03	1.00	01	320440	545645	706820
L08100263-05	1.00	01	314001	547266	707275
L08100263-07	1.00	01	319412	544825	698922
WG284799-01	1.00	01	364215	627555	816127
WG284799-02	1.00	01	386622	653506	837275
WG284799-03	1.00	01	385181	669176	872255
WG284799-04	1.00	01	313931	528127	669489

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG284869

CCV Number: WG284867-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284867-02	NA	NA	438989	784786	964381
Upper Limit	NA	NA	877978	1569572	1928762
Lower Limit	NA	NA	219495	392393	482191
<u>L08100263-04</u>	<u>10.0</u>	<u>DL01</u>	<u>321634</u>	<u>601122</u>	<u>738059</u>
WG284869-01	1.00	01	325959	588039	725737
WG284869-02	1.00	01	366556	639859	767584
WG284869-03	1.00	01	263574	492092	597388
WG284869-04	1.00	01	332198	555084	645863
WG284869-05	1.00	01	332811	576981	672811

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG285197

CCV Number: WG285196-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285196-02	NA	NA	408796	691214	853210
Upper Limit	NA	NA	817592	1382428	1706420
Lower Limit	NA	NA	204398	345607	426605
<u>L08100263-06</u>	<u>1.00</u>	<u>01</u>	<u>269106</u>	<u>483752</u>	<u>601760</u>
<u>L08100263-09</u>	<u>1.00</u>	<u>01</u>	<u>278883</u>	<u>507736</u>	<u>621478</u>
WG285197-01	1.00	01	272031	509441	616680
WG285197-02	1.00	01	348417	582367	711538
WG285197-03	1.00	01	256925	477126	592495
WG285197-04	1.00	01	332588	556288	643402
WG285197-05	1.00	01	346834	571102	685874

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG285281

CCV Number: WG285280-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285280-02	NA	NA	462976	811608	1000893
Upper Limit	NA	NA	925952	1623216	2001786
Lower Limit	NA	NA	231488	405804	500447
<u>L08100263-06</u>	<u>50.0</u>	<u>DL01</u>	<u>354254</u>	<u>653516</u>	<u>817887</u>
WG285281-01	1.00	01	330313	603123	752909
WG285281-02	1.00	01	396471	673915	828868
WG285281-03	1.00	01	434337	768553	941193

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS14
Workgroup (AAB#): WG285327

CCV Number: WG285325-02
CAL ID: HPMS14 - 11-OCT-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285325-02	NA	NA	255247	491459	654994
Upper Limit	NA	NA	510494	982918	1309988
Lower Limit	NA	NA	127624	245730	327497
<u>L08100263-09</u>	<u>1.00</u>	<u>02</u>	<u>232895</u>	<u>452302</u>	<u>617448</u>
WG285327-01	1.00	01	240549	480514	669671
WG285327-02	1.00	01	260682	513126	693466

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG284781

CCV Number: WG284780-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284780-02	NA	NA	17.52	14.51	10.65
Upper Limit	NA	NA	18.02	15.01	11.15
Lower Limit	NA	NA	17.02	14.01	10.15
<u>L08100263-04</u>	<u>1.00</u>	<u>01</u>	<u>17.52</u>	<u>14.51</u>	<u>10.65</u>
WG284781-01	1.00	01	17.52	14.51	10.65
WG284781-02	1.00	01	17.52	14.51	10.65
WG284781-03	1.00	01	17.52	14.51	10.65

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS6
Workgroup (AAB#): WG284799

CCV Number: WG284798-02
CAL ID: HPMS6 - 25-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284798-02	NA	NA	18.86	15.3	10.82
Upper Limit	NA	NA	19.36	15.8	11.32
Lower Limit	NA	NA	18.36	14.8	10.32
L08100263-01	1.00	01	18.86	15.29	10.83
L08100263-02	1.00	01	18.85	15.3	10.82
L08100263-03	1.00	01	18.85	15.3	10.82
L08100263-05	1.00	01	18.86	15.29	10.82
L08100263-07	1.00	01	18.85	15.3	10.82
WG284799-01	1.00	01	18.86	15.29	10.82
WG284799-02	1.00	01	18.86	15.3	10.82
WG284799-03	1.00	01	18.86	15.3	10.82
WG284799-04	1.00	01	18.85	15.3	10.82

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG284869

CCV Number: WG284867-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG284867-02	NA	NA	17.52	14.51	10.65
Upper Limit	NA	NA	18.02	15.01	11.15
Lower Limit	NA	NA	17.02	14.01	10.15
<u>L08100263-04</u>	<u>10.0</u>	<u>DL01</u>	<u>17.52</u>	<u>14.51</u>	<u>10.65</u>
WG284869-01	1.00	01	17.52	14.51	10.65
WG284869-02	1.00	01	17.52	14.51	10.65
WG284869-03	1.00	01	17.52	14.51	10.65
WG284869-04	1.00	01	17.52	14.51	10.65
WG284869-05	1.00	01	17.52	14.51	10.65

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG285197

CCV Number: WG285196-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285196-02	NA	NA	17.52	14.51	10.65
Upper Limit	NA	NA	18.02	15.01	11.15
Lower Limit	NA	NA	17.02	14.01	10.15
L08100263-06	1.00	01	17.52	14.51	10.65
L08100263-09	1.00	01	17.51	14.51	10.65
WG285197-01	1.00	01	17.52	14.51	10.65
WG285197-02	1.00	01	17.52	14.51	10.65
WG285197-03	1.00	01	17.52	14.51	10.65
WG285197-04	1.00	01	17.52	14.51	10.65
WG285197-05	1.00	01	17.52	14.51	10.65

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS10
Workgroup (AAB#): WG285281

CCV Number: WG285280-02
CAL ID: HPMS10 - 16-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285280-02	NA	NA	17.52	14.51	10.65
Upper Limit	NA	NA	18.02	15.01	11.15
Lower Limit	NA	NA	17.02	14.01	10.15
<u>L08100263-06</u>	<u>50.0</u>	<u>DL01</u>	17.52	14.51	10.65
WG285281-01	1.00	01	17.52	14.51	10.65
WG285281-02	1.00	01	17.52	14.51	10.65
WG285281-03	1.00	01	17.52	14.51	10.65

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

Underline = Response outside limits

Login Number: L08100263
Instrument ID: HPMS14
Workgroup (AAB#): WG285327

CCV Number: WG285325-02
CAL ID: HPMS14 - 11-OCT-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG285325-02	NA	NA	17.15	14.36	10.74
Upper Limit	NA	NA	17.65	14.86	11.24
Lower Limit	NA	NA	16.65	13.86	10.24
<u>L08100263-09</u>	<u>1.00</u>	<u>02</u>	<u>17.149</u>	<u>14.36</u>	<u>10.743</u>
WG285327-01	1.00	01	17.149	14.361	10.743
WG285327-02	1.00	01	17.149	14.36	10.743

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

Underline = Response outside limits

2.2 General Chemistry Data

2.2.1 Nitrate Data

2.2.1.1 Summary Data

LABORATORY REPORT

00081739

L08100263

10/23/08 15:29

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: Larry Duty

Project Number: 2773.025
Project: Longhorn AAP
Site: LHAAP

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

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
49DPT-02	L08100263-08	353.2	1	09-OCT-08



Report Number: **L08100263**Report Date : **October 23, 2008**

00081740

Sample Number: **L08100263-08**
Client ID: **49DPT-02**
Matrix: **Water**
Workgroup Number: **WG284561**
Collect Date: **10/08/2008 07:45**

PrePrep Method: **NONE**
Prep Method: **353.2**
Analytical Method: **353.2**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **SMARTCHEM**
Prep Date: **10/10/2008 14:08**
Cal Date: **10/10/2008 09:20**
Run Date: **10/10/2008 14:08**
File ID: **SC08101415555801**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Nitrogen, Nitrate-Nitrite		0.0860		0.0500	0.0250

1 of 1



2.2.1.2 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.

Data Checklist

Date: 10-OCT-2008

Analyst: DIH

Analyst: NA

Method: NO3

Instrument: SC

Curve Workgroup: NA

Runlog ID: _____

Analytical Workgroups: WG284560 WG284561 WG284573

Calibration/Linearity	10/10/2008
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:
16-OCT-2008

Secondary Reviewer:



Analytical Method: 353.2

AAB#: WG284561

Login Number: L08100263

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
49DPT-02	10/08/08	10/09/08	10/10/08	28	2.27	10/10/08	28	2.27	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number:	<u>L08100263</u>	Work Group:	<u>WG284561</u>
Blank File ID:	<u>SC08101415452201</u>	Blank Sample ID:	<u>WG284561-01</u>
Prep Date:	<u>10/10/08 14:08</u>	Instrument ID:	<u>SMARTCHEM</u>
Analyzed Date:	<u>10/10/08 14:08</u>	Method:	<u>353.2</u>
Analyst:	<u>DIH</u>		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS2	WG284561-03	SC08101415454301	10/10/08 14:08	
49DPT-02	L08100263-08	SC08101415555801	10/10/08 14:08	
LCS	WG284561-02	SC08101415453301	10/10/08 14:08	
DUP	WG284561-05	SC08101415460201	10/10/08 14:08	

Report Name: BLANK_SUMMARY
PDF File ID: 1221993
Report generated 10/14/2008 16:29



Login Number: L08100263 Prep Date: 10/10/08 14:08 Sample ID: WG284561-01
Instrument ID: SMARTCHEM Run Date: 10/10/08 14:08 Prep Method: 353.2
File ID: SC08101415452201 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG284561 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: SMARTC - 10-OCT-08

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: 1221994
14-OCT-2008 16:29



Login Number: L08100263 Analyst: DIH Prep Method: 353.2
Instrument ID: SMARTCHEM Matrix: Water Method: 353.2
Workgroup (AAB#): WG284561 Units: mg/L
QC Key: STD Lot #: STD28610
Sample ID: WG284561-02 LCS File ID: SC08101415453301 Run Date: 10/10/2008 14:08
Sample ID: WG284561-03 LCS2 File ID: SC08101415454301 Run Date: 10/10/2008 14:08

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrogen, Nitrate-Nitrite	1.00	0.982	98.2	1.00	0.987	98.7	0.508	90 - 110	15	

2.2.1.3 Raw Data

WORKGROUP: WG284560

SMARTCHEM RUN LOG

284561
284573

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 # 20081010002
- 2) Workgroup _____
Plan # _____
- 3) Workgroup _____
Plan # _____

Analyte	1	2	3
User Prepared Curve	NO3		
SC Prepared Curve			
Position			
1-1	ICV 1.5		
1-2	BIK		
1-3	LCS 1		
1-4	LCS DUP		
1-5	NO2 1		
1-6	10-193-01		
1-7	10-211-01		
1-8	02		
1-9	03		
1-10	04		
1-11	05		
1-12	06		
1-13	07		
1-14	08		
1-15	09		
1-16	10-280-01	1/50	
1-17	10-303-01		
1-18	10-297-01		
1-19	10-234-01		Auto 1/4
1-20	03		
1-21	DUP 1		
1-22	MS 1		
2-1	MSD 1		
2-2	BIK		
2-3	LCS 1		

NOTES:

- * Run NO2 std on NO3 runs
 * LCS/LCS Dup all parameters
 * MS/MSD (NO3, TKN, NH3)

Position	Analyte	1	2	3
2-4	LCS DUP			
2-5	10-263-08			
2-6	10-197-01			
2-7	02			
2-8	03			
2-9	04			
2-10	05			
2-11	06			
2-12	10			
2-13	11			
2-14	12			
2-15	10-248-01			
2-16	DUP 01			
2-17	MS 02			
2-18	MSD 03			
2-19	04			
2-20	05			
2-21	06			
2-22	MS 07			
2-23	MSD 08			
2-24	09			
2-25	10			
2-26	11			
3-1	12			
3-2	13			
~~3-3~~	~~14~~			

DCN#77047



Heanna Roberts

Approved: October 21, 2008

WORKGROUP: WG284560

SMARTCHEM RUN LOG

Analyte	1	2	3
Position			
3-3	10-248-14		
3-4	BK		
3-5	LCS		
3-6	LCS		
3-7	10-32302	Autodilute	1/4
3-8	10-262-d		
3-9	10-268-d	7/8 1/5 color	
3-10	02	7/8	
3-11	03		
3-12	10-273-01		
3-13	10-277-10		
3-14	11		
3-15	12		

Analyte	1	2	3
Position			
3-16	10-277-13		
3-17	DVD		
3-18	MS		
3-19	MSD		
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		
SOP & Revision	NO ₃ R 3532	
Curve Stock (SC made)	std 29132	
Curve ID (user made)		NO ₂
ICV	std 29131	std 29133
CCV	std 29130	
LCS	std 29129	
MS	std 26495	
	Dilution 0.1/5(25)=0.5	

Comments: _____

Analyst: Deanna RobertsDate: 10/10/08

DCN#77047



Deanna Roberts

Approved: October 21, 2008

MICROBAC (OVD)

SMARTCHEM REPORT

UNITS: MG/L

Method : WNO3 -Unit [mg/L] - EPA 353.2 Nitrate-NitrIte

Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.000	0.0166	0.00		1:25:45 PM
DIL-1	RBL	0.000	0.0137	0.00		1:26:57 PM
DIL-1	RBL	0.000	0.0141	0.00		1:28:09 PM
DIL-1	Std-1	0.000	-0.0013	0.00	INV	1:29:21 PM
SR5-1	Std-2	0.040	0.0072	0.00		1:30:33 PM
SR5-2	Std-3	0.100	0.0268	0.00		1:31:45 PM
SR5-3	Std-4	0.500	0.1434	0.00		1:32:57 PM
SR5-4	Std-5	1.000	0.2887	0.00		1:34:09 PM
ST-1	Std-6	2.000	0.5884	0.00		1:35:21 PM
1	ICV 1.5	1.478	0.4327	0.00		1:36:33 PM
2	WG284560-01 BLANK	-0.004	-0.0046	0.00	INV,><,LL	1:37:45 PM
3	WG284560-02 LCS	0.961	0.2802	0.00		1:38:57 PM
4	WG284560-03 LCSDUP	0.986	0.2875	0.00		1:40:09 PM
5	NO2 1	1.022	0.2982	0.00		1:41:21 PM
6	L08100193-01	0.024	0.0036	0.00		1:42:33 PM
7	L08100211-01	0.689	0.1998	0.00		1:43:45 PM
8	L08100211-02	0.004	-0.0024	0.00	INV,><	1:44:57 PM
9	L08100211-03	0.135	0.0364	0.00		1:46:09 PM
10	L08100211-04	1.535	0.4494	0.00		1:47:21 PM
ST-2	CCV (1 mg/L)	0.987	0.2878	98.70		1:48:33 PM
ST-3	CCB (0 mg/L)	-0.008	-0.0059	0.00	INV,><,LL	1:49:45 PM
11	L08100211-05	0.077	0.0191	0.00		1:50:57 PM
12	L08100211-06	0.017	0.0016	0.00		1:52:09 PM
13	L08100211-07	1.804	0.5289	0.00		1:53:21 PM
14	L08100211-08	0.066	0.0160	0.00		1:54:33 PM
15	L08100211-09	0.023	0.0031	0.00		1:55:45 PM
16	L08100280-01 (50)	1.660	0.4864	0.00		1:56:57 PM
17	L08100303-01	0.376	0.1074	0.00		1:58:10 PM
18	L08100297-01	0.014	0.0007	0.00		1:59:22 PM
19	L08100234-01	15.542X	4.5843	0.00	><,LH	2:00:34 PM
20	L08100234-03	0.875	0.2547	0.00		2:01:46 PM
ST-2	CCV (1 mg/L)	0.979	0.2855	97.92		2:02:58 PM

Report Date :10/10/2008

Run Date :10/10/2008

Operator : WESTCO

Plan # :20081010002

Plan Description : NO3-A-DIH/10/10/2008

Heanna Roberts

Approved: October 21, 2008

MICROBAC (OVD)
SMARTCHEM REPORT
 UNITS: MG/L

Method : WNO3 -Unit [mg/L] - EPA 353.2 Nitrate-Nitrite

Smp#[/Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-3	CCB (0 mg/L)	-0.004	-0.0047	0.00	INV,><,LL	2:04:10 PM
21	DUP 234-03	0.881	0.2566	0.00		2:05:22 PM
22	MS 234-03	1.324	0.3872	0.00		2:06:34 PM
23	MSD 234-03	1.361	0.3983	0.00		2:07:46 PM
24	WG284561-01 BLANK	-0.006	-0.0054	0.00	INV,><,LL	2:08:58 PM
25	WG284561-02 LCS	0.982	0.2862	0.00		2:10:10 PM
26	WG284561-03 LCSDUP	0.987	0.2878	0.00		2:11:22 PM
27	L08100263-08	0.086	0.0219	0.00		2:12:34 PM
28	L08100197-01	2.182X	0.6405	0.00	><,LH	2:13:46 PM
29	L08100197-02	1.061	0.3097	0.00		2:14:58 PM
30	L08100197-03	0.104	0.0270	0.00		2:16:10 PM
ST-2	CCV (1 mg/L)	0.999	0.2913	99.89		2:17:22 PM
ST-3	CCB (0 mg/L)	-0.008	-0.0060	0.00	INV,><,LL	2:18:34 PM
31	L08100197-04	0.143	0.0387	0.00		2:19:46 PM
32	L08100197-05	1.438	0.4209	0.00		2:20:58 PM
33	L08100197-06	0.012	0.0001	0.00		2:22:10 PM
34	L08100197-10	0.654	0.1894	0.00		2:23:22 PM
35	L08100197-11	0.014	0.0007	0.00		2:24:34 PM
36	L08100197-12	0.647	0.1874	0.00		2:25:46 PM
37	L08100248-01	0.730	0.2119	0.00		2:26:58 PM
38	DUP 248-01	0.728	0.2113	0.00		2:28:10 PM
39	L08100248-02 MS	1.200	0.3507	0.00		2:29:22 PM
40	L08100248-03 MSD	1.189	0.3473	0.00		2:30:34 PM
ST-2	CCV (1 mg/L)	0.978	0.2852	97.82		2:31:46 PM
ST-3	CCB (0 mg/L)	-0.007	-0.0057	0.00	INV,><,LL	2:32:58 PM
41	L08100248-04	0.385	0.1100	0.00		2:34:10 PM
42	L08100248-05	3.066X	0.9016	0.00	><,LH	2:35:22 PM
43	L08100248-06	6.830X	2.0125	0.00	><,LH	2:36:34 PM
44	L081000248-07 MS	7.114X	2.0964	0.00	><,LH	2:37:46 PM
45	L08100248-08 MSD	6.872X	2.0248	0.00	><,LH	2:38:58 PM
46	L08100248-09	0.449	0.1289	0.00		2:40:10 PM
47	L08100248-10	1.144	0.3340	0.00		2:41:22 PM

Report Date :10/10/2008 Run Date :10/10/2008 Operator : WESTCO Plan # :20081010002

Plan Description : NO3-A-DIH/10/10/2008

Heanna Roberts

Approved: October 21, 2008

MICROBAC (OVD)
SMARTCHEM REPORT
 UNITS: MG/L

Method : WNO3 -Unit [mg/L] - EPA 353.2 Nitrate-Nitrite

Smp#[[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
48	L08100248-11	1.175	0.3433	0.00		2:42:34 PM
49	L08100248-12	2.892 X	0.8502	0.00	><,LH	2:43:46 PM
50	L08100248-13	0.107	0.0281	0.00		2:44:58 PM
ST-2	CCV (1 mg/L)	0.958	0.2792	95.79		2:46:10 PM
ST-3	CCB (0 mg/L)	-0.008	-0.0059	0.00	INV,><,LL	2:47:22 PM
51	L08100248-14	2.183 X	0.6407	0.00	><,LH	2:48:34 PM
52	BLANK wg 284573-01	-0.008	-0.0059	0.00	INV,><,LL	2:49:47 PM
53	LCS 02	0.929	0.2708	0.00		2:50:58 PM
54	LCSDUP 03	0.955	0.2784	0.00		2:52:11 PM
55	ID 55 10-323-02	15.608 X	4.6037	0.00	><,LH	2:53:23 PM
56	ID 56 10-262-01	0.767	0.2229	0.00		2:54:34 PM
57	ID 57 10-268-01(5)	0.029	0.0049	0.00		2:55:46 PM
58	ID 58 02(5)	0.001	-0.0032	0.00	INV,><	2:56:59 PM
59	ID 59 03(5)	0.010	-0.0007	0.00	INV	2:58:11 PM
60	ID 60 10-273-01	1.827	0.5357	0.00		2:59:23 PM
ST-2	CCV (1 mg/L)	0.954	0.2779	95.35		3:00:35 PM
ST-3	CCB (0 mg/L)	-0.013	-0.0074	0.00	INV,><,LL	3:01:47 PM
61	Add-L08100277-10	0.120	0.0319	0.00		3:02:59 PM
62	Add-L08100277-11	0.142	0.0384	0.00		3:04:11 PM
63	Add-L08100277-12	0.340	0.0968	0.00		3:05:23 PM
64	Add-L08100277-13	-0.004	-0.0046	0.00	INV,><,LL	3:06:35 PM
65	Add-DUP 277-13	0.002	-0.0029	0.00	INV,><	3:07:47 PM
66	Add-MS 277-13	0.452	0.1300	0.00		3:08:59 PM
67	Add-MSD 277-13	0.441	0.1267	0.00		3:10:11 PM
68	Add-ID 68	-0.012 X	-0.0071	0.00	INV,><,LL	3:11:23 PM
69	Add-ID 69	-0.005 X	-0.0050	0.00	INV,><,LL	3:12:35 PM
70	Add-ID 70	-0.013 X	-0.0074	0.00	INV,><,LL	3:13:47 PM
ST-2	Add-CCV (1 mg/L)	0.924	0.2693	92.43		3:14:59 PM
ST-3	Add-CCB (0 mg/L)	-0.003	-0.0044	0.00	INV,><,LL	3:16:11 PM
19-[1/4]	L08100234-01 (4)	3.936	0.2869	0.00	LH	3:25:21 PM
28-[1/4]	L08100197-01	2.178	0.1572	0.00	LH	3:27:27 PM
42-[1/4]	L08100248-05	3.227	0.2346	0.00	LH	3:29:33 PM

Report Date :10/10/2008 Run Date :10/10/2008 Operator : WESTCO Plan # :20081010002
 Plan Description : NO3-A-DIH/10/10/2008

Heanna Roberts

Approved: October 21, 2008

MICROBAC (OVD)
SMARTCHEM REPORT
 UNITS: MG/L

Method : WNO3 -Unit [mg/L] - EPA 353.2 Nitrate-Nitrite

Smp#[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
43-[1/4]	L08100248-06	7.088	0.5195	0.00	LH	3:31:39 PM
44-[1/4]	L081000248-07 MS	7.343	0.5383	0.00	LH	3:33:46 PM
45-[1/4]	L08100248-08 MSD	7.242	0.5309	0.00	LH	3:35:51 PM
49-[1/4]	L08100248-12	3.040	0.2208	0.00	LH	3:37:57 PM
51-[1/4]	L08100248-14	2.302	0.1663	0.00	LH	3:40:03 PM
55-[1/4]	ID 55 10-323-62 (4)	4.933	0.3605	0.00	LH	3:42:09 PM
ST-2	CCV (1 mg/L)	0.920	0.2680	91.99		3:43:03 PM
ST-3	CCB (0 mg/L)	-0.013	-0.0073	0.00	INV,><,LL	3:44:15 PM

0.140

Report Date :10/10/2008 Run Date :10/10/2008 Operator : WESTCO Plan # :20081010002
 Plan Description : NO3-A-DIH/10/10/2008

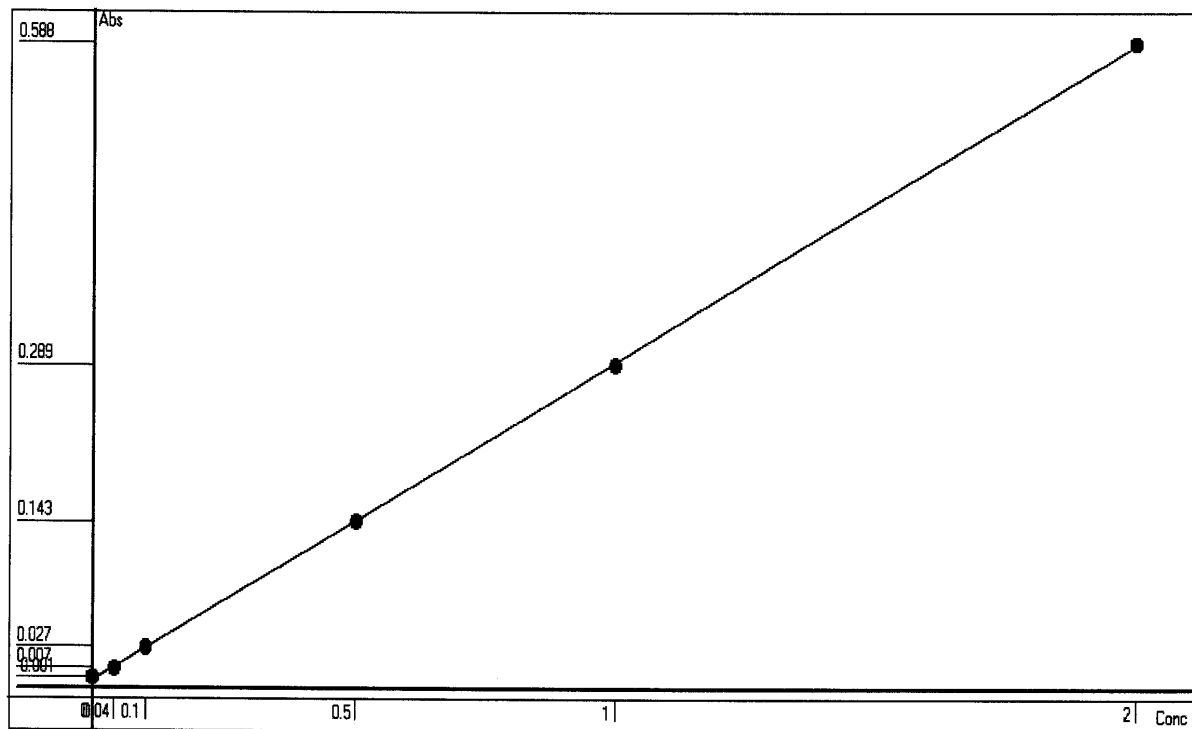
Heanna Roberts

Approved: October 21, 2008

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:1/1/2010 User:Westco Scientific

Plan #: 20081010002 Description : [NO3-A-DIH/10/10/2008] Unit



Point	OD	Conc	Recalc Conc	% Error
1	-0.0013	0	0.0076	0.76
2	0.0072	0.04	0.0364	-9.00
3	0.0268	0.1	0.1028	2.80
4	0.1434	0.5	0.4978	-0.44
5	0.2887	1	0.9900	-1.00
6	0.5884	2	2.0053	0.27

Conc= +3.3877*Abso +0.012 R²=0.9999
 RBL
 0.0139
 0

Report Date 10/10/2008 Run Date 10/10/2008

Approved: October 21, 2008

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
October 23, 2008

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	DSF - DEBRA S. FREDERICK	EAB - EDDIE A. BYERS
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	EDA - ERIN D. AGEE
EDH - ETHAN D. MORRIS	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY
JC - JOHN L. CONLEY	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
KJW - KATIE J. WIEFERICH	KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF
LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN
MES - MARY E. SCHILLING	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	SMH - SHAUNA M. HYDE	TDH - TRICIA D. HUCK
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

List of Valid Qualifiers

October 23, 2008

Qualifier: 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.



NO. 5544



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

Chain of Custody

Laboratory Name: <i>Microbac</i>				Address:				Contact:								
Project Name: <i>CHAAP</i>				Project Location: <i>Karnadi, TX</i>				Analysis and Method Desired (Indicate separate containers)				Remarks				
Project No.				Project Contact		Project Telephone No.		Number of Containers	<i>VOC</i>	<i>Nitrate/Nitrite</i>						
Point of Contact:						Project Manager/Supervisor:										
Telephone No.																
Item No.	Sample Number	Date	Time	Comp	Grab	Matrix	Sample Description, Location									
1	58DPT-08	10/2	1330	☒		W		3	X							
2	58DPT-01	10/2	945			W		3	X							
3	58DPT-03	10/2	1245			W		3	X							
4	58DPT-04	10/1	955			W		3	X							
5	58DPT-05	10/2	915			W		3	X							
6	18/4 DPT-1C	10/8	845			W		3	X							
7	DUP-01	10/2	-			W		3	X							
8	49DPT-02	10/8	745			W		1		X						
9	Trip Blank	-	-			W		3	X							
10																
Transfers Relinquished By (signature)				Date/Time		Transfers Accepted By (signature)		Date/Time		Special Instructions						
<i>g. bilal</i>				10/8/08 1200												
										FedEx Airbill No.:						
						Laboratory: <i>Erin Pouch</i>		10-908 923		Sampler's Signature: <i>g. bilal</i>						
TAT: <u>Standard</u>				Rush Date		Seals Intact? <u>Y</u> <u>N</u>		Received Good Condition <u>Y</u> <u>N</u>		Cold						

Client: SHAW longhorn				
Workorder Number: B				
Date Received: 10-9-08				
Delivered by: () Fedx (x) UPS () Client () Courier Time: 0923				
Opened by: ERP				
IR Temp Gun: () D (x) G				
Logged by: ERP / SKT/jim LEX100263				

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
61	1	1266V7250191505822		

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

Login: L08100263

Account: 2773

Project: 2773.025

Samples: 9

Due Date: 16-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-01	509702	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-03	509704	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

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

Login: L08100263

Account: 2773

Project: 2773.025

Samples: 9

Due Date: 16-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-07	509708	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:25	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:25	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:25	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-05	509706	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

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

Login: L08100263

Account: 2773

Project: 2773.025

Samples: 9

Due Date: 16-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-06	509707	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-09	509710	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:25	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

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

Login: L08100263

Account: 2773

Project: 2773.025

Samples: 9

Due Date: 16-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-08	509709	N03N02

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	09-OCT-2008 14:00	ERE	
2	ANALYZ	W1	WET	10-OCT-2008 12:42	DIH	JKT
3	STORE	WET	A1	13-OCT-2008 08:09	JKT	DIH

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-02	509703	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 13:59	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

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

Login: L08100263**Account:** 2773**Project:** 2773.025**Samples:** 9**Due Date:** 16-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100263-04	509705	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	09-OCT-2008 14:00	ERE	
2	ANALYZ	V1	ORG4	10-OCT-2008 10:24	MRT	JKT
3	STORE	ORG4	A1	23-OCT-2008 13:43	ERE	MRT

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



Quick Facts



Look closer. Go further. Do more.

Corporate Information:

Microbac Laboratories, Inc.

Franklin Corporate Center

2000 Corporate Drive, Suite 350

Wexford, PA 15090

Phone: (724) 934-5030

FAX: (724) 934-5088

www.microbac.com

President & CEO: J. Trevor Boyce

Federal Tax ID#: 25-1199-642

DUNS#: 048192892

Incorporated in the State of PA -- May 1, 1969

Employees Corporate-Wide: 467

Facilities Corporate -Wide: 18 Divisions, 28 locations across 15 states



Microbac Laboratories Inc.
Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750

Phone: 800-373-4071
Fax: 740-373-4835
Email: OVL@microbac.com



Please note these administrative changes for our Ohio Valley Division laboratory in Marietta, OH (formerly KEMRON Environmental Services, Inc.), in particular the address, which is a revised routing of remittances on our invoices. All invoices dated April 1, 2008 or later will reflect this change, and will be highlighted with an attention-getting sticker during our transition. Please adjust your records to ensure proper routing of payments.



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

Laboratory Report Number: L08100669

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 November 03, 2008.

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 November 03, 2008.

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 86 pages.

Look closer. Go further. Do more.



Microbac REPORT L08100669
PREPARED FOR Shaw E I, Inc.
WORK ID: QUARTERLY EFFLUENT SAMPLES

1.0 Introduction	4
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2.1.1 Volatiles GCMS Data (8260)	11
2.1.1.1 Summary Data	12
2.1.1.2 QC Summary Data	22
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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L08100669

CHAIN OF CUSTODY: The chain of custody number was 5425.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 1 degrees C.

SAMPLE MANAGEMENT: All samples received were intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and 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: 28-OCT-08

<i>Stephanie Mossburg</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.

MIKE D. ALBERTSON



Volatiles Lab Supervisor

November 3, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name:	Microbac Laboratories Inc.
Laboratory Log Number:	L08100669
Project Name:	798-LONGHORN
Method:	8260B
Prep Batch Number(s):	286203, 286075
Reviewer Name:	MIKE D. ALBERTSON
LRC Date:	November 03, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?	✓				
Were surrogate percent recoveries in all samples within the laboratory QC limits?		✓			1
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <MQL?	✓				
Laboratory control samples (LCS):					
Were all COCs included in the LCS?	✓				
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	✓				
Were LCSs analyzed at the required frequency?	✓				
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		✓			4
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)	NA(2)	NA(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?	✓				

EXCEPTIONS REPORT

ER# - Description

- 1) 1,2-Dichloroethane-d4 and 4-bromofluorobenzene exceeded the upper control limits in samples 01, 02, and 04 and the LCS/LCSD analyzed 10/27/08 on HPMS-6. 4-Bromofluorobenzene exceeded the upper control limit in the method blank analyzed 10/27/08 on HPMS-6.
- 2) n-Butylbenzene and chloroethane exceeded the upper control limits in the CCV analyzed 10/27/08 on HPMS-6. 2-Chloroethylvinyl ether exceeded the upper control limit in the CCV analyzed 10/28/08 on HPMS-14.
- 3) 2-Chloroethylvinyl ether exceeded the upper control limit in the ICV analyzed 10/11/08 on HPMS-14. Dichlorodifluoromethane exceeded the upper control limit in the ICV analyzed 09/26/08 on HPMS-6.
- 4) n-Butylbenzene, 2-chloroethylvinyl ether, dichlorodifluoromethane, p-isopropyltoluene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene exceeded the upper advisory limits in the LCS/LCSD analyzed 10/28/08 on HPMS-14. n-Butylbenzene, s-butylbenzene, chloroethane, chloromethane, 2-chlorotoluene, 4-chlorotoluene, 1,2-dibromo-3-chloropropane, dichlorodifluoromethane, 1,1-dichloroethane, 2-hexanone, p-isopropyltoluene, n-propylbenzene, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, vinyl chloride, and 1,3,5-trimethylbenzene exceeded the upper advisory limits in the LCS/LCSD analyzed 10/27/08 on HPMS-6.
- 5) Bromomethane was detected above the RL in the method blank analyzed 10/28/08 on HPMS-14.

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

00081779

L08100669

11/03/08 10:40

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: Larry Duty

Project Number: 2773.025
Project: Longhorn AAP
Site: QUARTERLY EFFLUENT SAMPLES

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

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
58-DPT-02	L08100669-01	8260B	1	22-OCT-08
58-DPT-03	L08100669-02	8260B	1	22-OCT-08
58-DPT-06	L08100669-03	8260B	1	22-OCT-08
TRIP BLANK	L08100669-04	8260B	1	22-OCT-08

Sample Number: **L08100669-01**
Client ID: **58-DPT-02**
Matrix: **Water**
Workgroup Number: **WG286075**
Collect Date: **10/15/2008 10:10**
Sample Tag: **01**

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

Instrument: **HPMS6**
Prep Date: **10/27/2008 19:02**
Cal Date: **09/25/2008 20:37**
Run Date: **10/27/2008 19:02**
File ID: **6M79233**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.129	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	1.07		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	0.607	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L08100669**Report Date : **November 3, 2008**

00081781

Sample Number: **L08100669-01**
 Client ID: **58-DPT-02**
 Matrix: **Water**
 Workgroup Number: **WG286075**
 Collect Date: **10/15/2008 10:10**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/27/2008 19:02**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/27/2008 19:02**
 File ID: **6M79233**

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	111	86	118		
1,2-Dichloroethane-d4	133	80	120	*	
Toluene-d8	104	88	110		
4-Bromofluorobenzene	129	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

* Surrogate or spike compound out of range

Sample Number: **L08100669-02**
 Client ID: **58-DPT-03**
 Matrix: **Water**
 Workgroup Number: **WG286075**
 Collect Date: **10/15/2008 10:35**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/27/2008 19:35**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/27/2008 19:35**
 File ID: **6M79234**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	6.17	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	1.24		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: **L08100669**Report Date : **November 3, 2008**

00081783

Sample Number: **L08100669-02**
 Client ID: **58-DPT-03**
 Matrix: **Water**
 Workgroup Number: **WG286075**
 Collect Date: **10/15/2008 10:35**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/27/2008 19:35**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/27/2008 19:35**
 File ID: **6M79234**

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	111	86	118		
1,2-Dichloroethane-d4	136	80	120	*	
Toluene-d8	105	88	110		
4-Bromofluorobenzene	129	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

* Surrogate or spike compound out of range

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

Instrument: **HPMS14**
Prep Date: **10/28/2008 19:17**
Cal Date: **10/11/2008 03:19**
Run Date: **10/28/2008 19:17**
File ID: **14M09335**

Sample Number: **L08100669-03**
Client ID: **58-DPT-06**
Matrix: **Water**
Workgroup Number: **WG286203**
Collect Date: **10/15/2008 11:10**
Sample Tag: **01**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1	4.16	J	10.0	2.50
Benzene	71-43-2	2.31		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	2.79	B	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	2.06		1.00	0.125
1,2-Dichloroethane	107-06-2		U	1.00	0.250
1,1-Dichloroethene	75-35-4	1.25		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	0.258	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L08100669**Report Date : **November 3, 2008**

00081785

Sample Number: **L08100669-03**
 Client ID: **58-DPT-06**
 Matrix: **Water**
 Workgroup Number: **WG286203**
 Collect Date: **10/15/2008 11:10**
 Sample Tag: **01**

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

Instrument: **HPMS14**
 Prep Date: **10/28/2008 19:17**
 Cal Date: **10/11/2008 03:19**
 Run Date: **10/28/2008 19:17**
 File ID: **14M09335**

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	119	80	120		
Toluene-d8	97.0	88	110		
4-Bromofluorobenzene	98.9	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

B Analyte present in method blank

Sample Number: **L08100669-04**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG286075**
 Collect Date: **10/15/2008 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/27/2008 14:40**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/27/2008 14:40**
 File ID: **6M79225**

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	0.306	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

Report Number: **L08100669**Report Date : **November 3, 2008**

00081787

Sample Number: **L08100669-04**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG286075**
 Collect Date: **10/15/2008 00:01**
 Sample Tag: **01**

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

Instrument: **HPMS6**
 Prep Date: **10/27/2008 14:40**
 Cal Date: **09/25/2008 20:37**
 Run Date: **10/27/2008 14:40**
 File ID: **6M79225**

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	124	80	120	*	
Toluene-d8	107	88	110		
4-Bromofluorobenzene	131	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

* Surrogate or spike compound out of range

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

Instrument: HPMS6 Dataset: 092508
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25957

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090

Comments: [CAI:VC to 100.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M78188	SYSTEM BLANK	NA	1	1		09/25/08 09:54
2	6M78189	SYSTEM BLANK	NA	1	1		09/25/08 10:27
3	6M78190	SYSTEM BLANK	NA	1	1		09/25/08 11:24
4	6M78191	SYSTEM BLANK	NA	1	1		09/25/08 12:02
5	6M78192	SYSTEM CHECK	NA	1	1		09/25/08 12:35
6	6M78193	WG283090-01 BFB 50ng STD 8260	NA	1	1	STD28704	09/25/08 13:21
7	6M78194	WG283090-02 50ug/L STD 8260	NA	1	1	STD28878	09/25/08 13:51
8	6M78195	WG283090-02 50ug/L STD 8260	NA	1	1	STD28878	09/25/08 14:30
9	6M78196	SYSTEM BLANK	NA	1	1		09/25/08 15:03
10	6M78197	WG283090-02 0.30ug/L STD 8260	NA	1	1	STD28949	09/25/08 15:39
11	6M78198	WG283090-03 0.40ug/L STD 8260	NA	1	1	STD28949	09/25/08 16:12
12	6M78199	WG283090-04 1ug/L STD 8260	NA	1	1	STD28949	09/25/08 16:44
13	6M78200	WG283090-05 2ug/L STD 8260	NA	1	1	STD28949	09/25/08 17:17
14	6M78201	WG283090-06 5ug/L STD 8260	NA	1	1	STD28949	09/25/08 17:50
15	6M78202	WG283090-07 20ug/L STD 8260	NA	1	1	STD28949	09/25/08 18:24
16	6M78203	WG283090-08 50ug/L STD 8260	NA	1	1	STD28949	09/25/08 18:57
17	6M78204	WG283090-09 100ug/L STD 8260	NA	1	1	STD28949	09/25/08 19:30
18	6M78205	WG283090-10 200ug/L STD 8260	NA	1	1	STD28949	09/25/08 20:04
19	6M78206	WG283090-11 300ug/L STD 8260	NA	1	1	STD28949	09/25/08 20:37
20	6M78207	SYSTEM BLANK	NA	1	1		09/25/08 21:10
21	6M78208	SYSTEM BLANK	NA	1	1		09/25/08 21:44
22	6M78209	WG283090-12 20ug/L Alt Source STD 8260	NA	1	1	STD28892	09/25/08 22:17
23	6M78210	SYSTEM BLANK	NA	1	1		09/25/08 22:50

Comments

Seq.	Rerun	Dil.	Reason	Analytes
7	X			
File ID: 6M78194				
WG283090-02 50ug/L STD 8260 - Megamix low.				
8	X			
File ID: 6M78195				
WG283090-02 50ug/L STD 8260 - Megamix high.				
22	X			

Approved: September 26, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092508
Analyst1: CAA Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25957

Internal Standard: STD28881 Surrogate Standard: STD28639
CCV: STD28949 LCS: STD28915 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG283090

Comments: ICAI:VC to 100.Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M78209				
WG283090-12 20ug/L Alt Source STD 8260 - Bad gas mix.				

Approved: September 26, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092608
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25968

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090, WG283267

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M78211	SYSTEM BLANK	NA	1	1		09/26/08 08:53
2	6M78212	WG283266-01 BFB 50ng STD 8260	NA	1	1	STD28704	09/26/08 09:24
3	6M78213	WG283266-02 50ug/L STD 8260	NA	1	1	STD28915	09/26/08 09:52
4	6M78214	WG283267-01 VBLK0926 BLANK 8260	NA	1	1		09/26/08 10:26
5	6M78215	WG283267-01 VBLK0926 BLANK 8260	NA	1	1		09/26/08 10:59
6	6M78216	WG283090-12 20ug/L Alt Source STD 8260	NA	1	1	STD28915	09/26/08 11:32
7	6M78217	WG283267-02 20ug/L LCS STD 8260	NA	1	1	STD28915	09/26/08 12:06
8	6M78218	WG283267-03 20ug/L LCS DUP STD 8260	NA	1	1	STD28915	09/26/08 12:39
9	6M78219	L08090397-21 C 100X 826-SPE	<2	1	100		09/26/08 13:12
10	6M78220	L08090397-24 B 10X 826-SPE	<2	1	10		09/26/08 13:45
11	6M78221	L08090397-17 B 50X 826-SPE	<2	1	50		09/26/08 14:18
12	6M78222	L08090426-06 A 826-SPE	<2	1	1		09/26/08 14:51
13	6M78223	L08090426-11 A 826-SPE	<2	1	1		09/26/08 15:25
14	6M78224	L08090397-23 B 826-SPE	<2	1	1		09/26/08 15:58
15	6M78225	L08090397-26 A 826-SPE	<2	1	1		09/26/08 16:31
16	6M78226	L08090426-07 B 826-SPE	<2	1	1		09/26/08 17:04
17	6M78227	L08090426-10 A 826-SPE	<2	1	1		09/26/08 17:38
18	6M78228	L08090426-01 A 2X 826-SPE	<2	1	2		09/26/08 18:11
19	6M78229	L08090426-02 A 2.5X 826-SPE	<2	1	2.5		09/26/08 18:44
20	6M78230	L08090426-03 A 20X 826-SPE	<2	1	20		09/26/08 19:18
21	6M78231	L08090426-04 A 50X 826-SPE	<2	1	50		09/26/08 19:51
22	6M78232	L08090426-05 A 50X 826-SPE	<2	1	50		09/26/08 20:24
23	6M78233	L08090426-08 A 50X 826-SPE	<2	1	50		09/26/08 20:57
24	6M78234	L08090426-09 A 2X 826-SPE	<2	1	2		09/26/08 21:31
25	6M78235	SYSTEM BLANK	NA	1	1		09/26/08 22:04
26	6M78236	SYSTEM BLANK	NA	1	1		09/26/08 22:37

Comments

Seq.	Rerun	Dil.	Reason	Analytes
4	X		Carry-over contamination	
File ID: 6M78214				
WG283267-01 VBLK0926 BLANK 8260				
17	X	2.5	Over Calibration Range	VC

Approved: September 29, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 092608
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: 25968

Internal Standard: STD28881 Surrogate Standard: STD28639
 CCV: STD28949 LCS: STD28915 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG283090, WG283267

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 6M78227				
L08090426-10 A 826-SPE				
19	X	20	Over Calibration Range	1,1-DCA
File ID: 6M78229				
L08090426-02 A 2.5X 826-SPE				
21	X	10	Analyzed too dilute	
File ID: 6M78231				
L08090426-04 A 50X 826-SPE				
22	X	10	Analyzed too dilute	
File ID: 6M78232				
L08090426-05 A 50X 826-SPE				
24	X		Missed Tune	
File ID: 6M78234				
L08090426-09 A 2X 826-SPE - Rerun at 10x for VC, cis-1,2-DCE.				

Approved: September 29, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 101008
 Analyst1: MDA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: STD29209 Surrogate Standard: STD29108
 CCV: STD29205 LCS: STD29154 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG284610

Comments: _____

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	14M08677	WG284468-01 50ng BFB	NA	1	1	STD29166	10/10/08 09:29
2	14M08678	WG284468-02 50ug/L STD 8260	NA	1	1		10/10/08 10:04
3	14M08682	WG284467-01 50ng BFB	NA	1	1	STD29166	10/10/08 12:35
4	14M08683	WG284467-02 50ug/L STD 8260	NA	1	1	STD29145	10/10/08 12:59
5	14M08684	WG284468-03 100ug/L App-IX STD	NA	1	1	STD29124	10/10/08 13:30
6	14M08685	WG284469-01 vblk1010 BLANK 8260	NA	1	1		10/10/08 14:02
7	14M08686	WG284469-01 VBLK1010 BLANK 8260	NA	1	1		10/10/08 14:31
8	14M08687	WG284610-01 50ng BFB	NA	1	1	STD29166	10/10/08 16:05
9	14M08688	WG284610-02 0.3ug/L STD 8260	NA	1	1	STD29205	10/10/08 16:28
10	14M08689	WG284610-03 0.4ug/L STD 8260	NA	1	1	STD29205	10/10/08 17:00
11	14M08690	WG284610-04 1ug/L STD 8260	NA	1	1	STD29205	10/10/08 17:31
12	14M08691	WG284610-05 2ug/L STD 8260	NA	1	1	STD29205	10/10/08 18:02
13	14M08692	WG284610-06 5ug/L STD 8260	NA	1	1	STD29205	10/10/08 18:33
14	14M08693	WG284610-07 20ug/L STD 8260	NA	1	1	STD29205	10/10/08 19:04
15	14M08694	WG284610-08 50ug/L STD 8260	NA	1	1	STD29205	10/10/08 19:35
16	14M08695	WG284610-09 100ug/L STD 8260	NA	1	1	STD29205	10/10/08 20:06
17	14M08696	WG284610-10 200ug/L STD 8260	NA	1	1	STD29205	10/10/08 20:37
18	14M08697	WG284610-11 300ug/L STD 8260	NA	1	1	STD29205	10/10/08 21:08
19	14M08698	RINSE	NA	1	1		10/10/08 21:39
20	14M08699	RINSE	NA	1	1		10/10/08 22:09
21	14M08700	RINSE	NA	1	1		10/10/08 22:40
22	14M08701	WG284610-12 20ug/L ICV 8260	NA	1	1	STD29154	10/10/08 23:11
23	14M08702	WG284610-13 100ug/L APP-IX STD	NA	1	1	STD29154	10/10/08 23:45
24	14M08703	WG284610-13 vblk1010 blank 8260	NA	1	1		10/11/08 00:31
25	14M08704	rinse	NA	1	1		10/11/08 01:08
26	14M08705	rinse	NA	1	1		10/11/08 01:54
27	14M08706	rinse	NA	1	1		10/11/08 02:36
28	14M08707	WG284610-02 0.3ug/L STD 8260	NA	1	1	STD29205	10/11/08 03:19
29	14M08708	WG284610-12 20UG/L ICV 8260	NA		1	STD29154	10/11/08 03:50

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9				

Approved:



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 101008
Analyst1: MDA Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 5030B/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: STD29209 Surrogate Standard: STD29108
CCV: STD29205 LCS: STD29154 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG284610

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 14M08688				
DNR RR				
22				
File ID: 14M08701				
DNR RR				

Approved:

Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS6 Dataset: 102708
 Analyst1: CAA Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26343

Internal Standard: STD29107 Surrogate Standard: STD29108
 CCV: STD29369 LCS: STD29360 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG286075

Comments: All samples had SS BFB and DCA high.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	6M79213	WG286074-01 50ng BFB STD 8260	NA	1	1	STD29166	10/27/08 08:17
2	6M79214	WG286074-01 50ng BFB STD 8260	NA	1	1	STD29166	10/27/08 08:33
3	6M79215	WG286074-02 50ug/L STD 8260	NA	1	1	STD29369	10/27/08 09:03
4	6M79216	WG286075-01 VBLK1027 BLANK 8260	NA	1	1		10/27/08 09:47
5	6M79217	WG286075-01 VBLK1027 BLANK 8260	NA	1	1		10/27/08 10:19
6	6M79218	WG286075-02 20ug/L LCS STD 8260	NA	1	1	STD29360	10/27/08 10:52
7	6M79219	WG286075-03 20ug/L LCS DUP STD 8260	NA	1	1	STD29360	10/27/08 11:25
8	6M79220	L08100547-01 B 50X 826-SPE	<2	1	50		10/27/08 11:57
9	6M79221	L08100547-02 B 50X 826-SPE	=7	1	50		10/27/08 12:30
10	6M79222	L08100565-01 A 826-SPE	<2	1	1		10/27/08 13:03
11	6M79223	L08100490-07 A 826-SPE	<2	1	1		10/27/08 13:35
12	6M79224	L08100556-18 A 826-SPE	<2	1	1		10/27/08 14:08
13	6M79225	L08100669-04 A 826-SPE	<2	1	1		10/27/08 14:40
14	6M79226	L08100483-01 A 826-SPE	<2	1	1		10/27/08 15:13
15	6M79227	L08100483-02 A 826-SPE	<2	1	1		10/27/08 15:46
16	6M79228	L08100758-01 A 826-LOW	<2	1	1		10/27/08 16:18
17	6M79229	L08100490-01 A 826-SPE	<2	1	1		10/27/08 16:51
18	6M79230	L08100490-06 A 826-SPE	<2	1	1		10/27/08 17:24
19	6M79231	L08100556-16 A 826-SPE	<2	1	1		10/27/08 17:57
20	6M79232	L08100556-17 A 826-SPE	<2	1	1		10/27/08 18:30
21	6M79233	L08100669-01 A 826-SPE	<2	1	1		10/27/08 19:02
22	6M79234	L08100669-02 A 826-SPE	<2	1	1		10/27/08 19:35

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
File ID: 6M79213				
WG286074-01 50ng BFB STD 8260				
4	X		Carry-over contamination	
File ID: 6M79216				
WG286075-01 VBLK1027 BLANK 8260				

Approved: October 29, 2008

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Aseli Bucina



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 102808
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: NA Surrogate Standard: NA
 CCV: STD29369 LCS: STD29460 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG286203, WG286305

Comments: NO REANALYSIS REQUIRED.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	14M09313	WG286202-01 50ng BFB	NA	1	1	STD29166	10/28/08 08:01
2	14M09314	WG286202-02 50ug/L STD 8260	NA	1	1	STD29369	10/28/08 08:25
3	14M09315	WG286203-01 BLANK 8260	NA	1	1		10/28/08 08:56
4	14M09316	WG286203-01 BLANK 8260	NA	1	1		10/28/08 09:27
5	14M09317	WG286203-02 LCS 20ug/L 8260	NA	1	1	STD29460	10/28/08 09:58
6	14M09318	WG286203-03 LCSD 20ug/L 8260	NA	1	1	STD29460	10/28/08 10:29
7	14M09319	SYSTEM BLANK	NA	1	1		10/28/08 11:00
8	14M09320	L08100506-12 A 826-SPE	<2	1	1		10/28/08 11:32
9	14M09321	L08100506-11 B 826-SPE	<2	1	1		10/28/08 12:02
10	14M09322	L08100483-07 A 826-SPE	<2	1	1		10/28/08 12:34
11	14M09323	L08100483-03 A 826-SPE	<2	1	1		10/28/08 13:05
12	14M09324	L08100483-04 A 826-SPE	<2	1	1		10/28/08 13:36
13	14M09325	L08100483-05 A 826-SPE	<2	1	1		10/28/08 14:07
14	14M09326	L08100483-06 A 826-SPE	<2	1	1		10/28/08 14:38
15	14M09327	L08100537-01 A 826-SPE	<2	1	1		10/28/08 15:09
16	14M09328	L08100537-02 A 826-SPE	<2	1	1		10/28/08 15:40
17	14M09329	L08100556-03 B 1000X 826-LOW	<2	1	1000		10/28/08 16:10
18	14M09330	L08100556-04 B 2000X 826-LOW	<2	1	2000		10/28/08 16:41
19	14M09331	L08100556-05 B 10X 826-LOW	<2	1	10		10/28/08 17:12
20	14M09332	L08100556-06 B 2.5X 826-LOW	<2	1	2.5		10/28/08 17:43
21	14M09333	L08100556-07 B 50X 826-LOW	<2	1	50		10/28/08 18:14
22	14M09334	L08100556-08 B 100X 826-LOW	<2	1	100		10/28/08 18:46
23	14M09335	L08100669-03 B 826-LOW	<2	1	1		10/28/08 19:17
24	14M09336	L08100515-04 B 826-SPE	<2	1	1		10/28/08 19:47
25	14M09337	SYSTEM BLANK	NA	1	1		10/28/08 20:19
26	14M09338	SYSTEM BLANK	NA	1	1		10/28/08 20:49
27	14M09340	WG286304-01 50ng BFB	NA	1	1	STD29166	10/28/08 21:47
28	14M09341	WG286304-02 50ug/L STD 8260	NA	1	1	STD29369	10/28/08 22:16
29	14M09342	WG286304-02 50ug/L STD 8260	NA	1	1	STD29369	10/28/08 22:52
30	14M09343	WG286305-01 BLANK 8260	NA	1	1		10/28/08 23:22
31	14M09344	WG286305-01 BLANK 8260	NA	1	1		10/28/08 23:53
32	14M09345	WG286305-02 LCS 20ug/L 8260	NA	1	1	STD29544	10/29/08 00:24
33	14M09346	WG286305-03 LCSD 20ug/L 8260	NA	1	1	STD29544	10/29/08 00:56
34	14M09347	SYSTEM BLANK	NA	1	1		10/29/08 01:27

Approved: November 03, 2008

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Aseli Bucina

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS14 Dataset: 102808
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030B SOP: PAT01 Rev: 11

Maintenance Log ID: _____

Internal Standard: NA Surrogate Standard: NA
 CCV: STD29369 LCS: STD29460 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG286203, WG286305

Comments: NO REANALYSIS REQUIRED.

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
35	14M09348	L08100229-02 826-SPLP	NA	1	1		10/29/08 01:58
36	14M09349	L08100229-04 826-SPLP	NA	1	1		10/29/08 02:30
37	14M09350	L08100556-03 B 2000X 826-LOW	<2	1	2000		10/29/08 03:02
38	14M09351	L08100556-04 B 5000X 826-LOW	<2	1	5000		10/29/08 03:34
39	14M09352	L08100556-05 B 2X 826-LOW	<2	1	2		10/29/08 04:04
40	14M09353	L08100556-09 B 1000X 826-LOW	<2	1	1000		10/29/08 04:35
41	14M09354	L08100556-10 B 50X 826-LOW	<2	1	50		10/29/08 05:06
42	14M09355	L08100556-11 B 50X 826-LOW	<2	1	50		10/29/08 05:37
43	14M09356	L08100556-12 B 100X 826-LOW	<2	1	100		10/29/08 06:08
44	14M09357	L08100556-13 B 500X 826-LOW	<2	1	500		10/29/08 06:39
45	14M09358	L08100556-14 B 5000X 826-LOW	<2	1	5000		10/29/08 07:10
46	14M09359	L08100556-15 B 5000X 826-LOW	<2	1	5000		10/29/08 07:41
47	14M09360	L08100328-01 A 50X 826-SPE	<2	1	50		10/29/08 08:12
48	14M09361	L08100328-02 A 50X 826-SPE	<2	1	50		10/29/08 08:43
49	14M09362	L08100328-06 A 50X 826-SPE	<2	1	50		10/29/08 09:13
50	14M09363	SYSTEM BLANK	NA	1	1		10/29/08 09:45
51	14M09364	SYSTEM BLANK	NA	1	1		10/29/08 10:16

Approved: November 03, 2008

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Alexi Bucina



Microbac Laboratories Inc.

