U.S. Environmental Protection Agency
Region 7

Site: Agromac-Lockwood
ID#: NESFN0703597
Break: 1.3 OU#2
Other: 68-S7-01-41
4 of 9 1-31-02

Superfund Technical Assessment and Response Team (START) 2 Contract

Contract No. 68-S7-01-41

Attachment 8

Agromac-Lockwood Operable Unit 2
Gering, Nebraska

Volume 4 of 9

40088458
SUPERFUND RECORDS

Tetra Tech EM Inc.

Printed on Recycled Paper

Columbia Analytical Services Inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

January 31, 2002

Mr. Curt Enos
Tetra Tech EM Inc.
8030 Flint St.
Lenexa, KS 66214

PROJECT:AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Submission #:R2210310

Dear Mr. Enos

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Mark Wilson
Client Service Manager

Enc.

1 Mustard St. • Suite 250 • Rochester, NY 14609 • Tele:(716)288-5380 • Fax:(716)288-8475

Columbia Analytical Services Inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609

THIS IS AN ANALYTICAL TEST REPORT FOR:

Client : Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Lab Submission # : R2210310
Reported : 01/31/02

Report Contains a total of 416 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. Michael K. Perry

01

SDG NARRATIVE

CASE NARRATIVE

COMPANY: Tetra Tech EM Inc.
Agromack-Lockwood OU#2
SUBMISSION #: R2210310

Tetra Tech water samples were collected on 01/15-16/02 and received at CAS on 01/17/02 in good condition.

VOLATILE ORGANICS

Water samples were analyzed for Target Compound List (TCL) volatile organics by SW-846 Method 8260B.

All Matrix spike/Matrix spike duplicate recoveries and RPD were within QC limits.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits except for Chloromethane, which was above limits in the LCS analyzed 01/22/02 and Carbon Disulfide which was above limits in another LCS analyzed 01/22/02. These analytes were not detected in any associated samples. No further action was taken.

Surrogate Standard and Internal Standard recoveries were within QC limits.

All samples were analyzed within the required holding times.

No other analytical or QC problems were encountered with these analyses.

INORGANICS

Water samples were analyzed for a site list of Metals by EPA Methods 6010B and 7470A.

All matrix spike recoveries and RPD were within QC limits.

All initial and continuing calibrations were compliant.

All blank spike recoveries were within QC limits.

No other analytical or QC problems were encountered with these analyses.

SOLUBLE METALS

Soluble Metals were analyzed by ICP-MS at the CAS-Jacksonville laboratory. The report for that data will be sent at a later date as an addendum to this report.

1 Mustard Street, Suite 250 ▪ Rochester, NY 14609-6925 ▪ Telephone (585) 288-5380 ▪ Fax (585) 288-8475

CAS ASP/CLP BATCHIN' FORM / LOGIN SHEET

SDG #: MW LW-3	BATCH COMPLETE: __yes_____	DATE REVISED:
SUBMISSION R2210310	DISKETTE REQUESTED: EXCEL	DATE DUE: 02/14/02
CLIENT: Tetra Tech EM Inc.	DATE: 01/18/02	PROTOCOL: 846
CLIENT REP: Mark Wilson	CUSTODY SEAL: PRESENT/ABSENT:	SHIPPING No.:
PROJECT: AGROMAC-LOCKWOOD OU #2	CHAIN OF CUSTODY: PRESENT/ABSENT:	

CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE SAMPLED	DATE RECEIVED	pH (SOLIDS)	% SOLIDS	REMARKS SAMPLE CONDITION
524665	MW LW-3	WATER	8260/Met	1/15/02	1/17/02			50C MET 6020 - CAS JAY
524666	MW LW-4	WATER	8260/Met	1/15/02	1/17/02			
524669	MW LW-8	WATER	QC 8260/Met	1/15/02	1/17/02			
524670	MW LW-1	WATER	8260/Met	1/15/02	1/17/02			
524671	MW RF5-FD	WATER	8260/Met	1/15/02	1/17/02			
524674	RF 5	WATER	8260/Met	1/15/02	1/17/02			
524675	MW LW-7	WATER	8260/Met	1/15/02	1/17/02			
524676	MW LW-7-FD	WATER	8260/Met	1/15/02	1/17/02			
524677	RF 3	WATER	8260/Met	1/15/02	1/17/02			
524678	MW MI-2	WATER	8260/Met	1/15/02	1/17/02			
524679	MW M-6	WATER	8260/Met	1/15/02	1/17/02			
524683	MW M-3	WATER	8260/Met	1/15/02	1/17/02			
524685	MW M-8	WATER	8260/Met	1/15/02	1/17/02			
524686	RF4	WATER	8260/Met	1/15/02	1/17/02			
524687	RF1-FD	WATER	8260/Met	1/15/02	1/17/02			
524688	MWLW-2	WATER	8260/Met	1/15/02	1/17/02			
524689	MWLW-5	WATER	8260/Met	1/15/02	1/17/02			
524690	RF-1	WATER	8260/Met	1/15/02	1/17/02			
524691	RF-2	WATER	8260/Met	1/15/02	1/17/02			
524692	MW LW-6	WATER	8260/Met	1/15/02	1/17/02			
524693	MW M-7	WATER	8260/Met	1/16/02	1/17/02			
524694	MW M-4	WATER	8260/Met	1/16/02	1/17/02			
524695	MW M-5	WATER	8260/Met	1/16/02	1/17/02			
524696	MW MI-1	WATER	8260/Met	1/16/02	1/17/02			
524697	MW M-1	WATER	8260/Met	1/16/02	1/17/02			
524698	MW M-2	WATER	8260/Met	1/16/02	1/17/02			
524706	TRIP BLANK-1	WATER	8260	1/16/02	1/17/02			
524707	TRIP BLANK-2	WATER	8260	1/16/02	1/17/02			
524708	TRIP BLANK-3	WATER	8260	1/16/02	1/17/02			
524709	TRIP BLANK-4	WATER	8260	1/16/02	1/17/02			

04

INORGANIC QUALIFIERS

C (Concentration) qualifier - Enter "B" if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for, but not detected, a "U" must be entered.

Q qualifier - Specified entries and their meanings are as follows:

E - The reported value is estimated because of the presence of interference.

M - Duplicate injection precision not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier - Enter:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed

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Effective 10/26/01

CAS LIST OF QUALIFIERS

U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. For further explanation see case narrative / cover letter.

B - This flag is used when the analyte is found in the associated blank as well as in the sample.

E - This flag identifies compounds whose concentrations exceed the calibration range.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

N - Spiked sample recovery not within control limits.
(Flag the entire batch - Inorganic analysis only)

* - Inorganic Duplicate analysis not within control limits. Flag the entire batch - Inorganic analysis only

* - Organics QC data outside limits.

D - Spike diluted out.

S - Reported value determined by Method of Standard Additions. (MSA)

X - As specified in the case narrative.

CAS/Rochester Lab ID # for State Certifications

NELAP Accredited
New York ID # 10145
Connecticut ID # PH0556
Massachusetts ID # M-NY032
American Industrial Hygiene Assoc. ID #:100314
Navy Facilities Engineering Service Center Approved

Delaware Accredited
New Jersey ID # 73004
Rhode Island ID # 158
New Hampshire ID # 294100 A/B
West Virginia ID # 292
Florida ID # E87674

ACCREDITED IN ACCORDANCE WITH nelac

CHAINS OF CUSTODY
INTERNAL CHAINS

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 32

SR #

CAS Contact

Project Name: Agromac-Lockwood OU #2	Project Number: 69011.E.01.0008.10
Project Manager: Curt Enos	Report CC:
Company/Address: Tetra Tech EM Inc., 8030 Flint St., Lenexa, KS 66214	
Phone #: 913-495-3906	FAX#: 913-894-6295
Sampler's Signature: Trisha R. Dealy	Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
					PRESERVATIVE	1								2	2					
MW LW-3	52Y665	1/15/02	1630	W	3	✓														
MW LW-3	↓	1/15/02	1630	W	1								✓							6010 B
MW LW-3	↓	1/15/02	1630	W	1									✓						6020
MW LW-4	66	1/15/02	1710	W	1								✓							6010 B
MW LW-4	↓	1/15/02	1710	W	1									✓						6020
MW LW-4	↓	1/15/02	1710	W	3	✓														
MW LW-8	69	1/15/02	1430	W	1								✓							6010 B
MW LW-1	70	1/15/02	0825	W	1								✓							6010 B
MW LW-1	↓	1/15/02	0825	W	1									✓						6020
MW-RFS-FD	71	1/15/02	1045	W	1								✓							6010 B

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:

R221030
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Trisha R. Dealy	Signature: Kelly M. Cook	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: K. Cook	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Tetra Tech EM Inc.	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 1/16/02 1100	Date/Time: 1-17-02 930	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0101-08

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SR #

CAS Contact

Project Name: Aromac-Lockwood OU#2	Project Number: G9011.E.01.0008.10
Project Manager: Curt Enos	Report CC:
Company/Address: Tetra Tech EM Inc. 8030 Flint St. Lenexa, KS 66214	
Phone #: 913-495-3906	FAX#: 913-894-6295
Sampler's Signature: Trisha R. Dealy	Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260B ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's	WASTE CHARACTERIZATION ☐ H/P ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE					1										2	2				
MW-RFS-FD	524671	1/15/02	1045	W	1									✓						6020
RF 5	74		1045	W	1								✓							6010 B
RF 5	↓		1045	W	1									✓						6020
MW LW-7	75		1300	W	1								✓							6010 B
MW LW-7 FD	76		1300	W	1									✓						6020
MW-LW 7-FD	↓		1300	W	1								✓							6010 B
MW LW-7	75		1300	W	1									✓						6020
MW LW-8	69		1430	W	1									✓						6020
LW 8-MS			1430	W	1									✓						6020
LW 8-MS/MSD	↓	1/15/02	1430	W	1									✓						6020

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Trisha R. Dealy	Signature: Kellyn M. Cook	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: N. COOK	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Tetra Tech EM Inc.	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 1/16/02 1100	Date/Time: 1-17-02 930	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

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SR #

CAS Contact

Project Name: Agromec-Lockwood OU#2	Project Number: G9011.E.01.0008.10
Project Manager: Curt Enos	Report CC:
Company/Address: Tetra Tech EM Inc. 8030 Flint St. Lenexa, KS 66214	
Phone #: 913-495-3906	FAX#: 913-894-6295
Sampler's Signature: Trisha R. Dealy	Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOA's ☒ 8260 ☐ 624 ☐ CLP	GCMS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ VOA's ☐ METALS ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE						1								2	2					
Trip Blank -1	524706	1/11/02	1600	W	3	✓														
LW 7-FD	676	1/15/02	1300	W	3	✓														
MW LW-8	669	1/15/02	1430	W	3	✓														
RF 5	674	1/15/02	1045	W	3	✓														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
	Kelley M. Cook				
Signature: Trisha R. Dealy	Signature: M. Cook	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Tetra Tech EM Inc.	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time: 1/14/02 1100	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

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SR #

CAS Contact

Project Name: Agromac-Lockwood OU#2	Project Number: G9011.E.01.0008.10
Project Manager: Curt Enos	Report CC:
Company/Address: Tetra Tech EM Inc. 8030 Flint St Lenexa, KS 66214	
Phone #: 913-495-3906	FAX#: 913-894-6295
Sampler's Signature: Trisha R. Dealy	Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 2 | 2

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ VOA's ☐ METALS ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
LW 8-MS	5246 69	1/15/02	1430	W	1									✓						6010B
LW 8-MS/MSD	↓		1430	W	1									✓						6010B
RF 3	77		1600	W	1									✓						6010B
RF 3	77		1600	W	1										✓					6020
~~MW MI-1~~			~~1700~~	~~W~~	~~1~~										✓					~~6020~~ D
~~MW MI-1~~			~~1700~~	~~W~~	~~1~~									✓						~~6010B~~ D
MW LW-1	70		0825	W	3	✓														
~~MW MI-1~~			~~1700~~	~~W~~	~~3~~	✓														D
RF 3	77		1600	W	3	✓														
RS-FD	71	1/15/02	1045	W	3	✓														

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
	Kelly M. Cook				
Signature: Trisha R. Dealy	Signature: K. COOK	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Tetra Tech EM Inc.	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time: 1/16/02 11:00	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0101-06

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SR #

CAS Contact

Project Name: Aeromec - Lockwood OU #2
Project Number: G9011.E.01.0008.10
Project Manager: Curt Enos
Report CC:
Company/Address: Tetra Tech EM Inc. 8030 Flint St. Lenexa, KS 66214
Phone #: 913-495-3906
FAX#: 913-894-6295
Sampler's Signature: Trisha R. Dealy
Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260B ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's	WASTE CHARACTERIZATION ☐ H/P ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE						1									2	2				
LW 8-MS	524669	1/15/02	1430	W	3	✓														
MW LW-7	75	1/15/02	1300	W	3	✓														
Trip Blank-3	708	1/11/02	1600	W	3	✓														
LW 8-MS/MSD	69	1/15/02	1430	W	3	✓														
MW MI-2	78	1/15/02	1700	W	1								✓							601DB
MW MI-2	↓	1/15/02	1700	W	1									✓						6020
MW MI-2	↓	1/15/02	1700	W	3	✓														
MW M-6	79	1/16/02	0943	W	3	✓														
MW M-3	83	1/16/02	0834	W	3	✓														
MW M-8	85	1/16/02	0900	W	3	✓														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

See Contract

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
	Kelly M. Cook				
Signature: Trisha R. Dealy	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: TTEMI	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time: 1/16/02 1100	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0101-08

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SR #

CAS Contact

Project Name: Agromac-Lockwood OU#2
Project Number: G9011.E.01.0008.10
Project Manager: Curt Enos
Report CC:
Company/Address: Tetra Tech EM Inc.
8030 Flint St.
Lenexa, KS 66214
Phone #: 913-495-3906
FAX#: 913-894-6295
Sampler's Signature: Trisha R Dealy
Sampler's Printed Name: Trisha R. Dealy

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 624 ☐ CLP ☐ 8260	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ VOA's ☐ METALS	WASTE CHARACTERIZATION ☐ SVOA's ☐ H/P ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
PRESERVATIVE					1									2	2					
MW M-3	524683	1/16/02	0834	W	1								✓							6010 B
MW M-6	79	1/16/02	0943	W	1								✓							6010 B
MW M-8	85	1/16/02	0900	W	1								✓							6010 B
MW M-8	85	1/16/02	0900	W	1									✓						6020
MW M-3	83	1/16/02	0834	W	1									✓						6020
MW M-6	79	1/16/02	0943	W	1									✓						6020

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Specialized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
	Kelly M. Cook				
Signature: Trisha R. Dealy	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: Trisha R. Dealy	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: TTEMI	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time: 1/16/02 1100	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

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SR #

CAS Contact

Project Name: Agromac-Lockwood OU #2
Project Number: G9011 E010008.10
Project Manager: Curt Enos
Report CC:
Company/Address: TetraTech EMI
8030 Flint
Lenexa KS 66214
Phone #: 913-495-3906
FAX#: 913-894-6295
Sampler's Signature: Stephanie McCaslin
Sampler's Printed Name: Stephanie McCaslin

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 2 2

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
RF4	524 686	1/15/02	1600	W	1										✓					6020 -
RF1-FD	87	1/15/02	1325	W	1									✓						6010B
MW LW-2	88	1/15/02	1515	W	1									✓						6010B
MW LW-2	↓	1/15/02	1515	W	1										✓					6020
RF1-FD	87	1/15/02	1325	W	1										✓					6020
RF4	86	1/15/02	1600	W	1									✓						6010B
MW LW-5	89	1/15/02	1630	W	1									✓						6010B
MW-LW-5	↓	1/15/02	1630	W	1										✓					6020
RF-1	90	1/15/02	1325	W	1									✓						6010B
RF-1	↓	1/15/02	1345	W	1										✓					6020

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Stephanie McCaslin	Kelly M. Cook				
Signature: Stephanie McCaslin	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: TetraTech EMI	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: 01/16/02 11:10	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

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SR #

CAS Contact

Project Name: Agromac - Lockwood CW #2
Project Number: 69011 E010008.10
Project Manager: Curt Enos
Report CC:
Company/Address: Tetra Tech EMI
8030 Flint
Lenexa KS 66214
Phone #: 913-495-3906
FAX#: 913-894-6295
Sampler's Signature: Stephanie McCaslin
Sampler's Printed Name: Stephanie McCaslin

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 2 | 2

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☒ 8260B ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
RF-2	524691	1/15/02	1345	W	1									✓						6010B
RF-2	↓	1/15/02	1345	W	1										✓					6020
MW LW-6	92	1/15/02	1624	W	1										✓					6020
MW LW-6	↓	1/15/02	1624	W	1									✓						6010B
RF4	86	1/15/02	1600	W	3	✓														
MW LW-2	88	1/15/02	1515	W	3	✓														
MW LW-5	89	1/15/02	1630	W	3	✓														
RF1-FD	87	1/15/02	1325	W	3	✓														
RF2	91	1/15/02	1345	W	3	✓														
MW LW-6	92	1/15/02	1624	W	3	✓														

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

See Contract

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Stephanie McCaslin	Kelly M. Cook				
Signature: Stephanie McCaslin	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: Tetra Tech EMI	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: 01/16/02 11:10	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

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SR #

CAS Contact

Project Name: Agromac Lockwood (W) #7
Project Number: 69011E010008.10
Project Manager: Curt Enos
Report CC:
Company/Address: Tetra Tech EMI, 8030 Flint, Lenexa KS 66214
Phone #: 913-495-3906
FAX#: 913 894 6295
Sampler's Signature: Stephanie McCaslin
Sampler's Printed Name: Stephanie McCaslin

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 1

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	trip blank				REMARKS/ ALTERNATE DESCRIPTION
trip blank-2	524707	1/11/02	1600	W	3											✓				
RF1	690	1/15/02	1325	W	3	✓														

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
✓ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See contract

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Stephanie McCaslin	Kelly M. Cook				
Signature: Stephanie McCaslin	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: Tetra Tech EMI	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: 01/16/02 11:20	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

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SR #

CAS Contact

Project Name: Aquamac-Lockwood	Project Number: G9011E010008.10
Project Manager: Curt Enos	Report CC:
Company/Address: TetraTech EMI, 8030 Flint, Lenexa KS 66214	
Phone#: 913-495-3906	FAX#: 913-894-6295
Sampler's Signature: Stephanie McCaslin	Sampler's Printed Name: Stephanie McCaslin

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE	1									2	1				
NUMBER OF CONTAINERS	GC/MS VOA's ☒ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Tripblank				REMARKS/ ALTERNATE DESCRIPTION
CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX											
MW M-7	524693	1/16/02	945	W	1							✓			6020
MW M-4	94	1/16/02	900	W	1							✓			6020
MW M-4	↓	1/16/02	900	W	1						✓				6010B
MW M-7	93	1/16/02	945	W	1						✓				6010B
MW M-5	95	1/16/02	830	W	1						✓				6010B
MW M-5	↓	1/16/02	830	W	1							✓			6020
Tripblank-4	709	1/11/02	1600	W	3								✓		
MW M-7	93	1/16/02	945	W	3	✓									
MW M-4	94	1/16/02	900	W	3	✓									
MW M-5	95	1/16/02	830	W	3	✓									

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 24 hr ___ 48 hr ___ 5 day
___ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

See Contract

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
___ V. Speicalized Forms / Custom Report
Edata ___ Yes ___ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Stephanie McCaslin	Signature: Kelly M. Cook	Signature	Signature	Signature	Signature
Printed Name: Tetratech EMI	Printed Name: K. Cook	Printed Name	Printed Name	Printed Name	Printed Name
Firm: 01-16-02 17:10	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time	Date/Time: 1-17-02 930	Date/Time	Date/Time	Date/Time	Date/Time

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SR #

CAS Contact

Project Name: Hyman Lockwood
Project Number: G9011 E010008.10
Project Manager: Curt Enos
Report CC:
Company/Address: Tetra Tech EMI
8030 Flint
Lenexa KS 66214
Phone #: 9134953906
FAX#: 9138946295
Sampler's Signature: Stephanie McCaslin
Sampler's Printed Name: Stephanie McCaslin

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1 | 2

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/ PCB's ☐ 8081 ☐ 608 ☐ CLP ☐ 8082	STAR'S LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STAR'S LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☐ METALS ☐ VOA's ☐ SVOA's ☐ H/P	WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)					REMARKS/ ALTERNATE DESCRIPTION
MW MI-1	524696	1/16/02	845	W	3	✓														
MW M-1	97	1/16/02	915	W	3	✓														
MW M-2	98	1/16/02	800	W	3	✓														
MW M-1	97	1/16/02	915	W	1										✓					6020
MW MI-1	96	1/16/02	845	W	1									✓						6010B
MW MI-1	96	1/16/02	845	W	1										✓					6020
MW M-2	98	1/16/02	800	W	1									✓						6010B
MW M-2	98	1/16/02	800	W	1										✓					6020
MW M-1	97	1/16/02	915	W	1									✓						6010B

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
____ STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Stephanie McCaslin	Kelly M. Cook				
Signature: Stephanie McCaslin	Signature: K. Cook	Signature	Signature	Signature	Signature
Printed Name: Tetra Tech EMI	Printed Name: CAS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: 1-16-02 11:10	Firm: 1-17-02 930	Firm	Firm	Firm	Firm
Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0101-08

Cooler Receipt And Preservation Check Form

Project/Client TTEM-KS Submission Number R2-10310.

Cooler received on 1-17-02 by: UMC COURIER: CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES / NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 2°C 3°C 3°C 1°C ____

Is the temperature within 0° - 6° C?:	Yes	Yes	Yes	Yes	Yes
If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 1-17-02 940

Thermometer ID: IR-GUN Temp Blank Sample Bottle Cooler Temp IR. Gun

If out of Temperature, Client Approval to Run Samples ____

Cooler Breakdown: Date: 1-17-02 by: UMC / BJC

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies: ____

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO_3	X				
2	H_2SO_4					
Residual Chlorine (+/-)	for TCN & Phenol					
5-11 pH slurry*	CLP SVOA					
5-9 pH slurry*	CLP* P/PCBs					
5-9**	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH ____

*Do not adjust pH! Report in C/N **If pH adjustment is required, use NaOH and/or H_2SO_4

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

INTERNAL C"" INS

:LIENT NAME: Tetra Tech EM Inc.

:DG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	PH	STORAGE LOCATION	SCHEDULED LTS DATE
3260B	524665	3	UMC	DR	1-17-02 1430		C-1	02/16/02
3260B	524666	3						02/16/02
3260B	524669 QC	9						02/16/02
3260B	524670	3						02/16/02
3260B	524671	3						02/16/02
8260B	524674	3						02/16/02
8260B	524675	3						02/16/02
8260B	524676	3						02/16/02
8260B	524677	3						02/16/02
8260B	524678	3						02/16/02
8260B	524679	3						02/16/02
8260B	524683	3						02/16/02
8260B	524685	3						02/16/02
8260B	524686	3						02/16/02
8260B	524687	3						02/16/02
8260B	524688	3						02/16/02
8260B	524689	3						02/16/02
8260B	524690	3						02/16/02
8260B	524691	3						02/16/02

INTERNAL C INS

:LIENT NAME: Tetra Tech EM Inc.

:DG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	PH	STORAGE LOCATION	SCHEDULED LTS DATE
3260B	524692	3	KMC	DR	1-17-02 1430		C-1	02/16/02
3260B	524693	3						02/16/02
3260B	524694	3						02/16/02
3260B	524695	3						02/16/02
8260B	524696	3						02/16/02
8260B	524697	3						02/16/02
8260B	524698	3						02/16/02
8260B	524706	3						02/16/02
8260B	524707	3						02/16/02
8260B	524708	3						02/16/02
8260B	524709	3						02/16/02

INTERNAL ' INS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	STORAGE LOCATION	SCHEDULED LTS DATE
METALS	524665	1	VMC	[illegible]	1-17-02 1500	A1	02/16/02
METALS	524666	1					02/16/02
METALS	524669 QC	2					02/16/02
METALS	524670	1					02/16/02
METALS	524671	1					02/16/02
METALS	524674	1					02/16/02
METALS	524675	1					02/16/02
METALS	524676	1					02/16/02
METALS	524677	1					02/16/02
METALS	524678	1					02/16/02
METALS	524679	1					02/16/02
METALS	524683	1					02/16/02
METALS	524685	1					02/16/02
METALS	524686	1					02/16/02
METALS	524687	1					02/16/02
METALS	524688	1					02/16/02
METALS	524689	1					02/16/02
METALS	524690	1					02/16/02
METALS	524691	1					02/16/02

INTERNAL C INS

:LIENT NAME: Tetra Tech EM Inc.

:DG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	STORAGE LOCATION	SCHEDULED LTS DATE
METALS	524692	1	KMC	JM	1-17-02 1500	A1	02/16/02
METALS	524693	1					02/16/02
METALS	524694	1					02/16/02
METALS	524695	1					02/16/02
METALS	524696	1					02/16/02
METALS	524697	1					02/16/02
METALS	524698	1					02/16/02

INTERNAL C INS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	STORAGE LOCATION	SCHEDULED LTS DATE
HG	524665	1	UMC	DCB	1-17-02 1500	C-3	02/16/02
HG	524666	1					02/16/02
HG	524669 QC	1					02/16/02
HG	524670	1					02/16/02
HG	524671	1					02/16/02
HG	524674	1					02/16/02
HG	524675	1					02/16/02
HG	524676	1					02/16/02
HG	524677	1					02/16/02
HG	524678	1					02/16/02
HG	524679	1					02/16/02
HG	524683	1					02/16/02
HG	524685	1					02/16/02
HG	524686	1					02/16/02
HG	524687	1					02/16/02
HG	524688	1					02/16/02
HG	524689	1					02/16/02
HG	524690	1					02/16/02
HG	524691	1					02/16/02

23

INTERNAL C' 'NS

'LIENT NAME: Tetra Tech EM Inc.

'DG#: SUBMISSION: R2210310 DATE REC'D: 01/17/02 0930

	ORDER #	# OF CONTAINERS	RELINQUISHED BY	RECEIVED BY	DATE TIME	STORAGE LOCATION	SCHEDULED LTS DATE
IG	524692	1	KMC	DCB	1-17-02 1500	C-3	02/16/02
IG	524693	1	↓	↓	↓	↓	02/16/02
IG	524694	1	↓	↓	↓	↓	02/16/02
IG	524695	1	↓	↓	↓	↓	02/16/02
IG	524696	1	↓	↓	↓	↓	02/16/02
IG	524697	1	↓	↓	↓	↓	02/16/02
IG	524698	1	↓	↓	↓	↓	02/16/02

VOLATILE ORGANICS

QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER

Spiked Order No. : 524669 Tetra Tech EM Inc.

Client ID: MW LW-8

Test: 8260B TCL

Analytical Units: UG/L

Run Number : 73718

ANALYTE	SPIKE ADDED	CONCENT. SAMPLE	MATRIX SPIKE FOUND	MATRIX SPIKE % REC.	MATRIX SPIKE DUP. FOUND	MATRIX SPIKE DUP. % REC.	RPD	QC LIMITS RPD	QC LIMITS REC.
BENZENE	50.0	0	44.0	88	44.0	88	0	11	70 - 130
CHLOROBENZENE	50.0	0	44.0	88	44.0	88	0	13	70 - 130
1,1-DICHLOROETHENE	50.0	0	44.0	88	44.0	88	0	14	61 - 145
TOLUENE	50.0	0	46.0	92	46.0	92	0	13	70 - 130
TRICHLOROETHENE	50.0	0	45.0	90	43.0	86	5	14	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 525622 ANALYTICAL RUN # : 73718

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	85	50 - 150
BENZENE	20.0	97	70 - 130
BROMODICHLOROMETHANE	20.0	99	70 - 130
BROMOFORM	20.0	90	70 - 130
BROMOMETHANE	20.0	87	50 - 150
2-BUTANONE (MEK)	20.0	87	50 - 150
CARBON DISULFIDE	20.0	80	70 - 130
CARBON TETRACHLORIDE	20.0	96	70 - 130
CHLOROBENZENE	20.0	99	70 - 130
CHLOROETHANE	20.0	99	70 - 130
CHLOROFORM	20.0	100	70 - 130
CHLOROMETHANE	20.0	112	70 - 130
DIBROMOCHLOROMETHANE	20.0	93	70 - 130
1,1-DICHLOROETHANE	20.0	103	70 - 130
1,2-DICHLOROETHANE	20.0	95	70 - 130
1,1-DICHLOROETHENE	20.0	96	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	99	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	100	70 - 130
1,2-DICHLOROPROPANE	20.0	94	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	98	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	104	70 - 130
ETHYLBENZENE	20.0	104	70 - 130
2-HEXANONE	20.0	86	70 - 130
METHYLENE CHLORIDE	20.0	94	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	90	70 - 130
STYRENE	20.0	102	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	90	70 - 130
TETRACHLOROETHENE	20.0	107	70 - 130
TOLUENE	20.0	102	70 - 130
1,1,1-TRICHLOROETHANE	20.0	100	70 - 130
1,1,2-TRICHLOROETHANE	20.0	97	70 - 130
TRICHLOROETHENE	20.0	96	70 - 130
VINYL CHLORIDE	20.0	107	70 - 130
O-XYLENE	20.0	103	70 - 130
M+P-XYLENE	40.0	103	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 525626 ANALYTICAL RUN # : 73718

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	91	50 - 150
BENZENE	20.0	121	70 - 130
BROMODICHLOROMETHANE	20.0	122	70 - 130
BROMOFORM	20.0	106	70 - 130
BROMOMETHANE	20.0	107	50 - 150
2-BUTANONE (MEK)	20.0	96	50 - 150
CARBON DISULFIDE	20.0	124	70 - 130
CARBON TETRACHLORIDE	20.0	121	70 - 130
CHLOROBENZENE	20.0	123	70 - 130
CHLOROETHANE	20.0	120	70 - 130
CHLOROFORM	20.0	124	70 - 130
CHLOROMETHANE	20.0	142 *	70 - 130
DIBROMOCHLOROMETHANE	20.0	111	70 - 130
1,1-DICHLOROETHANE	20.0	124	70 - 130
1,2-DICHLOROETHANE	20.0	115	70 - 130
1,1-DICHLOROETHENE	20.0	118	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	117	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	124	70 - 130
1,2-DICHLOROPROPANE	20.0	112	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	121	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	121	70 - 130
ETHYLBENZENE	20.0	129	70 - 130
2-HEXANONE	20.0	94	70 - 130
METHYLENE CHLORIDE	20.0	116	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	99	70 - 130
STYRENE	20.0	113	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	120	70 - 130
TETRACHLOROETHENE	20.0	129	70 - 130
TOLUENE	20.0	125	70 - 130
1,1,1-TRICHLOROETHANE	20.0	129	70 - 130
1,1,2-TRICHLOROETHANE	20.0	113	70 - 130
TRICHLOROETHENE	20.0	121	70 - 130
VINYL CHLORIDE	20.0	128	70 - 130
O-XYLENE	20.0	116	70 - 130
M+P-XYLENE	40.0	118	70 - 130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD: 8260B TCL

LABORATORY CONTROL SAMPLE SUMMARY

REFERENCE ORDER #: 525813 ANALYTICAL RUN # : 73718

ANALYTE	TRUE VALUE	% RECOVERY	QC LIMITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.0			
ACETONE	20.0	115	50 - 150
BENZENE	20.0	103	70 - 130
BROMODICHLOROMETHANE	20.0	99	70 - 130
BROMOFORM	20.0	91	70 - 130
BROMOMETHANE	20.0	104	50 - 150
2-BUTANONE (MEK)	20.0	114	50 - 150
CARBON DISULFIDE	20.0	131 *	70 - 130
CARBON TETRACHLORIDE	20.0	102	70 - 130
CHLOROBENZENE	20.0	100	70 - 130
CHLOROETHANE	20.0	103	70 - 130
CHLOROFORM	20.0	101	70 - 130
CHLOROMETHANE	20.0	117	70 - 130
DIBROMOCHLOROMETHANE	20.0	92	70 - 130
1,1-DICHLOROETHANE	20.0	107	70 - 130
1,2-DICHLOROETHANE	20.0	98	70 - 130
1,1-DICHLOROETHENE	20.0	98	70 - 130
CIS-1,2-DICHLOROETHENE	20.0	99	70 - 130
TRANS-1,2-DICHLOROETHENE	20.0	104	70 - 130
1,2-DICHLOROPROPANE	20.0	98	70 - 130
CIS-1,3-DICHLOROPROPENE	20.0	97	70 - 130
TRANS-1,3-DICHLOROPROPENE	20.0	100	70 - 130
ETHYLBENZENE	20.0	107	70 - 130
2-HEXANONE	20.0	110	70 - 130
METHYLENE CHLORIDE	20.0	95	70 - 130
4-METHYL-2-PENTANONE (MIBK)	20.0	112	70 - 130
STYRENE	20.0	105	70 - 130
1,1,2,2-TETRACHLOROETHANE	20.0	91	70 - 130
TETRACHLOROETHENE	20.0	111	70 - 130
TOLUENE	20.0	105	70 - 130
1,1,1-TRICHLOROETHANE	20.0	106	70 - 130
1,1,2-TRICHLOROETHANE	20.0	98	70 - 130
TRICHLOROETHENE	20.0	105	70 - 130
VINYL CHLORIDE	20.0	110	70 - 130
O-XYLENE	20.0	106	70 - 130
M+P-XYLENE	40.0	108	70 - 130

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MET BLK1

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: SDG No.: MW LW-3

Lab File ID: B9205.D Lab Sample ID: 525621 1.0

Date Analyzed: 01/21/02 Time Analyzed: 09:55

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: MS#3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS1	525622 1.0	B9206.D	10:32
02	MW LW-3	524665 1.0	B9209.D	12:22
03	MW LW-4	524666 1.0	B9210.D	12:59
04	MW LW-8	524669 1.0	B9211.D	13:36
05	MW LW-1	524670 1.0	B9212.D	14:13
06	MW-RF5-FD	524671 1.0	B9213.D	15:03
07	RF 5	524674 1.0	B9214.D	15:39
08	MW LW-7	524675 1.0	B9215.D	16:16
09	MW LW-7-FD	524676 1.0	B9216.D	16:52
10	RF 3	524677 1.0	B9217.D	17:28
11	MW MI-2	524678 1.0	B9218.D	18:04
12	MW M-6	524679 1.0	B9219.D	18:41
13	MW LW-8 (MS)	525623 1.0	B9220.D	19:17
14	MW LW-8 (MSD)	525624 1.0	B9221.D	19:53

COMMENTS

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MET BLK2

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID: B9228.D Lab Sample ID: 525625 1.0

Date Analyzed: 01/22/02 Time Analyzed: 00:05

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: MS#3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW M-3	524683 1.0	B9230.D	01:19
02	MW M-8	524685 1.0	B9231.D	01:55
03	RF4	524686 1.0	B9232.D	02:31
04	RF1-FD	524687 1.0	B9233.D	03:07
05	MWLW-2	524688 1.0	B9234.D	03:43
06	MWLW-5	524689 1.0	B9235.D	04:20
07	RF-1	524690 1.0	B9236.D	04:56
08	RF-2	524691 1.0	B9237.D	05:33
09	MW LW-6	524692 1.0	B9238.D	06:10
10	MW M-7	524693 1.0	B9239.D	06:45
11	MW M-4	524694 1.0	B9240.D	07:22
12	LCS2	525626 1.0	B9241.D	08:47

COMMENTS

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MET BLK3

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID: B9245.D Lab Sample ID: 525812 1.0

Date Analyzed: 01/22/02 Time Analyzed: 11:15

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: MS#3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS3	525813 1.0	B9246.D	11:51
02	MW M-5	524695 1.0	B9248.D	13:05
03	MW MI-1	524696 1.0	B9249.D	13:41
04	MW M-1	524697 1.0	B9250.D	14:17
05	MW M-2	524698 1.0	B9251.D	14:53
06	TRIP BLANK-1	524706 1.0	B9252.D	15:30
07	TRIP BLANK-2	524707 1.0	B9253.D	16:06
08	TRIP BLANK-3	524708 1.0	B9254.D	16:43
09	TRIP BLANK-4	524709 1.0	B9255.D	17:19

COMMENTS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID: B8384.D BFB Injection Date: 12/17/01

Instrument ID: MS#3 BFB Injection Time: 09:49

GC Column: DB624 ID: 0.20 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.9
75	30.0 - 66.0% of mass 95	43.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	72.4
175	4.0 - 9.0% of mass 174	5.1 (7.1)1
176	93.0 - 101.0% of mass 174	69.8 (96.5)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

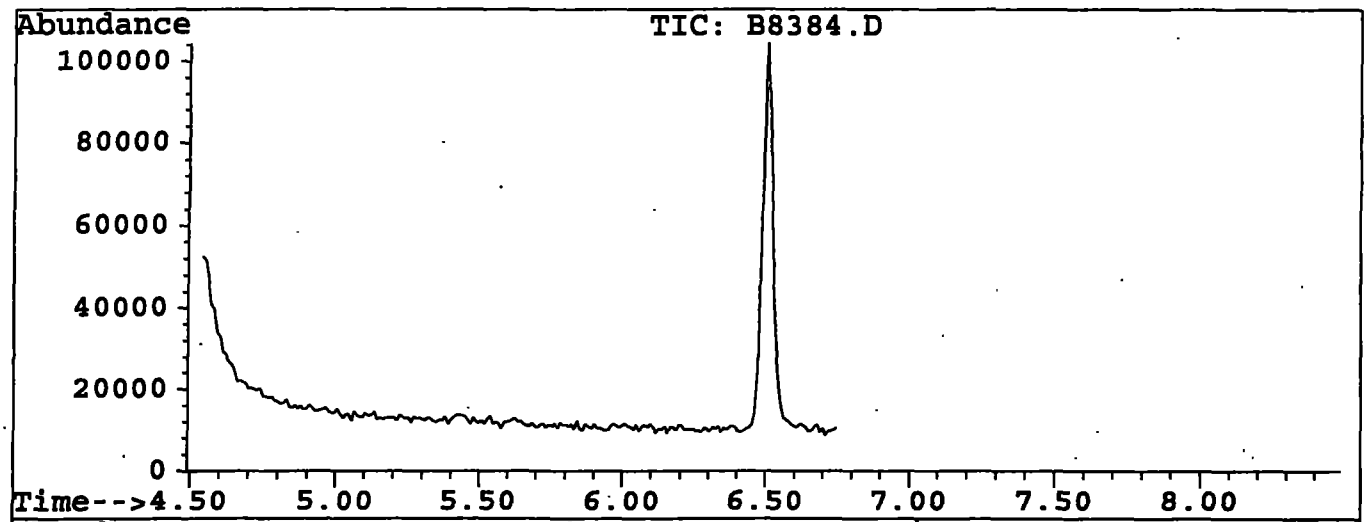
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

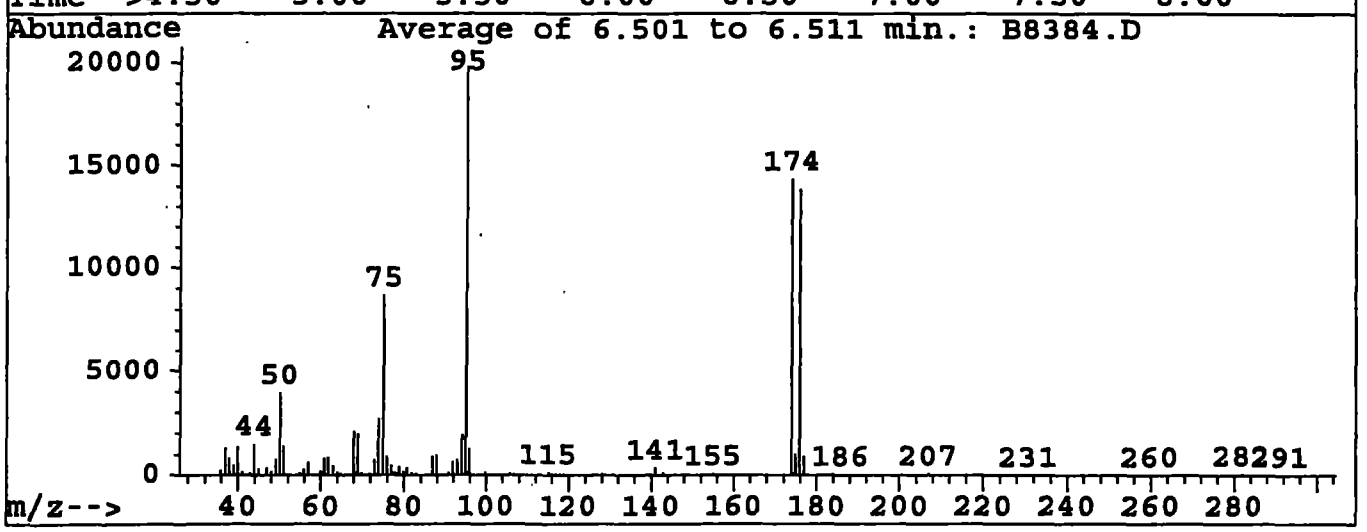
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	001	1 PPB	B8386.D	12/17/01	11:01
02	005	5 PPB	B8387.D	12/17/01	11:39
03	020	20 PPB	B8388.D	12/17/01	12:15
04	050	50 PPB	B8389.D	12/17/01	12:52
05	100	100 PPB	B8390.D	12/17/01	13:28
06	150	150 PPB	B8391.D	12/17/01	14:05
07	200	200 PPB	B8392.D	12/17/01	14:42