Data Checklist

Date: 25-SEP-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24414

Analytical Workgroups: ICAL

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	NA
Continuing Calibration /Check Standards	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
Results Reporting/Data Qualifiers	NA
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	CAA
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-SEP-2008

Cassio D. Augenstein

Secondary Reviewer:
26-SEP-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 26-SEP-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24433

Analytical Workgroups: WG283090, WG283267

System Performance Check	X
BFB	X
Initial Calibration	NA
Average RF	NA
Linear Reg or Higher Order Curve	NA
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	CAA
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
29-SEP-2008

Cassio D. Augenstein

Secondary Reviewer:
29-SEP-2008

MDA

Microbac Laboratories Inc.

Data Checklist

Date: 10-OCT-2008

Analyst: MDA

Analyst: NA

Method: 8260

Instrument: HPMS14

Curve Workgroup: NA

Runlog ID: 24813

Analytical Workgroups: WG284610

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	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	X
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	X
Case Narrative	NA
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MDA
Secondary Reviewer	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
21-OCT-2008



Secondary Reviewer:

Microbac Laboratories Inc.

Data Checklist

Date: 27-OCT-2008

Analyst: CAA

Analyst: NA

Method: 8260

Instrument: HPMS6

Curve Workgroup: NA

Runlog ID: 24918

Analytical Workgroups: WG286075

System Performance Check	X
BFB	X
Initial Calibration	NA
Average RF	NA
Linear Reg or Higher Order Curve	NA
Second Source standard % Difference	NA
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	CAA
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:
29-OCT-2008

Cassio D. Augenstein

Secondary Reviewer:
29-OCT-2008

Leslie Bucina

Analytical Method: 8260B

AAB#: WG286075

Login Number: L08100669

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
58-DPT-02	10/15/08	10/22/08	10/27/08	14	12.4	10/27/08	14	12.4	
TRIP BLANK	10/15/08	10/22/08	10/27/08	14	12.6	10/27/08	14	12.6	
58-DPT-03	10/15/08	10/22/08	10/27/08	14	12.4	10/27/08	14	12.4	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG286203

Login Number: L08100669

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
58-DPT-06	10/15/08	10/22/08	10/28/08	14	13.3	10/28/08	14	13.3	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L08100669
Instrument Id: HPMS14
Workgroup (AAB#): WG286203

Method: 8260
CAL ID: HPMS14 - 11-OCT-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100669-03	1.00	01	119	102	98.9	97.0
WG286203-01	1.00	01	94.2	91.1	93.0	97.5
WG286203-02	1.00	01	93.8	94.5	92.8	98.0
WG286203-03	1.00	01	94.8	94.3	92.8	96.7

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

Underline = Result out of surrogate limits

DL = surrogate diluted out

ND = surrogate not detected

Login Number: L08100669
Instrument Id: HPMS6
Workgroup (AAB#): WG286075

Method: 8260
CAL ID: HPMS6 - 25-SEP-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08100669-01	1.00	01	<u>133</u>	111	<u>129</u>	104
L08100669-02	1.00	01	<u>136</u>	111	<u>129</u>	105
L08100669-04	1.00	01	<u>124</u>	109	<u>131</u>	107
WG286075-01	1.00	01	118	105	<u>128</u>	107
WG286075-02	1.00	01	119	105	<u>132</u>	107
WG286075-03	1.00	01	<u>121</u>	108	<u>130</u>	107

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: L08100669
Blank File ID: 14M09316
Prep Date: 10/28/08 09:27
Analyzed Date: 10/28/08 09:27
Analyst: WTD

Work Group: WG286203
Blank Sample ID: WG286203-01
Instrument ID: HPMS14
Method: 8260B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG286203-02	14M09317	10/28/08 09:58	01
LCS2	WG286203-03	14M09318	10/28/08 10:29	01
58-DPT-06	L08100669-03	14M09335	10/28/08 19:17	01

METHOD BLANK SUMMARY

Login Number: L08100669
Blank File ID: 6M79217
Prep Date: 10/27/08 10:19
Analyzed Date: 10/27/08 10:19
Analyst: CAA

Work Group: WG286075
Blank Sample ID: WG286075-01
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	WG286075-02	6M79218	10/27/08 10:52	01
LCS2	WG286075-03	6M79219	10/27/08 11:25	01
TRIP BLANK	L08100669-04	6M79225	10/27/08 14:40	01
58-DPT-02	L08100669-01	6M79233	10/27/08 19:02	01
58-DPT-03	L08100669-02	6M79234	10/27/08 19:35	01

Login Number: L08100669 Prep Date: 10/28/08 09:27 Sample ID: WG286203-01
Instrument ID: HPMS14 Run Date: 10/28/08 09:27 Prep Method: 5030B
File ID: 14M09316 Analyst: WTD Method: 8260B
Workgroup (AAB#): WG286203 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS14 - 11-OCT-08

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	3.13	1	*
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: 1235053

03-NOV-2008 10:02



Login Number: L08100669 Prep Date: 10/28/08 09:27 Sample ID: WG286203-01
Instrument ID: HPMS14 Run Date: 10/28/08 09:27 Prep Method: 5030B
File ID: 14M09316 Analyst: WTD Method: 8260B
Workgroup (AAB#): WG286203 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS14 - 11-OCT-08

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	91.1	86 - 118	PASS
1,2-Dichloroethane-d4	94.2	80 - 120	PASS
Toluene-d8	97.5	88 - 110	PASS
4-Bromofluorobenzene	93.0	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: 1235053

03-NOV-2008 10:02



Login Number: L08100669 Prep Date: 10/27/08 10:19 Sample ID: WG286075-01
Instrument ID: HPMS6 Run Date: 10/27/08 10:19 Prep Method: 5030B
File ID: 6M79217 Analyst: CAA Method: 8260B
Workgroup (AAB#): WG286075 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 25-SEP-08

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: 1235053

03-NOV-2008 10:02



Login Number: L08100669 Prep Date: 10/27/08 10:19 Sample ID: WG286075-01
Instrument ID: HPMS6 Run Date: 10/27/08 10:19 Prep Method: 5030B
File ID: 6M79217 Analyst: CAA Method: 8260B
Workgroup (AAB#): WG286075 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS6 - 25-SEP-08

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	105	86 - 118	PASS
1,2-Dichloroethane-d4	118	80 - 120	PASS
Toluene-d8	107	88 - 110	PASS
4-Bromofluorobenzene	128	86 - 115	FAIL

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: 1235053

03-NOV-2008 10:02



Login Number: L08100669 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS14 Matrix: Water Method: 8260B
Workgroup (AAB#): WG286203 Units: ug/L
QC Key: STD Lot #: STD29460

Sample ID: WG286203-02 LCS File ID: 14M09317 Run Date: 10/28/2008 09:58
Sample ID: WG286203-03 LCS2 File ID: 14M09318 Run Date: 10/28/2008 10:29

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	20.1	100	20.0	20.3	102	1.20	40 - 142	20	
Benzene	20.0	22.0	110	20.0	20.9	104	5.49	80 - 121	20	
Bromobenzene	20.0	20.8	104	20.0	19.7	98.7	5.23	80 - 120	20	
Bromochloromethane	20.0	22.7	113	20.0	22.3	112	1.43	65 - 130	20	
Bromodichloromethane	20.0	24.8	124	20.0	23.4	117	5.67	80 - 131	20	
Bromoform	20.0	23.5	117	20.0	23.0	115	1.79	70 - 130	20	
Bromomethane	20.0	21.6	108	20.0	21.9	110	1.36	30 - 145	20	
2-Butanone	20.0	19.2	95.9	20.0	19.9	99.7	3.91	30 - 150	20	
n-Butylbenzene	20.0	26.8	134	20.0	25.6	128	4.66	80 - 131	20	*
sec-Butylbenzene	20.0	23.8	119	20.0	23.0	115	3.36	80 - 127	20	
tert-Butylbenzene	20.0	23.0	115	20.0	21.7	109	5.62	80 - 126	20	
Carbon disulfide	20.0	19.6	97.9	20.0	19.0	95.1	2.88	58 - 138	20	
Carbon tetrachloride	20.0	21.3	106	20.0	20.8	104	2.36	65 - 140	20	
Chlorobenzene	20.0	23.0	115	20.0	21.7	108	5.69	80 - 120	20	
Chlorodibromomethane	20.0	24.5	122	20.0	23.5	118	3.95	60 - 135	20	
Chloroethane	20.0	22.1	110	20.0	20.8	104	5.95	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	38.3	191	20.0	40.9	204	6.60	58 - 151	20	*
Chloroform	20.0	22.8	114	20.0	21.7	109	5.01	80 - 125	20	
Chloromethane	20.0	18.7	93.6	20.0	18.0	89.8	4.16	40 - 125	20	
2-Chlorotoluene	20.0	23.5	117	20.0	22.1	110	6.20	80 - 127	20	
4-Chlorotoluene	20.0	22.0	110	20.0	20.5	102	6.87	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	20.4	102	20.0	21.2	106	3.47	50 - 130	20	
1,2-Dibromoethane	20.0	23.7	118	20.0	23.3	117	1.53	80 - 125	20	
Dibromomethane	20.0	23.8	119	20.0	23.4	117	1.34	75 - 125	20	
1,2-Dichlorobenzene	20.0	22.3	112	20.0	21.3	106	4.62	80 - 125	20	
1,3-Dichlorobenzene	20.0	22.4	112	20.0	21.3	106	5.19	80 - 120	20	
1,4-Dichlorobenzene	20.0	21.8	109	20.0	20.7	103	5.21	80 - 120	20	
Dichlorodifluoromethane	20.0	24.6	123	20.0	27.0	135	9.18	50 - 133	20	*
1,1-Dichloroethane	20.0	23.0	115	20.0	21.7	109	5.90	80 - 125	20	
1,2-Dichloroethane	20.0	24.0	120	20.0	23.2	116	3.61	80 - 129	20	
1,1-Dichloroethene	20.0	20.9	105	20.0	20.6	103	1.58	80 - 132	20	
cis-1,2-Dichloroethene	20.0	22.6	113	20.0	21.5	107	5.09	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.6	108	20.0	20.5	103	4.83	80 - 127	20	
1,2-Dichloropropane	20.0	22.2	111	20.0	21.0	105	5.72	80 - 120	20	
1,3-Dichloropropane	20.0	23.4	117	20.0	22.9	115	2.12	80 - 120	20	
2,2-Dichloropropane	20.0	22.1	110	20.0	21.1	106	4.31	80 - 133	20	
cis-1,3-Dichloropropene	20.0	22.9	115	20.0	21.8	109	5.27	70 - 130	20	
trans-1,3-Dichloropropene	20.0	21.7	109	20.0	20.9	105	3.77	80 - 130	20	
1,1-Dichloropropene	20.0	22.0	110	20.0	21.3	106	3.40	75 - 130	20	
Ethylbenzene	20.0	23.2	116	20.0	21.9	110	5.64	80 - 122	20	

Login Number: L08100669 Analyst: WTD Prep Method: 5030B
Instrument ID: HPMS14 Matrix: Water Method: 8260B
Workgroup (AAB#): WG286203 Units: ug/L
QC Key: STD Lot #: STD29460

Sample ID: WG286203-02 LCS File ID: 14M09317 Run Date: 10/28/2008 09:58
Sample ID: WG286203-03 LCS2 File ID: 14M09318 Run Date: 10/28/2008 10:29

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	19.9	99.3	20.0	20.8	104	4.83	55 - 130	20	
Hexachlorobutadiene	20.0	24.8	124	20.0	24.4	122	1.70	72 - 132	20	
Isopropylbenzene	20.0	21.0	105	20.0	19.9	99.4	5.24	80 - 122	20	
p-Isopropyltoluene	20.0	24.7	123	20.0	23.5	117	5.07	80 - 122	20	*
4-Methyl-2-pentanone	20.0	19.6	98.1	20.0	20.1	101	2.63	64 - 140	20	
Methylene chloride	20.0	21.4	107	20.0	20.4	102	4.73	80 - 123	20	
Naphthalene	20.0	27.4	137	20.0	27.9	139	1.84	59 - 149	20	
n-Propylbenzene	20.0	23.3	116	20.0	22.1	110	5.34	80 - 129	20	
Styrene	20.0	23.8	119	20.0	22.6	113	5.14	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	25.1	126	20.0	23.6	118	6.37	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	21.3	106	20.0	21.4	107	0.475	79 - 125	20	
Tetrachloroethene	20.0	22.6	113	20.0	21.8	109	3.67	80 - 124	20	
Toluene	20.0	21.8	109	20.0	20.4	102	6.72	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	25.7	128	20.0	25.2	126	1.86	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	26.0	130	20.0	24.8	124	4.73	65 - 135	20	
1,1,1-Trichloroethane	20.0	23.7	119	20.0	22.7	114	4.32	80 - 134	20	
1,1,2-Trichloroethane	20.0	23.9	120	20.0	23.0	115	4.13	80 - 125	20	
Trichloroethene	20.0	22.2	111	20.0	21.2	106	4.73	80 - 122	20	
Trichlorofluoromethane	20.0	20.3	101	20.0	21.2	106	4.35	62 - 151	20	
1,2,3-Trichloropropane	20.0	21.7	109	20.0	21.5	107	1.21	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	26.2	131	20.0	24.5	122	6.88	80 - 125	20	*
1,3,5-Trimethylbenzene	20.0	25.7	128	20.0	24.1	120	6.53	80 - 127	20	*
Vinyl acetate	20.0	20.2	101	20.0	19.5	97.7	3.41	10 - 150	20	
Vinyl chloride	20.0	26.7	133	20.0	26.1	130	2.27	65 - 140	20	
o-Xylene	20.0	24.0	120	20.0	22.7	113	5.73	80 - 122	20	
m-, p-Xylene	40.0	48.7	122	40.0	46.1	115	5.45	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	93.8	94.8	80 - 120	PASS
Dibromofluoromethane	94.5	94.3	86 - 118	PASS
4-Bromofluorobenzene	92.8	92.8	86 - 115	PASS
Toluene-d8	98.0	96.7	88 - 110	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

Login Number: L08100669 Analyst: CAA Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG286075 Units: ug/L
QC Key: STD Lot #: STD29360

Sample ID: WG286075-02 LCS File ID: 6M79218 Run Date: 10/27/2008 10:52
Sample ID: WG286075-03 LCS2 File ID: 6M79219 Run Date: 10/27/2008 11:25

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	18.5	92.6	20.0	23.7	119	24.6	40 - 142	20	#
Benzene	20.0	22.0	110	20.0	21.4	107	2.98	80 - 121	20	
Bromobenzene	20.0	22.1	111	20.0	21.2	106	4.21	80 - 120	20	
Bromochloromethane	20.0	20.0	99.9	20.0	20.9	105	4.62	65 - 130	20	
Bromodichloromethane	20.0	24.1	121	20.0	23.6	118	1.96	80 - 131	20	
Bromoform	20.0	17.9	89.7	20.0	18.8	93.8	4.48	70 - 130	20	
Bromomethane	20.0	23.8	119	20.0	22.8	114	4.47	30 - 145	20	
2-Butanone	20.0	24.1	120	20.0	28.7	144	17.6	30 - 150	20	
n-Butylbenzene	20.0	28.2	141	20.0	26.2	131	7.40	80 - 131	20	*
sec-Butylbenzene	20.0	26.9	135	20.0	25.0	125	7.38	80 - 127	20	*
tert-Butylbenzene	20.0	22.0	110	20.0	20.4	102	7.54	80 - 126	20	
Carbon disulfide	20.0	18.7	93.3	20.0	17.9	89.5	4.09	58 - 138	20	
Carbon tetrachloride	20.0	24.6	123	20.0	22.5	113	8.55	65 - 140	20	
Chlorobenzene	20.0	21.4	107	20.0	20.7	103	3.22	80 - 120	20	
Chlorodibromomethane	20.0	23.5	117	20.0	23.9	120	1.93	60 - 135	20	
Chloroethane	20.0	29.7	148	20.0	31.8	159	6.85	60 - 135	20	*
2-Chloroethyl vinyl ether	20.0	20.1	100	20.0	21.6	108	7.45	58 - 151	20	
Chloroform	20.0	24.3	121	20.0	23.6	118	2.81	80 - 125	20	
Chloromethane	20.0	26.3	131	20.0	25.3	126	4.01	40 - 125	20	*
2-Chlorotoluene	20.0	26.0	130	20.0	24.8	124	4.96	80 - 127	20	*
4-Chlorotoluene	20.0	26.1	131	20.0	24.4	122	7.09	80 - 126	20	*
1,2-Dibromo-3-chloropropane	20.0	27.4	137	20.0	28.7	144	4.95	50 - 130	20	*
1,2-Dibromoethane	20.0	21.4	107	20.0	22.2	111	3.66	80 - 125	20	
Dibromomethane	20.0	23.4	117	20.0	23.9	119	1.98	75 - 125	20	
1,2-Dichlorobenzene	20.0	20.6	103	20.0	20.2	101	1.73	80 - 125	20	
1,3-Dichlorobenzene	20.0	21.2	106	20.0	20.3	101	4.32	80 - 120	20	
1,4-Dichlorobenzene	20.0	20.3	102	20.0	19.6	98.2	3.50	80 - 120	20	
Dichlorodifluoromethane	20.0	37.0	185	20.0	36.2	181	2.17	50 - 133	20	*
1,1-Dichloroethane	20.0	25.2	126	20.0	24.2	121	3.96	80 - 125	20	*
1,2-Dichloroethane	20.0	25.7	128	20.0	25.6	128	0.423	80 - 129	20	
1,1-Dichloroethene	20.0	23.8	119	20.0	22.3	111	6.62	80 - 132	20	
cis-1,2-Dichloroethene	20.0	23.2	116	20.0	22.4	112	3.66	70 - 125	20	
trans-1,2-Dichloroethene	20.0	21.8	109	20.0	21.4	107	1.84	80 - 127	20	
1,2-Dichloropropane	20.0	23.9	120	20.0	23.5	118	1.70	80 - 120	20	
1,3-Dichloropropane	20.0	23.2	116	20.0	23.8	119	2.66	80 - 120	20	
2,2-Dichloropropane	20.0	23.4	117	20.0	22.1	111	5.58	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.8	104	20.0	20.8	104	0.0826	70 - 130	20	
trans-1,3-Dichloropropene	20.0	21.3	106	20.0	21.5	108	1.21	80 - 130	20	
1,1-Dichloropropene	20.0	20.4	102	20.0	19.4	96.8	5.17	75 - 130	20	
Ethylbenzene	20.0	21.8	109	20.0	21.1	106	3.36	80 - 122	20	

Login Number: L08100669 Analyst: CAA Prep Method: 5030B
Instrument ID: HPMS6 Matrix: Water Method: 8260B
Workgroup (AAB#): WG286075 Units: ug/L
QC Key: STD Lot #: STD29360

Sample ID: WG286075-02 LCS File ID: 6M79218 Run Date: 10/27/2008 10:52
Sample ID: WG286075-03 LCS2 File ID: 6M79219 Run Date: 10/27/2008 11:25

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	23.7	118	20.0	26.8	134	12.4	55 - 130	20	*
Hexachlorobutadiene	20.0	21.3	107	20.0	19.7	98.7	7.78	72 - 132	20	
Isopropylbenzene	20.0	19.7	98.7	20.0	18.6	93.0	5.85	80 - 122	20	
p-Isopropyltoluene	20.0	25.7	128	20.0	23.9	120	6.96	80 - 122	20	*
4-Methyl-2-pentanone	20.0	21.0	105	20.0	23.9	119	12.7	64 - 140	20	
Methylene chloride	20.0	20.4	102	20.0	20.6	103	0.887	80 - 123	20	
Naphthalene	20.0	23.9	120	20.0	25.2	126	5.27	59 - 149	20	
n-Propylbenzene	20.0	27.7	139	20.0	25.8	129	7.09	80 - 129	20	*
Styrene	20.0	21.4	107	20.0	20.9	105	2.39	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	22.3	112	20.0	21.4	107	4.08	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	27.1	136	20.0	28.4	142	4.50	79 - 125	20	*
Tetrachloroethene	20.0	17.7	88.3	20.0	16.9	84.4	4.51	80 - 124	20	
Toluene	20.0	22.0	110	20.0	20.9	104	5.02	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	18.7	93.7	20.0	18.6	93.1	0.624	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	20.5	103	20.0	20.4	102	0.453	65 - 135	20	
1,1,1-Trichloroethane	20.0	24.2	121	20.0	23.3	117	3.67	80 - 134	20	
1,1,2-Trichloroethane	20.0	22.8	114	20.0	23.5	117	2.87	80 - 125	20	
Trichloroethene	20.0	18.8	93.8	20.0	18.2	90.8	3.28	80 - 122	20	
Trichlorofluoromethane	20.0	25.5	128	20.0	24.1	120	5.90	62 - 151	20	
1,2,3-Trichloropropane	20.0	24.4	122	20.0	25.7	128	5.15	75 - 125	20	*
1,2,4-Trimethylbenzene	20.0	26.4	132	20.0	24.9	125	5.96	80 - 125	20	*
1,3,5-Trimethylbenzene	20.0	25.9	130	20.0	24.6	123	5.44	80 - 127	20	*
Vinyl acetate	20.0	22.7	113	20.0	25.3	126	10.9	10 - 150	20	
Vinyl chloride	20.0	35.7	178	20.0	33.6	168	6.07	65 - 140	20	*
o-Xylene	20.0	20.8	104	20.0	20.0	99.8	4.34	80 - 122	20	
m-, p-Xylene	40.0	43.6	109	40.0	42.1	105	3.46	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	119	121	80 - 120	FAIL
Dibromofluoromethane	105	108	86 - 118	PASS
4-Bromofluorobenzene	132	130	86 - 115	FAIL
Toluene-d8	107	107	88 - 110	PASS

* FAILS %REC LIMIT

FAILS RPD LIMIT

BFB

Login Number: L08100669
Instrument: HPMS14
Analyst: MDA
Workgroup: WG284610

Tune ID: WG284610-01
Run Date: 10/10/2008
Run Time: 16:05
File ID: 14M08687

Cal ID: HPMS14-11-OCT-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	18.4	1350	PASS
75.0	95.0	30.0	60.0	48.6	3559	PASS
95.0	95.0	100	100	100	7328	PASS
96.0	95.0	5.00	9.00	6.85	502	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	82.2	6020	PASS
175	174	5.00	9.00	6.93	417	PASS
176	174	95.0	101	97.5	5867	PASS
177	176	5.00	9.00	6.37	374	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG284610-03	STD	01	10/10/2008 17:00	
WG284610-04	STD	01	10/10/2008 17:31	
WG284610-05	STD	01	10/10/2008 18:02	
WG284610-06	STD	01	10/10/2008 18:33	
WG284610-07	STD	01	10/10/2008 19:04	
WG284610-08	STD-CCV	01	10/10/2008 19:35	
WG284610-09	STD	01	10/10/2008 20:06	
WG284610-10	STD	01	10/10/2008 20:37	
WG284610-11	STD	01	10/10/2008 21:08	
WG284610-02	STD	01	10/11/2008 03:19	
WG284610-12	SSCV	01	10/11/2008 03:50	

* Sample past 12 hour tune limit

BFB

Login Number: L08100669
Instrument: HPMS14
Analyst: WTD
Workgroup: WG286202

Tune ID: WG286202-01
Run Date: 10/28/2008
Run Time: 08:01
File ID: 14M09313

Cal ID: HPMS14 - 11-OCT-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	18.7	2194	PASS
75.0	95.0	30.0	60.0	48.8	5738	PASS
95.0	95.0	100	100	100	11749	PASS
96.0	95.0	5.00	9.00	7.60	893	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	79.6	9349	PASS
175	174	5.00	9.00	7.36	688	PASS
176	174	95.0	101	96.8	9051	PASS
177	176	5.00	9.00	6.42	581	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG286202-02	CCV	01	10/28/2008 08:25	
WG286203-01	BLANK	01	10/28/2008 09:27	
WG286203-02	LCS	01	10/28/2008 09:58	
WG286203-03	LCS2	01	10/28/2008 10:29	
L08100669-03	58-DPT-06	01	10/28/2008 19:17	

* Sample past 12 hour tune limit

BFB

Login Number: L08100669
Instrument: HPMS6
Analyst: CAA
Workgroup: WG283090

Tune ID: WG283090-01
Run Date: 09/25/2008
Run Time: 13:21
File ID: 6M78193

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	27.5	13255	PASS
75.0	95.0	30.0	60.0	56.6	27248	PASS
95.0	95.0	100	100	100	48181	PASS
96.0	95.0	5.00	9.00	6.88	3317	PASS
173	174	0	2.00	0.361	120	PASS
174	95.0	50.0	100	68.9	33200	PASS
175	174	5.00	9.00	6.56	2177	PASS
176	174	95.0	101	96.9	32184	PASS
177	176	5.00	9.00	8.06	2595	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG283090-02	STD	01	09/25/2008 15:39	
WG283090-03	STD	01	09/25/2008 16:12	
WG283090-04	STD	01	09/25/2008 16:44	
WG283090-05	STD	01	09/25/2008 17:17	
WG283090-06	STD	01	09/25/2008 17:50	
WG283090-07	STD	01	09/25/2008 18:24	
WG283090-08	STD-CCV	01	09/25/2008 18:57	
WG283090-09	STD	01	09/25/2008 19:30	
WG283090-10	STD	01	09/25/2008 20:04	
WG283090-11	STD	01	09/25/2008 20:37	

* Sample past 12 hour tune limit

BFB

Login Number: L08100669

Tune ID: WG283266-01

Instrument: HPMS6

Run Date: 09/26/2008

Analyst: CAA

Run Time: 09:24

Workgroup: WG283266

File ID: 6M78212

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	25.3	11203	PASS
75.0	95.0	30.0	60.0	56.5	24991	PASS
95.0	95.0	100	100	100	44210	PASS
96.0	95.0	5.00	9.00	6.68	2954	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	72.1	31861	PASS
175	174	5.00	9.00	7.04	2243	PASS
176	174	95.0	101	96.6	30792	PASS
177	176	5.00	9.00	6.85	2110	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG283090-12	SSCV	01	09/26/2008 11:32	

* Sample past 12 hour tune limit

BFB

Login Number: L08100669

Instrument: HPMS6

Analyst: CAA

Workgroup: WG286074

Tune ID: WG286074-01

Run Date: 10/27/2008

Run Time: 08:33

File ID: 6M79214

Cal ID: HPMS6 - 25-SEP-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	33.4	17916	PASS
75.0	95.0	30.0	60.0	59.0	31674	PASS
95.0	95.0	100	100	100	53682	PASS
96.0	95.0	5.00	9.00	6.40	3433	PASS
173	174	0	2.00	0.377	109	PASS
174	95.0	50.0	100	53.9	28920	PASS
175	174	5.00	9.00	6.06	1752	PASS
176	174	95.0	101	96.6	27936	PASS
177	176	5.00	9.00	7.21	2013	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG286074-02	CCV	01	10/27/2008 09:03	
WG286075-01	BLANK	01	10/27/2008 10:19	
WG286075-02	LCS	01	10/27/2008 10:52	
WG286075-03	LCS2	01	10/27/2008 11:25	
L08100669-04	TRIP BLANK	01	10/27/2008 14:40	
L08100669-01	58-DPT-02	01	10/27/2008 19:02	
L08100669-02	58-DPT-03	01	10/27/2008 19:35	

* Sample past 12 hour tune limit

Login Number: L08100669
Analytical Method: 8260B
ICAL Workgroup: WG283090

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3739	15.9		1.00000
1,2-Dichloropropane	CCC	0.1996	11.0		
Chloroform	CCC	0.4182	8.61		
Ethylbenzene	CCC	0.3892	9.70		
Toluene	CCC	1.107	8.39		
Vinyl Chloride	CCC	0.2002	20.1		1.00000
1,1,2,2-Tetrachloroethane	SPCC	0.3582	7.85		
1,1-Dichloroethane	SPCC	0.4280	8.89		
Bromoform	SPCC	0.1386	21.3		1.00000
Chlorobenzene	SPCC	0.7200	6.06		
Chloromethane	SPCC	0.2502	14.3		
1,1,1,2-Tetrachloroethane		0.2503	12.3		
1,1,1-Trichloroethane		0.3501	14.3		
1,1,2-Trichloroethane		0.1813	9.12		
1,1-Dichloropropene		0.3051	15.2		1.00000
1,2,3-Trichlorobenzene		0.6385	14.7		
1,2,3-Trichloropropane		0.1185	5.02		
1,2,4-Trichlorobenzene		0.6729	4.41		
1,2,4-Trimethylbenzene		1.938	8.06		
1,2-Dibromo-3-Chloropropane		0.08593	12.5		
1,2-Dibromoethane		0.1941	7.42		
1,2-Dichlorobenzene		1.012	6.54		
1,2-Dichloroethane		0.3794	8.69		
1,3,5-Trimethylbenzene		1.840	9.62		
1,3-Dichlorobenzene		1.063	5.13		
1,3-Dichloropropane		0.3824	6.58		
1,4-Dichlorobenzene		1.133	5.34		
2,2-Dichloropropane		0.3937	10.6		
2-Butanone		0.06523	6.58		
2-Chloroethyl Vinyl Ether		0.09501	18.8		1.00000
2-Chlorotoluene		1.740	3.09		
2-Hexanone		0.1388	10.3		
4-Chlorotoluene		1.803	9.16		
4-Methyl-2-Pentanone		0.05247	7.75		
Acetone		0.05407	16.9		0.99900
Benzene		0.7848	6.67		
Bromobenzene		0.4861	13.3		
Bromochloromethane		0.1080	10.0		
Bromodichloromethane		0.3046	9.96		
Bromomethane		0.1260	17.5		1.00000
Carbon Disulfide		0.6388	4.12		
Carbon Tetrachloride		0.2395	29.8		1.00000
Chloroethane		0.1321	12.2		
Dibromochloromethane		0.2229	15.1		
Dibromomethane		0.1086	5.76		

INT_CAL - Modified 03/06/2008
PDF File ID: 1239113
Report generated 11/03/2008 10:02



Login Number: L08100669
Analytical Method: 8260B
ICAL Workgroup: WG283090

Instrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane		0.2197	9.96		
Hexachlorobutadiene		0.2735	13.2		
Isopropylbenzene		1.304	11.8		
Methylene Chloride		0.2616	33.6	1.00000	
Naphthalene		1.179	5.19		
Styrene		0.8578	6.90		
Tetrachloroethene		0.2677	6.31		
Trichloroethene		0.1891	5.82		
Trichlorofluoromethane		0.3714	24.6		1.00000
Vinyl Acetate		0.3344	5.34		
cis-1,2-Dichloroethene		0.2000	12.6		
cis-1,3-Dichloropropene		0.3497	8.41		
m-,p-Xylene		0.5004	10.5		
n-Butylbenzene		1.847	12.2		
n-Propylbenzene		2.527	11.5		
o-Xylene		0.5029	6.71		
p-Isopropyltoluene		1.811	13.1		
sec-Butylbenzene		2.139	11.9		
tert-Butylbenzene		0.3732	13.4		
trans-1,2-Dichloroethene		0.1848	9.74		
trans-1,3-Dichloropropene		0.4458	9.98		

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: L08100669
Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-02			WG283090-03			WG283090-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	3715.00000	0.2434	1.00	13768.0000	0.3734
1,2-Dichloropropane	NA	NA	NA	0.400	2357.00000	0.1544	1.00	6749.00000	0.1831
Chloroform	0.300	3994.00000	0.3465	0.400	6004.00000	0.3933	1.00	15068.0000	0.4087
Ethylbenzene	NA	NA	NA	0.400	3596.00000	0.3145	1.00	11303.0000	0.4118
Toluene	NA	NA	NA	0.400	10447.0000	0.9136	1.00	31390.0000	1.144
Vinyl Chloride	NA	NA	NA	0.400	3158.00000	0.2069	1.00	9969.00000	0.2704
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2249.00000	0.2953	1.00	6814.00000	0.3740
1,1-Dichloroethane	NA	NA	NA	0.400	5414.00000	0.3547	1.00	15050.0000	0.4082
Bromoform	NA	NA	NA	NA	NA	NA	1.00	2339.00000	0.08520
Chlorobenzene	NA	NA	NA	0.400	7344.00000	0.6423	1.00	18982.0000	0.6915
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	11364.0000	0.3082
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	2274.00000	0.1989	1.00	6126.00000	0.2232
1,1,1-Trichloroethane	NA	NA	NA	0.400	3627.00000	0.2376	1.00	13582.0000	0.3684
1,1,2-Trichloroethane	NA	NA	NA	0.400	1959.00000	0.1713	1.00	4008.00000	0.1460
1,1-Dichloropropene	NA	NA	NA	0.400	3093.00000	0.2026	1.00	11348.0000	0.3078
1,2,3-Trichlorobenzene	0.300	5016.00000	0.8696	0.400	5254.00000	0.6899	1.00	11280.0000	0.6192
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	2350.00000	0.1290
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	4870.00000	0.6395	1.00	12045.0000	0.6612
1,2,4-Trimethylbenzene	NA	NA	NA	0.400	12897.0000	1.694	1.00	35590.0000	1.954
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	1.00	1233.00000	0.06770
1,2-Dibromoethane	NA	NA	NA	0.400	2037.00000	0.1781	1.00	4888.00000	0.1781
1,2-Dichlorobenzene	0.300	5349.00000	0.9273	0.400	8671.00000	1.139	1.00	18650.0000	1.024
1,2-Dichloroethane	NA	NA	NA	0.400	5242.00000	0.3434	1.00	12631.0000	0.3426
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	11418.0000	1.499	1.00	34632.0000	1.901
1,3-Dichlorobenzene	NA	NA	NA	0.400	7296.00000	0.9581	1.00	19378.0000	1.064
1,3-Dichloropropane	NA	NA	NA	0.400	3914.00000	0.3423	1.00	9809.00000	0.3573
1,4-Dichlorobenzene	0.300	6655.00000	1.154	0.400	8379.00000	1.100	1.00	22357.0000	1.227
2,2-Dichloropropane	NA	NA	NA	0.400	4722.00000	0.3093	1.00	15206.0000	0.4125
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	NA	NA	NA	NA	NA	NA	1.00	2558.00000	0.06940
2-Chlorotoluene	NA	NA	NA	0.400	13593.0000	1.785	1.00	30646.0000	1.682
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	12371.0000	1.625	1.00	33777.0000	1.854
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	10524.0000	0.6894	1.00	28717.0000	0.7789
Bromobenzene	0.300	2181.00000	0.3781	0.400	2996.00000	0.3934	1.00	8440.00000	0.4633
Bromochloromethane	NA	NA	NA	0.400	1350.00000	0.08840	1.00	3473.00000	0.09420
Bromodichloromethane	NA	NA	NA	0.400	4096.00000	0.2683	1.00	9468.00000	0.2568
Bromomethane	NA	NA	NA	NA	NA	NA	1.00	4166.00000	0.1130
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	25083.0000	0.6804
Carbon Tetrachloride	NA	NA	NA	0.400	1080.00000	0.07070	1.00	8976.00000	0.2435

INT_CAL - Modified 03/06/2008
PDF File ID: 1239113
Report generated 11/03/2008 10:02

Login Number: L08100669
Analytical Method: 8260BInstrument ID: HPMS6
Initial Calibration Date: 25-SEP-08 20:37
Column ID: F

Analyte	WG283090-05			WG283090-06			WG283090-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	30786.0000	0.4247	5.00	63424.0000	0.3441	20.0	312725.000	0.4151
1,2-Dichloropropane	2.00	14850.0000	0.2049	5.00	35555.0000	0.1929	20.0	160311.000	0.2128
Chloroform	2.00	32335.0000	0.4461	5.00	72598.0000	0.3939	20.0	341799.000	0.4537
Ethylbenzene	2.00	21997.0000	0.4009	5.00	48268.0000	0.3478	20.0	235960.000	0.4131
Toluene	2.00	66347.0000	1.209	5.00	151588.000	1.092	20.0	664884.000	1.164
Vinyl Chloride	2.00	16941.0000	0.2337	5.00	30633.0000	0.1662	20.0	138969.000	0.1844
1,1,2,2-Tetrachloroethane	2.00	13403.0000	0.3688	5.00	31600.0000	0.3472	20.0	139771.000	0.3633
1,1-Dichloroethane	2.00	32607.0000	0.4499	5.00	73321.0000	0.3978	20.0	339107.000	0.4501
Bromoform	2.00	7022.00000	0.1280	5.00	16747.0000	0.1207	20.0	83112.0000	0.1455
Chlorobenzene	2.00	41824.0000	0.7622	5.00	94952.0000	0.6841	20.0	432030.000	0.7564
Chloromethane	2.00	21311.0000	0.2940	5.00	40861.0000	0.2217	20.0	180807.000	0.2400
1,1,1,2-Tetrachloroethane	2.00	14472.0000	0.2637	5.00	31131.0000	0.2243	20.0	160861.000	0.2816
1,1,1-Trichloroethane	2.00	26461.0000	0.3651	5.00	60721.0000	0.3294	20.0	291226.000	0.3865
1,1,2-Trichloroethane	2.00	10439.0000	0.1902	5.00	24443.0000	0.1761	20.0	110853.000	0.1941
1,1-Dichloropropene	2.00	23859.0000	0.3292	5.00	50679.0000	0.2749	20.0	248997.000	0.3305
1,2,3-Trichlorobenzene	2.00	22070.0000	0.6073	5.00	53605.0000	0.5890	20.0	237677.000	0.6178
1,2,3-Trichloropropane	2.00	4036.00000	0.1111	5.00	11006.0000	0.1209	20.0	45792.0000	0.1190
1,2,4-Trichlorobenzene	2.00	23883.0000	0.6572	5.00	60828.0000	0.6684	20.0	273883.000	0.7119
1,2,4-Trimethylbenzene	2.00	76420.0000	2.103	5.00	170716.000	1.876	20.0	793227.000	2.062
1,2-Dibromo-3-Chloropropane	2.00	2849.00000	0.07840	5.00	8021.00000	0.08810	20.0	37707.0000	0.09800
1,2-Dibromoethane	2.00	10465.0000	0.1907	5.00	25016.0000	0.1802	20.0	120939.000	0.2117
1,2-Dichlorobenzene	2.00	38664.0000	1.064	5.00	85828.0000	0.9431	20.0	396791.000	1.031
1,2-Dichloroethane	2.00	30399.0000	0.4194	5.00	72404.0000	0.3928	20.0	312083.000	0.4142
1,3,5-Trimethylbenzene	2.00	71187.0000	1.959	5.00	160143.000	1.760	20.0	762304.000	1.981
1,3-Dichlorobenzene	2.00	39982.0000	1.100	5.00	92977.0000	1.022	20.0	416762.000	1.083
1,3-Dichloropropane	2.00	21873.0000	0.3986	5.00	49881.0000	0.3594	20.0	228471.000	0.4000
1,4-Dichlorobenzene	2.00	43085.0000	1.186	5.00	94135.0000	1.034	20.0	437060.000	1.136
2,2-Dichloropropane	2.00	30130.0000	0.4157	5.00	66469.0000	0.3606	20.0	320622.000	0.4255
2-Butanone	NA	NA	NA	5.00	10893.0000	0.05910	20.0	47556.0000	0.06310
2-Chloroethyl Vinyl Ether	2.00	5668.00000	0.07820	5.00	15279.0000	0.08290	20.0	77792.0000	0.1032
2-Chlorotoluene	2.00	64282.0000	1.769	5.00	151464.000	1.664	20.0	677190.000	1.760
2-Hexanone	NA	NA	NA	5.00	15971.0000	0.1151	20.0	75833.0000	0.1328
4-Chlorotoluene	2.00	72371.0000	1.992	5.00	164676.000	1.810	20.0	729094.000	1.895
4-Methyl-2-Pentanone	NA	NA	NA	5.00	8552.00000	0.04640	20.0	38173.0000	0.05070
Acetone	NA	NA	NA	5.00	12811.0000	0.06950	20.0	44210.0000	0.05870
Benzene	2.00	59043.0000	0.8146	5.00	133564.000	0.7246	20.0	610182.000	0.8099
Bromobenzene	2.00	20269.0000	0.5578	5.00	42703.0000	0.4692	20.0	202731.000	0.5270
Bromochloromethane	2.00	7971.00000	0.1100	5.00	20511.0000	0.1113	20.0	87861.0000	0.1166
Bromodichloromethane	2.00	21804.0000	0.3008	5.00	53800.0000	0.2919	20.0	246253.000	0.3268
Bromomethane	2.00	8307.00000	0.1146	5.00	16944.0000	0.09190	20.0	90849.0000	0.1206
Carbon Disulfide	2.00	44162.0000	0.6093	5.00	113471.000	0.6156	20.0	473060.000	0.6279
Carbon Tetrachloride	2.00	18464.0000	0.2547	5.00	41748.0000	0.2265	20.0	211649.000	0.2809

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Column ID: F

Analyte	WG283090-08			WG283090-09			WG283090-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	820324.000	0.4181	100	1648908.00	0.3978	200	3330114.00	0.3747
1,2-Dichloropropane	50.0	426724.000	0.2175	100	890725.000	0.2149	200	1924127.00	0.2165
Chloroform	50.0	888762.000	0.4530	100	1838332.00	0.4435	200	3776963.00	0.4250
Ethylbenzene	50.0	632304.000	0.4167	100	1321667.00	0.4154	200	2753446.00	0.3937
Toluene	50.0	1744305.00	1.150	100	3647462.00	1.146	200	7278197.00	1.041
Vinyl Chloride	50.0	358125.000	0.1825	100	651475.000	0.1572	NA	NA	NA
1,1,2,2-Tetrachloroethane	50.0	386639.000	0.3809	100	762312.000	0.3546	200	1763164.00	0.3815
1,1-Dichloroethane	50.0	918222.000	0.4680	100	1885887.00	0.4549	200	3914018.00	0.4404
Bromoform	50.0	247613.000	0.1632	100	512783.000	0.1612	200	1163634.00	0.1664
Chlorobenzene	50.0	1141046.00	0.7520	100	2394676.00	0.7526	200	5027422.00	0.7188
Chloromethane	50.0	471357.000	0.2403	100	920061.000	0.2219	200	2004721.00	0.2256
1,1,1,2-Tetrachloroethane	50.0	422451.000	0.2784	100	871949.000	0.2740	200	1808736.00	0.2586
1,1,1-Trichloroethane	50.0	770246.000	0.3926	100	1554747.00	0.3751	200	3075480.00	0.3460
1,1,2-Trichloroethane	50.0	291178.000	0.1919	100	596870.000	0.1876	200	1352625.00	0.1934
1,1-Dichloropropene	50.0	673230.000	0.3432	100	1385617.00	0.3343	200	2828402.00	0.3182
1,2,3-Trichlorobenzene	50.0	626961.000	0.6176	100	1235546.00	0.5748	200	2594676.00	0.5614
1,2,3-Trichloropropane	50.0	122672.000	0.1208	100	244324.000	0.1137	200	532150.000	0.1151
1,2,4-Trichlorobenzene	50.0	731329.000	0.7204	100	1461693.00	0.6800	200	2977397.00	0.6442
1,2,4-Trimethylbenzene	50.0	2097217.00	2.066	100	4335898.00	2.017	200	8011238.00	1.733
1,2-Dibromo-3-Chloropropane	50.0	99629.0000	0.09810	100	183150.000	0.08520	200	397649.000	0.08600
1,2-Dibromoethane	50.0	321297.000	0.2118	100	630443.000	0.1981	200	1427034.00	0.2040
1,2-Dichlorobenzene	50.0	1042653.00	1.027	100	2155194.00	1.003	200	4402546.00	0.9525
1,2-Dichloroethane	50.0	797173.000	0.4063	100	1540374.00	0.3716	200	3065734.00	0.3449
1,3,5-Trimethylbenzene	50.0	2033968.00	2.004	100	4150985.00	1.931	200	7791643.00	1.686
1,3-Dichlorobenzene	50.0	1133355.00	1.117	100	2401022.00	1.117	200	4809866.00	1.041
1,3-Dichloropropane	50.0	620376.000	0.4089	100	1258780.00	0.3956	200	2776387.00	0.3969
1,4-Dichlorobenzene	50.0	1179568.00	1.162	100	2440372.00	1.135	200	4894301.00	1.059
2,2-Dichloropropane	50.0	848638.000	0.4326	100	1717875.00	0.4144	200	3369199.00	0.3791
2-Butanone	50.0	132146.000	0.06740	100	259834.000	0.06270	200	626280.000	0.07050
2-Chloroethyl Vinyl Ether	50.0	215088.000	0.1096	100	441513.000	0.1065	200	1024534.00	0.1153
2-Chlorotoluene	50.0	1842475.00	1.815	100	3766466.00	1.752	200	7828769.00	1.694
2-Hexanone	50.0	221291.000	0.1458	100	430291.000	0.1352	200	1039612.00	0.1486
4-Chlorotoluene	50.0	1938185.00	1.909	100	3983209.00	1.853	200	6881603.00	1.489
4-Methyl-2-Pentanone	50.0	105681.000	0.05390	100	211565.000	0.05100	200	518702.000	0.05840
Acetone	50.0	108394.000	0.05530	100	192622.000	0.04650	200	429884.000	0.04840
Benzene	50.0	1635555.00	0.8337	100	3457236.00	0.8340	200	7047384.00	0.7929
Bromobenzene	50.0	548116.000	0.5400	100	1134704.00	0.5279	200	2397034.00	0.5186
Bromochloromethane	50.0	232605.000	0.1186	100	472735.000	0.1140	200	983249.000	0.1106
Bromodichloromethane	50.0	667582.000	0.3403	100	1351392.00	0.3260	200	2893770.00	0.3256
Bromomethane	50.0	276675.000	0.1410	100	619159.000	0.1494	200	1345442.00	0.1514
Carbon Disulfide	50.0	1241202.00	0.6327	100	2644027.00	0.6378	200	5937796.00	0.6681
Carbon Tetrachloride	50.0	563091.000	0.2870	100	1162105.00	0.2803	200	2418638.00	0.2721

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Analyte	WG283090-11		
	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	902432.000	0.06860
2-Chloroethyl Vinyl Ether	NA	NA	NA
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1471904.00	0.1551
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	715505.000	0.05440
Acetone	300	605154.000	0.04600
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	WG283090-02			WG283090-03			WG283090-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	3918.00000	0.1063
Dibromochloromethane	NA	NA	NA	0.400	1841.00000	0.1610	1.00	5532.00000	0.2015
Dibromomethane	NA	NA	NA	0.400	1603.00000	0.1050	1.00	3513.00000	0.09530
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	8602.00000	0.2333
Hexachlorobutadiene	NA	NA	NA	0.400	1490.00000	0.1957	1.00	4761.00000	0.2613
Isopropylbenzene	NA	NA	NA	0.400	11340.0000	0.9917	1.00	36816.0000	1.341
Methylene Chloride	NA	NA	NA	0.400	7065.00000	0.4628	1.00	11198.0000	0.3037
Naphthalene	NA	NA	NA	0.400	8713.00000	1.144	1.00	20269.0000	1.113
Styrene	NA	NA	NA	0.400	8753.00000	0.7655	1.00	23285.0000	0.8483
Tetrachloroethene	NA	NA	NA	0.400	2824.00000	0.2470	1.00	7930.00000	0.2889
Trichloroethene	NA	NA	NA	0.400	2689.00000	0.1761	1.00	7063.00000	0.1916
Trichlorofluoromethane	NA	NA	NA	0.400	2708.00000	0.1774	1.00	16066.0000	0.4358
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	2169.00000	0.1421	1.00	7834.00000	0.2125
cis-1,3-Dichloropropene	NA	NA	NA	0.400	4812.00000	0.3152	1.00	11491.0000	0.3117
m-,p-Xylene	NA	NA	NA	0.800	8881.00000	0.3883	2.00	29293.0000	0.5336
n-Butylbenzene	NA	NA	NA	0.400	10652.0000	1.399	1.00	33029.0000	1.813
n-Propylbenzene	NA	NA	NA	0.400	15449.0000	2.029	1.00	49130.0000	2.697
o-Xylene	NA	NA	NA	0.400	5050.00000	0.4416	1.00	14981.0000	0.5458
p-Isopropyltoluene	NA	NA	NA	0.400	9966.00000	1.309	1.00	33908.0000	1.861
sec-Butylbenzene	NA	NA	NA	0.400	12204.0000	1.603	1.00	41725.0000	2.290
tert-Butylbenzene	NA	NA	NA	0.400	1969.00000	0.2586	1.00	7006.00000	0.3846
trans-1,2-Dichloroethene	NA	NA	NA	0.400	2363.00000	0.1548	1.00	7120.00000	0.1931
trans-1,3-Dichloropropene	NA	NA	NA	0.400	4569.00000	0.3996	1.00	10139.0000	0.3694

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Analyte	WG283090-05			WG283090-06			WG283090-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	11008.0000	0.1519	5.00	21263.0000	0.1154	20.0	103839.000	0.1378
Dibromochloromethane	2.00	11682.0000	0.2129	5.00	28610.0000	0.2061	20.0	136346.000	0.2387
Dibromomethane	2.00	8122.00000	0.1121	5.00	20258.0000	0.1099	20.0	82391.0000	0.1094
Dichlorodifluoromethane	2.00	18200.0000	0.2511	5.00	36400.0000	0.1975	20.0	174891.000	0.2321
Hexachlorobutadiene	2.00	11523.0000	0.3171	5.00	24927.0000	0.2739	20.0	113081.000	0.2939
Isopropylbenzene	2.00	77288.0000	1.409	5.00	169205.000	1.219	20.0	808518.000	1.416
Methylene Chloride	2.00	18975.0000	0.2618	5.00	39320.0000	0.2133	20.0	159480.000	0.2117
Naphthalene	2.00	40890.0000	1.125	5.00	107060.000	1.176	20.0	487687.000	1.268
Styrene	2.00	45130.0000	0.8224	5.00	110960.000	0.7995	20.0	522579.000	0.9150
Tetrachloroethene	2.00	14971.0000	0.2728	5.00	33881.0000	0.2441	20.0	160643.000	0.2813
Trichloroethene	2.00	13965.0000	0.1927	5.00	31066.0000	0.1685	20.0	146753.000	0.1948
Trichlorofluoromethane	2.00	32234.0000	0.4447	5.00	63855.0000	0.3464	20.0	302058.000	0.4009
Vinyl Acetate	NA	NA	NA	5.00	58834.0000	0.3192	20.0	252370.000	0.3350
cis-1,2-Dichloroethene	2.00	15438.0000	0.2130	5.00	34133.0000	0.1852	20.0	158115.000	0.2099
cis-1,3-Dichloropropene	2.00	25928.0000	0.3577	5.00	58803.0000	0.3190	20.0	273440.000	0.3629
m-,p-Xylene	4.00	58534.0000	0.5334	10.0	130885.000	0.4715	40.0	612729.000	0.5364
n-Butylbenzene	2.00	74199.0000	2.042	5.00	160559.000	1.764	20.0	767206.000	1.994
n-Propylbenzene	2.00	99959.0000	2.751	5.00	220910.000	2.427	20.0	1042648.00	2.710
o-Xylene	2.00	28488.0000	0.5192	5.00	64663.0000	0.4659	20.0	294776.000	0.5161
p-Isopropyltoluene	2.00	67692.0000	1.863	5.00	155620.000	1.710	20.0	765382.000	1.989
sec-Butylbenzene	2.00	82841.0000	2.280	5.00	186109.000	2.045	20.0	876700.000	2.279
tert-Butylbenzene	2.00	14943.0000	0.4112	5.00	31741.0000	0.3488	20.0	154850.000	0.4025
trans-1,2-Dichloroethene	2.00	13166.0000	0.1816	5.00	29382.0000	0.1594	20.0	147373.000	0.1956
trans-1,3-Dichloropropene	2.00	24300.0000	0.4428	5.00	59324.0000	0.4274	20.0	276154.000	0.4835

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Analyte	WG283090-08			WG283090-09			WG283090-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	283167.000	0.1443	100	567341.000	0.1369	200	1171924.00	0.1319
Dibromochloromethane	50.0	390082.000	0.2571	100	802739.000	0.2523	200	1771167.00	0.2532
Dibromomethane	50.0	228591.000	0.1165	100	455329.000	0.1098	200	985444.000	0.1109
Dichlorodifluoromethane	50.0	448765.000	0.2287	100	822732.000	0.1985	200	1749942.00	0.1969
Hexachlorobutadiene	50.0	294527.000	0.2901	100	623572.000	0.2901	200	1227058.00	0.2655
Isopropylbenzene	50.0	2179301.00	1.436	100	4471314.00	1.405	200	8496147.00	1.215
Methylene Chloride	50.0	426911.000	0.2176	100	877126.000	0.2116	200	1867480.00	0.2101
Naphthalene	50.0	1294880.00	1.276	100	2526001.00	1.175	200	5350561.00	1.158
Styrene	50.0	1393868.00	0.9187	100	2933217.00	0.9219	200	6094657.00	0.8714
Tetrachloroethene	50.0	426232.000	0.2809	100	864733.000	0.2718	200	1783611.00	0.2550
Trichloroethene	50.0	391370.000	0.1995	100	824322.000	0.1989	200	1693242.00	0.1905
Trichlorofluoromethane	50.0	789973.000	0.4027	100	1624531.00	0.3919	NA	NA	NA
Vinyl Acetate	50.0	686385.000	0.3499	100	1301190.00	0.3139	200	3145558.00	0.3539
cis-1,2-Dichloroethene	50.0	416502.000	0.2123	100	885848.000	0.2137	200	1876641.00	0.2111
cis-1,3-Dichloropropene	50.0	743849.000	0.3792	100	1555583.00	0.3753	200	3346180.00	0.3765
m-,p-Xylene	100	1611228.00	0.5310	200	3377286.00	0.5307	400	6693577.00	0.4785
n-Butylbenzene	50.0	2075090.00	2.044	100	4319915.00	2.010	200	7908803.00	1.711
n-Propylbenzene	50.0	2818367.00	2.776	100	5728865.00	2.665	200	9984689.00	2.160
o-Xylene	50.0	786803.000	0.5186	100	1653337.00	0.5196	200	3473098.00	0.4966
p-Isopropyltoluene	50.0	2065028.00	2.034	100	4288763.00	1.995	200	7968489.00	1.724
sec-Butylbenzene	50.0	2370252.00	2.335	100	4948812.00	2.302	200	9138552.00	1.977
tert-Butylbenzene	50.0	408690.000	0.4026	100	850326.000	0.3956	200	1762162.00	0.3813
trans-1,2-Dichloroethene	50.0	388230.000	0.1979	100	822223.000	0.1983	200	1759840.00	0.1980
trans-1,3-Dichloropropene	50.0	751809.000	0.4955	100	1520905.00	0.4780	200	3290241.00	0.4704

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Analyte	WG283090-11		
	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: L08100669 Run Date: 10/11/2008 Sample ID: WG284610-12
Instrument ID: HPMS14 Run Time: 03:50 Method: 8260B
File ID: 14M08708 Analyst: MDA QC Key: STD
ICal Workgroup: WG284610 Cal ID: HPMS14 - 11-OCT-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	22.6	ug/L	0.413	13.1	30	
1,1-Dichloroethene	CCC	20.0	20.4	ug/L	0.321	2.20	30	
1,2-Dichloropropane	CCC	20.0	21.5	ug/L	0.210	7.40	30	
Ethylbenzene	CCC	20.0	22.7	ug/L	0.466	13.5	30	
Toluene	CCC	20.0	20.9	ug/L	1.21	4.60	30	
Vinyl Chloride	CCC	20.0	25.2	ug/L	0.160	26.1	30	
Bromoform	SPCC	20.0	21.8	ug/L	0.149	9.20	30	
Chlorobenzene	SPCC	20.0	21.9	ug/L	0.823	9.30	30	
Chloromethane	SPCC	20.0	17.2	ug/L	0.141	14.2	30	
1,1-Dichloroethane	SPCC	20.0	22.8	ug/L	0.398	14.2	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	22.2	ug/L	0.393	11.2	30	
Acetone		20.0	22.6	ug/L	0.0308	13.2	30	
Benzene		20.0	21.3	ug/L	0.820	6.40	30	
Bromobenzene		20.0	21.5	ug/L	0.732	7.40	30	
Bromochloromethane		20.0	23.8	ug/L	0.115	19.0	30	
Bromodichloromethane		20.0	23.2	ug/L	0.317	16.1	30	
Bromomethane		20.0	17.4	ug/L	0.0888	12.8	30	
2-Butanone		20.0	21.9	ug/L	0.0429	9.70	30	
n-Butylbenzene		20.0	23.1	ug/L	1.74	15.7	30	
sec-Butylbenzene		20.0	22.7	ug/L	2.90	13.6	30	
tert-Butylbenzene		20.0	22.3	ug/L	0.491	11.3	30	
Carbon Disulfide		20.0	18.9	ug/L	0.551	5.50	30	
Carbon Tetrachloride		20.0	21.2	ug/L	0.379	6.10	30	
Dibromochloromethane		20.0	22.8	ug/L	0.284	14.0	30	
Chloroethane		20.0	23.0	ug/L	0.129	15.0	30	
2-Chloroethyl Vinyl Ether		20.0	26.6	ug/L	0.0168	33.2	30	*
2-Chlorotoluene		20.0	22.9	ug/L	2.49	14.3	30	
4-Chlorotoluene		20.0	21.6	ug/L	1.85	8.10	30	
1,2-Dibromo-3-Chloropropane		20.0	21.8	ug/L	0.0756	8.90	30	
1,2-Dibromoethane		20.0	22.7	ug/L	0.191	13.7	30	
Dibromomethane		20.0	23.5	ug/L	0.104	17.4	30	
1,2-Dichlorobenzene		20.0	21.7	ug/L	1.17	8.70	30	
1,3-Dichlorobenzene		20.0	21.9	ug/L	1.35	9.40	30	
1,4-Dichlorobenzene		20.0	21.1	ug/L	1.31	5.40	30	
Dichlorodifluoromethane		20.0	25.3	ug/L	0.283	26.7	30	
1,2-Dichloroethane		20.0	23.4	ug/L	0.300	16.9	30	
cis-1,2-Dichloroethene		20.0	23.0	ug/L	0.222	14.8	30	
trans-1,2-Dichloroethene		20.0	22.8	ug/L	0.198	13.9	30	
1,3-Dichloropropane		20.0	22.5	ug/L	0.335	12.4	30	
2,2-Dichloropropane		20.0	21.3	ug/L	0.351	6.50	30	
cis-1,3-Dichloropropene		20.0	22.2	ug/L	0.312	10.9	30	
trans-1,3-Dichloropropene		20.0	21.0	ug/L	0.343	5.10	30	