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8384.D Vial: 2
Acq On : 17 Dec 101 9:49 am Operator: droot
Sample : tune Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA1\METHODS\EXP1127W.M
Title : 8260B VOA COMPOUNDS GCMS#1





Peak Apex is scan: 199

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	3947	PASS
75	95	30	60	43.8	8675	PASS
95	95	100	100	100.0	19812	PASS
96	95	5	9	6.5	1284	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	72.4	14338	PASS
175	174	5	9	7.1	1014	PASS
176	174	95	101	96.5	13835	PASS
177	176	5	9	6.6	912	PASS

B8384.D EXP1127W.M Mon Dec 17 09:57:22 2001

34

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: SDG No.: MW LW-3

Lab File ID: B9202.D BFB Injection Date: 01/21/02

Instrument ID: MS#3 BFB Injection Time: 08:06

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.5
75	30.0 - 66.0% of mass 95	42.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.8
175	4.0 - 9.0% of mass 174	6.4 (8.5)1
176	93.0 - 101.0% of mass 174	74.8 (98.7)1
177	5.0 - 9.0% of mass 176	4.9 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

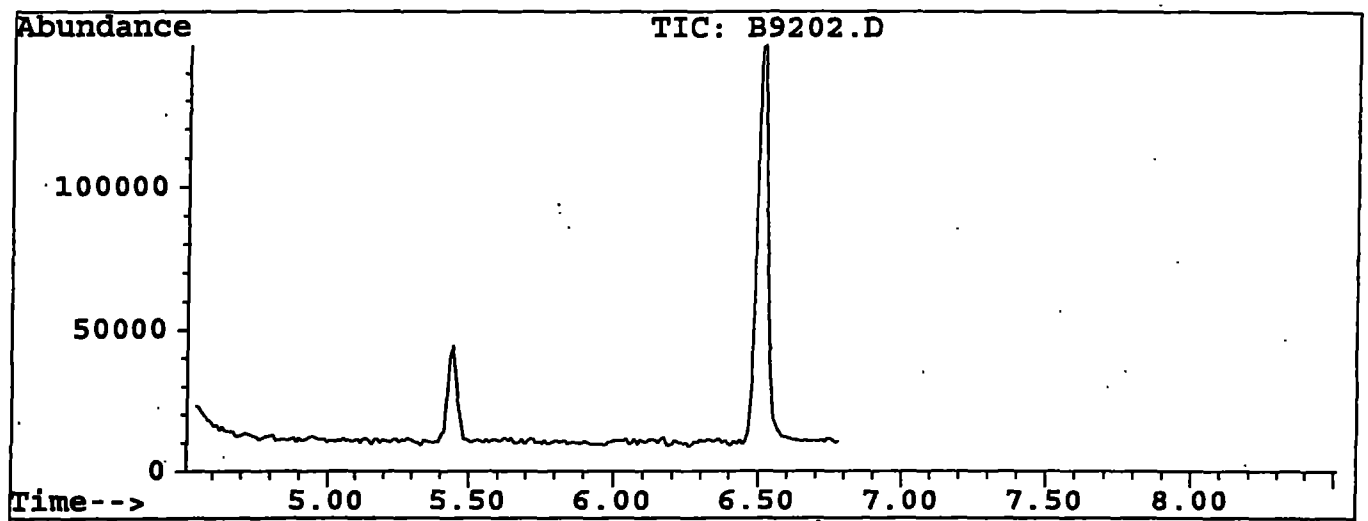
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV1	CCV	B9203.D	01/21/02	08:41
02	MET BLK1	525621 1.0	B9205.D	01/21/02	09:55
03	LCS1	525622 1.0	B9206.D	01/21/02	10:32
04	MW LW-3	524665 1.0	B9209.D	01/21/02	12:22
05	MW LW-4	524666 1.0	B9210.D	01/21/02	12:59
06	MW LW-8	524669 1.0	B9211.D	01/21/02	13:36
07	MW LW-1	524670 1.0	B9212.D	01/21/02	14:13
08	MW-RF5-FD	524671 1.0	B9213.D	01/21/02	15:03
09	RF 5	524674 1.0	B9214.D	01/21/02	15:39
10	MW LW-7	524675 1.0	B9215.D	01/21/02	16:16
11	MW LW-7-FD	524676 1.0	B9216.D	01/21/02	16:52
12	RF 3	524677 1.0	B9217.D	01/21/02	17:28
13	MW MI-2	524678 1.0	B9218.D	01/21/02	18:04
14	MW M-6	524679 1.0	B9219.D	01/21/02	18:41
15	MW LW-8 (MS)	525623 1.0	B9220.D	01/21/02	19:17
16	MW LW-8 (MSD)	525624 1.0	B9221.D	01/21/02	19:53

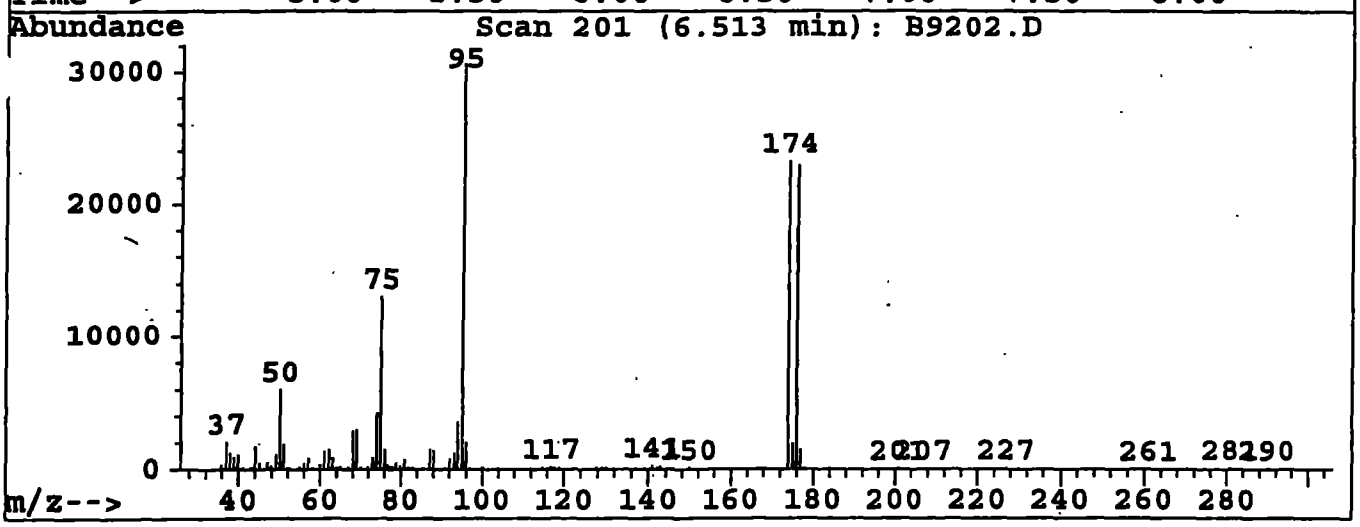
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9202.D
Acq On : 21 Jan 102 8:06 am
Sample : TUNE
Misc :

Vial: 13
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa





Peak Apex is scan: 201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	5961	PASS
75	95	30	60	42.6	13047	PASS
95	95	100	100	100.0	30608	PASS
96	95	5	9	6.7	2060	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	75.8	23208	PASS
175	174	5	9	8.5	1966	PASS
176	174	95	101	98.7	22896	PASS
177	176	5	9	6.5	1495	PASS

B9202.D EXP1217.M Mon Jan 21 08:13:40 2002

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID: B9223.D BFB Injection Date: 01/21/02

Instrument ID: MS#3 BFB Injection Time: 21:06

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.7
75	30.0 - 66.0% of mass 95	43.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.3 (0.5)1
174	50.0 - 120.0% of mass 95	71.5
175	4.0 - 9.0% of mass 174	4.9 (6.8)1
176	93.0 - 101.0% of mass 174	68.0 (95.0)1
177	5.0 - 9.0% of mass 176	5.3 (7.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

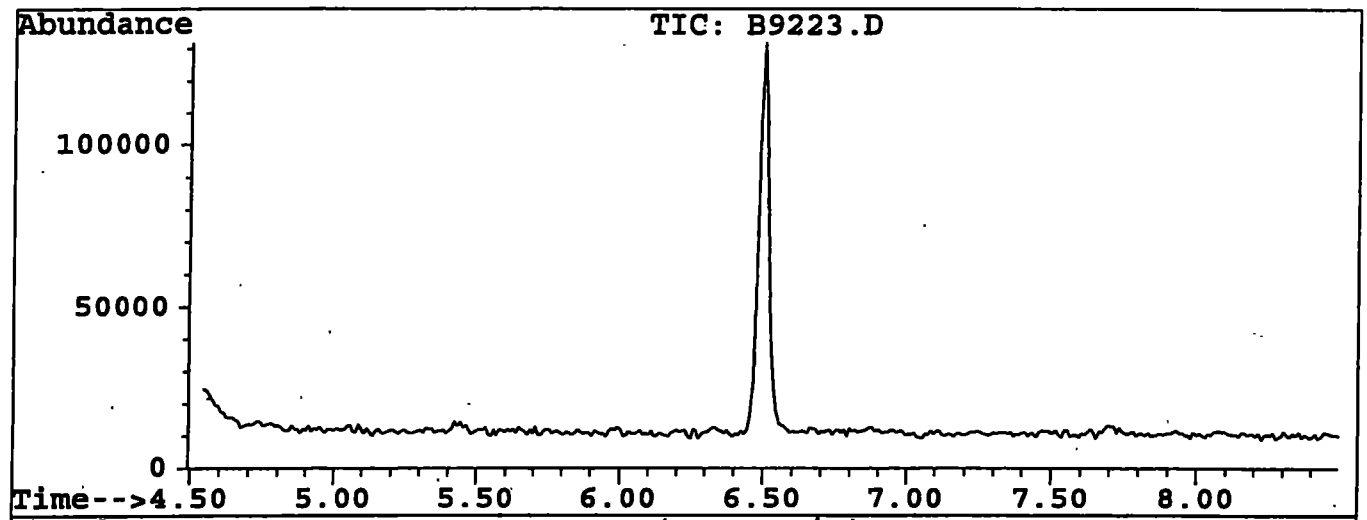
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV2	CCV	B9226.D	01/21/02	22:53
02	MET BLK2	525625 1.0	B9228.D	01/22/02	00:05
03	MW M-3	524683 1.0	B9230.D	01/22/02	01:19
04	MW M-8	524685 1.0	B9231.D	01/22/02	01:55
05	RF4	524686 1.0	B9232.D	01/22/02	02:31
06	RF1-FD	524687 1.0	B9233.D	01/22/02	03:07
07	MWLW-2	524688 1.0	B9234.D	01/22/02	03:43
08	MWLW-5	524689 1.0	B9235.D	01/22/02	04:20
09	RF-1	524690 1.0	B9236.D	01/22/02	04:56
10	RF-2	524691 1.0	B9237.D	01/22/02	05:33
11	MW LW-6	524692 1.0	B9238.D	01/22/02	06:10
12	MW M-7	524693 1.0	B9239.D	01/22/02	06:45
13	MW M-4	524694 1.0	B9240.D	01/22/02	07:22
14	LCS2	525626 1.0	B9241.D	01/22/02	08:47

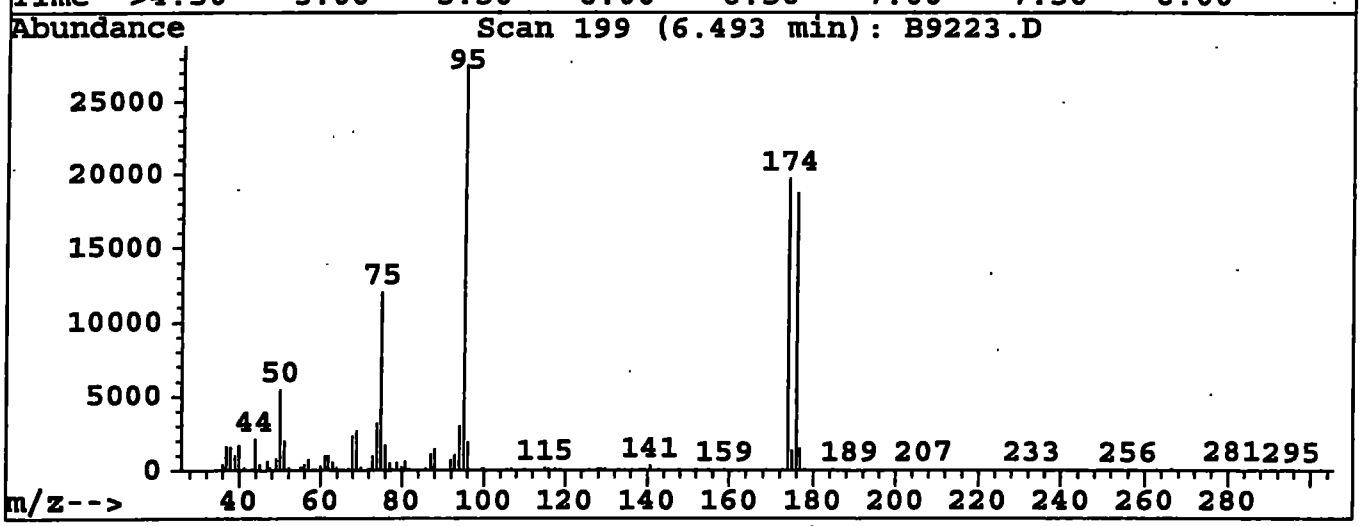
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9223.D
Acq On : 21 Jan 102 9:06 pm
Sample : TUNE
Misc :

Vial: 16
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa





Peak Apex is scan: 199

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	5433	PASS
75	95	30	60	43.7	12029	PASS
95	95	100	100	100.0	27536	PASS
96	95	5	9	6.8	1885	PASS
173	174	0	2	0.5	93	PASS
174	95	50	120	71.5	19696	PASS
175	174	5	9	6.8	1339	PASS
176	174	95	101	95.0	18720	PASS
177	176	5	9	7.8	1451	PASS

B9223.D EXP1217.M Tue Jan 22 08:11:38 2002

1/22 38

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID: B9242.D BFB Injection Date: 01/22/02

Instrument ID: MS#3 BFB Injection Time: 09:26

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.1
75	30.0 - 66.0% of mass 95	42.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.2
175	4.0 - 9.0% of mass 174	5.5 (7.5)1
176	93.0 - 101.0% of mass 174	70.8 (96.8)1
177	5.0 - 9.0% of mass 176	4.2 (6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

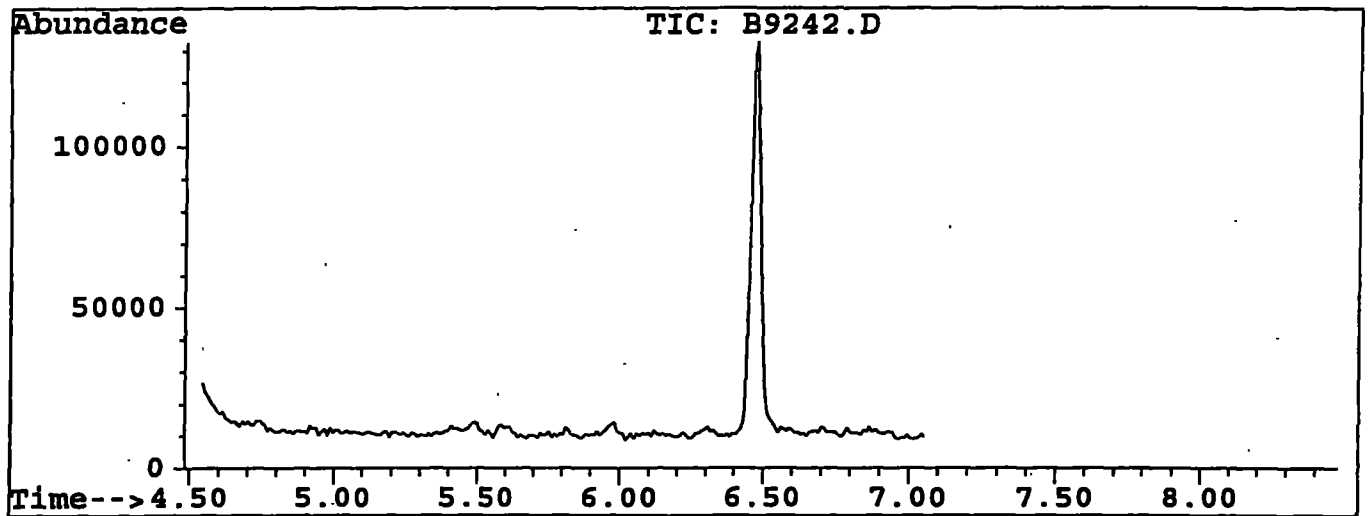
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV3	CCV	B9243.D	01/22/02	10:02
02	MET BLK3	525812 1.0	B9245.D	01/22/02	11:15
03	LCS3	525813 1.0	B9246.D	01/22/02	11:51
04	MW M-5	524695 1.0	B9248.D	01/22/02	13:05
05	MW MI-1	524696 1.0	B9249.D	01/22/02	13:41
06	MW M-1	524697 1.0	B9250.D	01/22/02	14:17
07	MW M-2	524698 1.0	B9251.D	01/22/02	14:53
08	TRIP BLANK-1	524706 1.0	B9252.D	01/22/02	15:30
09	TRIP BLANK-2	524707 1.0	B9253.D	01/22/02	16:06
10	TRIP BLANK-3	524708 1.0	B9254.D	01/22/02	16:43
11	TRIP BLANK-4	524709 1.0	B9255.D	01/22/02	17:19

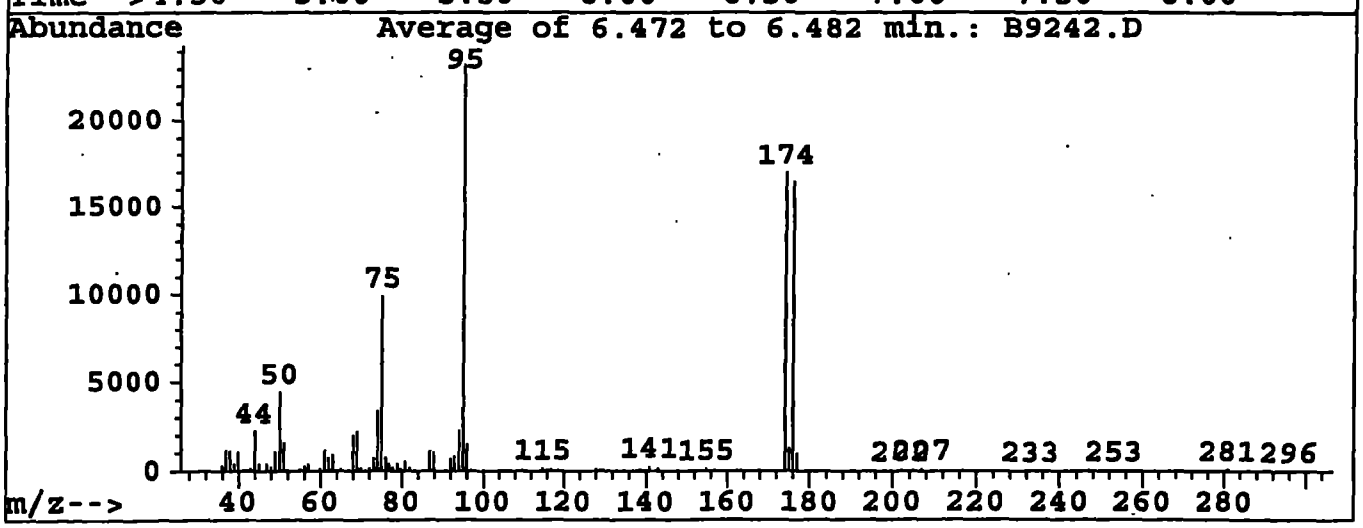
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9242.D
Acq On : 22 Jan 102 9:26 am
Sample : TUNE
Misc :

Vial: 13
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa





Peak Apex is scan: 198

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	4436	PASS
75	95	30	60	42.7	9907	PASS
95	95	100	100	100.0	23200	PASS
96	95	5	9	6.5	1510	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	73.2	16981	PASS
175	174	5	9	7.5	1279	PASS
176	174	95	101	96.8	16434	PASS
177	176	5	9	6.0	980	PASS

B9242.D EXP1217.M Tue Jan 22 09:34:25 2002

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID (Standard): B9203.D Date Analyzed: 01/21/02

Instrument ID: MS#3 Time Analyzed: 08:41

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): ~~Y~~/N Q1/80

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	778046	7.39	1457363	8.57	1156043	13.66
	UPPER LIMIT	1556092	6.89	2914726	8.07	2312086	13.16
	LOWER LIMIT	389023	7.89	728682	9.07	578022	14.16
	EPA SAMPLE NO.						
01	MET BLK1	759372	7.39	1424201	8.56	1106631	13.65
02	LCS1	746634	7.39	1434406	8.57	1111264	13.66
03	MW LW-3	751961	7.39	1412811	8.58	1111617	13.66
04	MW LW-4	739224	7.39	1384259	8.57	1100310	13.66
05	MW LW-8	746996	7.40	1395894	8.58	1089876	13.67
06	MW LW-1	736177	7.40	1390776	8.57	1117751	13.66
07	MW-RF5-FD	759835	7.39	1425368	8.57	1125998	13.66
08	RF 5	741207	7.39	1399625	8.57	1106181	13.65
09	MW LW-7	746806	7.39	1402924	8.57	1103263	13.67
10	MW LW-7-FD	747311	7.38	1388975	8.56	1103128	13.65
11	RF 3	726836	7.38	1384893	8.56	1090458	13.65
12	MW MI-2	738017	7.38	1393998	8.55	1099720	13.64
13	MW M-6	731173	7.38	1405263	8.56	1099567	13.64
14	MW LW-8 (M	749589	7.38	1400959	8.56	1107233	13.65
15	MW LW-8 (M	750626	7.37	1437160	8.56	1110145	13.63

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID (Standard): B9203.D Date Analyzed: 01/21/02

Instrument ID: MS#3 Time Analyzed: 08:41

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): ~~Y~~ N CP 1/30

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	414185	18.10				
	UPPER LIMIT	828370	17.60				
	LOWER LIMIT	207093	18.60				
	EPA SAMPLE NO.						
01	MET BLK1	384229	18.10				
02	LCS1	428964	18.10				
03	MW LW-3	399595	18.11				
04	MW LW-4	422944	18.11				
05	MW LW-8	425020	18.11				
06	MW LW-1	418228	18.11				
07	MW-RF5-FD	434451	18.11				
08	RF 5	402478	18.10				
09	MW LW-7	422502	18.11				
10	MW LW-7-FD	404581	18.09				
11	RF 3	403384	18.09				
12	MW MI-2	409510	18.09				
13	MW M-6	400211	18.09				
14	MW LW-8 (M	437870	18.08				
15	MW LW-8 (M	438627	18.08				

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: SDG No.: MW LW-3

Lab File ID (Standard): B9226.D Date Analyzed: 01/21/02

Instrument ID: MS#3 Time Analyzed: 22:53

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	772171	7.37	1457239	8.55	1145903	13.64
	UPPER LIMIT	1544342	6.87	2914478	8.05	2291806	13.14
	LOWER LIMIT	386086	7.87	728620	9.05	572952	14.14
	EPA SAMPLE NO.						
01	MET BLK2	782801	7.37	1481223	8.55	1152300	13.63
02	MW M-3	765747	7.37	1451311	8.55	1141934	13.64
03	MW M-8	776817	7.37	1466854	8.55	1156043	13.63
04	RF4	759515	7.37	1442220	8.54	1138002	13.63
05	RF1-FD	775366	7.36	1439161	8.54	1143257	13.62
06	MWLW-2	772743	7.36	1443362	8.54	1120897	13.62
07	MWLW-5	761354	7.36	1438622	8.54	1134412	13.62
08	RF-1	741734	7.36	1442695	8.54	1127538	13.62
09	RF-2	772406	7.35	1430852	8.53	1131127	13.62
10	MW LW-6	765699	7.35	1447721	8.53	1142914	13.61
11	MW M-7	751086	7.35	1438326	8.53	1126470	13.61
12	MW M-4	762940	7.35	1420858	8.53	1124865	13.61
13	LCS2	797519	7.34	1516583	8.53	1206135	13.60

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID (Standard): B9226.D Date Analyzed: 01/21/02

Instrument ID: MS#3 Time Analyzed: 22:53

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	465651	18.08				
	UPPER LIMIT	931302	17.58				
	LOWER LIMIT	232826	18.58				
	EPA SAMPLE NO.						
01	MET BLK2	438334	18.08				
02	MW M-3	445266	18.08				
03	MW M-8	396608	18.08				
04	RF4	422402	18.07				
05	RF1-FD	442490	18.07				
06	MWLW-2	433829	18.06				
07	MWLW-5	427282	18.06				
08	RF-1	407700	18.06				
09	RF-2	438959	18.06				
10	MW LW-6	416206	18.06				
11	MW M-7	414513	18.05				
12	MW M-4	436461	18.05				
13	LCS2	410128	18.05				

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID (Standard): B9243.D Date Analyzed: 01/22/02

Instrument ID: MS#3 Time Analyzed: 10:02

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	778819	7.34	1475795	8.52	1169005	13.60
	UPPER LIMIT	1557638	6.84	2951590	8.02	2338010	13.10
	LOWER LIMIT	389410	7.84	737898	9.02	584503	14.10
	EPA SAMPLE NO.						
01	MET BLK3	780843	7.34	1469093	8.52	1173098	13.60
02	LCS3	776136	7.34	1468141	8.52	1164616	13.61
03	MW M-5	775501	7.34	1444412	8.52	1149077	13.60
04	MW MI-1	777732	7.34	1460511	8.52	1161482	13.60
05	MW M-1	772342	7.35	1441806	8.52	1133197	13.61
06	MW M-2	765465	7.34	1438742	8.53	1139375	13.60
07	TRIP BLANK-	765580	7.34	1430854	8.53	1149179	13.60
08	TRIP BLANK-	763975	7.34	1462930	8.53	1141351	13.61
09	TRIP BLANK-	754692	7.34	1421970	8.52	1136984	13.60
10	TRIP BLANK-	754573	7.34	1429140	8.52	1126153	13.60

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1031 SAS No.: _____ SDG No.: MW LW-3

Lab File ID (Standard): B9243.D Date Analyzed: 01/22/02

Instrument ID: MS#3 Time Analyzed: 10:02

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N

		IS4 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	466710	18.04				
	UPPER LIMIT	933420	17.54				
	LOWER LIMIT	233355	18.54				
	EPA SAMPLE NO.						
01	MET BLK3	438851	18.05				
02	LCS3	445279	18.05				
03	MW M-5	446639	18.05				
04	MW MI-1	402330	18.05				
05	MW M-1	405080	18.05				
06	MW M-2	400463	18.05				
07	TRIP BLANK-	400951	18.05				
08	TRIP BLANK-	423364	18.04				
09	TRIP BLANK-	443819	18.04				
10	TRIP BLANK-	435509	18.04				

IS1 = Pentafluorobenzene
IS2 = 1,4 - Difluorobenzene
IS3 = d5 - Chlorobenzene
IS4 = d4 - Dichlorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column to be used to flag values outside QC limit with an asterisk.
* Values outside of contract required QC limits

William C Allgier

MS#3

MDL 8260 WATER MAY 9,2001

	AMT	B3288	B3292	B3293	B3294	B3295	B3296	B3297	AVG	%REC	STDEV	MDL
Pentafluorobenzene	50.00	584115	577040	568906	580941	571309	580652	586046	578430			
1,4-Difluorobenzene	50.00	1183332	1160841	1157969	1161051	1153491	1181466	1175210	1167623			
d5-Chlorobenzene	50.00	1041241	1019522	1017689	1029609	1017847	1033994	1036184	1028012			
d4-1,4-Dichlorobenzene	50.00	379941	372264	380676	378826	386354	385684	390786	382362			ug/L
Dibromofluorobenzene	50.00	49.81	49.78	49.60	50.30	49.23	49.86	49.82	49.77	99.5	0.32	1.00
Toluene-d8	50.00	50.23	50.22	50.28	50.03	50.65	51.05	50.88	50.48	101.0	0.38	1.21
Bromofluorobenzene	50.00	47.33	48.44	48.42	48.50	49.04	48.98	48.86	48.51	97.0	0.58	1.83
		TRIAL1	TRIAL2	TRIAL3	TRIAL4	TRIAL5	TRIAL6	TRIAL7				
Dichlorodifluoromethane	5.00	4.92	4.61	4.68	4.09	4.49	4.21	3.99	4.43	88.5	0.34	1.07
Chloromethane	5.00	5.13	6.29	5.94	5.80	5.98	5.63	5.49	5.74	114.7	0.38	1.20
Vinyl Chloride	5.00	4.10	4.83	4.72	4.71	4.60	4.52	4.34	4.55	90.9	0.25	0.79
Bromomethane	5.00	7.08	10.83	10.64	8.89	9.12	8.70	7.87	8.99	179.8	1.39	4.37
Chloroethane	5.00	4.13	4.73	4.84	4.82	4.86	4.48	4.65	4.64	92.9	0.26	0.83
Trichlorofluoromethane	5.00	3.87	4.58	4.52	4.34	4.45	4.29	4.30	4.34	86.7	0.23	0.73
Diethyl Ether	5.00	4.75	4.71	5.00	4.84	4.86	4.55	4.83	4.79	95.8	0.14	0.44
Acrolein	100.0	94.52	101.59	102.69	102.13	102.88	94.65	99.45	99.70	99.7	3.67	11.53
Freon113	5.00	3.95	4.57	4.47	4.28	4.11	4.14	4.24	4.25	85.0	0.21	0.67
1,1-Dichlethene	5.00	4.13	4.67	4.49	4.54	4.31	4.46	4.44	4.42	88.4	0.15	0.48
Acetone	20.00	19.07	19.15	19.21	18.29	18.06	18.46	18.59	18.69	93.5	0.46	1.43
Iodomethane	5.00	13.43	12.23	12.67	12.43	13.16	13.61	13.30	12.96	259.5	0.53	1.67
Carbon Disulfide	20.00	18.43	20.37	20.44	19.81	20.49	19.57	19.46	19.80	99.0	0.74	2.31
Acetonitrile	25.0	22.45	23.61	23.97	24.39	23.68	23.86	22.79	23.54	94.1	0.68	2.14
Allyl Chloride	5.00	4.73	5.30	5.03	5.08	4.88	4.82	5.07	4.99	99.7	0.19	0.60
Methylene Chloride	5.00	4.65	4.93	4.76	4.90	4.92	4.80	4.80	4.82	96.5	0.10	0.32
tert-Butyl Alcohol	100	93.69	95.93	95.12	99.66	94.52	93.44	98.04	95.77	95.8	2.31	7.26
Acrylonitrile	25.00	23.40	23.24	24.24	22.92	23.98	22.98	22.82	23.37	93.5	0.55	1.72
Methyl-t-Butyl Ether	5.00	4.72	4.75	4.77	4.79	4.72	4.68	4.66	4.73	94.5	0.05	0.15
trans-1,2-Dichloroethene	5.00	4.34	4.93	4.87	4.76	4.72	4.68	4.48	4.68	93.7	0.21	0.66
1,1-Dichloroethane	5.00	4.51	4.80	4.66	4.83	4.69	4.55	4.53	4.65	93.1	0.13	0.41
Vinyl Acetate	20.00	18.36	22.38	21.25	19.25	22.84	16.21	16.15	19.49	97.5	2.77	8.69
2-Chloro-1,3-butadiene	5.00	18.55	20.50	20.74	20.34	20.59	19.67	19.23	19.95	398.9	0.82	2.58
2,2-Dichloropropane	5.00	4.10	5.08	4.76	4.67	4.55	4.36	4.25	4.54	90.7	0.33	1.05
2-Butanone	20.00	19.20	19.38	19.90	20.88	19.68	18.75	19.55	19.62	98.1	0.67	2.09
cis-1,2-Dichloroethene	5.00	4.41	4.80	4.90	4.85	4.74	4.61	4.52	4.69	93.8	0.18	0.57
Propionitrile	25.00	23.09	23.51	22.11	23.50	22.98	21.68	22.61	22.78	91.1	0.69	2.17
Methacrylonitrile	5.00	4.46	4.38	4.76	4.67	4.43	4.70	4.53	4.56	91.2	0.15	0.47
Bromochloromethane	5.00	4.75	4.70	4.89	4.80	4.85	4.80	4.52	4.76	95.2	0.12	0.38
Chloroform	5.00	4.54	4.78	4.84	4.63	4.90	4.68	4.52	4.70	94.0	0.15	0.46
Tetrahydrofuran	5.00	5.49	4.96	5.33	5.79	6.09	4.99	6.10	5.54	110.7	0.48	1.50
1,1,1-Trichloroethane	5.00	4.26	4.72	4.68	4.56	4.51	4.44	4.41	4.51	90.2	0.16	0.49
Carbontetrachloride	5.00	3.98	4.62	4.50	4.50	4.29	4.37	4.22	4.35	87.1	0.21	0.67
1,1-Dichloropropene	5.00	4.05	4.58	4.54	4.53	4.39	4.35	4.27	4.39	87.7	0.19	0.59
Iso-Butyl Alcohol	100	88.32	93.92	92.94	101.52	90.44	91.13	98.2	93.79	93.8	4.63	14.53
Benzene	5.00	4.50	4.76	4.71	4.80	4.70	4.66	4.68	4.69	93.7	0.10	0.30
1,2-Dichloroethane	5.00	4.48	4.81	4.85	4.97	4.75	4.77	4.56	4.74	94.8	0.17	0.53
N-Heptane	5.00	3.72	4.59	4.42	4.33	4.14	4.22	3.96	4.20	83.9	0.29	0.91
Trichloroethene	5.00	4.31	4.73	4.76	4.61	4.65	4.74	4.63	4.66	93.2	0.17	0.54
1,2-Dichloropropane	5.00	4.42	4.72	4.72	4.73	4.75	4.76	4.67	4.68	93.6	0.12	0.37
Methyl Methacrylate	5.00	4.41	4.53	4.43	4.84	4.32	4.34	4.59	4.49	89.9	0.18	0.57
1,4-Dioxane	100	82.8	101.26	79.93	97.65	96.37	81.27	98.2	91.06	91.1	9.27	29.09
Dibromomethane	5.00	4.63	4.77	4.79	5.14	4.80	4.89	4.59	4.80	96.0	0.18	0.57
Bromodichloromethane	5.00	4.52	4.69	4.81	4.63	4.65	4.62	4.55	4.64	92.8	0.10	0.30
2-Nitropropane	10.00	9.40	9.31	9.29	9.67	8.48	9.17	8.58	9.13	91.3	0.44	1.37
2-Chloroethylvinyl Ether	20.00	19.42	20.10	19.75	20.36	19.80	19.34	20.35	19.87	99.4	0.41	1.30
cis-1,3-Dichloropropene	5.00	4.52	4.83	4.79	4.84	4.79	4.68	4.64	4.73	94.5	0.12	0.37
4-methyl-2-Pentanone	20.00	20.03	20.02	20.33	20.63	20.55	20.09	20.59	20.32	101.6	0.27	0.86
Toluene	5.00	4.56	4.81	4.80	4.76	4.93	4.79	4.75	4.77	95.4	0.11	0.35
trans-1,3-Dichloropropene	5.00	4.47	4.54	4.65	4.66	4.57	4.46	4.54	4.55	91.1	0.08	0.25
Ethyl Methacrylate	5.00	4.48	4.66	4.70	4.49	4.52	4.58	4.55	4.57	91.4	0.08	0.26
1,1,2-Trichloroethane	5.00	4.62	4.81	4.87	4.67	4.77	4.91	4.92	4.80	95.9	0.12	0.37
Tetrachloroethene	5.00	4.20	4.61	4.70	4.48	4.47	4.60	4.47	4.50	90.1	0.16	0.50
2-Hexanone	20.00	20.37	19.67	19.87	21.02	20.39	19.80	20.71	20.26	101.3	0.50	1.58
1,3-Dichloropropane	5.00	4.58	4.73	4.57	4.78	4.72	4.50	4.54	4.63	92.6	0.11	0.34
Dibromochloromethane	5.00	4.46	4.44	4.59	4.57	4.51	4.51	4.46	4.51	90.2	0.06	0.17
1,2-Dibromoethane	5.00	4.46	4.71	4.90	4.55	4.69	4.51	4.75	4.65	93.1	0.15	0.49
Chlorobenzene	5.00	4.51	4.83	4.98	4.83	4.78	4.74	4.73	4.77	95.4	0.14	0.45
1,1,1,2-Tetrachloroethane	5.00	4.59	4.67	4.54	4.75	4.58	4.72	4.73	4.65	93.1	0.08	0.26
Ethylbenzene	5.00	4.31	4.62	4.53	4.47	4.61	4.48	4.43	4.49	89.9	0.11	0.34
(m+p) Xylene	10.00	8.16	8.91	9.12	8.78	9.28	8.92	8.87	8.86	88.6	0.35	1.11
o-Xylene	5.00	4.27	4.46	4.58	4.58	4.67	4.47	4.41	4.49	89.8	0.13	0.41
Styrene	5.00	4.05	4.36	4.49	4.33	4.48	4.35	4.55	4.37	87.5	0.16	0.52

	AMT	B3298	B3292	B3293	B3294	B3295	B3296	B3297	AVG	%REC	STDEV	MDL
Pentafluorobenzene	50.00	584115	577040	568906	580941	571309	580652	586046	578430			
1,4-Difluorobenzene	50.00	1183332	1160841	1157969	1161051	1153491	1181466	1175210	1167623			
d5-Chlorobenzene	50.00	1041241	1019522	1017689	1029609	1017847	1033994	1036184	1026012			
d4-1,4-Dichlorobenzene	50.00	379941	372264	380676	378826	386354	385684	390786	382362			ug/L
Dibromofluorobenzene	50.00	49.81	49.78	49.60	50.30	49.23	49.86	49.82	49.77	99.5	0.32	1.00
Toluene-d8	50.00	50.23	50.22	50.26	50.03	50.65	51.05	50.66	50.48	101.0	0.38	1.21
Bromofluorobenzene	50.00	47.33	48.44	48.42	48.50	49.04	48.98	48.86	48.51	97.0	0.58	1.83
		TRIAL1	TRIAL2	TRIAL3	TRIAL4	TRIAL5	TRIAL6	TRIAL7				
Bromoform	5.00	4.37	4.49	4.42	4.83	4.70	4.37	4.49	4.52	90.5	0.18	0.56
Isopropylbenzene	5.00	4.01	4.50	4.46	4.31	4.44	4.39	4.42	4.36	87.2	0.17	0.52
Cyclohexanone	100	87.2	98.9	102.3	103.0	85.3	93.7	101.8	95.74	95.7	7.30	22.92
1,1,2,2-Tetrachloroethane	5.00	4.87	5.09	4.87	4.91	4.82	4.83	4.69	4.87	97.4	0.12	0.38
trans-1,4-Dichloro-2-butene	5.00	4.44	4.96	4.67	4.24	4.63	4.67	4.35	4.57	91.3	0.24	0.76
1,2,3-Trichloropropane	5.00	5.22	5.51	5.08	5.05	4.61	4.82	4.60	4.98	99.7	0.33	1.04
n-Propylbenzene	5.00	4.20	4.61	4.52	4.56	4.59	4.52	4.49	4.50	90.0	0.14	0.43
Bromobenzene	5.00	4.78	5.10	4.84	4.81	4.78	4.90	4.72	4.85	96.9	0.12	0.39
1,3,5-Trimethylbenzene	5.00	4.12	4.60	4.61	4.35	4.85	4.47	4.62	4.52	90.3	0.23	0.73
2-Chlorotoluene	5.00	4.62	4.92	4.77	4.80	4.76	4.85	4.60	4.75	94.9	0.14	0.44
4-Chlorotoluene	5.00	4.63	4.78	4.78	4.74	4.88	4.56	4.82	4.73	94.5	0.13	0.41
tert-Butylbenzene	5.00	4.23	4.55	4.58	4.49	4.67	4.40	4.38	4.46	89.1	0.13	0.40
1,2,4-Trimethylbenzene	5.00	4.11	4.23	4.56	4.32	4.78	4.67	4.58	4.46	89.3	0.26	0.77
sec-Butylbenzene	5.00	4.10	4.53	4.52	4.46	4.48	4.48	4.47	4.43	88.7	0.15	0.47
p-Isopropyltoluene	5.00	4.00	4.28	4.45	4.24	4.53	4.39	4.36	4.32	86.4	0.17	0.54
1,3-Dichlorobenzene	5.00	4.44	4.86	4.81	4.60	4.82	4.68	4.70	4.70	94.0	0.15	0.46
1,4-Dichlorobenzene	5.00	4.48	4.97	4.85	4.92	4.87	4.89	4.79	4.82	96.5	0.16	0.51
n-Butylbenzene	5.00	3.71	4.01	4.23	3.97	4.46	4.37	4.20	4.14	82.7	0.26	0.81
1,2-Dichlorobenzene	5.00	4.64	4.88	4.96	4.68	4.91	4.78	4.81	4.81	96.2	0.12	0.37
1,2-Dibromo-3-chloropropane	5.00	4.90	4.77	4.82	4.62	4.64	4.50	4.57	4.69	93.8	0.14	0.45
Nitrobenzene	10.0	6.32	6.54	7.02	7.22	6.03	6.23	6.70	6.58	65.8	0.43	1.36
1,2,4-Trichlorobenzene	5.00	4.12	4.14	4.77	4.22	4.96	4.79	4.47	4.50	89.9	0.35	1.09
Hexachlorobutadiene	5.00	4.42	4.80	4.63	4.74	5.12	4.74	4.63	4.75	95.1	0.21	0.67
Naphthalene	5.00	4.11	4.13	4.25	4.05	4.67	4.55	4.60	4.34	86.7	0.26	0.82
1,2,3-Trichlorobenzene	5.00	4.06	4.31	4.34	4.13	4.93	4.86	4.54	4.45	89.1	0.34	1.07