Login Number: L08100669 Run Date: 10/11/2008 Sample ID: WG284610-12
Instrument ID: HPMS14 Run Time: 03:50 Method: 8260B
File ID: 14M08708 Analyst: MDA QC Key: STD
ICal Workgroup: WG284610 Cal ID: HPMS14 - 11-OCT-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	22.1	ug/L	0.311	10.7	30	
2-Hexanone	20.0	20.8	ug/L	0.0838	3.90	30	
Hexachlorobutadiene	20.0	23.3	ug/L	0.424	16.6	30	
Isopropylbenzene	20.0	19.9	ug/L	1.30	0.400	30	
p-Isopropyltoluene	20.0	22.2	ug/L	2.18	11.0	30	
4-Methyl-2-Pentanone	20.0	19.7	ug/L	0.0392	1.50	30	
Methylene Chloride	20.0	21.9	ug/L	0.185	9.40	30	
Naphthalene	20.0	22.9	ug/L	0.655	14.7	30	
n-Propylbenzene	20.0	22.6	ug/L	3.34	13.0	30	
Styrene	20.0	22.5	ug/L	0.860	12.3	30	
1,1,1,2-Tetrachloroethane	20.0	23.0	ug/L	0.321	14.9	30	
Tetrachloroethene	20.0	22.1	ug/L	0.343	10.6	30	
1,2,3-Trichlorobenzene	20.0	22.2	ug/L	0.442	10.8	30	
1,2,4-Trichlorobenzene	20.0	22.1	ug/L	0.529	10.4	30	
1,1,1-Trichloroethane	20.0	23.3	ug/L	0.425	16.7	30	
1,1,2-Trichloroethane	20.0	22.8	ug/L	0.188	14.1	30	
Trichloroethene	20.0	21.3	ug/L	0.241	6.40	30	
Trichlorofluoromethane	20.0	20.0	ug/L	0.426	0	30	
1,2,3-Trichloropropane	20.0	22.4	ug/L	0.142	11.8	30	
1,2,4-Trimethylbenzene	20.0	23.0	ug/L	1.90	15.0	30	
1,3,5-Trimethylbenzene	20.0	23.0	ug/L	2.02	14.8	30	
Vinyl Acetate	20.0	17.9	ug/L	0.151	10.7	40	
o-Xylene	20.0	22.5	ug/L	0.525	12.4	30	
m-,p-Xylene	40.0	45.6	ug/L	0.546	14.1	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100669 Run Date: 09/26/2008 Sample ID: WG283090-12
Instrument ID: HPMS6 Run Time: 11:32 Method: 8260B
File ID: 6M78216 Analyst: CAA QC Key: STD
ICal Workgroup: WG283090 Cal ID: HPMS6 - 25-SEP-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	21.0	ug/L	0.440	5.20	30	
1,1-Dichloroethene	CCC	20.0	18.9	ug/L	0.394	5.30	30	
1,2-Dichloropropane	CCC	20.0	20.6	ug/L	0.206	3.20	30	
Ethylbenzene	CCC	20.0	21.7	ug/L	0.422	8.50	30	
Toluene	CCC	20.0	20.5	ug/L	1.13	2.50	30	
Vinyl Chloride	CCC	20.0	24.0	ug/L	0.230	20.0	30	
Bromoform	SPCC	20.0	18.7	ug/L	0.144	6.30	30	
Chlorobenzene	SPCC	20.0	21.0	ug/L	0.755	4.80	30	
Chloromethane	SPCC	20.0	18.5	ug/L	0.231	7.60	30	
1,1-Dichloroethane	SPCC	20.0	21.3	ug/L	0.455	6.40	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.4	ug/L	0.365	1.80	30	
Acetone		20.0	20.4	ug/L	0.0576	2.10	30	
Benzene		20.0	20.2	ug/L	0.791	0.800	30	
Bromobenzene		20.0	22.0	ug/L	0.535	10.1	30	
Bromochloromethane		20.0	21.5	ug/L	0.116	7.50	30	
Bromodichloromethane		20.0	22.0	ug/L	0.335	9.90	30	
Bromomethane		20.0	19.7	ug/L	0.134	1.70	30	
2-Butanone		20.0	20.5	ug/L	0.0670	2.70	30	
n-Butylbenzene		20.0	22.0	ug/L	2.04	10.2	30	
sec-Butylbenzene		20.0	21.8	ug/L	2.33	9.10	30	
tert-Butylbenzene		20.0	21.0	ug/L	0.392	5.00	30	
Carbon Disulfide		20.0	17.2	ug/L	0.549	14.1	30	
Carbon Tetrachloride		20.0	20.1	ug/L	0.285	0.600	30	
Dibromochloromethane		20.0	21.5	ug/L	0.239	7.30	30	
Chloroethane		20.0	23.0	ug/L	0.152	15.2	30	
2-Chloroethyl Vinyl Ether		20.0	19.6	ug/L	0.100	1.90	30	
2-Chlorotoluene		20.0	20.9	ug/L	1.82	4.30	30	
4-Chlorotoluene		20.0	21.2	ug/L	1.91	6.10	30	
1,2-Dibromo-3-Chloropropane		20.0	20.9	ug/L	0.0899	4.60	30	
1,2-Dibromoethane		20.0	20.5	ug/L	0.199	2.40	30	
Dibromomethane		20.0	20.5	ug/L	0.111	2.50	30	
1,2-Dichlorobenzene		20.0	20.3	ug/L	1.03	1.30	30	
1,3-Dichlorobenzene		20.0	21.1	ug/L	1.12	5.30	30	
1,4-Dichlorobenzene		20.0	20.0	ug/L	1.13	0.200	30	
Dichlorodifluoromethane		20.0	26.1	ug/L	0.287	30.7	30	*
1,2-Dichloroethane		20.0	20.3	ug/L	0.386	1.70	30	
cis-1,2-Dichloroethene		20.0	21.3	ug/L	0.213	6.70	30	
trans-1,2-Dichloroethene		20.0	20.0	ug/L	0.185	0.100	30	
1,3-Dichloropropane		20.0	20.8	ug/L	0.398	4.20	30	
2,2-Dichloropropane		20.0	21.7	ug/L	0.428	8.70	30	
cis-1,3-Dichloropropene		20.0	20.1	ug/L	0.351	0.500	30	
trans-1,3-Dichloropropene		20.0	19.2	ug/L	0.428	4.00	30	

Login Number: L08100669 Run Date: 09/26/2008 Sample ID: WG283090-12
Instrument ID: HPMS6 Run Time: 11:32 Method: 8260B
File ID: 6M78216 Analyst: CAA QC Key: STD
Ical Workgroup: WG283090 Cal ID: HPMS6 - 25-SEP-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	19.0	ug/L	0.324	5.10	30	
2-Hexanone	20.0	19.6	ug/L	0.136	2.10	30	
Hexachlorobutadiene	20.0	21.0	ug/L	0.288	5.20	30	
Isopropylbenzene	20.0	19.5	ug/L	1.27	2.60	30	
p-Isopropyltoluene	20.0	21.6	ug/L	1.95	7.80	30	
4-Methyl-2-Pentanone	20.0	19.5	ug/L	0.0512	2.40	30	
Methylene Chloride	20.0	19.6	ug/L	0.212	1.90	30	
Naphthalene	20.0	21.5	ug/L	1.27	7.30	30	
n-Propylbenzene	20.0	21.7	ug/L	2.74	8.50	30	
Styrene	20.0	20.8	ug/L	0.894	4.20	30	
1,1,1,2-Tetrachloroethane	20.0	21.4	ug/L	0.268	7.20	30	
Tetrachloroethene	20.0	20.7	ug/L	0.277	3.60	30	
1,2,3-Trichlorobenzene	20.0	19.4	ug/L	0.620	2.80	30	
1,2,4-Trichlorobenzene	20.0	21.8	ug/L	0.733	9.00	30	
1,1,1-Trichloroethane	20.0	21.9	ug/L	0.384	9.70	30	
1,1,2-Trichloroethane	20.0	20.9	ug/L	0.190	4.50	30	
Trichloroethene	20.0	20.7	ug/L	0.196	3.40	30	
Trichlorofluoromethane	20.0	21.2	ug/L	0.428	5.80	30	
1,2,3-Trichloropropane	20.0	20.8	ug/L	0.123	3.80	30	
1,2,4-Trimethylbenzene	20.0	21.7	ug/L	2.10	8.50	30	
1,3,5-Trimethylbenzene	20.0	21.7	ug/L	1.99	8.30	30	
Vinyl Acetate	20.0	17.8	ug/L	0.297	11.2	40	
o-Xylene	20.0	20.7	ug/L	0.520	3.40	30	
m-,p-Xylene	40.0	42.5	ug/L	0.532	6.30	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08100669 Run Date: 10/27/2008 Sample ID: WG286074-02
Instrument ID: HPMS6 Run Time: 09:03 Method: 8260B
File ID: 6M79215 Analyst: CAA QC Key: STD
Workgroup (AAB#): WG286075 Cal ID: HPMS6 - 25-SEP-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	58.5	ug/L	0.489	17.0	20	
1,1-Dichloroethene	CCC	50.0	59.9	ug/L	0.490	19.7	20	
1,2-Dichloropropane	CCC	50.0	57.4	ug/L	0.229	14.8	20	
Ethylbenzene	CCC	50.0	55.1	ug/L	0.429	10.1	20	
Toluene	CCC	50.0	55.5	ug/L	1.23	11.0	20	
Vinyl Chloride	CCC	50.0	57.9	ug/L	0.204	15.8	20	
Bromoform	SPCC	50.0	43.7	ug/L	0.139	12.5	40	
Chlorobenzene	SPCC	50.0	51.5	ug/L	0.741	2.94	40	
Chloromethane	SPCC	50.0	58.0	ug/L	0.290	16.1	40	
1,1-Dichloroethane	SPCC	50.0	60.9	ug/L	0.521	21.8	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	65.5	ug/L	0.469	31.0	40	
Acetone		50.0	57.6	ug/L	0.0588	15.2	40	
Benzene		50.0	53.5	ug/L	0.840	7.09	40	
Bromobenzene		50.0	52.3	ug/L	0.509	4.61	40	
Bromochloromethane		50.0	47.4	ug/L	0.102	5.14	40	
Bromodichloromethane		50.0	57.3	ug/L	0.349	14.5	40	
Bromomethane		50.0	51.7	ug/L	0.149	3.35	40	
2-Butanone		50.0	58.0	ug/L	0.0756	16.0	40	
n-Butylbenzene		50.0	70.2	ug/L	2.59	40.3	40	*
sec-Butylbenzene		50.0	66.5	ug/L	2.84	32.9	40	
tert-Butylbenzene		50.0	53.5	ug/L	0.399	6.94	40	
Carbon Disulfide		50.0	57.4	ug/L	0.734	14.8	40	
Carbon Tetrachloride		50.0	59.5	ug/L	0.338	19.0	40	
Dibromochloromethane		50.0	58.2	ug/L	0.260	16.5	40	
Chloroethane		50.0	72.9	ug/L	0.192	45.7	40	*
2-Chloroethyl Vinyl Ether		50.0	47.2	ug/L	0.0987	5.64	40	
2-Chlorotoluene		50.0	65.8	ug/L	2.29	31.7	40	
4-Chlorotoluene		50.0	63.2	ug/L	2.28	26.3	40	
1,2-Dibromo-3-Chloropropane		50.0	64.0	ug/L	0.110	28.0	40	
1,2-Dibromoethane		50.0	52.1	ug/L	0.202	4.15	40	
Dibromomethane		50.0	53.2	ug/L	0.116	6.41	40	
1,2-Dichlorobenzene		50.0	48.4	ug/L	0.980	3.18	40	
1,3-Dichlorobenzene		50.0	51.6	ug/L	1.10	3.10	40	
1,4-Dichlorobenzene		50.0	49.3	ug/L	1.12	1.49	40	
Dichlorodifluoromethane		50.0	60.7	ug/L	0.267	21.4	40	
1,2-Dichloroethane		50.0	57.6	ug/L	0.437	15.2	40	
cis-1,2-Dichloroethene		50.0	55.1	ug/L	0.220	10.2	40	
trans-1,2-Dichloroethene		50.0	58.1	ug/L	0.215	16.2	40	
1,3-Dichloropropane		50.0	54.7	ug/L	0.419	9.43	40	
2,2-Dichloropropane		50.0	60.7	ug/L	0.478	21.4	40	
cis-1,3-Dichloropropene		50.0	51.8	ug/L	0.362	3.57	40	
trans-1,3-Dichloropropene		50.0	58.5	ug/L	0.522	17.1	40	

CCV - Modified 03/05/2008
PDF File ID: 1239116
Report generated 11/03/2008 10:02



Login Number: L08100669	Run Date: 10/27/2008	Sample ID: WG286074-02
Instrument ID: HPMS6	Run Time: 09:03	Method: 8260B
File ID: 6M79215	Analyst: CAA	QC Key: STD
Workgroup (AAB#): WG286075	Cal ID: HPMS6 - 25-SEP-08	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene		50.0	50.5	ug/L	0.344	0.974	40	
2-Hexanone		50.0	60.1	ug/L	0.167	20.2	40	
Hexachlorobutadiene		50.0	49.8	ug/L	0.273	0.350	40	
Isopropylbenzene		50.0	54.9	ug/L	1.43	9.87	40	
p-Isopropyltoluene		50.0	65.3	ug/L	2.37	30.6	40	
4-Methyl-2-Pentanone		50.0	53.0	ug/L	0.0556	6.06	40	
Methylene Chloride		50.0	50.8	ug/L	0.216	1.59	40	
Naphthalene		50.0	54.5	ug/L	1.28	8.96	40	
n-Propylbenzene		50.0	69.3	ug/L	3.50	38.6	40	
Styrene		50.0	53.5	ug/L	0.918	7.04	40	
1,1,1,2-Tetrachloroethane		50.0	54.2	ug/L	0.271	8.39	40	
Tetrachloroethene		50.0	42.5	ug/L	0.228	15.0	40	
1,2,3-Trichlorobenzene		50.0	42.4	ug/L	0.541	15.3	40	
1,2,4-Trichlorobenzene		50.0	48.2	ug/L	0.648	3.65	40	
1,1,1-Trichloroethane		50.0	60.6	ug/L	0.425	21.3	40	
1,1,2-Trichloroethane		50.0	53.7	ug/L	0.195	7.43	40	
Trichloroethene		50.0	45.9	ug/L	0.174	8.11	40	
Trichlorofluoromethane		50.0	59.3	ug/L	0.474	18.7	40	
1,2,3-Trichloropropane		50.0	56.9	ug/L	0.135	13.8	40	
1,2,4-Trimethylbenzene		50.0	65.8	ug/L	2.55	31.5	40	
1,3,5-Trimethylbenzene		50.0	65.1	ug/L	2.40	30.2	40	
Vinyl Acetate		50.0	68.4	ug/L	0.458	36.9	40	
o-Xylene		50.0	51.8	ug/L	0.521	3.63	40	
m-,p-Xylene		100	108	ug/L	0.541	8.16	40	
1,2-Dichloroethene		100	113	ug/L	0.218	13.2	40	
Xylenes		150	160	ug/L	0.531	6.65	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08100669	Run Date: 10/28/2008	Sample ID: WG286202-02
Instrument ID: HPMS14	Run Time: 08:25	Method: 8260B
File ID: 14M09314	Analyst: WTD	QC Key: STD
Workgroup (AAB#): WG286203	Cal ID: HPMS14 - 11-OCT-08	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	57.6	ug/L	0.421	15.3	20	
1,1-Dichloroethene	CCC	50.0	51.9	ug/L	0.329	3.72	20	
1,2-Dichloropropane	CCC	50.0	52.5	ug/L	0.205	4.97	20	
Ethylbenzene	CCC	50.0	56.6	ug/L	0.464	13.1	20	
Toluene	CCC	50.0	54.2	ug/L	1.25	8.49	20	
Vinyl Chloride	CCC	50.0	51.4	ug/L	0.130	2.72	20	
Bromoform	SPCC	50.0	56.6	ug/L	0.155	13.2	40	
Chlorobenzene	SPCC	50.0	55.4	ug/L	0.834	10.8	40	
Chloromethane	SPCC	50.0	44.9	ug/L	0.147	10.2	40	
1,1-Dichloroethane	SPCC	50.0	58.4	ug/L	0.407	16.8	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	47.5	ug/L	0.336	5.06	40	
Acetone		50.0	44.3	ug/L	0.0241	11.5	40	
Benzene		50.0	53.3	ug/L	0.821	6.59	40	
Bromobenzene		50.0	49.0	ug/L	0.667	2.05	40	
Bromochloromethane		50.0	55.3	ug/L	0.107	10.6	40	
Bromodichloromethane		50.0	56.5	ug/L	0.309	13.0	40	
Bromomethane		50.0	58.4	ug/L	0.133	16.7	40	
2-Butanone		50.0	40.7	ug/L	0.0318	18.6	40	
n-Butylbenzene		50.0	67.5	ug/L	2.04	35.0	40	
sec-Butylbenzene		50.0	58.7	ug/L	2.99	17.4	40	
tert-Butylbenzene		50.0	56.2	ug/L	0.496	12.5	40	
Carbon Disulfide		50.0	49.8	ug/L	0.581	0.336	40	
Carbon Tetrachloride		50.0	52.0	ug/L	0.366	3.96	40	
Dibromochloromethane		50.0	57.8	ug/L	0.288	15.6	40	
Chloroethane		50.0	51.6	ug/L	0.116	3.22	40	
2-Chloroethyl Vinyl Ether		50.0	98.4	ug/L	0.0357	96.9	40	*
2-Chlorotoluene		50.0	47.0	ug/L	2.05	6.06	40	
4-Chlorotoluene		50.0	52.8	ug/L	1.80	5.54	40	
1,2-Dibromo-3-Chloropropane		50.0	46.9	ug/L	0.0650	6.24	40	
1,2-Dibromoethane		50.0	53.9	ug/L	0.182	7.88	40	
Dibromomethane		50.0	54.0	ug/L	0.0953	7.92	40	
1,2-Dichlorobenzene		50.0	52.6	ug/L	1.13	5.12	40	
1,3-Dichlorobenzene		50.0	54.4	ug/L	1.34	8.74	40	
1,4-Dichlorobenzene		50.0	53.1	ug/L	1.32	6.26	40	
Dichlorodifluoromethane		50.0	48.6	ug/L	0.217	2.73	40	
1,2-Dichloroethane		50.0	55.8	ug/L	0.287	11.7	40	
cis-1,2-Dichloroethene		50.0	57.6	ug/L	0.223	15.2	40	
trans-1,2-Dichloroethene		50.0	59.2	ug/L	0.206	18.4	40	
1,3-Dichloropropane		50.0	52.3	ug/L	0.312	4.66	40	
2,2-Dichloropropane		50.0	59.4	ug/L	0.392	18.7	40	
cis-1,3-Dichloropropene		50.0	54.8	ug/L	0.309	9.56	40	
trans-1,3-Dichloropropene		50.0	57.1	ug/L	0.372	14.2	40	

CCV - Modified 03/05/2008
PDF File ID: 1239116
Report generated 11/03/2008 10:02



Login Number: L08100669 Run Date: 10/28/2008 Sample ID: WG286202-02
Instrument ID: HPMS14 Run Time: 08:25 Method: 8260B
File ID: 14M09314 Analyst: WTD QC Key: STD
Workgroup (AAB#): WG286203 Cal ID: HPMS14 - 11-OCT-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	54.2	ug/L	0.305	8.34	40	
2-Hexanone	50.0	45.8	ug/L	0.0739	8.32	40	
Hexachlorobutadiene	50.0	61.1	ug/L	0.444	22.1	40	
Isopropylbenzene	50.0	57.9	ug/L	1.51	15.8	40	
p-Isopropyltoluene	50.0	63.5	ug/L	2.50	26.9	40	
4-Methyl-2-Pentanone	50.0	45.0	ug/L	0.0358	10.0	40	
Methylene Chloride	50.0	50.7	ug/L	0.168	1.50	40	
Naphthalene	50.0	64.2	ug/L	0.733	28.4	40	
n-Propylbenzene	50.0	57.3	ug/L	3.39	14.6	40	
Styrene	50.0	59.0	ug/L	0.903	17.9	40	
1,1,1,2-Tetrachloroethane	50.0	58.1	ug/L	0.325	16.2	40	
Tetrachloroethene	50.0	55.1	ug/L	0.342	10.3	40	
1,2,3-Trichlorobenzene	50.0	61.4	ug/L	0.490	22.8	40	
1,2,4-Trichlorobenzene	50.0	64.1	ug/L	0.614	28.1	40	
1,1,1-Trichloroethane	50.0	58.2	ug/L	0.424	16.4	40	
1,1,2-Trichloroethane	50.0	53.6	ug/L	0.177	7.20	40	
Trichloroethene	50.0	54.3	ug/L	0.246	8.52	40	
Trichlorofluoromethane	50.0	46.9	ug/L	0.401	6.15	40	
1,2,3-Trichloropropane	50.0	47.7	ug/L	0.121	4.56	40	
1,2,4-Trimethylbenzene	50.0	64.5	ug/L	2.14	29.1	40	
1,3,5-Trimethylbenzene	50.0	63.5	ug/L	2.23	27.1	40	
Vinyl Acetate	50.0	64.9	ug/L	0.203	29.8	40	
o-Xylene	50.0	59.4	ug/L	0.555	18.9	40	
m-,p-Xylene	100	120	ug/L	0.572	19.5	40	
1,2-Dichloroethene	100	117	ug/L	0.214	16.8	40	
Xylenes	150	179	ug/L	0.564	19.3	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08100669
Instrument ID: HPMS6
Workgroup (AAB#): WG286075

CCV Number: WG286074-02
CAL ID: HPMS6 - 25-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG286074-02	NA	NA	436004	788407	1165222
Upper Limit	NA	NA	872008	1576814	2330444
Lower Limit	NA	NA	218002	394204	582611
L08100669-01	1.00	01	269981	480801	676476
L08100669-02	1.00	01	267641	476256	662465
L08100669-04	1.00	01	319060	579743	820483
WG286075-01	1.00	01	352579	638809	925440
WG286075-02	1.00	01	370061	658946	945866
WG286075-03	1.00	01	384529	675241	961640

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

Underline = Response outside limits

Login Number: L08100669
Instrument ID: HPMS14
Workgroup (AAB#): WG286203

CCV Number: WG286202-02
CAL ID: HPMS14 - 11-OCT-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG286202-02	NA	NA	270277	524787	703981
Upper Limit	NA	NA	540554	1049574	1407962
Lower Limit	NA	NA	135139	262394	351991
<u>L08100669-03</u>	<u>1.00</u>	<u>01</u>	<u>178182</u>	<u>347538</u>	<u>483064</u>
WG286203-01	1.00	01	245039	484624	662424
WG286203-02	1.00	01	250945	493066	663804
WG286203-03	1.00	01	261051	512568	678903

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

Underline = Response outside limits

Login Number: L08100669
Instrument ID: HPMS6
Workgroup (AAB#): WG286075

CCV Number: WG286074-02
CAL ID: HPMS6 - 25-SEP-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG286074-02	NA	NA	18.86	15.3	10.83
Upper Limit	NA	NA	19.36	15.8	11.33
Lower Limit	NA	NA	18.36	14.8	10.33
L08100669-01	1.00	01	18.86	15.3	10.83
L08100669-02	1.00	01	18.86	15.3	10.82
L08100669-04	1.00	01	18.86	15.3	10.82
WG286075-01	1.00	01	18.86	15.31	10.82
WG286075-02	1.00	01	18.86	15.3	10.82
WG286075-03	1.00	01	18.86	15.3	10.82

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

Underline = Response outside limits

Login Number: L08100669
Instrument ID: HPMS14
Workgroup (AAB#): WG286203

CCV Number: WG286202-02
CAL ID: HPMS14 - 11-OCT-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG286202-02	NA	NA	17.15	14.36	10.74
Upper Limit	NA	NA	17.65	14.86	11.24
Lower Limit	NA	NA	16.65	13.86	10.24
<u>L08100669-03</u>	<u>1.00</u>	<u>01</u>	<u>17.149</u>	<u>14.361</u>	<u>10.743</u>
WG286203-01	1.00	01	17.149	14.361	10.743
WG286203-02	1.00	01	17.149	14.36	10.743
WG286203-03	1.00	01	17.149	14.361	10.743

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
November 3, 2008

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	DSF - DEBRA S. FREDERICK	EAB - EDDIE A. BYERS
ECL - ERIC C. LAWSON	ED - EMILY E. DECKER	EDA - ERIN D. AGEE
EDH - ETHAN D. MORRIS	ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HAV - HEMA VILASAGAR	HJR - HOLLY J. REED	JBK - JEREMY B. KINNEY
JC - JOHN L. CONLEY	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
KJW - KATIE J. WIEFERICH	KRA - KATHY R. ALBERTSON	LKN - LINDA K. NEDEFF
LSB - LESLIE S. BUCINA	MDA - MIKE D. ALBERTSON	MDC - MICHAEL D. COCHRAN
MES - MARY E. SCHILLING	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	SMH - SHAUNA M. HYDE	TDH - TRICIA D. HUCK
TIP - TAE I. PARRISH	TMB - TIFFANY M. BAILEY	TMM - TAMMY M. MORRIS
VC - VICKI COLLIER	WTD - WADE T. DELONG	

List of Valid Qualifiers

November 03, 2008

Qualifier: 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.

NO. 5425



NO. 5425

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

Client: <u>SHAW Longhorn</u>			
Workorder Number: <u>B</u>			
Date Received: <u>10-22-08</u>			
Delivered by: ☐ Fedx ☒ UPS ☐ Client ☐ Courier Time: <u>0930</u>			
Opened by: <u>ERP</u>			
IR Temp Gun: ☐ D ☒ G			
Logged by: <u>RLK/JKT</u> L <u>08 10 06069</u>			

Cooler information

Cooler ID	Temp C	Airbill#	COC#	Other
<u>3156</u>	<u>1</u>	<u>1266V7250192595385</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?	☒			
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

<u>Rec'd 2 Dup blank vials/added it JKT</u>
<u>10/22/08</u>

Distribution

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

Resolution/other comments:

Internal Chain of Custody Report

Login: L08100669

Account: 2773

Project: 2773.025

Samples: 4

Due Date: 29-OCT-2008

Samplenum **Container ID** **Products**
L08100669-02 516114 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Samplenum **Container ID** **Products**
L08100669-04 516116 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Samplenum **Container ID** **Products**
L08100669-01 516113 826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

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

Login: L08100669**Account:** 2773**Project:** 2773.025**Samples:** 4**Due Date:** 29-OCT-2008

<u>Samplenum</u>	<u>Container ID</u>	<u>Products</u>
L08100669-03	516115	826-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	V1	22-OCT-2008 16:48	ERE	
2	ANALYZ	V1	ORG4	22-OCT-2008 17:03	AM	JKT

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



Quick Facts



Look closer. Go further. Do more.

Corporate Information:

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President & CEO: J. Trevor Boyce

Federal Tax ID#: 25-1199-642

DUNS#: 048192892

Incorporated in the State of PA -- May 1, 1969

Employees Corporate-Wide: 467

Facilities Corporate -Wide: 18 Divisions, 28 locations across 15 states



Microbac Laboratories Inc.
Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750

Phone: 800-373-4071
Fax: 740-373-4835
Email: OVL@microbac.com



Please note these administrative changes for our Ohio Valley Division laboratory in Marietta, OH (formerly KEMRON Environmental Services, Inc.), in particular the address, which is a revised routing of remittances on our invoices. All invoices dated April 1, 2008 or later will reflect this change, and will be highlighted with an attention-getting sticker during our transition. Please adjust your records to ensure proper routing of payments.



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

Laboratory Report Number: L08110782

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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Annie Brown	<i>Client Services Specialist</i>	abrown@microbac.com
Jacqueline Parsons	<i>Team Assistant</i>	jparsons@microbac.com

This report was reviewed on December 09, 2008.

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

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the 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 December 09, 2008.

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 386 pages.

Look closer. Go further. Do more.



Microbac REPORT L08110782
PREPARED FOR Shaw E I, Inc.
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1.0 Introduction

Microbac Laboratories Inc.
REPORT NARRATIVE

Microbac Login No: L08110782

CHAIN OF CUSTODY: The chain of custody number was 5725.

SHIPMENT CONDITIONS: The chain of custody forms were received sealed in a cooler. The cooler temperature was 1 degree 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: 08-DEC-08

<i>Stephanie Mossburg</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.

SHERI L. PFALZGRAF



Chemist II

December 8, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 7471
 Prep Batch Number(s): WG289276
 Reviewer Name: SHERI L. PFALZGRAF
 LRC Date: December 08, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <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)	NA(2)	IRIS
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?		✓			1
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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	7471
Prep Batch Number(s):	WG289276
Reviewer Name:	SHERI L. PFALZGRAF
LRC Date:	December 08, 2008

EXCEPTIONS REPORT

ER1 - Instrumental calculations for the ICV yielded a result that met all acceptance criteria, however due to rounding errors through data management, the quality control form shows a noncompliant result. The data was considered acceptable and all results reportable.

Footnotes:

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

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- c) preparation methods,
- d) Cleanup methods, and
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- 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
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R8 Laboratory analytical duplicate (if applicable) recovery and precision:

- a) the amount of analyte measured in the duplicate,
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SHERI L. PFALZGRAF



Chemist II

December 8, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 6020
 Prep Batch Number(s): WG289288
 Reviewer Name: SHERI L. PFALZGRAF
 LRC Date: December 08, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <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)	NA(2)	IRIS
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?		✓			2
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?		✓			1
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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	6020
Prep Batch Number(s):	WG289288
Reviewer Name:	SHERI L. PFALZGRAF
LRC Date:	December 08, 2008

EXCEPTIONS REPORT

ER1 - Due to ICSAB failure for silver on 02-DEC-2008 at 12:06, client samples 01 through 05 and batch QC/QA samples were reanalyzed on 03-DEC-2008 for silver.

ER2 - Client samples 01 and 03 required dilution analyses in order to obtain results for barium within the linear range. Client sample 02 required dilution analysis in order to obtain results for chromium and manganese within the linear range. Client sample 03 required dilution analysis in order to obtain a result for nickel within the linear range.

Footnotes:

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(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.

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MAREN M. BEERY



Metals Supervisor

December 3, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 6020
 Prep Batch Number(s): WG289287
 Reviewer Name: MAREN M. BEERY
 LRC Date: December 03, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <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)	NA(2)	IRIS
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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	6020
Prep Batch Number(s):	WG289287
Reviewer Name:	MAREN M. BEERY
LRC Date:	December 03, 2008

EXCEPTIONS REPORT

ER# - Description

Footnotes:

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

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

December 4, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 6010
 Prep Batch Number(s): WG289244
 Reviewer Name: MAREN M. BEERY
 LRC Date: December 04, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?			✓		
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <RL?	✓				ER1
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)	NA(2)	NA(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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	6010
Prep Batch Number(s):	WG289244
Reviewer Name:	MAREN M. BEERY
LRC Date:	December 04, 2008

EXCEPTIONS REPORT

ER#1 -Due to continuing calibration blank failure for iron on 01-DEC-2008 at 13:51, the method blank and the laboratory control sample were reanalyzed on 01-DEC-2008 following a compliant CCV/CCB which met all acceptance criteria.

Footnotes:

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

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.

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MAREN M. BEERY



Metals Supervisor

December 5, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 6010
 Prep Batch Number(s): WG289268
 Reviewer Name: MAREN M. BEERY
 LRC Date: December 05, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?			✓		ER2
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?		✓			ER1
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)	NA(2)	IRIS
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?	✓				ER3
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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	6010
Prep Batch Number(s):	WG289268
Reviewer Name:	MAREN M. BEERY
LRC Date:	December 05, 2008

EXCEPTIONS REPORT

ER#1 -The continuing calibration blanks analyzed on 02-DEC-2008 at 13:29 and on 03-DEC-2008 at 01:04 yielded sodium results that exceeded the reporting detection limit. However, since client samples 01 through 05 yielded sodium results that were greater than ten times that in the CCBs, the sodium results were reported with the permission of the customer service representative.

ER2 - Due to results that exceeded the linear range of the instrument upon initial analysis, sodium for client samples 02, 04 and 05, calcium and magnesium for sample 04 and potassium for 05 were reported from dilution analyses.

ER3 - Due to results that were noncompliant on the negative side upon initial analysis, aluminum for client sample 04 and vanadium for sample 05 were reported from dilution analyses.

Footnotes:

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- (3) ER# = Exception report number

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

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

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- 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.

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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

December 5, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 7471
 Prep Batch Number(s): WG289304
 Reviewer Name: MAREN M. BEERY
 LRC Date: December 05, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?	✓				
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?	✓				
Were sample quantitation limits reported for all analytes not detected?	✓				
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?	✓				
Were blanks analyzed at the appropriate frequency?	✓				
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	✓				
Were blank concentrations <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)	NA(2)	NA(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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	7471
Prep Batch Number(s):	WG289304
Reviewer Name:	MAREN M. BEERY
LRC Date:	December 05, 2008

EXCEPTIONS REPORT

ER# - Description

Footnotes:

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

This data Package consists of:

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

- ✓R1 Field chain-of-custody documentation;
- ✓R2 sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) Cleanup methods, and
 - e) If required for the project, tentatively identified compounds (TICs)
- ✓R4 Surrogate recovery data including:
 - a) Calculated recovery (%R) for each analyte, and
 - b) The laboratory's surrogate QC limits.
- ✓R5 Test reports/summary forms for blank samples;
- ✓R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amount,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- ✓R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %R and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- ✓R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- ✓R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ✓R10 Other problems or anomalies.
- ✓The exception Report for every "No" or "Not Reviewed (NR)" item IN laboratory review checklist.

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

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

MIKE D. ALBERTSON



Volatiles Lab Supervisor

December 8, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: 8260B
 Prep Batch Number(s): WG289214, WG289216
 Reviewer Name: MIKE D. ALBERTSON
 LRC Date: December 08, 2008

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

Description	Yes	No	NA(1)	NA(2)	IRIS
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?		✓			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) Vinyl acetate exceeded the upper advisory limit in the LCS/LCSDs 11/29/08 and 11/30/08 on HPMS-11.
- 2) Acetone, bromomethane, and dichlorodifluoromethane exceeded the upper control limits.

Footnotes:

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

This data Package consists of:

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

R1 Field chain-of-custody documentation;

R2 sample identification cross-reference;

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

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

R4 Surrogate recovery data including:

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

R5 Test reports/summary forms for blank samples;

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

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

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

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

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

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

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

R10 Other problems or anomalies.

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

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

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

DEANNA I. HESSON



Conventional Lab Supervisor

December 4, 2008

Name (Printed)

Signature

Official Title (printed)

DATE

Microbac Laboratories Inc.
Laboratory Review Checklist

Laboratory Name: Microbac Laboratories Inc.
 Laboratory Log Number: L08110782
 Project Name: 798-LONGHORN
 Method: PCTSOLIDS
 Prep Batch Number(s): WG289169
 Reviewer Name: DEANNA I. HESSON
 LRC Date: December 04, 2008

Description	Yes	No	NA(1)	NR(2)	ER(3)
Chain-Of-Custody (C-O-C)					
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	✓				
Were all departures from standard conditions described in an exception report?	✓				
Sample and quality control (QC) identification					
Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	✓				
Are all laboratory ID numbers cross-referenced to the corresponding QC data?	✓				
Test reports					
Were all samples prepared and analyzed within holding times?	✓				
Other than those results <MQL, were all other raw values bracketed by calibration standards?			✓		
Were calculations checked by a peer or supervisor?	✓				
Were all analyte identifications checked by a peer or supervisor?			✓		
Were sample quantitation limits reported for all analytes not detected?			✓		
Were all results for soil and sediment samples reported on a dry weight basis?	✓				
Were % moisture (or solids) reported for all soil and sediment samples?	✓				
If required for the project, TICs reported?			✓		
Surrogate recovery data					
Were surrogates added prior to extraction?			✓		
Were surrogate percent recoveries in all samples within the laboratory QC limits?			✓		
Test reports/summary forms for blank samples					
Were appropriate type(s) of blanks analyzed?			✓		
Were blanks analyzed at the appropriate frequency?			✓		
Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?			✓		
Were blank concentrations <MQL?			✓		
Laboratory control samples (LCS):					
Were all COCs included in the LCS?			✓		
Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			✓		
Were LCSs analyzed at the required frequency?			✓		
Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			✓		
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)	NA(2)	NA(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)	NA(2)	NA(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:	L08110782
Project Name:	798-LONGHORN
Method:	PCTSOLIDS
Prep Batch Number(s):	WG289169
Reviewer Name:	DEANNA I. HESSON
LRC Date:	December 04, 2008

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

00081900

L08110782

12/09/08 09:06

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
35AWW01-111908	L08110782-01	8260B	1	25-NOV-08
LHSMW06-111908	L08110782-02	8260B	1	25-NOV-08
LHSMW03-111908	L08110782-03	8260B	1	25-NOV-08
LHSMW07-111908	L08110782-04	8260B	10	25-NOV-08
LHSMW07-111908	L08110782-04	8260B	1	25-NOV-08
35AWW05-112108	L08110782-05	8260B	1	25-NOV-08
TRIP BLANK	L08110782-08	8260B	1	25-NOV-08



Sample Number: **L08110782-01**
 Client ID: **35AWW01-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 15:15**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 23:05**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 23:05**
 File ID: **11M55651**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.260	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		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: **L08110782**
 Report Date : **December 9, 2008**

00081902

Sample Number: **L08110782-01**
 Client ID: **35AWW01-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 15:15**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 23:05**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 23:05**
 File ID: **11M55651**

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	90.7	86	118		
1,2-Dichloroethane-d4	87.9	80	120		
Toluene-d8	93.6	88	110		
4-Bromofluorobenzene	90.9	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: **L08110782-02**
 Client ID: **LHSMW06-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 12:40**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 23:37**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 23:37**
 File ID: **11M55652**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.196	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	1.35		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	2.26		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	0.486	J	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L08110782**Report Date : **December 9, 2008**

00081904

Sample Number: **L08110782-02**
 Client ID: **LHSMW06-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 12:40**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 23:37**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 23:37**
 File ID: **11M55652**

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	90.4	86	118		
1,2-Dichloroethane-d4	85.1	80	120		
Toluene-d8	93.3	88	110		
4-Bromofluorobenzene	91.8	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: **L08110782-03**
 Client ID: **LHSMW03-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 09:45**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 00:09**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 00:09**
 File ID: **11M55653**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.138	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		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: **L08110782**Report Date : **December 9, 2008**

00081906

Sample Number: **L08110782-03**
 Client ID: **LHSMW03-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/19/2008 09:45**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 00:09**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 00:09**
 File ID: **11M55653**

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	90.5	86	118		
1,2-Dichloroethane-d4	86.5	80	120		
Toluene-d8	94.0	88	110		
4-Bromofluorobenzene	92.4	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

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289216**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **DL01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 15:24**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 15:24**
 File ID: **11M55679**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	100	25.0
Benzene	71-43-2	6.11	J	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	2.50
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	49.5		10.0	1.25
1,2-Dichloroethane	107-06-2		U	10.0	2.50
1,1-Dichloroethene	75-35-4	576		10.0	5.00
cis-1,2-Dichloroethene	156-59-2	6.88	J	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		U	50.0	2.50
Naphthalene	91-20-3	11.9		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	1.25
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	20.7		10.0	2.50
Trichlorofluoromethane	75-69-4		U	10.0	2.50

Report Number: **L08110782**Report Date : **December 9, 2008**

00081908

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289216**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **DL01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 15:24**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 15:24**
 File ID: **11M55679**

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	136777-61-2	6.05	J	10.0	5.00
Surrogate	% Recovery	Lower	Upper	Qual	
Dibromofluoromethane	91.0	86	118		
1,2-Dichloroethane-d4	84.2	80	120		
Toluene-d8	92.3	88	110		
4-Bromofluorobenzene	92.6	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: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 00:42**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 00:42**
 File ID: **11M55654**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2	0.557	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	0.191	J	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	56.5		1.00	0.125
1,2-Dichloroethane	107-06-2	1.06		1.00	0.250
1,1-Dichloroethene	75-35-4	626	I	1.00	0.500
cis-1,2-Dichloroethene	156-59-2	7.96		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	0.421	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	1.92		1.00	0.250
Trichloroethene	79-01-6	25.0		1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250

Report Number: **L08110782**
 Report Date : **December 9, 2008**

00081910

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 00:42**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 00:42**
 File ID: **11M55654**

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	14.4		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	89.1	86	118		
1,2-Dichloroethane-d4	89.4	80	120		
Toluene-d8	93.5	88	110		
4-Bromofluorobenzene	90.3	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
 I Semiquantitative result (out of instrument calibration range)

Sample Number: **L08110782-05**
 Client ID: **35AWW05-112108**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/21/2008 17:30**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 01:14**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 01:14**
 File ID: **11M55655**

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	0.551	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	0.250
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: **L08110782**Report Date : **December 9, 2008**

00081912

Sample Number: **L08110782-05**
 Client ID: **35AWW05-112108**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/21/2008 17:30**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/30/2008 01:14**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/30/2008 01:14**
 File ID: **11M55655**

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	93.4	86	118		
1,2-Dichloroethane-d4	91.2	80	120		
Toluene-d8	93.2	88	110		
4-Bromofluorobenzene	93.3	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

Sample Number: **L08110782-08**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/18/2008 10:15**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 19:22**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 19:22**
 File ID: **11M55644**

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	0.315	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: **L08110782**
 Report Date : **December 9, 2008**

00081914

Sample Number: **L08110782-08**
 Client ID: **TRIP BLANK**
 Matrix: **Water**
 Workgroup Number: **WG289214**
 Collect Date: **11/18/2008 10:15**
 Sample Tag: **01**

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

Instrument: **HPMS11**
 Prep Date: **11/29/2008 19:22**
 Cal Date: **11/25/2008 21:08**
 Run Date: **11/29/2008 19:22**
 File ID: **11M55644**

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	91.2	86	118		
1,2-Dichloroethane-d4	89.3	80	120		
Toluene-d8	93.4	88	110		
4-Bromofluorobenzene	93.7	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

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

Instrument: HPMS11 Dataset: 112508
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26803

Internal Standard: STD29716 Surrogate Standard: STD29969
 CCV: STD30123 LCS: STD29858 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG289038

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M55528	50NG BFB STD 8260	NA	1	1	STD29746	11/25/08 08:04
2	11M55529	50ug/L CCV 8260	NA	1	1	STD30008	11/25/08 08:38
27	11M55530	BLANK 8260	NA	1	1		11/25/08 09:30
28	11M55531	5ug/L Vinyl Acetate 8260	NA	1	1		11/25/08 10:17
3	11M55532	0.3ug/L 8260	NA	1	1		11/25/08 10:49
4	11M55533	WG 50NG BFB STD 8260	NA	1	1	STD29746	11/25/08 11:37
5	11M55534	WG 50NG BFB STD 8260	NA	1	1	STD29746	11/25/08 11:49
6	11M55535	WG 50NG BFB STD 8260	NA	1	1	STD29746	11/25/08 12:20
7	11M55536	WG289038-01 50NG BFB STD 8260	NA	1	1	STD29746	11/25/08 12:53
8	11M55537	WG289038-02 0.3ug/L 8260	NA	1	1	STD30042	11/25/08 13:20
9	11M55538	WG289038-03 0.4ug/L 8260	NA	1	1	STD30042	11/25/08 14:03
10	11M55539	WG289038-04 1.0ug/L 8260	NA	1	1	STD30042	11/25/08 14:38
11	11M55540	WG289038-05 2ug/L 8260	NA	1	1	STD30042	11/25/08 15:10
12	11M55541	SYSTEM BLANK	NA	1	1	STD30042	11/25/08 15:48
13	11M55542	WG289038-02 0.3ug/L 8260	NA	1	1	STD30042	11/25/08 16:23
14	11M55543	WG289038-03 0.4ug/L 8260	NA	1	1	STD30042	11/25/08 16:54
15	11M55544	WG289038-04 1ug/L 8260	NA	1	1	STD30042	11/25/08 17:26
16	11M55545	WG289038-05 2ug/L 8260	NA	1	1	STD30042	11/25/08 17:58
17	11M55546	WG289038-06 5ug/L 8260	NA	1	1	STD30042	11/25/08 18:30
18	11M55547	WG289038-07 20ug/L 8260	NA	1	1	STD30042	11/25/08 19:01
19	11M55548	WG289038-08 50ug/L 8260	NA	1	1	STD30042	11/25/08 19:33
20	11M55549	WG289038-09 100ug/L 8260	NA	1	1	STD30042	11/25/08 20:05
21	11M55550	WG289038-10 200ug/L 8260	NA	1	1	STD30042	11/25/08 20:37
22	11M55551	WG289038-11 300ug/L 8260	NA	1	1	STD30042	11/25/08 21:08
23	11M55552	SYSTEM BLANK	NA	1	1		11/25/08 21:40
24	11M55553	SYSTEM BLANK	NA	1	1		11/25/08 22:12
25	11M55554	WG289038-12 20ug/L ALT SOURCE	NA	1	1	STD30055	11/25/08 22:44
26	11M55555	SYSTEM BLANK	NA	1	1		11/25/08 23:16

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2				
File ID: 11M55529				

Approved: December 02, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS11 Dataset: 112508
 Analyst1: WTD Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 5030/5035 SOP: PAT01 Rev: 11

Maintenance Log ID: 26803

Internal Standard: STD29716 Surrogate Standard: STD29969
 CCV: STD30123 LCS: STD29858 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG289038

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
			running a curve.	
4				
File ID: 11M55533				
			RR, BFB failed.	
5				
File ID: 11M55534				
			RR, BFB failed. Replaced the septum.	
6				
File ID: 11M55535				
			RR, BFB failed.	
8				
File ID: 11M55537				
			DNR	
9				
File ID: 11M55538				
			DNR	
10				
File ID: 11M55539				
			DNR	
11				
File ID: 11M55540				
			DNR	

Approved: December 02, 2008

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Michael Cohen



Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS11 Dataset: 112908
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 11
 Method: 5030/5035 SOP: PAT01 Rev: 12
 Maintenance Log ID: 26840

Internal Standard: STD28640 Surrogate Standard: STD28751
 CCV: STD30042 LCS: STD30055 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG289214

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M55637	WG289211-01 50NG BFB STD 8260	NA	1	1	STD29746	11/29/08 15:42
2	11M55638	WG289211-02 50ug/L CCV 8260	NA	1	1	STD30042	11/29/08 16:10
3	11M55639	WG289214-01 VBLK1129 BLANK 8260	NA	1	1		11/29/08 16:43
4	11M55640	WG289214-01 VBLK1129 BLANK 8260	NA	1	1		11/29/08 17:15
5	11M55641	WG289214-02 20ug/L LCS 8260	NA	1	1	STD30055	11/29/08 17:47
6	11M55642	WG289214-03 20ug/L LCSDUP 8260	NA	1	1	STD30055	11/29/08 18:19
7	11M55643	L08110497-12 A 826-SPE2	NA	1	1		11/29/08 18:51
8	11M55644	L08110782-08 A 826-LOW	NA	1	1		11/29/08 19:22
9	11M55645	L08110506-01 A 826-SPE	NA	1	1		11/29/08 19:54
10	11M55646	L08110506-02 A 826-SPE	NA	1	1		11/29/08 20:26
11	11M55647	L08110507-06 A 826-SPE	NA	1	1		11/29/08 20:58
12	11M55648	L08110507-07 A 826-SPE	NA	1	1		11/29/08 21:30
13	11M55649	L08110551-03 A 100X 826-LOW	NA	1	100		11/29/08 22:02
14	11M55650	L08110769-01 A 100X 826-LOW	NA	1	100		11/29/08 22:34
15	11M55651	L08110782-01 A 826-LOW	NA	1	1		11/29/08 23:05
16	11M55652	L08110782-02 A 826-LOW	NA	1	1		11/29/08 23:37
17	11M55653	L08110782-03 A 826-LOW	NA	1	1		11/30/08 00:09
18	11M55654	L08110782-04 A 826-LOW	NA	1	1		11/30/08 00:42
19	11M55655	L08110782-05 A 826-LOW	NA	1	1		11/30/08 01:14
20	11M55656	L08110497-08 A 10X 826-SPE2	NA	1	10		11/30/08 01:47
21	11M55657	L08110497-09 A 2.5X 826-SPE2	NA	1	2.5		11/30/08 02:19
22	11M55658	L08110497-10 A 5X 826-SPE2	NA	1	5		11/30/08 02:51
23	11M55659	L08110497-11 A 826-SPE2	NA	1	1		11/30/08 03:23
24	11M55660	SYSTEM BLANK	NA	1	1		11/30/08 03:55
25	11M55661	SYSTEM BLANK	NA	1	1		11/30/08 04:28
26	11M55662	L08110358-01 B 826-REF-BLK	NA	1	1		11/30/08 05:00
27	11M55663	L08110358-02 B 826-REF-BLK	NA	1	1		11/30/08 05:32
28	11M55664	L08110358-03 B 826-REF-BLK	NA	1	1		11/30/08 06:04
29	11M55665	L08110358-04 B 826-REF-BLK	NA	1	1		11/30/08 06:36
30	11M55666	L08110358-05 B 826-REF-BLK	NA	1	1		11/30/08 07:07
31	11M55667	SYSTEM CHECK	NA	1	1		11/30/08 07:39

Comments

Approved: December 05, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS11 Dataset: 112908
 Analyst1: MES Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 11
 Method: 5030/5035 SOP: PAT01 Rev: 12
 Maintenance Log ID: 26840

Internal Standard: STD28640 Surrogate Standard: STD28751
 CCV: STD30042 LCS: STD30055 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG289214

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M55639				
9	X	2	Over Calibration Range	124 TMB
File ID: 11M55645				
10	X	2	Over Calibration Range	124 TMB
File ID: 11M55646				
11	X	5	Over Calibration Range	MTBE, EB, MP&O XYL, 124 TMB, NAPH
File ID: 11M55647				
12	X	5	Over Calibration Range	MTBE, EB, MP&O XYL, 124 TMB, NAPH
File ID: 11M55648				
13	X	50	Analyzed too dilute	
File ID: 11M55649				
DNR				
14	X	1	Analyzed too dilute	
File ID: 11M55650				
DNR				
18	X	10	Over Calibration Range	11 DCE
File ID: 11M55654				
20	X	5	Analyzed too dilute	
File ID: 11M55656				
DNR				
21	X	1	Analyzed too dilute	
File ID: 11M55657				
DNR				
30				
File ID: 11M55666				
ONE IS OUT, REPORT ANYWAY. CANNOT RR. A VIAL HAD C/O				

Approved: December 05, 2008

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Microbac Laboratories Inc.
Instrument Run Log

Instrument: HPMS11 Dataset: 113008
 Analyst1: FJB Analyst2: NA
 Method: 8260B SOP: MSV01 Rev: 12
 Method: 624 SOP: MSV10 Rev: 11
 Method: 5030/5035 SOP: PAT01 Rev: 12
 Maintenance Log ID: 26846

Internal Standard: STD29716 Surrogate Standard: STD29969
 CCV: STD30042 LCS: STD30055 MS/MSD: NA
 Column 1 ID: RTX502.2 Column 2 ID: NA
 Workgroups: WG289216

Comments:

Seq.	File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
1	11M55669	WG289215-01 50ng BFB STD 8260	NA	1	1	STD29746	11/30/08 10:02
2	11M55670	WG289215-02 50ug/L STD 8260	NA	1	1	STD30042	11/30/08 10:28
3	11M55671	WG289216-01 VBLK1130 BLANK 8260	NA	1	1		11/30/08 11:00
4	11M55672	WG289216-01 VBLK1130 BLANK 8260	NA	1	1		11/30/08 11:32
5	11M55673	WG289216-02 20ug/L LCS STD 8260	NA	1	1	STD30055	11/30/08 12:13
6	11M55674	WG289216-03 20ug/L LCS DUP STD 8260	NA	1	1	STD30055	11/30/08 12:44
7	11M55675	L08110506-01 2X B 826-SPE D1	<2	1	2		11/30/08 13:16
8	11M55676	L08110506-02 2X B 826-SPE D1	<2	1	2		11/30/08 13:48
9	11M55677	L08110507-06 5X B 826-SPE D1	<2	1	5		11/30/08 14:20
10	11M55678	L08110507-07 5X B 826-SPE D1	<2	1	5		11/30/08 14:52
11	11M55679	L08110782-04 10X B 826-LOW D1	<2	1	10		11/30/08 15:24
12	11M55680	L08110551-03 50X B 826-LOW 00	<2	1	50		11/30/08 15:56
13	11M55681	L08110769-01 B 826-LOW 00	<2	1	1		11/30/08 16:27
14	11M55682	L08110497-08 5X B 826-SPE2 00	<2	1	5		11/30/08 16:59
15	11M55683	L08110497-09 B 826-SPE2 00	<2	1	1		11/30/08 17:31
16	11M55684	L08110564-02 A 826-SPE1	<2	1	1		11/30/08 18:03
17	11M55685	L08110564-01 A 826-SPE1	<2	1	1		11/30/08 18:35
18	11M55686	L08110552-05 A 826-SPE	<2	1	1		11/30/08 19:07
19	11M55687	L08110552-06 A 826-SPE	<2	1	1		11/30/08 19:38
20	11M55688	L08110552-07 A 826-SPE	<2	1	1		11/30/08 20:10
21	11M55689	L08110554-01 A 826-SPE	<2	1	1		11/30/08 20:42
22	11M55690	L08110554-02 A 826-SPE	<2	1	1		11/30/08 21:14
23	11M55691	L08110554-03 A 826-SPE	<2	1	1		11/30/08 21:46
24	11M55692	SYSTEM BLANK	NA	1	1		11/30/08 22:18
25	11M55693	SYSTEM BLANK	NA	1	1		11/30/08 22:49
26	11M55694	SYSTEM CHECK	NA	1	1		11/30/08 23:22

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X		Carry-over contamination	
File ID: 11M55671				
9	X	50	Analyzed too dilute	BENZENE

Approved: December 04, 2008

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS11 Dataset: 113008
Analyst1: FJB Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 12
Method: 624 SOP: MSV10 Rev: 11
Method: 5030/5035 SOP: PAT01 Rev: 12
Maintenance Log ID: 26846

Internal Standard: STD29716 Surrogate Standard: STD29969
CCV: STD30042 LCS: STD30055 MS/MSD: NA
Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG289216

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 11M55677				
10	X	50	Analyzed too dilute	BENZENE
File ID: 11M55678				

Approved: December 04, 2008

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Microbac Laboratories Inc.

Data Checklist

Date: 25-NOV-2008

Analyst: WTD

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 25509

Analytical Workgroups: WG289038

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	NA
Project/Client Specific Requirements	NA
Special Standards	NA
Blanks	NA
TCL's	NA
Surrogates	NA
LCS (Laboratory Control Sample)	NA
Recoveries	NA
Surrogates	NA
MS/MSD/Duplicates	NA
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	NA
Library Searches	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	NA
Results Reporting/Data Qualifiers	NA
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MES
Secondary Reviewer	MDC
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
02-DEC-2008



Secondary Reviewer:
02-DEC-2008



Microbac Laboratories Inc.

Data Checklist

Date: 29-NOV-2008

Analyst: MES

Analyst: NA

Method: 8260B

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 25557

Analytical Workgroups: WG289214

System Performance Check	X
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	FJB
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:
04-DEC-2008



Secondary Reviewer:
05-DEC-2008



Microbac Laboratories Inc.

Data Checklist

Date: 30-NOV-2008

Analyst: FJB

Analyst: NA

Method: 8260

Instrument: HPMS11

Curve Workgroup: NA

Runlog ID: 25563

Analytical Workgroups: WG289216

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	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	FJB
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:
04-DEC-2008



Secondary Reviewer:
04-DEC-2008



Analytical Method: 8260B

AAB#: WG289214

Login Number: L08110782

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	11/18/08	11/25/08	11/29/08	14	11.4	11/29/08	14	11.4	
LHSMW03-111908	11/19/08	11/25/08	11/30/08	14	10.6	11/30/08	14	10.6	
35AWW05-112108	11/21/08	11/25/08	11/30/08	14	8.32	11/30/08	14	8.32	
LHSMW07-111908	11/21/08	11/25/08	11/30/08	14	8.48	11/30/08	14	8.48	
35AWW01-111908	11/19/08	11/25/08	11/29/08	14	10.3	11/29/08	14	10.3	
LHSMW06-111908	11/19/08	11/25/08	11/29/08	14	10.5	11/29/08	14	10.5	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 8260B

AAB#: WG289216

Login Number: L08110782

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
LHSMW07-111908	11/21/08	11/25/08	11/30/08	14	9.10	11/30/08	14	9.10	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

Login Number: L08110782
Instrument Id: HPMS11
Workgroup (AAB#): WG289214

Method: 8260
CAL ID: HPMS11 - 25-NOV-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08110782-01	1.00	01	87.9	90.7	90.9	93.6
L08110782-02	1.00	01	85.1	90.4	91.8	93.3
L08110782-03	1.00	01	86.5	90.5	92.4	94.0
L08110782-04	1.00	01	89.4	89.1	90.3	93.5
L08110782-05	1.00	01	91.2	93.4	93.3	93.2
L08110782-08	1.00	01	89.3	91.2	93.7	93.4
WG289214-01	1.00	01	87.1	90.4	92.6	92.5
WG289214-02	1.00	01	86.7	95.7	92.5	93.3
WG289214-03	1.00	01	87.4	95.2	92.6	92.6

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: L08110782
Instrument Id: HPMS11
Workgroup (AAB#): WG289216

Method: 8260
CAL ID: HPMS11 - 25-NOV-08
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L08110782-04	10.0	DL01	84.2	91.0	92.6	92.3
WG289216-01	1.00	01	88.6	92.2	95.2	93.1
WG289216-02	1.00	01	89.0	94.9	93.6	92.5
WG289216-03	1.00	01	88.1	94.7	93.2	92.5

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: L08110782
 Blank File ID: 11M55640
 Prep Date: 11/29/08 17:15
 Analyzed Date: 11/29/08 17:15
 Analyst: MES

Work Group: WG289214
 Blank Sample ID: WG289214-01
 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	WG289214-02	11M55641	11/29/08 17:47	01
LCS2	WG289214-03	11M55642	11/29/08 18:19	01
TRIP BLANK	L08110782-08	11M55644	11/29/08 19:22	01
35AWW01-111908	L08110782-01	11M55651	11/29/08 23:05	01
LHSMW06-111908	L08110782-02	11M55652	11/29/08 23:37	01
LHSMW03-111908	L08110782-03	11M55653	11/30/08 00:09	01
LHSMW07-111908	L08110782-04	11M55654	11/30/08 00:42	01
35AWW05-112108	L08110782-05	11M55655	11/30/08 01:14	01

Report Name: BLANK_SUMMARY
 PDF File ID: 1269827
 Report generated 12/08/2008 11:15



METHOD BLANK SUMMARY

Login Number: L08110782
Blank File ID: 11M55672
Prep Date: 11/30/08 11:32
Analyzed Date: 11/30/08 11:32
Analyst: FJB

Work Group: WG289216
Blank Sample ID: WG289216-01
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	WG289216-02	11M55673	11/30/08 12:13	01
LCS2	WG289216-03	11M55674	11/30/08 12:44	01
LHSMW07-111908	L08110782-04	11M55679	11/30/08 15:24	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 1269827
Report generated 12/08/2008 11:15



Login Number: L08110782 Prep Date: 11/29/08 17:15 Sample ID: WG289214-01
Instrument ID: HPMS11 Run Date: 11/29/08 17:15 Prep Method: 5030B
File ID: 11M55640 Analyst: MES Method: 8260B
Workgroup (AAB#): WG289214 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 25-NOV-08

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: 1269829

08-DEC-2008 11:15



Login Number: L08110782 Prep Date: 11/29/08 17:15 Sample ID: WG289214-01
Instrument ID: HPMS11 Run Date: 11/29/08 17:15 Prep Method: 5030B
File ID: 11M55640 Analyst: MES Method: 8260B
Workgroup (AAB#): WG289214 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 25-NOV-08

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	90.4	86 - 118	PASS
1,2-Dichloroethane-d4	87.1	80 - 120	PASS
Toluene-d8	92.5	88 - 110	PASS
4-Bromofluorobenzene	92.6	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: 1269829

08-DEC-2008 11:15



Login Number: L08110782 Prep Date: 11/30/08 11:32 Sample ID: WG289216-01
Instrument ID: HPMS11 Run Date: 11/30/08 11:32 Prep Method: 5030B
File ID: 11M55672 Analyst: FJB Method: 8260B
Workgroup (AAB#): WG289216 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 25-NOV-08

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	0.831	1	J
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: 1269829

08-DEC-2008 11:15



Login Number: L08110782 Prep Date: 11/30/08 11:32 Sample ID: WG289216-01
Instrument ID: HPMS11 Run Date: 11/30/08 11:32 Prep Method: 5030B
File ID: 11M55672 Analyst: FJB Method: 8260B
Workgroup (AAB#): WG289216 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: HPMS11 - 25-NOV-08

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	0.267	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	92.2	86 - 118	PASS
1,2-Dichloroethane-d4	88.6	80 - 120	PASS
Toluene-d8	93.1	88 - 110	PASS
4-Bromofluorobenzene	95.2	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: 1269829
08-DEC-2008 11:15



Login Number: L08110782 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG289216 Units: ug/L
QC Key: STD Lot #: STD30055

Sample ID: WG289216-02 LCS File ID: 11M55673 Run Date: 11/30/2008 12:13
Sample ID: WG289216-03 LCS2 File ID: 11M55674 Run Date: 11/30/2008 12:44

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	28.1	141	20.0	25.9	130	8.14	40 - 142	20	
Benzene	20.0	19.6	98.1	20.0	19.7	98.3	0.176	80 - 121	20	
Bromobenzene	20.0	19.5	97.6	20.0	19.6	97.9	0.289	80 - 120	20	
Bromochloromethane	20.0	19.8	98.8	20.0	20.1	100	1.54	65 - 130	20	
Bromodichloromethane	20.0	20.8	104	20.0	21.2	106	1.74	80 - 131	20	
Bromoform	20.0	16.2	81.1	20.0	17.7	88.3	8.47	70 - 130	20	
Bromomethane	25.0	18.9	75.7	25.0	20.4	81.6	7.50	30 - 145	20	
2-Butanone	20.0	20.4	102	20.0	20.8	104	1.89	30 - 150	20	
n-Butylbenzene	20.0	19.2	96.0	20.0	18.9	94.7	1.38	80 - 131	20	
sec-Butylbenzene	20.0	19.3	96.3	20.0	19.1	95.6	0.690	80 - 127	20	
tert-Butylbenzene	20.0	19.4	97.1	20.0	19.2	95.9	1.16	80 - 126	20	
Carbon disulfide	20.0	18.1	90.4	20.0	18.3	91.3	1.02	58 - 138	20	
Carbon tetrachloride	20.0	21.2	106	20.0	21.4	107	0.721	65 - 140	20	
Chlorobenzene	20.0	19.5	97.7	20.0	19.8	99.1	1.44	80 - 120	20	
Chlorodibromomethane	20.0	19.9	99.7	20.0	20.0	99.9	0.283	60 - 135	20	
Chloroethane	25.0	22.0	87.8	25.0	22.6	90.4	2.96	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	18.0	89.9	20.0	18.8	94.0	4.42	58 - 151	20	
Chloroform	20.0	21.4	107	20.0	21.2	106	0.573	80 - 125	20	
Chloromethane	25.0	16.0	64.2	25.0	16.8	67.0	4.37	40 - 125	20	
2-Chlorotoluene	20.0	20.3	102	20.0	23.1	116	12.9	80 - 127	20	
4-Chlorotoluene	20.0	19.9	99.3	20.0	17.1	85.5	14.9	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	16.4	81.9	20.0	16.8	83.8	2.29	50 - 130	20	
1,2-Dibromoethane	20.0	18.1	90.6	20.0	18.7	93.6	3.19	80 - 125	20	
Dibromomethane	20.0	19.3	96.3	20.0	19.6	98.2	1.97	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.1	95.7	20.0	19.3	96.3	0.641	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.2	96.1	20.0	19.4	97.0	0.881	80 - 120	20	
1,4-Dichlorobenzene	20.0	18.7	93.7	20.0	18.8	94.0	0.314	80 - 120	20	
Dichlorodifluoromethane	25.0	16.2	64.9	25.0	15.7	62.8	3.40	50 - 133	20	
1,1-Dichloroethane	20.0	20.0	100	20.0	20.1	100	0.271	80 - 125	20	
1,2-Dichloroethane	20.0	18.9	94.4	20.0	18.9	94.6	0.162	80 - 129	20	
1,1-Dichloroethene	20.0	19.5	97.7	20.0	19.4	97.0	0.662	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.0	100	20.0	19.8	99.2	0.887	70 - 125	20	
trans-1,2-Dichloroethene	20.0	19.1	95.3	20.0	19.3	96.5	1.24	80 - 127	20	
1,2-Dichloropropane	20.0	19.8	98.9	20.0	19.8	99.2	0.279	80 - 120	20	
1,3-Dichloropropane	20.0	18.4	92.2	20.0	18.7	93.5	1.43	80 - 120	20	
2,2-Dichloropropane	20.0	20.7	103	20.0	22.7	114	9.50	80 - 133	20	
cis-1,3-Dichloropropene	20.0	19.5	97.4	20.0	19.9	99.7	2.38	70 - 130	20	
trans-1,3-Dichloropropene	20.0	16.8	84.1	20.0	17.7	88.5	5.14	80 - 130	20	
1,1-Dichloropropene	20.0	19.4	97.2	20.0	19.8	98.8	1.66	75 - 130	20	
Ethylbenzene	20.0	20.0	99.8	20.0	20.4	102	2.12	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1268022
Report generated: 12/08/2008 11:15



Login Number: L08110782 Analyst: FJB Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG289216 Units: ug/L
QC Key: STD Lot #: STD30055

Sample ID: WG289216-02 LCS File ID: 11M55673 Run Date: 11/30/2008 12:13
Sample ID: WG289216-03 LCS2 File ID: 11M55674 Run Date: 11/30/2008 12:44

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	18.3	91.7	20.0	19.0	94.8	3.32	55 - 130	20	
Hexachlorobutadiene	20.0	18.4	91.9	20.0	18.3	91.3	0.580	72 - 132	20	
Isopropylbenzene	20.0	17.7	88.7	20.0	17.8	89.1	0.434	80 - 122	20	
p-Isopropyltoluene	20.0	18.6	93.1	20.0	18.6	92.9	0.257	80 - 122	20	
4-Methyl-2-pentanone	20.0	17.1	85.6	20.0	17.6	88.1	2.89	64 - 140	20	
Methylene chloride	20.0	18.6	93.2	20.0	18.8	93.8	0.669	80 - 123	20	
Naphthalene	20.0	17.2	86.1	20.0	17.3	86.4	0.386	59 - 149	20	
n-Propylbenzene	20.0	20.0	99.9	20.0	19.9	99.4	0.512	80 - 129	20	
Styrene	20.0	19.9	99.5	20.0	20.5	102	2.78	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.0	100	20.0	20.2	101	0.826	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	18.7	93.4	20.0	19.0	94.9	1.56	79 - 125	20	
Tetrachloroethene	20.0	19.1	95.5	20.0	19.2	96.0	0.554	80 - 124	20	
Toluene	20.0	19.3	96.7	20.0	19.5	97.4	0.653	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	17.4	87.1	20.0	17.3	86.5	0.671	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	17.9	89.4	20.0	17.5	87.7	1.97	65 - 135	20	
1,1,1-Trichloroethane	20.0	20.0	100	20.0	20.1	101	0.353	80 - 134	20	
1,1,2-Trichloroethane	20.0	19.1	95.6	20.0	19.0	95.0	0.648	80 - 125	20	
Trichloroethene	20.0	18.4	91.8	20.0	18.3	91.5	0.377	80 - 122	20	
Trichlorofluoromethane	25.0	22.5	89.9	25.0	21.9	87.6	2.63	62 - 151	20	
1,2,3-Trichloropropane	20.0	18.1	90.7	20.0	18.0	89.8	1.08	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	20.0	100	20.0	19.8	99.1	0.968	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	19.7	98.7	20.0	19.5	97.7	0.992	80 - 127	20	
Vinyl acetate	20.0	28.1	141	20.0	31.5	157	11.2	10 - 150	20	*
Vinyl chloride	25.0	19.5	77.9	25.0	18.5	74.2	4.92	65 - 140	20	
o-Xylene	20.0	20.1	100	20.0	20.3	102	1.17	80 - 122	20	
m-, p-Xylene	40.0	40.8	102	40.0	41.1	103	0.656	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	89.0	88.1	80 - 120	PASS
Dibromofluoromethane	94.9	94.7	86 - 118	PASS
4-Bromofluorobenzene	93.6	93.2	86 - 115	PASS
Toluene-d8	92.5	92.5	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1268022
Report generated: 12/08/2008 11:15



Login Number: L08110782 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG289214 Units: ug/L
QC Key: STD Lot #: STD30055

Sample ID: WG289214-02 LCS File ID: 11M55641 Run Date: 11/29/2008 17:47
Sample ID: WG289214-03 LCS2 File ID: 11M55642 Run Date: 11/29/2008 18:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Acetone	20.0	22.3	112	20.0	24.6	123	9.70	40 - 142	20	
Benzene	20.0	20.3	102	20.0	20.9	104	2.83	80 - 121	20	
Bromobenzene	20.0	20.0	100	20.0	20.6	103	2.70	80 - 120	20	
Bromochloromethane	20.0	20.2	101	20.0	21.3	107	5.11	65 - 130	20	
Bromodichloromethane	20.0	21.6	108	20.0	22.0	110	1.93	80 - 131	20	
Bromoform	20.0	16.8	84.1	20.0	18.2	91.0	7.86	70 - 130	20	
Bromomethane	25.0	21.6	86.2	25.0	20.8	83.1	3.63	30 - 145	20	
2-Butanone	20.0	20.3	102	20.0	22.5	112	9.97	30 - 150	20	
n-Butylbenzene	20.0	19.0	95.0	20.0	19.4	97.0	2.06	80 - 131	20	
sec-Butylbenzene	20.0	19.1	95.3	20.0	19.5	97.4	2.15	80 - 127	20	
tert-Butylbenzene	20.0	19.6	98.0	20.0	20.0	99.8	1.83	80 - 126	20	
Carbon disulfide	20.0	19.8	98.9	20.0	20.2	101	1.87	58 - 138	20	
Carbon tetrachloride	20.0	22.8	114	20.0	23.3	116	1.82	65 - 140	20	
Chlorobenzene	20.0	20.1	101	20.0	20.5	103	2.01	80 - 120	20	
Chlorodibromomethane	20.0	20.2	101	20.0	21.2	106	4.53	60 - 135	20	
Chloroethane	25.0	20.3	81.2	25.0	20.9	83.5	2.78	60 - 135	20	
2-Chloroethyl vinyl ether	20.0	19.3	96.6	20.0	22.0	110	12.8	58 - 151	20	
Chloroform	20.0	22.1	111	20.0	22.5	112	1.42	80 - 125	20	
Chloromethane	25.0	14.0	55.9	25.0	15.6	62.4	11.1	40 - 125	20	
2-Chlorotoluene	20.0	20.5	103	20.0	20.7	103	0.696	80 - 127	20	
4-Chlorotoluene	20.0	20.3	102	20.0	20.6	103	1.58	80 - 126	20	
1,2-Dibromo-3-chloropropane	20.0	16.1	80.5	20.0	17.6	87.8	8.70	50 - 130	20	
1,2-Dibromoethane	20.0	18.3	91.4	20.0	19.6	97.8	6.80	80 - 125	20	
Dibromomethane	20.0	19.2	96.2	20.0	20.3	102	5.45	75 - 125	20	
1,2-Dichlorobenzene	20.0	19.2	96.1	20.0	20.2	101	4.85	80 - 125	20	
1,3-Dichlorobenzene	20.0	19.6	98.0	20.0	20.2	101	3.06	80 - 120	20	
1,4-Dichlorobenzene	20.0	19.1	95.5	20.0	19.4	97.2	1.84	80 - 120	20	
Dichlorodifluoromethane	25.0	23.4	93.6	25.0	23.5	93.9	0.304	50 - 133	20	
1,1-Dichloroethane	20.0	21.1	105	20.0	21.4	107	1.70	80 - 125	20	
1,2-Dichloroethane	20.0	19.4	96.8	20.0	19.9	99.6	2.80	80 - 129	20	
1,1-Dichloroethene	20.0	21.7	108	20.0	22.3	112	3.02	80 - 132	20	
cis-1,2-Dichloroethene	20.0	20.6	103	20.0	21.2	106	3.06	70 - 125	20	
trans-1,2-Dichloroethene	20.0	20.7	104	20.0	21.2	106	2.09	80 - 127	20	
1,2-Dichloropropane	20.0	20.0	99.8	20.0	20.7	104	3.73	80 - 120	20	
1,3-Dichloropropane	20.0	18.5	92.7	20.0	19.7	98.3	5.87	80 - 120	20	
2,2-Dichloropropane	20.0	25.5	128	20.0	24.5	122	4.21	80 - 133	20	
cis-1,3-Dichloropropene	20.0	20.4	102	20.0	21.2	106	3.94	70 - 130	20	
trans-1,3-Dichloropropene	20.0	17.7	88.4	20.0	18.4	92.2	4.29	80 - 130	20	
1,1-Dichloropropene	20.0	20.5	102	20.0	21.1	106	3.04	75 - 130	20	
Ethylbenzene	20.0	20.6	103	20.0	20.9	105	1.36	80 - 122	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1268022
Report generated: 12/08/2008 11:15



Login Number: L08110782 Analyst: MES Prep Method: 5030B
Instrument ID: HPMS11 Matrix: Water Method: 8260B
Workgroup (AAB#): WG289214 Units: ug/L
QC Key: STD Lot #: STD30055

Sample ID: WG289214-02 LCS File ID: 11M55641 Run Date: 11/29/2008 17:47
Sample ID: WG289214-03 LCS2 File ID: 11M55642 Run Date: 11/29/2008 18:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
2-Hexanone	20.0	18.4	91.9	20.0	21.0	105	13.5	55 - 130	20	
Hexachlorobutadiene	20.0	18.0	89.8	20.0	18.9	94.4	5.01	72 - 132	20	
Isopropylbenzene	20.0	18.2	90.9	20.0	18.7	93.5	2.84	80 - 122	20	
p-Isopropyltoluene	20.0	18.8	93.9	20.0	19.2	95.9	2.12	80 - 122	20	
4-Methyl-2-pentanone	20.0	17.4	87.0	20.0	19.4	96.8	10.6	64 - 140	20	
Methylene chloride	20.0	19.3	96.7	20.0	20.0	100	3.55	80 - 123	20	
Naphthalene	20.0	17.0	85.1	20.0	18.5	92.6	8.54	59 - 149	20	
n-Propylbenzene	20.0	20.1	100	20.0	20.4	102	1.78	80 - 129	20	
Styrene	20.0	20.9	104	20.0	21.5	107	2.95	80 - 123	20	
1,1,1,2-Tetrachloroethane	20.0	20.3	101	20.0	20.9	105	3.30	80 - 130	20	
1,1,2,2-Tetrachloroethane	20.0	18.5	92.6	20.0	20.4	102	9.54	79 - 125	20	
Tetrachloroethene	20.0	19.8	98.8	20.0	20.3	101	2.47	80 - 124	20	
Toluene	20.0	19.8	99.0	20.0	20.2	101	2.06	80 - 124	20	
1,2,3-Trichlorobenzene	20.0	17.0	84.8	20.0	18.2	90.9	6.90	55 - 140	20	
1,2,4-Trichlorobenzene	20.0	17.6	87.9	20.0	18.3	91.4	3.90	65 - 135	20	
1,1,1-Trichloroethane	20.0	21.3	106	20.0	21.6	108	1.54	80 - 134	20	
1,1,2-Trichloroethane	20.0	19.1	95.3	20.0	20.3	102	6.40	80 - 125	20	
Trichloroethene	20.0	19.2	96.0	20.0	19.5	97.5	1.48	80 - 122	20	
Trichlorofluoromethane	25.0	20.6	82.6	25.0	21.0	83.9	1.54	62 - 151	20	
1,2,3-Trichloropropane	20.0	17.9	89.3	20.0	19.3	96.5	7.73	75 - 125	20	
1,2,4-Trimethylbenzene	20.0	20.2	101	20.0	20.6	103	1.80	80 - 125	20	
1,3,5-Trimethylbenzene	20.0	19.9	99.7	20.0	20.1	100	0.604	80 - 127	20	
Vinyl acetate	20.0	31.3	156	20.0	31.4	157	0.484	10 - 150	20	*
Vinyl chloride	25.0	22.3	89.3	25.0	23.3	93.0	4.13	65 - 140	20	
o-Xylene	20.0	20.6	103	20.0	21.3	107	3.31	80 - 122	20	
m-, p-Xylene	40.0	41.7	104	40.0	42.6	106	2.17	80 - 122	20	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	86.7	87.4	80 - 120	PASS
Dibromofluoromethane	95.7	95.2	86 - 118	PASS
4-Bromofluorobenzene	92.5	92.6	86 - 115	PASS
Toluene-d8	93.3	92.6	88 - 110	PASS

* FAILS %REC LIMIT
FAILS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
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Report generated: 12/08/2008 11:15



BFB

Login Number: L08110782
Instrument: HPMS11
Analyst: WTD
Workgroup: WG289038

Tune ID: WG289038-01
Run Date: 11/25/2008
Run Time: 12:53
File ID: 11M55536

Cal ID: HPMS11-25-NOV-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.4	20731	PASS
75.0	95.0	30.0	60.0	46.4	47232	PASS
95.0	95.0	100	100	100	101824	PASS
96.0	95.0	5.00	9.00	7.09	7222	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	89.3	90928	PASS
175	174	5.00	9.00	7.23	6572	PASS
176	174	95.0	101	95.4	86752	PASS
177	176	5.00	9.00	6.66	5780	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG289038-02	STD	01	11/25/2008 16:23	
WG289038-03	STD	01	11/25/2008 16:54	
WG289038-04	STD	01	11/25/2008 17:26	
WG289038-05	STD	01	11/25/2008 17:58	
WG289038-06	STD	01	11/25/2008 18:30	
WG289038-07	STD	01	11/25/2008 19:01	
WG289038-08	STD-CCV	01	11/25/2008 19:33	
WG289038-09	STD	01	11/25/2008 20:05	
WG289038-10	STD	01	11/25/2008 20:37	
WG289038-11	STD	01	11/25/2008 21:08	
WG289038-12	SSCV	01	11/25/2008 22:44	

* Sample past 12 hour tune limit

BFB

Login Number: L08110782
Instrument: HPMS11
Analyst: MES
Workgroup: WG289211

Tune ID: WG289211-01
Run Date: 11/29/2008
Run Time: 15:42
File ID: 11M55637

Cal ID: HPMS11-25-NOV-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	20.8	8172	PASS
75.0	95.0	30.0	60.0	45.1	17665	PASS
95.0	95.0	100	100	100	39210	PASS
96.0	95.0	5.00	9.00	6.89	2703	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	79.3	31088	PASS
175	174	5.00	9.00	7.29	2265	PASS
176	174	95.0	101	99.1	30805	PASS
177	176	5.00	9.00	6.15	1894	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG289211-02	CCV	01	11/29/2008 16:10	
WG289214-01	BLANK	01	11/29/2008 17:15	
WG289214-02	LCS	01	11/29/2008 17:47	
WG289214-03	LCS2	01	11/29/2008 18:19	
L08110782-08	TRIP BLANK	01	11/29/2008 19:22	
L08110782-01	35AWW01-111908	01	11/29/2008 23:05	
L08110782-02	LHSMW06-111908	01	11/29/2008 23:37	
L08110782-03	LHSMW03-111908	01	11/30/2008 00:09	
L08110782-04	LHSMW07-111908	01	11/30/2008 00:42	
L08110782-05	35AWW05-112108	01	11/30/2008 01:14	

* Sample past 12 hour tune limit

BFB

Login Number: L08110782
Instrument: HPMS11
Analyst: FJB
Workgroup: WG289215

Tune ID: WG289215-01
Run Date: 11/30/2008
Run Time: 10:02
File ID: 11M55669

Cal ID: HPMS11-25-NOV-08

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	23.0	6701	PASS
75.0	95.0	30.0	60.0	47.5	13851	PASS
95.0	95.0	100	100	100	29144	PASS
96.0	95.0	5.00	9.00	7.15	2084	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	80.9	23564	PASS
175	174	5.00	9.00	7.81	1841	PASS
176	174	95.0	101	95.1	22408	PASS
177	176	5.00	9.00	7.23	1620	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG289215-02	CCV	01	11/30/2008 10:28	
WG289216-01	BLANK	01	11/30/2008 11:32	
WG289216-02	LCS	01	11/30/2008 12:13	
WG289216-03	LCS2	01	11/30/2008 12:44	
L08110782-04	LHSMW07-111908	DL01	11/30/2008 15:24	

* Sample past 12 hour tune limit

Login Number: L08110782
Analytical Method: 8260B
ICAL Workgroup: WG289038

Instrument ID: HPMS11
Initial Calibration Date: 25-NOV-08 21:08
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
1,1-Dichloroethene	CCC	0.3660	5.39		
1,2-Dichloropropane	CCC	0.2280	3.45		
Chloroform	CCC	0.3755	7.39		
Ethylbenzene	CCC	0.4191	7.29		
Toluene	CCC	1.098	3.56		
Vinyl Chloride	CCC	0.1730	22.2		0.99900
1,1,2,2-Tetrachloroethane	SPCC	0.3385	9.50		
1,1-Dichloroethane	SPCC	0.4229	6.41		
Bromoform	SPCC	0.1190	17.1	0.99800	
Chlorobenzene	SPCC	0.7773	6.00		
Chloromethane	SPCC	0.2014	15.6		1.00000
1,1,1,2-Tetrachloroethane		0.2557	8.09		
1,1,1-Trichloroethane		0.3464	6.30		
1,1,2-Trichloroethane		0.1775	7.13		
1,1-Dichloropropene		0.2864	5.62		
1,2,3-Trichlorobenzene		0.6548	4.31		
1,2,3-Trichloropropane		0.1277	5.64		
1,2,4-Trichlorobenzene		0.7496	3.28		
1,2,4-Trimethylbenzene		2.045	3.81		
1,2-Dibromo-3-Chloropropane		0.06755	6.33		
1,2-Dibromoethane		0.1891	5.57		
1,2-Dichlorobenzene		1.112	3.04		
1,2-Dichloroethane		0.3208	3.40		
1,3,5-Trimethylbenzene		2.012	4.50		
1,3-Dichlorobenzene		1.213	3.08		
1,3-Dichloropropane		0.3175	5.53		
1,4-Dichlorobenzene		1.259	3.77		
2,2-Dichloropropane		0.2153	23.4	0.99800	
2-Butanone		0.06628	5.33		
2-Chloroethyl Vinyl Ether		0.1018	13.6		
2-Chlorotoluene		1.606	2.78		
2-Hexanone		0.1270	7.49		
4-Chlorotoluene		1.670	6.71		
4-Methyl-2-Pentanone		0.06563	7.11		
Acetone		0.04745	14.7		
Benzene		0.8111	3.23		
Bromobenzene		0.6233	2.88		
Bromochloromethane		0.1322	10.0		
Bromodichloromethane		0.2647	11.0		
Bromomethane		0.09393	14.6		
Carbon Disulfide		0.5403	15.5	0.99800	
Carbon Tetrachloride		0.2698	13.7		
Chloroethane		0.1328	10.9		
Dibromochloromethane		0.2265	12.5		
Dibromomethane		0.09999	5.45		

INT_CAL - Modified 03/06/2008
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Login Number: L08110782
Analytical Method: 8260B
ICAL Workgroup: WG289038

Instrument ID: HPMS11
Initial Calibration Date: 25-NOV-08 21:08
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R ²)	QUAD(R ²)
Dichlorodifluoromethane		0.2327	5.56		
Hexachlorobutadiene		0.2585	8.86		
Isopropylbenzene		1.299	6.10		
Methylene Chloride		0.2805	45.1		1.00000
Naphthalene		1.522	3.44		
Styrene		0.8605	6.60		
Tetrachloroethene		0.2302	6.08		
Trichloroethene		0.2892	20.5		1.00000
Trichlorofluoromethane		0.3776	5.62		
Vinyl Acetate		0.1223	48.2	0.99600	
cis-1,2-Dichloroethene		0.2278	4.49		
cis-1,3-Dichloropropene		0.2990	11.5		
m-,p-Xylene		0.5126	8.26		
n-Butylbenzene		1.769	6.57		
n-Propylbenzene		2.610	5.16		
o-Xylene		0.5060	6.18		
p-Isopropyltoluene		2.174	4.90		
sec-Butylbenzene		2.465	4.44		
tert-Butylbenzene		0.4352	4.77		
trans-1,2-Dichloroethene		0.2103	6.47		
trans-1,3-Dichloropropene		0.3221	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: L08110782
Analytical Method: 8260BInstrument ID: HPMS11
Initial Calibration Date: 25-NOV-08 21:08
Column ID: F

Analyte	WG289038-02			WG289038-03			WG289038-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	NA	NA	NA	0.400	6778.00000	0.3277	1.00	18158.0000	0.3578
1,2-Dichloropropane	NA	NA	NA	0.400	4419.00000	0.2137	1.00	11357.0000	0.2238
Chloroform	0.300	5528.00000	0.3418	0.400	6873.00000	0.3323	1.00	18362.0000	0.3618
Ethylbenzene	NA	NA	NA	0.400	7400.00000	0.4456	1.00	16363.0000	0.3956
Toluene	NA	NA	NA	0.400	18373.0000	1.106	1.00	45479.0000	1.100
Vinyl Chloride	NA	NA	NA	NA	NA	NA	1.00	10278.0000	0.2025
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.400	2576.00000	0.2770	1.00	7247.00000	0.3160
1,1-Dichloroethane	NA	NA	NA	0.400	7962.00000	0.3850	1.00	20064.0000	0.3953
Bromoform	NA	NA	NA	NA	NA	NA	1.00	4117.00000	0.09950
Chlorobenzene	NA	NA	NA	0.400	13250.0000	0.7978	1.00	31679.0000	0.7659
Chloromethane	NA	NA	NA	NA	NA	NA	1.00	12775.0000	0.2517
1,1,1,2-Tetrachloroethane	NA	NA	NA	0.400	3945.00000	0.2375	1.00	10065.0000	0.2433
1,1,1-Trichloroethane	NA	NA	NA	0.400	6642.00000	0.3212	1.00	16818.0000	0.3314
1,1,2-Trichloroethane	NA	NA	NA	0.400	2599.00000	0.1565	1.00	7339.00000	0.1774
1,1-Dichloropropene	NA	NA	NA	0.400	5422.00000	0.2622	1.00	13860.0000	0.2731
1,2,3-Trichlorobenzene	0.300	4564.00000	0.6346	0.400	6295.00000	0.6768	1.00	15005.0000	0.6542
1,2,3-Trichloropropane	NA	NA	NA	NA	NA	NA	1.00	2599.00000	0.1133
1,2,4-Trichlorobenzene	NA	NA	NA	0.400	0	0	1.00	17142.0000	0.7474
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	1.00	44640.0000	1.946
1,2-Dibromo-3-Chloropropane	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NA	NA	NA	0.400	2856.00000	0.1720	1.00	7978.00000	0.1929
1,2-Dichlorobenzene	0.300	7821.00000	1.088	0.400	10275.0000	1.105	1.00	25114.0000	1.095
1,2-Dichloroethane	NA	NA	NA	0.400	6594.00000	0.3188	1.00	15363.0000	0.3027
1,3,5-Trimethylbenzene	NA	NA	NA	0.400	17953.0000	1.930	1.00	43699.0000	1.905
1,3-Dichlorobenzene	NA	NA	NA	0.400	11164.0000	1.200	1.00	26736.0000	1.166
1,3-Dichloropropane	NA	NA	NA	0.400	4996.00000	0.3008	1.00	13215.0000	0.3195
1,4-Dichlorobenzene	0.300	9508.00000	1.322	0.400	12134.0000	1.305	1.00	28177.0000	1.229
2,2-Dichloropropane	NA	NA	NA	NA	NA	NA	1.00	9478.00000	0.1867
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	14469.0000	1.556	1.00	35927.0000	1.567
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NA	NA	NA	0.400	15776.0000	1.696	1.00	36297.0000	1.583
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	16629.0000	0.8040	1.00	40215.0000	0.7924
Bromobenzene	0.300	4534.00000	0.6305	0.400	5560.00000	0.5978	1.00	13794.0000	0.6014
Bromochloromethane	NA	NA	NA	0.400	2348.00000	0.1135	1.00	5860.00000	0.1155
Bromodichloromethane	NA	NA	NA	0.400	4599.00000	0.2224	1.00	11760.0000	0.2317
Bromomethane	NA	NA	NA	0.400	1462.00000	0.07070	1.00	4291.00000	0.08450
Carbon Disulfide	NA	NA	NA	NA	NA	NA	1.00	26163.0000	0.5155
Carbon Tetrachloride	NA	NA	NA	0.400	4549.00000	0.2200	1.00	12003.0000	0.2365

INT_CAL - Modified 03/06/2008
PDF File ID: 1269830
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Login Number: L08110782
Analytical Method: 8260BInstrument ID: HPMS11
Initial Calibration Date: 25-NOV-08 21:08
Column ID: F

Analyte	WG289038-05			WG289038-06			WG289038-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	2.00	36805.0000	0.3657	5.00	95895.0000	0.3841	20.0	370042.000	0.3746
1,2-Dichloropropane	2.00	22398.0000	0.2226	5.00	57181.0000	0.2290	20.0	231290.000	0.2341
Chloroform	2.00	36005.0000	0.3578	5.00	96019.0000	0.3846	20.0	388074.000	0.3929
Ethylbenzene	2.00	35086.0000	0.4320	5.00	90379.0000	0.4444	20.0	359218.000	0.4395
Toluene	2.00	88046.0000	1.084	5.00	229467.000	1.128	20.0	911902.000	1.116
Vinyl Chloride	2.00	23199.0000	0.2305	5.00	49924.0000	0.2000	20.0	164650.000	0.1667
1,1,2,2-Tetrachloroethane	2.00	15148.0000	0.3348	5.00	37729.0000	0.3299	20.0	158326.000	0.3448
1,1-Dichloroethane	2.00	39867.0000	0.3962	5.00	106690.000	0.4273	20.0	429033.000	0.4343
Bromoform	2.00	7668.00000	0.09440	5.00	22673.0000	0.1115	20.0	105675.000	0.1293
Chlorobenzene	2.00	64952.0000	0.7996	5.00	167583.000	0.8240	20.0	655667.000	0.8022
Chloromethane	2.00	19820.0000	0.1970	5.00	43560.0000	0.1745	20.0	171590.000	0.1737
1,1,1,2-Tetrachloroethane	2.00	20887.0000	0.2571	5.00	55950.0000	0.2751	20.0	224495.000	0.2747
1,1,1-Trichloroethane	2.00	31987.0000	0.3179	5.00	90090.0000	0.3608	20.0	361958.000	0.3664
1,1,2-Trichloroethane	2.00	15164.0000	0.1867	5.00	37273.0000	0.1833	20.0	152020.000	0.1860
1,1-Dichloropropene	2.00	28415.0000	0.2824	5.00	75359.0000	0.3018	20.0	296937.000	0.3006
1,2,3-Trichlorobenzene	2.00	28945.0000	0.6397	5.00	78035.0000	0.6824	20.0	319194.000	0.6951
1,2,3-Trichloropropane	2.00	5930.00000	0.1311	5.00	14997.0000	0.1311	20.0	58034.0000	0.1264
1,2,4-Trichlorobenzene	2.00	32962.0000	0.7285	5.00	87740.0000	0.7672	20.0	362474.000	0.7893
1,2,4-Trimethylbenzene	2.00	90852.0000	2.008	5.00	239284.000	2.092	20.0	973359.000	2.120
1,2-Dibromo-3-Chloropropane	2.00	2820.00000	0.06230	5.00	7122.00000	0.06230	20.0	31404.0000	0.06840
1,2-Dibromoethane	2.00	16116.0000	0.1984	5.00	39423.0000	0.1938	20.0	155365.000	0.1901
1,2-Dichlorobenzene	2.00	50698.0000	1.121	5.00	129487.000	1.132	20.0	530291.000	1.155
1,2-Dichloroethane	2.00	32686.0000	0.3248	5.00	81599.0000	0.3268	20.0	324510.000	0.3285
1,3,5-Trimethylbenzene	2.00	87081.0000	1.925	5.00	238841.000	2.089	20.0	962500.000	2.096
1,3-Dichlorobenzene	2.00	54366.0000	1.202	5.00	142777.000	1.249	20.0	573212.000	1.248
1,3-Dichloropropane	2.00	26074.0000	0.3210	5.00	68389.0000	0.3363	20.0	265438.000	0.3247
1,4-Dichlorobenzene	2.00	56817.0000	1.256	5.00	144331.000	1.262	20.0	586352.000	1.277
2,2-Dichloropropane	2.00	13580.0000	0.1349	5.00	46173.0000	0.1849	20.0	212149.000	0.2148
2-Butanone	NA	NA	NA	5.00	16077.0000	0.06440	20.0	66767.0000	0.06760
2-Chloroethyl Vinyl Ether	2.00	8023.00000	0.07970	5.00	21933.0000	0.08780	20.0	97520.0000	0.09870
2-Chlorotoluene	2.00	71837.0000	1.588	5.00	190883.000	1.669	20.0	755268.000	1.645
2-Hexanone	NA	NA	NA	5.00	23961.0000	0.1178	20.0	107795.000	0.1319
4-Chlorotoluene	2.00	74700.0000	1.651	5.00	197542.000	1.727	20.0	797792.000	1.737
4-Methyl-2-Pentanone	NA	NA	NA	5.00	14778.0000	0.05920	20.0	63860.0000	0.06460
Acetone	NA	NA	NA	5.00	14761.0000	0.05910	20.0	49685.0000	0.05030
Benzene	2.00	80890.0000	0.8038	5.00	208394.000	0.8347	20.0	822720.000	0.8329
Bromobenzene	2.00	28958.0000	0.6400	5.00	72303.0000	0.6323	20.0	287683.000	0.6264
Bromochloromethane	2.00	12098.0000	0.1202	5.00	34742.0000	0.1391	20.0	139953.000	0.1417
Bromodichloromethane	2.00	24530.0000	0.2438	5.00	65703.0000	0.2632	20.0	276466.000	0.2799
Bromomethane	2.00	8454.00000	0.08400	5.00	22580.0000	0.09040	20.0	105931.000	0.1072
Carbon Disulfide	2.00	37955.0000	0.3772	5.00	127473.000	0.5106	20.0	561374.000	0.5683
Carbon Tetrachloride	2.00	22661.0000	0.2252	5.00	68816.0000	0.2756	20.0	292874.000	0.2965

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Column ID: F

Analyte	WG289038-08			WG289038-09			WG289038-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1-Dichloroethene	50.0	979133.000	0.3846	100	2085058.00	0.3817	200	3334619.00	0.3520
1,2-Dichloropropane	50.0	609132.000	0.2393	100	1262724.00	0.2312	200	2179039.00	0.2300
Chloroform	50.0	1034681.00	0.4064	100	2205188.00	0.4037	200	3774720.00	0.3985
Ethylbenzene	50.0	902398.000	0.4313	100	1837248.00	0.4064	200	3227716.00	0.3579
Toluene	50.0	2327304.00	1.112	100	5094224.00	1.127	200	9088258.00	1.008
Vinyl Chloride	50.0	351202.000	0.1380	100	777258.000	0.1423	200	1243566.00	0.1313
1,1,2,2-Tetrachloroethane	50.0	443237.000	0.3770	100	828168.000	0.3641	200	1600703.00	0.3647
1,1-Dichloroethane	50.0	1153017.00	0.4529	100	2474959.00	0.4531	200	4161499.00	0.4393
Bromoform	50.0	305022.000	0.1458	100	603346.000	0.1335	NA	NA	NA
Chlorobenzene	50.0	1673104.00	0.7996	100	3406779.00	0.7536	200	6094122.00	0.6758
Chloromethane	50.0	440231.000	0.1729	100	1129622.00	0.2068	200	2210890.00	0.2334
1,1,1,2-Tetrachloroethane	50.0	587343.000	0.2807	100	1155211.00	0.2555	200	2000186.00	0.2218
1,1,1-Trichloroethane	50.0	952920.000	0.3743	100	1969228.00	0.3605	200	3204423.00	0.3383
1,1,2-Trichloroethane	50.0	401641.000	0.1920	100	803256.000	0.1777	200	1449226.00	0.1607
1,1-Dichloropropene	50.0	776009.000	0.3048	100	1605853.00	0.2940	200	2580164.00	0.2724
1,2,3-Trichlorobenzene	50.0	781650.000	0.6649	100	1458429.00	0.6412	200	2650816.00	0.6040
1,2,3-Trichloropropane	50.0	160170.000	0.1362	100	295503.000	0.1299	200	553980.000	0.1262
1,2,4-Trichlorobenzene	50.0	898753.000	0.7645	100	1698042.00	0.7466	200	3112029.00	0.7090
1,2,4-Trimethylbenzene	50.0	2476841.00	2.107	100	4777925.00	2.101	200	8522778.00	1.942
1,2-Dibromo-3-Chloropropane	50.0	85157.0000	0.07240	100	159231.000	0.07000	200	306934.000	0.06990
1,2-Dibromoethane	50.0	420554.000	0.2010	100	857900.000	0.1898	200	1572982.00	0.1744
1,2-Dichlorobenzene	50.0	1358930.00	1.156	100	2514677.00	1.106	200	4606323.00	1.050
1,2-Dichloroethane	50.0	858084.000	0.3371	100	1734140.00	0.3175	200	2938265.00	0.3102
1,3,5-Trimethylbenzene	50.0	2450598.00	2.084	100	4805679.00	2.113	200	8580284.00	1.955
1,3-Dichlorobenzene	50.0	1472318.00	1.252	100	2790859.00	1.227	200	5083698.00	1.158
1,3-Dichloropropane	50.0	706137.000	0.3375	100	1424724.00	0.3152	200	2570090.00	0.2850
1,4-Dichlorobenzene	50.0	1506819.00	1.282	100	2821679.00	1.241	200	5090227.00	1.160
2,2-Dichloropropane	50.0	648063.000	0.2546	100	1374111.00	0.2515	200	2652613.00	0.2800
2-Butanone	50.0	183039.000	0.07190	100	348484.000	0.06380	200	642638.000	0.06780
2-Chloroethyl Vinyl Ether	50.0	281829.000	0.1107	100	575188.000	0.1053	200	1072407.00	0.1132
2-Chlorotoluene	50.0	1941162.00	1.651	100	3550640.00	1.561	200	7066612.00	1.610
2-Hexanone	50.0	301422.000	0.1441	100	553447.000	0.1224	200	1103055.00	0.1223
4-Chlorotoluene	50.0	2053429.00	1.747	100	4050364.00	1.781	200	6317362.00	1.439
4-Methyl-2-Pentanone	50.0	176463.000	0.06930	100	334564.000	0.06120	200	657889.000	0.06950
Acetone	50.0	120503.000	0.04730	100	241448.000	0.04420	200	431165.000	0.04550
Benzene	50.0	2139559.00	0.8404	100	4472753.00	0.8188	200	7218097.00	0.7620
Bromobenzene	50.0	753433.000	0.6409	100	1453056.00	0.6389	200	2640077.00	0.6015
Bromochloromethane	50.0	365215.000	0.1435	100	766388.000	0.1403	200	1360673.00	0.1436
Bromodichloromethane	50.0	749917.000	0.2946	100	1557314.00	0.2851	200	2812462.00	0.2969
Bromomethane	50.0	257555.000	0.1012	100	568631.000	0.1041	200	1035003.00	0.1093
Carbon Disulfide	50.0	1529631.00	0.6008	100	3445031.00	0.6307	200	5482190.00	0.5788
Carbon Tetrachloride	50.0	797722.000	0.3133	100	1614309.00	0.2955	200	2798099.00	0.2954

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Column ID: F

Analyte	WG289038-11		
	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	934262.000	0.06220
2-Chloroethyl Vinyl Ether	300	1758647.00	0.1170
2-Chlorotoluene	NA	NA	NA
2-Hexanone	300	1737022.00	0.1237
4-Chlorotoluene	NA	NA	NA
4-Methyl-2-Pentanone	300	1051577.00	0.07000
Acetone	300	575315.000	0.03830
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	WG289038-02			WG289038-03			WG289038-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	NA	NA	NA	NA	NA	NA	1.00	6444.00000	0.1270
Dibromochloromethane	NA	NA	NA	0.400	3091.00000	0.1861	1.00	8508.00000	0.2057
Dibromomethane	NA	NA	NA	0.400	1828.00000	0.08840	1.00	5036.00000	0.09920
Dichlorodifluoromethane	NA	NA	NA	NA	NA	NA	1.00	12672.00000	0.2497
Hexachlorobutadiene	NA	NA	NA	0.400	2248.00000	0.2417	1.00	4959.00000	0.2162
Isopropylbenzene	NA	NA	NA	0.400	21390.00000	1.288	1.00	52122.00000	1.260
Methylene Chloride	NA	NA	NA	0.400	11843.00000	0.5726	1.00	17081.00000	0.3366
Naphthalene	NA	NA	NA	0.400	13680.00000	1.471	1.00	35174.00000	1.534
Styrene	NA	NA	NA	0.400	13764.00000	0.8287	1.00	33507.00000	0.8101
Tetrachloroethene	NA	NA	NA	0.400	3847.00000	0.2316	1.00	9032.00000	0.2184
Trichloroethene	NA	NA	NA	0.400	8740.00000	0.4226	1.00	16008.00000	0.3154
Trichlorofluoromethane	NA	NA	NA	0.400	7171.00000	0.3467	1.00	20845.00000	0.4107
Vinyl Acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	0.400	4501.00000	0.2176	1.00	11165.00000	0.2200
cis-1,3-Dichloropropene	NA	NA	NA	0.400	5146.00000	0.2488	1.00	13638.00000	0.2687
m-,p-Xylene	NA	NA	NA	0.800	17267.00000	0.5198	2.00	42498.00000	0.5137
n-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	36080.00000	1.573
n-Propylbenzene	NA	NA	NA	0.400	22773.00000	2.449	1.00	57237.00000	2.496
o-Xylene	NA	NA	NA	0.400	8355.00000	0.5031	1.00	19752.00000	0.4775
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	1.00	46534.00000	2.029
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	53369.00000	2.327
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	1.00	9933.00000	0.4331
trans-1,2-Dichloroethene	NA	NA	NA	0.400	3877.00000	0.1875	1.00	9967.00000	0.1964
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	1.00	12348.00000	0.2985

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Analyte	WG289038-05			WG289038-06			WG289038-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	2.00	10558.0000	0.1049	5.00	32770.0000	0.1312	20.0	144027.000	0.1458
Dibromochloromethane	2.00	16310.0000	0.2008	5.00	44641.0000	0.2195	20.0	199901.000	0.2446
Dibromomethane	2.00	9807.00000	0.09750	5.00	25265.0000	0.1012	20.0	102168.000	0.1034
Dichlorodifluoromethane	2.00	21878.0000	0.2174	5.00	59345.0000	0.2377	20.0	243710.000	0.2467
Hexachlorobutadiene	2.00	11035.0000	0.2439	5.00	32443.0000	0.2837	20.0	128441.000	0.2797
Isopropylbenzene	2.00	104645.000	1.288	5.00	282594.000	1.390	20.0	1127112.00	1.379
Methylene Chloride	2.00	27023.0000	0.2685	5.00	59413.0000	0.2380	20.0	210133.000	0.2127
Naphthalene	2.00	69400.0000	1.534	5.00	176857.000	1.547	20.0	725789.000	1.581
Styrene	2.00	69150.0000	0.8513	5.00	185503.000	0.9121	20.0	755443.000	0.9242
Tetrachloroethene	2.00	18358.0000	0.2260	5.00	50532.0000	0.2485	20.0	196906.000	0.2409
Trichloroethene	2.00	28855.0000	0.2867	5.00	69819.0000	0.2796	20.0	259767.000	0.2630
Trichlorofluoromethane	2.00	36425.0000	0.3620	5.00	97338.0000	0.3899	20.0	387902.000	0.3927
Vinyl Acetate	NA	NA	NA	5.00	9636.00000	0.03860	20.0	62070.0000	0.06280
cis-1,2-Dichloroethene	2.00	21377.0000	0.2124	5.00	60397.0000	0.2419	20.0	225618.000	0.2284
cis-1,3-Dichloropropene	2.00	26336.0000	0.2617	5.00	75247.0000	0.3014	20.0	316467.000	0.3204
m-,p-Xylene	4.00	84095.0000	0.5177	10.0	228847.000	0.5626	40.0	891423.000	0.5453
n-Butylbenzene	2.00	74431.0000	1.645	5.00	208952.000	1.827	20.0	844574.000	1.839
n-Propylbenzene	2.00	110867.000	2.450	5.00	307707.000	2.691	20.0	1240072.00	2.700
o-Xylene	2.00	41234.0000	0.5076	5.00	109945.000	0.5406	20.0	439944.000	0.5382
p-Isopropyltoluene	2.00	93747.0000	2.072	5.00	259522.000	2.269	20.0	1043198.00	2.272
sec-Butylbenzene	2.00	105225.000	2.326	5.00	293943.000	2.570	20.0	1161382.00	2.529
tert-Butylbenzene	2.00	18325.0000	0.4050	5.00	53075.0000	0.4641	20.0	206990.000	0.4507
trans-1,2-Dichloroethene	2.00	20733.0000	0.2060	5.00	56015.0000	0.2243	20.0	214566.000	0.2172
trans-1,3-Dichloropropene	2.00	21856.0000	0.2691	5.00	65056.0000	0.3199	20.0	280478.000	0.3431

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Analytical Method: 8260B

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Column ID: F

Analyte	WG289038-08			WG289038-09			WG289038-10		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Chloroethane	50.0	365915.000	0.1437	100	790900.000	0.1448	200	1251276.00	0.1321
Dibromochloromethane	50.0	561785.000	0.2685	100	1144550.00	0.2532	200	2107262.00	0.2337
Dibromomethane	50.0	270198.000	0.1061	100	547697.000	0.1003	200	983607.000	0.1038
Dichlorodifluoromethane	50.0	575710.000	0.2261	100	1275258.00	0.2335	200	2064143.00	0.2179
Hexachlorobutadiene	50.0	318451.000	0.2709	100	614752.000	0.2703	200	1146779.00	0.2613
Isopropylbenzene	50.0	2850002.00	1.362	100	5784286.00	1.280	200	10340629.0	1.147
Methylene Chloride	50.0	533247.000	0.2095	100	1143151.00	0.2093	200	1861403.00	0.1965
Naphthalene	50.0	1855706.00	1.578	100	3409862.00	1.499	200	6275005.00	1.430
Styrene	50.0	1940845.00	0.9276	100	3873219.00	0.8568	200	6969888.00	0.7729
Tetrachloroethene	50.0	497194.000	0.2376	100	1059828.00	0.2344	200	1838843.00	0.2039
Trichloroethene	50.0	663247.000	0.2605	100	1370656.00	0.2509	200	2224774.00	0.2349
Trichlorofluoromethane	50.0	951113.000	0.3736	100	2113644.00	0.3869	200	3391857.00	0.3581
Vinyl Acetate	50.0	333042.000	0.1308	100	804203.000	0.1472	200	1608346.00	0.1698
cis-1,2-Dichloroethene	50.0	601910.000	0.2364	100	1280523.00	0.2344	200	2193316.00	0.2316
cis-1,3-Dichloropropene	50.0	857860.000	0.3370	100	1775063.00	0.3249	200	3114860.00	0.3288
m-,p-Xylene	100	2207251.00	0.5275	200	4453076.00	0.4925	400	7603407.00	0.4216
n-Butylbenzene	50.0	2177743.00	1.852	100	4273807.00	1.879	200	7743399.00	1.764
n-Propylbenzene	50.0	3165794.00	2.693	100	6394031.00	2.811	200	11374760.0	2.592
o-Xylene	50.0	1112963.00	0.5319	100	2254029.00	0.4986	200	4063869.00	0.4507
p-Isopropyltoluene	50.0	2641045.00	2.246	100	5107611.00	2.246	200	9158172.00	2.087
sec-Butylbenzene	50.0	2970743.00	2.527	100	5844661.00	2.570	200	10562278.0	2.407
tert-Butylbenzene	50.0	518434.000	0.4410	100	1001449.00	0.4403	200	1808591.00	0.4121
trans-1,2-Dichloroethene	50.0	570094.000	0.2239	100	1206507.00	0.2209	200	1951060.00	0.2060
trans-1,3-Dichloropropene	50.0	768194.000	0.3671	100	1557615.00	0.3445	200	2818366.00	0.3125

INT_CAL - Modified 03/06/2008
PDF File ID: 1269830
Report generated 12/08/2008 11:15



Login Number: L08110782
Analytical Method: 8260B

Instrument ID: HPMS11
Initial Calibration Date: 25-NOV-08 21:08
Column ID: F

Analyte	WG289038-11		
	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	2776303.00	0.1848
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

INT_CAL - Modified 03/06/2008
PDF File ID: 1269830
Report generated 12/08/2008 11:15



Login Number: L08110782 Run Date: 11/25/2008 Sample ID: WG289038-12
Instrument ID: HPMS11 Run Time: 22:44 Method: 8260B
File ID: 11M55554 Analyst: WTD QC Key: STD
ICal Workgroup: WG289038 Cal ID: HPMS11 - 25-NOV-08

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Chloroform	CCC	20.0	21.8	ug/L	0.410	9.10	30	
1,1-Dichloroethene	CCC	20.0	20.0	ug/L	0.365	0.200	30	
1,2-Dichloropropane	CCC	20.0	20.6	ug/L	0.235	3.00	30	
Ethylbenzene	CCC	20.0	20.8	ug/L	0.436	4.00	30	
Toluene	CCC	20.0	20.0	ug/L	1.10	0.200	30	
Vinyl Chloride	CCC	20.0	21.8	ug/L	0.167	9.10	30	
Bromoform	SPCC	20.0	18.8	ug/L	0.127	5.90	30	
Chlorobenzene	SPCC	20.0	20.4	ug/L	0.792	1.90	30	
Chloromethane	SPCC	20.0	24.3	ug/L	0.215	21.6	30	
1,1-Dichloroethane	SPCC	20.0	20.3	ug/L	0.429	1.40	30	
1,1,2,2-Tetrachloroethane	SPCC	20.0	20.8	ug/L	0.353	4.20	30	
Acetone		20.0	26.4	ug/L	0.0626	31.9	30	*
Benzene		20.0	20.3	ug/L	0.824	1.60	30	
Bromobenzene		20.0	20.0	ug/L	0.624	0.100	30	
Bromochloromethane		20.0	21.6	ug/L	0.143	8.10	30	
Bromodichloromethane		20.0	21.9	ug/L	0.290	9.60	30	
Bromomethane		20.0	36.5	ug/L	0.172	82.5	30	*
2-Butanone		20.0	22.6	ug/L	0.0750	13.1	30	
n-Butylbenzene		20.0	19.8	ug/L	1.75	0.900	30	
sec-Butylbenzene		20.0	19.3	ug/L	2.38	3.50	30	
tert-Butylbenzene		20.0	19.3	ug/L	0.421	3.40	30	
Carbon Disulfide		20.0	17.7	ug/L	0.535	11.4	30	
Carbon Tetrachloride		20.0	20.7	ug/L	0.280	3.70	30	
Dibromochloromethane		20.0	21.5	ug/L	0.244	7.70	30	
Chloroethane		20.0	25.9	ug/L	0.172	29.4	30	
2-Chloroethyl Vinyl Ether		20.0	20.6	ug/L	0.105	3.20	30	
2-Chlorotoluene		20.0	19.7	ug/L	1.58	1.50	30	
4-Chlorotoluene		20.0	19.8	ug/L	1.65	1.10	30	
1,2-Dibromo-3-Chloropropane		20.0	19.7	ug/L	0.0666	1.40	30	
1,2-Dibromoethane		20.0	20.6	ug/L	0.194	2.90	30	
Dibromomethane		20.0	21.2	ug/L	0.106	5.80	30	
1,2-Dichlorobenzene		20.0	20.4	ug/L	1.14	2.10	30	
1,3-Dichlorobenzene		20.0	20.1	ug/L	1.22	0.500	30	
1,4-Dichlorobenzene		20.0	19.6	ug/L	1.24	1.90	30	
Dichlorodifluoromethane		20.0	28.5	ug/L	0.332	42.7	30	*
1,2-Dichloroethane		20.0	20.2	ug/L	0.325	1.20	30	
cis-1,2-Dichloroethene		20.0	20.7	ug/L	0.236	3.40	30	
trans-1,2-Dichloroethene		20.0	20.1	ug/L	0.212	0.600	30	
1,3-Dichloropropane		20.0	21.1	ug/L	0.335	5.40	30	
2,2-Dichloropropane		20.0	16.9	ug/L	0.195	15.3	30	
cis-1,3-Dichloropropene		20.0	20.4	ug/L	0.305	2.00	30	
trans-1,3-Dichloropropene		20.0	18.2	ug/L	0.293	9.00	30	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1269831
Report generated 12/08/2008 11:16



Login Number: L08110782 Run Date: 11/25/2008 Sample ID: WG289038-12
Instrument ID: HPMS11 Run Time: 22:44 Method: 8260B
File ID: 11M55554 Analyst: WTD QC Key: STD
ICal Workgroup: WG289038 Cal ID: HPMS11 - 25-NOV-08