VOLATILE ORGANICS

SAMPLE DATA

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-3

Date Sampled : 01/15/02 16:30 **Order #:** 524665 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
HLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	0.99 J	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	96	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9209.D Vial: 3
Acq On : 21 Jan 102 12:22 pm Operator: droot
Sample : 524665 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 12:50 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	751961	50.00	ppb	0.00
35) 1,4 - Difluorobenzene	8.58	114	1412811	50.00	ppb	0.00
52) d5 - Chlorobenzene	13.66	117	1111617	50.00	ppb	0.00
74) d4 - Dichlorobenzene	18.11	152	399595	50.00	ppb	0.00
System Monitoring Compounds						%Recovery
36) surr4,Dibrflmethane	7.27	113	507754	50.94	ppb	101.88%
58) surr3,Toluene-d8	11.09	98	1377966	52.89	ppb	105.78%
59) surr2,bfb	15.88	95	512379	48.16	ppb	96.32%
Target Compounds						Qvalue
5) Bromomethane	2.38	94	2484	~~0.49~~	~~ppb~~ #	~~16~~
13) Iodomethane	3.86	127	442	~~4.44~~	~~ppb~~	~~1~~
15) Acetonitrile	4.19	41	264	~~0.73~~	~~ppb~~ #	~~1~~
24) 2-Chloro-1,3-butadiene	5.38	53	301	~~1.21~~	~~PPB~~	~~100~~
39) Iso-Butyl Alcohol	8.42	43	823	~~2.51~~	~~ppb~~	~~90~~
46) 1,4-Dioxane	9.61	88	236	~~2.63~~	~~ppb~~ #	~~12~~
53) 4-Methyl-2-Pentanone	11.08	43	9068	~~0.81~~	~~ppb~~ # J	~~1~~
60) Tetrachloroethene	12.17	166	5143	5 ~~.09~~	ppb 0.99 R	96
72) Isopropylbenzene	15.59	105	507	~~3.30~~	~~ppb~~ #	~~49~~
73) Cyclohexanone	15.74	55	1014	~~1.32~~	~~ppb~~	~~98~~
80) 1,3,5-Trimethylbenzene	16.76	105	328	~~3.75~~	~~ppb~~ #	~~87~~
92) Nitrobenzene	20.83	77	466	~~9.20~~	~~ppb~~ #	~~27~~

true value for tetrachloroethene:

$$\frac{(\text{area target})(\text{Amt IS})}{(\text{area IS})(\bar{RF})} = \text{amt ppb}$$

$$\frac{5143 \times 50}{1111617 \times 0.234} = 0.99$$

R 1/30/02

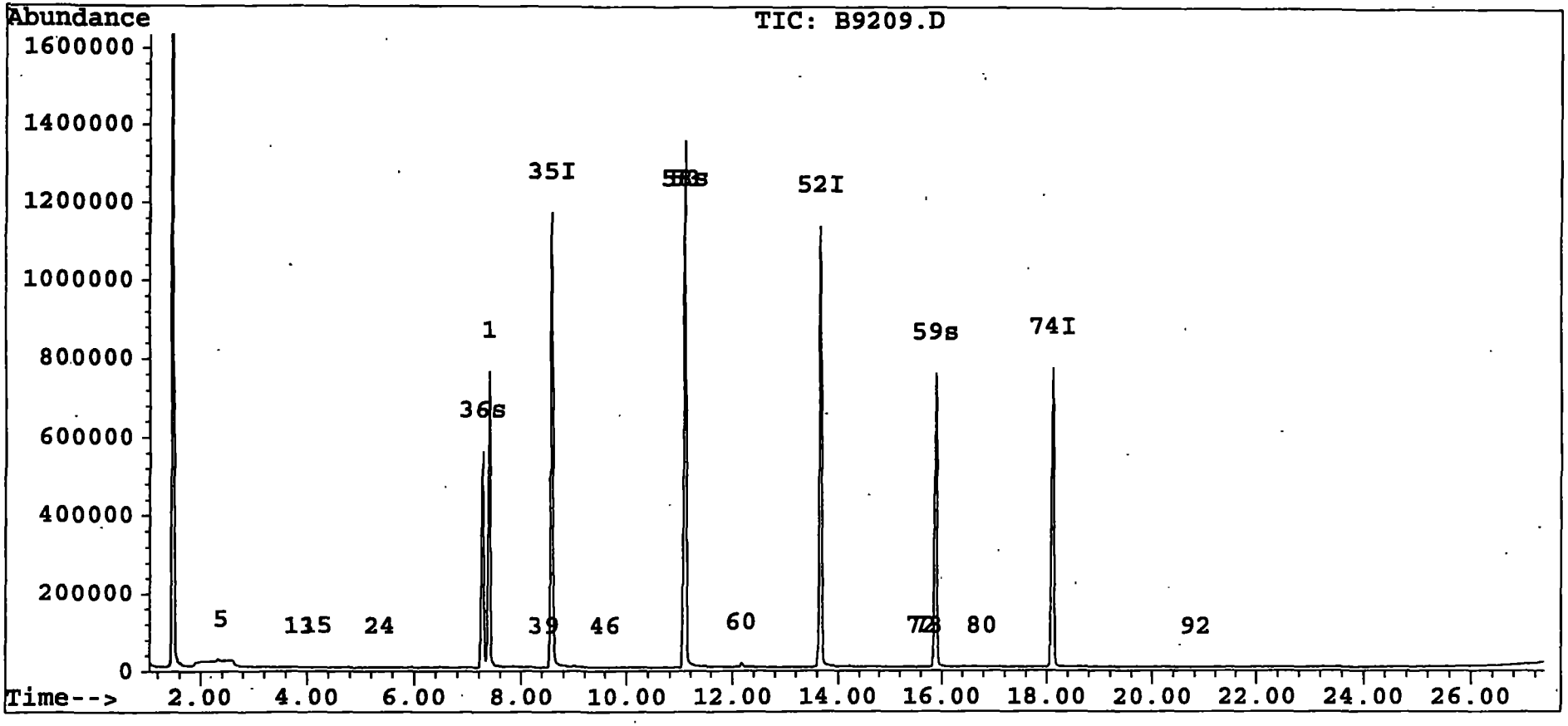
(#) = qualifier out of range (m) = manual integration
B9209.D EXP1217.M Mon Jan 21 12:50:15 2002

Quantitation Report

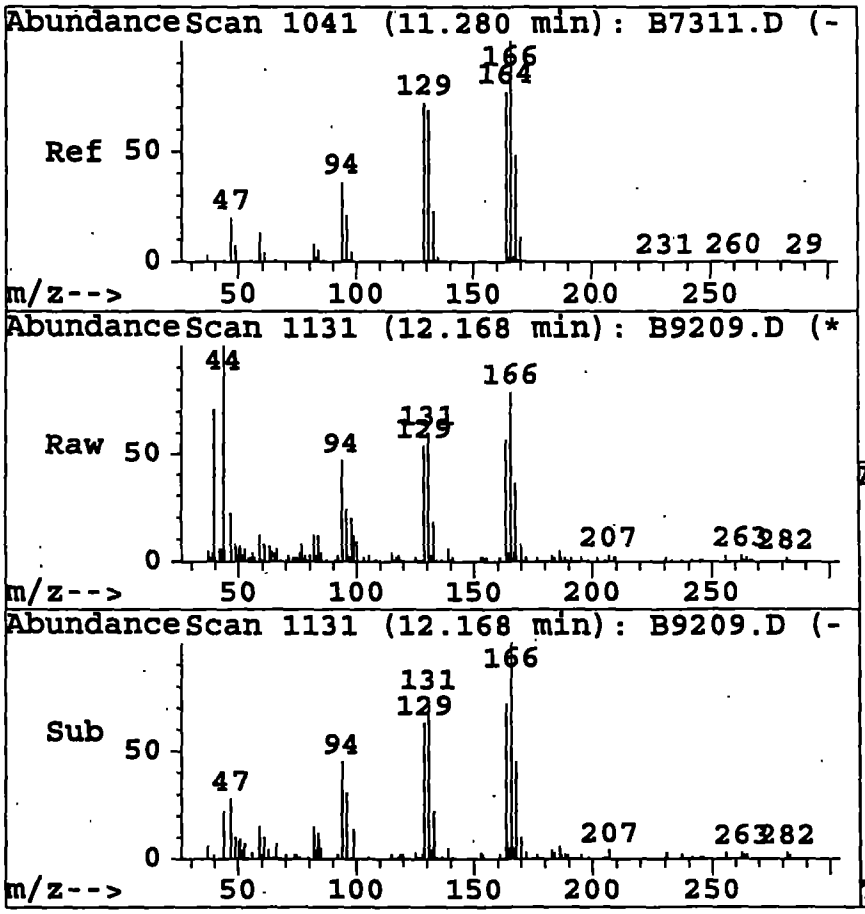
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9209.D
Acq On : 21 Jan 102 12:22 pm
Sample : 524665 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 12:50 19102

Vial: 3
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



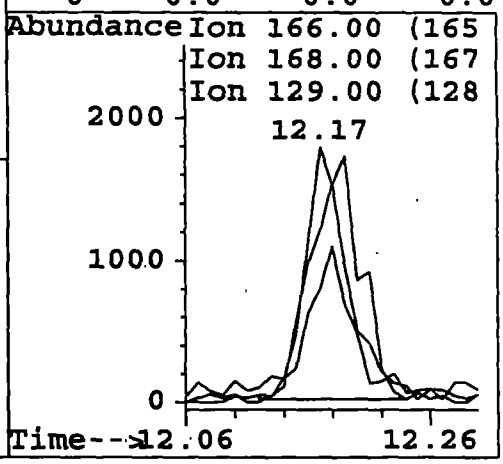
52



#60
Tetrachloroethene
Concen: ~~5.09 ppb~~ 0.99 JCP 1/30
RT: 12.17 min Scan# 1131
Delta R.T. -0.00 min
Lab File: B9209.D
Acq: 21 Jan 102 12:22 pm

Tgt Ion:166 Resp: 5143

Ion	Ratio	Lower	Upper
166	100		
168	45.3	37.8	56.7
129	68.0	57.6	86.3
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-4

Date Sampled : 01/15/02 17:10 **Order #:** 524666 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	103	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9210.D Vial: 4
Acq On : 21 Jan 102 12:59 pm Operator: droot
Sample : 524666 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 13:27 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	739224	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.57	114	1384259	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.66	117	1100310	50.00 ppb	0.00
74) d4 - Dichlorobenzene	18.11	152	422944	50.00 ppb	0.00
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.27	113	501020	51.41 ppb	102.82%
58) surr3,Toluene-d8	11.08	98	1338010	51.57 ppb	103.14%
59) surr2,bfb	15.88	95	519847	49.83 ppb	99.66%
Target Compounds					Qvalue
12) Acetone	3.79	43	2553	0.80 ppb	100 <
13) Iodomethane	3.96	127	~~231~~	~~4.39 ppb~~	~~1~~
15) Acetonitrile	4.14	41	~~318~~	~~0.89 ppb~~ #	~~1~~
24) 2-Chloro-1,3-butadiene	5.44	53	~~151~~	~~1.20 PPB~~	~~84~~
39) Iso-Butyl Alcohol	8.42	43	~~2130~~	~~6.63 ppb~~	~~83~~
46) 1,4-Dioxane	10.00	88	~~208~~	~~2.37 ppb~~	~~80~~
60) Tetrachloroethene	12.17	166	~~178~~	~~4.28 ppb~~ #	~~3~~
72) Isopropylbenzene	15.61	105	~~307~~	~~3.29 ppb~~	~~92~~
73) Cyclohexanone	15.58	55	~~361~~	~~0.47 ppb~~	~~87~~
80) 1,3,5-Trimethylbenzene	16.59	105	~~186~~	~~3.74 ppb~~	~~91~~
92) Nitrobenzene	20.81	77	~~510~~	~~9.22 ppb~~ #	~~27~~

1/21

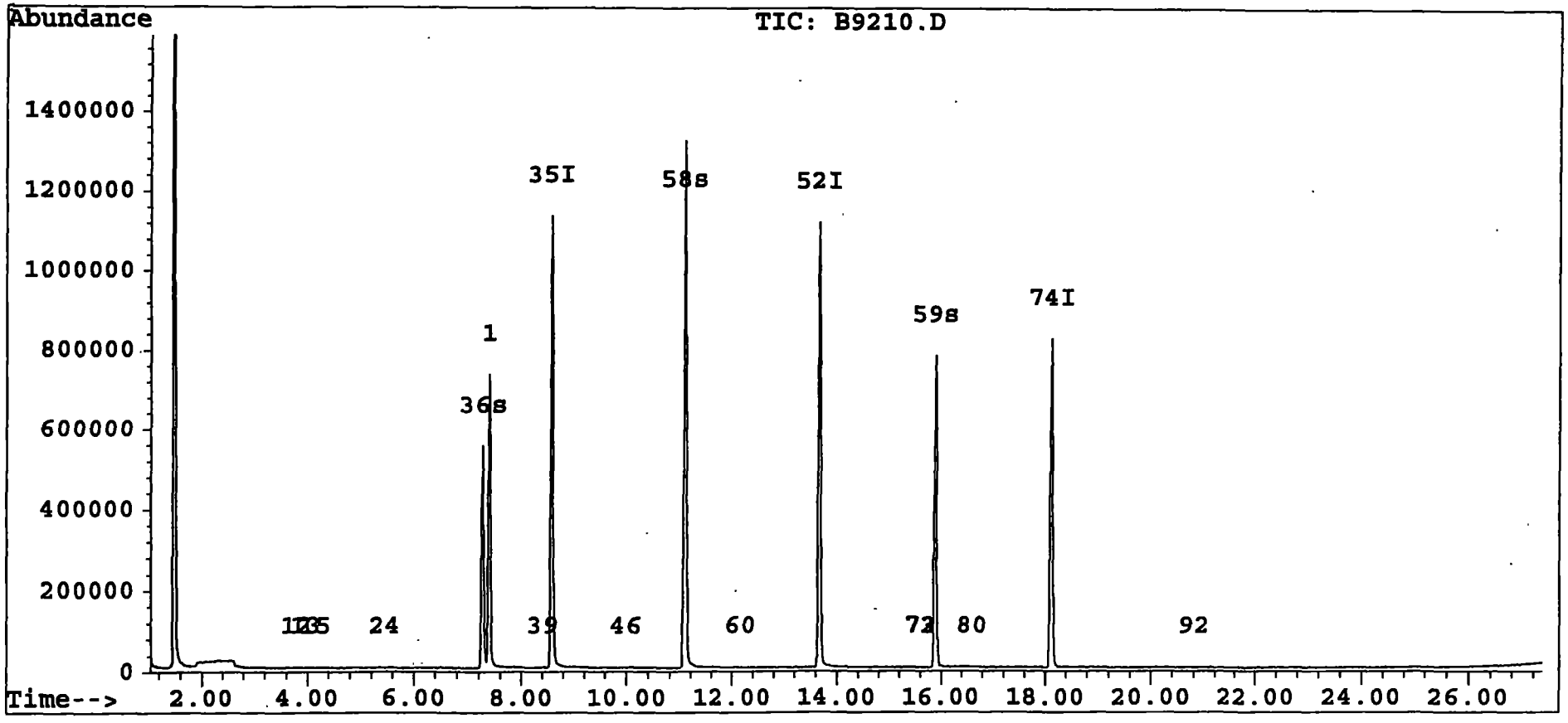
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9210.D
Acq On : 21 Jan 102 12:59 pm
Sample : 524666 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 13:27 19102

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



56

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-8

Date Sampled : 01/15/02 14:30 **Order #:** 524669 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	103	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9211.D
Acq On : 21 Jan 102 1:36 pm
Sample : 524669 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 14:04 19102

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	746996	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.58	114	1395894	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.67	117	1089876	50.00 ppb	0.00
74) d4 - Dichlorobenzene	18.11	152	425020	50.00 ppb	0.00

System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.27	113	499294	50.63 ppb	101.26%
58) surr3,Toluene-d8	11.09	98	1348706	52.77 ppb	105.54%
59) surr2,bfb	15.88	95	528813	51.68 ppb	103.35%

Target Compounds						Qvalue
13) Iodomethane	3.85	127	161	4.37 ppb		1
15) Acetonitrile	4.19	41	512	1.42 ppb	#	1
24) 2-Chloro-1,3-butadiene	5.70	53	253	1.20 PPB	#	65
39) Iso-Butyl Alcohol	8.43	43	1524	4.70 ppb		82
46) 1,4-Dioxane	9.61	88	139	1.57 ppb	#	12
60) Tetrachloroethene	12.17	166	969	4.41 ppb	#	79
72) Isopropylbenzene	15.61	105	351	3.30 ppb	#	52
80) 1,3,5-Trimethylbenzene	16.75	105	433	3.75 ppb	#	44
92) Nitrobenzene	20.78	77	595	9.30 ppb	#	46

1/21

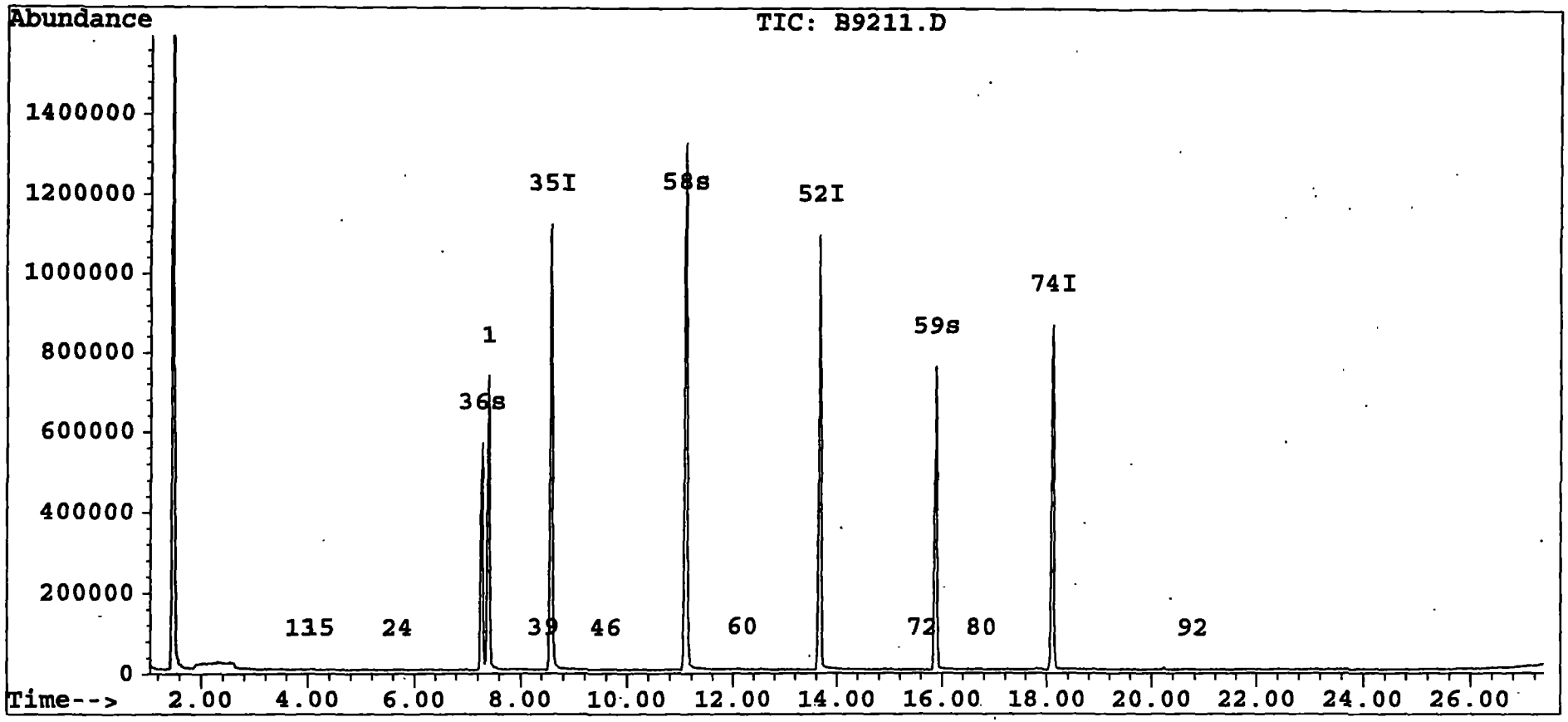
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9211..
Acq On : 21 Jan 102 1:36 pm
Sample : 524669 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 14:04 19102

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



59

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-1

Date Sampled : 01/15/02 08:25 **Order #:** 524670 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	98	%
TOLUENE-D8	(87 - 108 %)	102	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9212.D Vial: 6
Acq On : 21 Jan 102 2:13 pm Operator: droot
Sample : 524670 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 14:41 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	736177	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.57	114	1390776	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.66	117	1117751	50.00 ppb	0.00
74) d4 - Dichlorobenzene	18.11	152	418228	50.00 ppb	0.00

System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.27	113	501666	51.18 ppb	102.36%
58) surr3,Toluene-d8	11.08	98	1345266	50.87 ppb	101.75%
59) surr2,bfb	15.88	95	521058	48.92 ppb	97.84%

Target Compounds						Qvalue
13) Iodomethane	3.86	127	125	~~4.36 ppb~~		~~1~~
24) 2-Chloro-1,3-butadiene	5.67	53	208	~~1.20 PPB~~		~~83~~
39) Iso-Butyl Alcohol	8.45	43	2005	~~6.21 ppb~~		~~81~~
46) 1,4-Dioxane	9.72	88	171	~~1.94 ppb~~		~~86~~
53) 4-Methyl-2-Pentanone	11.09	43	9584	~~0.85 ppb~~	~~#~~	~~1~~
60) Tetrachloroethene	12.18	166	272	~~4.30 ppb~~	~~#~~	~~36~~
72) Isopropylbenzene	15.59	105	435	~~3.30 ppb~~	~~#~~	~~59~~
73) Cyclohexanone	15.77	55	321	~~0.41 ppb~~		~~93~~
80) 1,3,5-Trimethylbenzene	16.74	105	156	~~3.74 ppb~~		~~92~~
92) Nitrobenzene	20.82	77	557	~~9.27 ppb~~	~~#~~	~~27~~

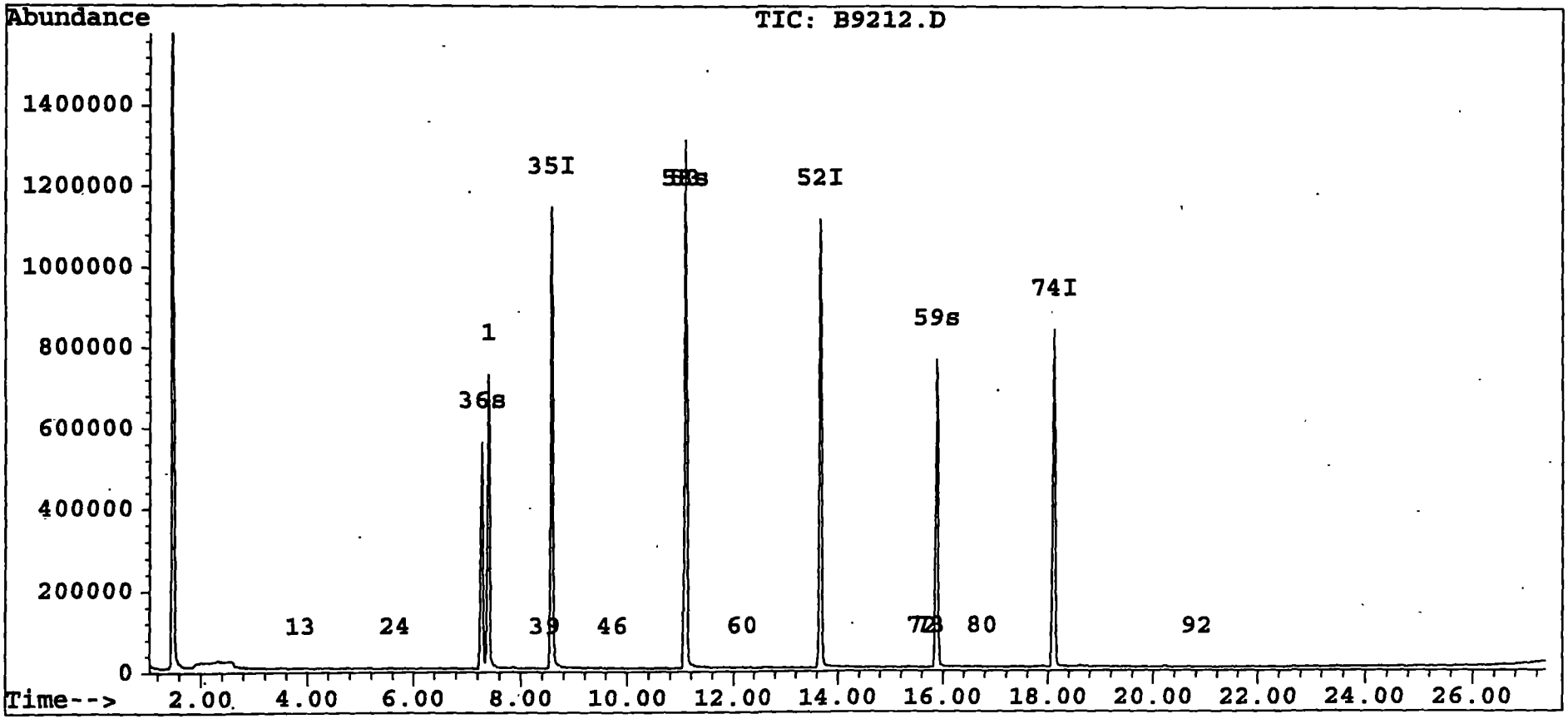
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9212.
Acq On : 21 Jan 102 2:13 pm
Sample : 524670 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 14:41 19102

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



62

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW RF5-FD

Date Sampled : 01/15/02 10:45 **Order #:** 524671 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.2	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9213.D Vial: 7
Acq On : 21 Jan 102 3:03 pm Operator: droot
Sample : 524671 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 15:31 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	759835	50.00 ppb	-0.01
35) 1,4 - Difluorobenzene	8.57	114	1425368	50.00 ppb	-0.01
52) d5 - Chlorobenzene	13.66	117	1125998	50.00 ppb	-0.01
74) d4 - Dichlorobenzene	18.11	152	434451	50.00 ppb	0.00
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.26	113	501628	49.58 ppb	99.15%
58) surr3,Toluene-d8	11.08	98	1377493	51.98 ppb	103.96%
59) surr2,bfb	15.87	95	533022	49.96 ppb	99.93%
Target Compounds					**Qvalue**
12) Acetone	3.79	43	1635	~~0.50 ppb~~	~~# 82~~
13) Iodomethane	3.85	127	319	~~4.41 ppb~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.86	53	149	~~1.19 PPB~~	~~93~~
39) Iso-Butyl Alcohol	8.55	43	556	~~1.68 ppb~~	~~95~~
46) 1,4-Dioxane	9.93	88	113	~~1.25 ppb~~	~~78~~
53) 4-Methyl-2-Pentanone	11.08	43	9446	~~0.83 ppb~~	~~# 1~~
60) Tetrachloroethene	12.17	166	6639	~~5.32 ppb~~	# 1.25 88
72) Isopropylbenzene	15.57	105	370	~~3.30 ppb~~	~~# 77~~
73) Cyclohexanone	15.87	55	1633	~~2.09 ppb~~	~~88~~
80) 1,3,5-Trimethylbenzene	16.73	105	393	~~3.75 ppb~~	~~# 49~~
92) Nitrobenzene	20.77	77	219	~~8.92 ppb~~	~~# 27~~

true value for tetrachloroethene:

$$\frac{(\text{area target})(\text{Amt. IS})}{(\text{area IS})(\bar{RF})} = \text{amt ppb}$$

$$\frac{6639 \times 50}{1125998 \times 0.234} = 1.25$$ @ 1/30/02

1/31

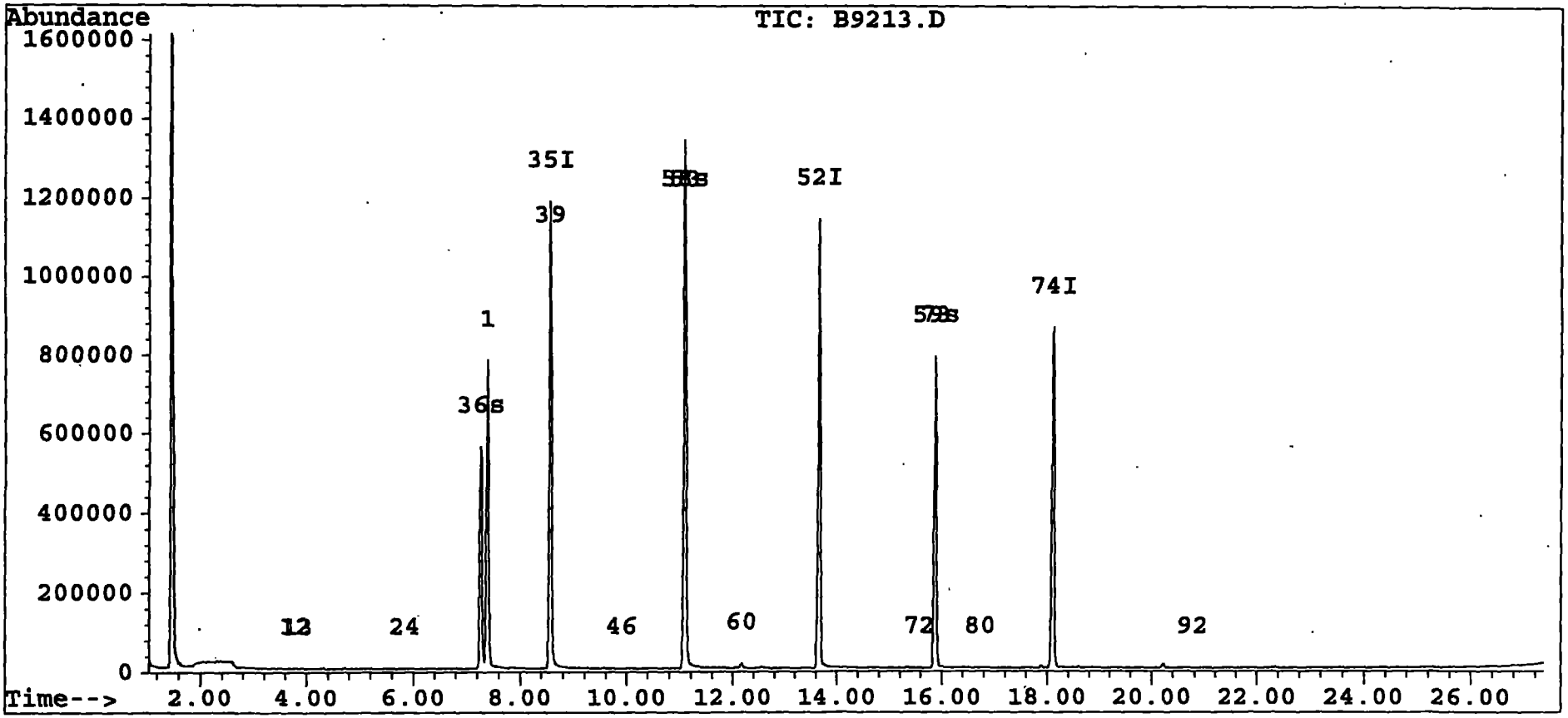
(#) = qualifier out of range (m) = manual integration

Quantitation Report

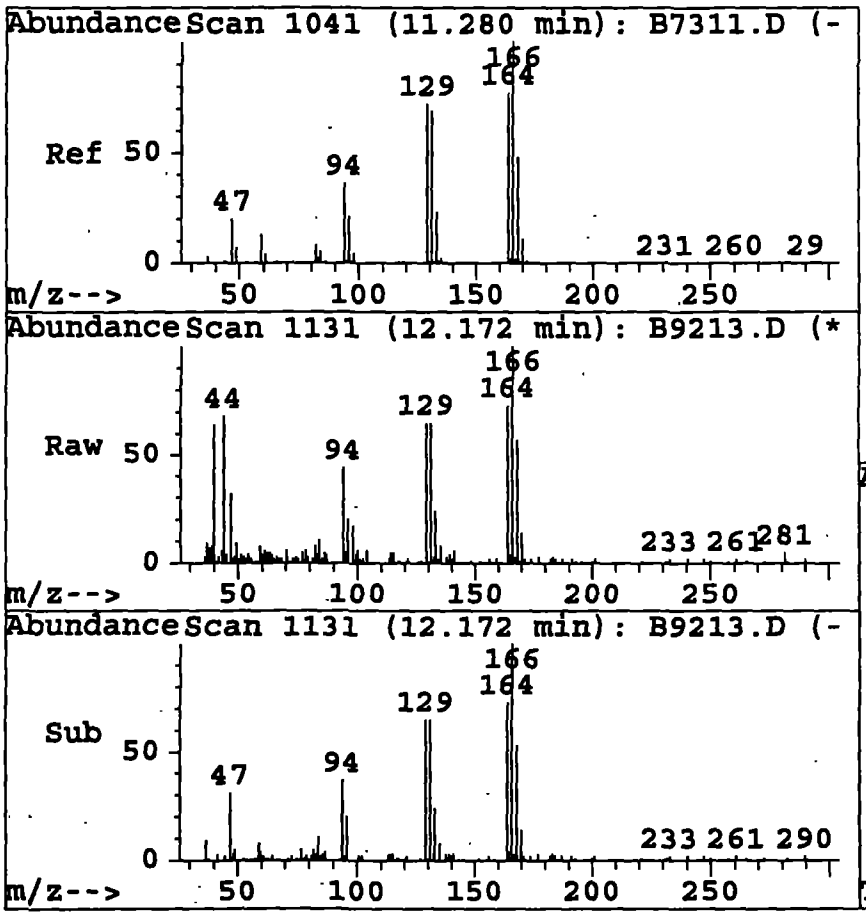
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9213..
Acq On : 21 Jan 102 3:03 pm
Sample : 524671 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 15:31 19102

Vial: 7
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



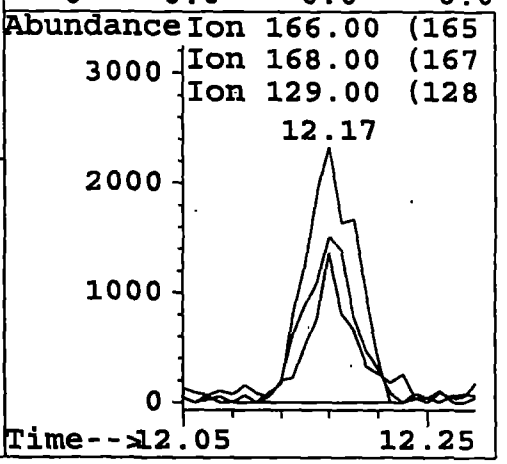
65



#60
Tetrachloroethene
Concen: ~~5.32 ppb~~ 1.25 ug/L
RT: 12.17 min Scan# 1131
Delta R.T. -0.00 min
Lab File: B9213.D
Acq: 21 Jan 102 3:03 pm

Tgt Ion:166 Resp: 6639

Ion	Ratio	Lower	Upper
166	100		
168	58.5	37.8	56.7#
129	64.8	57.6	86.3
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF 5

Date Sampled : 01/15/02 10:45 **Order #:** 524674 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
ILOROMETHANE	1.0	1.0 U	UG/L
BROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.4	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9214.D Vial: 8
Acq On : 21 Jan 102 3:39 pm Operator: droot
Sample : 524674 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 16:07 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	741207	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.57	114	1399625	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.65	117	1106181	50.00 ppb	-0.02
74) d4 - Dichlorobenzene	18.10	152	402478	50.00 ppb	0.00
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.26	113	506630	51.41 ppb	102.83%
58) surr3,Toluene-d8	11.08	98	1349024	51.77 ppb	103.54%
59) surr2,bfb	15.87	95	522762	49.85 ppb	99.70%
Target Compounds					Qvalue
5) Bromomethane	2.42	94	4388	~~0.88 ppb #~~	~~8~~
12) Acetone	3.80	43	2593	~~0.82 ppb #~~	~~85~~
13) Iodomethane	3.88	127	605	~~4.48 ppb~~	~~1~~
15) Acetonitrile	4.14	41	457	~~1.28 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.47	53	63	~~1.19 PPB~~	~~91~~
39) Iso-Butyl Alcohol	8.44	43	1294	~~3.98 ppb~~	~~84~~
46) 1,4-Dioxane	9.54	88	330	~~3.72 ppb~~	~~95~~
60) Tetrachloroethene	12.17	166	7153	~~5.43~~ ppb 1.38	94 X
72) Isopropylbenzene	15.60	105	322	~~3.29 ppb #~~	~~68~~
73) Cyclohexanone	15.73	55	379	~~0.49 ppb~~	~~89~~
80) 1,3,5-Trimethylbenzene	16.73	105	288	~~3.75 ppb #~~	~~1~~
92) Nitrobenzene	20.80	77	280	~~9.00 ppb #~~	~~27~~

true value for tetrachloroethene:

$$\frac{(\text{area target})(\text{Amt IS})}{(\text{area IS})(\bar{RF})} = \text{amt ppb}$$

$$\frac{7153 \times 50}{1106181 \times 0.234} = 1.38$$

1/30/02

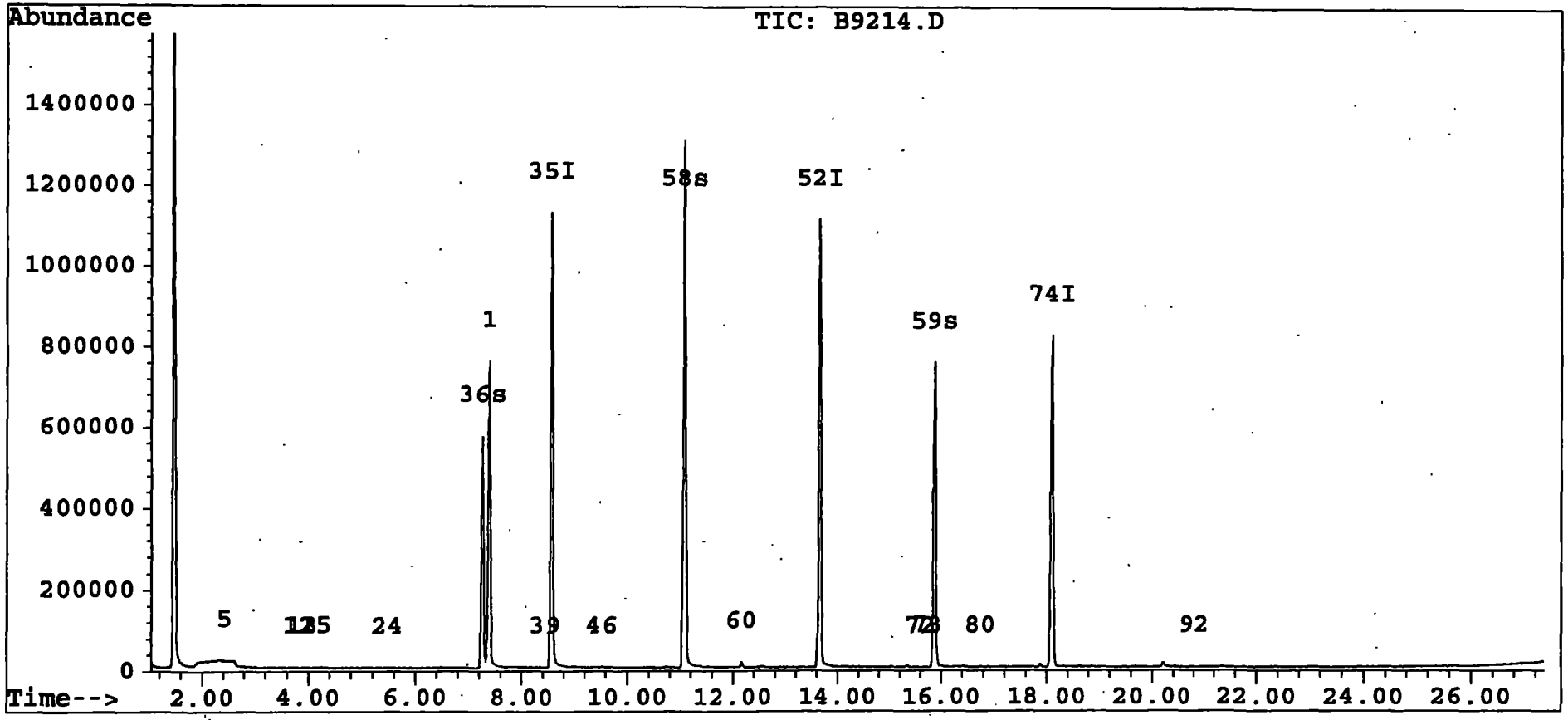
(#) = qualifier out of range (m) = manual integration
B9214.D EXP1217.M Mon Jan 21 16:07:35 2002