Analyte	Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloropropene	20.0	19.9	ug/L	0.286	0.300	30	
2-Hexanone	20.0	22.0	ug/L	0.139	9.80	30	
Hexachlorobutadiene	20.0	20.3	ug/L	0.262	1.40	30	
Isopropylbenzene	20.0	18.6	ug/L	1.21	6.80	30	
p-Isopropyltoluene	20.0	19.2	ug/L	2.09	4.00	30	
4-Methyl-2-Pentanone	20.0	20.3	ug/L	0.0665	1.30	30	
Methylene Chloride	20.0	19.5	ug/L	0.213	2.70	30	
Naphthalene	20.0	20.6	ug/L	1.57	3.00	30	
n-Propylbenzene	20.0	19.3	ug/L	2.52	3.40	30	
Styrene	20.0	21.6	ug/L	0.928	7.80	30	
1,1,1,2-Tetrachloroethane	20.0	21.5	ug/L	0.275	7.30	30	
Tetrachloroethene	20.0	20.1	ug/L	0.231	0.500	30	
1,2,3-Trichlorobenzene	20.0	20.6	ug/L	0.674	2.90	30	
1,2,4-Trichlorobenzene	20.0	20.4	ug/L	0.764	1.90	30	
1,1,1-Trichloroethane	20.0	20.2	ug/L	0.350	1.00	30	
1,1,2-Trichloroethane	20.0	21.7	ug/L	0.193	8.70	30	
Trichloroethene	20.0	19.1	ug/L	0.254	4.40	30	
Trichlorofluoromethane	20.0	22.8	ug/L	0.431	14.1	30	
1,2,3-Trichloropropane	20.0	20.1	ug/L	0.128	0.400	30	
1,2,4-Trimethylbenzene	20.0	20.1	ug/L	2.06	0.600	30	
1,3,5-Trimethylbenzene	20.0	19.8	ug/L	2.00	0.800	30	
Vinyl Acetate	20.0	27.6	ug/L	0.134	38.1	40	
o-Xylene	20.0	21.1	ug/L	0.533	5.30	30	
m-,p-Xylene	40.0	42.2	ug/L	0.541	5.50	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

Login Number: L08110782 Run Date: 11/29/2008 Sample ID: WG289211-02
Instrument ID: HPMS11 Run Time: 16:10 Method: 8260B
File ID: 11M55638 Analyst: MES QC Key: STD
Workgroup (AAB#): WG289214 Cal ID: HPMS11 - 25-NOV-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	54.0	ug/L	0.406	8.07	20	
1,1-Dichloroethene	CCC	50.0	57.7	ug/L	0.423	15.4	20	
1,2-Dichloropropane	CCC	50.0	50.3	ug/L	0.229	0.643	20	
Ethylbenzene	CCC	50.0	52.3	ug/L	0.438	4.53	20	
Toluene	CCC	50.0	53.0	ug/L	1.16	6.01	20	
Vinyl Chloride	CCC	50.0	50.4	ug/L	0.147	0.814	20	
Bromoform	SPCC	50.0	44.2	ug/L	0.120	11.5	40	
Chlorobenzene	SPCC	50.0	51.6	ug/L	0.802	3.17	40	
Chloromethane	SPCC	50.0	40.1	ug/L	0.146	19.9	40	
1,1-Dichloroethane	SPCC	50.0	55.3	ug/L	0.468	10.6	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	47.6	ug/L	0.322	4.82	40	
Acetone		50.0	42.8	ug/L	0.0407	14.3	40	
Benzene		50.0	52.4	ug/L	0.850	4.80	40	
Bromobenzene		50.0	51.9	ug/L	0.647	3.84	40	
Bromochloromethane		50.0	51.5	ug/L	0.136	3.02	40	
Bromodichloromethane		50.0	52.2	ug/L	0.277	4.46	40	
Bromomethane		50.0	69.4	ug/L	0.130	38.8	40	
2-Butanone		50.0	41.0	ug/L	0.0544	17.9	40	
n-Butylbenzene		50.0	52.5	ug/L	1.86	5.07	40	
sec-Butylbenzene		50.0	52.3	ug/L	2.58	4.53	40	
tert-Butylbenzene		50.0	52.3	ug/L	0.455	4.65	40	
Carbon Disulfide		50.0	55.3	ug/L	0.656	10.6	40	
Carbon Tetrachloride		50.0	60.6	ug/L	0.327	21.3	40	
Dibromochloromethane		50.0	53.0	ug/L	0.240	6.04	40	
Chloroethane		50.0	60.1	ug/L	0.160	20.1	40	
2-Chloroethyl Vinyl Ether		50.0	43.5	ug/L	0.0886	12.9	40	
2-Chlorotoluene		50.0	59.1	ug/L	1.90	18.3	40	
4-Chlorotoluene		50.0	46.8	ug/L	1.56	6.33	40	
1,2-Dibromo-3-Chloropropane		50.0	42.6	ug/L	0.0576	14.8	40	
1,2-Dibromoethane		50.0	44.8	ug/L	0.170	10.3	40	
Dibromomethane		50.0	45.3	ug/L	0.0907	9.31	40	
1,2-Dichlorobenzene		50.0	49.2	ug/L	1.09	1.62	40	
1,3-Dichlorobenzene		50.0	52.0	ug/L	1.26	4.08	40	
1,4-Dichlorobenzene		50.0	50.5	ug/L	1.27	0.947	40	
Dichlorodifluoromethane		50.0	61.4	ug/L	0.286	22.8	40	
1,2-Dichloroethane		50.0	46.2	ug/L	0.297	7.59	40	
cis-1,2-Dichloroethene		50.0	52.6	ug/L	0.240	5.19	40	
trans-1,2-Dichloroethene		50.0	55.8	ug/L	0.235	11.6	40	
1,3-Dichloropropane		50.0	46.2	ug/L	0.293	7.64	40	
2,2-Dichloropropane		50.0	54.4	ug/L	0.287	8.82	40	
cis-1,3-Dichloropropene		50.0	52.7	ug/L	0.315	5.44	40	
trans-1,3-Dichloropropene		50.0	52.2	ug/L	0.336	4.34	40	

CCV - Modified 03/05/2008
PDF File ID: 1269833
Report generated 12/08/2008 11:16



Login Number: L08110782	Run Date: 11/29/2008	Sample ID: WG289211-02
Instrument ID: HPMS11	Run Time: 16:10	Method: 8260B
File ID: 11M55638	Analyst: MES	QC Key: STD
Workgroup (AAB#): WG289214	Cal ID: HPMS11 - 25-NOV-08	
Matrix: WATER		

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene		50.0	54.4	ug/L	0.312	8.87	40	
2-Hexanone		50.0	42.8	ug/L	0.109	14.3	40	
Hexachlorobutadiene		50.0	48.8	ug/L	0.252	2.40	40	
Isopropylbenzene		50.0	52.6	ug/L	1.37	5.23	40	
p-Isopropyltoluene		50.0	52.6	ug/L	2.29	5.28	40	
4-Methyl-2-Pentanone		50.0	39.0	ug/L	0.0512	22.0	40	
Methylene Chloride		50.0	50.6	ug/L	0.216	1.13	40	
Naphthalene		50.0	42.1	ug/L	1.28	15.9	40	
n-Propylbenzene		50.0	55.3	ug/L	2.89	10.5	40	
Styrene		50.0	52.1	ug/L	0.897	4.27	40	
1,1,1,2-Tetrachloroethane		50.0	52.0	ug/L	0.266	3.97	40	
Tetrachloroethene		50.0	52.5	ug/L	0.242	5.01	40	
1,2,3-Trichlorobenzene		50.0	42.5	ug/L	0.557	14.9	40	
1,2,4-Trichlorobenzene		50.0	45.0	ug/L	0.675	9.93	40	
1,1,1-Trichloroethane		50.0	54.8	ug/L	0.380	9.67	40	
1,1,2-Trichloroethane		50.0	46.9	ug/L	0.167	6.19	40	
Trichloroethene		50.0	50.0	ug/L	0.260	0.0552	40	
Trichlorofluoromethane		50.0	58.4	ug/L	0.441	16.8	40	
1,2,3-Trichloropropane		50.0	45.3	ug/L	0.116	9.44	40	
1,2,4-Trimethylbenzene		50.0	53.5	ug/L	2.19	7.06	40	
1,3,5-Trimethylbenzene		50.0	54.5	ug/L	2.19	9.06	40	
Vinyl Acetate		50.0	41.3	ug/L	0.105	17.5	40	
o-Xylene		50.0	52.5	ug/L	0.531	4.96	40	
m-,p-Xylene		100	105	ug/L	0.536	4.53	40	
1,2-Dichloroethene		100	108	ug/L	0.237	8.39	40	
Xylenes		150	157	ug/L	0.533	4.68	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08110782 Run Date: 11/30/2008 Sample ID: WG289215-02
Instrument ID: HPMS11 Run Time: 10:28 Method: 8260B
File ID: 11M55670 Analyst: FJB QC Key: STD
Workgroup (AAB#): WG289216 Cal ID: HPMS11 - 25-NOV-08
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Chloroform	CCC	50.0	54.1	ug/L	0.407	8.26	20	
1,1-Dichloroethene	CCC	50.0	57.2	ug/L	0.419	14.4	20	
1,2-Dichloropropane	CCC	50.0	50.1	ug/L	0.229	0.230	20	
Ethylbenzene	CCC	50.0	52.8	ug/L	0.443	5.61	20	
Toluene	CCC	50.0	51.7	ug/L	1.13	3.32	20	
Vinyl Chloride	CCC	50.0	55.9	ug/L	0.162	11.8	20	
Bromoform	SPCC	50.0	40.7	ug/L	0.110	18.5	40	
Chlorobenzene	SPCC	50.0	50.4	ug/L	0.783	0.781	40	
Chloromethane	SPCC	50.0	38.7	ug/L	0.141	22.6	40	
1,1-Dichloroethane	SPCC	50.0	54.9	ug/L	0.464	9.75	40	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.7	ug/L	0.303	10.7	40	
Acetone		50.0	43.5	ug/L	0.0413	12.9	40	
Benzene		50.0	51.8	ug/L	0.841	3.62	40	
Bromobenzene		50.0	50.1	ug/L	0.625	0.213	40	
Bromochloromethane		50.0	49.0	ug/L	0.130	2.04	40	
Bromodichloromethane		50.0	51.4	ug/L	0.272	2.79	40	
Bromomethane		50.0	50.2	ug/L	0.0943	0.435	40	
2-Butanone		50.0	40.1	ug/L	0.0532	19.8	40	
n-Butylbenzene		50.0	54.0	ug/L	1.91	7.94	40	
sec-Butylbenzene		50.0	53.1	ug/L	2.62	6.12	40	
tert-Butylbenzene		50.0	52.3	ug/L	0.455	4.54	40	
Carbon Disulfide		50.0	54.3	ug/L	0.644	8.61	40	
Carbon Tetrachloride		50.0	59.5	ug/L	0.321	18.9	40	
Dibromochloromethane		50.0	48.7	ug/L	0.221	2.63	40	
Chloroethane		50.0	55.0	ug/L	0.146	10.1	40	
2-Chloroethyl Vinyl Ether		50.0	39.6	ug/L	0.0806	20.8	40	
2-Chlorotoluene		50.0	61.3	ug/L	1.97	22.6	40	
4-Chlorotoluene		50.0	48.4	ug/L	1.62	3.28	40	
1,2-Dibromo-3-Chloropropane		50.0	38.6	ug/L	0.0522	22.8	40	
1,2-Dibromoethane		50.0	42.8	ug/L	0.162	14.4	40	
Dibromomethane		50.0	44.6	ug/L	0.0893	10.7	40	
1,2-Dichlorobenzene		50.0	48.7	ug/L	1.08	2.69	40	
1,3-Dichlorobenzene		50.0	51.5	ug/L	1.25	2.96	40	
1,4-Dichlorobenzene		50.0	49.6	ug/L	1.25	0.833	40	
Dichlorodifluoromethane		50.0	58.5	ug/L	0.272	17.0	40	
1,2-Dichloroethane		50.0	46.5	ug/L	0.298	7.08	40	
cis-1,2-Dichloroethene		50.0	51.6	ug/L	0.235	3.22	40	
trans-1,2-Dichloroethene		50.0	54.5	ug/L	0.229	8.95	40	
1,3-Dichloropropane		50.0	43.3	ug/L	0.275	13.3	40	
2,2-Dichloropropane		50.0	46.5	ug/L	0.243	7.00	40	
cis-1,3-Dichloropropene		50.0	51.1	ug/L	0.306	2.24	40	
trans-1,3-Dichloropropene		50.0	47.9	ug/L	0.309	4.19	40	

CCV - Modified 03/05/2008
PDF File ID: 1269833
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Login Number: L08110782 Run Date: 11/30/2008 Sample ID: WG289215-02
Instrument ID: HPMS11 Run Time: 10:28 Method: 8260B
File ID: 11M55670 Analyst: FJB QC Key: STD
Workgroup (AAB#): WG289216 Cal ID: HPMS11 - 25-NOV-08
Matrix: WATER

Analyte	Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloropropene	50.0	53.7	ug/L	0.308	7.48	40	
2-Hexanone	50.0	39.2	ug/L	0.0996	21.6	40	
Hexachlorobutadiene	50.0	51.8	ug/L	0.268	3.56	40	
Isopropylbenzene	50.0	52.0	ug/L	1.35	4.06	40	
p-Isopropyltoluene	50.0	53.1	ug/L	2.31	6.19	40	
4-Methyl-2-Pentanone	50.0	36.6	ug/L	0.0480	26.9	40	
Methylene Chloride	50.0	49.4	ug/L	0.211	1.20	40	
Naphthalene	50.0	38.7	ug/L	1.18	22.6	40	
n-Propylbenzene	50.0	56.0	ug/L	2.92	11.9	40	
Styrene	50.0	51.5	ug/L	0.886	3.02	40	
1,1,1,2-Tetrachloroethane	50.0	51.2	ug/L	0.262	2.39	40	
Tetrachloroethene	50.0	50.7	ug/L	0.233	1.33	40	
1,2,3-Trichlorobenzene	50.0	40.4	ug/L	0.529	19.2	40	
1,2,4-Trichlorobenzene	50.0	43.6	ug/L	0.653	12.9	40	
1,1,1-Trichloroethane	50.0	54.8	ug/L	0.380	9.59	40	
1,1,2-Trichloroethane	50.0	43.5	ug/L	0.154	13.1	40	
Trichloroethene	50.0	49.9	ug/L	0.259	0.286	40	
Trichlorofluoromethane	50.0	57.9	ug/L	0.438	15.9	40	
1,2,3-Trichloropropane	50.0	40.8	ug/L	0.104	18.3	40	
1,2,4-Trimethylbenzene	50.0	53.9	ug/L	2.20	7.81	40	
1,3,5-Trimethylbenzene	50.0	55.6	ug/L	2.24	11.1	40	
Vinyl Acetate	50.0	43.1	ug/L	0.112	13.7	40	
o-Xylene	50.0	51.8	ug/L	0.524	3.57	40	
m-,p-Xylene	100	105	ug/L	0.539	5.12	40	
1,2-Dichloroethene	100	106	ug/L	0.232	6.08	40	
Xylenes	150	157	ug/L	0.531	4.60	40	

* Exceeds %D Criteria

CCC Calibration Check Compounds

SPCC System Performance Check Compounds

Login Number: L08110782
Instrument ID: HPMS11
Workgroup (AAB#): WG289214

CCV Number: WG289211-02
CAL ID: HPMS11 - 25-NOV-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG289211-02	NA	NA	653760	1258337	1595726
Upper Limit	NA	NA	1307520	2516674	3191452
Lower Limit	NA	NA	326880	629169	797863
<u>L08110782-01</u>	<u>1.00</u>	<u>01</u>	<u>546662</u>	<u>1002660</u>	<u>1240620</u>
L08110782-02	1.00	01	537398	980934	1213256
L08110782-03	1.00	01	521180	957235	1186102
L08110782-04	1.00	01	525316	952014	1161843
L08110782-05	1.00	01	519554	964256	1189244
L08110782-08	1.00	01	547934	1009027	1249904
WG289214-01	1.00	01	580607	1080983	1343804
WG289214-02	1.00	01	606794	1085036	1307921
WG289214-03	1.00	01	615856	1090120	1299933

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

Underline = Response outside limits

Login Number: L08110782
Instrument ID: HPMS11
Workgroup (AAB#): WG289216

CCV Number: WG289215-02
CAL ID: HPMS11 - 25-NOV-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG289215-02	NA	NA	536506	1045740	1274391
Upper Limit	NA	NA	1073012	2091480	2548782
Lower Limit	NA	NA	268253	522870	637196
<u>L08110782-04</u>	<u>10.0</u>	<u>DL01</u>	<u>522210</u>	<u>985330</u>	<u>1205321</u>
WG289216-01	1.00	01	501598	956593	1180586
WG289216-02	1.00	01	533684	983349	1184010
WG289216-03	1.00	01	550340	988741	1183476

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

Underline = Response outside limits

Login Number: L08110782
Instrument ID: HPMS11
Workgroup (AAB#): WG289214

CCV Number: WG289211-02
CAL ID: HPMS11 - 25-NOV-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG289211-02	NA	NA	16.51	13.71	10.09
Upper Limit	NA	NA	17.01	14.21	10.59
Lower Limit	NA	NA	16.01	13.21	9.59
<u>L08110782-01</u>	<u>1.00</u>	<u>01</u>	<u>16.512</u>	<u>13.71</u>	<u>10.092</u>
L08110782-02	1.00	01	16.513	13.711	10.092
L08110782-03	1.00	01	16.502	13.71	10.092
L08110782-04	1.00	01	16.502	13.71	10.092
L08110782-05	1.00	01	16.502	13.711	10.092
L08110782-08	1.00	01	16.502	13.71	10.092
WG289214-01	1.00	01	16.502	13.71	10.092
WG289214-02	1.00	01	16.502	13.711	10.092
WG289214-03	1.00	01	16.502	13.71	10.092

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

Underline = Response outside limits

Login Number: L08110782
Instrument ID: HPMS11
Workgroup (AAB#): WG289216

CCV Number: WG289215-02
CAL ID: HPMS11 - 25-NOV-08
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG289215-02	NA	NA	16.51	13.71	10.09
Upper Limit	NA	NA	17.01	14.21	10.59
Lower Limit	NA	NA	16.01	13.21	9.59
<u>L08110782-04</u>	<u>10.0</u>	<u>DL01</u>	<u>16.512</u>	<u>13.71</u>	<u>10.092</u>
WG289216-01	1.00	01	16.513	13.711	10.092
WG289216-02	1.00	01	16.502	13.711	10.092
WG289216-03	1.00	01	16.513	13.711	10.092

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

00081967

L08110782

12/09/08 09:06

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
35AWW01-111908	L08110782-01	6010B	1	25-NOV-08
LHSMW06-111908	L08110782-02	6010B	1	25-NOV-08
LHSMW06-111908	L08110782-02	6010B	100	25-NOV-08
LHSMW03-111908	L08110782-03	6010B	1	25-NOV-08
LHSMW07-111908	L08110782-04	6010B	1	25-NOV-08
LHSMW07-111908	L08110782-04	6010B	2	25-NOV-08
LHSMW07-111908	L08110782-04	6010B	100	25-NOV-08
35AWW05-112108	L08110782-05	6010B	1	25-NOV-08
35AWW05-112108	L08110782-05	6010B	2	25-NOV-08
35AWW05-112108	L08110782-05	6010B	10	25-NOV-08
03SB11-(10-11)	L08110782-06	6010B	1	25-NOV-08
03SB11-(BOTTOM)	L08110782-07	6010B	1	25-NOV-08



Sample Number: **L08110782-01**
 Client ID: **35AWW01-111908**
 Matrix: **Water**
 Workgroup Number: **WG289427**
 Collect Date: **11/19/2008 15:15**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **SLP**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **12/01/2008 12:48**
 Cal Date: **12/02/2008 11:16**
 Run Date: **12/03/2008 00:26**
 File ID: **P2.120308.002611**

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	45.2		0.200	0.100
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6	4.40		0.100	0.0250
Magnesium, Total	7439-95-4	25.0		0.500	0.250
Potassium, Total	7440-09-7	2.37		1.00	0.250
Sodium, Total	7440-23-5	75.4		0.500	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

Sample Number: **L08110782-02**
 Client ID: **LHSMW06-111908**
 Matrix: **Water**
 Workgroup Number: **WG289427**
 Collect Date: **11/19/2008 12:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **SLP**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **12/01/2008 12:48**
 Cal Date: **12/02/2008 11:16**
 Run Date: **12/03/2008 00:32**
 File ID: **P2.120308.003227**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5	0.294		0.100	0.0500
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Calcium, Total	7440-70-2	184		0.200	0.100
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6	1.31		0.100	0.0250
Magnesium, Total	7439-95-4	82.0		0.500	0.250
Potassium, Total	7440-09-7	0.509	J	1.00	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.00545	J	0.0200	0.00500

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: **L08110782**Report Date : **December 9, 2008**

00081970

Sample Number: **L08110782-02**
Client ID: **LHSMW06-111908**
Matrix: **Water**
Workgroup Number: **WG289427**
Collect Date: **11/19/2008 12:40**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **SLP**
Dilution: **100**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **12/01/2008 12:48**
Cal Date: **12/03/2008 11:08**
Run Date: **12/03/2008 12:55**
File ID: **P2.120308.125508**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5	416		50.0	25.0

Report Number: **L08110782**Report Date : **December 9, 2008**

00081971

Sample Number: **L08110782-03**
 Client ID: **LHSMW03-111908**
 Matrix: **Water**
 Workgroup Number: **WG289427**
 Collect Date: **11/19/2008 09:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **SLP**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **12/01/2008 12:48**
 Cal Date: **12/02/2008 11:16**
 Run Date: **12/03/2008 00:38**
 File ID: **P2.120308.003848**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5	0.390		0.100	0.0500
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Calcium, Total	7440-70-2	30.3		0.200	0.100
Cobalt, Total	7440-48-4	0.00317	J	0.00500	0.00250
Iron, Total	7439-89-6	0.608		0.100	0.0250
Magnesium, Total	7439-95-4	21.9		0.500	0.250
Potassium, Total	7440-09-7	1.69		1.00	0.250
Sodium, Total	7440-23-5	94.4		0.500	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

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

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289427**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **SLP**
 Dilution: **1**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **12/01/2008 12:48**
 Cal Date: **12/02/2008 11:16**
 Run Date: **12/03/2008 00:45**
 File ID: **P2.120308.004505**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cobalt, Total	7440-48-4		U	0.00500	0.00250
Iron, Total	7439-89-6		U	0.100	0.0250
Potassium, Total	7440-09-7	4.61		1.00	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500
Zinc, Total	7440-66-6	0.0290		0.0200	0.00500

U Not detected at or above adjusted sample detection limit

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289427**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **DL01**

PrePrep Method: **NONE**
 Prep Method: **3005A**
 Analytical Method: **6010B**
 Analyst: **SLP**
 Dilution: **2**
 Units: **mg/L**

Instrument: **PE-ICP2**
 Prep Date: **12/01/2008 12:48**
 Cal Date: **12/03/2008 11:08**
 Run Date: **12/03/2008 13:01**
 File ID: **P2.120308.130121**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5		U	0.200	0.100
Calcium, Total	7440-70-2	834		0.400	0.200
Magnesium, Total	7439-95-4	517		1.00	0.500

U Not detected at or above adjusted sample detection limit

Report Number: **L08110782**Report Date : **December 9, 2008**

00081974

Sample Number: **L08110782-04**
Client ID: **LHSMW07-111908**
Matrix: **Water**
Workgroup Number: **WG289427**
Collect Date: **11/21/2008 13:05**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **SLP**
Dilution: **100**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **12/01/2008 12:48**
Cal Date: **12/03/2008 11:08**
Run Date: **12/03/2008 13:07**
File ID: **P2.120308.130747**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5	1340		50.0	25.0

Sample Number: **L08110782-05**
Client ID: **35AWW05-112108**
Matrix: **Water**
Workgroup Number: **WG289427**
Collect Date: **11/21/2008 17:30**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **SLP**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **12/01/2008 12:48**
Cal Date: **12/02/2008 11:16**
Run Date: **12/03/2008 00:52**
File ID: **P2.120308.005208**

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	1.91		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	53.8		0.500	0.250
Zinc, Total	7440-66-6		U	0.0200	0.00500

U Not detected at or above adjusted sample detection limit

Report Number: **L08110782**Report Date : **December 9, 2008**

00081976

Sample Number: **L08110782-05**
Client ID: **35AWW05-112108**
Matrix: **Water**
Workgroup Number: **WG289427**
Collect Date: **11/21/2008 17:30**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **SLP**
Dilution: **2**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **12/01/2008 12:48**
Cal Date: **12/03/2008 11:08**
Run Date: **12/03/2008 13:14**
File ID: **P2.120308.131408**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Sodium, Total	7440-23-5	239		1.00	0.500
Vanadium, Total	7440-62-2		U	0.0200	0.0100

U Not detected at or above adjusted sample detection limit

Report Number: **L08110782**Report Date : **December 9, 2008**

00081977

Sample Number: **L08110782-05**
Client ID: **35AWW05-112108**
Matrix: **Water**
Workgroup Number: **WG289427**
Collect Date: **11/21/2008 17:30**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **SLP**
Dilution: **10**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **12/01/2008 12:48**
Cal Date: **12/03/2008 11:08**
Run Date: **12/03/2008 13:44**
File ID: **P2.120308.134447**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Potassium, Total	7440-09-7	214		10.0	2.50

Sample Number: **L08110782-06**
 Client ID: **03SB11-(10-11)**
 Matrix: **Soil**
 Workgroup Number: **WG289309**
 Collect Date: **11/18/2008 09:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3051**
 Analytical Method: **6010B**
 Analyst: **EDA**
 Dilution: **1**
 Units: **mg/kg**

Instrument: **ICP-THERMO2**
 Prep Date: **12/01/2008 08:37**
 Cal Date: **12/01/2008 10:06**
 Run Date: **12/01/2008 14:34**
 File ID: **T2.120108.143420**
 Percent Solid: **89.3**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5	7080		16.6	8.28
Silver, Total	7440-22-4	0.209	J	1.66	0.207
Barium, Total	7440-39-3	29.4		0.414	0.0828
Beryllium, Total	7440-41-7	0.341	J	0.414	0.00994
Calcium, Total	7440-70-2	718		8.28	4.14
Cadmium, Total	7440-43-9		U	0.414	0.0414
Cobalt, Total	7440-48-4	1.50		0.828	0.0994
Chromium, Total	7440-47-3	9.11		0.828	0.0994
Copper, Total	7440-50-8	3.91		0.828	0.414
Iron, Total	7439-89-6	7800		2.48	0.828
Potassium, Total	7440-09-7	588		41.4	20.7
Magnesium, Total	7439-95-4	862		20.7	9.94
Manganese, Total	7439-96-5	32.8		0.414	0.0828
Sodium, Total	7440-23-5	331		20.7	4.14
Nickel, Total	7440-02-0	7.22		1.66	0.414
Antimony, Total	7440-36-0		U	0.828	0.414
Vanadium, Total	7440-62-2	14.3		0.414	0.207
Zinc, Total	7440-66-6	16.7		0.828	0.414

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: **L08110782**Report Date : **December 9, 2008**

00081979

Sample Number: **L08110782-07**
 Client ID: **03SB11-(BOTTOM)**
 Matrix: **Soil**
 Workgroup Number: **WG289309**
 Collect Date: **11/18/2008 10:15**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3051**
 Analytical Method: **6010B**
 Analyst: **EDA**
 Dilution: **1**
 Units: **mg/kg**

Instrument: **ICP-THERMO2**
 Prep Date: **12/01/2008 08:38**
 Cal Date: **12/01/2008 10:06**
 Run Date: **12/01/2008 14:57**
 File ID: **T2.120108.145740**
 Percent Solid: **84.9**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Aluminum, Total	7429-90-5	4740		17.1	8.53
Silver, Total	7440-22-4		U	1.71	0.213
Barium, Total	7440-39-3	32.8		0.427	0.0853
Beryllium, Total	7440-41-7	0.226	J	0.427	0.0102
Calcium, Total	7440-70-2	1830		8.53	4.27
Cadmium, Total	7440-43-9	0.125	J	0.427	0.0427
Cobalt, Total	7440-48-4	13.1		0.853	0.102
Chromium, Total	7440-47-3	6.00		0.853	0.102
Copper, Total	7440-50-8	3.09		0.853	0.427
Iron, Total	7439-89-6	2090		2.56	0.853
Potassium, Total	7440-09-7	364		42.7	21.3
Magnesium, Total	7439-95-4	1680		21.3	10.2
Manganese, Total	7439-96-5	23.7		0.427	0.0853
Sodium, Total	7440-23-5	418		21.3	4.27
Nickel, Total	7440-02-0	14.8		1.71	0.427
Antimony, Total	7440-36-0		U	0.853	0.427
Vanadium, Total	7440-62-2	3.13		0.427	0.213
Zinc, Total	7440-66-6	22.0		0.853	0.427

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: WG289244
Analyst: PDM
Spike Analyst: VC
Run Date: 12/01/2008 08:41
Method: 3051

SOP: ME406 Revision 11
Spike Solution: STD27613
Spike Witness: VC
HNO3 Lot #: COA13530
hcl Lot #: COA13324
Digest tubes Lot #: COA13407

SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
WG289244-02	BLANK	7	1 g	50 mL	176.012 g	176.018 g		
WG289244-03	LCS	7	1 g	50 mL	181.136 g	181.14 g	5 mL	
L08110782-06	SAMP	7	1.352 g	50 mL	178.862 g	178.72 g		12/02/08
WG289244-01	REF	7	1.381 g	50 mL	175.989 g	175.991 g		
L08110782-07	SAMP	7	1.381 g	50 mL	175.989 g	175.991 g		12/02/08
WG289244-04	MS	7	1.381 g	50 mL	180.227 g	180.255 g	5 mL	
WG289244-05	MSD	7	1.381 g	50 mL	181.587 g	181.588 g	5 mL	

Analyst: Pierce Morris

Reviewer: [Signature]

Workgroup: WG289268

Analyst: VC

Spike Analyst: VC

Method: 3005A

Run Date: 12/01/2008 09:33

Hotblock Start Temp: 95 @ 08:30

Hotblock End Temp: 95 @ 12:30

SOP: ME401 Revision 13

Spike Solution: STD27612

Spike Witness: ED

HN03 Lot #: COA13530

hcl Lot #: COA13324

Digest tubes Lot #: COA13407

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG289268-02	BLANK	1	50 mL	50 mL		
2	WG289268-03	LCS	1	50 mL	50 mL	5 mL	
3	WG289268-01	REF	1	50 mL	50 mL		
4	L08110624-01	RS01	1	50 mL	50 mL		12/05/08
5	WG289268-04	MS	1	50 mL	50 mL	5 mL	
6	L08110624-02	MS01	1	50 mL	50 mL	5 mL	12/05/08
7	WG289268-05	MSD	1	50 mL	50 mL	5 mL	
8	L08110624-03	SD01	1	50 mL	50 mL	5 mL	12/05/08
9	L08110624-04	SAMP	1	50 mL	50 mL		12/05/08
10	L08110624-05	SAMP	1	50 mL	50 mL		12/05/08
11	L08110624-06	SAMP	1	50 mL	50 mL		12/05/08
12	L08110624-07	SAMP	1	50 mL	50 mL		12/05/08
13	L08110624-08	SAMP	1	50 mL	50 mL		12/05/08
14	L08110624-09	SAMP	1	50 mL	50 mL		12/05/08
15	L08110670-01	SAMP	1	50 mL	50 mL		12/05/08
16	L08110670-02	SAMP	1	50 mL	50 mL		12/05/08
17	L08110670-03	SAMP	1	50 mL	50 mL		12/05/08
18	L08110670-04	SAMP	1	50 mL	50 mL		12/05/08
19	L08110782-01	SAMP	1	50 mL	50 mL		12/05/08
20	L08110782-02	SAMP	1	50 mL	50 mL		12/05/08
21	L08110782-03	SAMP	1	50 mL	50 mL		12/05/08
22	L08110782-04	SAMP	1	50 mL	50 mL		12/05/08
23	L08110782-05	SAMP	1	50 mL	50 mL		12/05/08

Analyst: Vicki Collier

Reviewer: Emily Decker

00081986

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-THERMO2 Dataset: 120108T2.1
 Analyst1: EDA Analyst2: N/A
 Method: 6010B SOP: ME600G Rev: 8
 Maintenance Log ID: 26779

Calibration Std: STD29881 ICV/CCV Std: STD29977 Post Spike: STD27612
 ICSA: STD29915 ICSAB: STD29913
 Workgroups: 289238,239309,289239

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	T2.120108.094300	WG289367-01	Calibration Point		1		12/01/08 09:43
2	T2.120108.094852	WG289367-02	Calibration Point		1		12/01/08 09:48
3	T2.120108.095447	WG289367-03	Calibration Point		1		12/01/08 09:54
4	T2.120108.100042	WG289367-04	Calibration Point		1		12/01/08 10:00
5	T2.120108.100626	WG289367-05	Calibration Point		1		12/01/08 10:06
6	T2.120108.101207	WG289367-06	Initial Calibration Verification		1		12/01/08 10:12
7	T2.120108.101751	WG289367-07	Initial Calib Blank		1		12/01/08 10:17
8	T2.120108.102346	WG289367-08	Interference Check		1		12/01/08 10:23
9	T2.120108.102937	WG289367-09	Interference Check		1		12/01/08 10:29
10	T2.120108.103522	WG289367-10	CCV		1		12/01/08 10:35
11	T2.120108.104103	WG289367-11	CCB		1		12/01/08 10:41
12	T2.120108.104658	WG289122-02	Method/Prep Blank	1/50	1		12/01/08 10:46
13	T2.120108.105252	WG289122-03	Laboratory Control S	1/50	1		12/01/08 10:52
14	T2.120108.105846	L08110548-20	463-G0037	1.34/50	1		12/01/08 10:58
15	T2.120108.110430	WG289238-01	Post Digestion Spike		1	L08110548-20	12/01/08 11:04
16	T2.120108.111011	WG289238-02	Serial Dilution		5	L08110548-20	12/01/08 11:10
17	T2.120108.111602	WG289238-02	Serial Dilution		25	L08110548-20	12/01/08 11:16
18	T2.120108.112156	L08110548-21	463-G0039	1.306/50	1		12/01/08 11:21
19	T2.120108.112740	L08110548-22	463-G0040	1.441/50	1		12/01/08 11:27
20	T2.120108.113327	L08110548-23	463-G0041	1.438/50	1		12/01/08 11:33
21	T2.120108.113913	L08110548-24	463-G0001	1.384/50	1		12/01/08 11:39
22	T2.120108.114502	WG289367-12	CCV		1		12/01/08 11:45
23	T2.120108.115044	WG289367-13	CCB		1		12/01/08 11:50
24	T2.120108.115639	L08110550-01	2810-G0003	1.333/50	1		12/01/08 11:56
25	T2.120108.120221	WG289122-01	Reference Sample		1	L08110550-02	12/01/08 12:02
26	T2.120108.120803	WG289122-04	Matrix Spike	1.343/50	1	L08110550-03	12/01/08 12:08
27	T2.120108.121344	WG289122-05	Matrix Spike Duplica	1.343/50	1	L08110550-04	12/01/08 12:13
28	T2.120108.121925	L08110550-05	2810-G0007	1.366/50	1		12/01/08 12:19
29	T2.120108.122507	L08110550-06	2810-G0009	1.35/50	1		12/01/08 12:25
30	T2.120108.123050	L08110550-07	2810-G0011	1.319/50	1		12/01/08 12:30
31	T2.120108.123633	L08110550-08	2810-G0013	1.335/50	1		12/01/08 12:36
32	T2.120108.124217	L08110550-09	2810-G0015	1.318/50	1		12/01/08 12:42
33	T2.120108.124801	L08110550-10	2810-G0017	1.33/50	1		12/01/08 12:48
34	T2.120108.125346	WG289367-14	CCV		1		12/01/08 12:53
35	T2.120108.125927	WG289367-15	CCB		1		12/01/08 12:59
36	T2.120108.130524	L08110550-11	2810-G0019	1.343/50	1		12/01/08 13:05
37	T2.120108.131108	L08110550-12	2810-G0021	1.349/50	1		12/01/08 13:11

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Maren Beery



00081987

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-THERMO2 Dataset: 120108T2.1
 Analyst1: EDA Analyst2: N/A
 Method: 6010B SOP: ME600G Rev: 8
 Maintenance Log ID: 26779

Calibration Std: STD29881 ICV/CCV Std: STD29977 Post Spike: STD27612
 ICSA: STD29915 ICSAB: STD29913

Workgroups: 289238,239309,289239

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	T2.120108.131652	L08110550-13	2810-G0023	1.339/50	1		12/01/08 13:16
39	T2.120108.132233	L08110550-14	2810-G0025	1.35/50	1		12/01/08 13:22
40	T2.120108.132824	L08110550-15	2810-G0027	1.313/50	1		12/01/08 13:28
41	T2.120108.133407	L08110550-16	2810-G0029	1.414/50	1		12/01/08 13:34
42	T2.120108.133949	L08110550-17	2810-G0031	1.333/50	1		12/01/08 13:39
43	T2.120108.134533	WG289367-16	CCV		1		12/01/08 13:45
44	T2.120108.135115	WG289367-17	CCB		1		12/01/08 13:51
45	T2.120108.135712	WG289244-02	Method/Prep Blank		1		12/01/08 13:57
46	T2.120108.140308	WG289244-03	Laboratory Control S		1		12/01/08 14:03
47	T2.120108.141102	WG289367-18	CCV		1		12/01/08 14:11
48	T2.120108.141641	WG289367-19	CCB		1		12/01/08 14:16
49	T2.120108.142238	WG289244-02	Method/Prep Blank	1/50	1		12/01/08 14:22
50	T2.120108.142835	WG289244-03	Laboratory Control S	1/50	1		12/01/08 14:28
51	T2.120108.143420	L08110782-06	03SB11-(10-11)	1.352/50	1		12/01/08 14:34
52	T2.120108.144009	WG289309-01	Post Digestion Spike		1	L08110782-06	12/01/08 14:40
53	T2.120108.144551	WG289309-02	Serial Dilution		5	L08110782-06	12/01/08 14:45
54	T2.120108.145144	WG289309-02	Serial Dilution		25	L08110782-06	12/01/08 14:51
55	T2.120108.145740	WG289244-01	Reference Sample		1	L08110782-07	12/01/08 14:57
56	T2.120108.150328	WG289244-04	Matrix Spike	1.381/50	1	L08110782-07	12/01/08 15:03
57	T2.120108.150910	WG289244-05	Matrix Spike Duplica	1.381/50	1	L08110782-07	12/01/08 15:09
58	T2.120108.151452	WG289367-20	CCV		1		12/01/08 15:14
59	T2.120108.152033	WG289367-21	CCB		1		12/01/08 15:20
60	T2.120108.152629	WG289145-02	Method/Prep Blank	1/50	1		12/01/08 15:26
61	T2.120108.153225	WG289145-03	Laboratory Control S	1/50	1		12/01/08 15:32
62	T2.120108.153818	L08110550-18	2810-G0033	1.429/50	1		12/01/08 15:38
63	T2.120108.154401	WG289239-01	Post Digestion Spike		1	L08110550-18	12/01/08 15:44
64	T2.120108.154941	WG289239-02	Serial Dilution		5	L08110550-18	12/01/08 15:49
65	T2.120108.155530	WG289239-02	Serial Dilution		25	L08110550-18	12/01/08 15:55
66	T2.120108.160122	L08110550-19	2810-G0035	1.331/50	1		12/01/08 16:01
67	T2.120108.160706	L08110550-20	2810-G0037	1.409/50	1		12/01/08 16:07
68	T2.120108.161247	L08110550-21	2810-G0039	1.381/50	1		12/01/08 16:12
69	T2.120108.161829	L08110550-22	2810-G0040	1.382/50	1		12/01/08 16:18
70	T2.120108.162413	WG289367-22	CCV		1		12/01/08 16:24
71	T2.120108.162955	WG289367-23	CCB		1		12/01/08 16:29
72	T2.120108.163551	L08110550-23	2810-G0041	1.318/50	1		12/01/08 16:35
73	T2.120108.164133	WG289145-01	Reference Sample		1	L08110550-25	12/01/08 16:41
74	T2.120108.164715	WG289145-04	Matrix Spike	1.372/50	1	L08110550-25	12/01/08 16:47

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Maren Beery



00081988

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-THERMO2 Dataset: 120108T2.1
 Analyst1: EDA Analyst2: N/A
 Method: 6010B SOP: ME600G Rev: 8
 Maintenance Log ID: 26779

Calibration Std: STD29881 ICV/CCV Std: STD29977 Post Spike: STD27612
 ICSA: STD29915 ICSAB: STD29913
 Workgroups: 289238,239309,289239

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	T2.120108.165258	WG289145-05	Matrix Spike Duplica	1.378/50	1	L08110550-25	12/01/08 16:52
76	T2.120108.165840	L08110636-01	14507-C0001	1.462/50	2		12/01/08 16:58
77	T2.120108.170425	L08110636-02	14507-C0002	1.419/50	2		12/01/08 17:04
78	T2.120108.171010	L08110636-03	14507-C0003	1.457/50	2		12/01/08 17:10
79	T2.120108.171554	L08110636-04	14507-C0004	1.481/50	2		12/01/08 17:15
80	T2.120108.172143	L08110636-05	14507-C0005	1.351/50	2		12/01/08 17:21
81	T2.120108.172727	L08110636-06	14507-C0006	1.338/50	2		12/01/08 17:27
82	T2.120108.173314	WG289367-24	CCV		1		12/01/08 17:33
83	T2.120108.173856	WG289367-25	CCB		1		12/01/08 17:38
84	T2.120108.174452	L08110636-07	14507-C0007	1.373/50	2		12/01/08 17:44
85	T2.120108.175035	L08110636-08	14507-G0001	1.308/50	2		12/01/08 17:50
86	T2.120108.175618	L08110636-09	14507-G0002	1.406/50	2		12/01/08 17:56
87	T2.120108.180204	L08110636-10	14517-C0001	1.334/50	2		12/01/08 18:02
88	T2.120108.180746	L08110636-11	14517-C0002	1.436/50	2		12/01/08 18:07
89	T2.120108.181331	L08110636-12	14517-C0003	1.388/50	2		12/01/08 18:13
90	T2.120108.181919	L08110636-13	14517-C0004	1.482/50	2		12/01/08 18:19
91	T2.120108.182509	WG289367-26	CCV		1		12/01/08 18:25
92	T2.120108.183051	WG289367-27	CCB		1		12/01/08 18:30

Maren Beery



00081989

Microbac Laboratories Inc.

Instrument Run Log

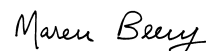
Instrument: PE-ICP2 Dataset: 120208H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.120208.105113	WG289468-01	Calibration Point		1		12/02/08 10:51
2	P2.120208.105723	WG289468-02	Calibration Point		1		12/02/08 10:57
3	P2.120208.110339	WG289468-03	Calibration Point		1		12/02/08 11:03
4	P2.120208.110954	WG289468-04	Calibration Point		1		12/02/08 11:09
5	P2.120208.111610	WG289468-05	Calibration Point		1		12/02/08 11:16
6	P2.120208.112236	WG289468-06	Initial Calibration Verification		1		12/02/08 11:22
7	P2.120208.112856	WG289468-07	Initial Calib Blank		1		12/02/08 11:28
8	P2.120208.113512	WG289468-08	Interference Check		1		12/02/08 11:35
9	P2.120208.114032	WG289468-09	Interference Check		1		12/02/08 11:40
10	P2.120208.114554	WG289468-10	CCV		1		12/02/08 11:45
11	P2.120208.115213	WG289468-11	CCB		1		12/02/08 11:52
12	P2.120208.121942	L08110643-01	NR-12-101-112108	50/50	100		12/02/08 12:19
13	P2.120208.122556	L08110643-02	NR-12-102-112108	50/50	100		12/02/08 12:25
14	P2.120208.123218	L08110643-03	NR-12-103-112108	50/50	2		12/02/08 12:32
15	P2.120208.123850	L08110643-03	NR-12-103-112108	50/50	50		12/02/08 12:38
16	P2.120208.124507	WG288890-03	Method/Prep Blank	50/50	1		12/02/08 12:45
17	P2.120208.125128	WG288890-04	Laboratory Control S	50/50	1		12/02/08 12:51
18	P2.120208.125748	L08110586-01	NR-12-113-112008	50/50	1		12/02/08 12:57
19	P2.120208.130410	L08110586-01	NR-12-113-112008	50/50	10		12/02/08 13:04
20	P2.120208.131028	L08110586-02	NR-12-110-112008	50/50	1		12/02/08 13:10
21	P2.120208.131701	L08110586-02	NR-12-110-112008	50/50	10		12/02/08 13:17
22	P2.120208.132325	WG289468-12	CCV		1		12/02/08 13:23
23	P2.120208.132943	WG289468-13	CCB		1		12/02/08 13:29
24	P2.120208.133558	L08110552-01	C6.8-111908-0T01	50/50	1		12/02/08 13:35
25	P2.120208.134215	WG288970-04	Serial Dilution		5	L08110552-01	12/02/08 13:42
26	P2.120208.134835	WG288970-03	Post Digestion Spike		1	L08110552-01	12/02/08 13:48
27	P2.120208.135500	WG288890-01	Reference Sample		1	L08110552-02	12/02/08 13:55
28	P2.120208.140124	WG288890-05	Matrix Spike	50/50	1	L08110552-02	12/02/08 14:01
29	P2.120208.140742	WG288890-06	Matrix Spike Duplica	50/50	1	L08110552-02	12/02/08 14:07
30	P2.120208.141404	WG289468-14	Interference Check		1		12/02/08 14:14
31	P2.120208.141927	WG289468-15	Interference Check		1		12/02/08 14:19
32	P2.120208.142448	WG289468-16	CCV		1		12/02/08 14:24
33	P2.120208.143105	WG289468-17	CCB		1		12/02/08 14:31
34	P2.120208.143720	L08110668-03	0274-023	5/50	1		12/02/08 14:37
35	P2.120208.144341	WG289340-03	Post Digestion Spike		1	L08110668-03	12/02/08 14:43
36	P2.120208.145002	L08110770-04	OUTFALL 003/COMP	50/50	10		12/02/08 14:50
37	P2.120208.145620	L08110623-01	MW127-112008-0T01	50/50	2		12/02/08 14:56




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Instrument Run Log

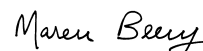
Instrument: PE-ICP2 Dataset: 120208H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	P2.120208.150247	WG289075-02	Serial Dilution		10	L08110623-01	12/02/08 15:02
39	P2.120208.150908	L08110623-17	MW281RR-112008-0T01	50/50	1		12/02/08 15:09
40	P2.120208.151525	L08110623-19	MW291-112008-0T01	50/50	1		12/02/08 15:15
41	P2.120208.152152	WG289468-18	CCV		1		12/02/08 15:21
42	P2.120208.152812	WG289468-19	CCB		1		12/02/08 15:28
43	P2.120208.153428	L08110690-04	OUTLET 003 BRANCH LEG	50/50	1		12/02/08 15:34
44	P2.120208.154046	L08110690-06	OUTLET 003 BRANCH LEG	50/50	1		12/02/08 15:40
45	P2.120208.154707	L08110697-01	AF11-24MBBREF	50/50	10		12/02/08 15:47
46	P2.120208.155324	L08110697-02	AF11-24MBBRIF	50/50	10		12/02/08 15:53
47	P2.120208.155948	WG289468-20	CCV		1		12/02/08 15:59
48	P2.120208.160606	WG289468-21	CCB		1		12/02/08 16:06
49	P2.120208.162213	WG289083-02	Method/Prep Blank	50/50	1		12/02/08 16:22
50	P2.120208.162847	WG289083-03	Laboratory Control S	50/50	1		12/02/08 16:28
51	P2.120208.163506	L08110621-01	MW178-112008-0T01	50/50	1		12/02/08 16:35
52	P2.120208.164132	L08110621-02	D3.5-112008-0T01	50/50	1		12/02/08 16:41
53	P2.120208.164749	WG289338-04	Serial Dilution		5	L08110621-02	12/02/08 16:47
54	P2.120208.165410	WG289338-03	Post Digestion Spike		1	L08110621-02	12/02/08 16:54
55	P2.120208.170035	WG289083-01	Reference Sample		1	L08110621-03	12/02/08 17:00
56	P2.120208.170700	WG289083-04	Matrix Spike	50/50	1	L08110621-03	12/02/08 17:07
57	P2.120208.171320	WG289083-05	Matrix Spike Duplica	50/50	1	L08110621-03	12/02/08 17:13
58	P2.120208.171944	L08110621-04	D3-112008-0T01	50/50	1		12/02/08 17:19
59	P2.120208.172612	WG289468-22	CCV		1		12/02/08 17:26
60	P2.120208.173229	WG289468-23	CCB		1		12/02/08 17:32
61	P2.120208.173847	L08110621-05	D2.8-112008-0T01	50/50	1		12/02/08 17:38
62	P2.120208.174503	L08110621-06	D2.3-112008-0T01	50/50	1		12/02/08 17:45
63	P2.120208.175125	L08110621-07	D1-112008-0T01	50/50	1		12/02/08 17:51
64	P2.120208.175650	L08110621-08	PBMW29M-112008-0T01	50/50	1		12/02/08 17:56
65	P2.120208.180316	L08110623-21	MW060R-111808-0T01	50/50	1		12/02/08 18:03
66	P2.120208.180935	L08110623-22	MW060R-111808-0D01	50/50	1		12/02/08 18:09
67	P2.120208.181559	L08110623-23	MW148-111808-0T01	50/50	1		12/02/08 18:15
68	P2.120208.182224	L08110623-24	MW148-111808-0D01	50/50	1		12/02/08 18:22
69	P2.120208.182844	L08110623-25	MW283-111808-0T01	50/50	1		12/02/08 18:28
70	P2.120208.183508	L08110623-26	MW283-111808-0D01	50/50	1		12/02/08 18:35
71	P2.120208.184133	WG289468-24	CCV		1		12/02/08 18:41
72	P2.120208.184753	WG289468-25	CCB		1		12/02/08 18:47
73	P2.120208.185411	L08110631-20	MR08-EB111908	50/50	1		12/02/08 18:54
74	P2.120208.190031	WG288970-03	Post Digestion Spike		5	L08110552-01	12/02/08 19:00




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Instrument Run Log

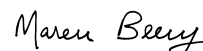
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 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	P2.120208.190648	WG288890-01	Reference Sample		10	L08110552-02	12/02/08 19:06
76	P2.120208.191309	WG288890-05	Matrix Spike	50/50	10	L08110552-02	12/02/08 19:13
77	P2.120208.191930	WG288890-06	Matrix Spike Duplica	50/50	10	L08110552-02	12/02/08 19:19
78	P2.120208.192545	L08110552-05	C7-111908-0T01	50/50	1		12/02/08 19:25
79	P2.120208.193209	L08110552-05	C7-111908-0T01	50/50	10		12/02/08 19:32
80	P2.120208.193831	L08110552-06	C5.8-111908-0T01	50/50	1		12/02/08 19:38
81	P2.120208.194450	L08110552-06	C5.8-111908-0T01	50/50	10		12/02/08 19:44
82	P2.120208.195111	L08110552-07	C5.8-111908-1T01	50/50	1		12/02/08 19:51
83	P2.120208.195736	WG289468-26	CCV		1		12/02/08 19:57
84	P2.120208.200353	WG289468-27	CCB		1		12/02/08 20:03
85	P2.120208.201011	L08110552-07	C5.8-111908-1T01	50/50	10		12/02/08 20:10
86	P2.120208.201632	L08110552-08	C6.8-111908-0D01	50/50	1		12/02/08 20:16
87	P2.120208.202251	WG288890-02	Reference Sample		1	L08110552-09	12/02/08 20:22
88	P2.120208.202915	WG288890-07	Matrix Spike	50/50	1	L08110552-09	12/02/08 20:29
89	P2.120208.203541	WG288890-08	Matrix Spike Duplica	50/50	1	L08110552-09	12/02/08 20:35
90	P2.120208.204201	L08110552-12	C7-111908-0D01	50/50	1		12/02/08 20:42
91	P2.120208.204820	L08110552-13	C5.8-111908-0D01	50/50	1		12/02/08 20:48
92	P2.120208.205441	L08110552-14	C5.8-111908-1D01	50/50	1		12/02/08 20:54
93	P2.120208.210100	WG289356-02	Method/Prep Blank	50/50	1		12/02/08 21:01
94	P2.120208.210715	WG289356-03	Laboratory Control S	50/50	1		12/02/08 21:07
95	P2.120208.211331	WG289468-28	CCV		1		12/02/08 21:13
96	P2.120208.211944	WG289468-29	CCB		1		12/02/08 21:19
97	P2.120208.212555	L08120016-01	DRL-Z-SS-1	50/50	1		12/02/08 21:25
98	P2.120208.213211	WG289426-02	Serial Dilution		5	L08120016-01	12/02/08 21:32
99	P2.120208.213830	WG289426-01	Post Digestion Spike		1	L08120016-01	12/02/08 21:38
100	P2.120208.214449	L08120016-02	DRL-Z-SS-2	50/50	1		12/02/08 21:44
101	P2.120208.215108	WG289356-01	Reference Sample		1	L08120017-01	12/02/08 21:51
102	P2.120208.215730	WG289356-04	Matrix Spike	50/50	1	L08120017-01	12/02/08 21:57
103	P2.120208.220346	WG289356-05	Matrix Spike Duplica	50/50	1	L08120017-01	12/02/08 22:03
104	P2.120208.221002	L08120018-02	DRL-K-EQBLK-3	50/50	1		12/02/08 22:10
105	P2.120208.221618	WG289268-02	Method/Prep Blank	50/50	1		12/02/08 22:16
106	P2.120208.222234	WG289268-03	Laboratory Control S	50/50	1		12/02/08 22:22
107	P2.120208.222855	WG289468-30	CCV		1		12/02/08 22:28
108	P2.120208.223512	WG289468-31	CCB		1		12/02/08 22:35
109	P2.120208.224126	WG289268-01	Reference Sample		1	L08110624-01	12/02/08 22:41
110	P2.120208.224743	WG289268-04	Matrix Spike	50/50	1	L08110624-01	12/02/08 22:47
111	P2.120208.225403	WG289268-05	Matrix Spike Duplica	50/50	1	L08110624-01	12/02/08 22:54




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Instrument Run Log

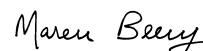
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 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

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112	P2.120208.230020	L08110624-04	MR08-FB112008	50/50	1		12/02/08 23:00
113	P2.120208.230636	WG289427-02	Serial Dilution		5	L08110624-04	12/02/08 23:06
114	P2.120208.231252	WG289427-01	Post Digestion Spike		1	L08110624-04	12/02/08 23:12
115	P2.120208.231909	L08110624-05	MR08-TW04-08D	50/50	1		12/02/08 23:19
116	P2.120208.232521	L08110624-06	MR08-TW19-08D	50/50	1		12/02/08 23:25
117	P2.120208.233139	L08110624-07	MR08-TW20-08D	50/50	1		12/02/08 23:31
118	P2.120208.233754	L08110624-08	MR08-TW25-08D	50/50	1		12/02/08 23:37
119	P2.120208.234410	WG289468-32	CCV		1		12/02/08 23:44
120	P2.120208.235022	WG289468-33	CCB		1		12/02/08 23:50
121	P2.120208.235633	L08110624-09	MR08-TW18-08D	50/50	1		12/02/08 23:56
122	P2.120308.000246	L08110670-01	SV-8	50/50	1		12/03/08 00:02
123	P2.120308.000908	L08110670-02	SV-7	50/50	1		12/03/08 00:09
124	P2.120308.001429	L08110670-03	SV-11	50/50	1		12/03/08 00:14
125	P2.120308.002048	L08110670-04	SV-12	50/50	1		12/03/08 00:20
126	P2.120308.002611	L08110782-01	35AWW01-111908	50/50	1		12/03/08 00:26
127	P2.120308.003227	L08110782-02	LHSMW06-111908	50/50	1		12/03/08 00:32
128	P2.120308.003848	L08110782-03	LHSMW03-111908	50/50	1		12/03/08 00:38
129	P2.120308.004505	L08110782-04	LHSMW07-111908	50/50	1		12/03/08 00:45
130	P2.120308.005208	L08110782-05	35AWW05-112108	50/50	1	WG289304-01	12/03/08 00:52
131	P2.120308.005825	WG289468-34	CCV		1		12/03/08 00:58
132	P2.120308.010439	WG289468-35	CCB		1		12/03/08 01:04
133	P2.120308.011050	WG289270-04	Method/Prep Blank	50/50	1		12/03/08 01:10
134	P2.120308.011703	WG289270-05	Laboratory Control S	50/50	1		12/03/08 01:17
135	P2.120308.012317	WG289270-01	Reference Sample		1	L08110627-02	12/03/08 01:23
136	P2.120308.012930	WG289270-06	Matrix Spike	50/50	1	L08110627-02	12/03/08 01:29
137	P2.120308.013548	WG289270-07	Matrix Spike Duplica	50/50	1	L08110627-02	12/03/08 01:35
138	P2.120308.014205	L08110627-11	MW2E-231-14	50/50	1		12/03/08 01:42
139	P2.120308.014819	WG289428-02	Serial Dilution		5	L08110627-11	12/03/08 01:48
140	P2.120308.015433	WG289428-01	Post Digestion Spike		1	L08110627-11	12/03/08 01:54
141	P2.120308.020047	L08110627-14	MW4B-231-14	50/50	1		12/03/08 02:00
142	P2.120308.020700	L08110627-17	MW5A-231-14	50/50	1		12/03/08 02:07
143	P2.120308.021313	WG289468-36	CCV		1		12/03/08 02:13
144	P2.120308.021925	WG289468-37	CCB		1		12/03/08 02:19
145	P2.120308.022536	L08110627-20	MW5A2-231-14	50/50	1		12/03/08 02:25
146	P2.120308.023149	L08110627-23	OW1B-231-14	50/50	1		12/03/08 02:31
147	P2.120308.023802	L08110627-26	OW2A-231-14	50/50	1		12/03/08 02:38
148	P2.120308.024419	L08110627-29	OW3A-231-14	50/50	1		12/03/08 02:44




00081993

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Instrument Run Log

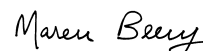
Instrument: PE-ICP2 Dataset: 120208H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

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149	P2.120308.025035	WG289270-02	Reference Sample		1	L08110642-01	12/03/08 02:50
150	P2.120308.025652	WG289270-08	Matrix Spike	50/50	1	L08110642-01	12/03/08 02:56
151	P2.120308.030310	WG289270-09	Matrix Spike Duplica	50/50	1	L08110642-01	12/03/08 03:03
152	P2.120308.030928	WG289270-03	Reference Sample		1	L08110642-04	12/03/08 03:09
153	P2.120308.031546	WG289270-10	Matrix Spike	50/50	1	L08110642-04	12/03/08 03:15
154	P2.120308.032205	WG289270-11	Matrix Spike Duplica	50/50	1	L08110642-04	12/03/08 03:22
155	P2.120308.032827	WG289468-38	CCV		1		12/03/08 03:28
156	P2.120308.033525	WG289468-39	CCB		1		12/03/08 03:35
157	P2.120308.034140	L08110642-07	MW059R-112108-1T01	50/50	1		12/03/08 03:41
158	P2.120308.034800	WG289428-04	Serial Dilution		5	L08110642-07	12/03/08 03:48
159	P2.120308.035413	WG289428-03	Post Digestion Spike		1	L08110642-07	12/03/08 03:54
160	P2.120308.040031	L08110642-08	MW059R-112108-1D01	50/50	1		12/03/08 04:00
161	P2.120308.040648	L08110699-36	ORG-SO1-231-14	50/50	1		12/03/08 04:06
162	P2.120308.041301	L08110699-38	ORG-SO2-231-14	50/50	1		12/03/08 04:13
163	P2.120308.041914	L08110761-01	SE-3026P	50/50	1		12/03/08 04:19
164	P2.120308.042529	L08110761-02	PRE-CARBON	50/50	1		12/03/08 04:25
165	P2.120308.043145	WG289348-02	Method/Prep Blank	50/50	1		12/03/08 04:31
166	P2.120308.043801	WG289348-03	Laboratory Control S	50/50	1		12/03/08 04:38
167	P2.120308.044417	WG289468-40	CCV		1		12/03/08 04:44
168	P2.120308.045032	WG289468-41	CCB		1		12/03/08 04:50
169	P2.120308.045643	WG289348-01	Reference Sample		1	L08110717-33	12/03/08 04:56
170	P2.120308.050257	WG289348-04	Matrix Spike	50/50	1	L08110717-33	12/03/08 05:02
171	P2.120308.050912	WG289348-05	Matrix Spike Duplica	50/50	1	L08110717-33	12/03/08 05:09
172	P2.120308.051527	L08110718-11	10402-W0001	50/50	1		12/03/08 05:15
173	P2.120308.052141	WG289430-02	Serial Dilution		5	L08110718-11	12/03/08 05:21
174	P2.120308.052755	WG289430-01	Post Digestion Spike		1	L08110718-11	12/03/08 05:27
175	P2.120308.053411	L08110718-70	10425-W0001	50/50	1		12/03/08 05:34
176	P2.120308.054025	L08110726-01	16146-W2179	50/50	1		12/03/08 05:40
177	P2.120308.054639	L08110726-02	16150-W2180	50/50	1		12/03/08 05:46
178	P2.120308.055253	L08110726-03	16153-W2175	50/50	1		12/03/08 05:52
179	P2.120308.055907	WG289468-42	CCV		1		12/03/08 05:59
180	P2.120308.060525	WG289468-43	CCB		1		12/03/08 06:05
181	P2.120308.061139	L08110726-04	16153-W2181	50/50	1		12/03/08 06:11
182	P2.120308.061753	L08110726-05	16179-W2176	50/50	1		12/03/08 06:17
183	P2.120308.062407	L08110726-06	16181-W2177	50/50	1		12/03/08 06:24
184	P2.120308.063021	L08110726-07	16195-W2178	50/50	1		12/03/08 06:30
185	P2.120308.063635	L08110730-01	14046-W2160	50/50	1		12/03/08 06:36




Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 120208H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26805

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Comments: Additional Workgroups: 289428, 289430

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186	P2.120308.064249	L08110730-02	14999-W2161	50/50	1		12/03/08 06:42
187	P2.120308.064903	L08110730-03	15011-W2162	50/50	1		12/03/08 06:49
188	P2.120308.065517	L08110737-01	16203-W2184	50/50	1		12/03/08 06:55
189	P2.120308.070129	L08110737-02	16221-W2130	50/50	1		12/03/08 07:01
190	P2.120308.070741	L08110737-03	16235-W2131	50/50	1		12/03/08 07:07
191	P2.120308.071353	WG289468-44	CCV		1		12/03/08 07:13
192	P2.120308.072009	WG289468-45	CCB		1		12/03/08 07:20
193	P2.120308.072623	L08110742-11	10050-W0001	50/50	1		12/03/08 07:26
194	P2.120308.073235	L08110742-29	10052-W0001	50/50	1		12/03/08 07:32
195	P2.120308.073858	L08110743-37	10179-W0001	50/50	1		12/03/08 07:38
196	P2.120308.074606	WG289468-46	CCV		1		12/03/08 07:46
197	P2.120308.075315	WG289468-47	CCB		1		12/03/08 07:53

00081995

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 120308H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26830

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289078, 289427, 289428, 289430, 289429, 289431, 289537

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.120308.104347	WG289590-01	Calibration Point		1		12/03/08 10:43
2	P2.120308.104957	WG289590-02	Calibration Point		1		12/03/08 10:49
3	P2.120308.105613	WG289590-03	Calibration Point		1		12/03/08 10:56
4	P2.120308.110228	WG289590-04	Calibration Point		1		12/03/08 11:02
5	P2.120308.110843	WG289590-05	Calibration Point		1		12/03/08 11:08
6	P2.120308.111509	WG289590-06	Initial Calibration Verification		1		12/03/08 11:15
7	P2.120308.112127	WG289590-07	Initial Calib Blank		1		12/03/08 11:21
8	P2.120308.112743	WG289590-08	Interference Check		1		12/03/08 11:27
9	P2.120308.113302	WG289590-09	Interference Check		1		12/03/08 11:33
10	P2.120308.113822	WG289590-10	CCV		1		12/03/08 11:38
11	P2.120308.114443	WG289590-11	CCB		1		12/03/08 11:44
12	P2.120308.115338	L08110635-01	14517-W0901	50/50	1		12/03/08 11:53
13	P2.120308.115951	L08110635-02	14674-W2171		1		12/03/08 11:59
14	P2.120308.120710	L08110635-04	14709-W2173	50/50	1		12/03/08 12:07
15	P2.120308.121329	L08110635-06	15031-W2168	50/50	1		12/03/08 12:13
16	P2.120308.121942	L08110635-08	15034-W2170	50/50	1		12/03/08 12:19
17	P2.120308.122523	L08110635-02	14674-W2171	50/50	1		12/03/08 12:25
18	P2.120308.123302	WG289590-12	CCV		1		12/03/08 12:33
19	P2.120308.124114	WG289590-13	CCV		1		12/03/08 12:41
20	P2.120308.124732	WG289590-14	CCB		1		12/03/08 12:47
21	P2.120308.125508	L08110782-02	LHSMW06-111908	50/50	100		12/03/08 12:55
22	P2.120308.130121	L08110782-04	LHSMW07-111908	50/50	2		12/03/08 13:01
23	P2.120308.130747	L08110782-04	LHSMW07-111908	50/50	100		12/03/08 13:07
24	P2.120308.131408	L08110782-05	35AWW05-112108	50/50	2		12/03/08 13:14
25	P2.120308.132025	WG289270-02	Reference Sample		10	L08110642-01	12/03/08 13:20
26	P2.120308.132645	WG289270-08	Matrix Spike		10	L08110642-01	12/03/08 13:26
27	P2.120308.133304	WG289270-09	Matrix Spike Duplica		10	L08110642-01	12/03/08 13:33
28	P2.120308.133659	L08110642-07	MW059R-112108-1T01		10		12/03/08 13:36
29	P2.120308.134447	L08110782-05	35AWW05-112108	50/50	10		12/03/08 13:44
30	P2.120308.135101	WG289590-15	CCV		1		12/03/08 13:51
31	P2.120308.135723	WG289590-16	CCB		1		12/03/08 13:57
32	P2.120308.140346	L08110726-02	16150-W2180	50/50	1		12/03/08 14:03
33	P2.120308.140959	L08110726-03	16153-W2175	50/50	1		12/03/08 14:09
34	P2.120308.141618	L08110730-03	15011-W2162	50/50	1		12/03/08 14:16
35	P2.120308.142239	L08110737-02	16221-W2130	50/50	1		12/03/08 14:22
36	P2.120308.142852	WG289590-17	CCV		1		12/03/08 14:28
37	P2.120308.143511	WG289590-18	CCB		1		12/03/08 14:35

Page: 1 Approved: December 05, 2008

Maren Beery



00081996

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 120308H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26830

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289078, 289427, 289428, 289430, 289429, 289431, 289537

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	P2.120308.150542	WG289283-02	Method/Prep Blank	50/50	1		12/03/08 15:05
39	P2.120308.151159	WG289283-03	Laboratory Control Sample	50/50	1		12/03/08 15:11
40	P2.120308.151823	L08110664-01	MR08-TW24 -08D		1	WG288964-01	12/03/08 15:18
41	P2.120308.152442	L08110664-02	MR08-TW17 -08D		1	WG289087-01	12/03/08 15:24
42	P2.120308.153056	L08110664-03	MR08-TW17D -08D		1		12/03/08 15:30
43	P2.120308.153717	L08110664-04	MR08-TW15 -08D		1		12/03/08 15:37
44	P2.120308.154338	L08110664-05	MR08-TW15D -08D		1		12/03/08 15:43
45	P2.120308.154954	L08110664-06	MR08-TW16 -08D		1		12/03/08 15:49
46	P2.120308.155616	L08110664-07	MR08-TW21 -08D		1		12/03/08 15:56
47	P2.120308.160231	L08110664-08	MR08-TW22 -08D		1		12/03/08 16:02
48	P2.120308.160846	WG289590-19	CCV		1		12/03/08 16:08
49	P2.120308.161516	WG289590-20	CCB		1		12/03/08 16:15
50	P2.120308.162132	L08110664-09	MR08-TW23 -08D		1		12/03/08 16:21
51	P2.120308.162747	L08110713-01	10925-W0001	50/50	1		12/03/08 16:27
52	P2.120308.163411	L08110713-02	10928-W0001	50/50	1		12/03/08 16:34
53	P2.120308.164031	L08110713-03	10932-W0001	50/50	1		12/03/08 16:40
54	P2.120308.164647	L08110716-24	10368-W0001	50/50	1		12/03/08 16:46
55	P2.120308.165312	L08110716-29	10369-W0001	50/50	1		12/03/08 16:53
56	P2.120308.165932	L08110763-01	SE-3037P	50/50	1		12/03/08 16:59
57	P2.120308.170505	L08110788-01	11-100-08	50/50	1		12/03/08 17:05
58	P2.120308.171121	WG289429-02	Serial Dilution		5		12/03/08 17:11
59	P2.120308.171741	WG289429-01	Post Digestion Spike		1		12/03/08 17:17
60	P2.120308.172403	WG289590-21	CCV		1		12/03/08 17:24
61	P2.120308.173021	WG289590-22	CCB		1		12/03/08 17:30
62	P2.120308.173637	L08110788-02	11-FD03-08	50/50	1		12/03/08 17:36
63	P2.120308.174252	WG289283-01	Reference Sample		1	L08110788-03	12/03/08 17:42
64	P2.120308.174913	WG289283-04	Matrix Spike	50/50	1	L08110788-04	12/03/08 17:49
65	P2.120308.175535	WG289283-05	Matrix Spike Duplicate	50/50	1	L08110788-05	12/03/08 17:55
66	P2.120308.180151	L08110788-06	11-102-08	50/50	1		12/03/08 18:01
67	P2.120308.180813	L08110788-07	11-103-08	50/50	1		12/03/08 18:08
68	P2.120308.181433	WG289350-02	Method/Prep Blank		1		12/03/08 18:14
69	P2.120308.182055	WG289350-03	Laboratory Control Sample		1		12/03/08 18:20
70	P2.120308.182711	WG289350-01	Reference Sample		1	L08110744-11	12/03/08 18:27
71	P2.120308.183331	WG289350-04	Matrix Spike		1		12/03/08 18:33
72	P2.120308.183954	WG289590-23	CCV		1		12/03/08 18:39
73	P2.120308.184614	WG289590-24	CCB		1		12/03/08 18:46
74	P2.120308.185232	WG289350-05	Matrix Spike Duplicate		1		12/03/08 18:52

Maren Beery



Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 120308H.CSV
 Analyst1: SLP Analyst2: N/A
 Method: 6010B SOP: ME600E Rev: 8
 Maintenance Log ID: 26830

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
 ICSA: STD30083 ICSAB: STD29971

Workgroups: 289078, 289427, 289428, 289430, 289429, 289431, 289537

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	P2.120308.185848	L08110744-29	10354-W0001		1		12/03/08 18:58
76	P2.120308.190509	WG289431-02	Serial Dilution		5		12/03/08 19:05
77	P2.120308.191129	WG289431-01	Post Digestion Spike		1		12/03/08 19:11
78	P2.120308.191752	L08110745-21	10383-W0001		1		12/03/08 19:17
79	P2.120308.192408	L08110745-47	10427-W0001		1		12/03/08 19:24
80	P2.120308.193029	L08110748-14	624-W0001		1		12/03/08 19:30
81	P2.120308.193650	L08110751-22	696-W0001		1		12/03/08 19:36
82	P2.120308.194306	L08110751-56	730-W0001		1		12/03/08 19:43
83	P2.120308.194926	L08110753-10	752-W0001		1		12/03/08 19:49
84	P2.120308.195548	WG289590-25	CCV		1		12/03/08 19:55
85	P2.120308.200206	WG289590-26	CCB		1		12/03/08 20:02
86	P2.120308.200824	L08110754-14	489-W0001		1		12/03/08 20:08
87	P2.120308.201445	L08110754-44	497-W0001		1		12/03/08 20:14
88	P2.120308.202101	L08110757-29	504-W0001		1		12/03/08 20:21
89	P2.120308.202722	WG289445-02	Method/Prep Blank		1		12/03/08 20:27
90	P2.120308.203343	WG289445-03	Laboratory Control Sample		1		12/03/08 20:33
91	P2.120308.204000	WG289415-01	Fluid Blank		1		12/03/08 20:40
92	P2.120308.204625	WG289445-01	Reference Sample		1	L08120004-01	12/03/08 20:46
93	P2.120308.205251	WG289445-04	Matrix Spike		1		12/03/08 20:52
94	P2.120308.205910	WG289445-05	Matrix Spike Duplicate		1		12/03/08 20:59
95	P2.120308.210535	L08120020-01	GC081554		1		12/03/08 21:05
96	P2.120308.211201	WG289590-27	CCV		1		12/03/08 21:12
97	P2.120308.211821	WG289590-28	CCB		1		12/03/08 21:18
98	P2.120308.212438	WG289537-02	Serial Dilution		5		12/03/08 21:24
99	P2.120308.213100	WG289537-01	Post Digestion Spike		1		12/03/08 21:31
100	P2.120308.213720	L08120020-02	GC081555		1	WG289477-01	12/03/08 21:37
101	P2.120308.214346	L08120020-03	GC081556		1		12/03/08 21:43
102	P2.120308.215012	L08120021-01	GC081615		1		12/03/08 21:50
103	P2.120308.215631	L08120021-02	GC081616		1		12/03/08 21:56
104	P2.120308.220350	L08120021-03	GC081617		1	WG289444-01	12/03/08 22:03
105	P2.120308.221011	L08120021-04	GC081618		1		12/03/08 22:10
106	P2.120308.221726	WG289590-29	CCV		1		12/03/08 22:17
107	P2.120308.222356	WG289590-30	CCB		1		12/03/08 22:23

Comments

Seq.	Rerun	Dil.	Reason	Analytes
13				

Page: 3 Approved: December 05, 2008

Maren Berry



Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 120308H.CSV
Analyst1: SLP Analyst2: N/A
Method: 6010B SOP: ME600E Rev: 8
Maintenance Log ID: 26830

Calibration Std: STD30021 ICV/CCV Std: STD30082 Post Spike: STD27612
ICSA: STD30083 ICSAB: STD29971
Workgroups: 289078, 289427, 289428, 289430, 289429, 289431, 289537

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time

Seq.	Rerun	Dil.	Reason	Analytes
			Autosampler missed tube; reanalyzed.	
18			Autosampler missed tube; reanalyzed.	

Microbac Laboratories Inc.

Data Checklist

Date: 01-DEC-2008

Analyst: EDA

Analyst: NA

Method: 6010B

Instrument: ICP-THERMO2

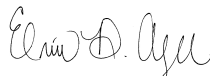
Curve Workgroup: 289367

Runlog ID: 25484

Analytical Workgroups: 289238,289309,289239

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	
Case Narrative	548,550,782,636
Client Forms	X
Level X	
Level 3	
Level 4	
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDA
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
02-DEC-2008



Secondary Reviewer:
04-DEC-2008



Microbac Laboratories Inc.

Data Checklist

Date: 02-DEC-2008

Analyst: SLP

Analyst: NA

Method: 6010

Instrument: PE-ICP2

Curve Workgroup: 289468

Runlog ID: 25511

Analytical Workgroups: 289338, 288970, 289340, 289317, 289075, 289339, 289426, 289427,

Additional Workgroups:	289428, 289430
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	0643, 0621, 0623, 0631, 0586, 0552, 0668, 0770, 0016, 0017, 0018, 0624, 0670, 0782, 0642, 0761, 0717, 0718, 0726, 0730, 0737, 0742, 0743
	X
Client Forms	
Level X	
Level 3	
Level 4	0643, 0621, 0623, 0631, 0586, 0552, 0668, 0624, 0670, 0782, 0642, 0717, 0718, 0726, 0730, 0737, 0742, 0743
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	SLP
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
03-DEC-2008

Shen L. Pabon

Secondary Reviewer:
05-DEC-2008

Maren Beery

Microbac Laboratories Inc.

Data Checklist

Date: 03-DEC-2008

Analyst: SLP

Analyst: NA

Method: 6010

Instrument: PE-ICP2

Curve Workgroup: 289590

Runlog ID: 25545

Analytical Workgroups: 289078, 289427, 289430, 289429

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	0635, 0782, 0426, 0730, 0737, 0713, 0716, 0763, 0788
Client Forms	X
Level X	
Level 3	0782
Level 4	0635, 0426, 0730, 0737, 0713, 0716, 0788
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	SLP
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
04-DEC-2008

Shen L. Pabon

Secondary Reviewer:
05-DEC-2008

Maren Beery

Analytical Method:6010B

AAB#:WG289427

Login Number:L08110782

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
LHSMW03-111908	11/19/08	11/25/08	12/01/08	180	12.1	12/03/08	180	1.49	
35AWW05-112108	11/21/08	11/25/08	12/01/08	180	9.80	12/03/08	180	2.02	
35AWW05-112108	11/21/08	11/25/08	12/01/08	180	9.80	12/03/08	180	2.04	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	180	12.0	12/03/08	180	1.49	
35AWW01-111908	11/19/08	11/25/08	12/01/08	180	11.9	12/03/08	180	1.48	
LHSMW07-111908	11/21/08	11/25/08	12/01/08	180	9.99	12/03/08	180	2.01	
LHSMW07-111908	11/21/08	11/25/08	12/01/08	180	9.99	12/03/08	180	1.50	
35AWW05-112108	11/21/08	11/25/08	12/01/08	180	9.80	12/03/08	180	1.50	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	180	12.0	12/03/08	180	2.00	
LHSMW07-111908	11/21/08	11/25/08	12/01/08	180	9.99	12/03/08	180	2.01	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 6010B

AAB#: WG289309

Login Number: L08110782

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
03SB11-(10-11)	11/18/08	11/25/08	12/01/08	180	13.0	12/01/08	180	0.248	
03SB11-(BOTTOM)	11/18/08	11/25/08	12/01/08	180	12.9	12/01/08	180	0.264	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: <u>L08110782</u>	Work Group: <u>WG289427</u>
Blank File ID: <u>P2.120208.221618</u>	Blank Sample ID: <u>WG289268-02</u>
Prep Date: <u>12/01/08 09:33</u>	Instrument ID: <u>PE-ICP2</u>
Analyzed Date: <u>12/02/08 22:16</u>	Method: <u>6010B</u>
Analyst: <u>SLP</u>	

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG289268-03	P2.120208.222234	12/02/08 22:22	01
35AWW01-111908	L08110782-01	P2.120308.002611	12/03/08 00:26	01
LHSMW06-111908	L08110782-02	P2.120308.003227	12/03/08 00:32	01
LHSMW03-111908	L08110782-03	P2.120308.003848	12/03/08 00:38	01
LHSMW07-111908	L08110782-04	P2.120308.004505	12/03/08 00:45	01
35AWW05-112108	L08110782-05	P2.120308.005208	12/03/08 00:52	01
LHSMW06-111908	L08110782-02	P2.120308.125508	12/03/08 12:55	DL01
LHSMW07-111908	L08110782-04	P2.120308.130121	12/03/08 13:01	DL01
LHSMW07-111908	L08110782-04	P2.120308.130747	12/03/08 13:07	DL02
35AWW05-112108	L08110782-05	P2.120308.131408	12/03/08 13:14	DL01
35AWW05-112108	L08110782-05	P2.120308.134447	12/03/08 13:44	DL02

Report Name: BLANK_SUMMARY
 PDF File ID: 1265718
 Report generated 12/04/2008 09:08



METHOD BLANK SUMMARY

Login Number: L08110782
Blank File ID: T2.120108.142238
Prep Date: 12/01/08 08:41
Analyzed Date: 12/01/08 14:22
Analyst: EDA

Work Group: WG289309
Blank Sample ID: WG289244-02
Instrument ID: ICP-THERM02
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG289244-03	T2.120108.142835	12/01/08 14:28	01
03SB11-(10-11)	L08110782-06	T2.120108.143420	12/01/08 14:34	01
03SB11-(BOTTOM)	L08110782-07	T2.120108.145740	12/01/08 14:57	01

Report Name: BLANK_SUMMARY
PDF File ID: 1264128
Report generated 12/02/2008 09:06



Login Number: L08110782 Prep Date: 12/01/08 09:33 Sample ID: WG289268-02
Instrument ID: PE-ICP2 Run Date: 12/02/08 22:16 Prep Method: 3005A
File ID: P2.120208.221618 Analyst: SLP Method: 6010B
Workgroup (AAB#): WG289427 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: PE-ICP - 02-DEC-08

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
Sodium, Total	0.250	0.500	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: 1265719
03-DEC-2008 09:47



Login Number: L08110782 Prep Date: 12/01/08 08:41 Sample ID: WG289244-02
Instrument ID: ICP-THERM02 Run Date: 12/01/08 14:22 Prep Method: 3051
File ID: T2.120108.142238 Analyst: EDA Method: 6010B
Workgroup (AAB#): WG289309 Matrix: Soil Units: mg/kg
Contract #: DACA56-94-D-0020 Cal ID: ICP-TH - 01-DEC-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Aluminum, Total	10.0	20.0	10.0	1	U
Silver, Total	0.250	2.00	0.250	1	U
Barium, Total	0.100	0.500	0.100	1	U
Beryllium, Total	0.0120	0.500	0.0120	1	U
Calcium, Total	5.00	10.0	5.00	1	U
Cadmium, Total	0.0500	0.500	0.0500	1	U
Cobalt, Total	0.120	1.00	0.120	1	U
Chromium, Total	0.120	1.00	0.120	1	U
Copper, Total	0.500	1.00	0.500	1	U
Iron, Total	1.00	3.00	1.83	1	J
Potassium, Total	25.0	50.0	25.0	1	U
Magnesium, Total	12.0	25.0	12.0	1	U
Manganese, Total	0.100	0.500	0.100	1	U
Sodium, Total	5.00	25.0	5.00	1	U
Nickel, Total	0.500	2.00	0.500	1	U
Antimony, Total	0.500	1.00	0.500	1	U
Vanadium, Total	0.250	0.500	0.250	1	U
Zinc, Total	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: 1264129
02-DEC-2008 09:07



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289268-03
Instrument ID: PE-ICP2 Run Time: 22:22 Prep Method: 3005A
File ID: P2.120208.222234 Analyst: SLP Method: 6010B
Workgroup (AAB#): WG289427 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD27612 Cal ID: PE-ICP - 02-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.00	99.9	85 - 115	
Beryllium, Total	0.0250	0.0251	101	85 - 115	
Calcium, Total	5.00	5.20	104	85 - 115	
Cobalt, Total	0.100	0.100	100	85 - 115	
Iron, Total	2.00	1.99	99.7	85 - 115	
Magnesium, Total	5.00	5.00	100	85 - 115	
Potassium, Total	25.0	24.4	97.4	85 - 115	
Sodium, Total	25.0	24.8	99.0	85 - 115	
Vanadium, Total	0.500	0.505	101	85 - 115	
Zinc, Total	0.500	0.515	103	85 - 115	

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289244-03
Instrument ID: ICP-THERM02 Run Time: 14:28 Prep Method: 3051
File ID: T2.120108.142835 Analyst: EDA Method: 6010B
Workgroup (AAB#): WG289309 Matrix: Soil Units: mg/kg
QC Key: STD Lot#: STD27613 Cal ID: ICP-TH - 01-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	250	245	98.2	80 - 120	
Silver, Total	10.0	9.83	98.3	80 - 120	
Barium, Total	25.0	25.1	100	80 - 120	
Beryllium, Total	1.25	1.22	97.4	80 - 120	
Calcium, Total	250	241	96.3	80 - 120	
Cadmium, Total	1.25	1.19	95.2	80 - 120	
Cobalt, Total	5.00	4.96	99.2	80 - 120	
Chromium, Total	12.5	12.8	102	80 - 120	
Copper, Total	12.5	12.0	95.6	80 - 120	
Iron, Total	100	98.3	98.3	80 - 120	
Potassium, Total	1250	1230	98.1	80 - 120	
Magnesium, Total	250	240	95.8	80 - 120	
Manganese, Total	12.5	12.3	98.5	80 - 120	
Sodium, Total	1250	1230	98.5	80 - 120	
Nickel, Total	12.5	12.3	98.8	80 - 120	
Antimony, Total	30.0	27.9	92.9	80 - 120	
Vanadium, Total	25.0	26.3	105	80 - 120	
Zinc, Total	25.0	23.7	94.8	80 - 120	

Loginnum: L08110782 Cal ID: PE-ICP2 - Worknum: WG289427
Instrument ID: PE-ICP2 Contract #: DACA56-94-D-0020 Method: 6010B
Parent ID: WG289268-01 File ID: P2.120208.224126 Dil: 1 Matrix: WATER
Sample ID: WG289268-04 MS File ID: P2.120208.224743 Dil: 1 Units: mg/L
Sample ID: WG289268-05 MSD File ID: P2.120208.225403 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum	1.85	5.00	7.00	103	5.00	6.89	101	1.66	80 - 120	20	
Beryllium	ND	0.0250	0.0256	102	0.0250	0.0250	100	2.06	80 - 120	20	
Calcium	21.2	5.00	26.9	114	5.00	26.6	108	1.20	80 - 120	20	
Cobalt	0.00332	0.100	0.105	102	0.100	0.103	99.8	1.70	80 - 120	20	
Iron	1.17	2.00	3.19	101	2.00	3.21	102	0.660	80 - 120	20	
Magnesium	3.52	5.00	8.55	101	5.00	8.58	101	0.369	80 - 120	20	
Potassium	2.49	25.0	27.1	98.6	25.0	26.8	97.3	1.22	80 - 120	20	
Sodium	6.98	25.0	32.3	101	25.0	32.0	100	0.905	80 - 120	20	
Vanadium	ND	0.500	0.514	103	0.500	0.502	100	2.38	80 - 120	20	
Zinc	0.00918	0.500	0.519	102	0.500	0.512	101	1.35	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: <u>L08110782</u>	Cal ID: <u>ICP-THERMO -</u>	Worknum: <u>WG289309</u>
Instrument ID: <u>ICP-THERMO</u>	Contract #: <u>DACA56-94-D-0020</u>	Method: <u>6010B</u>
Parent ID: <u>WG289244-01</u>	File ID: <u>T2.120108.145740</u> Dil: <u>1</u>	Matrix: <u>SOLID</u>
Sample ID: <u>WG289244-04 MS</u>	File ID: <u>T2.120108.150328</u> Dil: <u>1</u>	Units: <u>mg/kg</u>
Sample ID: <u>WG289244-05 MSD</u>	File ID: <u>T2.120108.150910</u> Dil: <u>1</u>	Percent Solid: <u>84.9</u>

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	4740	213	7860	1460	213	13800	4270	55.1	80 - 120	20	*#
Antimony, Total	ND	25.6	21.9	85.7	25.6	21.9	85.5	0.263	80 - 120	20	
Barium, Total	32.8	21.3	79.0	217	21.3	68.6	168	14.2	80 - 120	20	*
Beryllium, Total	0.226	1.07	1.30	100	1.07	1.49	119	13.9	80 - 120	20	
Cadmium, Total	0.125	1.07	1.10	91.5	1.07	1.02	83.9	7.64	80 - 120	20	
Calcium, Total	1830	213	2480	306	213	1530	-137	47.2	80 - 120	20	*#
Chromium, Total	6.00	10.7	20.9	140	10.7	29.9	224	35.4	80 - 120	20	*#
Cobalt, Total	13.1	4.27	9.74	-79.5	4.27	7.46	-133	26.5	80 - 120	20	*#
Copper, Total	3.09	10.7	12.9	91.8	10.7	14.0	102	8.15	80 - 120	20	
Iron, Total	2090	85.3	4070	2320	85.3	12800	12600	104	80 - 120	20	*#
Magnesium, Total	1680	213	2410	344	213	2010	157	18.0	80 - 120	20	*
Manganese, Total	23.7	10.7	42.7	178	10.7	47.0	218	9.54	80 - 120	20	*
Nickel, Total	14.8	10.7	19.9	48.0	10.7	22.6	73.1	12.6	80 - 120	20	*
Potassium, Total	364	1070	1560	112	1070	1910	145	20.1	80 - 120	20	*#
Silver, Total	ND	8.53	7.99	93.6	8.53	8.38	98.2	4.77	80 - 120	20	
Sodium, Total	418	1070	1530	104	1070	1360	87.9	12.1	80 - 120	20	
Vanadium, Total	3.13	21.3	27.4	114	21.3	46.3	202	51.1	80 - 120	20	*#
Zinc, Total	22.0	21.3	49.4	128	21.3	58.7	172	17.2	80 - 120	20	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289427
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG289427-02 **File ID:** P2.120208.230636 **Dil:** 5 **Units:** mg/L
Sample: L08110624-04 **File ID:** P2.120208.230020 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Beryllium	ND	U	ND	U		
Calcium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Iron	ND	U	ND	U		
Magnesium	ND	U	ND	U		
Potassium	ND	U	ND	U		
Sodium	ND	U	ND	U		
Vanadium	ND	U	ND	U		
Zinc	ND	U	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.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 1265714

12/03/2008 09:47



Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289309
Instrument: ICP-THERMO2 **Method:** 6010B
Serial Dil: WG289309-02 **File ID:** T2.120108.144551 **Dil:** 5 **Units:** mg/L
Sample: L08110782-06 **File ID:** T2.120108.143420 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	171		190		11.10	E
Antimony	ND	U	ND	U		
Barium	.709		.79		11.40	E
Beryllium	.00824	F	.0097	F	17.70	
Cadmium	ND	U	ND	U		
Calcium	17.3		19		9.83	
Chromium	.22		.2505		13.90	E
Cobalt	.0362	X	.03965	F	9.53	
Copper	.0944	X	.1005	X	6.46	
Iron	188		205.5		9.31	
Magnesium	20.8		23.3		12.00	E
Manganese	.792		.875		10.50	E
Nickel	.174	X	.1985	F	14.10	
Potassium	14.2	X	15.85	X	11.60	
Silver	.00505	F	ND	U		
Sodium	7.99		9.2		15.10	E
Vanadium	.344		.389		13.10	E
Zinc	.403	X	.4485	X	11.30	

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.

SERIAL_DIL - Modified 09/22/2008

PDF File ID: 1264125

12/02/2008 09:03



Sample Login ID: L08110782
Instrument ID: PE-ICP2
Post Spike ID: WG289427-01
Sample ID: L08110624-04

Worknum: WG289427
Method: 6010B
Units: mg/L
Matrix: Water
File ID: P2.120208.231252 Dil: 1
File ID: P2.120208.230020 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	4.98		0	.05	5	99.5	75 - 125	
BERYLLIUM	0.0243		0	.0005	.025	97.2	75 - 125	
CALCIUM	5.07		0	.1	5	101.4	75 - 125	
COBALT	0.101		0	.0025	.1	100.6	75 - 125	
IRON	1.99		0	.025	2	99.3	75 - 125	
MAGNESIUM	4.95		0	.25	5	99.1	75 - 125	
POTASSIUM	24.3		0	.25	25	97.3	75 - 125	
SODIUM	24.6		0	.25	25	98.3	75 - 125	
VANADIUM	0.489		0	.005	.5	97.9	75 - 125	
ZINC	0.498		0	.005	.5	99.6	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

Sample Login ID: L08110782
Instrument ID: ICP-THERM02
Post Spike ID: WG289309-01
Sample ID: L08110782-06

Worknum: WG289309
Method: 6010B
Units: mg/L
Matrix: Soil
File ID: T2.120108.144009 Dil: 1
File ID: T2.120108.143420 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	159		171		5	96.2	75 - 125	
ANTIMONY	0.550		0	.01	.6	91.6	75 - 125	
BARIUM	1.13		0.709		.5	98.6	75 - 125	
BERYLLIUM	0.0311		0.00824	F	.025	94.7	75 - 125	
CADMIUM	0.0220		0	.001	.025	88.1	75 - 125	
CALCIUM	20.2		17.3		5	91.1	75 - 125	
CHROMIUM	0.434		0.220		.25	94.5	75 - 125	
COBALT	0.130		0.0362		.1	97.2	75 - 125	
COPPER	0.313		0.0944		.25	91.1	75 - 125	
IRON	170		188		2	-06.2	75 - 125	N
MAGNESIUM	23.4		20.8		5	92.6	75 - 125	
MANGANESE	0.949		0.792		.25	94.5	75 - 125	
NICKEL	0.390		0.174		.25	93.3	75 - 125	
POTASSIUM	37.0		14.2		25	96.9	75 - 125	
SILVER	0.195		0.00505	F	.2	95.4	75 - 125	
SODIUM	31.3		7.99		25	96.4	75 - 125	
VANADIUM	0.807		0.344		.5	99.4	75 - 125	
ZINC	0.822		0.403		.5	91.8	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

00082016

Login:	<u>L08110782</u>	Workgroup (AAB#):	<u>WG289427</u>
Analytical Method:	<u>6010B</u>	Instrument ID:	<u>PE-ICP2</u>
ICAL Worknum:	<u>WG289468</u>	Initial Calibration Date:	<u>02-DEC-2008 11:16</u>

	WG289468-01		WG289468-02		WG289468-03		WG289468-04		WG289468-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-26.9	.1	556	.2	1060	10	52900	20	104000	.99998	
BERYLLIUM	0	-898	.0005	205	.001	422	.05	20800	.1	40500	.999925	
CALCIUM	0	-84.4	.1	15.8	.2	26.7	10	1180	20	2390	.999988	
COBALT	0	-49.1	.002	46.1	.004	97.1	.1	4880	.4	9360	.999789	
IRON	0	-0.874	.04	17.6	.08	33.5	4	1650	8	3280	.999999	
MAGNESIUM	0	9.68	.1	34.4	.2	76.9	10	3690	20	7420	.999998	
POTASSIUM	0	-506	.5	1200	1	2310	50	111000	100	219000	1	
SODIUM	0	317	.5	832	1	1690	50	81600	100	160000	1	
VANADIUM	0	4470	.01	977	.02	1840	1	94300	2	184000	.999916	
ZINC	0	4.91	.01	89.9	.02	176	1	9250	2	17800	.999801	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00082017

Login:	<u>L08110782</u>	Workgroup (AAB#):	<u>WG289427</u>
Analytical Method:	<u>6010B</u>	Instrument ID:	<u>PE-ICP2</u>
ICAL Worknum:	<u>WG289590</u>	Initial Calibration Date:	<u>03-DEC-2008 11:08</u>

	WG289590-01		WG289590-02		WG289590-03		WG289590-04		WG289590-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-47.4	.1	561	.2	1080	10	54000	20	108000	.999998	
BERYLLIUM	0	-899	.0005	193	.001	419	.05	20900	.1	41300	.999984	
CALCIUM	0	-85.9	.1	8.71	.2	23.7	10	1190	20	2400	.999986	
COBALT	0	-48.3	.002	48.9	.004	101	.1	4880	.4	9550	.999938	
IRON	0	-1.32	.04	15.8	.08	34.9	4	1670	8	3320	.999991	
MAGNESIUM	0	7.75	.1	38.1	.2	77.5	10	3740	20	7420	.999994	
POTASSIUM	0	-547	.5	1250	1	2310	50	111000	100	223000	1	
SODIUM	0	65.4	.5	878	1	1730	50	82300	100	164000	1	
VANADIUM	0	4680	.01	1080	.02	1910	1	94200	2	187000	.999989	
ZINC	0	0.432	.01	92.3	.02	186	1	9310	2	18300	.999955	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00082018

Login:	L08110782	Workgroup (AAB#):	WG289309
Analytical Method:	6010B	Instrument ID:	ICP-THERM02
ICAL Worknum:	WG289367	Initial Calibration Date:	01-DEC-2008 10:06

	WG289367-01		WG289367-02		WG289367-03		WG289367-04		WG289367-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	0.000540	.1	0.000820	.2	0.00106	5	0.0278	10	0.0558	.999971	
ANTIMONY	0	0.0000100	.012	0.000130	.024	0.000300	.6	0.0143	1.2	0.0289	.999958	
BARIUM	0	0.00447	.01	0.00935	.02	0.0144	.5	0.488	1	0.975	.999996	
BERYLLIUM	0	-0.000400	.0005	0.000970	.001	0.00210	.025	0.125	.05	0.244	.999926	
CADMIUM	0	0.0000200	.0005	0.000150	.001	0.000250	.025	0.0100	.05	0.0200	.999745	
CALCIUM	0	-0.000320	.1	0.000260	.2	0.00107	5	0.0670	10	0.137	.999921	
CHROMIUM	0	0.000340	.005	0.000840	.01	0.00138	.25	0.0490	.5	0.0958	.999939	
COBALT	0	-0.0000700	.002	0.000210	.004	0.000390	.1	0.0248	.2	0.0494	.999951	
COPPER	0	0.000120	-.1	0.000340	.01	0.000480	.25	0.0178	.5	0.0353	.999987	
IRON	0	-0.0000100	.04	0.000200	.08	0.000380	2	0.0197	4	0.0399	.999975	
MAGNESIUM	0	0.0000200	.1	0.000160	.2	0.000290	5	0.0156	10	0.0316	.999884	
MANGANESE	0	0.000140	.005	0.000680	.01	0.00107	.25	0.0495	.5	0.100	.999946	
NICKEL	0	-0.000190	.005	0.0000100	.01	0.000200	.25	0.0181	.5	0.0362	.999969	
POTASSIUM	0	0.000850	.5	0.00357	1	0.00644	25	0.286	50	0.577	.999981	
SILVER	0	-0.000700	20	0.000140	.008	0.000990	.2	0.0736	.4	0.144	.999821	
SODIUM	0	-0.00158	.5	0.00903	1	0.0202	25	1.08	50	2.15	.999995	
VANADIUM	0	-0.000140	.01	0.00290	.02	0.00556	.5	0.291	1	0.571	.999956	
ZINC	0	-0.0000300	.01	0.00182	.02	0.00330	.5	0.149	1	0.300	.999859	

INT = Instrument intensity
 R = Coefficient of correlation
 Q = Data Qualifier
 * = Out of Compliance; R < 0.995



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-07
Instrument ID: PE-ICP2 Run Time: 11:28 Method: 6010
File ID: P2.120208.112856 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP2 - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BERYLLIUM	.0005	.002	.0005	U
CALCIUM	.1	.2	.1	U
COBALT	.0025	.005	.0025	U
IRON	.025	.1	.025	U
MAGNESIUM	.25	.5	.25	U
POTASSIUM	.25	1	.25	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.005	.02	.005	U

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-07
Instrument ID: PE-ICP2 Run Time: 11:21 Method: 6010
File ID: P2.120308.112127 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP2 - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BERYLLIUM	.0005	.002	.0005	U
CALCIUM	.1	.2	.1	U
COBALT	.0025	.005	.0025	U
IRON	.025	.1	.025	U
MAGNESIUM	.25	.5	.25	U
POTASSIUM	.25	1	.25	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.005	.02	.005	U

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-07
Instrument ID: ICP-THERM02 Run Time: 10:17 Method: 6010
File ID: T2.120108.101751 Analyst: EDA Units: mg/L
Workgroup (AAB#): WG289309 Cal ID: ICP-THERM - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.2	.4	.2	U
ANTIMONY	.01	.02	.01	U
BARIUM	.002	.01	.002	U
BERYLLIUM	.00024	.01	.00024	U
CADMIUM	.001	.01	.001	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.0024	.02	.0024	U
COBALT	.0024	.02	.0024	U
COPPER	.01	.02	.01	U
IRON	.02	.06	.02	U
MAGNESIUM	.24	.5	.24	U
MANGANESE	.002	.01	.002	U
NICKEL	.01	.04	.01	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.04	.005	U
SODIUM	.1	.5	.1	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-11
Instrument ID: PE-ICP2 Run Time: 11:52 Method: 6010B
File ID: P2.120208.115213 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00516	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-13
Instrument ID: PE-ICP2 Run Time: 13:29 Method: 6010B
File ID: P2.120208.132943 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.978	*
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00505	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-17
Instrument ID: PE-ICP2 Run Time: 14:31 Method: 6010B
File ID: P2.120208.143105 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-29
Instrument ID: PE-ICP2 Run Time: 21:19 Method: 6010B
File ID: P2.120208.211944 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00575	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-31
Instrument ID: PE-ICP2 Run Time: 22:35 Method: 6010B
File ID: P2.120208.223512 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00584	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-33
Instrument ID: PE-ICP2 Run Time: 23:50 Method: 6010B
File ID: P2.120208.235022 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00557	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289468-35
Instrument ID: PE-ICP2 Run Time: 01:04 Method: 6010B
File ID: P2.120308.010439 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.578	*
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00569	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-11
Instrument ID: PE-ICP2 Run Time: 11:44 Method: 6010B
File ID: P2.120308.114443 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-14
Instrument ID: PE-ICP2 Run Time: 12:47 Method: 6010B
File ID: P2.120308.124732 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-16
Instrument ID: PE-ICP2 Run Time: 13:57 Method: 6010B
File ID: P2.120308.135723 Analyst: SLP Units: mg/L
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Beryllium	0.000500	0.00200	0.000500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.00250	0.00500	0.00250	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Potassium	0.250	1.00	0.250	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.00500	0.0200	0.00500	U

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

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-11
Instrument ID: ICP-THERM02 Run Time: 10:41 Method: 6010B
File ID: T2.120108.104103 Analyst: EDA Units: mg/L
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.200	0.400	0.200	U
Silver	0.00500	0.0400	0.00500	U
Barium	0.00200	0.0100	0.00200	U
Beryllium	0.000240	0.0100	0.000240	U
Calcium	0.100	0.200	0.100	U
Cadmium	0.00100	0.0100	0.00100	U
Cobalt	0.00240	0.0200	0.00240	U
Chromium	0.00240	0.0200	0.00240	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0200	0.0600	0.0200	U
Potassium	0.500	1.00	0.500	U
Magnesium	0.240	0.500	0.240	U
Manganese	0.00200	0.0100	0.00200	U
Sodium	0.100	0.500	0.100	U
Nickel	0.0100	0.0400	0.0100	U
Antimony	0.0100	0.0200	0.0100	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

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

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-19
Instrument ID: ICP-THERM02 Run Time: 14:16 Method: 6010B
File ID: T2.120108.141641 Analyst: EDA Units: mg/L
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.200	0.400	0.200	U
Silver	0.00500	0.0400	0.00500	U
Barium	0.00200	0.0100	0.00200	U
Beryllium	0.000240	0.0100	0.000240	U
Calcium	0.100	0.200	0.100	U
Cadmium	0.00100	0.0100	0.00100	U
Cobalt	0.00240	0.0200	0.00240	U
Chromium	0.00240	0.0200	0.00240	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0200	0.0600	0.0200	U
Potassium	0.500	1.00	0.500	U
Magnesium	0.240	0.500	0.240	U
Manganese	0.00200	0.0100	0.00200	U
Sodium	0.100	0.500	0.100	U
Nickel	0.0100	0.0400	0.0100	U
Antimony	0.0100	0.0200	0.0100	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

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

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-21
Instrument ID: ICP-THERM02 Run Time: 15:20 Method: 6010B
File ID: T2.120108.152033 Analyst: EDA Units: mg/L
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.200	0.400	0.200	U
Silver	0.00500	0.0400	0.00500	U
Barium	0.00200	0.0100	0.00200	U
Beryllium	0.000240	0.0100	0.000240	U
Calcium	0.100	0.200	0.100	U
Cadmium	0.00100	0.0100	0.00100	U
Cobalt	0.00240	0.0200	0.00240	U
Chromium	0.00240	0.0200	0.00240	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0200	0.0600	0.0404	F
Potassium	0.500	1.00	0.500	U
Magnesium	0.240	0.500	0.240	U
Manganese	0.00200	0.0100	0.00200	U
Sodium	0.100	0.500	0.100	U
Nickel	0.0100	0.0400	0.0100	U
Antimony	0.0100	0.0200	0.0100	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-06
 Instrument ID: PE-ICP2 Run Time: 11:22 Method: 6010B
 File ID: P2.120208.112236 Analyst: SLP Units: mg/L
 Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	10.0	100	90 - 110	
Beryllium	.05	0.0488	97.5	90 - 110	
Calcium	10	10.4	104	90 - 110	
Cobalt	.2	0.194	97.0	90 - 110	
Iron	4	4.02	101	90 - 110	
Magnesium	10	10.2	102	90 - 110	
Potassium	50	48.9	97.9	90 - 110	
Sodium	50	49.3	98.6	90 - 110	
Vanadium	1	0.980	98.0	90 - 110	
Zinc	1	0.994	99.4	90 - 110	

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-06
 Instrument ID: PE-ICP2 Run Time: 11:15 Method: 6010B
 File ID: P2.120308.111509 Analyst: SLP Units: mg/L
 Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	10.0	100	90 - 110	
Beryllium	.05	0.0498	99.7	90 - 110	
Calcium	10	10.5	105	90 - 110	
Cobalt	.2	0.204	102	90 - 110	
Iron	4	4.09	102	90 - 110	
Magnesium	10	10.3	103	90 - 110	
Potassium	50	49.8	99.6	90 - 110	
Sodium	50	49.9	99.8	90 - 110	
Vanadium	1	1.01	101	90 - 110	
Zinc	1	1.03	103	90 - 110	

* Exceeds LIMITS Limit

Login Number: <u>L08110782</u>	Run Date: <u>12/01/2008</u>	Sample ID: <u>WG289367-06</u>
Instrument ID: <u>ICP-THERM02</u>	Run Time: <u>10:12</u>	Method: <u>6010B</u>
File ID: <u>T2.120108.101207</u>	Analyst: <u>EDA</u>	Units: <u>mg/L</u>
Workgroup (AAB#): <u>WG289309</u>	Cal ID: <u>ICP-TH - 01-DEC-08</u>	
QC Key: <u>STD</u>		

Analyte	Expected	Found	%REC	LIMITS	Q
Aluminum	10	10.2	102	90 - 110	
Silver	.4	0.409	102	90 - 110	
Barium	1	1.02	102	90 - 110	
Beryllium	.05	0.0509	102	90 - 110	
Calcium	10	10.2	102	90 - 110	
Cadmium	.05	0.0509	102	90 - 110	
Cobalt	.2	0.205	103	90 - 110	
Chromium	.5	0.513	103	90 - 110	
Copper	.5	0.516	103	90 - 110	
Iron	4	4.10	103	90 - 110	
Potassium	50	51.1	102	90 - 110	
Magnesium	10	10.1	101	90 - 110	
Manganese	.5	0.506	101	90 - 110	
Sodium	50	50.6	101	90 - 110	
Nickel	.5	0.514	103	90 - 110	
Antimony	1.2	1.21	101	90 - 110	
Vanadium	1	1.03	103	90 - 110	
Zinc	1	1.02	102	90 - 110	

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-10
Instrument ID: PE-ICP2 Run Time: 11:45 Method: 6010B
File ID: P2.120208.114554 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.1	mg/L	101	90 - 110	
Beryllium	0.0500	0.0505	mg/L	101	90 - 110	
Calcium	10.0	10.6	mg/L	106	90 - 110	
Cobalt	0.200	0.205	mg/L	103	90 - 110	
Iron	4.00	4.17	mg/L	104	90 - 110	
Magnesium	10.0	10.5	mg/L	105	90 - 110	
Potassium	50.0	49.2	mg/L	98.3	90 - 110	
Sodium	50.0	49.6	mg/L	99.2	90 - 110	
Vanadium	1.00	1.01	mg/L	101	90 - 110	
Zinc	1.00	1.04	mg/L	104	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-12
Instrument ID: PE-ICP2 Run Time: 13:23 Method: 6010B
File ID: P2.120208.132325 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Beryllium	0.0500	0.0507	mg/L	101	90 - 110	
Calcium	10.0	10.5	mg/L	105	90 - 110	
Cobalt	0.200	0.202	mg/L	101	90 - 110	
Iron	4.00	4.10	mg/L	102	90 - 110	
Magnesium	10.0	10.5	mg/L	105	90 - 110	
Potassium	50.0	49.1	mg/L	98.2	90 - 110	
Sodium	50.0	50.6	mg/L	101	90 - 110	
Vanadium	1.00	1.00	mg/L	100	90 - 110	
Zinc	1.00	1.03	mg/L	103	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-16
Instrument ID: PE-ICP2 Run Time: 14:24 Method: 6010B
File ID: P2.120208.142448 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.78	mg/L	97.8	90 - 110		
Beryllium		0.0500	0.0503	mg/L	101	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Cobalt		0.200	0.199	mg/L	99.7	90 - 110		
Iron		4.00	3.91	mg/L	97.8	90 - 110		
Magnesium		10.0	9.97	mg/L	99.7	90 - 110		
Potassium		50.0	47.5	mg/L	95.0	90 - 110		
Sodium		50.0	47.9	mg/L	95.8	90 - 110		
Vanadium		1.00	0.992	mg/L	99.2	90 - 110		
Zinc		1.00	1.03	mg/L	103	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-28
Instrument ID: PE-ICP2 Run Time: 21:13 Method: 6010B
File ID: P2.120208.211331 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.92	mg/L	99.2	90 - 110	
Beryllium	0.0500	0.0493	mg/L	98.6	90 - 110	
Calcium	10.0	10.3	mg/L	103	90 - 110	
Cobalt	0.200	0.197	mg/L	98.7	90 - 110	
Iron	4.00	3.93	mg/L	98.2	90 - 110	
Magnesium	10.0	9.91	mg/L	99.1	90 - 110	
Potassium	50.0	48.0	mg/L	96.0	90 - 110	
Sodium	50.0	48.7	mg/L	97.4	90 - 110	
Vanadium	1.00	0.977	mg/L	97.7	90 - 110	
Zinc	1.00	1.01	mg/L	101	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-30
Instrument ID: PE-ICP2 Run Time: 22:28 Method: 6010B
File ID: P2.120208.222855 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.90	mg/L	99.0	90 - 110		
Beryllium		0.0500	0.0507	mg/L	101	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Cobalt		0.200	0.202	mg/L	101	90 - 110		
Iron		4.00	3.93	mg/L	98.4	90 - 110		
Magnesium		10.0	9.95	mg/L	99.5	90 - 110		
Potassium		50.0	47.8	mg/L	95.7	90 - 110		
Sodium		50.0	48.3	mg/L	96.5	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.04	mg/L	104	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289468-32
Instrument ID: PE-ICP2 Run Time: 23:44 Method: 6010B
File ID: P2.120208.234410 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Beryllium	0.0500	0.0516	mg/L	103	90 - 110	
Calcium	10.0	10.6	mg/L	106	90 - 110	
Cobalt	0.200	0.205	mg/L	103	90 - 110	
Iron	4.00	4.03	mg/L	101	90 - 110	
Magnesium	10.0	10.2	mg/L	102	90 - 110	
Potassium	50.0	49.1	mg/L	98.3	90 - 110	
Sodium	50.0	49.7	mg/L	99.4	90 - 110	
Vanadium	1.00	1.03	mg/L	103	90 - 110	
Zinc	1.00	1.06	mg/L	106	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289468-34
Instrument ID: PE-ICP2 Run Time: 00:58 Method: 6010B
File ID: P2.120308.005825 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Beryllium	0.0500	0.0515	mg/L	103	90 - 110	
Calcium	10.0	10.6	mg/L	106	90 - 110	
Cobalt	0.200	0.205	mg/L	102	90 - 110	
Iron	4.00	4.01	mg/L	100	90 - 110	
Magnesium	10.0	10.1	mg/L	101	90 - 110	
Potassium	50.0	49.4	mg/L	98.7	90 - 110	
Sodium	50.0	50.5	mg/L	101	90 - 110	
Vanadium	1.00	1.01	mg/L	101	90 - 110	
Zinc	1.00	1.06	mg/L	106	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-10
Instrument ID: PE-ICP2 Run Time: 11:38 Method: 6010B
File ID: P2.120308.113822 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.1	mg/L	101	90 - 110	
Beryllium	0.0500	0.0505	mg/L	101	90 - 110	
Calcium	10.0	10.6	mg/L	106	90 - 110	
Cobalt	0.200	0.203	mg/L	101	90 - 110	
Iron	4.00	4.07	mg/L	102	90 - 110	
Magnesium	10.0	10.3	mg/L	103	90 - 110	
Potassium	50.0	49.7	mg/L	99.4	90 - 110	
Sodium	50.0	50.2	mg/L	100	90 - 110	
Vanadium	1.00	1.01	mg/L	101	90 - 110	
Zinc	1.00	1.04	mg/L	104	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-13
Instrument ID: PE-ICP2 Run Time: 12:41 Method: 6010B
File ID: P2.120308.124114 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.94	mg/L	99.4	90 - 110		
Beryllium		0.0500	0.0493	mg/L	98.5	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Cobalt		0.200	0.202	mg/L	101	90 - 110		
Iron		4.00	4.00	mg/L	100	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Potassium		50.0	48.8	mg/L	97.6	90 - 110		
Sodium		50.0	49.9	mg/L	99.7	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289590-15
Instrument ID: PE-ICP2 Run Time: 13:51 Method: 6010B
File ID: P2.120308.135101 Analyst: SLP QC Key: STD
Workgroup (AAB#): WG289427 Cal ID: PE-ICP - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	9.55	mg/L	95.5	90 - 110	
Beryllium	0.0500	0.0480	mg/L	96.0	90 - 110	
Calcium	10.0	10.1	mg/L	101	90 - 110	
Cobalt	0.200	0.194	mg/L	97.1	90 - 110	
Iron	4.00	3.92	mg/L	98.1	90 - 110	
Magnesium	10.0	9.86	mg/L	98.6	90 - 110	
Potassium	50.0	47.1	mg/L	94.3	90 - 110	
Sodium	50.0	48.4	mg/L	96.8	90 - 110	
Vanadium	1.00	0.963	mg/L	96.3	90 - 110	
Zinc	1.00	0.983	mg/L	98.3	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-10
Instrument ID: ICP-THERM02 Run Time: 10:35 Method: 6010B
File ID: T2.120108.103522 Analyst: EDA QC Key: STD
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Silver		0.400	0.397	mg/L	99.1	90 - 110		
Barium		1.00	0.980	mg/L	98.0	90 - 110		
Beryllium		0.0500	0.0494	mg/L	98.7	90 - 110		
Calcium		10.0	9.94	mg/L	99.4	90 - 110		
Cadmium		0.0500	0.0498	mg/L	99.5	90 - 110		
Cobalt		0.200	0.199	mg/L	99.3	90 - 110		
Chromium		0.500	0.496	mg/L	99.2	90 - 110		
Copper		0.500	0.499	mg/L	99.9	90 - 110		
Iron		4.00	4.03	mg/L	101	90 - 110		
Potassium		50.0	49.2	mg/L	98.3	90 - 110		
Magnesium		10.0	9.86	mg/L	98.6	90 - 110		
Manganese		0.500	0.487	mg/L	97.4	90 - 110		
Sodium		50.0	48.9	mg/L	97.8	90 - 110		
Nickel		0.500	0.495	mg/L	99.1	90 - 110		
Antimony		1.20	1.18	mg/L	97.9	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	0.988	mg/L	98.8	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-18
Instrument ID: ICP-THERM02 Run Time: 14:11 Method: 6010B
File ID: T2.120108.141102 Analyst: EDA QC Key: STD
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Silver	0.400	0.414	mg/L	104	90 - 110	
Barium	1.00	1.01	mg/L	101	90 - 110	
Beryllium	0.0500	0.0512	mg/L	102	90 - 110	
Calcium	10.0	9.93	mg/L	99.3	90 - 110	
Cadmium	0.0500	0.0504	mg/L	101	90 - 110	
Cobalt	0.200	0.205	mg/L	102	90 - 110	
Chromium	0.500	0.506	mg/L	101	90 - 110	
Copper	0.500	0.500	mg/L	99.9	90 - 110	
Iron	4.00	4.00	mg/L	100	90 - 110	
Potassium	50.0	50.9	mg/L	102	90 - 110	
Magnesium	10.0	10.0	mg/L	100	90 - 110	
Manganese	0.500	0.499	mg/L	99.8	90 - 110	
Sodium	50.0	50.2	mg/L	100	90 - 110	
Nickel	0.500	0.506	mg/L	101	90 - 110	
Antimony	1.20	1.19	mg/L	99.2	90 - 110	
Vanadium	1.00	1.04	mg/L	104	90 - 110	
Zinc	1.00	1.02	mg/L	102	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/01/2008 Sample ID: WG289367-20
Instrument ID: ICP-THERM02 Run Time: 15:14 Method: 6010B
File ID: T2.120108.151452 Analyst: EDA QC Key: STD
Workgroup (AAB#): WG289309 Cal ID: ICP-TH - 01-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Aluminum	10.0	10.2	mg/L	102	90 - 110	
Silver	0.400	0.411	mg/L	103	90 - 110	
Barium	1.00	0.998	mg/L	99.8	90 - 110	
Beryllium	0.0500	0.0507	mg/L	101	90 - 110	
Calcium	10.0	9.73	mg/L	97.3	90 - 110	
Cadmium	0.0500	0.0495	mg/L	99.1	90 - 110	
Cobalt	0.200	0.203	mg/L	101	90 - 110	
Chromium	0.500	0.500	mg/L	100	90 - 110	
Copper	0.500	0.492	mg/L	98.5	90 - 110	
Iron	4.00	4.15	mg/L	104	90 - 110	
Potassium	50.0	50.1	mg/L	100	90 - 110	
Magnesium	10.0	9.89	mg/L	98.9	90 - 110	
Manganese	0.500	0.490	mg/L	97.9	90 - 110	
Sodium	50.0	49.5	mg/L	99.0	90 - 110	
Nickel	0.500	0.501	mg/L	100	90 - 110	
Antimony	1.20	1.17	mg/L	97.7	90 - 110	
Vanadium	1.00	1.03	mg/L	103	90 - 110	
Zinc	1.00	1.01	mg/L	101	90 - 110	