Quantit on Report

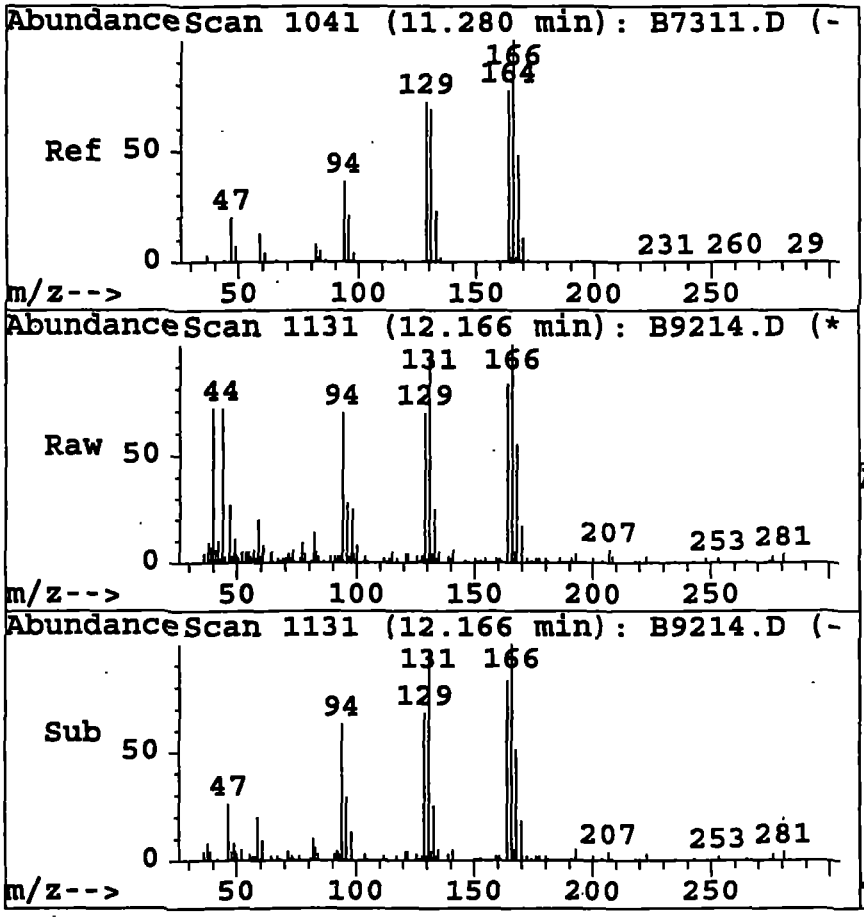
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9214.D
Acq On : 21 Jan 102 3:39 pm
Sample : 524674 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 16:07 19102

Vial: 8
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



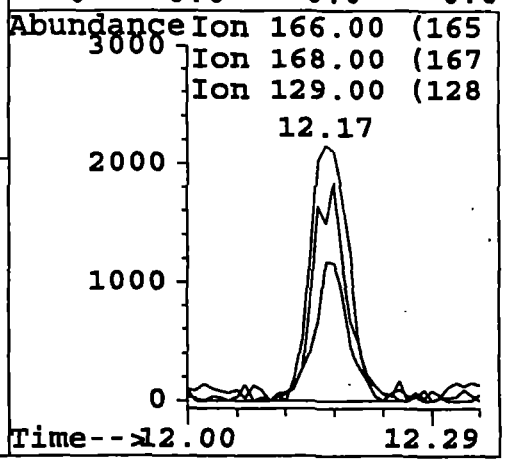
69



#60
Tetrachloroethene
Concen: ~~5.43 ppb~~ 1.38 1/30
RT: 12.17 min Scan# 1131
Delta R.T. -0.01 min
Lab File: B9214.D
Acq: 21 Jan 102 3:39 pm

Tgt Ion:166 Resp: 7153

Ion	Ratio	Lower	Upper
166	100		
168	54.5	37.8	56.7
129	69.2	57.6	86.3
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-7

Date Sampled : 01/15/02 13:00 **Order #:** 524675 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	0.96 J	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9215.D Vial: 9
Acq On : 21 Jan 102 4:16 pm Operator: droot
Sample : 524675 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 16:44 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	746806	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.57	114	1402924	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.67	117	1103263	50.00 ppb	0.00
74) d4 - Dichlorobenzene	18.11	152	422502	50.00 ppb	0.00
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.27	113	504803	51.02 ppb	102.04%
58) surr3,Toluene-d8	11.08	98	1356280	52.32 ppb	104.63%
59) surr2,bfb	15.88	95	527158	50.61 ppb	101.21%
Target Compounds					Qvalue
5) Bromomethane	2.44	94	3189	~~0.63 ppb~~	~~# 12~~
12) Acetone	3.78	43	2319	~~0.72 ppb~~	~~# 82~~
13) Iodomethane	3.82	127	138	~~4.36 ppb~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.68	53	177	~~1.20 PPB~~	~~# 51~~
39) Iso-Butyl Alcohol	8.58	43	1034	~~3.17 ppb~~	~~88~~
43) Trichloroethene	9.01	95	4341	0.64 ppb	# 75 <
46) 1,4-Dioxane	9.83	88	292	~~3.28 ppb~~	~~98~~
53) 4-Methyl-2-Pentanone	11.08	43	9350	~~0.84 ppb~~	~~# 1~~
60) Tetrachloroethene	12.18	166	4974	~~5.07~~ ppb 0.96 J	# 89 (L)
72) Isopropylbenzene	15.60	105	465	~~3.30 ppb~~	~~98~~
73) Cyclohexanone	15.76	55	777	~~1.02 ppb~~	~~# 28~~
80) 1,3,5-Trimethylbenzene	16.73	105	533	~~3.76 ppb~~	~~# 86~~
92) Nitrobenzene	20.82	77	~~223~~	~~8.93 ppb~~	~~# 27~~

true value for tetrachloroethene:

$$\frac{(\text{area target})(\text{amt IS})}{(\text{area IS})(\overline{RF})} = \text{amt ppb}$$

$$\frac{4974 \times 50}{1103263 \times 0.234} = 0.96\ J$$

QP 1/50

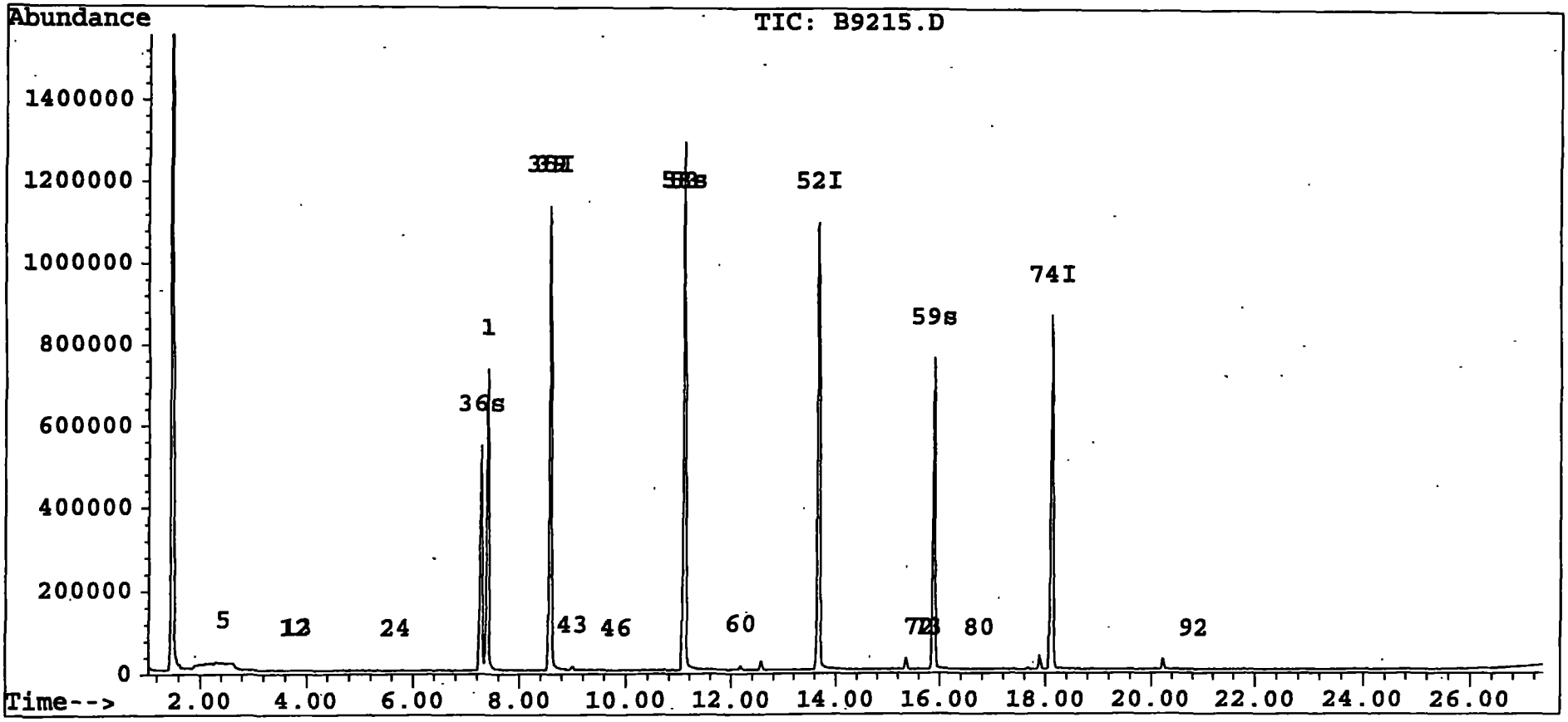
(#) = qualifier out of range (m) = manual integration

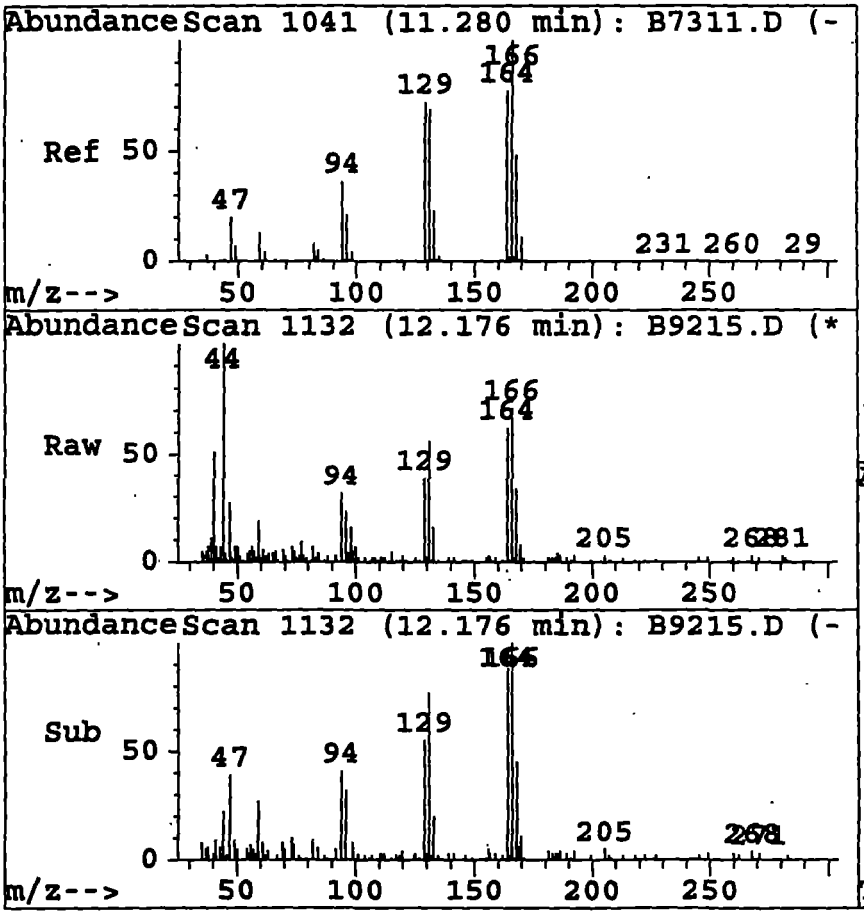
Quantit? 'on Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9215.D
Acq On : 21 Jan 102 4:16 pm
Sample : 524675 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 16:44 19102

Vial: 9
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

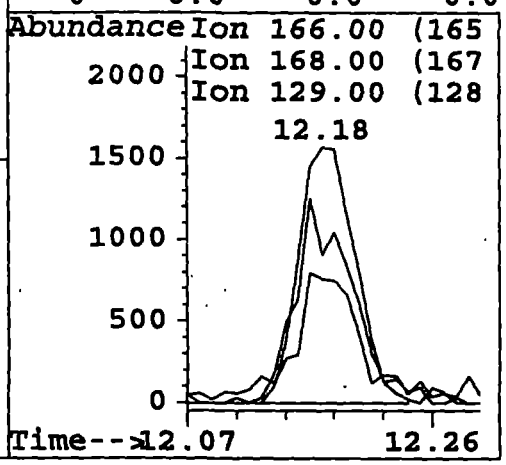




#60
Tetrachloroethene
Concen: ~~5.07 ppb~~ 0.96 J
RT: 12.18 min Scan# 1132
Delta R.T. 0.00 min
Lab File: B9215.D
Acq: 21 Jan 102 4:16 pm

Tgt Ion:166 Resp: 4974

Ion	Ratio	Lower	Upper
166	100		
168	48.5	37.8	56.7
129	58.0	57.6	86.3
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-7-FD

Date Sampled : 01/15/02 13:00 **Order #:** 524676 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

DATE ANALYZED : 01/21/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	0.89 J	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	103	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9216.D Vial: 10
Acq On : 21 Jan 102 4:52 pm Operator: droot
Sample : 524676 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 17:20 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.38	168	747311	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.56	114	1388975	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.65	117	1103128	50.00 ppb	-0.02
74) d4 - Dichlorobenzene	18.09	152	404581	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.26	113	503094	51.46 ppb	102.91%
58) surr3,Toluene-d8	11.07	98	1342337	51.62 ppb	103.24%
59) surr2,bfb	15.87	95	525682	50.42 ppb	100.84%
Target Compounds					Qvalue
5) Bromomethane	2.42	94	2419	~~0.48 ppb~~	~~# 14~~
12) Acetone	3.80	43	2988	~~0.93 ppb~~	~~# 56~~
13) Iodomethane	3.83	127	109	~~4.36 ppb~~	~~23~~
15) Acetonitrile	4.15	41	148	~~0.41 ppb~~	~~# 1~~
24) 2-Chloro-1,3-butadiene	5.60	53	71	~~1.19 PPB~~	~~89~~
39) Iso-Butyl Alcohol	8.42	43	1368	~~4.24 ppb~~	~~93~~
46) 1,4-Dioxane	9.29	88	574	~~6.52 ppb~~	~~81~~
60) Tetrachloroethene	12.17	166	4615	~~5.01 ppb~~ 0.89J	~~87~~
72) Isopropylbenzene	15.56	105	185	~~3.29 ppb~~	~~94~~
73) Cyclohexanone	15.87	55	1566	~~2.05 ppb~~	~~# 47~~
80) 1,3,5-Trimethylbenzene	16.61	105	195	~~3.74 ppb~~	~~# 49~~
92) Nitrobenzene	20.80	77	478	~~9.21 ppb~~	~~# 27~~

true value for tetrachloroethene:

$$\frac{(\text{area target})(\text{amt IS})}{(\text{area IS})(\bar{RF})} = \text{amt ppb}$$

$$\frac{4615 \times 50}{1103128 \times 0.234} = 0.89\text{J}$$

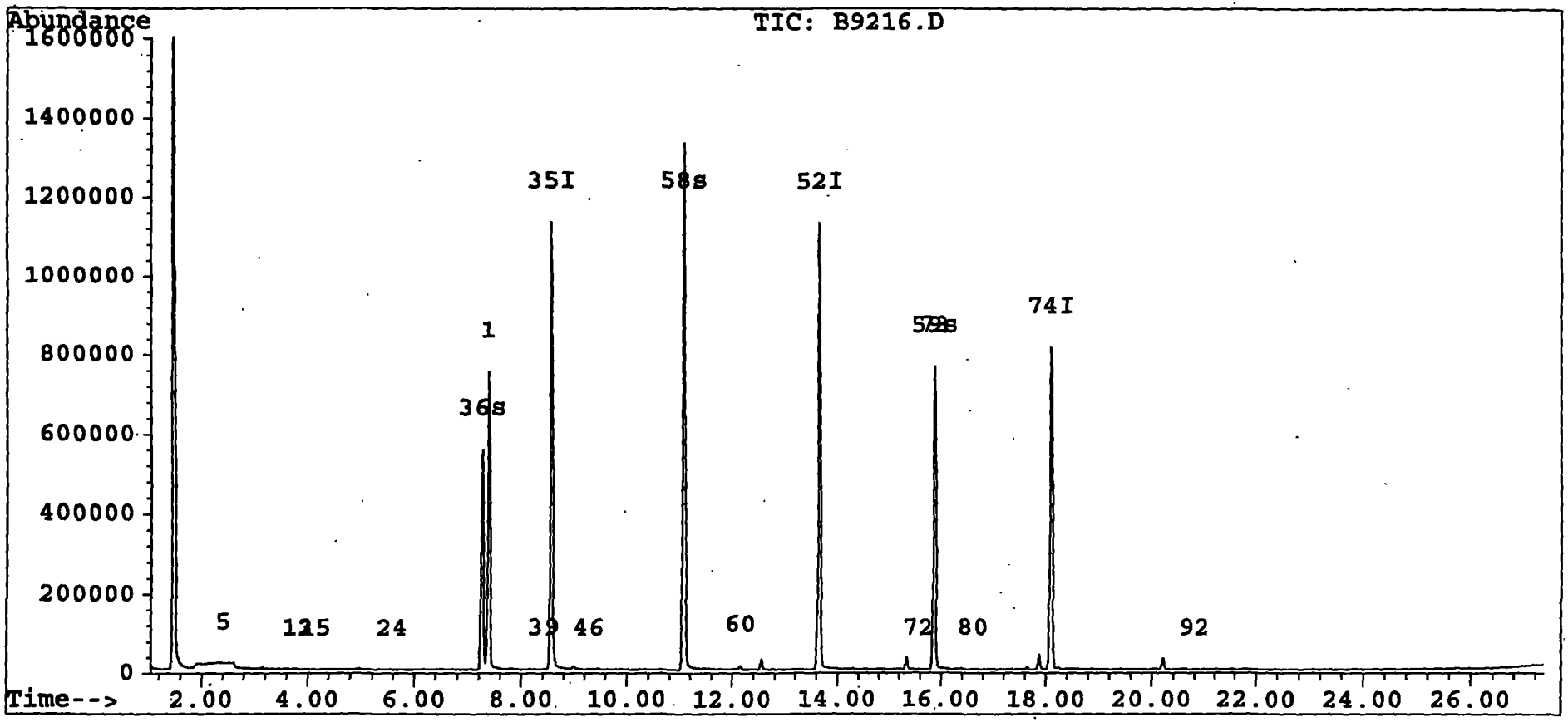
(#) = qualifier out of range (m) = manual integration

Quantitat. Report

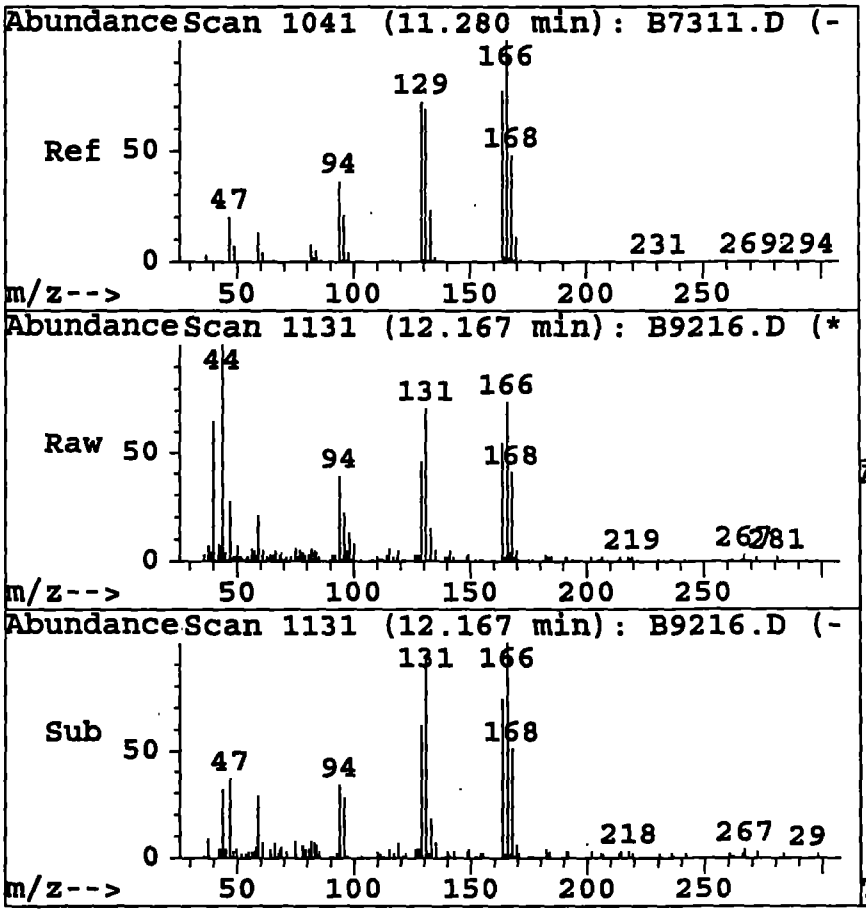
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9216.D
Acq On : 21 Jan 102 4:52 pm
Sample : 524676 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 17:20 19102

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



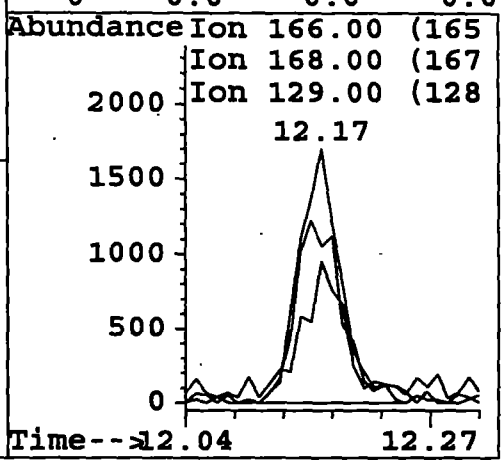
77



#60
Tetrachloroethene
Concen: ~~5.01 ppb~~ 0.89 J
RT: 12.17 min Scan# 1131
Delta R.T. -0.01 min
Lab File: B9216.D
Acq: 21 Jan 102 4:52 pm

Tgt Ion:166 Resp: 4615

Ion	Ratio	Lower	Upper
166	100		
168	56.0	37.8	56.7
129	61.8	57.6	86.3
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF 3

Date Sampled : 01/15/02 16:00 **Order #:** 524677 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	104	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9217.D Vial: 11
Acq On : 21 Jan 102 5:28 pm Operator: droot
Sample : 524677 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 17:56 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

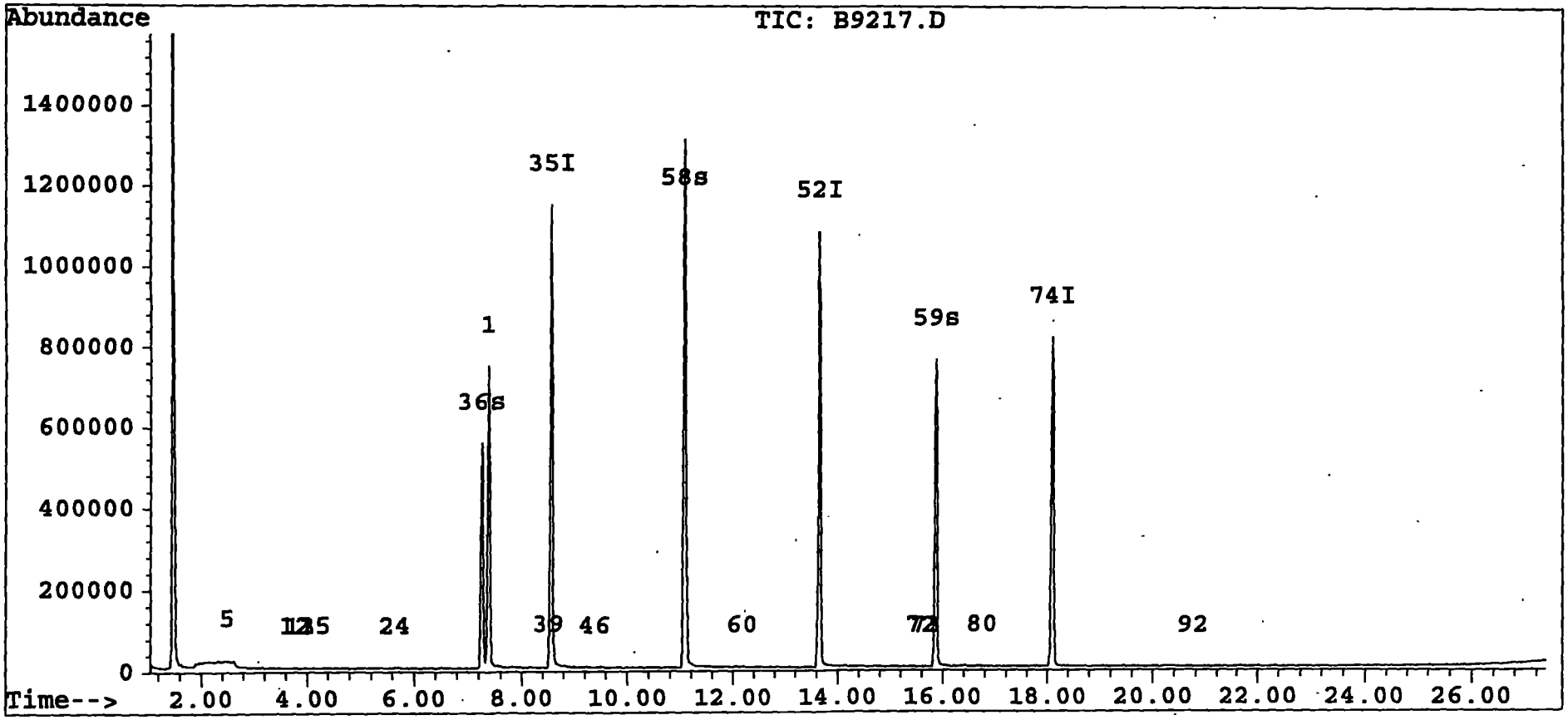
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.38	168	726836	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.56	114	1384893	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.65	117	1090458	50.00 ppb	-0.02
74) d4 - Dichlorobenzene	18.09	152	403384	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.25	113	505622	51.99 ppb	103.97%
58) surr3,Toluene-d8	11.07	98	1345183	52.55 ppb	105.11%
59) surr2,bfb	15.86	95	518155	50.22 ppb	100.45%
Target Compounds					Qvalue
5) Bromomethane	2.48	94	2179	~~0.44 ppb # 14~~	
12) Acetone	3.78	43	2063	~~0.66 ppb # 70~~	
13) Iodomethane	3.87	127	97	~~4.35 ppb 100~~	
15) Acetonitrile	4.16	41	262	~~0.75 ppb # 1~~	
24) 2-Chloro-1,3-butadiene	5.65	53	208	~~1.20 PPB # 70~~	
39) Iso-Butyl Alcohol	8.49	43	477	~~1.48 ppb 94~~	
46) 1,4-Dioxane	9.39	88	418	~~4.76 ppb 93~~	
60) Tetrachloroethene	12.18	166	360	~~4.31 ppb # 11~~	
72) Isopropylbenzene	15.59	105	250	~~3.29 ppb # 56~~	
73) Cyclohexanone	15.68	55	419	~~0.55 ppb 85~~	
80) 1,3,5-Trimethylbenzene	16.74	105	506	~~3.76 ppb # 36~~	
92) Nitrobenzene	20.76	77	677	~~9.42 ppb # 27~~	

Jan 1/02

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9217.. Vial: 11
Acq On : 21 Jan 102 5:28 pm Operator: droot
Sample : 524677 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 17:56 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



81

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW MI-2

Date Sampled : 01/15/02 17:00 **Order #:** 524678 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9218.D Vial: 12
Acq On : 21 Jan 102 6:04 pm Operator: droot
Sample : 524678 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 18:32 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

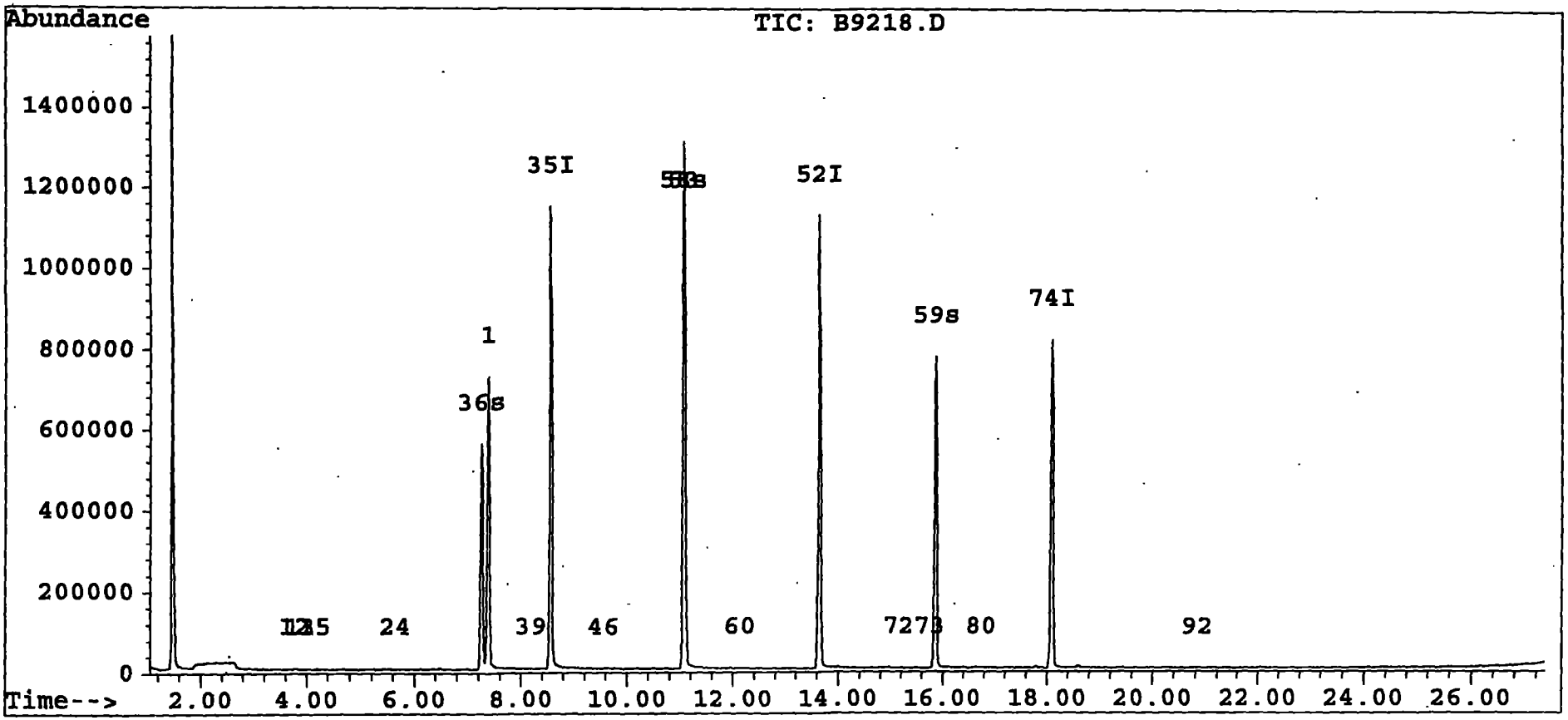
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.38	168	738017	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.55	114	1393998	50.00 ppb	-0.03
52) d5 - Chlorobenzene	13.64	117	1099720	50.00 ppb	-0.03
74) d4 - Dichlorobenzene	18.09	152	409510	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.25	113	499101	50.69 ppb	101.39%
58) surr3,Toluene-d8	11.06	98	1351421	52.29 ppb	104.58%
59) surr2,bfb	15.86	95	520595	49.97 ppb	99.93%
Target Compounds					Qvalue
12) Acetone	3.78	43	2629	~~0.83 ppb~~	~~97~~
13) Iodomethane	3.88	127	139	~~4.37 ppb~~	~~1~~
15) Acetonitrile	4.17	41	563	~~1.58 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.65	53	195	~~1.20 PPB~~	~~99~~
39) Iso-Butyl Alcohol	8.19	43	490	~~1.51 ppb~~	~~83~~
46) 1,4-Dioxane	9.55	88	150	~~1.70 ppb #~~	~~69~~
53) 4-Methyl-2-Pentanone	11.07	43	9353	~~0.84 ppb #~~	~~1~~
60) Tetrachloroethene	12.15	166	389	~~4.32 ppb #~~	~~71~~
72) Isopropylbenzene	15.16	105	177	~~3.29 ppb~~	~~93~~
73) Cyclohexanone	15.76	55	472	~~0.62 ppb~~	~~94~~
80) 1,3,5-Trimethylbenzene	16.75	105	194	~~3.74 ppb #~~	~~84~~
92) Nitrobenzene	20.83	77	529	~~9.25 ppb #~~	~~45~~

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9218.D
Acq On : 21 Jan 102 6:04 pm
Sample : 524678 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 18:32 19102

Vial: 12
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



84

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-6

Date Sampled : 01/15/02 09:43 **Order #:** 524679 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	98	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9219.D Vial: 13
Acq On : 21 Jan 102 6:41 pm Operator: droot
Sample : 524679 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 19:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

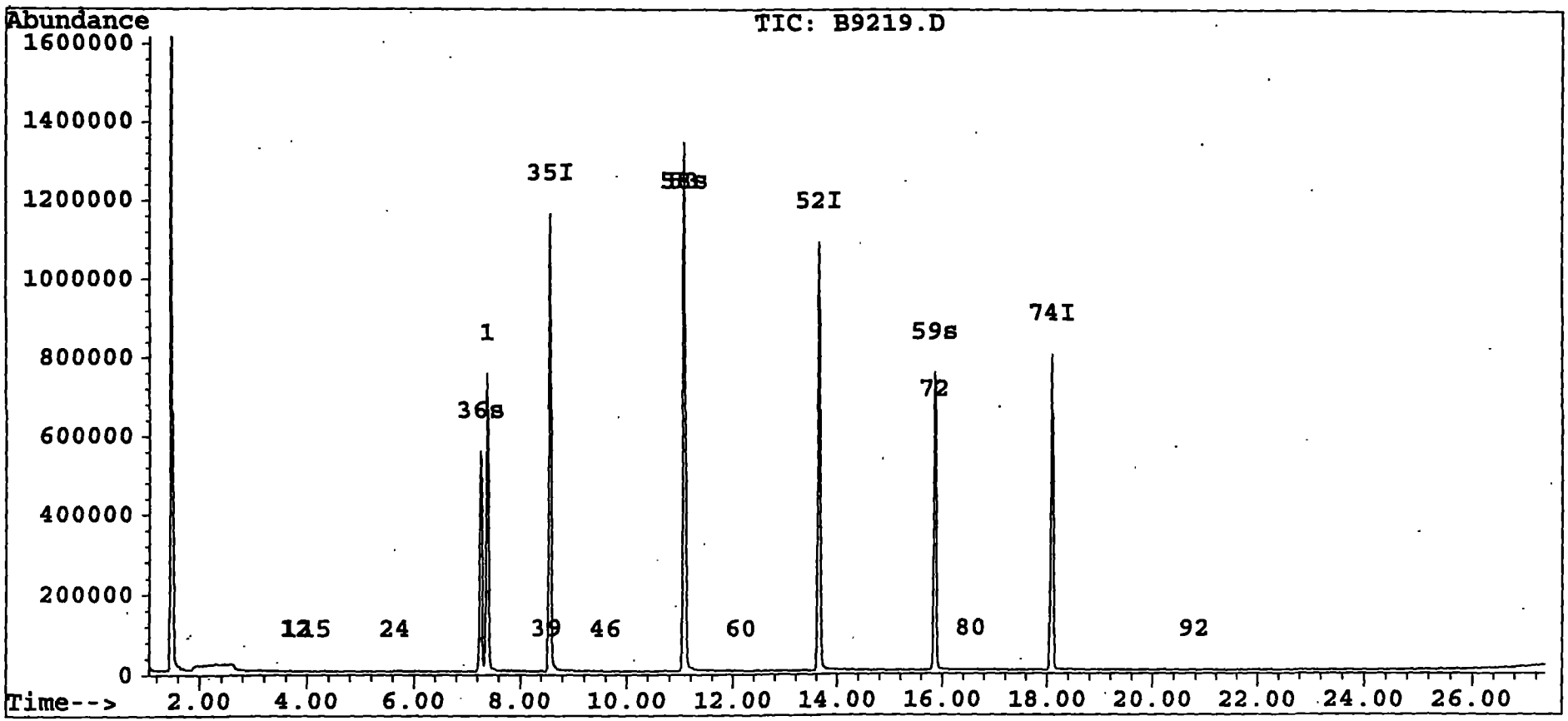
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.38	168	731173	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.56	114	1405263	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.64	117	1099567	50.00 ppb	-0.03
74) d4 - Dichlorobenzene	18.09	152	400211	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.25	113	500600	50.36 ppb	100.73%
58) surr3,Toluene-d8	11.07	98	1365868	53.03 ppb	106.07%
59) surr2,bfb	15.85	95	514819	49.21 ppb	98.43%
Target Compounds					Qvalue
12) Acetone	3.78	43	2033	~~0.65 ppb~~	~~90~~
13) Iodomethane	3.82	127	242	~~4.39 ppb~~	~~1~~
15) Acetonitrile	4.16	41	201	~~0.57 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.66	53	174	~~1.20 PPB #~~	~~23~~
39) Iso-Butyl Alcohol	8.48	43	334	~~1.02 ppb~~	~~77~~
46) 1,4-Dioxane	9.61	88	152	~~1.71 ppb #~~	~~50~~
53) 4-Methyl-2-Pentanone	11.06	43	8429	~~0.76 ppb #~~	~~1~~
60) Tetrachloroethene	12.14	166	185	~~4.28 ppb #~~	~~42~~
72) Isopropylbenzene	15.83	105	704	~~3.31 ppb~~	~~94~~
80) 1,3,5-Trimethylbenzene	16.55	105	200	~~3.74 ppb~~	~~96~~
92) Nitrobenzene	20.76	77	444	~~9.18 ppb #~~	~~27~~

(#) = qualifier out of range (m) = manual integration
B9219.D EXP1217.M Mon Jan 21 19:08:59 2002

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9219.I
Acq On : 21 Jan 102 6:41 pm
Sample : 524679 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 19:09 19102

Vial: 13
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



87

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-3

Date Sampled : 01/15/02 08:34 **Order #:** 524683 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
LOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9230.D Vial: 23
Acq On : 22 Jan 102 1:19 am Operator: droot
ample : 524683 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 1:47 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

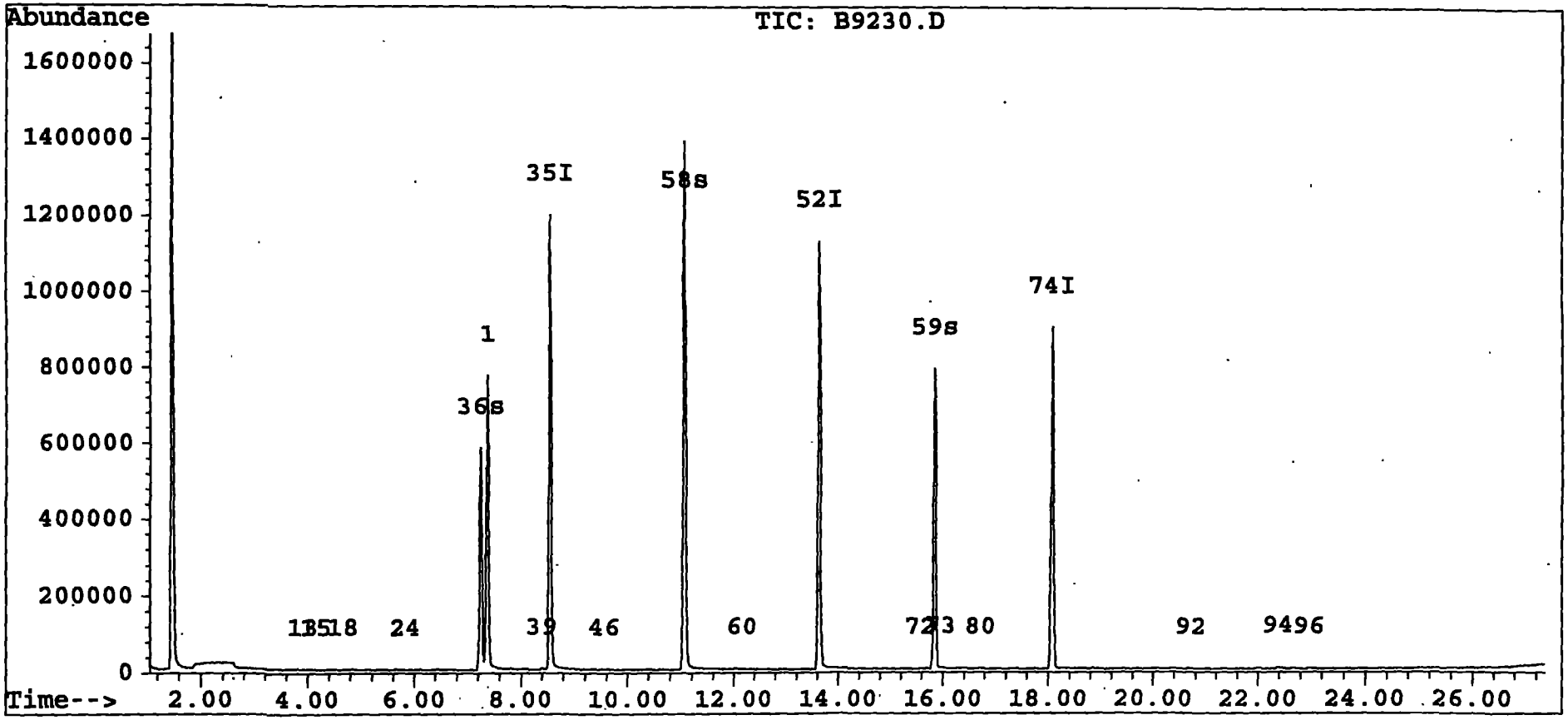
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	765747	50.00 ppb	-0.03
35) 1,4 - Difluorobenzene	8.55	114	1451311	50.00 ppb	-0.03
52) d5 - Chlorobenzene	13.64	117	1141934	50.00 ppb	-0.03
74) d4 - Dichlorobenzene	18.08	152	445266	50.00 ppb	-0.03
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.24	113	522463	51.05 ppb	102.10%
58) surr3,Toluene-d8	11.06	98	1408103	52.53 ppb	105.05%
59) surr2,bfb	15.84	95	546300	50.69 ppb	101.38%
Target Compounds					Qvalue
13) Iodomethane	3.91	127	396	~~4.43 ppb~~	~~1~~
15) Acetonitrile	4.15	41	253	~~0.69 ppb #~~	~~1~~
18) TBA	4.66	59	826	~~0.92 ppb #~~	~~1~~
14) 2-Chloro-1,3-butadiene	5.84	53	156	~~1.20 PPB~~	~~90~~
39) Iso-Butyl Alcohol	8.39	43	2518	~~7.47 ppb~~	~~90~~
46) 1,4-Dioxane	9.56	88	518	~~5.63 ppb #~~	~~38~~
60) Tetrachloroethene	12.16	166	279	~~4.30 ppb #~~	~~55~~
72) Isopropylbenzene	15.59	105	1710	~~3.35 ppb~~	~~98~~
73) Cyclohexanone	15.97	55	376	~~0.47 ppb~~	~~90~~
80) 1,3,5-Trimethylbenzene	16.71	105	1417	~~3.79 ppb~~	~~100~~ <NT
92) Nitrobenzene	20.71	77	774	~~9.44 ppb #~~	~~27~~
94) Hexachlorobt	22.40	225	1291	~~0.78 ppb~~	~~92~~ <NT
96) 1,2,3-Tclbenzene	22.96	180	1710	0.43 ppb #	69 <NT

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9230.I
Acq On : 22 Jan 102 1:19 am
Sample : 524683 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 1:47 19102

Vial: 23
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



90

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-8

Date Sampled : 01/15/02 09:00 **Order #:** 524685 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
LOROMETHANE	1.0	1.0 U	UG/L
BROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	95	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9231.D Vial: 24
Acq On : 22 Jan 102 1:55 am Operator: droot
Sample : 524685 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 2:23 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

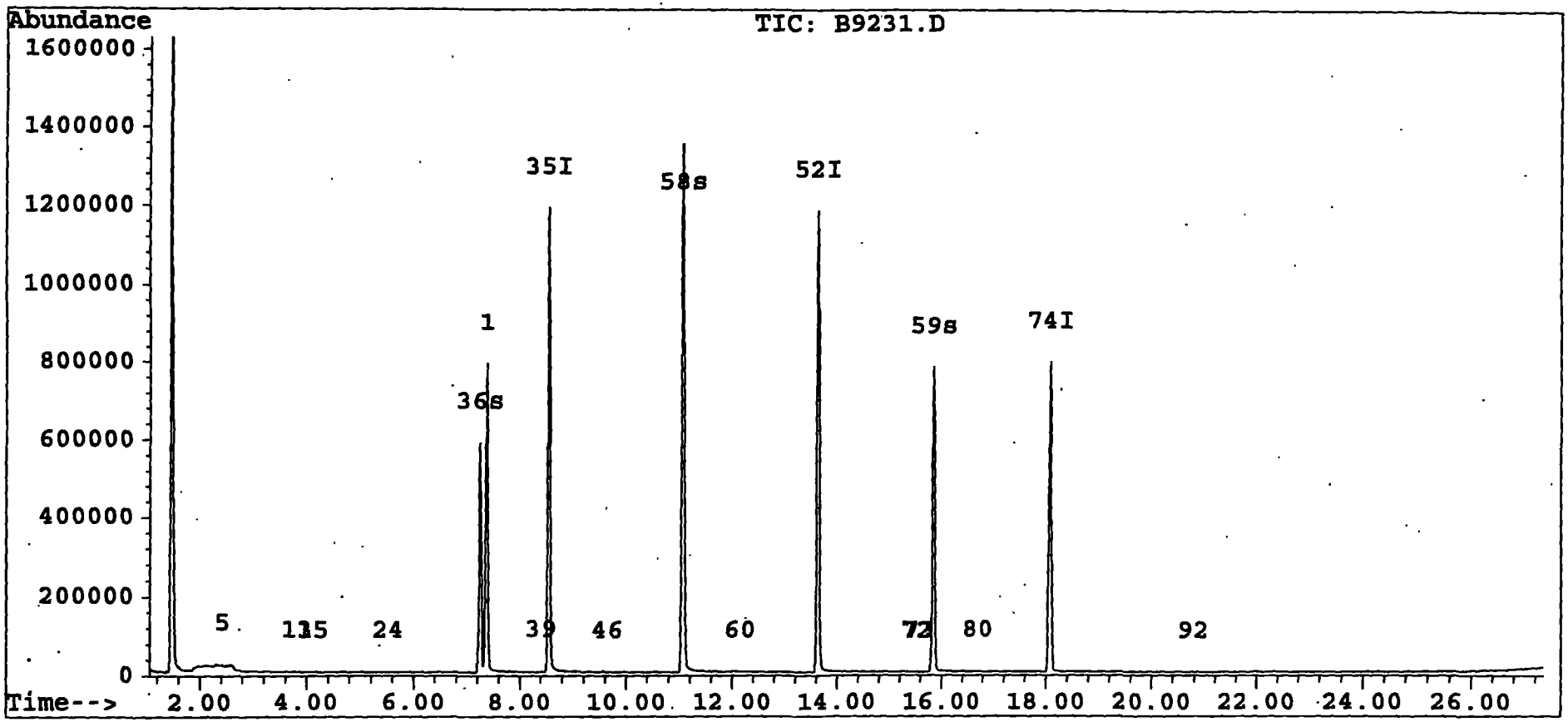
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	776817	50.00 ppb	-0.03
35) 1,4 - Difluorobenzene	8.55	114	1466854	50.00 ppb	-0.03
52) d5 - Chlorobenzene	13.63	117	1156043	50.00 ppb	-0.04
74) d4 - Dichlorobenzene	18.08	152	396608	50.00 ppb	-0.03
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.24	113	526585	50.87 ppb	101.74%
58) surr3,Toluene-d8	11.05	98	1421006	52.31 ppb	104.62%
59) surr2,bfb	15.84	95	526170	47.32 ppb	94.64%
Target Compounds					Qvalue
5) Bromomethane	2.42	94	3014	~~0.57 ppb #~~	~~21~~
13) Iodomethane	3.82	127	177	~~4.37 ppb~~	~~4~~
15) Acetonitrile	4.12	41	436	~~1.16 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.53	53	466	~~1.22 PPB~~	~~94~~
39) Iso-Butyl Alcohol	8.40	43	1771	~~5.20 ppb~~	~~89~~
46) 1,4-Dioxane	9.64	88	128	~~1.38 ppb~~	~~88~~
60) Tetrachloroethene	12.15	166	320	~~4.30 ppb #~~	~~67~~
72) Isopropylbenzene	15.54	105	320	3.29 ppb	96
73) Cyclohexanone	15.59	55	528	~~0.66 ppb~~	~~87~~
80) 1,3,5-Trimethylbenzene	16.71	105	745	~~3.77 ppb #~~	~~63~~
92) Nitrobenzene	20.78	77	348	~~9.08 ppb #~~	~~27~~

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9231.D
Acq On : 22 Jan 102 1:55 am
Sample : 524685 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 2:23 19102

Vial: 24
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



93

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF4

Date Sampled : 01/15/02 16:00 **Order #:** 524686 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9232.D Vial: 25
Acq On : 22 Jan 102 2:31 am Operator: droot
Sample : 524686 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 2:59 19102

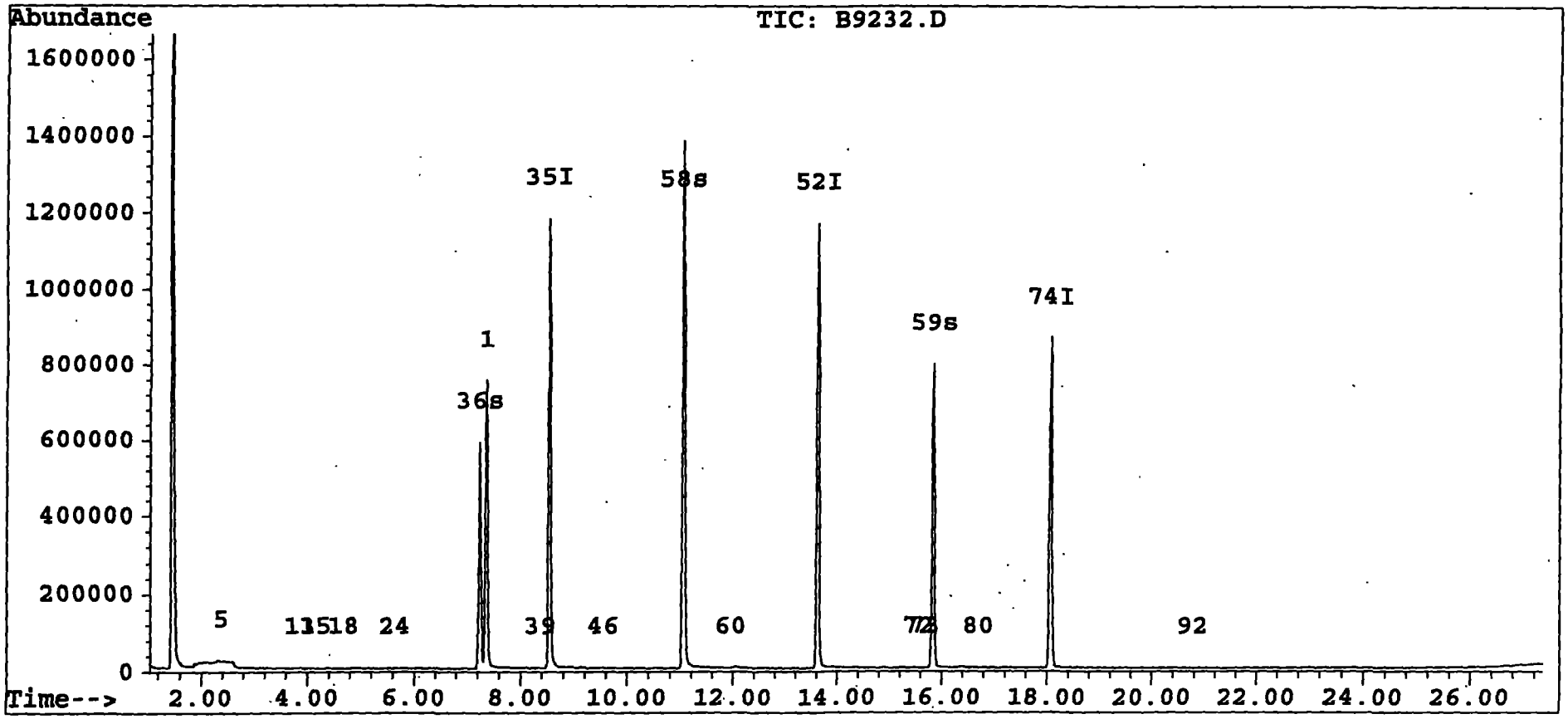
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	759515	50.00 ppb	-0.03
35) 1,4 - Difluorobenzene	8.54	114	1442220	50.00 ppb	-0.04
52) d5 - Chlorobenzene	13.63	117	1138002	50.00 ppb	-0.04
74) d4 - Dichlorobenzene	18.07	152	422402	50.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.24	113	515974	50.64 ppb	101.29%
58) surr3,Toluene-d8	11.05	98	1393771	52.06 ppb	104.12%
59) surr2,bfb	15.84	95	540260	50.16 ppb	100.32%
Target Compounds					**Qvalue**
5) Bromomethane	2.38	94	2849	~~0.55 ppb #~~	~~8~~
13) Iodomethane	3.85	127	325	~~4.41 ppb~~	~~1~~
15) Acetonitrile	4.16	41	445	~~1.22 ppb #~~	~~1~~
8) TBA	4.68	59	516	~~0.58 ppb #~~	~~66~~
24) 2-Chloro-1,3-butadiene	5.65	53	312	~~1.21 PPB #~~	~~68~~
39) Iso-Butyl Alcohol	8.38	43	1263	~~3.77 ppb~~	~~77~~
46) 1,4-Dioxane	9.56	88	202	~~2.21 ppb #~~	~~12~~
60) Tetrachloroethene	11.97	166	61	~~4.26 ppb #~~	~~1~~
72) Isopropylbenzene	15.55	105	554	~~3.30 ppb~~	~~96~~
73) Cyclohexanone	15.68	55	495	~~0.63 ppb~~	~~87~~
80) 1,3,5-Trimethylbenzene	16.71	105	517	~~3.76 ppb #~~	~~49~~
92) Nitrobenzene	20.79	77	311	~~9.02 ppb #~~	~~27~~

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9232.. Vial: 25
Acq On : 22 Jan 102 2:31 am Operator: droot
Sample : 524686 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 2:59 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



96

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF1-FD

Date Sampled : 01/15/02 13:25 **Order #:** 524687 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9233.D Vial: 26
Acq On : 22 Jan 102 3:07 am Operator: droot
Sample : 524687 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 3:35 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

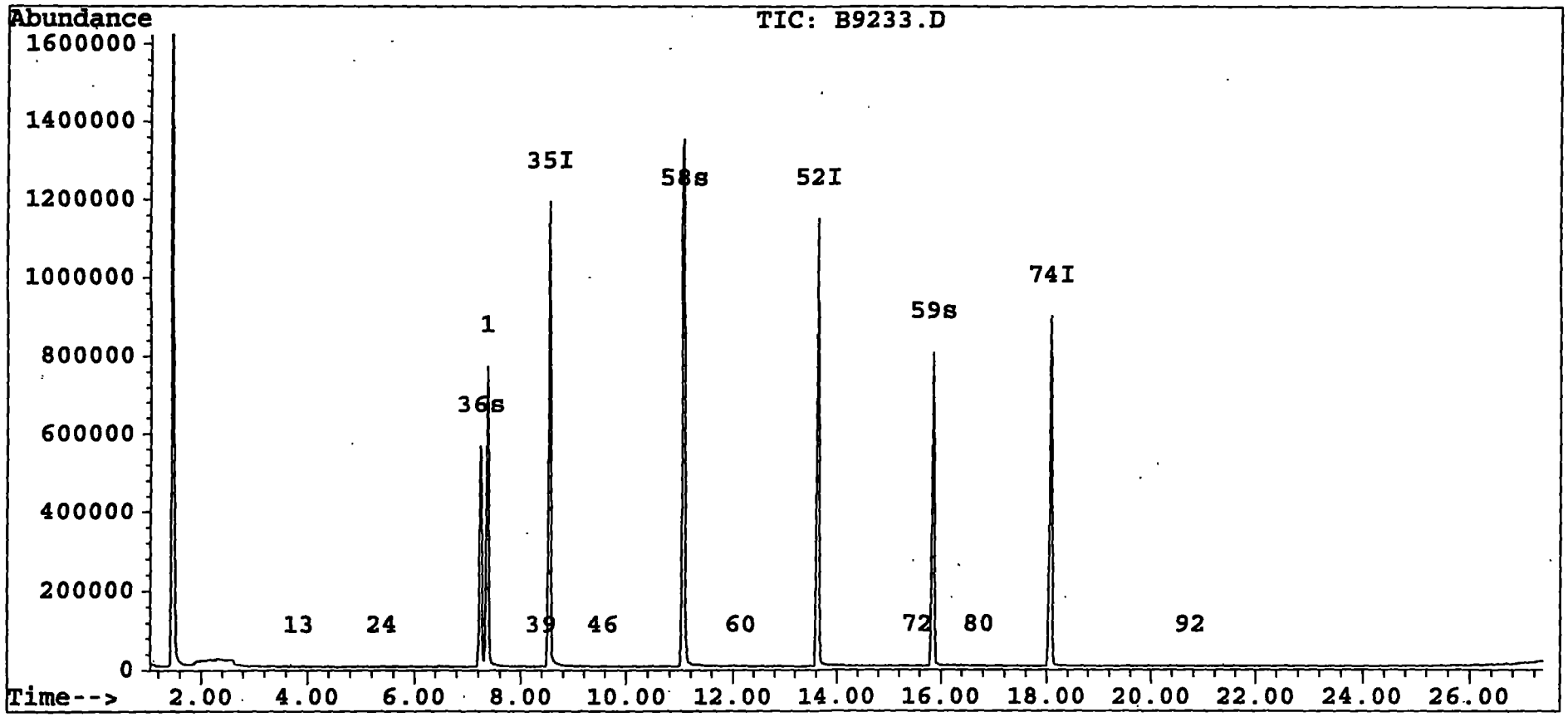
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.36	168	775366	50.00 ppb	-0.04
35) 1,4 - Difluorobenzene	8.54	114	1439161	50.00 ppb	-0.04
52) d5 - Chlorobenzene	13.62	117	1143257	50.00 ppb	-0.05
74) d4 - Dichlorobenzene	18.07	152	442490	50.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.23	113	517084	50.92 ppb	101.85%
58) surr3,Toluene-d8	11.04	98	1409324	52.51 ppb	105.01%
59) surr2,bfb	15.84	95	543956	50.31 ppb	100.63%
Target Compounds					**Qvalue**
13) Iodomethane	3.85	127	151	~~4.37 ppb~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.39	53	49	~~1.19 PPB~~	~~89~~
39) Iso-Butyl Alcohol	8.38	43	~~924~~	~~2.77 ppb~~	~~78~~
46) 1,4-Dioxane	9.57	88	265	~~2.90 ppb~~ #	~~62~~
60) Tetrachloroethene	12.15	166	309	~~4.30 ppb~~ #	~~51~~
72) Isopropylbenzene	15.55	105	~~495~~	~~3.30 ppb~~ #	~~1~~
80) 1,3,5-Trimethylbenzene	16.70	105	~~604~~	~~3.76 ppb~~ #	~~85~~
92) Nitrobenzene	20.74	77	73	~~8.78 ppb~~ #	~~27~~

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9233.I
Acq On : 22 Jan 102 3:07 am
Sample : 524687 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 3:35 19102

Vial: 26
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



99

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MWLW-2

Date Sampled : 01/15/02 15:15 **Order #:** 524688 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	108	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9234.D Vial: 27
Acq On : 22 Jan 102 3:43 am Operator: droot
Sample : 524688 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 4:11 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.36	168	772743	50.00 ppb	-0.04
35) 1,4 - Difluorobenzene	8.54	114	1443362	50.00 ppb	-0.04
52) d5 - Chlorobenzene	13.62	117	1120897	50.00 ppb	-0.05
74) d4 - Dichlorobenzene	18.06	152	433829	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	520753	51.20 ppb	102.40%
58) surr3,Toluene-d8	11.04	98	1407105	53.77 ppb	107.54%
59) surr2,bfb	15.84	95	540029	51.18 ppb	102.36%
Target Compounds					Qvalue
5) Bromomethane	2.39	94	2278	~~0.44 ppb~~	~~# 22~~
12) Acetone	3.78	43	2851	~~0.86 ppb~~	~~# 77~~
13) Iodomethane	3.89	127	237	~~4.39 ppb~~	~~15~~
15) Acetonitrile	4.16	41	458	~~1.23 ppb~~	~~# 1~~
24) 2-Chloro-1,3-butadiene	5.91	53	198	~~1.20 PPB~~	~~98~~
39) Iso-Butyl Alcohol	8.41	43	1380	~~4.12 ppb~~	~~90~~
46) 1,4-Dioxane	9.48	88	559	~~6.11 ppb~~	~~80~~
60) Tetrachloroethene	12.15	166	1101	~~4.43 ppb~~	~~# 64~~
72) Isopropylbenzene	15.56	105	556	~~3.30 ppb~~	~~# 61~~
80) 1,3,5-Trimethylbenzene	16.70	105	408	~~3.75 ppb~~	~~# 49~~
92) Nitrobenzene	20.75	77	520	~~9.21 ppb~~	~~# 27~~

1/28

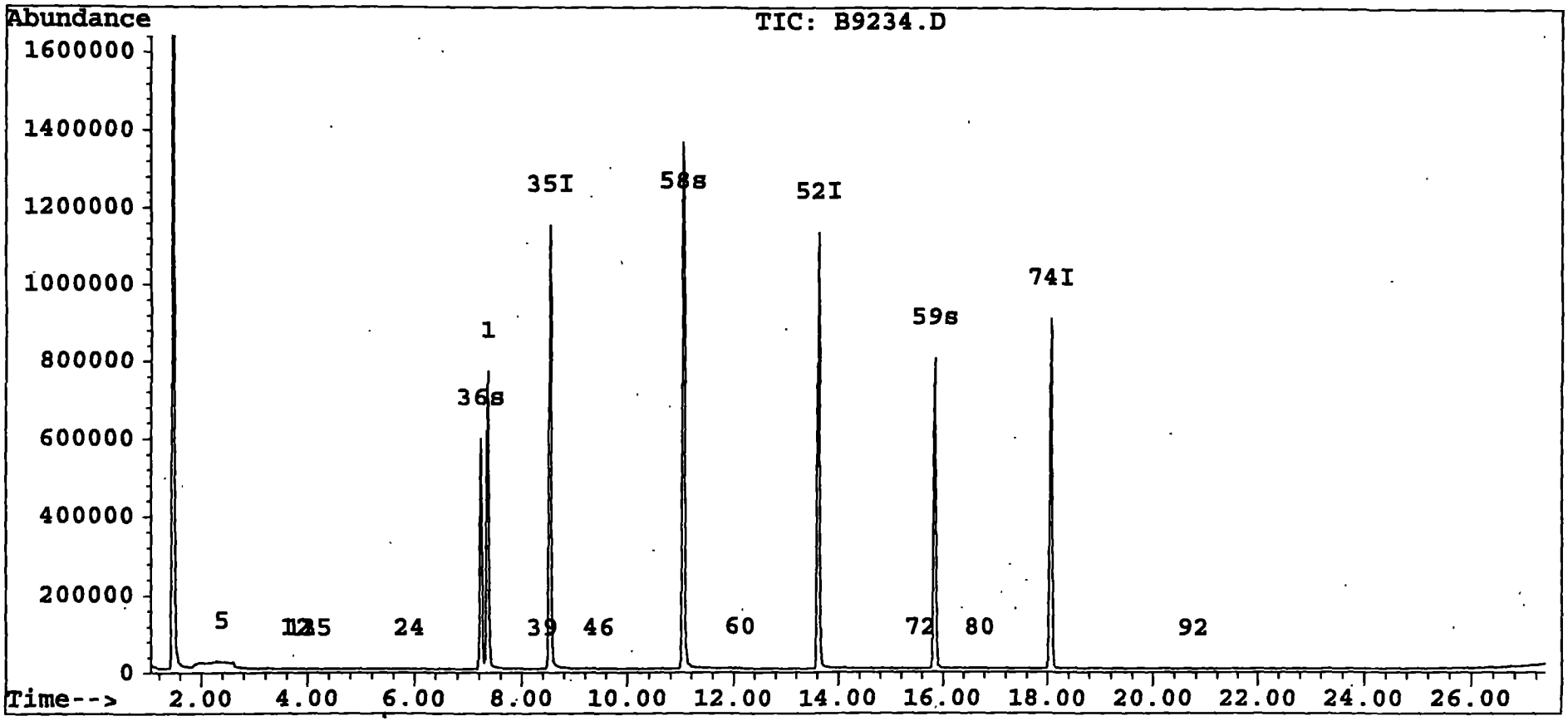
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9234..
Acq On : 22 Jan 102 3:43 am
Sample : 524688 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 4:11 19102

Vial: 27
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



102

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MWLW-5

Date Sampled : 01/15/02 16:30 **Order #:** 524689 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	98	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9235.D Vial: 28
Acq On : 22 Jan 102 4:20 am Operator: droot
Sample : 524689 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 4:48 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.36	168	761354	50.00 ppb	-0.04
35) 1,4 - Difluorobenzene	8.54	114	1438622	50.00 ppb	-0.04
52) d5 - Chlorobenzene	13.62	117	1134412	50.00 ppb	-0.05
74) d4 - Dichlorobenzene	18.06	152	427282	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	521234	51.48 ppb	102.95%
58) surr3,Toluene-d8	11.04	98	1400263	52.60 ppb	105.19%
59) surr2,bfb	15.83	95	529400	48.99 ppb	97.98%
Target Compounds					Qvalue
12) Acetone	3.78	43	1930	~~0.59 ppb~~	~~99~~
13) Iodomethane	3.87	127	~~349~~	~~4.42 ppb~~	~~1~~
15) Acetonitrile	4.13	41	185	~~0.50 ppb~~ #	~~1~~
24) 2-Chloro-1,3-butadiene	5.96	53	170	~~1.20 PPB~~	~~93~~
39) Iso-Butyl Alcohol	8.40	43	1276	~~3.82 ppb~~	~~95~~
46) 1,4-Dioxane	9.56	88	161	~~1.76 ppb~~	~~94~~
60) Tetrachloroethene	12.13	166	~~129~~	~~4.27 ppb~~ #	~~2~~
72) Isopropylbenzene	15.67	105	136	~~3.29 ppb~~	~~98~~
80) 1,3,5-Trimethylbenzene	16.69	105	479	~~3.76 ppb~~ #	~~86~~
92) Nitrobenzene	20.70	77	182	~~8.89 ppb~~ #	~~27~~

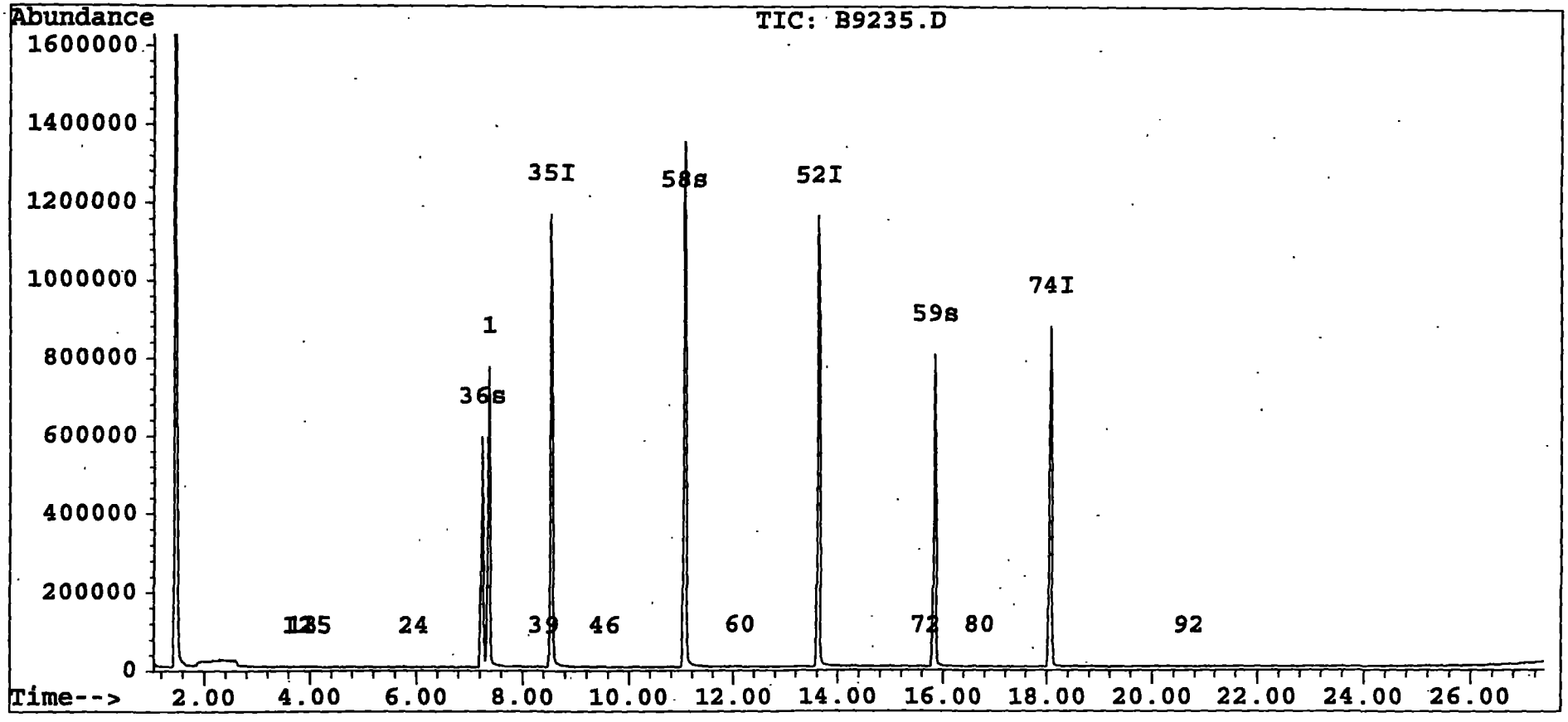
(#) = qualifier out of range (m) = manual integration

Quantitat. Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9235.D
Acq On : 22 Jan 102 4:20 am
Sample : 524689 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 4:48 19102

Vial: 28
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF-1

Date Sampled : 01/15/02 13:25 **Order #:** 524690 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	99	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9236.D Vial: 29
Acq On : 22 Jan 102 4:56 am Operator: droot
Sample : 524690 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 5:24 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.36	168	741734	50.00 ppb	-0.04
35) 1,4 - Difluorobenzene	8.54	114	1442695	50.00 ppb	-0.04
52) d5 - Chlorobenzene	13.62	117	1127538	50.00 ppb	-0.05
74) d4 - Dichlorobenzene	18.06	152	407700	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	523483	51.57 ppb	103.15%
58) surr3,Toluene-d8	11.04	98	1394907	52.75 ppb	105.50%
59) surr2,bfb	15.83	95	528264	49.26 ppb	98.52%
Target Compounds					Qvalue
5) Bromomethane	2.44	94	2915	~~0.58 ppb #~~	~~17~~
13) Iodomethane	3.85	127	204	~~4.38 ppb~~	~~6~~
15) Acetonitrile	4.15	41	288	~~0.81 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.68	53	118	~~1.19 PPB~~	~~87~~
39) Iso-Butyl Alcohol	8.53	43	444	~~1.33 ppb~~	~~82~~
46) 1,4-Dioxane	9.86	88	220	~~2.40 ppb~~	~~99~~
60) Tetrachloroethene	12.12	166	149	~~4.28 ppb #~~	~~79~~
72) Isopropylbenzene	15.57	105	239	~~3.29 ppb #~~	~~88~~
73) Cyclohexanone	15.69	55	400	~~0.51 ppb~~	~~94~~
80) 1,3,5-Trimethylbenzene	16.73	105	283	~~3.75 ppb #~~	~~1~~
92) Nitrobenzene	20.78	77	650	~~9.38 ppb #~~	~~27~~

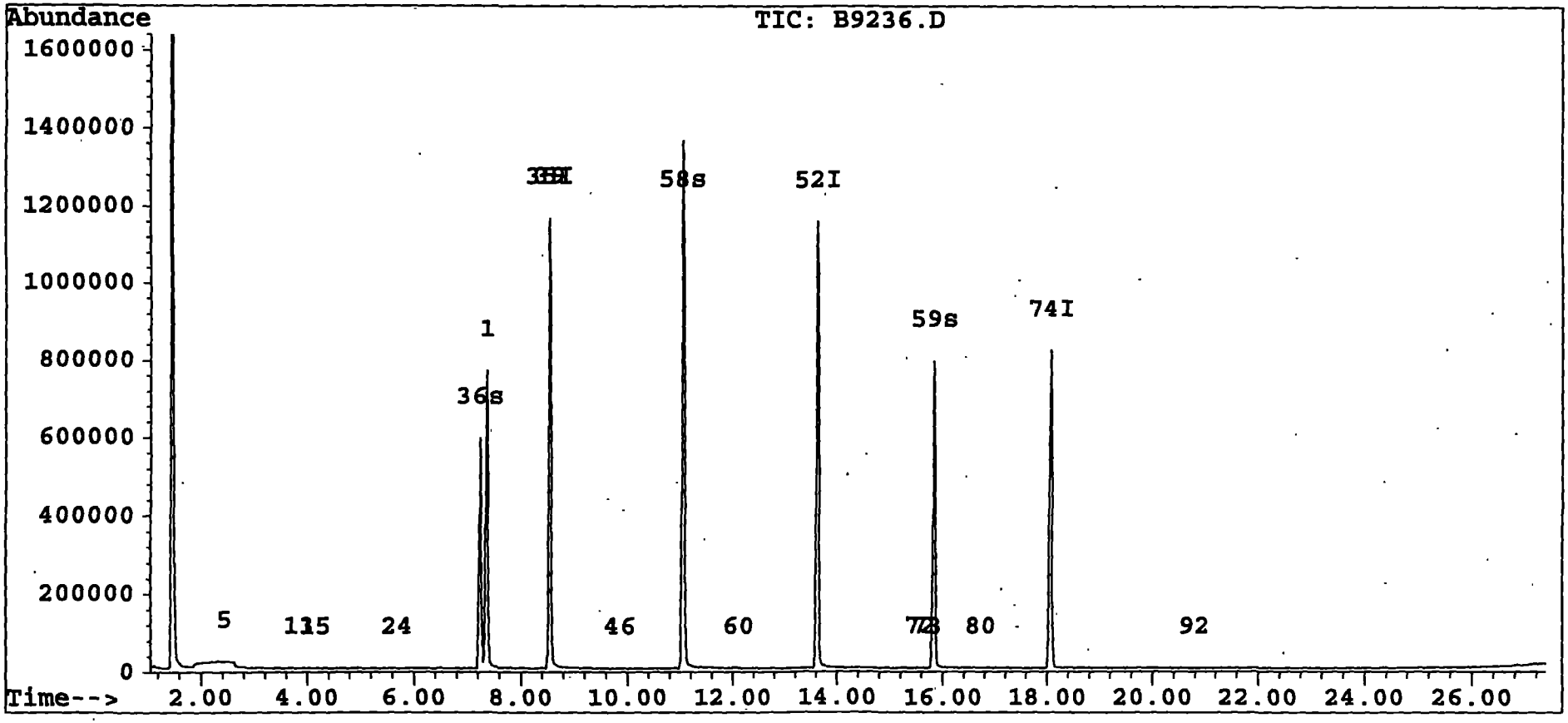
(#) = qualifier out of range (m) = manual integration

Quantitat Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9236.D
Acq On : 22 Jan 102 4:56 am
Sample : 524690 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 5:24 19102

Vial: 29
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



108

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : RF-2

Date Sampled : 01/15/02 13:45 **Order #:** 524691 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9237.D Vial: 30
Acq On : 22 Jan 102 5:33 am Operator: droot
Sample : 524691 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 6:01 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.35	168	772406	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1430852	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.62	117	1131127	50.00 ppb	-0.05
74) d4 - Dichlorobenzene	18.06	152	438959	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	511228	50.56 ppb	101.11%
58) surr3,Toluene-d8	11.04	98	1404434	53.00 ppb	106.01%
59) surr2,bfb	15.83	95	545297	51.22 ppb	102.45%
Target Compounds					Qvalue
5) Bromomethane	2.39	94	4180	~~0.80 ppb~~	~~# 12~~
13) Iodomethane	3.82	127	~~125~~	~~4.36 ppb~~	~~1~~
15) Acetonitrile	4.15	41	~~328~~	~~0.88 ppb~~	~~# 1~~
24) 2-Chloro-1,3-butadiene	5.69	53	170	~~1.20 PPB~~	~~98~~
39) Iso-Butyl Alcohol	8.48	43	150	~~0.45 ppb~~	~~85~~
46) 1,4-Dioxane	9.56	88	300	~~3.31 ppb~~	~~# 52~~
53) 4-Methyl-2-Pentanone	11.04	43	9055	~~0.79 ppb~~	~~# 1~~
60) Tetrachloroethene	12.14	166	252	~~4.29 ppb~~	~~# 72~~
72) Isopropylbenzene	15.56	105	355	~~3.30 ppb~~	~~# 86~~
73) Cyclohexanone	15.75	55	322	~~0.41 ppb~~	~~94~~
80) 1,3,5-Trimethylbenzene	16.69	105	~~348~~	~~3.75 ppb~~	~~# 66~~
92) Nitrobenzene	20.79	77	~~67~~	~~8.77 ppb~~	~~# 27~~

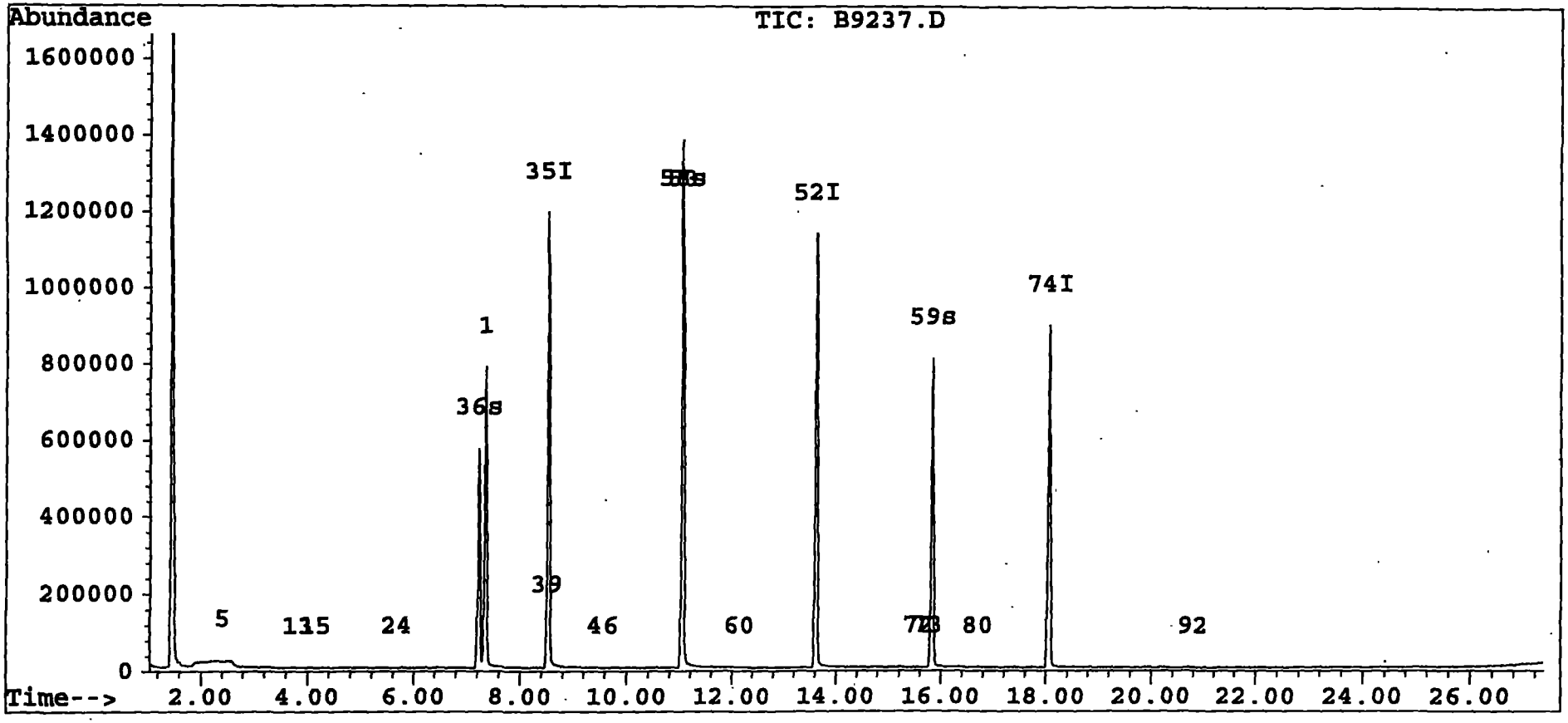
(#) = qualifier out of range (m) = manual integration

Quantitat \ Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9237.D
Acq On : 22 Jan 102 5:33 am
Sample : 524691 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 6:01 19102

Vial: 30
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



111

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW LW-6

Date Sampled : 01/15/02 16:24 **Order #:** 524692 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	98	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9238.D Vial: 31
Acq On : 22 Jan 102 6:10 am Operator: droot
Sample : 524692 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 6:38 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.35	168	765699	50.00	ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1447721	50.00	ppb	-0.05
52) d5 - Chlorobenzene	13.61	117	1142914	50.00	ppb	-0.06
74) d4 - Dichlorobenzene	18.06	152	416206	50.00	ppb	-0.05

System Monitoring Compounds						%Recovery
36) surr4,Dibrflmethane	7.23	113	514579	50.22	ppb	100.44%
58) surr3,Toluene-d8	11.04	98	1406620	52.39	ppb	104.79%
59) surr2,bfb	15.82	95	532713	48.91	ppb	97.82%