* Exceeds LIMITS Criteria

Login number: L08110782
Instrument ID: PE-ICP2
Sol. A : WG289468-14
Sol. AB : WG289468-15

File ID: P2.120208.141404
File ID: P2.120208.141927

Workgroup (AAB#): WG289427
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	256	102	250	250	100	
Beryllium	NS	0.000790	NS	0.250	0.254	102	
Calcium	250	278	111	250	265	106	
Cobalt	NS	-0.00157	NS	0.250	0.228	91.2	
Iron	100	97.8	97.8	100	95.5	95.5	
Magnesium	250	253	101	250	247	98.8	
Potassium	NS	0.0449	NS	5.00	4.96	99.2	
Sodium	NS	0.266	NS	5.00	5.27	105	
Vanadium	NS	0.00175	NS	0.250	0.251	100	
Zinc	NS	-0.00314	NS	0.500	0.462	92.4	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login number: L08110782
Instrument ID: PE-ICP2
Sol. A : WG289590-08
Sol. AB : WG289590-09

File ID: P2.120308.112743
File ID: P2.120308.113302

Workgroup (AAB#): WG289427
Method: 6010B
Units: mg/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	249	99.6	250	248	99.2	
Beryllium	NS	0.000270	NS	0.250	0.251	100	
Calcium	250	266	106	250	269	108	
Cobalt	NS	-0.00111	NS	0.250	0.230	92.0	
Iron	100	97.1	97.1	100	97.1	97.1	
Magnesium	250	248	99.2	250	248	99.2	
Potassium	NS	0.00340	NS	5.00	5.09	102	
Sodium	NS	-0.00109	NS	5.00	5.14	103	
Vanadium	NS	0.000750	NS	0.250	0.255	102	
Zinc	NS	0.000130	NS	0.500	0.463	92.6	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login number: L08110782
Instrument ID: ICP-THERMO2
Sol. A: WG289367-08
Sol. AB: WG289367-09

File ID: T2.120108.102346
File ID: T2.120108.102937

Workgroup (AAB#): WG289309
Method: 6010B
Units: mg/L
Matrix: Soil

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Aluminum	250	248	99.2	250	253	101	
Antimony	NS	-0.00476	NS	0.500	0.505	101	
Barium	NS	0.000670	NS	0.250	0.249	99.6	
Beryllium	NS	0.0000800	NS	0.250	0.243	97.2	
Cadmium	NS	0.00128	NS	0.500	0.483	96.6	
Calcium	250	252	101	250	258	103	
Chromium	NS	0.00156	NS	0.250	0.241	96.4	
Cobalt	NS	0.000320	NS	0.250	0.240	96.0	
Copper	NS	-0.00194	NS	0.250	0.245	98.0	
Iron	100	97.5	97.5	100	100	100	
Magnesium	250	248	99.2	250	255	102	
Manganese	NS	0.000110	NS	0.250	0.249	99.6	
Nickel	NS	0.000220	NS	0.500	0.476	95.2	
Potassium	NS	0.0642	NS	5.00	5.02	100	
Silver	NS	-0.000270	NS	0.500	0.495	99.0	
Sodium	NS	0.0346	NS	5.00	5.03	101	
Vanadium	NS	0.00360	NS	0.250	0.248	99.2	
Zinc	NS	-0.00761	NS	0.500	0.473	94.6	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login Number: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
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	0.0499	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	-0.000200	0.0000100	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	-0.0647
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.104	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	0.0669	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	-0.190
ZINC	206.20	0	0	0	0	0

Login Number: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
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	-3.78
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0105
BORON	249.68	0	0.0238	50.1	3.51	1.50
CADMIUM	228.80	0	0	0	-8.00	0
CALCIUM	227.55	0	0	0	174	-21.8
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0.436
COPPER	327.39	0	-0.0137	0	0.380	-0.0467
IRON	239.56	0	0.0227	0	1.91	0.331
LEAD	220.35	0	-0.0188	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	-0.00790	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	1.20	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.117	0	-0.382	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	-0.0100	0	6.00	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	0.000000100	0	0	-5.00

Login Number: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
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	-0.130	0	0	0
BARIUM	233.53	0	0.0211	0	0	0
BERYLLIUM	234.86	0	0.163	0	0	0
BORON	249.68	0	-4.02	0	0	0
CADMIUM	228.80	0	-0.00172	0	0	0
CALCIUM	227.55	-2.44	-8.15	0	0	0.104
CHROMIUM	267.72	0	-0.0180	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	-0.0128	0	0	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.341	0.0593	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	-0.0659	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0342	0	11.9	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	3.00	0	0	0
SELENIUM	196.03	0	-0.700	0	0	-0.0113
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	-0.0248	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.00120	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	-0.100	0	0	-0.0400
ZINC	206.20	-0.200	0.117	0	0	0

Login Number: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
Method: 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	51.0	0	0	0
ANTIMONY	206.84	0	-17.4	0	0	0
ARSENIC	188.98	0	3.15	0	0	0
BARIUM	233.53	0	-0.740	0	0	0
BERYLLIUM	234.86	-0.131	-0.545	0	-0.00974	0
BORON	249.68	0	-2.08	0	0	0
CADMIUM	228.80	0	0	0	-0.0990	0
CALCIUM	227.55	0	-25.0	0	-1100	0
CHROMIUM	267.72	0.800	-0.00100	0	0	0
COBALT	228.62	0	-0.668	0	0.129	0
COPPER	327.39	0	-0.519	0	-0.0905	-0.0630
IRON	239.56	-1.38	0	0	0	0
LEAD	220.35	0.260	-2.35	0	0	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	0.134	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	1.11	0.199	0	-0.202	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	3.00	0	-0.200	-0.100

Login Number: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
Method: 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	-7.64	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	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: L08110782
Instrument ID: PE-ICP2

Date: 01/16/2008
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	-2.27	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	11.3	0
CHROMIUM	267.72	0	0	-0.300	-0.0400
COBALT	228.62	2.07	0	0	0
COPPER	327.39	-1.79	0	-0.842	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	-0.750	0	-0.150	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	-0.0280	0
MANGANESE	257.61	-0.227	-0.0414	-0.0601	-0.0553
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.150	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	0	0	0.593	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-6.38	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: L08110782
Instrument ID: ICP-THERM02

Date: 08/28/2008
Method: 6010B

Analyte	Wave Length	AL	AS	B	BA	BE
ALUMINUM	308.20	0	0	0	0	0
ANTIMONY	206.80	0.0000210	0	0	0	0
ARSENIC	189.00	0	0	0	0	0
BARIUM	455.40	0	0	0	0	0
BERYLLIUM	313.00	0	0	0	0	0
BORON	249.70	0	0	0	0	0
CADMIUM	228.80	0	0.0171	0	0	0
CALCIUM	422.70	0	0	0	0	0
CHROMIUM	267.70	0	0	0	0	0
COBALT	228.60	0	0	0	0	0
COPPER	224.70	0	0	0	0	0
IRON	261.20	0	0	0	0	0
LEAD	220.30	0.000190	0	0	0	0
LITHIUM	670.80	0	0	0	0	0
MAGNESIUM	279.10	0	0	0	0	0
MANGANESE	257.60	0	0	0	0	0
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.40	0	0	0	0	0
SELENIUM	196.00	-0.0000240	0	0	0	0
SILICON	212.40	0	0	0	0	0
SILVER	328.00	0	0	0	0	0
SODIUM	589.50	0	0	0	0	0
STRONTIUM	407.80	0	0	0	0	0
THALLIUM	190.80	-0.0000120	0	0	0	0
TIN	189.90	0	0	0	0	0
TITANIUM	337.30	0	0	0	0	0
VANADIUM	292.40	0	0	0	0	0
ZINC	206.20	0.00000400	0	0	0	0

Login Number: L08110782
Instrument ID: ICP-THERM02

Date: 08/28/2008
Method: 6010B

Analyte	Wave Length	CA	CO	CR	CU	FE
ALUMINUM	308.20	0	-0.000820	0	0	0
ANTIMONY	206.80	0	0	0.00950	0	0.0000560
ARSENIC	189.00	0	0	0.000490	0	-0.000120
BARIUM	455.40	0	0	0	0	0
BERYLLIUM	313.00	0	0	0	0	0
BORON	249.70	0	0.00343	0	0	-0.000619
CADMIUM	228.80	0	0	0	0	0.00000100
CALCIUM	422.70	0	0	0	0	0
CHROMIUM	267.70	0	0	0	0	0.0000230
COBALT	228.60	0	0	0.000108	0	0
COPPER	224.70	0	0.0000770	0	0	0.000120
IRON	261.20	0	0	0	0	0
LEAD	220.30	0	-0.0000930	-0.000172	0.000809	0
LITHIUM	670.80	0	0	0	0	0
MAGNESIUM	279.10	0	0	0	0	0
MANGANESE	257.60	0	0	-0.0000920	0	0
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0.000160	0	0	0.0000320
POTASSIUM	766.40	0	0	0	0	0
SELENIUM	196.00	0	0	0	0	0
SILICON	212.40	0	0	0	0	0
SILVER	328.00	0	0	0	0	0
SODIUM	589.50	0	0	0	0	0
STRONTIUM	407.80	0.0000140	0	0	0	0
THALLIUM	190.80	0	0.00397	0.000276	0	0
TIN	189.90	0	0	0	0	0
TITANIUM	337.30	0	0	0	0	0
VANADIUM	292.40	0	0	0	0	0.0000200
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1264133
Report generated: 12/02/2008 09:03



Login Number: L08110782
Instrument ID: ICP-THERM02

Date: 08/28/2008
Method: 6010B

Analyte	Wave Length	LI	MG	MN	MO	NA
ALUMINUM	308.20	0	0	0	0.0153	0
ANTIMONY	206.80	0	0	0	0.000670	0
ARSENIC	189.00	0	0	0	0.00109	0
BARIUM	455.40	0	0	0	0	0
BERYLLIUM	313.00	0	0	0	0	0
BORON	249.70	0	0	0	-0.00169	0
CADMIUM	228.80	0	0	0	0.0000220	0
CALCIUM	422.70	0	0	0	0	0
CHROMIUM	267.70	0	0	0.000160	0	0
COBALT	228.60	0	0	0	-0.000983	0
COPPER	224.70	0	0	0	0.00274	0
IRON	261.20	0	0	0	0	0
LEAD	220.30	0	0	0	-0.00183	0
LITHIUM	670.80	0	0	0	0	0
MAGNESIUM	279.10	0	0	-0.00190	-0.0110	0
MANGANESE	257.60	0	0.0000190	0	0	0
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.40	0	0	0	0	0
SELENIUM	196.00	0	0	0	0.000156	0
SILICON	212.40	0	0	0	0.0187	0
SILVER	328.00	0	0	0	-0.0000440	0
SODIUM	589.50	0	0	0	0	0
STRONTIUM	407.80	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.90	0	0	0	0	0
TITANIUM	337.30	0	0	0	-0.000153	0
VANADIUM	292.40	0	0	0	-0.00778	0
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1264133
Report generated: 12/02/2008 09:03



Login Number: L08110782
Instrument ID: ICP-THERM02

Date: 08/28/2008
Method: 6010B

Analyte	Wave Length	NI	SB	SN	SR	TI
ALUMINUM	308.20	0	0	0	0	0
ANTIMONY	206.80	0	0	-0.00840	0	-0.000990
ARSENIC	189.00	0	0	0	0	0
BARIUM	455.40	0	0	0	0	0
BERYLLIUM	313.00	0	0	0	0	0
BORON	249.70	0	0	0	0	0
CADMIUM	228.80	-0.000128	0	0	0	0
CALCIUM	422.70	0	0	0	0	0
CHROMIUM	267.70	0	0	0	0	0.0000550
COBALT	228.60	0.000175	0	0	0	0.00188
COPPER	224.70	-0.00455	0	0	0	0.000469
IRON	261.20	0	0	0	0	0
LEAD	220.30	0.000110	0	0	0	0
LITHIUM	670.80	0	0	0	0	0
MAGNESIUM	279.10	0	0	0	0	-0.00290
MANGANESE	257.60	0	0	0	0	0
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.40	0	0	0	0	0
SELENIUM	196.00	0	0	0	0	0
SILICON	212.40	0	0	0	0	0
SILVER	328.00	0	0	0	0	-0.00620
SODIUM	589.50	0	0	0	0	0
STRONTIUM	407.80	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	-0.00170
TIN	189.90	0	0	0	0	-0.00220
TITANIUM	337.30	0	0	0	0	0
VANADIUM	292.40	0	0	0	0	0.000824
ZINC	206.20	0	0	0	0	0

Login Number: L08110782
Instrument ID: ICP-THERM02

Date: 08/28/2008
Method: 6010B

Analyte	Wave Length	V	ZN
ALUMINUM	308.20	0.00300	0
ANTIMONY	206.80	-0.00438	0
ARSENIC	189.00	0.000107	0
BARIUM	455.40	0	0
BERYLLIUM	313.00	0	0
BORON	249.70	0	0
CADMIUM	228.80	0.000102	0
CALCIUM	422.70	0	0
CHROMIUM	267.70	0	0
COBALT	228.60	0.0000200	0
COPPER	224.70	0	0
IRON	261.20	0	0
LEAD	220.30	0	0
LITHIUM	670.80	0	0
MAGNESIUM	279.10	0	0
MANGANESE	257.60	0	0
MOLYBDENUM	202.03	-0.000110	0
NICKEL	231.60	0	0
POTASSIUM	766.40	0	0
SELENIUM	196.00	0	0
SILICON	212.40	0	0
SILVER	328.00	-0.00617	0
SODIUM	589.50	0	0
STRONTIUM	407.80	0	0
THALLIUM	190.80	-0.0282	0
TIN	189.90	0	0
TITANIUM	337.30	0	0
VANADIUM	292.40	0	0
ZINC	206.20	0	0

Login Number: L08110782

Date: 09/11/2008

Instrument ID: PE-ICP2

Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	36.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	1.8
Boron	10.00	18.0
Cadmium	10.00	2.7
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	1.6
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	72.0
Selenium	10.00	45.0
Silicon	10.00	9.0
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.

Login Number: L08110782
 Instrument ID: ICP-THERM02

Date: 09/11/2008
 Method: 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	900.0
Antimony	10.00	90.0
Arsenic	10.00	90.0
Barium	10.00	36.0
Beryllium	15.00	9.0
Boron	10.00	90.0
Cadmium	10.00	18.0
Calcium	10.00	540.0
Chromium	10.00	90.0
Cobalt	10.00	90.0
Copper	10.00	180.0
Iron	5.00	900.0
Lead	10.00	180.0
Lithium	10.00	90.0
Magnesium	15.00	900.0
Manganese	15.00	180.0
Molybdenum	10.00	90.0
Nickel	10.00	90.0
Potassium	10.00	315.0
Selenium	10.00	90.0
Silicon	10.00	90.0
Silver	5.00	9.0
Sodium	10.00	315.0
Strontium	10.00	4.5
Thallium	10.00	9.0
Tin	10.00	90.0
Titanium	15.00	90.0
Vanadium	10.00	90.0
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

00082069

L08110782

12/09/08 09:06

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
35AWW01-111908	L08110782-01	6020	1	25-NOV-08
35AWW01-111908	L08110782-01	6020	10	25-NOV-08
35AWW01-111908	L08110782-01	6020	1	25-NOV-08
LHSMW06-111908	L08110782-02	6020	10	25-NOV-08
LHSMW06-111908	L08110782-02	6020	1	25-NOV-08
LHSMW06-111908	L08110782-02	6020	1	25-NOV-08
LHSMW03-111908	L08110782-03	6020	1	25-NOV-08
LHSMW03-111908	L08110782-03	6020	1	25-NOV-08
LHSMW03-111908	L08110782-03	6020	10	25-NOV-08
LHSMW07-111908	L08110782-04	6020	1	25-NOV-08
LHSMW07-111908	L08110782-04	6020	1	25-NOV-08
35AWW05-112108	L08110782-05	6020	1	25-NOV-08
35AWW05-112108	L08110782-05	6020	1	25-NOV-08
03SB11-(10-11)	L08110782-06	6020	1	25-NOV-08
03SB11-(BOTTOM)	L08110782-07	6020	1	25-NOV-08



Report Number: **L08110782**Report Date : **December 9, 2008**

00082070

Sample Number: **L08110782-01**
Client ID: **35AWW01-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 15:15**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/03/2008 12:07**
Run Date: **12/03/2008 17:19**
File ID: **EL.120308.171916**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250

U Not detected at or above adjusted sample detection limit

Report Number: **L08110782**Report Date : **December 9, 2008**

00082071

Sample Number: **L08110782-01**
Client ID: **35AWW01-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 15:15**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **10**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/02/2008 11:32**
Run Date: **12/02/2008 17:16**
File ID: **EL.120208.171605**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Barium, Total	7440-39-3	0.239		0.0300	0.00500

Report Number: **L08110782**Report Date : **December 9, 2008**

00082072

Sample Number: **L08110782-01**
 Client ID: **35AWW01-111908**
 Matrix: **Water**
 Workgroup Number: **WG289382**
 Collect Date: **11/19/2008 15:15**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **12/01/2008 11:21**
 Cal Date: **12/02/2008 11:32**
 Run Date: **12/02/2008 15:17**
 File ID: **EL.120208.151755**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.00115		0.00100	0.000250
Cadmium, Total	7440-43-9		U	0.000500	0.000125
Chromium, Total	7440-47-3	0.00239		0.00200	0.000500
Copper, Total	7440-50-8	0.000812	J	0.00200	0.000500
Lead, Total	7439-92-1		U	0.000500	0.000250
Manganese, Total	7439-96-5	0.0610		0.00200	0.000500
Nickel, Total	7440-02-0	0.00160	J	0.00400	0.00100
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2	0.00465		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.0000500

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: **L08110782**Report Date : **December 9, 2008**

00082073

Sample Number: **L08110782-02**
Client ID: **LHSMW06-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 12:40**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **10**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/02/2008 11:32**
Run Date: **12/02/2008 17:32**
File ID: **EL.120208.173214**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Chromium, Total	7440-47-3	1.38		0.0200	0.00500
Manganese, Total	7439-96-5	0.436		0.0200	0.00500

Report Number: **L08110782**Report Date : **December 9, 2008**

00082074

Sample Number: **L08110782-02**
Client ID: **LHSMW06-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 12:40**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/03/2008 12:07**
Run Date: **12/03/2008 17:46**
File ID: **EL.120308.174647**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250

U Not detected at or above adjusted sample detection limit

Sample Number: **L08110782-02**
 Client ID: **LHSMW06-111908**
 Matrix: **Water**
 Workgroup Number: **WG289382**
 Collect Date: **11/19/2008 12:40**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **12/01/2008 11:21**
 Cal Date: **12/02/2008 11:32**
 Run Date: **12/02/2008 15:46**
 File ID: **EL.120208.154631**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.00989		0.00100	0.000250
Barium, Total	7440-39-3	0.0359		0.00300	0.000500
Cadmium, Total	7440-43-9	0.000158	J	0.000500	0.000125
Copper, Total	7440-50-8	0.00663		0.00200	0.000500
Lead, Total	7439-92-1	0.000293	J	0.000500	0.000250
Nickel, Total	7440-02-0	0.0959		0.00400	0.00100
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2	0.0413		0.00100	0.000500
Thallium, Total	7440-28-0	0.0000755	J	0.000200	0.0000500

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: **L08110782**Report Date : **December 9, 2008**

00082076

Sample Number: **L08110782-03**
Client ID: **LHSMW03-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 09:45**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/03/2008 12:07**
Run Date: **12/03/2008 17:52**
File ID: **EL.120308.175210**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250

U Not detected at or above adjusted sample detection limit

Sample Number: **L08110782-03**
 Client ID: **LHSMW03-111908**
 Matrix: **Water**
 Workgroup Number: **WG289382**
 Collect Date: **11/19/2008 09:45**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **12/01/2008 11:21**
 Cal Date: **12/02/2008 11:32**
 Run Date: **12/02/2008 15:51**
 File ID: **EL.120208.155154**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.00336		0.00100	0.000250
Cadmium, Total	7440-43-9	0.000170	J	0.000500	0.000125
Chromium, Total	7440-47-3	0.0106		0.00200	0.000500
Copper, Total	7440-50-8	0.00190	J	0.00200	0.000500
Lead, Total	7439-92-1		U	0.000500	0.000250
Manganese, Total	7439-96-5	0.0930		0.00200	0.000500
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2	0.0142		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.0000500

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: **L08110782**Report Date : **December 9, 2008**

00082078

Sample Number: **L08110782-03**
Client ID: **LHSMW03-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/19/2008 09:45**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **10**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/02/2008 11:32**
Run Date: **12/02/2008 17:37**
File ID: **EL.120208.173738**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Barium, Total	7440-39-3	0.714		0.0300	0.00500
Nickel, Total	7440-02-0	0.246		0.0400	0.0100

Report Number: **L08110782**Report Date : **December 9, 2008**

00082079

Sample Number: **L08110782-04**
Client ID: **LHSMW07-111908**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/21/2008 13:05**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/03/2008 12:07**
Run Date: **12/03/2008 16:52**
File ID: **EL.120308.165215**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250

U Not detected at or above adjusted sample detection limit

Report Number: **L08110782**Report Date : **December 9, 2008**

00082080

Sample Number: **L08110782-04**
 Client ID: **LHSMW07-111908**
 Matrix: **Water**
 Workgroup Number: **WG289382**
 Collect Date: **11/21/2008 13:05**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **12/01/2008 11:21**
 Cal Date: **12/02/2008 11:32**
 Run Date: **12/02/2008 15:57**
 File ID: **EL.120208.155718**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.0207		0.00100	0.000250
Barium, Total	7440-39-3	0.0163		0.00300	0.000500
Cadmium, Total	7440-43-9	0.00216		0.000500	0.000125
Chromium, Total	7440-47-3	0.00764		0.00200	0.000500
Copper, Total	7440-50-8	0.00753		0.00200	0.000500
Lead, Total	7439-92-1		U	0.000500	0.000250
Manganese, Total	7439-96-5	0.103		0.00200	0.000500
Nickel, Total	7440-02-0	0.0431		0.00400	0.00100
Antimony, Total	7440-36-0		U	0.00100	0.000250
Selenium, Total	7782-49-2	0.0900		0.00100	0.000500
Thallium, Total	7440-28-0	0.000129	J	0.000200	0.0000500

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: **L08110782**Report Date : **December 9, 2008**

00082081

Sample Number: **L08110782-05**
Client ID: **35AWW05-112108**
Matrix: **Water**
Workgroup Number: **WG289382**
Collect Date: **11/21/2008 17:30**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:21**
Cal Date: **12/03/2008 12:07**
Run Date: **12/03/2008 16:57**
File ID: **EL.120308.165735**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Silver, Total	7440-22-4		U	0.00100	0.000250

U Not detected at or above adjusted sample detection limit

Sample Number: **L08110782-05**
 Client ID: **35AWW05-112108**
 Matrix: **Water**
 Workgroup Number: **WG289382**
 Collect Date: **11/21/2008 17:30**
 Sample Tag: **01**

PrePrep Method: **NONE**
 Prep Method: **3015**
 Analytical Method: **6020**
 Analyst: **JYH**
 Dilution: **1**
 Units: **mg/L**

Instrument: **ELAN-ICP**
 Prep Date: **12/01/2008 11:21**
 Cal Date: **12/02/2008 11:32**
 Run Date: **12/02/2008 16:02**
 File ID: **EL.120208.160240**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.00802		0.00100	0.000250
Barium, Total	7440-39-3	0.00340		0.00300	0.000500
Cadmium, Total	7440-43-9		U	0.000500	0.000125
Chromium, Total	7440-47-3	0.0204		0.00200	0.000500
Copper, Total	7440-50-8	0.000540	J	0.00200	0.000500
Lead, Total	7439-92-1		U	0.000500	0.000250
Manganese, Total	7439-96-5	0.00425		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	0.0345		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.0000500

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: **L08110782-06**
Client ID: **03SB11-(10-11)**
Matrix: **Soil**
Workgroup Number: **WG289424**
Collect Date: **11/18/2008 09:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3051**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/kg**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:05**
Cal Date: **12/02/2008 11:32**
Run Date: **12/02/2008 19:01**
File ID: **EL.120208.190114**
Percent Solid: **89.3**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	2.19		0.335	0.0838
Lead, Total	7439-92-1	4.15		0.223	0.112
Selenium, Total	7782-49-2	0.206	J	0.223	0.112
Thallium, Total	7440-28-0	0.0730		0.0223	0.0112

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

Sample Number: **L08110782-07**
Client ID: **03SB11-(BOTTOM)**
Matrix: **Soil**
Workgroup Number: **WG289424**
Collect Date: **11/18/2008 10:15**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3051**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/kg**

Instrument: **ELAN-ICP**
Prep Date: **12/01/2008 11:05**
Cal Date: **12/02/2008 11:32**
Run Date: **12/02/2008 19:17**
File ID: **EL.120208.191727**
Percent Solid: **84.9**

Analyte	CAS. Number	Result	Qual	PQL	SDL
Arsenic, Total	7440-38-2	0.219	J	0.351	0.0878
Lead, Total	7439-92-1	4.39		0.234	0.117
Selenium, Total	7782-49-2	0.209	J	0.234	0.117
Thallium, Total	7440-28-0	0.123		0.0234	0.0117

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

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

Perkin Elmer ELAN ICP/MS**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: WG289287
Analyst: ED
Spike Analyst: ED
Run Date: 12/01/2008 11:05
Method: 3051

SOP: ME406 Revision 11
Spike Solution: STD27101
Spike Witness: VC
HNO3 Lot #: COA13530
Digest tubes Lot #: COA13407

SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
WG289287-02	BLANK	7	.5 g	200 mL	173.279 g	173.22 g		
WG289287-03	LCS	7	.5 g	200 mL	175.463 g	175.408 g	.5 mL	
WG289287-01	REF	7	.501 g	200 mL	172.749 g	172.692 g		
L08110782-06	SAMP	7	.501 g	200 mL	172.749 g	172.692 g		12/05/08
L08110782-07	SAMP	7	.503 g	200 mL	173.849 g	173.796 g		12/05/08
WG289287-04	MS	7	.501 g	200 mL	173.785 g	173.725 g	.5 mL	
WG289287-05	MSD	7	.501 g	200 mL	174.252 g	174.2 g	.5 mL	

Analyst: Emily Decker

Reviewer: Vicki Collier

Workgroup: WG289288

SOP: ME407 Revision 10

Analyst: ED

Spike Solution: STD27101

Spike Analyst: ED

Spike Witness: VC

Run Date: 12/01/2008 11:21

SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
WG289288-03	BLANK	1	40 mL	100 mL	206.231 g	206.223 g		
WG289288-04	LCS	1	40 mL	100 mL	206.055 g	206.022 g	.25 mL	
L08110690-01	SAMP	2	40 mL	100 mL	204.996 g	204.979 g		12/05/08
WG289288-01	REF	2	40 mL	100 mL	205.792 g	205.765 g		
L08110690-02	SAMP	2	40 mL	100 mL	205.792 g	205.765 g		12/05/08
L08110690-03	SAMP	2	40 mL	100 mL	205.057 g	205.039 g		12/05/08
L08110690-04	SAMP	2	40 mL	100 mL	206.28 g	206.257 g		12/05/08
L08110690-05	SAMP	2	40 mL	100 mL	205.399 g	205.377 g		12/05/08
L08110690-06	SAMP	2	40 mL	100 mL	206.015 g	206 g		12/05/08
WG289288-02	REF	2	40 mL	100 mL	206.095 g	206.079 g		
L08110767-01	SAMP	2	40 mL	100 mL	206.095 g	206.079 g		12/02/08
L08110769-01	SAMP	1	40 mL	100 mL	205.231 g	205.217 g		12/03/08
L08110769-02	SAMP	1	40 mL	100 mL	205.915 g	205.907 g		12/03/08
L08110782-01	SAMP	1	40 mL	100 mL	205.285 g	205.278 g		12/05/08
L08110782-02	SAMP	1	40 mL	100 mL	206.554 g	206.536 g		12/05/08
L08110782-03	SAMP	1	40 mL	100 mL	205.013 g	204.989 g		12/05/08
L08110782-04	SAMP	1	40 mL	100 mL	207.076 g	207.049 g		12/05/08
L08110782-05	SAMP	1	40 mL	100 mL	206.021 g	206.008 g		12/05/08
WG289288-05	DUP	1	40 mL	100 mL	206.703 g	206.685 g		
WG289288-06	MS	1	40 mL	100 mL	207.017 g	207.008 g	.25 mL	
WG289288-07	MSD	1	40 mL	100 mL	207.535 g	207.528 g	.25 mL	

Analyst: Emily Decker

Reviewer: Vicki Collier

00082090

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120208A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000

Workgroups: 288659,289382,288707,289424,288705

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.120208.110932	Blank	Blank		1		12/02/08 11:09
2	EL.120208.111512	WG289472-01	Calibration Point		1		12/02/08 11:15
3	EL.120208.112053	WG289472-02	Calibration Point		1		12/02/08 11:20
4	EL.120208.112634	WG289472-03	Calibration Point		1		12/02/08 11:26
5	EL.120208.113216	WG289472-04	Calibration Point		1		12/02/08 11:32
6	EL.120208.113759	WG289472-05	Initial Calibration Verification		1		12/02/08 11:37
7	EL.120208.114341	WG289472-06	Initial Calib Blank		1		12/02/08 11:43
8	EL.120208.114924	WG289472-07	CRQL Check Solid		1		12/02/08 11:49
9	EL.120208.115510	WG289472-08	CRQL Check Water		1		12/02/08 11:55
10	EL.120208.120055	WG289472-09	Interference Check		1		12/02/08 12:00
11	EL.120208.120639	WG289472-10	Interference Check		1		12/02/08 12:06
12	EL.120208.121223	WG289472-11	CCV		1		12/02/08 12:12
13	EL.120208.121804	WG289472-12	CCB		1		12/02/08 12:18
14	EL.120208.122325	WG288367-02	Method/Prep Blank	.5/200	1		12/02/08 12:23
15	EL.120208.122907	WG288367-03	Laboratory Control S		1		12/02/08 12:29
16	EL.120208.123431	WG288367-01	Reference Sample		1	L08110471-09	12/02/08 12:34
17	EL.120208.123955	WG288367-04	Matrix Spike	.503/200	1	L08110471-09	12/02/08 12:39
18	EL.120208.124519	WG288367-02	Method/Prep Blank		1		12/02/08 12:45
19	EL.120208.125042	WG288367-03	Laboratory Control S	.5/200	1		12/02/08 12:50
20	EL.120208.125606	WG288367-05	Matrix Spike Duplica	.503/200	1	L08110471-09	12/02/08 12:56
21	EL.120208.130131	L08110471-12	MR08-IS382-08D	.502/200	1		12/02/08 13:01
22	EL.120208.130656	WG288659-01	Post Digestion Spike		1	L08110471-12	12/02/08 13:06
23	EL.120208.131220	WG288659-02	Serial Dilution		5	L08110471-12	12/02/08 13:12
24	EL.120208.131802	WG289472-13	CCV		1		12/02/08 13:18
25	EL.120208.132343	WG289472-14	CCB		1		12/02/08 13:23
26	EL.120208.132904	L08110471-13	MR08-SS399-08D	.504/200	1		12/02/08 13:29
27	EL.120208.133427	L08110471-14	MR08-SS398-08D	.504/200	1		12/02/08 13:34
28	EL.120208.133950	L08110471-15	MR08-SS397-08D	.508/200	1		12/02/08 13:39
29	EL.120208.134513	L08110471-16	MR08-SS396-08D	.505/200	1		12/02/08 13:45
30	EL.120208.135037	L08110471-02	MR08-IS386-08D	.508/200	1		12/02/08 13:50
31	EL.120208.135602	L08110471-03	MR08-IS387-08D	.506/200	1		12/02/08 13:56
32	EL.120208.140128	L08110471-04	MR08-IS384-08D	.501/200	1		12/02/08 14:01
33	EL.120208.140712	WG289472-15	CCV		1		12/02/08 14:07
34	EL.120208.141253	WG289472-16	CCB		1		12/02/08 14:12
35	EL.120208.141816	L08110471-05	MR08-IS383-08D	.503/200	1		12/02/08 14:18
36	EL.120208.142340	L08110471-06	MR08-IS374-08D	.506/200	1		12/02/08 14:23
37	EL.120208.142902	L08110471-07	MR08-IS374D-08D	.505/200	1		12/02/08 14:29

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00082091

Microbac Laboratories Inc.
Instrument Run Log

Instrument: ELAN-ICP Dataset: 120208A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 288659,289382,288707,289424,288705

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	EL.120208.143425	L08110471-08	MR08-IS375-08D	.5/200	1		12/02/08 14:34
39	EL.120208.144008	WG289472-17	CCV		1		12/02/08 14:40
40	EL.120208.144549	WG289472-18	CCB		1		12/02/08 14:45
41	EL.120208.145109	WG289288-03	Method/Prep Blank	40/100	1		12/02/08 14:51
42	EL.120208.145629	WG289288-04	Laboratory Control S	40/100	1		12/02/08 14:56
43	EL.120208.150150	WG289288-02	Reference Sample		2	L08110767-01	12/02/08 15:01
44	EL.120208.150712	WG289288-06	Matrix Spike	40/100	2	L08110767-01	12/02/08 15:07
45	EL.120208.151233	WG289288-07	Matrix Spike Duplica	40/100	2	L08110767-01	12/02/08 15:12
46	EL.120208.151755	L08110782-01	35AWW01-111908	40/100	1		12/02/08 15:17
47	EL.120208.152350	WG289382-01	Post Digestion Spike		1	L08110782-01	12/02/08 15:23
48	EL.120208.152946	WG289382-02	Serial Dilution		5	L08110782-01	12/02/08 15:29
49	EL.120208.153528	WG289472-19	CCV		1		12/02/08 15:35
50	EL.120208.154110	WG289472-20	CCB		1		12/02/08 15:41
51	EL.120208.154631	L08110782-02	LHSMW06-111908	40/100	1		12/02/08 15:46
52	EL.120208.155154	L08110782-03	LHSMW03-111908	40/100	1		12/02/08 15:51
53	EL.120208.155718	L08110782-04	LHSMW07-111908	40/100	1		12/02/08 15:57
54	EL.120208.160240	L08110782-05	35AWW05-112108	40/100	1	WG289304-01	12/02/08 16:02
55	EL.120208.160800	L08110690-01	OUTLET 003/COMP	40/100	1	WG289306-04	12/02/08 16:08
56	EL.120208.161321	L08110690-02	OUTLET 003/COMP	40/100	1	WG289288-01	12/02/08 16:13
57	EL.120208.161843	WG289288-05	Duplicate	40/100	1	L08110690-02	12/02/08 16:18
58	EL.120208.162404	L08110690-03	OUTLET 003 BRANCH LEG	40/100	1		12/02/08 16:24
59	EL.120208.162926	L08110690-04	OUTLET 003 BRANCH LEG	40/100	1		12/02/08 16:29
60	EL.120208.163449	L08110690-05	OUTLET 003 BRANCH LEG	40/100	1	WG289306-06	12/02/08 16:34
61	EL.120208.164031	WG289472-21	CCV		1		12/02/08 16:40
62	EL.120208.164613	WG289472-22	CCB		1		12/02/08 16:46
63	EL.120208.165134	L08110690-06	OUTLET 003 BRANCH LEG	40/100	1		12/02/08 16:51
64	EL.120208.165657	L08110769-01	LH18/24-SP650-6129-GRAB	40/100	1	WG289322-08	12/02/08 16:56
65	EL.120208.170220	L08110769-02	LH18/24-SP650-6129-COMP	40/100	1		12/02/08 17:02
66	EL.120208.170744	L08110537-06	NR-12-111-111908	40/100	10		12/02/08 17:07
67	EL.120208.171605	L08110782-01	35AWW01-111908	40/100	10		12/02/08 17:16
68	EL.120208.172128	WG289382-01	Post Digestion Spike		10	L08110782-01	12/02/08 17:21
69	EL.120208.172651	WG289382-02	Serial Dilution		50	L08110782-01	12/02/08 17:26
70	EL.120208.173214	L08110782-02	LHSMW06-111908	40/100	10		12/02/08 17:32
71	EL.120208.173738	L08110782-03	LHSMW03-111908	40/100	10		12/02/08 17:37
72	EL.120208.174321	WG289472-23	CCV		1		12/02/08 17:43
73	EL.120208.174903	WG289472-24	CCB		1		12/02/08 17:49
74	EL.120208.175425	L08110526-02	W-27	40/100	10		12/02/08 17:54

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120208A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 288659,289382,288707,289424,288705

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	EL.120208.175948	L08110526-04	W-13	40/100	1		12/02/08 17:59
76	EL.120208.180509	L08110526-05	W-30B	40/100	10		12/02/08 18:05
77	EL.120208.181030	L08110526-06	W-43 WTR	40/100	2		12/02/08 18:10
78	EL.120208.181552	L08110526-07	W-32 WT	40/100	2		12/02/08 18:15
79	EL.120208.182115	L08110526-09	W-32 WB	40/100	2		12/02/08 18:21
80	EL.120208.182637	L08110526-10	W-32B	40/100	10		12/02/08 18:26
81	EL.120208.183200	L08110526-11	W-52	40/100	10		12/02/08 18:32
82	EL.120208.183923	WG289472-25	CCV		1		12/02/08 18:39
83	EL.120208.184505	WG289472-26	CCB		1		12/02/08 18:45
84	EL.120208.185027	WG289287-02	Method/Prep Blank	.5/200	1		12/02/08 18:50
85	EL.120208.185550	WG289287-03	Laboratory Control S	.5/200	1		12/02/08 18:55
86	EL.120208.190114	WG289287-01	Reference Sample		1	L08110782-06	12/02/08 19:01
87	EL.120208.190639	WG289287-04	Matrix Spike	.501/200	1	L08110782-06	12/02/08 19:06
88	EL.120208.191203	WG289287-05	Matrix Spike Duplica	.501/200	1	L08110782-06	12/02/08 19:12
89	EL.120208.191727	L08110782-07	03SB11-(BOTTOM)	.503/200	1	WG289244-01	12/02/08 19:17
90	EL.120208.192248	WG289424-01	Post Digestion Spike		1	L08110782-07	12/02/08 19:22
91	EL.120208.192810	WG289424-02	Serial Dilution		5	L08110782-07	12/02/08 19:28
92	EL.120208.193353	WG289472-27	CCV		1		12/02/08 19:33
93	EL.120208.193935	WG289472-28	CCB		1		12/02/08 19:39
94	EL.120208.194456	WG288625-02	Method/Prep Blank	40/100	1		12/02/08 19:44
95	EL.120208.195019	WG288625-03	Laboratory Control S	40/100	1		12/02/08 19:50
96	EL.120208.195542	WG288625-01	Reference Sample		1	L08110527-08	12/02/08 19:55
97	EL.120208.200105	WG288625-04	Matrix Spike	40/100	1	L08110527-08	12/02/08 20:01
98	EL.120208.200629	WG288625-05	Matrix Spike Duplica	40/100	1	L08110527-08	12/02/08 20:06
99	EL.120208.201153	L08110527-01	MR08-TW05-08D	40/100	1		12/02/08 20:11
100	EL.120208.201717	WG288705-01	Post Digestion Spike		1	L08110527-01	12/02/08 20:17
101	EL.120208.202242	WG288705-02	Serial Dilution		5	L08110527-01	12/02/08 20:22
102	EL.120208.202826	WG289472-29	CCV		1		12/02/08 20:28
103	EL.120208.203408	WG289472-30	CCB		1		12/02/08 20:34
104	EL.120208.203930	L08110527-02	MR08-TW06-08D	40/100	1		12/02/08 20:39
105	EL.120208.204454	L08110527-03	MR08-TW14-08D	40/100	1		12/02/08 20:44
106	EL.120208.205016	L08110527-04	MR08-TW13-08D	40/100	1		12/02/08 20:50
107	EL.120208.205538	L08110527-05	MR08-TW11-08D	40/100	1		12/02/08 20:55
108	EL.120208.210101	L08110527-06	MR08-TW10-08D	40/100	1		12/02/08 21:01
109	EL.120208.210624	L08110527-07	MR08-TW09-08D	40/100	1		12/02/08 21:06
110	EL.120208.211147	L08110540-01	MR08-TW02-08D	40/100	1		12/02/08 21:11
111	EL.120208.211711	L08110540-02	MR08-TW02D-08D	40/100	1		12/02/08 21:17

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120208A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 288659,289382,288707,289424,288705

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
112	EL.120208.212235	L08110540-03	MR08-TW03-08D	40/100	1		12/02/08 21:22
113	EL.120208.212800	L08110540-04	MR08-TW03D-08D	40/100	1		12/02/08 21:28
114	EL.120208.213344	WG289472-31	CCV		1		12/02/08 21:33
115	EL.120208.213925	WG289472-32	CCB		1		12/02/08 21:39
116	EL.120208.214447	L08110541-12	MR08-EB111808	40/100	1		12/02/08 21:44
117	EL.120208.215032	WG289472-33	CCV		1		12/02/08 21:50
118	EL.120208.215613	WG289472-34	CCB		1		12/02/08 21:56

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120308A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 289481,289497,289382,288750,289513

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.120308.114444	Blank	Blank		1		12/03/08 11:44
2	EL.120308.115024	WG289539-01	Calibration Point		1		12/03/08 11:50
3	EL.120308.115604	WG289539-02	Calibration Point		1		12/03/08 11:56
4	EL.120308.120145	WG289539-03	Calibration Point		1		12/03/08 12:01
5	EL.120308.120727	WG289539-04	Calibration Point		1		12/03/08 12:07
6	EL.120308.121310	WG289539-05	Initial Calibration Verification		1		12/03/08 12:13
7	EL.120308.121851	WG289539-06	Initial Calib Blank		1		12/03/08 12:18
8	EL.120308.122434	WG289539-07	CRQL Check Solid		1		12/03/08 12:24
9	EL.120308.123019	WG289539-08	CRQL Check Water		1		12/03/08 12:30
10	EL.120308.123604	WG289539-09	Interference Check		1		12/03/08 12:36
11	EL.120308.124148	WG289539-10	Interference Check		1		12/03/08 12:41
12	EL.120308.124905	WG289539-11	Interference Check		1		12/03/08 12:49
13	EL.120308.125449	WG289539-12	CCV		1		12/03/08 12:54
14	EL.120308.130030	WG289539-13	CCB		1		12/03/08 13:00
15	EL.120308.130551	WG289443-02	Method/Prep Blank	.5/200	1		12/03/08 13:05
16	EL.120308.131111	WG289443-03	Laboratory Control S	.5/200	1		12/03/08 13:11
17	EL.120308.131632	WG289443-01	Reference Sample		10	L08110361-13	12/03/08 13:16
18	EL.120308.132154	WG289443-04	Matrix Spike	.502/200	10	L08110361-13	12/03/08 13:21
19	EL.120308.132715	WG289443-05	Matrix Spike Duplica	.502/200	10	L08110361-13	12/03/08 13:27
20	EL.120308.133237	L08110361-08	MR08-SD01-08D	.503/200	10		12/03/08 13:32
21	EL.120308.133800	L08110361-09	MR08-SD01D-08D	.512/200	10		12/03/08 13:38
22	EL.120308.134322	L08110361-11	MR08-SD03-08D	.505/200	1		12/03/08 13:43
23	EL.120308.134845	WG289481-01	Post Digestion Spike		1	L08110361-11	12/03/08 13:48
24	EL.120308.135409	WG289481-02	Serial Dilution		5	L08110361-11	12/03/08 13:54
25	EL.120308.135952	WG289539-14	CCV		1		12/03/08 13:59
26	EL.120308.140533	WG289539-15	CCB		1		12/03/08 14:05
27	EL.120308.141055	WG288905-02	Method/Prep Blank	40/100	1		12/03/08 14:10
28	EL.120308.141619	WG288905-03	Laboratory Control S	40/100	1		12/03/08 14:16
29	EL.120308.142141	L08110586-01	NR-12-113-112008	40/100	1		12/03/08 14:21
30	EL.120308.142702	L08110586-02	NR-12-110-112008	40/100	1		12/03/08 14:27
31	EL.120308.143224	WG288905-01	Reference Sample		1	L08110623-11	12/03/08 14:32
32	EL.120308.143745	WG288905-04	Matrix Spike	40/100	1	L08110623-11	12/03/08 14:37
33	EL.120308.144307	WG288905-05	Matrix Spike Duplica	40/100	1	L08110623-11	12/03/08 14:43
34	EL.120308.144829	L08110623-01	MW127-112008-0T01	40/100	1		12/03/08 14:48
35	EL.120308.145352	WG289497-01	Post Digestion Spike		1	L08110623-01	12/03/08 14:53
36	EL.120308.150055	WG289497-02	Serial Dilution		5	L08110623-01	12/03/08 15:00
37	EL.120308.150638	WG289539-16	CCV		1		12/03/08 15:06

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00082095

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120308A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580

ICSA: STD30126 ICSAB: STD30000

Workgroups: 289481,289497,289382,288750,289513

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
38	EL.120308.151219	WG289539-17	CCB		1		12/03/08 15:12
39	EL.120308.151741	L08110623-03	MW293-112008-0T01	40/100	1		12/03/08 15:17
40	EL.120308.152305	L08110623-05	MW091-112008-0T01	40/100	1		12/03/08 15:23
41	EL.120308.152830	L08110623-07	MW289-112008-0T01	40/100	1		12/03/08 15:28
42	EL.120308.153354	L08110623-09	MW093-112008-0T01	40/100	1		12/03/08 15:33
43	EL.120308.153917	L08110623-17	MW281RR-112008-0T01	40/100	1		12/03/08 15:39
44	EL.120308.154438	L08110623-19	MW291-112008-0T01	40/100	1		12/03/08 15:44
45	EL.120308.155000	L08110623-21	MW060R-111808-0T01	40/100	1	WG288910-04	12/03/08 15:50
46	EL.120308.155522	L08110623-23	MW148-111808-0T01	40/100	1		12/03/08 15:55
47	EL.120308.160044	L08110623-25	MW283-111808-0T01	40/100	1	WG289322-03	12/03/08 16:00
48	EL.120308.160627	WG289539-18	CCV		1		12/03/08 16:06
49	EL.120308.161208	WG289539-19	CCB		1		12/03/08 16:12
50	EL.120308.161750	WG289539-20	Interference Check		1		12/03/08 16:17
51	EL.120308.162334	WG289539-21	Interference Check		1		12/03/08 16:23
52	EL.120308.162917	WG289539-22	CCV		1		12/03/08 16:29
53	EL.120308.163500	WG289539-23	CCB		1		12/03/08 16:35
54	EL.120308.164134	WG289288-03	Method/Prep Blank	40/100	1		12/03/08 16:41
55	EL.120308.164654	WG289288-04	Laboratory Control S	40/100	1		12/03/08 16:46
56	EL.120308.165215	L08110782-04	LHSMW07-111908	40/100	1		12/03/08 16:52
57	EL.120308.165735	L08110782-05	35AWW05-112108	40/100	1		12/03/08 16:57
58	EL.120308.170257	WG289288-02	Reference Sample		2	L08110767-01	12/03/08 17:02
59	EL.120308.170818	WG289288-06	Matrix Spike	40/100	2	L08110767-01	12/03/08 17:08
60	EL.120308.171353	WG289288-07	Matrix Spike Duplica	40/100	2	L08110767-01	12/03/08 17:13
61	EL.120308.171916	L08110782-01	35AWW01-111908	40/100	1		12/03/08 17:19
62	EL.120308.172438	WG289382-01	Post Digestion Spike		1	L08110782-01	12/03/08 17:24
63	EL.120308.173001	WG289382-02	Serial Dilution		5	L08110782-01	12/03/08 17:30
64	EL.120308.173544	WG289539-24	CCV		1		12/03/08 17:35
65	EL.120308.174125	WG289539-25	CCB		1		12/03/08 17:41
66	EL.120308.174647	L08110782-02	LHSMW06-111908	40/100	1		12/03/08 17:46
67	EL.120308.175210	L08110782-03	LHSMW03-111908	40/100	1		12/03/08 17:52
68	EL.120308.175933	WG289539-26	CCV		1		12/03/08 17:59
69	EL.120308.180515	WG289539-27	CCB		1		12/03/08 18:05
70	EL.120308.181035	WG288703-03	Method/Prep Blank	40/100	1		12/03/08 18:10
71	EL.120308.181555	WG288703-04	Laboratory Control S	40/100	1		12/03/08 18:15
72	EL.120308.182116	WG288703-01	Reference Sample		1	L08110552-02	12/03/08 18:21
73	EL.120308.182638	WG288703-05	Matrix Spike	40/100	1	L08110552-02	12/03/08 18:26
74	EL.120308.183159	WG288703-06	Matrix Spike Duplica	40/100	1	L08110552-02	12/03/08 18:31

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00082096

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120308A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 289481,289497,289382,288750,289513

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
75	EL.120308.183721	L08110552-01	C6.8-111908-0T01	40/100	1		12/03/08 18:37
76	EL.120308.184244	WG288750-01	Post Digestion Spike		1	L08110552-01	12/03/08 18:42
77	EL.120308.184806	WG288750-02	Serial Dilution		5	L08110552-01	12/03/08 18:48
78	EL.120308.185349	WG289539-28	CCV		1		12/03/08 18:53
79	EL.120308.185931	WG289539-29	CCB		1		12/03/08 18:59
80	EL.120308.190452	L08110552-05	C7-111908-0T01	40/100	1		12/03/08 19:04
81	EL.120308.191015	L08110552-06	C5.8-111908-0T01	40/100	1		12/03/08 19:10
82	EL.120308.191539	L08110552-07	C5.8-111908-1T01	40/100	1		12/03/08 19:15
83	EL.120308.192103	L08110552-08	C6.8-111908-0D01	40/100	1		12/03/08 19:21
84	EL.120308.192626	WG288703-02	Reference Sample		1	L08110552-09	12/03/08 19:26
85	EL.120308.193147	WG288703-07	Matrix Spike	40/100	1	L08110552-09	12/03/08 19:31
86	EL.120308.193708	WG288703-08	Matrix Spike Duplica	40/100	1	L08110552-09	12/03/08 19:37
87	EL.120308.194229	L08110552-12	C7-111908-0D01	40/100	1		12/03/08 19:42
88	EL.120308.194751	L08110552-13	C5.8-111908-0D01	40/100	1		12/03/08 19:47
89	EL.120308.195314	L08110552-14	C5.8-111908-1D01	40/100	1		12/03/08 19:53
90	EL.120308.200036	WG289539-30	CCV		1		12/03/08 20:00
91	EL.120308.200618	WG289539-31	CCB		1		12/03/08 20:06
92	EL.120308.201139	WG289014-03	Method/Prep Blank	.5/200	1		12/03/08 20:11
93	EL.120308.201722	WG289539-32	Interference Check		1		12/03/08 20:17
94	EL.120308.202306	WG289539-33	Interference Check		1		12/03/08 20:23
95	EL.120308.202849	WG289539-34	CCV		1		12/03/08 20:28
96	EL.120308.203431	WG289539-35	CCB		1		12/03/08 20:34
97	EL.120308.203952	WG289014-04	Laboratory Control S	.5/200	1		12/03/08 20:39
98	EL.120308.204515	WG289014-01	Reference Sample		1	L08110631-03	12/03/08 20:45
99	EL.120308.205039	WG289014-05	Matrix Spike	.502/200	1	L08110631-03	12/03/08 20:50
100	EL.120308.205603	WG289014-06	Matrix Spike Duplica	.502/200	1	L08110631-03	12/03/08 20:56
101	EL.120308.210128	L08110631-01	MR08-SS388-08D	.501/200	1		12/03/08 21:01
102	EL.120308.210653	L08110631-02	MR08-IS388-08D	.518/200	1		12/03/08 21:06
103	EL.120308.211216	WG289513-01	Post Digestion Spike		1	L08110631-02	12/03/08 21:12
104	EL.120308.211737	WG289513-02	Serial Dilution		5	L08110631-02	12/03/08 21:17
105	EL.120308.212320	WG289539-36	CCV		1		12/03/08 21:23
106	EL.120308.212901	WG289539-37	CCB		1		12/03/08 21:29
107	EL.120308.213422	L08110631-06	MR08-IS389-08C	.504/200	1		12/03/08 21:34
108	EL.120308.213944	L08110631-07	MR08-IS389D-08D	.511/200	1		12/03/08 21:39
109	EL.120308.214507	L08110631-08	MR08-SS394-08D	.5/200	1		12/03/08 21:45
110	EL.120308.215030	WG289014-02	Reference Sample		1	L08110631-09	12/03/08 21:50
111	EL.120308.215553	WG289014-07	Matrix Spike	.5/200	1	L08110631-09	12/03/08 21:55

Page: 3 Approved: December 04, 2008

Maren Beery



00082097

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 120308A.REP
 Analyst1: JYH Analyst2: N/A
 Method: 6020 SOP: ME700 Rev: 4
 Maintenance Log ID: 25989

Calibration Std: STD30127 ICV/CCV Std: STD29884 Post Spike: STD27580
 ICSA: STD30126 ICSAB: STD30000
 Workgroups: 289481,289497,289382,288750,289513

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
112	EL.120308.220117	WG289014-08	Matrix Spike Duplica	.5/200	1	L08110631-09	12/03/08 22:01
113	EL.120308.220641	L08110631-12	MR08-IS396-08D	.517/200	1		12/03/08 22:06
114	EL.120308.221206	L08110631-13	MR08-SS395-08D	.5/200	1		12/03/08 22:12
115	EL.120308.221731	L08110631-14	MR08-SS395D-08D	.516/200	1		12/03/08 22:17
116	EL.120308.222257	L08110631-15	MR08-SS393-08D	.504/200	1		12/03/08 22:22
117	EL.120308.222841	WG289539-38	CCV		1		12/03/08 22:28
118	EL.120308.223423	WG289539-39	CCB		1		12/03/08 22:34
119	EL.120308.223944	L08110631-16	MR08-SS392-08D	.503/200	1		12/03/08 22:39
120	EL.120308.224507	L08110631-17	MR08-SS391-08D	.519/200	1		12/03/08 22:45
121	EL.120308.225030	L08110631-18	MR08-SS391D-08D	.511/200	1		12/03/08 22:50
122	EL.120308.225553	L08110631-19	MR08-SS390-08D	.5/200	1	WG289278-03	12/03/08 22:55
123	EL.120308.230136	WG289539-40	CCV		1		12/03/08 23:01
124	EL.120308.230718	WG289539-41	CCB		1		12/03/08 23:07

Page: 4 Approved: December 04, 2008

Maren Beery



Microbac Laboratories Inc.