Target Compounds							Qvalue
12) Acetone	3.75	43	1560	0.47	ppb		94
13) Iodomethane	3.77	127	194	4.38	ppb		1
15) Acetonitrile	4.12	41	201	0.54	ppb	#	1
24) 2-Chloro-1,3-butadiene	5.65	53	323	1.21	PPB	#	23
39) Iso-Butyl Alcohol	8.27	43	260	0.77	ppb		98
46) 1,4-Dioxane	9.55	88	223	2.43	ppb		97
60) Tetrachloroethene	12.12	166	675	4.36	ppb	#	76
72) Isopropylbenzene	15.58	105	495	3.30	ppb		95
73) Cyclohexanone	15.61	55	517	0.65	ppb		89
80) 1,3,5-Trimethylbenzene	16.69	105	435	3.75	ppb		90
92) Nitrobenzene	20.75	77	923	9.64	ppb	#	79

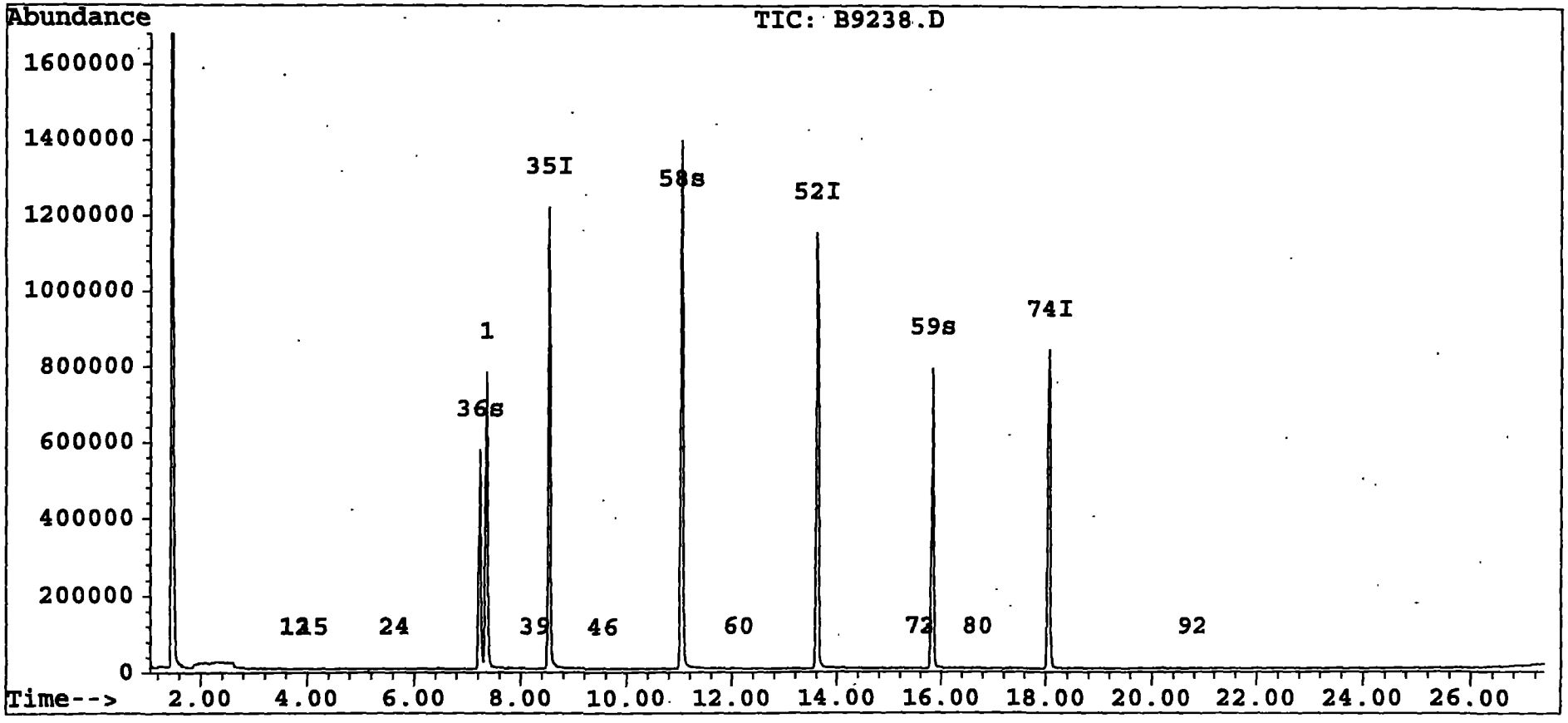
(#) = qualifier out of range (m) = manual integration

Quantitat ı Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9238.D
Acq On : 22 Jan 102 6:10 am
Sample : 524692 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 6:38 19102

Vial: 31
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



114

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-7

Date Sampled : 01/16/02 09:45 **Order #:** 524693 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	107	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9239.D Vial: 32
Acq On : 22 Jan 102 6:45 am Operator: droot
Sample : 524693 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 7:13 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.35	168	751086	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1438326	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.61	117	1126470	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	414513	50.00 ppb	-0.06
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	518426	51.13 ppb	102.27%
58) surr3,Toluene-d8	11.03	98	1404185	53.28 ppb	106.55%
59) surr2,bfb	15.83	95	541717	51.05 ppb	102.11%
Target Compounds					Qvalue
12) Acetone	3.75	43	1847	~~0.57 ppb #~~	~~86~~
13) Iodomethane	3.84	127	252	~~4.39 ppb~~	~~1~~
15) Acetonitrile	4.14	41	220	~~0.61 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.30	53	294	~~1.21 PPB~~	~~98~~
39) Iso-Butyl Alcohol	8.40	43	1000	~~2.99 ppb #~~	~~58~~
46) 1,4-Dioxane	9.58	88	107	~~1.17 ppb #~~	~~71~~
60) Tetrachloroethene	12.14	166	278	~~4.30 ppb #~~	~~64~~
72) Isopropylbenzene	15.56	105	104	~~3.28 ppb #~~	~~1~~
73) Cyclohexanone	15.72	55	464	~~0.59 ppb~~	~~88~~
80) 1,3,5-Trimethylbenzene	16.67	105	306	~~3.75 ppb #~~	~~49~~
92) Nitrobenzene	20.72	77	276	~~8.99 ppb #~~	~~27~~

1/28

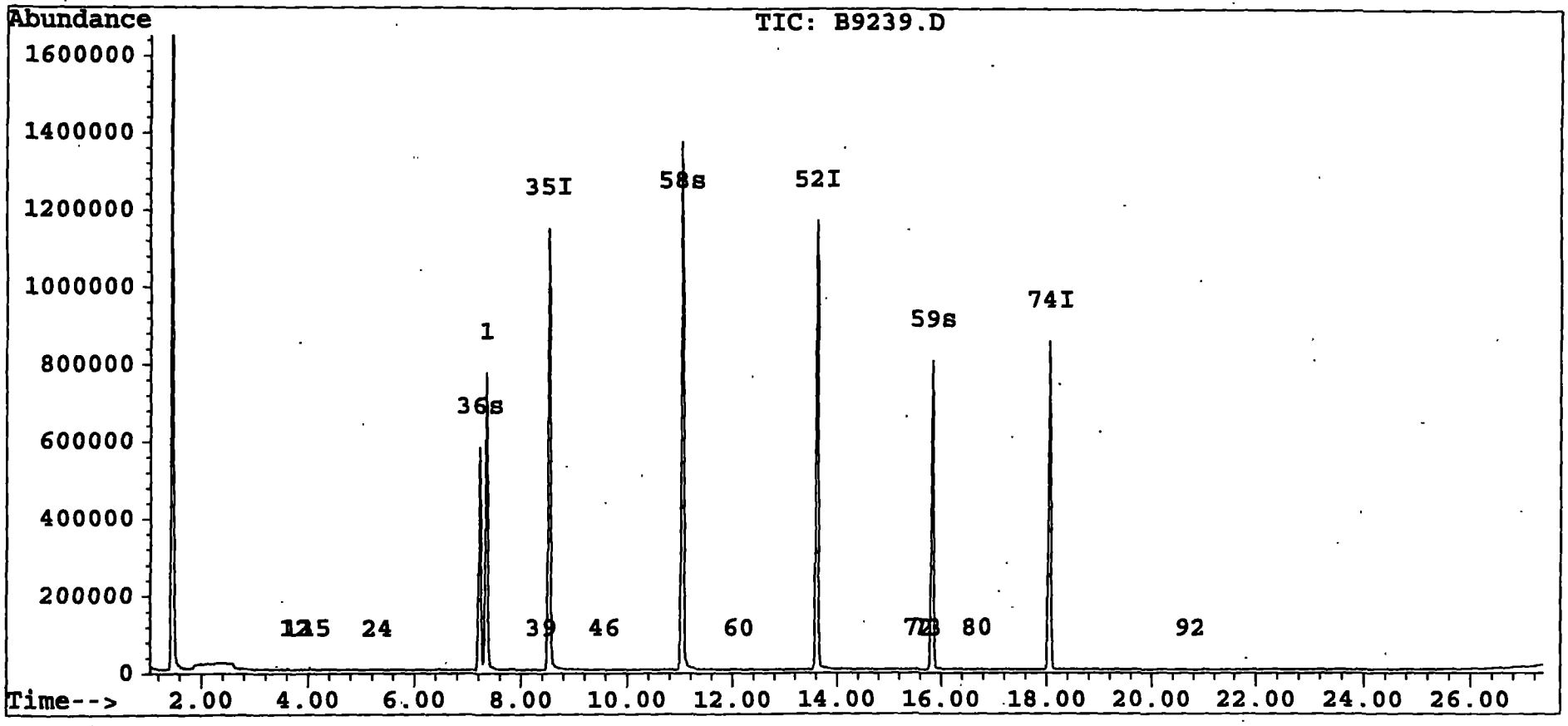
(#) = qualifier out of range (m) = manual integration

Quantitat ı Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9239.D
Acq On : 22 Jan 102 6:45 am
Sample : 524693 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 7:13 19102

Vial: 32
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-4

Date Sampled : 01/16/02 09:00 **Order #:** 524694 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.2 J	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9240.D Vial: 33
Acq On : 22 Jan 102 7:22 am Operator: droot
Sample : 524694 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 7:50 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.35	168	762940	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1420858	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.61	117	1124865	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	436461	50.00 ppb	-0.06
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	511030	50.99 ppb	101.98%
58) surr3,Toluene-d8	11.03	98	1387737	52.56 ppb	105.12%
59) surr2,bfb	15.82	95	534735	50.25 ppb	100.51%
Target Compounds					Qvalue
5) Bromomethane	2.38	94	2118	~~0.41 ppb~~	~~# 14~~
12) Acetone	3.74	43	3509	~~1.07 ppb~~	~~# 68~~
13) Iodomethane	3.87	127	349	~~4.42 ppb~~	~~1~~
15) Acetonitrile	4.16	41	350	~~0.95 ppb~~	~~# 1~~
24) 2-Chloro-1,3-butadiene	5.68	53	173	~~1.20 PPB~~	~~# 23~~
39) Iso-Butyl Alcohol	8.22	43	~~168~~	~~0.51 ppb~~	~~81~~
40) Benzene	7.85	78	31141	1.22 ppb	97
46) 1,4-Dioxane	9.24	88	385	~~4.27 ppb~~	~~92~~
60) Tetrachloroethene	12.13	166	1031	~~4.42 ppb~~	~~91~~
72) Isopropylbenzene	15.57	105	267	~~3.29 ppb~~	~~# 49~~
80) 1,3,5-Trimethylbenzene	16.36	105	64	~~3.74 ppb~~	~~98~~
92) Nitrobenzene	20.73	77	~~772~~	~~9.45 ppb~~	~~# 52~~

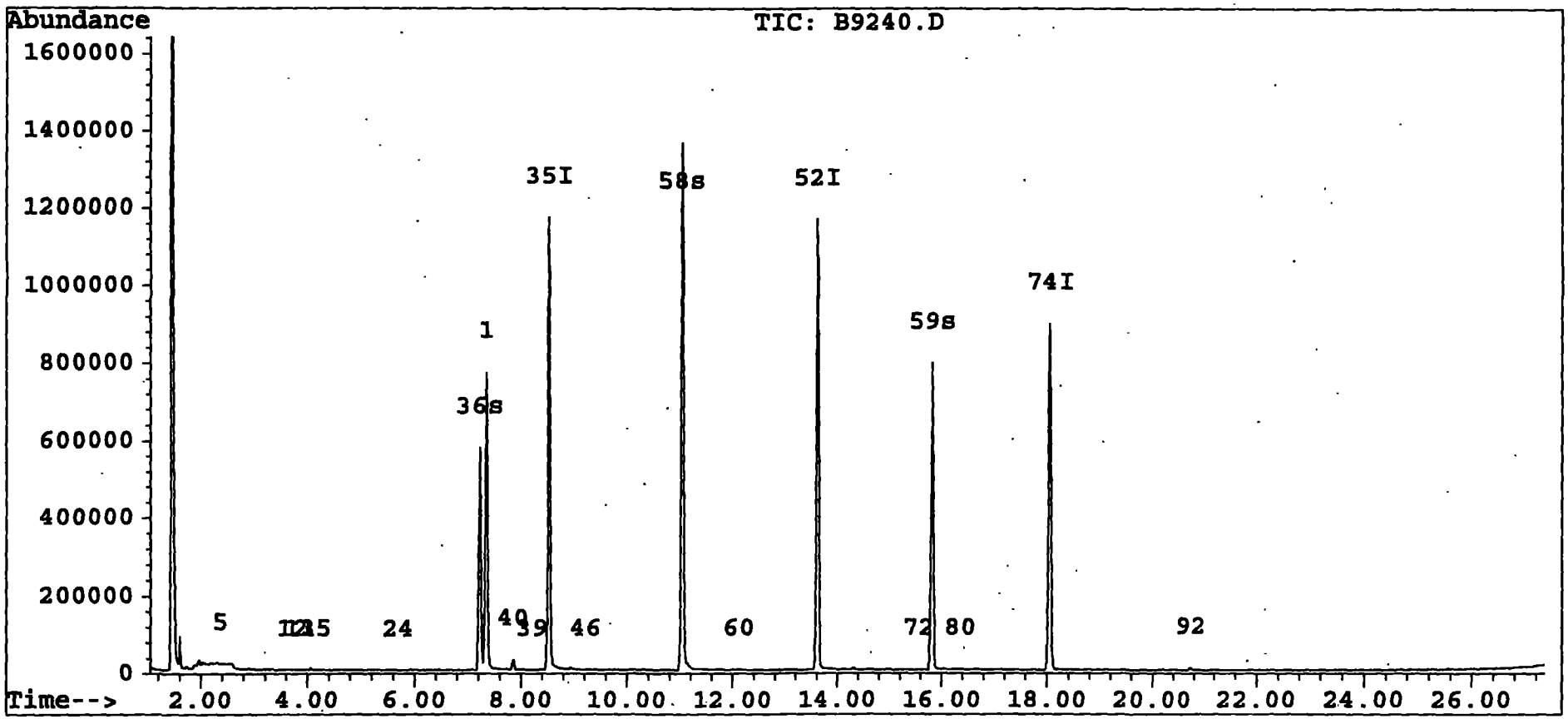
(#) = qualifier out of range (m) = manual integration

Quantitat Report

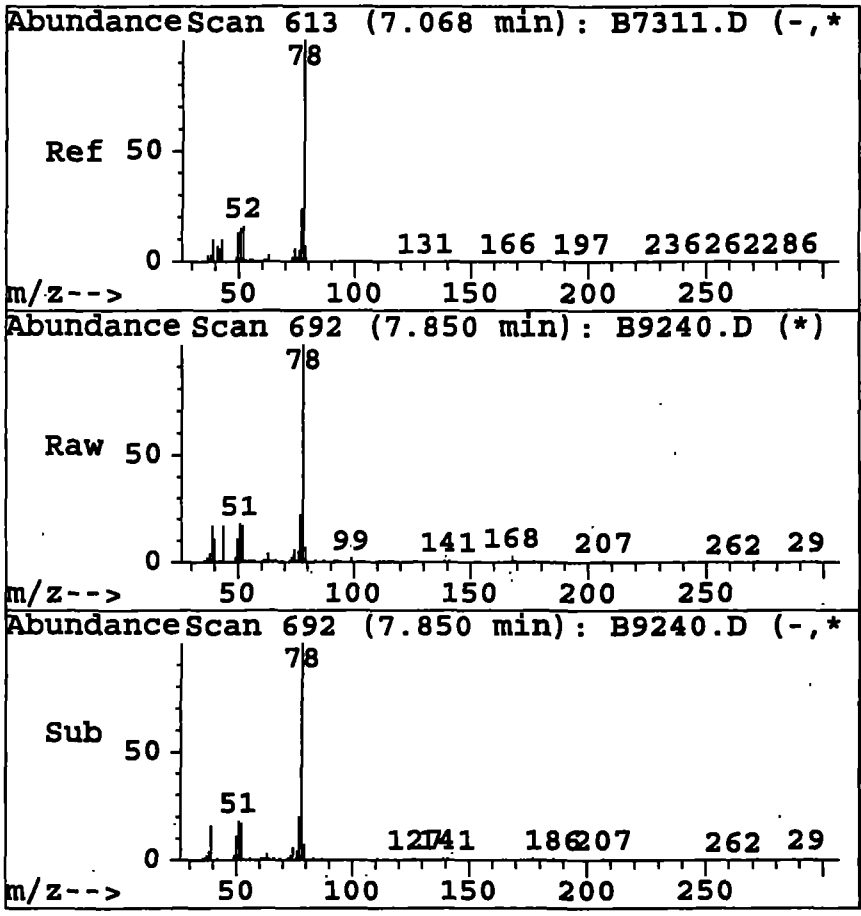
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9240.D
Acq On : 22 Jan 102 7:22 am
Sample : 524694 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 7:50 19102

Vial: 33
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



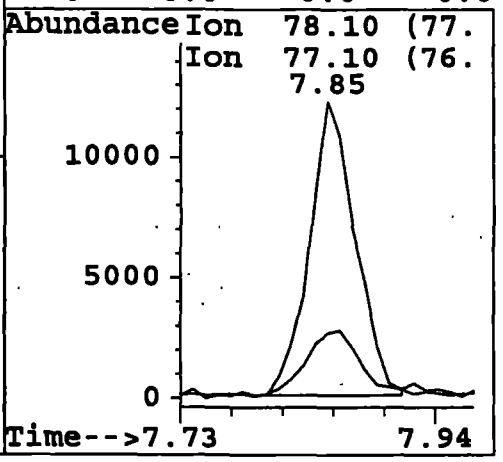
120



#40
Benzene
Concen: 1.22 ppb
RT: 7.85 min Scan# 692
Delta R.T. -0.05 min
Lab File: B9240.D
Acq: 22 Jan 102 7:22 am

Tgt Ion:78.1 Resp: 31141

Ion	Ratio	Lower	Upper
78	100		
77	21.9	16.5	30.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-5

Date Sampled : 01/16/02 08:30 **Order #:** 524695 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9248.D Vial: 2
Acq On : 22 Jan 102 1:05 pm Operator: droot
Sample : 524695 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 13:33 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	775501	50.00 ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1444412	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1149077	50.00 ppb	-0.07
74) d4 - Dichlorobenzene	18.05	152	446639	50.00 ppb	-0.06

System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	521708	51.27 ppb	102.54%
58) surr3,Toluene-d8	11.03	98	1411600	52.27 ppb	104.53%
59) surr2,bfb	15.82	95	552749	51.07 ppb	102.15%

Target Compounds						Qvalue
13) Iodomethane	3.79	127	284	~~4.40 ppb~~		~~1~~
15) Acetonitrile	4.15	41	578	~~1.55 ppb~~	~~#~~	~~1~~
18) TBA	4.64	59	1016	~~1.11 ppb~~	~~#~~	~~70~~
24) 2-Chloro-1,3-butadiene	5.64	53	800	~~1.25 PPB~~	~~#~~	~~46~~
39) Iso-Butyl Alcohol	8.38	43	3229	~~9.63 ppb~~		~~78~~
42) N-Heptane	8.38	43	3673	0.55 ppb		98
46) 1,4-Dioxane	9.59	88	790	~~8.62 ppb~~	~~#~~	~~66~~
60) Tetrachloroethene	12.12	166	627	~~4.35 ppb~~	~~#~~	~~36~~
72) Isopropylbenzene	15.29	105	216	~~3.29 ppb~~		~~95~~
73) Cyclohexanone	15.46	55	582	~~0.73 ppb~~		~~91~~
80) 1,3,5-Trimethylbenzene	16.99	105	294	3.75 ppb		98
92) Nitrobenzene	20.69	77	519	~~9.20 ppb~~	~~#~~	~~35~~
93) 1,2,4-Tcbenzene	21.99	180	1801	0.42 ppb		95
94) Hexachlorobt	22.38	225	2193	1.31 ppb	#	84
96) 1,2,3-Tclbenzene	22.95	180	2222	0.56 ppb	#	51

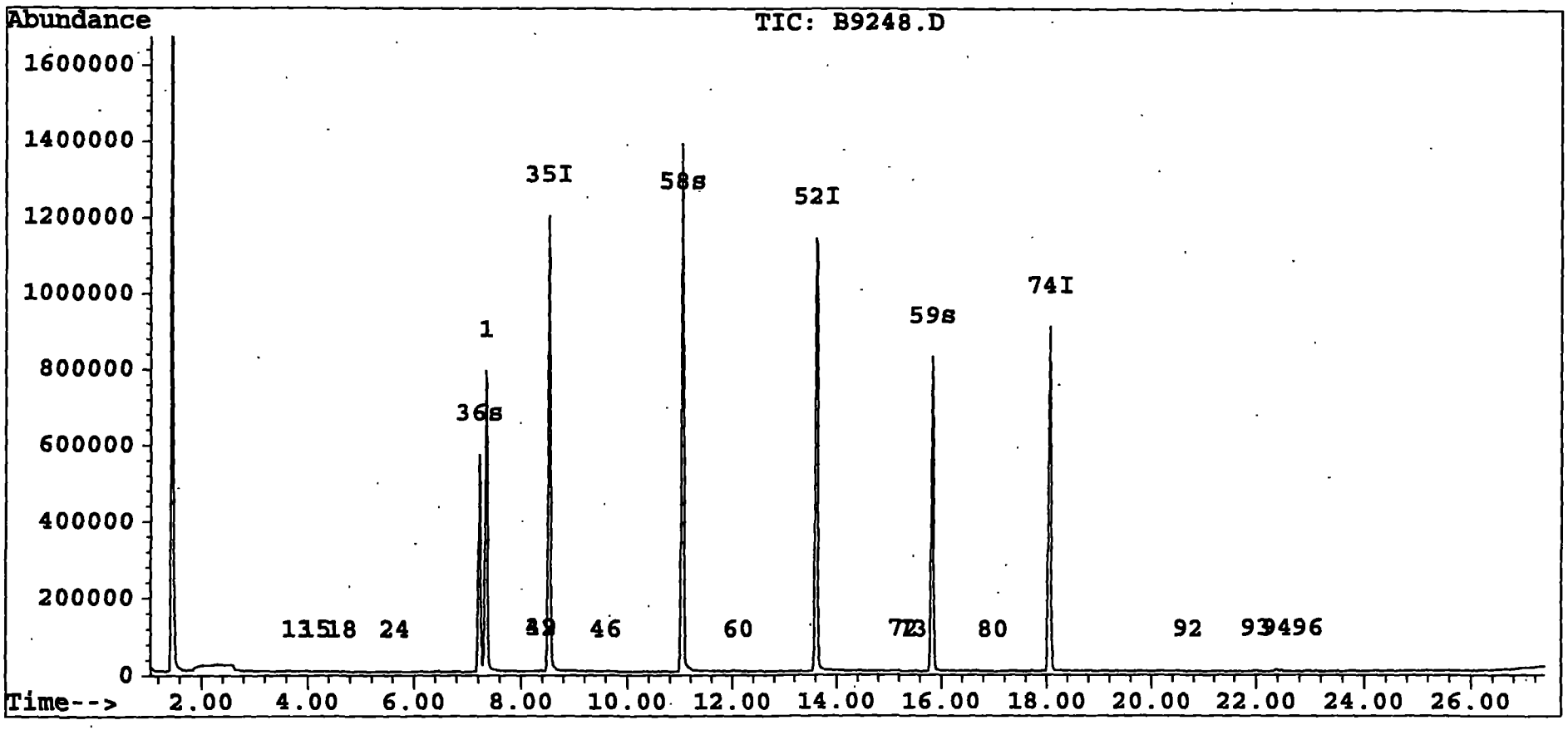
(#) = qualifier out of range (m) = manual integration

Quantitat \ Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9248.D
Acq On : 22 Jan 102 1:05 pm
Sample : 524695 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 13:33 19102

Vial: 2
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



124

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW MI-1

Date Sampled : 01/16/02 08:45 **Order #:** 524696 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	93	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9249.D Vial: 3
Acq On : 22 Jan 102 1:41 pm Operator: droot
Sample : 524696 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 14:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	777732	50.00 ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1460511	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1161482	50.00 ppb	-0.07
74) d4 - Dichlorobenzene	18.05	152	402330	50.00 ppb	-0.06
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	521852	50.56 ppb	101.12%
58) surr3,Toluene-d8	11.03	98	1416298	51.76 ppb	103.52%
59) surr2,bfb	15.82	95	521713	46.46 ppb	92.91%
Target Compounds					Qvalue
12) Acetone	3.76	43	1755	~~0.53 ppb~~	~~# 64~~
13) Iodomethane	3.78	127	225	~~4.38 ppb~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.66	53	408	~~1.22 PPB~~	~~# 23~~
39) Iso-Butyl Alcohol	8.37	43	2352	~~6.94 ppb~~	~~91~~
46) 1,4-Dioxane	9.53	88	273	~~2.95 ppb~~	~~# 12~~
60) Tetrachloroethene	12.12	166	940	~~4.40 ppb~~	~~# 79~~
72) Isopropylbenzene	15.55	105	756	~~3.31 ppb~~	~~# 74~~
80) 1,3,5-Trimethylbenzene	16.69	105	781	~~3.77 ppb~~	~~97~~
92) Nitrobenzene	20.71	77	464	~~9.19 ppb~~	~~# 46~~

1/28

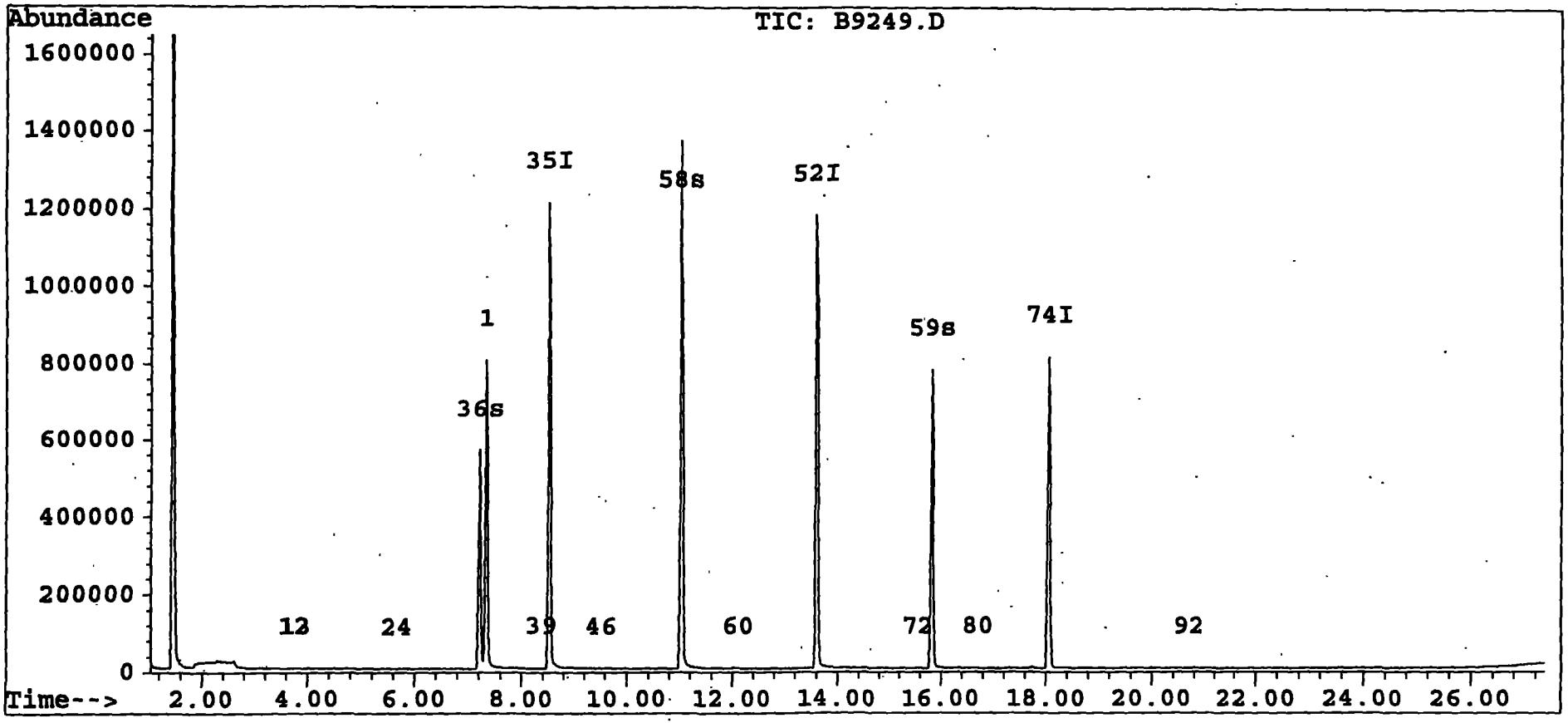
(#) = qualifier out of range (m) = manual integration

Quantitat Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9249.D
Acq On : 22 Jan 102 1:41 pm
Sample : 524696 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 14:09 19102

Vial: 3
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



127

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-1

Date Sampled : 01/16/02 09:15 **Order #:** 524697 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	97	%
TOLUENE-D8	(87 - 108 %)	108	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9250.D Vial: 4
Acq On : 22 Jan 102 2:17 pm Operator: droot
Sample : 524697 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 14:45 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.35	168	772342	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.52	114	1441806	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.61	117	1133197	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	405080	50.00 ppb	-0.06
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.22	113	516248	50.70 ppb	101.39%
58) surr3,Toluene-d8	11.03	98	1426934	53.99 ppb	107.97%
59) surr2,bfb	15.82	95	525704	48.59 ppb	97.18%
Target Compounds					**Qvalue**
5) Bromomethane	2.35	94	4227	0.81 ppb #	16
13) Iodomethane	3.81	127	259	4.39 ppb	1
15) Acetonitrile	4.15	41	441	1.18 ppb #	1
24) 2-Chloro-1,3-butadiene	5.63	53	160	1.20 PPB	86
39) Iso-Butyl Alcohol	8.61	43	370	1.11 ppb	91
46) 1,4-Dioxane	9.76	88	155	1.69 ppb	79
53) 4-Methyl-2-Pentanone	11.03	43	9462	0.83 ppb #	1
60) Tetrachloroethene	12.12	166	1308	4.46 ppb #	74
72) Isopropylbenzene	15.69	105	139	3.29 ppb	97
80) 1,3,5-Trimethylbenzene	16.54	105	142	3.74 ppb	92
92) Nitrobenzene	20.71	77	556	9.29 ppb #	27

.122

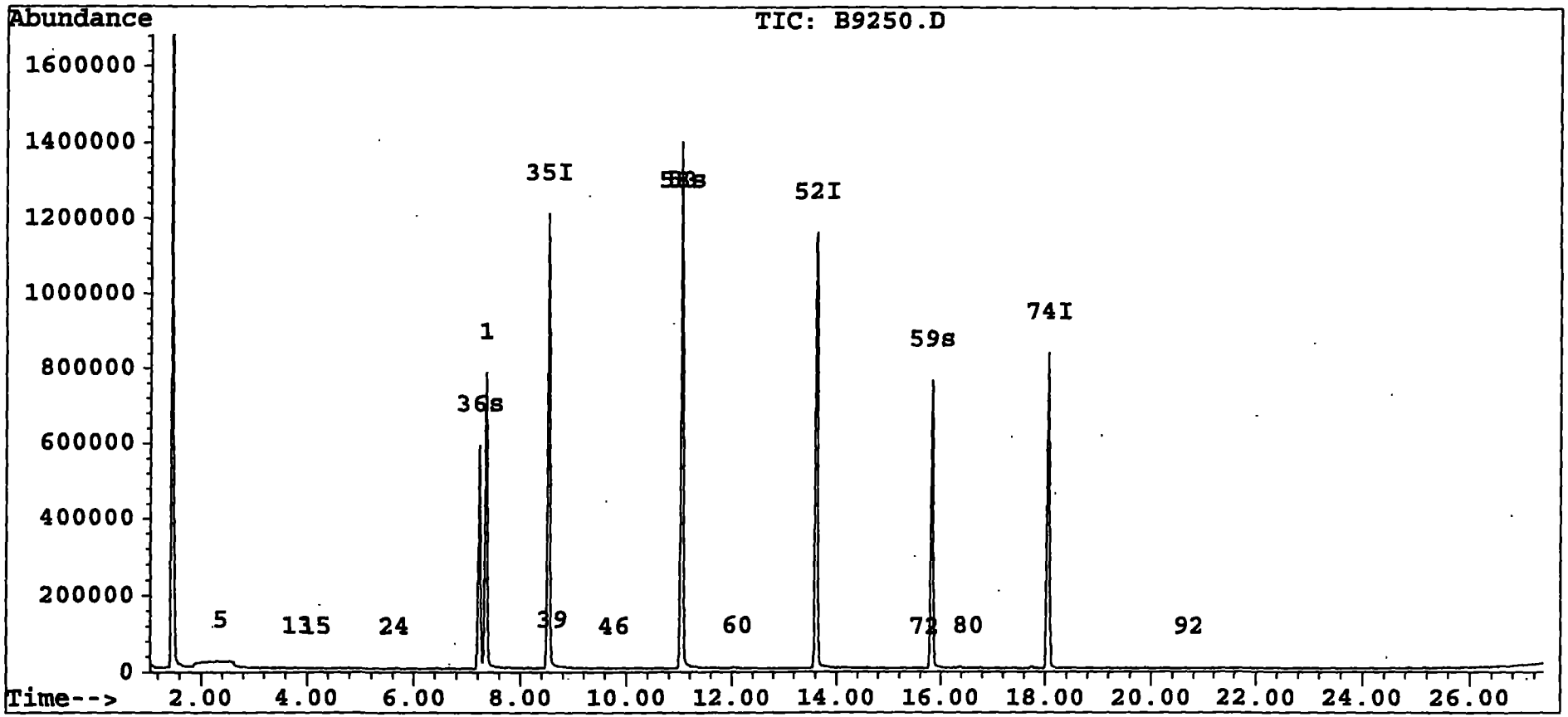
(#) = qualifier out of range (m) = manual integration

Quantitat Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9250.D
Acq On : 22 Jan 102 2:17 pm
Sample : 524697 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 14:45 19102

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



130

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : MW M-2

Date Sampled : 01/16/02 08:00 **Order #:** 524698 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	94	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9251.D Vial: 5
Acq On : 22 Jan 102 2:53 pm Operator: droot
Sample : 524698 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 15:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	765465	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1438742	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.60	117	1139375	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	400463	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.23	113	517361	50.98 ppb	101.96%
58) surr3,Toluene-d8	11.04	98	1397807	52.18 ppb	104.35%
59) surr2,bfb	15.82	95	514212	46.77 ppb	93.53%
Target Compounds					Qvalue
5) Bromomethane	2.35	94	2477	~~0.48 ppb # 15~~	
12) Acetone	3.74	43	1758	~~0.54 ppb # 74~~	
13) Iodomethane	3.83	127	567	~~4.47 ppb 5~~	
15) Acetonitrile	4.12	41	161	~~0.44 ppb # 1~~	
24) 2-Chloro-1,3-butadiene	5.67	53	240	~~1.20 PPB # 23~~	
39) Iso-Butyl Alcohol	8.38	43	1057	~~3.16 ppb 91~~	
46) 1,4-Dioxane	9.78	88	207	~~2.27 ppb 99~~	
53) 4-Methyl-2-Pentanone	11.03	43	9745	~~0.85 ppb # 1~~	
60) Tetrachloroethene	12.12	166	420	~~4.32 ppb # 48~~	
72) Isopropylbenzene	15.56	105	576	~~3.30 ppb # 49~~	
73) Cyclohexanone	15.70	55	319	~~0.40 ppb 95~~	
80) 1,3,5-Trimethylbenzene	16.57	105	214	~~3.75 ppb 100~~	
92) Nitrobenzene	20.74	77	162	~~8.88 ppb # 27~~	

DW 1/28

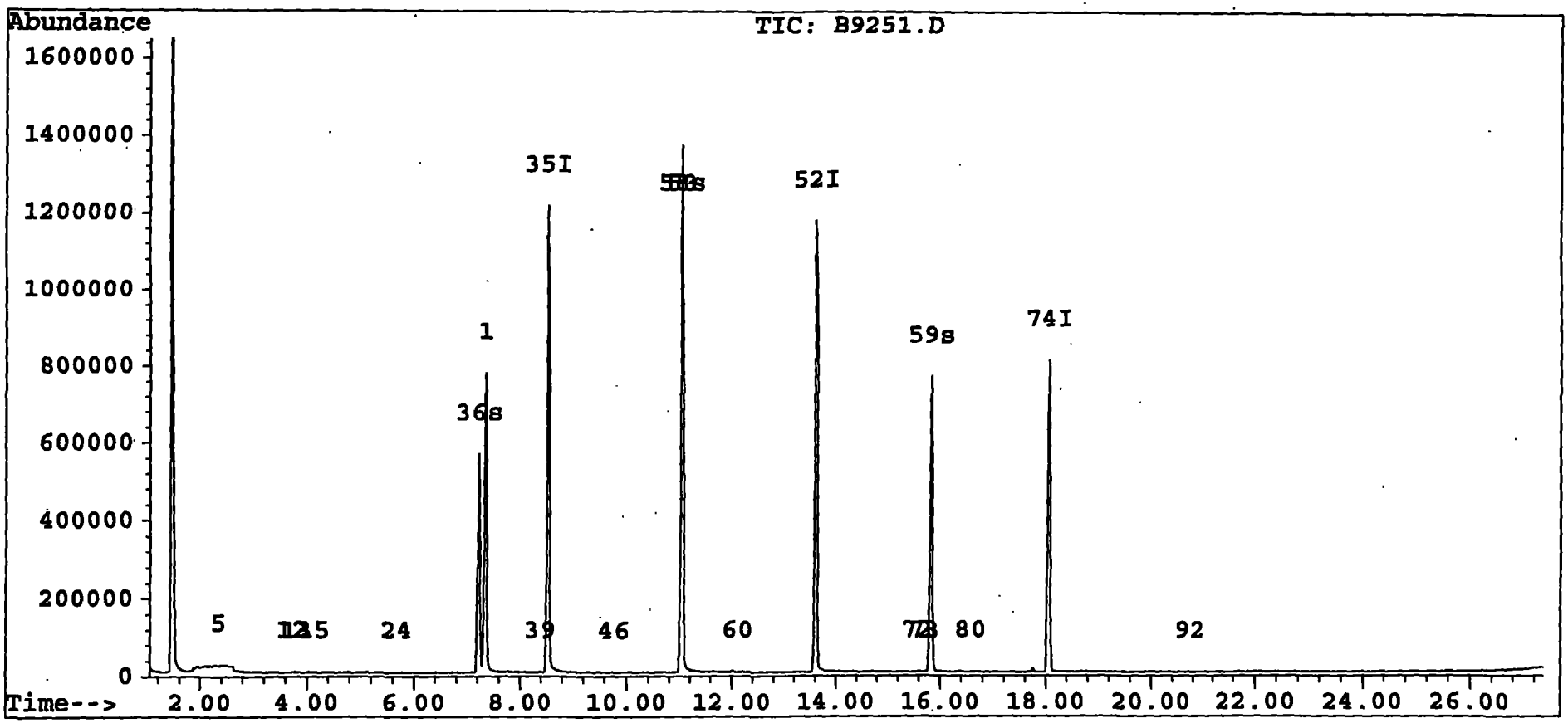
(#) = qualifier out of range (m) = manual integration

Quantitat Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9251.D
Acq On : 22 Jan 102 2:53 pm
Sample : 524698 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 15:21 19102

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



133

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : TRIP BLANK-1

Date Sampled : 01/16/02 **Order #:** 524706 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	95	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9252.D Vial: 6
Acq On : 22 Jan 102 3:30 pm Operator: droot
Sample : 524706 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 15:58 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	765580	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1430854	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.60	117	1149179	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	400951	50.00 ppb	-0.05
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	513651	50.87 ppb	101.73%
58) surr3,Toluene-d8	11.03	98	1423088	52.82 ppb	105.64%
59) surr2,bfb	15.82	95	522536	47.26 ppb	94.52%
Target Compounds					Qvalue
5) Bromomethane	2.33	94	2185	~~0.42 ppb #~~	~~4~~
12) Acetone	3.74	43	2424	~~0.74 ppb #~~	~~69~~
13) Iodomethane	3.86	127	293	~~4.40 ppb~~	~~12~~
15) Acetonitrile	4.15	41	184	~~0.50 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.66	53	323	~~1.21 PPB~~	~~94~~
39) Iso-Butyl Alcohol	8.47	43	473	~~1.42 ppb~~	~~80~~
46) 1,4-Dioxane	9.65	88	612	~~6.74 ppb~~	~~94~~
53) 4-Methyl-2-Pentanone	11.04	43	8534	~~0.74 ppb #~~	~~1~~
60) Tetrachloroethene	12.14	166	167	~~4.28 ppb #~~	~~1~~
72) Isopropylbenzene	15.16	105	93	~~3.28 ppb~~	~~94~~
80) 1,3,5-Trimethylbenzene	16.59	105	83	~~3.74 ppb~~	~~94~~
92) Nitrobenzene	20.72	77	299	~~9.02 ppb #~~	~~27~~