Data Checklist

Date: 02-DEC-2008

Analyst: JYH

Analyst: NA

Method: 6020

Instrument: ELAN

Curve Workgroup: 289472

Runlog ID: 25508

Analytical Workgroups: 288659,289382,288707,289424,288705

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	471,690,767,769,782,526,537,527,540
	541
Client Forms	X
Level X	
Level 3	769,782
Level 4	471,537,540,541
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:
03-DEC-2008

J. Y. H.

Secondary Reviewer:
03-DEC-2008

Maren Berry

Data Checklist

Date: 03-DEC-2008

Analyst: JYH

Analyst: NA

Method: 6020

Instrument: ELAN

Curve Workgroup: 289539

Runlog ID: 25535

Analytical Workgroups: 289481,289497,289382,288750,289513

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	361,623,586,782,552,631
Client Forms	X
Level X	
Level 3	782
Level 4	361,623,586,552,631
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:
04-DEC-2008

J. J. H.

Secondary Reviewer:
04-DEC-2008

Maren Berry

Analytical Method:6020

AAB#:WG289382

Login Number:L08110782

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
LHSMW07-111908	11/21/08	11/25/08	12/01/08	180	9.93	12/02/08	180	1.19	
LHSMW03-111908	11/19/08	11/25/08	12/01/08	180	12.1	12/02/08	180	1.19	
LHSMW03-111908	11/19/08	11/25/08	12/01/08	180	12.1	12/03/08	180	2.27	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	180	11.9	12/03/08	180	2.27	
35AWW01-111908	11/19/08	11/25/08	12/01/08	180	11.8	12/03/08	180	2.25	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	180	11.9	12/02/08	180	1.26	
35AWW05-112108	11/21/08	11/25/08	12/01/08	180	9.74	12/03/08	180	2.23	
LHSMW06-111908	11/19/08	11/25/08	12/01/08	180	11.9	12/02/08	180	1.18	
35AWW01-111908	11/19/08	11/25/08	12/01/08	180	11.8	12/02/08	180	1.16	
35AWW05-112108	11/21/08	11/25/08	12/01/08	180	9.74	12/02/08	180	1.20	
LHSMW03-111908	11/19/08	11/25/08	12/01/08	180	12.1	12/02/08	180	1.26	
35AWW01-111908	11/19/08	11/25/08	12/01/08	180	11.8	12/02/08	180	1.25	
LHSMW07-111908	11/21/08	11/25/08	12/01/08	180	9.93	12/03/08	180	2.23	

* EXT = SEE PROJECT QAPP REQUIREMENTS

*ANAL = SEE PROJECT QAPP REQUIREMENTS

Analytical Method: 6020

AAB#: WG289424

Login Number: L08110782

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
03SB11-(10-11)	11/18/08	11/25/08	12/01/08	180	13.1	12/02/08	180	1.33	
03SB11-(BOTTOM)	11/18/08	11/25/08	12/01/08	180	13.0	12/02/08	180	1.34	

* EXT = SEE PROJECT QAPP REQUIREMENTS

* ANAL = SEE PROJECT QAPP REQUIREMENTS

METHOD BLANK SUMMARY

Login Number: <u>L08110782</u>	Work Group: <u>WG289382</u>
Blank File ID: <u>EL.120208.145109</u>	Blank Sample ID: <u>WG289288-03</u>
Prep Date: <u>12/01/08 11:21</u>	Instrument ID: <u>ELAN-ICP</u>
Analyzed Date: <u>12/02/08 14:51</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	WG289288-04	EL.120208.145629	12/02/08 14:56	01
35AWW01-111908	L08110782-01	EL.120208.151755	12/02/08 15:17	01
LHSMW06-111908	L08110782-02	EL.120208.154631	12/02/08 15:46	01
LHSMW03-111908	L08110782-03	EL.120208.155154	12/02/08 15:51	01
LHSMW07-111908	L08110782-04	EL.120208.155718	12/02/08 15:57	01
35AWW05-112108	L08110782-05	EL.120208.160240	12/02/08 16:02	01
DUP	WG289288-05	EL.120208.161843	12/02/08 16:18	01
35AWW01-111908	L08110782-01	EL.120208.171605	12/02/08 17:16	DL01
LHSMW06-111908	L08110782-02	EL.120208.173214	12/02/08 17:32	DL01
LHSMW03-111908	L08110782-03	EL.120208.173738	12/02/08 17:37	DL01
LCS	WG289288-04	EL.120308.164654	12/03/08 16:46	02
LHSMW07-111908	L08110782-04	EL.120308.165215	12/03/08 16:52	02
35AWW05-112108	L08110782-05	EL.120308.165735	12/03/08 16:57	02
35AWW01-111908	L08110782-01	EL.120308.171916	12/03/08 17:19	02
LHSMW06-111908	L08110782-02	EL.120308.174647	12/03/08 17:46	02
LHSMW03-111908	L08110782-03	EL.120308.175210	12/03/08 17:52	02

Report Name: BLANK_SUMMARY
 PDF File ID: 1266081
 Report generated 12/04/2008 08:30



METHOD BLANK SUMMARY

Login Number: <u>L08110782</u>	Work Group: <u>WG289424</u>
Blank File ID: <u>EL.120208.185027</u>	Blank Sample ID: <u>WG289287-02</u>
Prep Date: <u>12/01/08 11:05</u>	Instrument ID: <u>ELAN-ICP</u>
Analyzed Date: <u>12/02/08 18:50</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	WG289287-03	EL.120208.185550	12/02/08 18:55	01
03SB11-(10-11)	L08110782-06	EL.120208.190114	12/02/08 19:01	01
03SB11-(BOTTOM)	L08110782-07	EL.120208.191727	12/02/08 19:17	01

Report Name: BLANK_SUMMARY
PDF File ID: 1266081
Report generated 12/04/2008 08:30



METHOD BLANK SUMMARY

Login Number: L08110782
 Blank File ID: EL.120308.164134
 Prep Date: 12/01/08 11:21
 Analyzed Date: 12/03/08 16:41
 Analyst: JYH

Work Group: WG289382
 Blank Sample ID: WG289288-03
 Instrument ID: ELAN-ICP
 Method: 6020

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG289288-04	EL.120208.145629	12/02/08 14:56	01
35AWW01-111908	L08110782-01	EL.120208.151755	12/02/08 15:17	01
LHSMW06-111908	L08110782-02	EL.120208.154631	12/02/08 15:46	01
LHSMW03-111908	L08110782-03	EL.120208.155154	12/02/08 15:51	01
LHSMW07-111908	L08110782-04	EL.120208.155718	12/02/08 15:57	01
35AWW05-112108	L08110782-05	EL.120208.160240	12/02/08 16:02	01
DUP	WG289288-05	EL.120208.161843	12/02/08 16:18	01
35AWW01-111908	L08110782-01	EL.120208.171605	12/02/08 17:16	DL01
LHSMW06-111908	L08110782-02	EL.120208.173214	12/02/08 17:32	DL01
LHSMW03-111908	L08110782-03	EL.120208.173738	12/02/08 17:37	DL01
LCS	WG289288-04	EL.120308.164654	12/03/08 16:46	02
LHSMW07-111908	L08110782-04	EL.120308.165215	12/03/08 16:52	02
35AWW05-112108	L08110782-05	EL.120308.165735	12/03/08 16:57	02
35AWW01-111908	L08110782-01	EL.120308.171916	12/03/08 17:19	02
LHSMW06-111908	L08110782-02	EL.120308.174647	12/03/08 17:46	02
LHSMW03-111908	L08110782-03	EL.120308.175210	12/03/08 17:52	02

Report Name: BLANK_SUMMARY
 PDF File ID: 1266081
 Report generated 12/04/2008 08:30



Login Number: L08110782 Prep Date: 12/01/08 11:21 Sample ID: WG289288-03
Instrument ID: ELAN-ICP Run Date: 12/02/08 14:51 Prep Method: 3015
File ID: EL.120208.145109 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289382 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 02-DEC-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
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	0.000500	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: 1266082
04-DEC-2008 08:30



Login Number: L08110782 Prep Date: 12/01/08 11:05 Sample ID: WG289287-02
Instrument ID: ELAN-ICP Run Date: 12/02/08 18:50 Prep Method: 3051
File ID: EL.120208.185027 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289424 Matrix: Soil Units: mg/kg
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 02-DEC-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Arsenic, Total	0.0750	0.300	0.0750	1	U
Lead, Total	0.100	0.200	0.100	1	U
Selenium, Total	0.100	0.200	0.100	1	U
Thallium, Total	0.0100	0.0200	0.0100	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: 1266082
04-DEC-2008 08:30



Login Number: L08110782 Prep Date: 12/01/08 11:21 Sample ID: WG289288-03
Instrument ID: ELAN-ICP Run Date: 12/03/08 16:41 Prep Method: 3015
File ID: EL.120308.164134 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289382 Matrix: Water Units: mg/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-I - 03-DEC-08

Analytes	SDL	PQL	Concentration	Dilution	Qualifier
Silver, 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: 1266082
04-DEC-2008 08:30



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289288-04
Instrument ID: ELAN-ICP Run Time: 14:56 Prep Method: 3015
File ID: EL.120208.145629 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289382 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD27101 Cal ID: ELAN-I - 02-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Arsenic, Total	0.0625	0.0629	101	80 - 120	
Barium, Total	0.0625	0.0652	104	80 - 120	
Cadmium, Total	0.0625	0.0644	103	80 - 120	
Chromium, Total	0.0625	0.0639	102	80 - 120	
Copper, Total	0.0625	0.0655	105	80 - 120	
Lead, Total	0.0625	0.0644	103	80 - 120	
Manganese, Total	0.0625	0.0637	102	80 - 120	
Nickel, Total	0.0625	0.0639	102	80 - 120	
Antimony, Total	0.0625	0.0673	108	80 - 120	
Selenium, Total	0.0625	0.0640	102	80 - 120	
Thallium, Total	0.0625	0.0636	102	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1266083
Report generated: 12/04/2008 08:30



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289287-03
Instrument ID: ELAN-ICP Run Time: 18:55 Prep Method: 3051
File ID: EL.120208.185550 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289424 Matrix: Soil Units: mg/kg
QC Key: STD Lot#: STD27101 Cal ID: ELAN-I - 02-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Arsenic, Total	10.0	10.4	104	80 - 120	
Lead, Total	10.0	10.8	108	80 - 120	
Selenium, Total	10.0	10.5	105	80 - 120	
Thallium, Total	10.0	10.7	107	80 - 120	

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289288-04
Instrument ID: ELAN-ICP Run Time: 16:46 Prep Method: 3015
File ID: EL.120308.164654 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289382 Matrix: Water Units: mg/L
QC Key: STD Lot#: STD27101 Cal ID: ELAN-I - 03-DEC-08

Analytes	Expected	Found	% Rec	LCS Limits	Q
Silver, Total	0.0625	0.0630	101	80 - 120	

Loginnum: L08110782 Cal ID: ELAN-ICP - Worknum: WG289382
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG289288-02 File ID: EL.120208.150150 Dil: 2 Matrix: WATER
 Sample ID: WG289288-06 MS File ID: EL.120208.150712 Dil: 2 Units: mg/L
 Sample ID: WG289288-07 MSD File ID: EL.120208.151233 Dil: 2

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	0.00328	0.0625	0.0705	108	0.0625	0.0712	109	0.867	75 - 125	20	
Arsenic	0.0147	0.0625	0.0752	96.8	0.0625	0.0762	98.4	1.28	75 - 125	20	
Barium	0.116	0.0625	0.183	108	0.0625	0.186	113	1.85	75 - 125	20	
Cadmium	0.000570	0.0625	0.0631	100	0.0625	0.0633	100	0.460	75 - 125	20	
Chromium	0.00434	0.0625	0.0675	101	0.0625	0.0681	102	0.781	75 - 125	20	
Copper	0.0107	0.0625	0.0751	103	0.0625	0.0756	104	0.687	75 - 125	20	
Lead	ND	0.0625	0.0645	103	0.0625	0.0651	104	0.932	75 - 125	20	
Manganese	0.0243	0.0625	0.0875	101	0.0625	0.0892	104	1.85	75 - 125	20	
Nickel	0.0129	0.0625	0.0757	100	0.0625	0.0768	102	1.42	75 - 125	20	
Selenium	0.00276	0.0625	0.0592	90.3	0.0625	0.0583	88.9	1.56	75 - 125	20	
Thallium	0.00204	0.0625	0.0658	102	0.0625	0.0669	104	1.64	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: L08110782 Cal ID: ELAN-ICP - Worknum: WG289382
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG289288-02 File ID: EL.120308.170257 Dil: 2 Matrix: WATER
 Sample ID: WG289288-06 MS File ID: EL.120308.170818 Dil: 2 Units: mg/L
 Sample ID: WG289288-07 MSD File ID: EL.120308.171353 Dil: 2

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Silver	ND	0.0625	0.0625	100	0.0625	0.0640	102	2.39	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Loginnum: L08110782 Cal ID: ELAN-ICP - Worknum: WG289424
 Instrument ID: ELAN-ICP Contract #: DACA56-94-D-0020 Method: 6020
 Parent ID: WG289287-01 File ID: EL.120208.190114 Dil: 1 Matrix: SOLID
 Sample ID: WG289287-04 MS File ID: EL.120208.190639 Dil: 1 Units: mg/kg
 Sample ID: WG289287-05 MSD File ID: EL.120208.191203 Dil: 1 Percent Solid: 89.3

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Arsenic, Total	2.19	11.2	13.4	101	11.2	11.1	79.5	19.3	75 - 125	20	
Lead, Total	4.15	11.2	17.3	118	11.2	14.9	96.6	14.7	75 - 125	20	
Selenium, Total	0.206	11.2	8.99	78.6	11.2	8.57	74.9	4.74	75 - 125	20	*
Thallium, Total	0.0730	11.2	11.5	102	11.2	11.2	99.4	2.76	75 - 125	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289382
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG289382-02 **File ID:** EL.120308.173001 **Dil:** 5 **Units:** ug/L
Sample: L08110782-01 **File ID:** EL.120308.171916 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	.487	X	.785	F	61.20	
Barium	92.1		87.5		4.99	
Cadmium	ND	U	ND	U		
Chromium	.751	F	ND	U		
Copper	.385	F	ND	U		
Lead	ND	U	ND	U		
Manganese	25.3		23.4		7.51	
Nickel	.78	F	ND	U		
Selenium	2.1	X	2.76	X	31.40	
Silver	ND	U	ND	U		
Thallium	ND	U	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 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: 1266078

12/04/2008 08:30



Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289382
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG289382-02 **File ID:** EL.120208.152946 **Dil:** 5 **Units:** ug/L
Sample: L08110782-01 **File ID:** EL.120208.151755 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	.461	X	.67	F	45.30	
Barium	95.8		93.5		2.40	
Cadmium	ND	U	ND	U		
Chromium	.955	X	ND	U		
Copper	.325	F	ND	U		
Lead	ND	U	ND	U		
Manganese	24.4		23.5		3.69	
Nickel	.64	F	ND	U		
Selenium	1.86	X	2.42	X	30.10	
Silver	ND	U	ND	U		
Thallium	ND	U	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 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: 1266078

12/04/2008 08:30



Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289424
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG289424-02 **File ID:** EL.120208.192810 **Dil:** 5 **Units:** ug/L
Sample: L08110782-07 **File ID:** EL.120208.191727 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	-.105		ND			
Arsenic	.467	F	ND	U		
Barium	43.1		ND			
Cadmium	.112		ND			
Chromium	11.3		ND			
Copper	5.93		ND			
Lead	9.38	X	9.5	X	1.28	
Manganese	57.8		ND			
Nickel	13.6		ND			
Selenium	.447	F	ND	U		
Silver	.0796		ND			
Thallium	.262	X	.2935	X	12.00	

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: 1266078

12/04/2008 08:30



Microbac Laboratories Inc.
Serial Dilution Report

Login: L08110782 **Worknum:** WG289382
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG289382-02 **File ID:** EL.120208.172651 **Dil:** 50 **Units:** ug/L
Sample: L08110782-01 **File ID:** EL.120208.171605 **Dil:** 10

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	ND	U	ND	U		
Barium	95.7	X	94.5	X	1.25	
Cadmium	ND	U	ND	U		
Chromium	ND	U	ND	U		
Copper	ND	U	ND	U		
Lead	ND	U	ND	U		
Manganese	24	X	22.45	F	6.46	
Nickel	ND	U	ND	U		
Selenium	3.66	F	ND	U		
Silver	ND	U	ND	U		
Thallium	ND	U	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 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: 1266078

12/04/2008 08:30



Sample Login ID: L08110782
Instrument ID: ELAN-ICP
Post Spike ID: WG289382-01
Sample ID: L08110782-01

Worknum: WG289382
Method: 6020
Units: ug/L
Matrix: Water
File ID: EL.120208.152350 Dil: 1
File ID: EL.120208.151755 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	51.9		0	.1	50	103.7	75 - 125	
ARSENIC	47.9		0.461		50	94.8	75 - 125	
BARIUM	153		95.8		50	113.6	75 - 125	
CADMIUM	48.2		0	.05	50	96.4	75 - 125	
CHROMIUM	52.4		0.955		50	103.0	75 - 125	
COPPER	51.8		0.325	F	50	102.9	75 - 125	
LEAD	51.6		0	.1	50	103.1	75 - 125	
MANGANESE	76.7		24.4		50	104.5	75 - 125	
NICKEL	50.8		0.640	F	50	100.4	75 - 125	
SELENIUM	44.2		1.86		50	84.7	75 - 125	
SILVER	50.0		0	.1	50	100.0	75 - 125	
THALLIUM	51.2		0	.02	50	102.4	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

Sample Login ID: L08110782
Instrument ID: ELAN-ICP
Post Spike ID: WG289382-01
Sample ID: L08110782-01

Worknum: WG289382
Method: 6020
Units: ug/L
Matrix: Water
File ID: EL.120208.172128 Dil: 10
File ID: EL.120208.171605 Dil: 10

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	55.5		0	.1	50	111.0	75 - 125	
ARSENIC	51.5		0	.1	50	102.9	75 - 125	
BARIUM	63.4		9.57		50	107.6	75 - 125	
CADMIUM	53.2		0	.05	50	106.4	75 - 125	
CHROMIUM	52.5		0	.2	50	105.1	75 - 125	
COPPER	54.1		0	.2	50	108.2	75 - 125	
LEAD	53.3		0	.1	50	106.6	75 - 125	
MANGANESE	55.6		2.40		50	106.4	75 - 125	
NICKEL	52.8		0	.4	50	105.6	75 - 125	
SELENIUM	50.5		0.366	F	50	100.3	75 - 125	
SILVER	56.2		0	.1	50	112.5	75 - 125	
THALLIUM	52.7		0	.02	50	105.3	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

Sample Login ID: L08110782
Instrument ID: ELAN-ICP
Post Spike ID: WG289382-01
Sample ID: L08110782-01

Worknum: WG289382
Method: 6020
Units: ug/L
Matrix: Water
File ID: EL.120308.172438 Dil: 1
File ID: EL.120308.171916 Dil: 1

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	48.6		0	.1	50	97.2	75 - 125	
ARSENIC	46.6		0.487		50	92.3	75 - 125	
BARIUM	137		92.1		50	90.6	75 - 125	
CADMIUM	47.2		0	.05	50	94.3	75 - 125	
CHROMIUM	52.4		0.751	F	50	103.3	75 - 125	
COPPER	51.8		0.385	F	50	102.9	75 - 125	
LEAD	51.2		0	.1	50	102.5	75 - 125	
MANGANESE	75.9		25.3		50	101.2	75 - 125	
NICKEL	53.1		0.780	F	50	104.7	75 - 125	
SELENIUM	44.8		2.10		50	85.4	75 - 125	
SILVER	45.2		0	.1	50	90.3	75 - 125	
THALLIUM	51.9		0	.02	50	103.9	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

Sample Login ID: L08110782
Instrument ID: ELAN-ICP
Post Spike ID: WG289424-01
Sample ID: L08110782-07

Worknum: WG289424
Method: 6020
File ID: EL.120208.192248 Dil: 1 Units: ug/L
File ID: EL.120208.191727 Dil: 1 Matrix: Soil

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ARSENIC	47.9		0.467	F	50	94.8	75 - 125	
LEAD	62.6		9.38		50	106.4	75 - 125	
SELENIUM	43.5		0.447	F	50	86.1	75 - 125	
THALLIUM	53.2		0.262		50	105.9	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

00082122

Login:	<u>L08110782</u>	Workgroup (AAB#):	<u>WG289382</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ELAN-ICP</u>
ICAL Worknum:	<u>WG289472</u>	Initial Calibration Date:	<u>02-DEC-2008 11:32</u>

	WG289472-01		WG289472-02		WG289472-03		WG289472-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	36.3	.4	3490	50	320000	100	621000	.999764	
ARSENIC	0	-369	.4	602	50	114000	100	219000	.999994	
BARIUM	0	26.7	.4	1150	50	138000	100	263000	.999975	
CADMIUM	0	12.0	.4	915	50	106000	100	204000	.999835	
CHROMIUM	0	19300	.4	25800	50	745000	100	1390000	.999998	
COPPER	0	188	.4	2000	50	202000	100	380000	.999983	
LEAD	0	388	.4	12200	50	1390000	100	2690000	.999988	
MANGANESE	0	665	.4	10100	50	1100000	100	2070000	.999999	
NICKEL	0	81.7	.4	1660	50	179000	100	343000	.999966	
SELENIUM	0	5.81	.4	87.1	50	9590	100	18400	1	
SILVER	0	163	.4	4370	50	505000	100	967000	.999985	
THALLIUM	0	135	.4	3520	50	420000	100	814000	1	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00082123

Login:	<u>L08110782</u>	Workgroup (AAB#):	<u>WG289424</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ELAN-ICP</u>
ICAL Worknum:	<u>WG289472</u>	Initial Calibration Date:	<u>02-DEC-2008 11:32</u>

	WG289472-01		WG289472-02		WG289472-03		WG289472-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	36.3	.4	3490	50	320000	100	621000	.999764	
ARSENIC	0	-369	.4	602	50	114000	100	219000	.999994	
BARIUM	0	26.7	.4	1150	50	138000	100	263000	.999975	
CADMIUM	0	12.0	.4	915	50	106000	100	204000	.999835	
CHROMIUM	0	19300	.4	25800	50	745000	100	1390000	.999998	
COPPER	0	188	.4	2000	50	202000	100	380000	.999983	
LEAD	0	388	.4	12200	50	1390000	100	2690000	.999988	
MANGANESE	0	665	.4	10100	50	1100000	100	2070000	.999999	
NICKEL	0	81.7	.4	1660	50	179000	100	343000	.999966	
SELENIUM	0	5.81	.4	87.1	50	9590	100	18400	1	
SILVER	0	163	.4	4370	50	505000	100	967000	.999985	
THALLIUM	0	135	.4	3520	50	420000	100	814000	1	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Microbac Laboratories Inc.
Initial Calibration Summary

00082124

Login:	<u>L08110782</u>	Workgroup (AAB#):	<u>WG289382</u>
Analytical Method:	<u>6020</u>	Instrument ID:	<u>ELAN-ICP</u>
ICAL Worknum:	<u>WG289539</u>	Initial Calibration Date:	<u>03-DEC-2008 12:07</u>

	WG289539-01		WG289539-02		WG289539-03		WG289539-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	422	.4	3320	50	293000	100	584000	.999995	
ARSENIC	0	-301	.4	561	50	109000	100	216000	.999952	
BARIUM	0	28.3	.4	1060	50	119000	100	237000	.999979	
CADMIUM	0	5.81	.4	831	50	98100	100	193000	.999997	
CHROMIUM	0	18000	.4	23400	50	675000	100	1330000	.999978	
COPPER	0	179	.4	1760	50	184000	100	359000	.99986	
LEAD	0	383	.4	10600	50	1220000	100	2420000	.999978	
MANGANESE	0	561	.4	9220	50	985000	100	1960000	.999978	
NICKEL	0	82.0	.4	1470	50	162000	100	319000	.999945	
SELENIUM	0	11.5	.4	89.4	50	9160	100	18100	.999965	
SILVER	0	666	.4	4650	50	469000	100	921000	.99999	
THALLIUM	0	71.0	.4	3140	50	366000	100	723000	.999966	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-06
Instrument ID: ELAN-ICP Run Time: 11:43 Method: 6020
File ID: EL.120208.114341 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-ICP - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
SILVER	.1	.4	.1	U
ARSENIC	.1	.4	.1	U
BARIUM	.2	1.2	.2	U
CADMIUM	.05	.2	.05	U
CHROMIUM	.2	.8	.2	U
COPPER	.2	.8	.2	U
MANGANESE	.2	.8	.2	U
NICKEL	.4	1.6	.4	U
LEAD	.1	.2	.1	U
ANTIMONY	.1	.4	.1	U
SELENIUM	.2	.4	.2	U
THALLIUM	.02	.08	.02	U

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-06
Instrument ID: ELAN-ICP Run Time: 12:18 Method: 6020
File ID: EL.120308.121851 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-ICP - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
SILVER	.1	.4	.1	U
ARSENIC	.1	.4	.1	U
BARIUM	.2	1.2	.2	U
CADMIUM	.05	.2	.05	U
CHROMIUM	.2	.8	.2	U
COPPER	.2	.8	.2	U
MANGANESE	.2	.8	.2	U
NICKEL	.4	1.6	.4	U
LEAD	.1	.2	.1	U
ANTIMONY	.1	.4	.117	F
SELENIUM	.2	.4	.2	U
THALLIUM	.02	.08	.02	U

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-06
Instrument ID: ELAN-ICP Run Time: 11:43 Method: 6020
File ID: EL.120208.114341 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289424 Cal ID: ELAN-ICP - 02-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.1875	.75	.1875	U
LEAD	.25	.5	.25	U
SELENIUM	.25	.5	.25	U
THALLIUM	.025	.05	.025	U

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-12
Instrument ID: ELAN-ICP Run Time: 12:18 Method: 6020
File ID: EL.120208.121804 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-18
Instrument ID: ELAN-ICP Run Time: 14:45 Method: 6020
File ID: EL.120208.144549 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-20
Instrument ID: ELAN-ICP Run Time: 15:41 Method: 6020
File ID: EL.120208.154110 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-22
Instrument ID: ELAN-ICP Run Time: 16:46 Method: 6020
File ID: EL.120208.164613 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-24
Instrument ID: ELAN-ICP Run Time: 17:49 Method: 6020
File ID: EL.120208.174903 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-13
Instrument ID: ELAN-ICP Run Time: 13:00 Method: 6020
File ID: EL.120308.130030 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-19
Instrument ID: ELAN-ICP Run Time: 16:12 Method: 6020
File ID: EL.120308.161208 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-23
Instrument ID: ELAN-ICP Run Time: 16:35 Method: 6020
File ID: EL.120308.163500 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-25
Instrument ID: ELAN-ICP Run Time: 17:41 Method: 6020
File ID: EL.120308.174125 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-27
Instrument ID: ELAN-ICP Run Time: 18:05 Method: 6020
File ID: EL.120308.180515 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.302	F
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-31
Instrument ID: ELAN-ICP Run Time: 20:06 Method: 6020
File ID: EL.120308.200618 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-35
Instrument ID: ELAN-ICP Run Time: 20:34 Method: 6020
File ID: EL.120308.203431 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
Silver	0.100	0.400	0.100	U
Arsenic	0.100	0.400	0.100	U
Barium	0.200	1.20	0.200	U
Cadmium	0.0500	0.200	0.0500	U
Chromium	0.200	0.800	0.200	U
Copper	0.200	0.800	0.200	U
Lead	0.100	0.200	0.100	U
Manganese	0.200	0.800	0.200	U
Nickel	0.400	1.60	0.400	U
Antimony	0.100	0.400	0.100	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0200	0.0800	0.0200	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-12
Instrument ID: ELAN-ICP Run Time: 12:18 Method: 6020
File ID: EL.120208.121804 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.188	0.750	0.188	U
Lead	0.250	0.500	0.250	U
Selenium	0.250	0.500	0.250	U
Thallium	0.0250	0.0500	0.0250	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-26
Instrument ID: ELAN-ICP Run Time: 18:45 Method: 6020
File ID: EL.120208.184505 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.188	0.750	0.188	U
Lead	0.250	0.500	0.250	U
Selenium	0.250	0.500	0.250	U
Thallium	0.0250	0.0500	0.0250	U

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

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-28
Instrument ID: ELAN-ICP Run Time: 19:39 Method: 6020
File ID: EL.120208.193935 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.188	0.750	0.188	U
Lead	0.250	0.500	0.250	U
Selenium	0.250	0.500	0.250	U
Thallium	0.0250	0.0500	0.0250	U

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

Login Number: <u>L08110782</u>	Run Date: <u>12/02/2008</u>	Sample ID: <u>WG289472-05</u>
Instrument ID: <u>ELAN-ICP</u>	Run Time: <u>11:37</u>	Method: <u>6020</u>
File ID: <u>EL.120208.113759</u>	Analyst: <u>JYH</u>	Units: <u>ug/L</u>
Workgroup (AAB#): <u>WG289382</u>	Cal ID: <u>ELAN-I - 02-DEC-08</u>	
QC Key: <u>STD</u>		

Analyte	Expected	Found	%REC	LIMITS	Q
Silver	50	51.2	102	90 - 110	
Arsenic	50	51.8	104	90 - 110	
Barium	50	51.8	104	90 - 110	
Cadmium	50	52.5	105	90 - 110	
Chromium	50	51.4	103	90 - 110	
Copper	50	51.5	103	90 - 110	
Lead	50	52.2	104	90 - 110	
Manganese	50	51.8	104	90 - 110	
Nickel	50	51.4	103	90 - 110	
Antimony	50	54.7	109	90 - 110	
Selenium	50	52.1	104	90 - 110	
Thallium	50	52.4	105	90 - 110	

* Exceeds LIMITS Limit

Login Number: <u>L08110782</u>	Run Date: <u>12/03/2008</u>	Sample ID: <u>WG289539-05</u>
Instrument ID: <u>ELAN-ICP</u>	Run Time: <u>12:13</u>	Method: <u>6020</u>
File ID: <u>EL.120308.121310</u>	Analyst: <u>JYH</u>	Units: <u>ug/L</u>
Workgroup (AAB#): <u>WG289382</u>	Cal ID: <u>ELAN-I - 03-DEC-08</u>	
QC Key: <u>STD</u>		

Analyte	Expected	Found	%REC	LIMITS	Q
Silver	50	49.9	99.7	90 - 110	
Arsenic	50	49.7	99.3	90 - 110	
Barium	50	49.7	99.3	90 - 110	
Cadmium	50	49.7	99.3	90 - 110	
Chromium	50	49.9	99.7	90 - 110	
Copper	50	50.1	100	90 - 110	
Lead	50	49.2	98.4	90 - 110	
Manganese	50	50.1	100	90 - 110	
Nickel	50	50.1	100	90 - 110	
Antimony	50	51.3	103	90 - 110	
Selenium	50	50.6	101	90 - 110	
Thallium	50	49.1	98.1	90 - 110	

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-05
 Instrument ID: ELAN-ICP Run Time: 11:37 Method: 6020
 File ID: EL.120208.113759 Analyst: JYH Units: ug/L
 Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
 QC Key: STD

Analyte	Expected	Found	%REC	LIMITS	Q
Arsenic	50	51.8	104	90 - 110	
Lead	50	52.2	104	90 - 110	
Selenium	50	52.1	104	90 - 110	
Thallium	50	52.4	105	90 - 110	

* Exceeds LIMITS Limit

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-11
Instrument ID: ELAN-ICP Run Time: 12:12 Method: 6020
File ID: EL.120208.121223 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	51.8	ug/L	104	90 - 110	
Arsenic	50.0	50.8	ug/L	102	90 - 110	
Barium	50.0	51.2	ug/L	102	90 - 110	
Cadmium	50.0	51.7	ug/L	103	90 - 110	
Chromium	50.0	50.7	ug/L	101	90 - 110	
Copper	50.0	51.7	ug/L	103	90 - 110	
Lead	50.0	51.5	ug/L	103	90 - 110	
Manganese	50.0	51.1	ug/L	102	90 - 110	
Nickel	50.0	50.8	ug/L	102	90 - 110	
Antimony	50.0	53.7	ug/L	107	90 - 110	
Selenium	50.0	51.7	ug/L	103	90 - 110	
Thallium	50.0	51.1	ug/L	102	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-17
Instrument ID: ELAN-ICP Run Time: 14:40 Method: 6020
File ID: EL.120208.144008 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	49.4	ug/L	98.7	90 - 110	
Arsenic	50.0	50.0	ug/L	100	90 - 110	
Barium	50.0	50.3	ug/L	101	90 - 110	
Cadmium	50.0	49.5	ug/L	99.1	90 - 110	
Chromium	50.0	49.6	ug/L	99.2	90 - 110	
Copper	50.0	50.2	ug/L	100	90 - 110	
Lead	50.0	49.9	ug/L	99.8	90 - 110	
Manganese	50.0	50.4	ug/L	101	90 - 110	
Nickel	50.0	49.7	ug/L	99.3	90 - 110	
Antimony	50.0	52.5	ug/L	105	90 - 110	
Selenium	50.0	50.2	ug/L	100	90 - 110	
Thallium	50.0	50.0	ug/L	99.9	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-19
Instrument ID: ELAN-ICP Run Time: 15:35 Method: 6020
File ID: EL.120208.153528 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	50.4	ug/L	101	90 - 110	
Arsenic	50.0	49.8	ug/L	99.5	90 - 110	
Barium	50.0	50.2	ug/L	100	90 - 110	
Cadmium	50.0	49.6	ug/L	99.2	90 - 110	
Chromium	50.0	49.9	ug/L	99.7	90 - 110	
Copper	50.0	50.8	ug/L	102	90 - 110	
Lead	50.0	50.3	ug/L	101	90 - 110	
Manganese	50.0	50.0	ug/L	100	90 - 110	
Nickel	50.0	49.9	ug/L	99.8	90 - 110	
Antimony	50.0	52.5	ug/L	105	90 - 110	
Selenium	50.0	50.4	ug/L	101	90 - 110	
Thallium	50.0	50.4	ug/L	101	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-21
Instrument ID: ELAN-ICP Run Time: 16:40 Method: 6020
File ID: EL.120208.164031 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	51.9	ug/L	104	90 - 110	
Arsenic	50.0	48.2	ug/L	96.4	90 - 110	
Barium	50.0	49.2	ug/L	98.3	90 - 110	
Cadmium	50.0	49.0	ug/L	98.0	90 - 110	
Chromium	50.0	48.4	ug/L	96.8	90 - 110	
Copper	50.0	51.1	ug/L	102	90 - 110	
Lead	50.0	50.0	ug/L	100	90 - 110	
Manganese	50.0	50.0	ug/L	100	90 - 110	
Nickel	50.0	50.1	ug/L	100	90 - 110	
Antimony	50.0	50.6	ug/L	101	90 - 110	
Selenium	50.0	48.0	ug/L	96.1	90 - 110	
Thallium	50.0	49.9	ug/L	99.8	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-23
Instrument ID: ELAN-ICP Run Time: 17:43 Method: 6020
File ID: EL.120208.174321 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 02-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	52.9	ug/L	106	90 - 110	
Arsenic	50.0	49.9	ug/L	99.9	90 - 110	
Barium	50.0	51.4	ug/L	103	90 - 110	
Cadmium	50.0	50.6	ug/L	101	90 - 110	
Chromium	50.0	49.6	ug/L	99.3	90 - 110	
Copper	50.0	51.5	ug/L	103	90 - 110	
Lead	50.0	50.6	ug/L	101	90 - 110	
Manganese	50.0	49.9	ug/L	99.9	90 - 110	
Nickel	50.0	50.4	ug/L	101	90 - 110	
Antimony	50.0	52.6	ug/L	105	90 - 110	
Selenium	50.0	50.1	ug/L	100	90 - 110	
Thallium	50.0	50.9	ug/L	102	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-12
Instrument ID: ELAN-ICP Run Time: 12:54 Method: 6020
File ID: EL.120308.125449 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	49.7	ug/L	99.5	90 - 110	
Arsenic	50.0	49.3	ug/L	98.6	90 - 110	
Barium	50.0	49.6	ug/L	99.1	90 - 110	
Cadmium	50.0	49.0	ug/L	98.0	90 - 110	
Chromium	50.0	49.5	ug/L	99.0	90 - 110	
Copper	50.0	50.4	ug/L	101	90 - 110	
Lead	50.0	48.8	ug/L	97.6	90 - 110	
Manganese	50.0	50.0	ug/L	100	90 - 110	
Nickel	50.0	50.1	ug/L	100	90 - 110	
Antimony	50.0	51.1	ug/L	102	90 - 110	
Selenium	50.0	49.9	ug/L	99.7	90 - 110	
Thallium	50.0	48.6	ug/L	97.1	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-18
Instrument ID: ELAN-ICP Run Time: 16:06 Method: 6020
File ID: EL.120308.160627 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Silver		50.0	50.9	ug/L	102	90 - 110		
Arsenic		50.0	49.2	ug/L	98.3	90 - 110		
Barium		50.0	48.4	ug/L	96.8	90 - 110		
Cadmium		50.0	49.0	ug/L	97.9	90 - 110		
Chromium		50.0	50.0	ug/L	100	90 - 110		
Copper		50.0	51.4	ug/L	103	90 - 110		
Lead		50.0	49.6	ug/L	99.2	90 - 110		
Manganese		50.0	50.1	ug/L	100	90 - 110		
Nickel		50.0	51.7	ug/L	103	90 - 110		
Antimony		50.0	49.0	ug/L	98.0	90 - 110		
Selenium		50.0	49.9	ug/L	99.8	90 - 110		
Thallium		50.0	50.6	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-22
Instrument ID: ELAN-ICP Run Time: 16:29 Method: 6020
File ID: EL.120308.162917 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	52.0	ug/L	104	90 - 110	
Arsenic	50.0	49.4	ug/L	98.7	90 - 110	
Barium	50.0	48.2	ug/L	96.5	90 - 110	
Cadmium	50.0	49.2	ug/L	98.5	90 - 110	
Chromium	50.0	50.8	ug/L	102	90 - 110	
Copper	50.0	52.3	ug/L	105	90 - 110	
Lead	50.0	50.0	ug/L	100	90 - 110	
Manganese	50.0	50.6	ug/L	101	90 - 110	
Nickel	50.0	52.7	ug/L	105	90 - 110	
Antimony	50.0	49.5	ug/L	99.0	90 - 110	
Selenium	50.0	50.2	ug/L	100	90 - 110	
Thallium	50.0	50.5	ug/L	101	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-24
Instrument ID: ELAN-ICP Run Time: 17:35 Method: 6020
File ID: EL.120308.173544 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Silver		50.0	51.3	ug/L	103	90 - 110		
Arsenic		50.0	49.5	ug/L	99.0	90 - 110		
Barium		50.0	47.8	ug/L	95.7	90 - 110		
Cadmium		50.0	48.8	ug/L	97.6	90 - 110		
Chromium		50.0	49.6	ug/L	99.2	90 - 110		
Copper		50.0	51.6	ug/L	103	90 - 110		
Lead		50.0	49.6	ug/L	99.2	90 - 110		
Manganese		50.0	49.6	ug/L	99.2	90 - 110		
Nickel		50.0	52.1	ug/L	104	90 - 110		
Antimony		50.0	49.5	ug/L	99.0	90 - 110		
Selenium		50.0	51.0	ug/L	102	90 - 110		
Thallium		50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-26
Instrument ID: ELAN-ICP Run Time: 17:59 Method: 6020
File ID: EL.120308.175933 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	52.0	ug/L	104	90 - 110	
Arsenic	50.0	49.1	ug/L	98.3	90 - 110	
Barium	50.0	49.0	ug/L	98.1	90 - 110	
Cadmium	50.0	50.4	ug/L	101	90 - 110	
Chromium	50.0	50.2	ug/L	100	90 - 110	
Copper	50.0	51.4	ug/L	103	90 - 110	
Lead	50.0	50.5	ug/L	101	90 - 110	
Manganese	50.0	50.4	ug/L	101	90 - 110	
Nickel	50.0	51.7	ug/L	103	90 - 110	
Antimony	50.0	49.3	ug/L	98.6	90 - 110	
Selenium	50.0	50.4	ug/L	101	90 - 110	
Thallium	50.0	51.8	ug/L	104	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-30
Instrument ID: ELAN-ICP Run Time: 20:00 Method: 6020
File ID: EL.120308.200036 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Silver		50.0	51.7	ug/L	103	90 - 110		
Arsenic		50.0	49.9	ug/L	99.7	90 - 110		
Barium		50.0	47.2	ug/L	94.4	90 - 110		
Cadmium		50.0	49.6	ug/L	99.3	90 - 110		
Chromium		50.0	49.7	ug/L	99.4	90 - 110		
Copper		50.0	51.2	ug/L	102	90 - 110		
Lead		50.0	49.7	ug/L	99.3	90 - 110		
Manganese		50.0	49.3	ug/L	98.5	90 - 110		
Nickel		50.0	51.5	ug/L	103	90 - 110		
Antimony		50.0	49.5	ug/L	98.9	90 - 110		
Selenium		50.0	51.0	ug/L	102	90 - 110		
Thallium		50.0	50.4	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-34
Instrument ID: ELAN-ICP Run Time: 20:28 Method: 6020
File ID: EL.120308.202849 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289382 Cal ID: ELAN-I - 03-DEC-08
Matrix: WATER

Analyte	Expected	Found	UNITS	%REC	LIMITS	Q
Silver	50.0	52.4	ug/L	105	90 - 110	
Arsenic	50.0	50.3	ug/L	101	90 - 110	
Barium	50.0	48.4	ug/L	96.8	90 - 110	
Cadmium	50.0	49.8	ug/L	99.6	90 - 110	
Chromium	50.0	50.2	ug/L	100	90 - 110	
Copper	50.0	52.6	ug/L	105	90 - 110	
Lead	50.0	50.1	ug/L	100	90 - 110	
Manganese	50.0	50.6	ug/L	101	90 - 110	
Nickel	50.0	52.4	ug/L	105	90 - 110	
Antimony	50.0	49.9	ug/L	99.9	90 - 110	
Selenium	50.0	51.9	ug/L	104	90 - 110	
Thallium	50.0	50.7	ug/L	101	90 - 110	

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-11
Instrument ID: ELAN-ICP Run Time: 12:12 Method: 6020
File ID: EL.120208.121223 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic	50.0	50.8	ug/L	102	90 - 110		
Lead	50.0	51.5	ug/L	103	90 - 110		
Selenium	50.0	51.7	ug/L	103	90 - 110		
Thallium	50.0	51.1	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-25
Instrument ID: ELAN-ICP Run Time: 18:39 Method: 6020
File ID: EL.120208.183923 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic	50.0	50.0	ug/L	99.9	90 - 110		
Lead	50.0	50.9	ug/L	102	90 - 110		
Selenium	50.0	50.7	ug/L	101	90 - 110		
Thallium	50.0	51.2	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-27
Instrument ID: ELAN-ICP Run Time: 19:33 Method: 6020
File ID: EL.120208.193353 Analyst: JYH QC Key: STD
Workgroup (AAB#): WG289424 Cal ID: ELAN-I - 02-DEC-08
Matrix: SOIL

Analyte	Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic	50.0	51.5	ug/L	103	90 - 110		
Lead	50.0	52.3	ug/L	105	90 - 110		
Selenium	50.0	52.5	ug/L	105	90 - 110		
Thallium	50.0	52.7	ug/L	105	90 - 110		

* Exceeds LIMITS Criteria

Login number: L08110782
Instrument ID: ELAN-ICP
Sol. A : WG289472-09
Sol. AB : WG289472-10

File ID: EL.120208.120055
File ID: EL.120208.120639

Workgroup (AAB#): WG289424
Method: 6020
Units: ug/L
Matrix: Soil

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Arsenic	NS	0.00810	NS	100	111	111	
Lead	NS	-0.00990	NS	100	104	104	
Selenium	NS	-0.00590	NS	100	118	118	
Thallium	NS	0.0161	NS	100	103	103	

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: L08110782
Instrument ID: ELAN-ICP
Sol. A : WG289472-09
Sol. AB : WG289472-10

File ID: EL.120208.120055
File ID: EL.120208.120639

Workgroup (AAB#): WG289382
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	-0.0772	NS	100	116	116	
Arsenic	NS	0.00810	NS	100	111	111	
Barium	NS	0.0752	NS	100	106	106	
Cadmium	NS	0.0845	NS	100	109	109	
Chromium	NS	0.0398	NS	100	101	101	
Copper	NS	0.141	NS	100	99.5	99.5	
Lead	NS	-0.00990	NS	100	104	104	
Manganese	NS	0.240	NS	100	101	101	
Nickel	NS	0.855	NS	100	99.5	99.5	
Selenium	NS	-0.00590	NS	100	118	118	
Silver	NS	-0.00790	NS	100	49.9	49.9	*
Thallium	NS	0.0161	NS	100	103	103	

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: L08110782
Instrument ID: ELAN-ICP
Sol. A : WG289539-20
Sol. AB : WG289539-21

File ID: EL.120308.161750
File ID: EL.120308.162334

Workgroup (AAB#): WG289382
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	-0.0787	NS	100	106	106	
Arsenic	NS	-0.0535	NS	100	106	106	
Barium	NS	0.0592	NS	100	99.9	99.9	
Cadmium	NS	0.0997	NS	100	103	103	
Chromium	NS	0.0567	NS	100	100	100	
Copper	NS	0.138	NS	100	99.4	99.4	
Lead	NS	-0.00530	NS	100	99.3	99.3	
Manganese	NS	0.269	NS	100	99.1	99.1	
Nickel	NS	1.05	NS	100	101	101	
Selenium	NS	-0.170	NS	100	116	116	
Silver	NS	-0.0790	NS	100	101	101	
Thallium	NS	-0.00220	NS	100	99.8	99.8	

NS = Not spiked

* = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.

= Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).

Login number: L08110782
Instrument ID: ELAN-ICP
Sol. A : WG289539-32
Sol. AB : WG289539-33

File ID: EL.120308.201722
File ID: EL.120308.202306

Workgroup (AAB#): WG289382
Method: 6020
Units: ug/L
Matrix: Water

ANALYTE	Sol. A			Sol. AB			Q
	True	Found	%Recovery	True	Found	%Recovery	
Antimony	NS	-0.0991	NS	100	104	104	
Arsenic	NS	-0.00840	NS	100	104	104	
Barium	NS	0.0640	NS	100	96.8	96.8	
Cadmium	NS	0.0485	NS	100	98.8	98.8	
Chromium	NS	-0.00480	NS	100	95.6	95.6	
Copper	NS	0.132	NS	100	94.6	94.6	
Lead	NS	-0.00680	NS	100	97.0	97.0	
Manganese	NS	0.261	NS	100	96.5	96.5	
Nickel	NS	1.01	NS	100	98.8	98.8	
Selenium	NS	-0.148	NS	100	115	115	
Silver	NS	-0.0804	NS	100	95.8	95.8	
Thallium	NS	-0.00520	NS	100	98.3	98.3	

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: L08110782 Run Date: 12/03/2008 Sample ID: WG289539-08
Instrument ID: ELAN-ICP Run Time: 12:30 Prep Method: 3015
File ID: EL.120308.123019 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289539 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-ICP-03-DEC-2008 12:07

Analytes	Expected	Found	% Rec	Limits	Q
Cadmium, Total	0.200	0.209	105	50 - 150	
Thallium, Total	0.0800	0.0698	87.3	50 - 150	

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Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-08
Instrument ID: ELAN-ICP Run Time: 11:55 Prep Method: 3015
File ID: EL.120208.115510 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289472 Matrix: Water Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-ICP-02-DEC-2008 11:32

Analytes	Expected	Found	% Rec	Limits	Q
Cadmium, Total	0.200	0.195	97.5	50 - 150	
Thallium, Total	0.0800	0.0750	93.8	50 - 150	

CRI - Modified 03/06/2008
PDF File ID: 1266086
Report generated 12/04/2008 08:30



Login Number: L08110782 Run Date: 12/02/2008 Sample ID: WG289472-07
Instrument ID: ELAN-ICP Run Time: 11:49 Prep Method: 3051
File ID: EL.120208.114924 Analyst: JYH Method: 6020
Workgroup (AAB#): WG289472 Matrix: Soil Units: ug/L
Contract #: DACA56-94-D-0020 Cal ID: ELAN-ICP-02-DEC-2008 11:32

Analytes	Expected	Found	% Rec	Limits	Q
Thallium, Total	0.0500	0.0543	109	50 - 150	

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PDF File ID: 1266086
Report generated 12/04/2008 08:30



INTERNAL STANDARD REPORT

Login: L08110782 Analytical Method: 6020
 Analytical Workgroup: WG289382 Matrix: 1
 Instrument: ELAN-ICP Analyst: JYH
 ICAL Date: 02-DEC-2008 11:15

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L08110782-01	SAMP	02-DEC-2008 15:17	91.056	97.775	92.199	93.476
L08110782-01	SAMP	02-DEC-2008 17:16	95.567	97.698	89.67	91.887
L08110782-02	SAMP	02-DEC-2008 15:46	81.971	90.941	84.157	87.172
L08110782-02	SAMP	02-DEC-2008 17:32	91.97	95.343	86.822	90.31
L08110782-03	SAMP	02-DEC-2008 15:51	88.215	94.475	87.357	88.32
L08110782-03	SAMP	02-DEC-2008 17:37	96.429	96.947	88.924	92.109
L08110782-04	SAMP	02-DEC-2008 15:57	63.845	74.456	70.577	73.825
L08110782-05	SAMP	02-DEC-2008 16:02	82.181	90.716	82.764	84.991
WG289288-01	REF	02-DEC-2008 16:13	94.89	96.808	89.313	92.64
WG289288-02	REF	02-DEC-2008 15:01	96.197	103.768	97.883	97.584
WG289288-03	BLANK	02-DEC-2008 14:51	96.087	101.234	99.583	99.174
WG289288-04	LCS	02-DEC-2008 14:56	96.038	101.144	99.96	99.789
WG289288-05	DUP	02-DEC-2008 16:18	94.543	97.069	89.231	92.997
WG289288-06	MS	02-DEC-2008 15:07	94.677	102.819	95.154	95.391
WG289288-07	MSD	02-DEC-2008 15:12	93.285	101.161	93.582	93.829
WG289382-01	PSPK	02-DEC-2008 15:23	90.833	97.897	91.354	92.936
WG289382-01	PSPK	02-DEC-2008 17:21	94.604	95.478	86.93	89.619
WG289382-02	SERIAL	02-DEC-2008 15:29	95.747	100.482	95.661	94.992
WG289382-02	SERIAL	02-DEC-2008 17:26	94.642	95.692	87.805	90.679
WG289472-05	ICV	02-DEC-2008 11:37	93.838	94.572	93.96	95.286
WG289472-06	ICB	02-DEC-2008 11:43	100.112	99.404	97.927	99.224
WG289472-11	CCV	02-DEC-2008 12:12	93.129	95.87	92.908	93.134
WG289472-12	CCB	02-DEC-2008 12:18	96.377	98.087	95.745	95.337
WG289472-17	CCV	02-DEC-2008 14:40	96.08	101.063	98.362	98.556
WG289472-18	CCB	02-DEC-2008 14:45	98.404	102.147	100.554	101.07
WG289472-19	CCV	02-DEC-2008 15:35	94.966	99.115	95.152	96.111
WG289472-20	CCB	02-DEC-2008 15:41	97.831	101.724	96.724	96.795
WG289472-21	CCV	02-DEC-2008 16:40	94.981	97.656	88.772	90.754
WG289472-22	CCB	02-DEC-2008 16:46	94.723	95.618	87.098	89.879
WG289472-23	CCV	02-DEC-2008 17:43	94.079	94.992	86.504	89.014
WG289472-24	CCB	02-DEC-2008 17:49	95.243	93.215	87.598	89.609

Acceptance criteria: 30% - 120%
 Underlined recoveries are out of range

INT_STD_ICPMS - Modified 03/05/2008
 PDF File ID: 1266087
 Report generated: 12/04/2008 08:30



INTERNAL STANDARD REPORT

Login: L08110782 Analytical Method: 6020
 Analytical Workgroup: WG289382 Matrix: 1
 Instrument: ELAN-ICP Analyst: JYH
 ICAL Date: 03-DEC-2008 11:50

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L08110782-01	SAMP	03-DEC-2008 17:19	92.711	86.636	85.766	91.366
L08110782-02	SAMP	03-DEC-2008 17:46	85.08	83.668	83.639	89.57
L08110782-03	SAMP	03-DEC-2008 17:52	95.081	90.066	89.002	95.74
L08110782-04	SAMP	03-DEC-2008 16:52	66.845	70.191	70.904	74.921
L08110782-05	SAMP	03-DEC-2008 16:57	85.784	86.587	83.959	90.051
WG289288-02	REF	03-DEC-2008 17:02	96.073	92.797	87.465	94.879
WG289288-03	BLANK	03-DEC-2008 16:41	97.894	94.846	92.669	95.102
WG289288-04	LCS	03-DEC-2008 16:46	99.129	95.146	91.822	94.698
WG289288-06	MS	03-DEC-2008 17:08	97.258	92.955	88.857	94.299
WG289288-07	MSD	03-DEC-2008 17:13	98.716	92.561	89.404	94.755
WG289382-01	PSPK	03-DEC-2008 17:24	94.771	88.41	87.676	93.419
WG289382-02	SERIAL	03-DEC-2008 17:30	100.401	92.545	90	95.252
WG289539-05	ICV	03-DEC-2008 12:13	97.107	98.032	97.813	97.596
WG289539-06	ICB	03-DEC-2008 12:18	98.238	98.639	98.066	97.961
WG289539-12	CCV	03-DEC-2008 12:54	97.366	98.989	96.685	96.473
WG289539-13	CCB	03-DEC-2008 13:00	99.537	100.041	96.687	97.565
WG289539-18	CCV	03-DEC-2008 16:06	98.788	93.884	92.368	95.721
WG289539-19	CCB	03-DEC-2008 16:12	98.766	93.627	91.829	94.275
WG289539-22	CCV	03-DEC-2008 16:29	96.684	93.344	90.861	93.736
WG289539-23	CCB	03-DEC-2008 16:35	97.323	93.438	91.143	94.943
WG289539-24	CCV	03-DEC-2008 17:35	98.527	90.514	89.612	94.045
WG289539-25	CCB	03-DEC-2008 17:41	99.775	92.002	90.541	95.612
WG289539-26	CCV	03-DEC-2008 17:59	96.69	91.78	90.014	92.738
WG289539-27	CCB	03-DEC-2008 18:05	97.796	91.304	90.006	95.356
WG289539-30	CCV	03-DEC-2008 20:00	96.566	87.223	86.458	93.117
WG289539-31	CCB	03-DEC-2008 20:06	96.771	87.264	86.434	91.306
WG289539-34	CCV	03-DEC-2008 20:28	94.266	88.105	85.821	89.739
WG289539-35	CCB	03-DEC-2008 20:34	95.337	88.185	86.474	91.066

Acceptance criteria: 30% - 120%
 Underlined recoveries are out of range

INT_STD_ICPMS - Modified 03/05/2008
 PDF File ID: 1266087
 Report generated: 12/04/2008 08:30



INTERNAL STANDARD REPORT

Login: L08110782 Analytical Method: 6020
 Analytical Workgroup: WG289424 Matrix: 7
 Instrument: ELAN-ICP Analyst: JYH
 ICAL Date: 02-DEC-2008 11:15

Sample	Type	Run Date	BISMUTH	GERMANIUM	INDIUM	TERBIUM
			% Rec	% Rec	% Rec	% Rec
L08110782-06	SAMP	02-DEC-2008 19:01	94.964	93.112	87.843	94.049
L08110782-07	SAMP	02-DEC-2008 19:17	94.038	95.953	91.525	93.243
WG289287-01	REF	02-DEC-2008 19:01	94.964	93.112	87.843	94.049
WG289287-02	BLANK	02-DEC-2008 18:50	93.521	92.537	85.498	88.621
WG289287-03	LCS	02-DEC-2008 18:55	90.666	90.009	83.615	87.795
WG289287-04	MS	02-DEC-2008 19:06	92.338	94.925	88.157	95.241
WG289287-05	MSD	02-DEC-2008 19:12	96.717	98.33	91.791	96.893
WG289424-01	PSPK	02-DEC-2008 19:22	93.709	96.867	89.922	91.717
WG289424-02	SERIAL	02-DEC-2008 19:28	93.646	97.373	90.605	90.83
WG289472-05	ICV	02-DEC-2008 11:37	93.838	94.572	93.96	95.286
WG289472-06	ICB	02-DEC-2008 11:43	100.112	99.404	97.927	99.224
WG289472-11	CCV	02-DEC-2008 12:12	93.129	95.87	92.908	93.134
WG289472-12	CCB	02-DEC-2008 12:18	96.377	98.087	95.745	95.337
WG289472-25	CCV	02-DEC-2008 18:39	91.099	91.184	84.268	87.335
WG289472-26	CCB	02-DEC-2008 18:45	91.678	90.844	85.016	87.583
WG289472-27	CCV	02-DEC-2008 19:33	90.887	94.754	88.43	89.969
WG289472-28	CCB	02-DEC-2008 19:39	94.962	96.198	90.777	92.869

Acceptance criteria: 30% - 120%
 Underlined recoveries are out of range

INT_STD_ICPMS - Modified 03/05/2008
 PDF File ID: 1266087
 Report generated: 12/04/2008 08:30



Login Number: L08110782

Date: 09/11/2008

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.

Login Number: L08110782

Date: 09/11/2008

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.