1/22

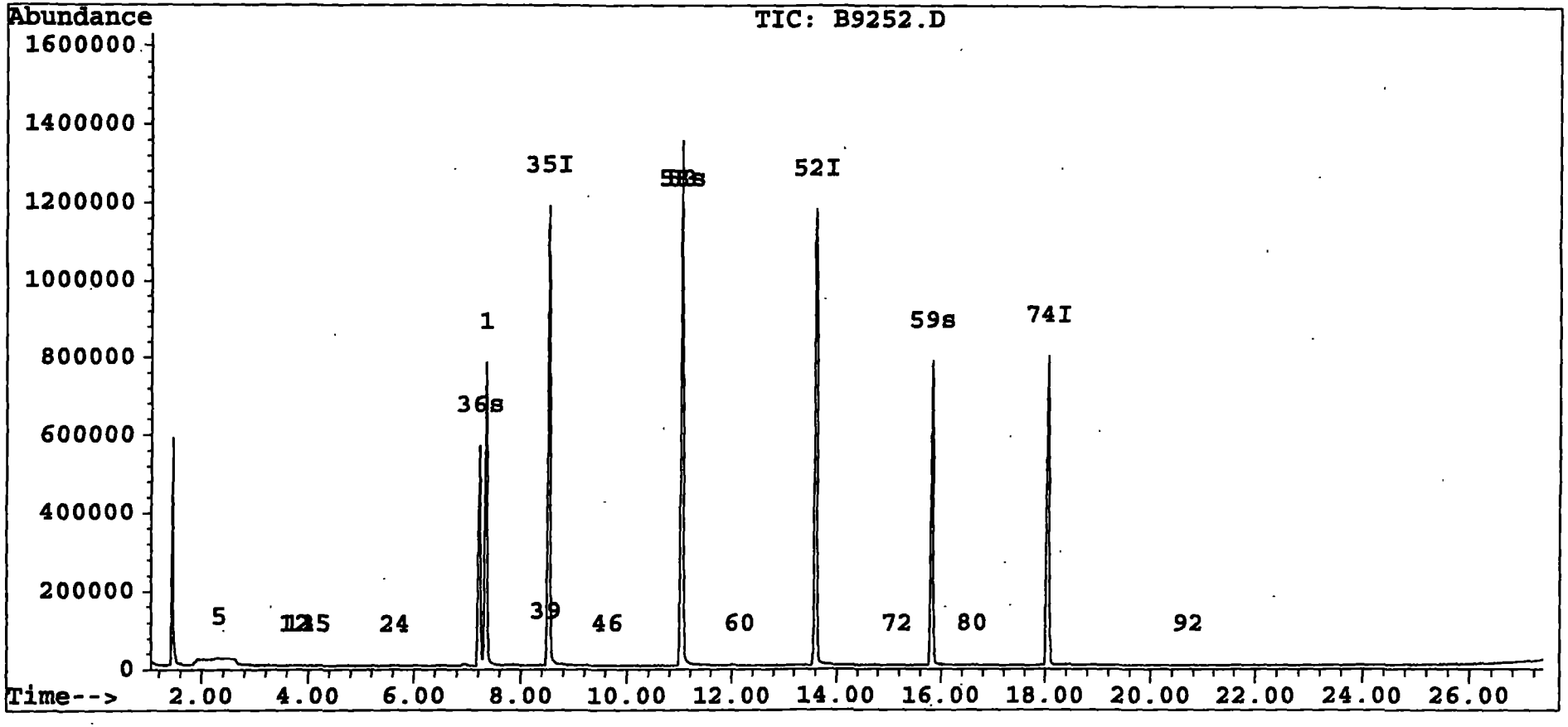
(#) = qualifier out of range (m) = manual integration

Quantita' 1 Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9252.D
Acq On : 22 Jan 102 3:30 pm
Sample : 524706 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 15:58 19102

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



139

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : TRIP BLANK-2

Date Sampled : 01/16/02 **Order #:** 524707 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	97	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9253.D Vial: 7
Acq On : 22 Jan 102 4:06 pm Operator: droot
Sample : 524707 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 16:34 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	763975	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1462930	50.00 ppb	-0.05
52) d5 - Chlorobenzene	13.61	117	1141351	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.04	152	423364	50.00 ppb	-0.06
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.22	113	508100	48.73 ppb	97.46%
58) surr3,Toluene-d8	11.03	98	1407588	52.54 ppb	105.07%
59) surr2,bfb	15.82	95	538649	49.76 ppb	99.51%
Target Compounds					**Qvalue**
5) Bromomethane	2.48	94	2986	~~0.58 ppb # 4~~	
13) Iodomethane	3.81	127	665	~~4.49 ppb 1~~	
24) 2-Chloro-1,3-butadiene	5.63	53	304	~~1.21 PPB # 23~~	
39) Iso-Butyl Alcohol	8.39	43	1020	~~3.00 ppb 95~~	
46) 1,4-Dioxane	9.57	88	178	~~1.92 ppb 94~~	
53) 4-Methyl-2-Pentanone	11.03	43	9388	~~0.82 ppb # 1~~	
60) Tetrachloroethene	12.16	166	145	~~4.28 ppb # 1~~	
72) Isopropylbenzene	15.57	105	93	~~3.28 ppb # 1~~	
73) Cyclohexanone	15.67	55	417	~~0.53 ppb 90~~	
80) 1,3,5-Trimethylbenzene	16.71	105	345	~~3.75 ppb 94~~	
92) Nitrobenzene	20.72	77	468	~~9.17 ppb # 27~~	

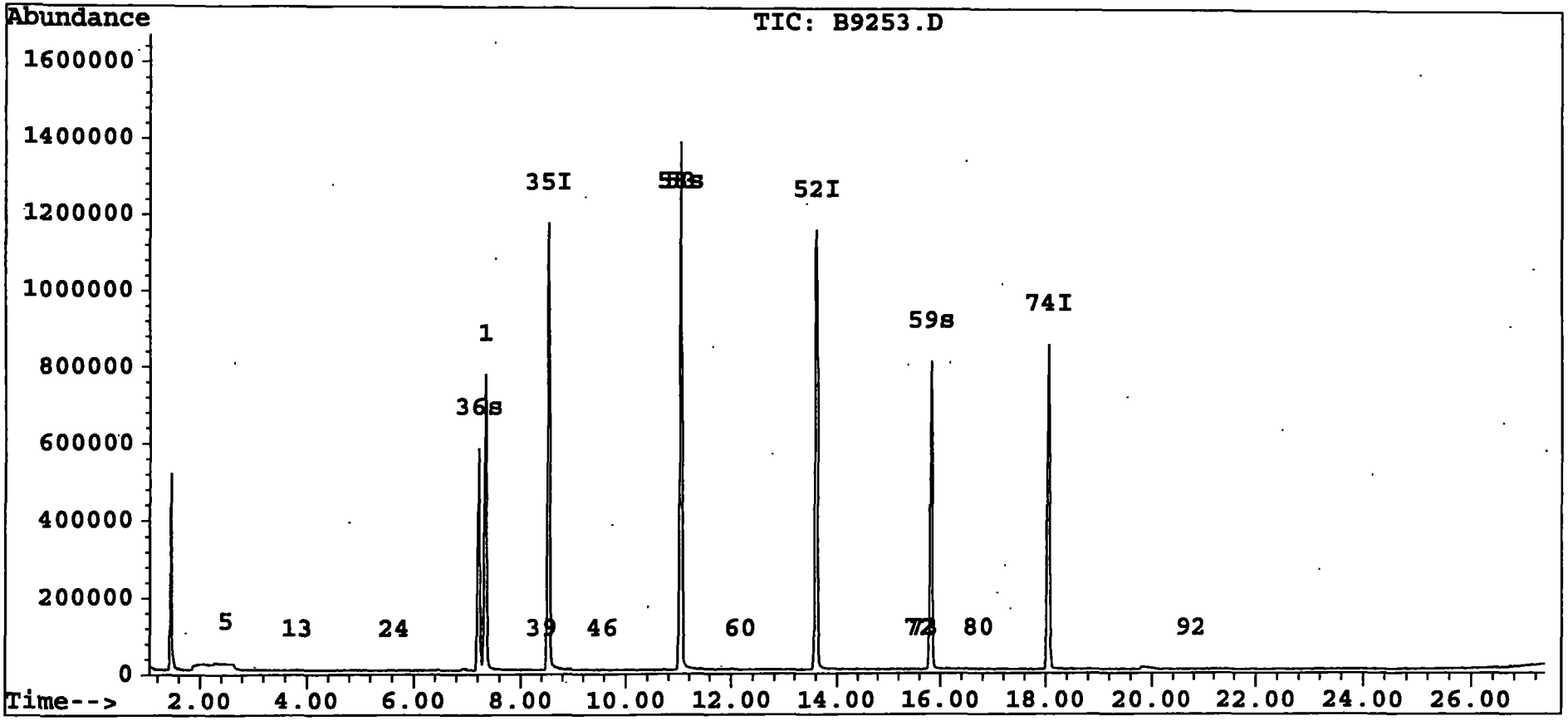
2/22/23

(#) = qualifier out of range (m) = manual integration

Quantit' 'on Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9253.D Vial: 7
Acq On : 22 Jan 102 4:06 pm Operator: droot
Sample : 524707 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 16:34 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



139

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : TRIP BLANK-3

Date Sampled : 01/16/02 **Order #:** 524708 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	103	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9254.D
Acq On : 22 Jan 102 4:43 pm
Sample : 524708 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 17:11 19102

Vial: 8
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	754692	50.00 ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1421970	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1136984	50.00 ppb	-0.07
74) d4 - Dichlorobenzene	18.04	152	443819	50.00 ppb	-0.07
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.22	113	515045	51.46 ppb	102.91%
58) surr3,Toluene-d8	11.03	98	1408183	52.83 ppb	105.66%
59) surr2,bfb	15.82	95	544267	50.73 ppb	101.47%
Target Compounds					**Qvalue**
5) Bromomethane	2.34	94	4425	~~0.87 ppb # 10~~	
13) Iodomethane	3.79	127	138	~~4.36 ppb 1~~	
15) Acetonitrile	4.11	41	200	~~0.55 ppb # 1~~	
24) 2-Chloro-1,3-butadiene	5.65	53	233	~~1.20 PPB 84~~	
39) Iso-Butyl Alcohol	8.37	43	1163	~~3.52 ppb 77~~	
46) 1,4-Dioxane	9.77	88	237	~~2.63 ppb 95~~	
60) Tetrachloroethene	12.14	166	146	~~4.28 ppb # 28~~	
72) Isopropylbenzene	15.55	105	552	~~3.30 ppb # 49~~	
80) 1,3,5-Trimethylbenzene	17.06	105	134	~~3.74 ppb 94~~	
92) Nitrobenzene	20.76	77	364	~~9.05 ppb # 27~~	

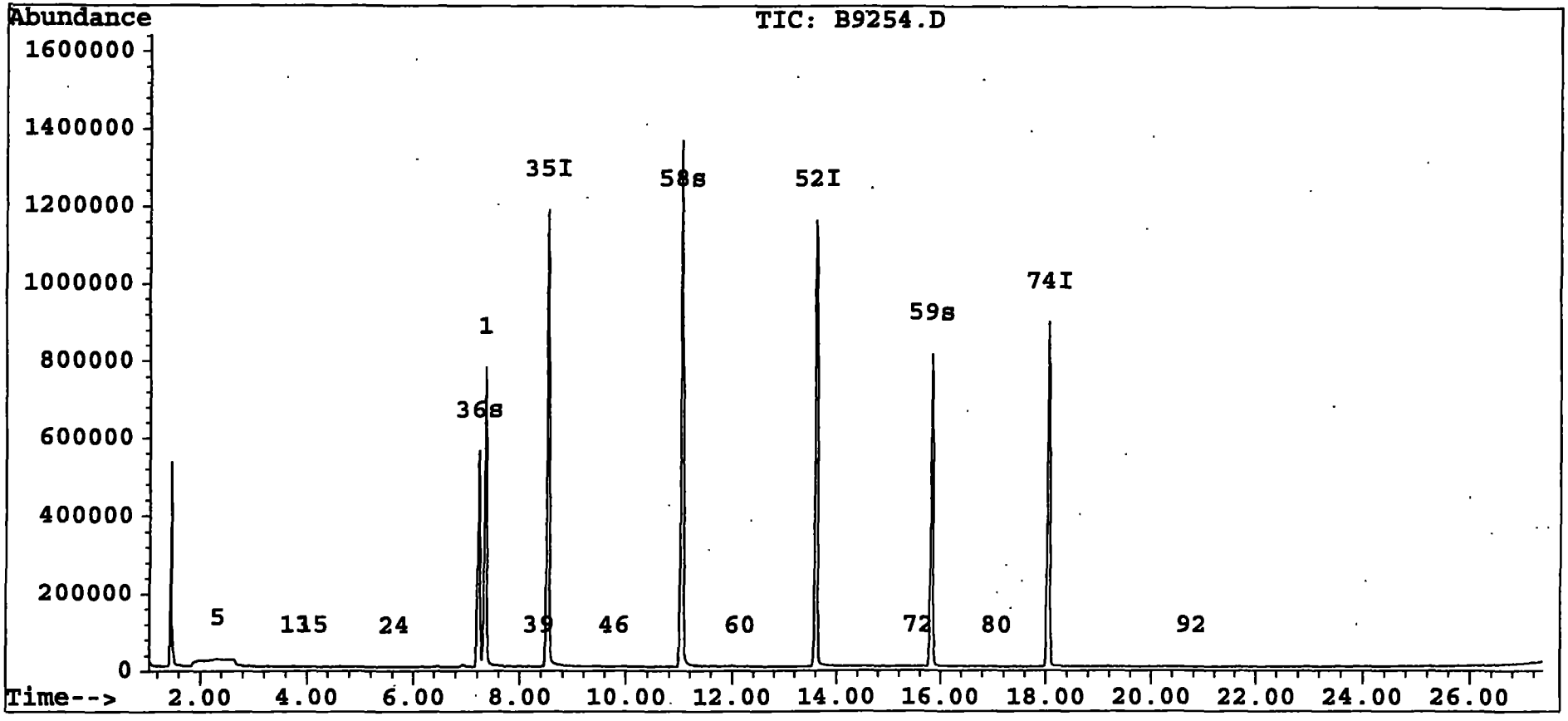
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9254.D
Acq On : 22 Jan 102 4:43 pm
Sample : 524708 1.0
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 22 17:11 19102

Vial: 8
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



142

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2 G9011.E.01.0008.10
Client Sample ID : TRIP BLANK-4

Date Sampled : 01/16/02 **Order #:** 524709 **Sample Matrix:** WATER
Date Received: 01/17/02 **Submission #:** R2210310 **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	105	%
TOLUENE-D8	(87 - 108 %)	106	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9255.D Vial: 9
Acq On : 22 Jan 102 5:19 pm Operator: droot
Sample : 524709 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 17:47 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	754573	50.00 ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1429140	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1126153	50.00 ppb	-0.07
74) d4 - Dichlorobenzene	18.04	152	435509	50.00 ppb	-0.07
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	511409	50.66 ppb	101.32%
58) surr3,Toluene-d8	11.03	98	1398113	53.00 ppb	105.99%
59) surr2,bfb	15.82	95	553003	52.52 ppb	105.05%
Target Compounds					Qvalue
12) Acetone	3.75	43	3246	~~1.00 ppb #~~	~~78~~
13) Iodomethane	3.84	127	217	~~4.38 ppb~~	~~1~~
15) Acetonitrile	4.12	41	363	~~1.00 ppb #~~	~~1~~
18) TBA	4.64	59	402	~~0.45 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.58	53	532	~~1.23 PPB~~	~~87~~
39) Iso-Butyl Alcohol	8.37	43	662	~~2.00 ppb~~	~~85~~
46) 1,4-Dioxane	9.49	88	147	~~1.62 ppb~~	~~96~~
53) 4-Methyl-2-Pentanone	11.02	43	8417	~~0.74 ppb #~~	~~1~~
60) Tetrachloroethene	12.13	166	179	~~4.28 ppb #~~	~~33~~
72) Isopropylbenzene	15.53	105	362	~~3.30 ppb #~~	~~81~~
80) 1,3,5-Trimethylbenzene	16.71	105	158	~~3.74 ppb #~~	~~49~~
92) Nitrobenzene	20.69	77	670	~~9.36 ppb #~~	~~43~~

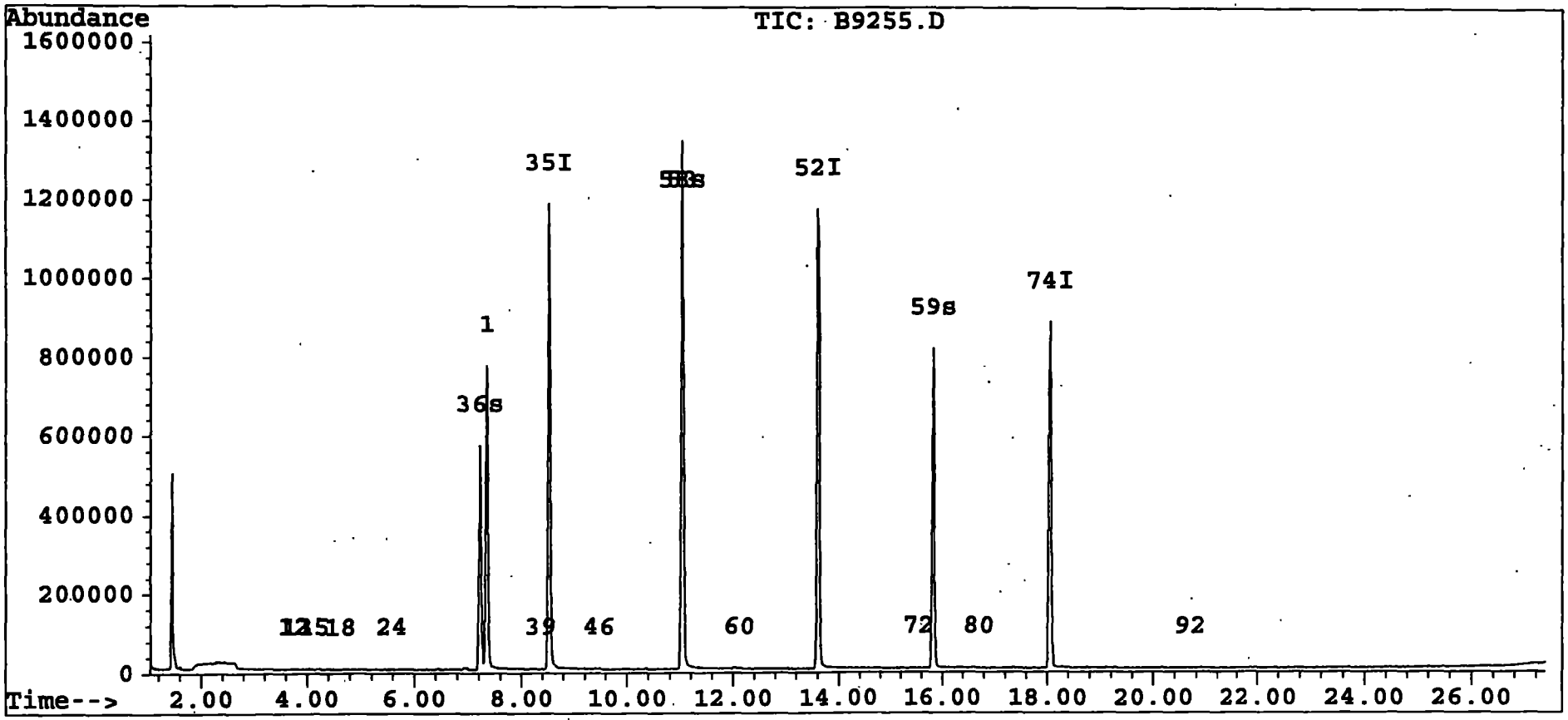
1/23

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9255.D Vial: 9
Acq On : 22 Jan 102 5:19 pm Operator: droot
Sample : 524709 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 17:47 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



145

VOLATILE ORGANICS

STANDARDS DATA

Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:59:41 2001
Response via : Initial Calibration

Calibration Files

1	=B8386.D	5	=B8387.D	20	=B8388.D
50	=B8389.D	100	=B8390.D	150	=B8391.D

		Compound	1	5	20	50	100	150	Avg	%RSD	
1)		Pentafluorobenzene	----------	----------	----------	ISTD	----------	----------	----------		
2)		Dichlorodifluoromet	0.376	0.446	0.375	0.365	0.483	0.494	0.426	12.61	
3)	p	Chloromethane	0.479	0.615	0.542	0.505	0.619	0.628	0.564	10.47	
4)	c	Vinyl Chloride	0.463	0.488	0.432	0.414	0.542	0.550	0.485	10.74	
5)		Bromomethane	0.394	0.333	0.297	0.281	0.359	0.371	0.338	11.87	
6)		Chloroethane	0.358	0.312	0.269	0.249	0.315	0.326	0.303	11.91	
7)		Trichlorofluorometh	0.481	0.566	0.480	0.463	0.604	0.612	0.536	11.54	
8)		Diethyl Ether	0.452	0.496	0.476	0.438	0.516	0.511	0.481	6.04	
9)		Acrolein	0.095	0.121	0.105	0.109	0.112	0.111	0.108	7.64	
10)		FREON 113	0.135	0.142	0.117	0.118	0.161	0.167	0.142	14.03	
11)	c	1,1-Diclethene	0.313	0.389	0.336	0.326	0.418	0.425	0.371	12.26	
12)		Acetone	0.282	0.207	0.194	0.201	0.215	0.216	0.215	14.65	
13)		Iodomethane		0.093	0.157	0.214	0.282	0.258	0.209	34.15	LR
14)		Carbon Disulfide		1.098	1.272	1.448	1.696	1.545	1.431	14.94	
15)		Acetonitrile		0.022	0.023	0.024	0.026	0.025	0.024	5.81	
16)		Allyl Chloride	0.232	0.233	0.210	0.204	0.251	0.252	0.230	8.00	
17)		Methylene Chloride	0.498	0.552	0.480	0.442	0.542	0.534	0.505	7.78	
18)		TBA	0.054	0.064	0.060	0.056	0.060	0.061	0.059	5.74	
19)		Acrylonitrile	0.240	0.282	0.268	0.254	0.274	0.271	0.263	5.70	
20)		Methyl-t-Butyl Ethe	1.266	1.537	1.432	1.318	1.543	1.514	1.432	7.60	
21)		trans-1,2-Dichloroe	0.381	0.474	0.422	0.404	0.525	0.526	0.460	12.63	
22)	p	1,1-Diclethane	0.742	0.831	0.771	0.731	0.927	0.915	0.821	9.58	
23)		Vinyl Acetate	1.256	1.245	1.129	1.089	1.152	0.971	1.103	12.51	
24)		2-Chloro-1,3-butadi		0.523	0.605	0.705	0.813	0.745	0.688	15.30	LR
25)		2,2-Dichloropropane	0.519	0.602	0.524	0.503	0.655	0.670	0.580	11.55	
26)		2-Butanone		0.419	0.351	0.388	0.384	0.393	0.383	6.35	
27)		Ethyl Acetate							0.000	-1.00	
28)		cis-1,2-Dichloroeth	0.531	0.563	0.511	0.477	0.603	0.599	0.548	8.33	
29)		Propionitrile	0.092	0.107	0.101	0.093	0.103	0.101	0.099	5.39	
30)		Methacrylonitrile	0.253	0.274	0.250	0.237	0.265	0.265	0.256	4.87	
31)		Bromochloromethane	0.288	0.295	0.260	0.238	0.284	0.274	0.271	7.44	
32)	c	Chloroform	0.753	0.831	0.740	0.696	0.852	0.851	0.787	7.71	
33)		Tetrahydrofuran		0.343	0.248	0.224	0.242	0.235	0.252	17.96	LR
34)		1,1,1-Trichloroetha	0.473	0.603	0.514	0.508	0.662	0.679	0.581	14.04	
35)	I	1,4 - Difluorobenzene	----------	----------	----------	ISTD	----------	----------	----------		
36)	s	surr4,Dibrflmethane			0.318	0.363	0.315	0.308	0.321	7.66	LR
37)		Carbontetrachloride		0.252	0.218	0.221	0.293	0.305	0.262	14.36	
38)		1,1-Dichloropropene	0.293	0.321	0.273	0.266	0.349	0.359	0.314	11.80	
39)		Iso-Butyl Alcohol	0.011	0.012	0.012	0.010	0.012	0.013	0.012	9.13	
40)		Benzene	0.769	0.954	0.836	0.789	0.996	1.013	0.899	11.07	
41)		1,2-Dichloroethane	0.326	0.362	0.340	0.309	0.367	0.358	0.343	6.12	
42)		N-Heptane	0.234	0.242	0.229	0.189	0.242	0.258	0.232	9.27	

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

Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:59:41 2001
Response via : Initial Calibration

Calibration Files
1 =B8386.D 5 =B8387.D 20 =B8388.D
50 =B8389.D 100 =B8390.D 150 =B8391.D

		Compound	1	5	20	50	100	150	Avg	%RSD	
43)		Trichloroethene	0.195	0.249	0.212	0.210	0.272	0.277	0.240	14.07	
44)	c	1,2-Diclpropane	0.259	0.313	0.285	0.263	0.321	0.320	0.295	8.88	
45)		Methyl Methacrylate	0.205	0.219	0.214	0.200	0.224	0.219	0.213	4.00	
46)		1,4-Dioxane		0.004	0.003	0.003	0.003	0.003	0.003	5.75	
47)		Dibromomethane	0.175	0.199	0.191	0.177	0.205	0.202	0.192	6.11	
48)		Bromodichloromethan	0.308	0.333	0.313	0.293	0.359	0.354	0.328	7.40	
49)		2-Nitropropane	0.112	0.111	0.109	0.102	0.112	0.111	0.109	3.59	
50)		2-Chloroethylvinyl	0.283	0.248	0.221	0.236	0.248	0.237	0.243	8.29	
51)		cis-1,3-Dichloropro	0.394	0.448	0.420	0.385	0.468	0.454	0.429	7.21	
52)	I	d5 - Chlorobenzene	----------	----------	ISTD	----------	----------	----------			
53)		4-Methyl-2-Pentanon	0.566	0.507	0.448	0.513	0.514	0.503	0.504	7.28	
54)	c	Toluene	0.918	1.056	0.941	0.916	1.178	1.199	1.048	11.82	
55)		trans-1,3-Dichlorop	0.408	0.483	0.455	0.439	0.524	0.507	0.472	8.60	
56)		Ethyl Methacrylate	0.417	0.480	0.450	0.437	0.499	0.479	0.461	6.13	
57)		1,1,2-Trichloroetha	0.235	0.273	0.263	0.247	0.286	0.277	0.265	6.77	
	s	surr3,Toluene-d8			1.051	1.220	1.051	1.015	1.066	8.41	UR
	s	surr2,bfb			0.417	0.483	0.411	0.403	0.420	8.87	UR
60)		Tetrachloroethene	0.207	0.233	0.192	0.196	0.266	0.277	0.234	15.45	UR
61)		2-Hexanone	0.338	0.359	0.310	0.352	0.354	0.346	0.341	5.06	
62)		1,3-Dichloropropane	0.508	0.599	0.570	0.531	0.620	0.601	0.573	7.03	
63)		Dibromochloromethan	0.273	0.324	0.302	0.293	0.353	0.346	0.318	9.30	
64)		1,2-Dibromoethane	0.305	0.356	0.335	0.318	0.374	0.356	0.342	7.10	
65)	p	Chlorobenzene	0.613	0.696	0.623	0.594	0.754	0.750	0.678	9.90	
66)		1,1,1,2-Tetrachloro	0.231	0.251	0.233	0.223	0.283	0.284	0.254	10.25	
67)	c	Ethylbenzene	0.891	1.081	0.932	0.918	1.210	1.228	1.061	13.73	
68)		(m+p)Xylene	0.314	0.379	0.328	0.328	0.430	0.439	0.376	14.08	
69)		o-Xylene	0.281	0.377	0.339	0.330	0.422	0.428	0.370	14.88	
70)		Styrene	0.548	0.673	0.618	0.588	0.754	0.758	0.666	12.51	
71)	p	Bromoform		0.201	0.194	0.190	0.228	0.224	0.210	7.76	
72)		Isopropylbenzene	0.717	0.935	0.780	0.784	1.042	1.082	0.907	16.08	UR
73)		Cyclohexanone	0.038	0.037	0.034	0.033	0.035	0.034	0.035	6.15	
74)	I	d4 - Dichlorobenzene	----------	----------	ISTD	----------	----------	----------			
75)	p	1,1,2,2-Tetrachloro	1.118	1.134	1.034	0.946	1.133	1.062	1.067	6.39	
76)		Trans-1,4-Dichloro-	0.375	0.304	0.307	0.298	0.347	0.328	0.326	8.42	
77)		1,2,3-Trichloroprop	0.387	0.330	0.298	0.288	0.333	0.326	0.326	9.75	
78)		n-Propylbenzene	2.226	2.716	2.303	2.273	3.061	3.117	2.661	14.64	
79)		Bromobenzene	0.641	0.674	0.594	0.563	0.745	0.739	0.668	10.79	
80)		1,3,5-Trimethylbenz	2.083	2.502	2.013	2.015	2.790	2.844	2.423	15.56	UR
81)		2-Chlorotoluene	1.440	1.761	1.527	1.478	1.938	1.951	1.707	12.98	
		4-Chlorotoluene	1.697	2.031	1.729	1.663	2.151	2.142	1.924	11.33	
		tert-Butylbenzene	1.263	1.425	1.158	1.157	1.558	1.605	1.384	13.72	
84)		1,2,4-Trimethylbenz	1.390	1.768	1.446	1.390	1.767	1.784	1.594	11.52	

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

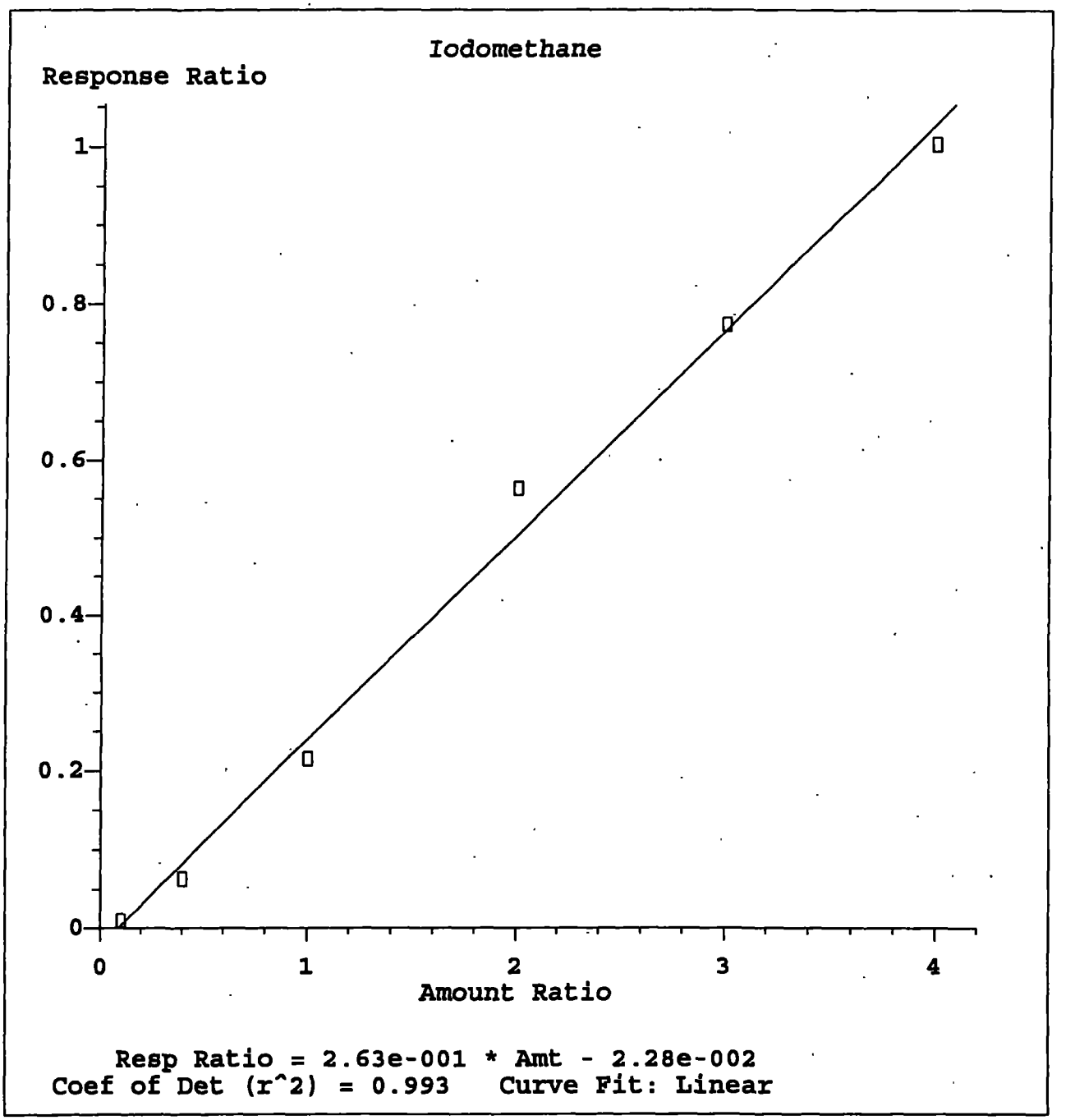
Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:59:41 2001
Response via : Initial Calibration

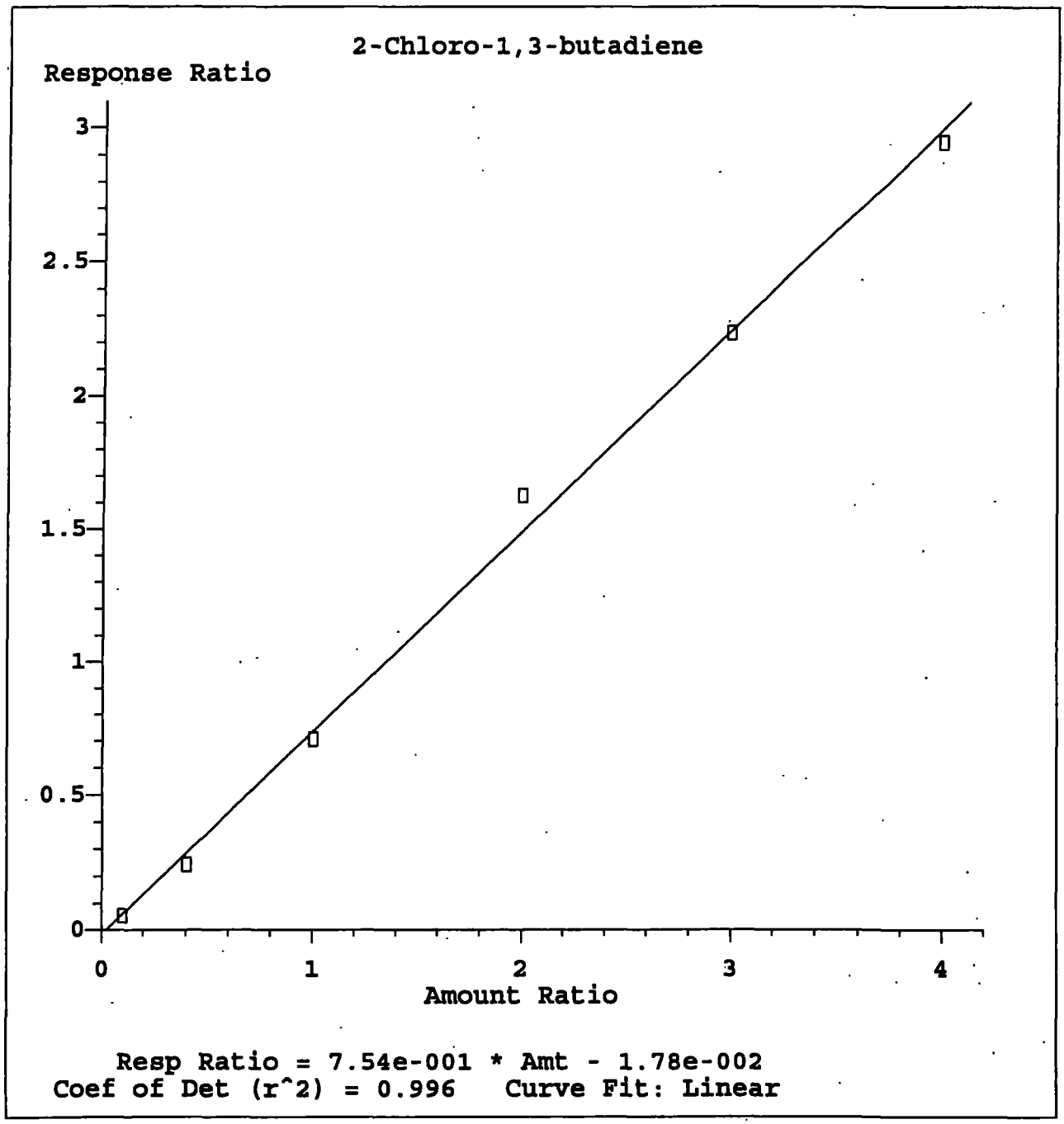
Calibration Files
1 =B8386.D 5 =B8387.D 20 =B8388.D
50 =B8389.D 100 =B8390.D 150 =B8391.D

	Compound	1	5	20	50	100	150	Avg	%RSD	
85)	sec-Butylbenzene	1.692	2.012	1.747	1.703	2.257	2.351	1.994	14.11	
86)	p-Isopropyltoluene	1.263	1.425	1.158	1.157	1.558	1.605	1.384	13.72	
87)	1,3-Dclbenz	0.878	0.922	0.839	0.797	1.033	1.033	0.927	10.19	
88)	1,4-Dclbenz	0.978	1.088	0.936	0.884	1.115	1.116	1.029	9.24	
89)	n-Butylbenzene	1.138	1.387	1.307	1.160	1.480	1.508	1.332	10.78	
90)	1,2-Dclbenz	0.943	1.011	0.907	0.849	1.082	1.070	0.987	9.02	
91)	1,2-Dibromo-3-chlor		0.167	0.167	0.156	0.185	0.180	0.173	6.53	
92)	Nitrobenzene		0.080	0.079	0.084	0.098	0.112	0.095	17.28	UL
93)	1,2,4-Tcbenzene	0.420	0.520	0.476	0.429	0.524	0.540	0.484	9.64	
94)	Hexachlorobt	0.167	0.178	0.202	0.160	0.198	0.212	0.187	10.28	
95)	Naphthalen	1.262	1.406	1.347	1.250	1.381	1.456	1.339	5.99	
96)	1,2,3-Tclbenzene	0.380	0.465	0.441	0.405	0.483	0.492	0.444	9.16	
97)	TOTAL XYLENE							0.000	-1.00	

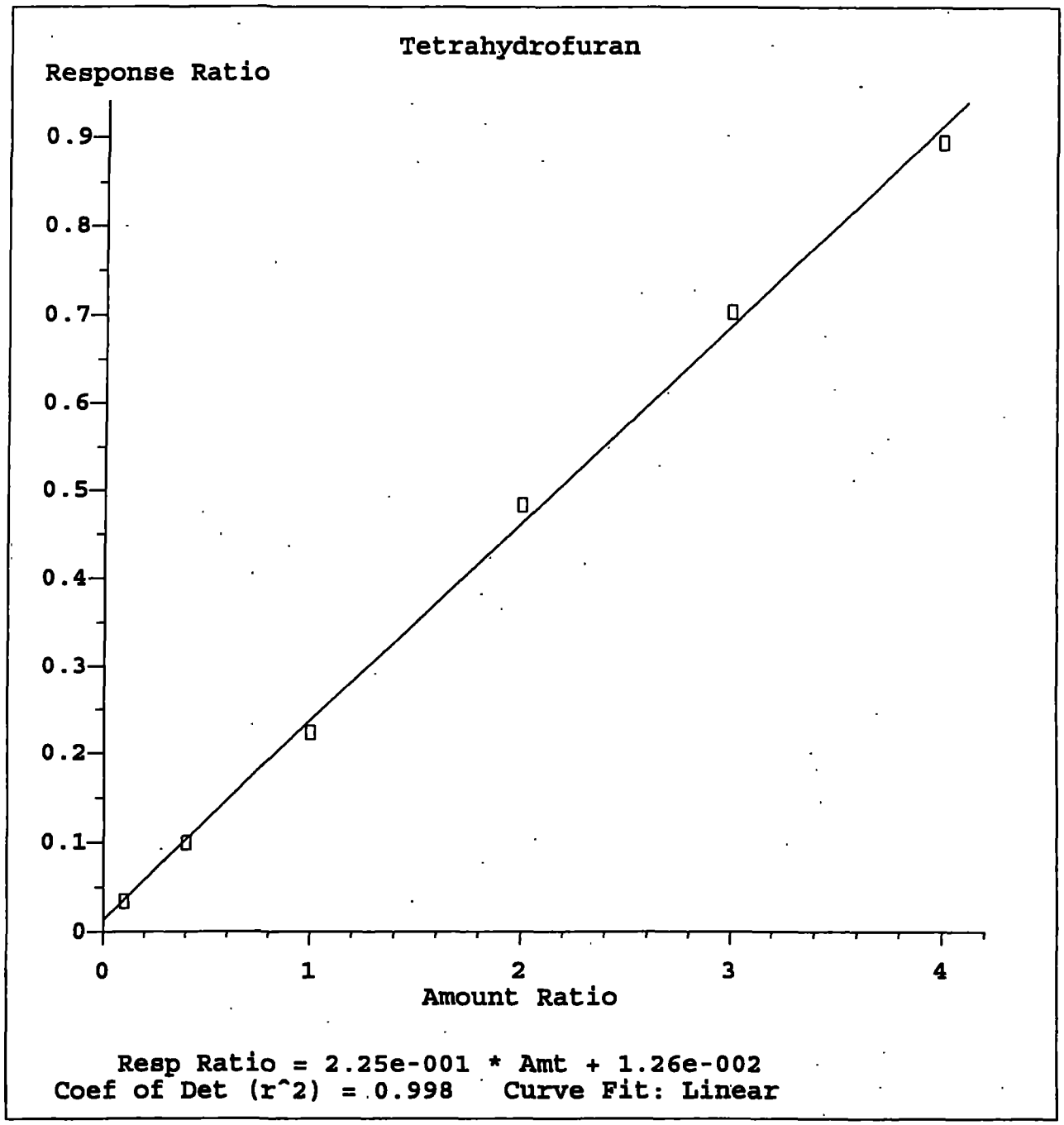
(#) = Out of Range ### Number of calibration levels exceeded format ###
EXP1217.M Mon Dec 17 16:03:33 2001 Page 3



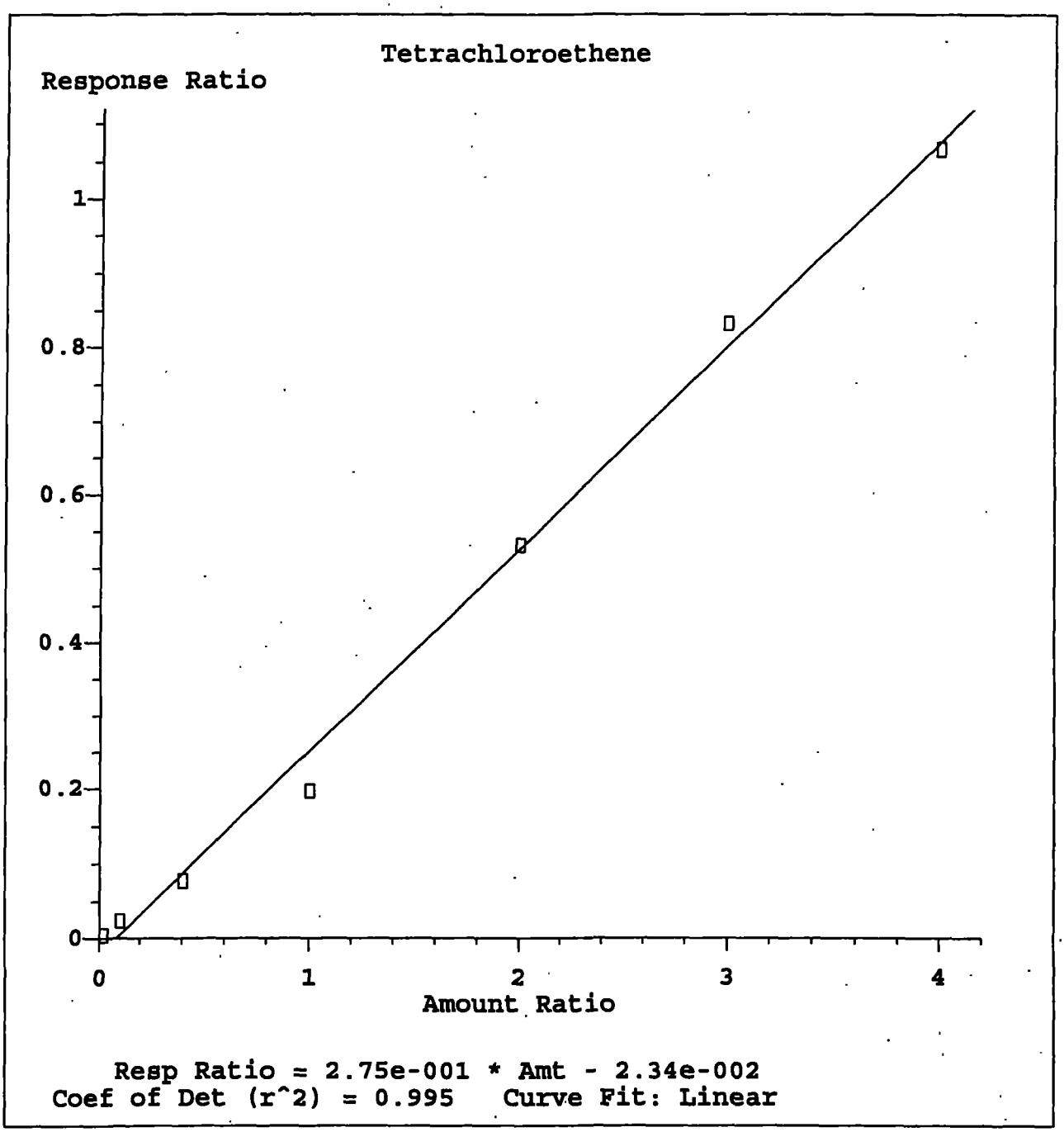
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:14:12 2001



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:18:11 2001



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:18:22 2001



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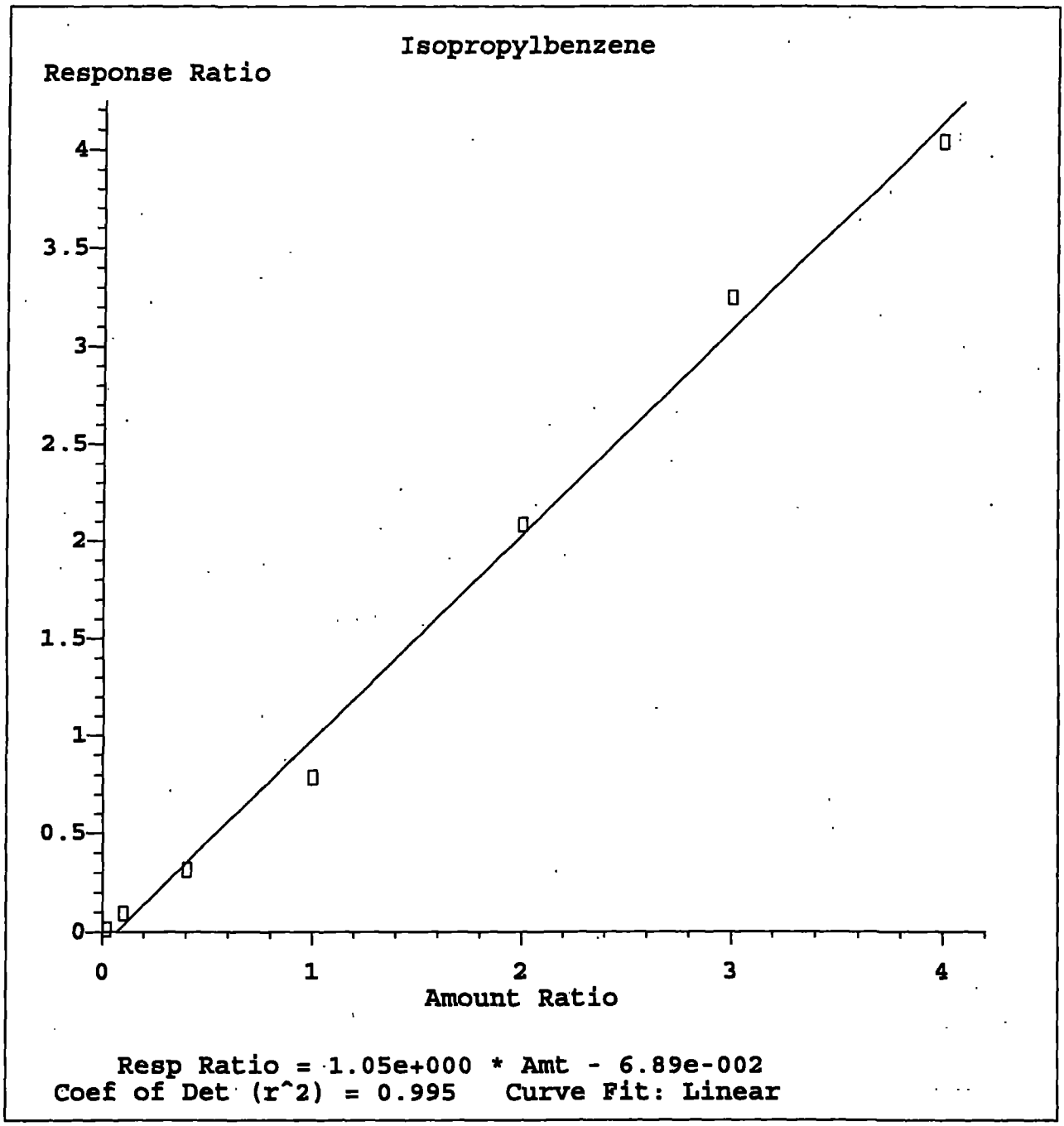
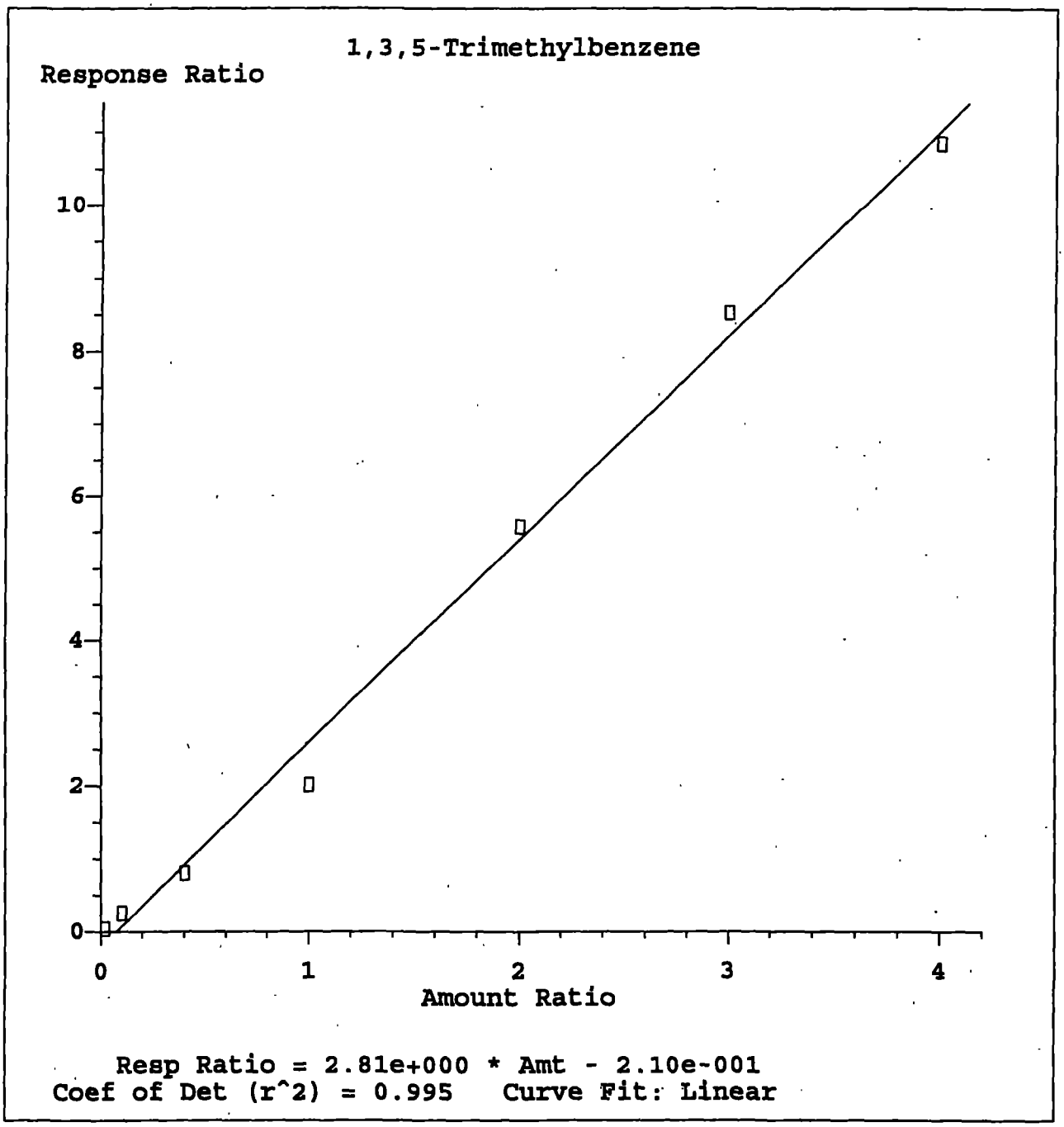
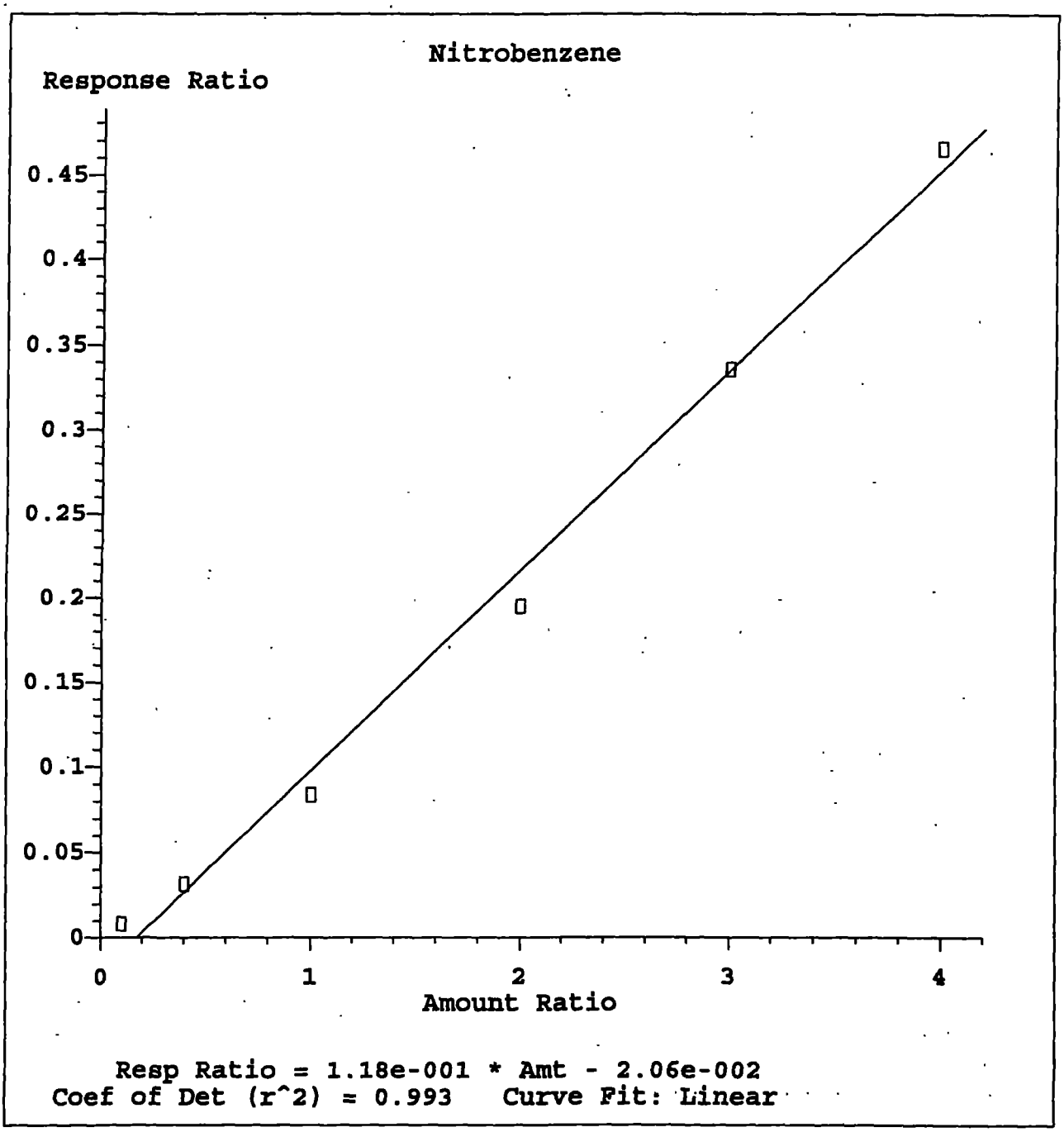
Calibration Table Last Updated: Mon Dec 17 15:18:46 2001



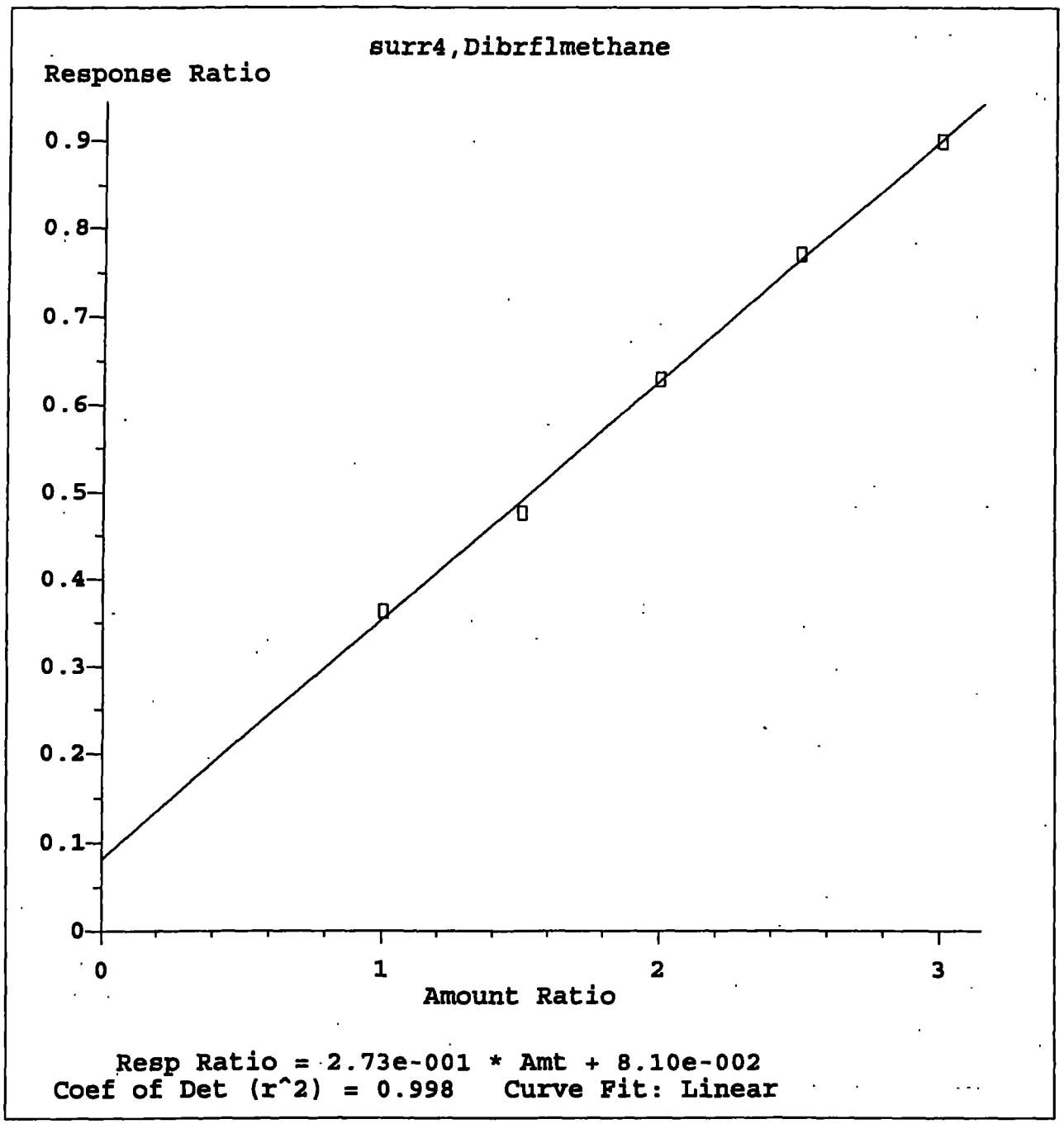
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:01 2001



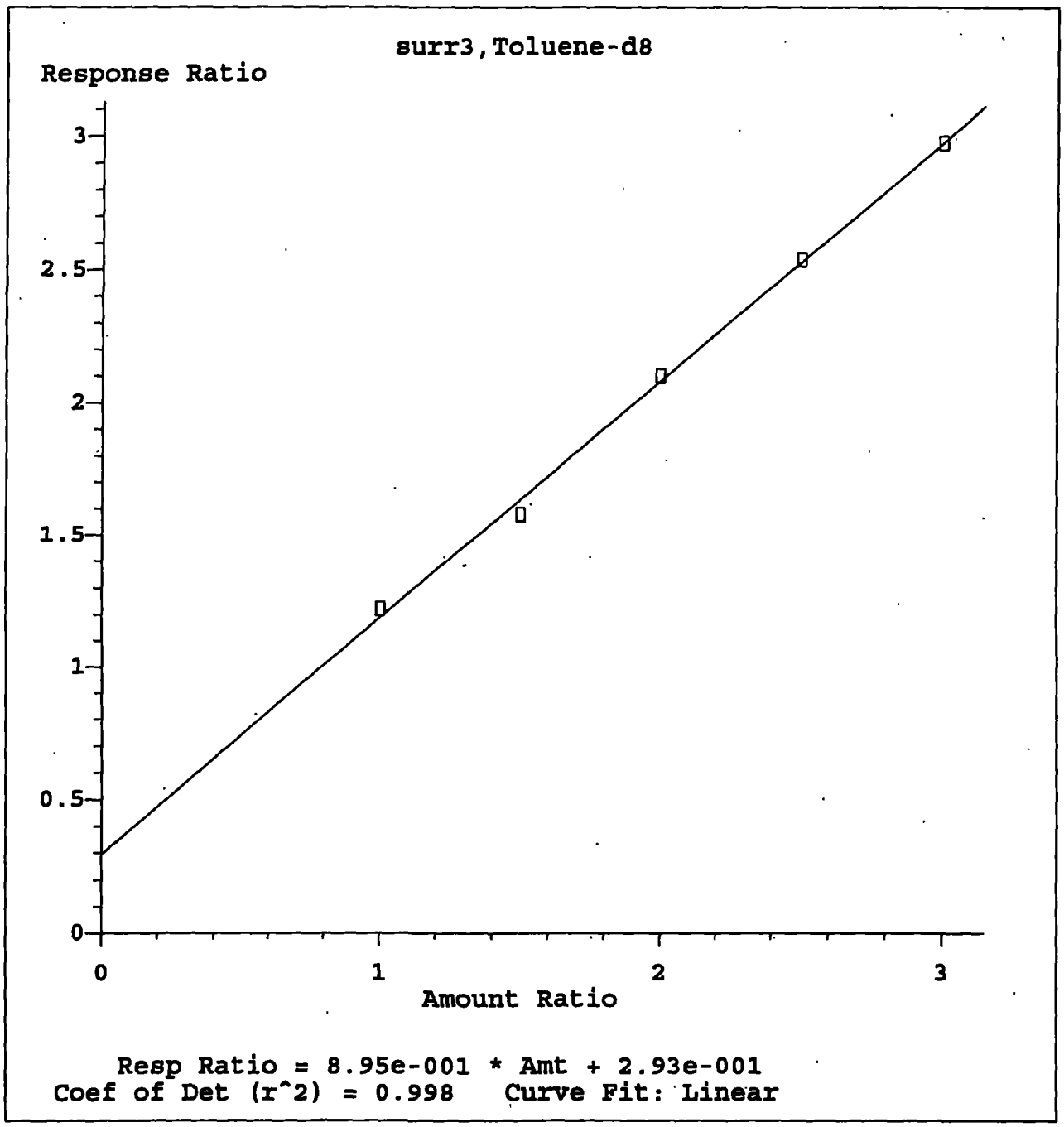
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:15 2001



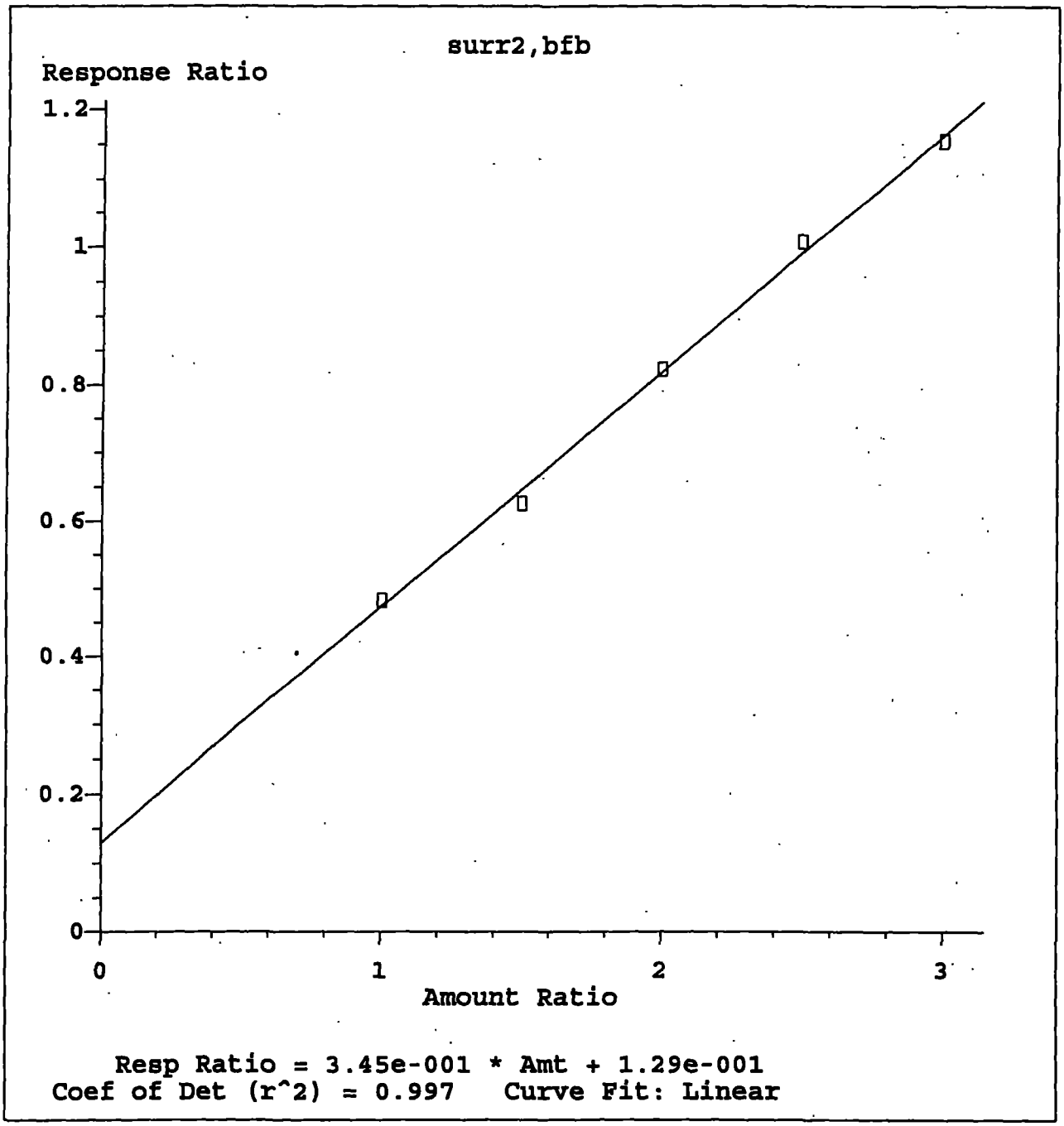
Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:29 2001



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:58:22 2001



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:59:21 2001



Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:59:34 2001

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D Vial: 4
Acq On : 17 Dec 101 11:01 am Operator: droot
Sample : 1 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 11:34 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	7.39	168	628126	50.00	ppb		-0.09
35) 1,4 - Difluorobenzene	8.57	114	1175109	50.00	ppb		-0.10
52) d5 - Chlorobenzene	13.66	117	933242	50.00	ppb		-0.11
74) d4 - Dichlorobenzene	18.10	152	323455	50.00	ppb		-0.13
System Monitoring Compounds							**%Recovery**
36) surr4,Dibrflmethane	7.26	113	415194	50.53	ppb		101.06%
58) surr3,Toluene-d8	11.08	98	1112392	51.91	ppb		103.82%
59) surr2,bfb	15.88	95	409944	51.61	ppb		103.23%
Target Compounds							**Qvalue**
2) Dichlorodifluoromethane	1.66	85	4721	0.88	ppb	#	95
3) Chloromethane	1.87	50	6012	0.78	ppb		95
4) Vinyl Chloride	2.00	62	5814	0.96	ppb		89
5) Bromomethane	2.40	94	4953	1.46	ppb	#	68
6) Chloroethane	2.55	64	4493	1.20	ppb		93
7) Trichlorofluoromethane	2.90	101	6041	0.89	ppb		97
8) Diethyl Ether	3.34	59	5682	0.91	ppb	#	77
9) Acrolein	3.50	56	5948	4.02	ppb		96
10) FREON 113	3.68	85	1696	6.03	ppb		77
11) 1,1-Diclethene	3.65	96	3927	0.89	ppb		89
12) Acetone	3.78	43	3539	1.21	ppb		94
~~13) Iodomethane~~	~~3.87~~	~~127~~	~~1113~~	~~7.38~~	~~ppb~~		~~83~~
~~14) Carbon Disulfide~~	~~3.96~~	~~76~~	~~22035~~	~~1.27~~	~~ppb~~		~~98~~
~~15) Acetonitrile~~	~~4.21~~	~~41~~	~~15185~~	~~48.71~~	~~ppb~~		~~88~~
16) Allyl Chloride	4.23	76	2917	1.05	ppb		96
17) Methylene Chloride	4.42	84	6251	1.00	ppb		92
18) TBA	4.66	59	13563	16.13	ppb	#	88
19) Acrylonitrile	4.80	53	15092	4.12	ppb		92
20) Methyl-t-Butyl Ether	4.89	73	15906	0.84	ppb	#	92
21) trans-1,2-Dichloroethene	4.86	96	4790	0.83	ppb		87
22) 1,1-Diclethane	5.53	63	9327	0.92	ppb	#	89
23) Vinyl Acetate	5.66	43	15778	1.10	ppb		96
~~24) 2-Chloro-1,3-butadiene~~	~~5.68~~	~~53~~	~~11207~~	~~1.30~~	~~PPB~~		~~97~~
25) 2,2-Dichloropropane	6.47	77	6518	0.89	ppb		99
~~26) 2-Butanone~~	~~6.53~~	~~43~~	~~7316~~	~~1.38~~	~~ppb~~		~~97~~
28) cis-1,2-Dichloroethene	6.47	96	6666	0.97	ppb		96
29) Propionitrile	6.60	54	5791	4.27	ppb	#	87
30) Methacrylonitrile	6.84	67	3184	0.86	ppb		95
31) Bromochloromethane	6.85	128	3624	1.05	ppb		87
32) Chloroform	7.01	83	9460	0.95	ppb		97
~~33) Tetrahydrofuran~~	~~6.96~~	~~42~~	~~8316~~	~~2.43~~	~~ppb~~	~~m~~	~~90~~
34) 1,1,1-Trichloroethane	7.29	97	5947	0.82	ppb	#	86
~~37) Carbontetrachloride~~	~~7.57~~	~~117~~	~~4334~~	~~3.64~~	~~ppb~~		~~86~~

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D Vial: 4
Acq On : 17 Dec 101 11:01 am Operator: droot
Sample : 1 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 11:34 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.57	75	6887	0.97	ppb	#	87
39)	Iso-Butyl Alcohol	8.41	43	5399	75.31	ppb		96
40)	Benzene	7.89	78	18076	0.86	ppb		100
41)	1,2-Dichloroethane	7.92	62	7651	0.93	ppb	#	83
42)	N-Heptane	8.41	43	5493	1.08	ppb		92
43)	Trichloroethene	9.01	95	4580	0.83	ppb		94
44)	1,2-Diclpropane	9.35	63	6079	0.87	ppb		90
45)	Methyl Methacrylate	9.62	69	4826	0.85	ppb		84
~~46)~~	~~1,4-Dioxane~~	~~9.75~~	~~88~~	~~134~~	~~1.77~~	~~ppb~~		~~80~~
47)	Dibromomethane	9.54	93	4124	0.86	ppb		92
48)	Bromodichloromethane	9.83	83	7235	0.94	ppb	#	82
49)	2-Nitropropane	10.22	43	5286	1.89	ppb	#	80
50)	2-Chloroethylvinyl Ether	10.37	63	6650	1.14	ppb	#	82
51)	cis-1,3-Dichloropropene	10.62	75	9266	0.91	ppb		99
53)	4-Methyl-2-Pentanone	10.91	43	10568	1.03	ppb		88
54)	Toluene	11.20	91	17125	0.87	ppb		93
55)	trans-1,3-Dichloropropene	11.59	75	7616	0.82	ppb		99
56)	Ethyl Methacrylate	11.80	69	7784	0.83	ppb		95
57)	1,1,2-Trichloroethane	11.91	83	4385	0.86	ppb		96
60)	Tetrachloroethene	12.18	166	3855	4.30	ppb	#	81
61)	2-Hexanone	12.38	43	6301	0.88	ppb		98
62)	1,3-Dichloropropane	12.19	76	9473	0.85	ppb		99
63)	Dibromochloromethane	12.61	129	5096	0.79	ppb		86
64)	1,2-Dibromoethane	12.80	107	5693	0.82	ppb	#	63
65)	Chlorobenzene	13.71	112	11445	0.90	ppb	#	86
66)	1,1,1,2-Tetrachloroethane	13.87	131	4308	0.87	ppb		95
67)	Ethylbenzene	13.94	91	16629	0.85	ppb		95
68)	(m+p)Xylene	14.16	106	11733	9.19	ppb		96
69)	o-Xylene	14.89	106	5245	0.76	ppb		74
70)	Styrene	14.93	104	10225	0.84	ppb		92
~~71)~~	~~Bromoform~~	~~15.23~~	~~173~~	~~2726~~	~~0.65~~	~~ppb~~	~~#~~	~~81~~
72)	Isopropylbenzene	15.61	105	13377	5.19	ppb	#	90
73)	Cyclohexanone	15.73	55	14181	13.67	ppb		96
75)	1,1,2,2-Tetrachloroethane	16.16	83	7231	0.94	ppb		89
76)	Trans-1,4-Dichloro-2-buten	16.28	53	2427	1.04	ppb	m	87
77)	1,2,3-Trichloropropane	16.22	110	2503	1.04	ppb		99
78)	n-Propylbenzene	16.39	91	14402	4.04	ppb		97
79)	Bromobenzene	16.14	156	4145	0.92	ppb		81
80)	1,3,5-Trimethylbenzene	15.61	105	13472	4.81	ppb	#	90
81)	2-Chlorotoluene	16.53	91	9313	0.82	ppb	#	79
82)	4-Chlorotoluene	16.74	91	10976	0.88	ppb		99
83)	tert-Butylbenzene	17.37	119	8173	4.68	ppb		90
84)	1,2,4-Trimethylbenzene	17.46	105	8991	0.84	ppb		95
85)	sec-Butylbenzene	17.80	105	10943	4.28	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D
`cq On : 17 Dec 101 11:01 am
,ample : 1 PPB
Misc :
Quant Time: Dec 17 11:34 19101

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
86)	p-Isopropyltoluene	17.37	119	8173	4.68	ppb	#	87
87)	1,3-Dclbenz	17.98	146	5681	0.90	ppb	#	73
88)	1,4-Dclbenz	18.15	146	6325	0.91	ppb		98
89)	n-Butylbenzene	18.88	91	7365	2.98	ppb	#	94
90)	1,2-Dclbenz	18.87	146	6102	0.91	ppb	#	84
~~91)~~	~~1,2-Dibromo-3-chloropropan~~	~~20.38~~	~~157~~	~~1051~~	~~0.83~~	~~ppb~~		~~90~~
~~92)~~	~~Nitrobenzene~~	~~20.79~~	~~77~~	~~669~~	~~0.92~~	~~ppb~~	~~#~~	~~57~~
93)	1,2,4-Tcbenzene	22.07	180	2717	0.76	ppb	#	72
94)	Hexachlorobt	22.42	225	1082	0.86	ppb	#	73
95)	Naphthalen	22.53	128	8165	0.76	ppb	#	91
96)	1,2,3-Tclbenzene	23.01	180	2458	0.71	ppb		91

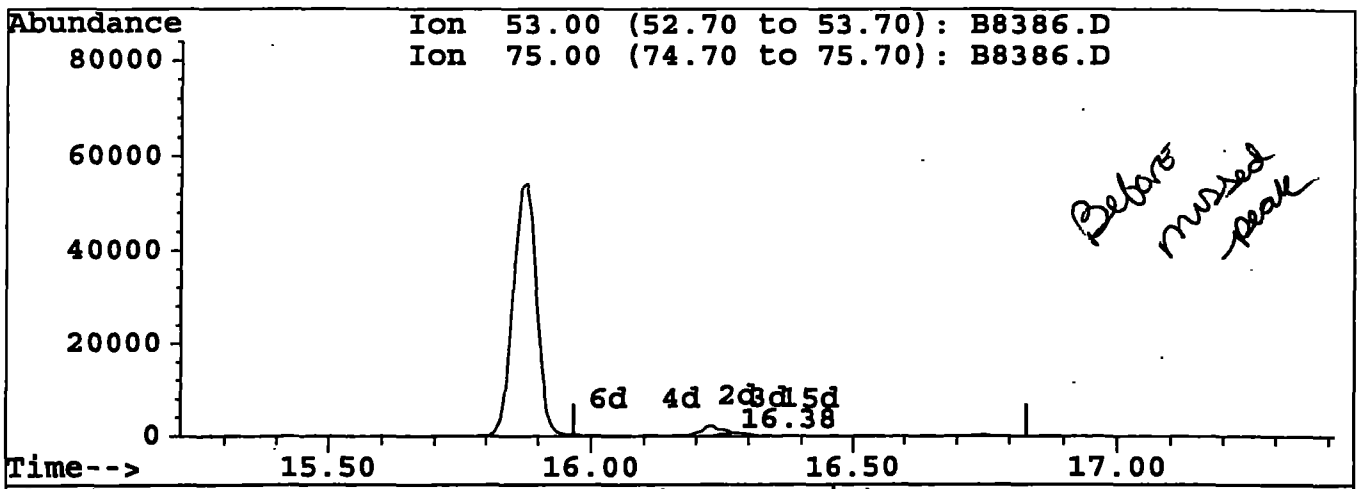
(#) = qualifier out of range (m) = manual integration

Quantitation Report

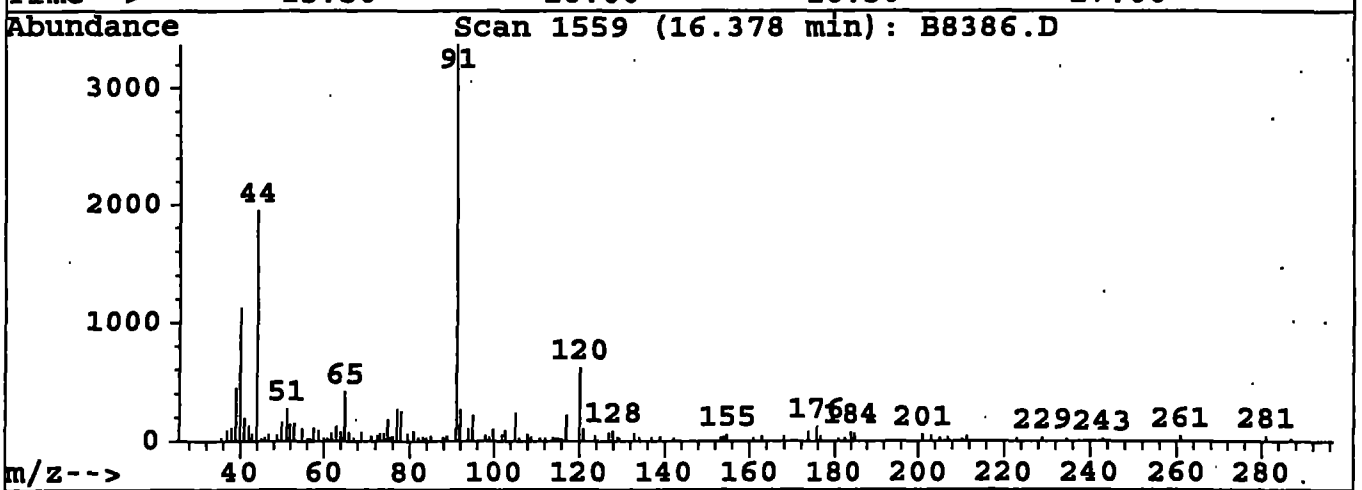
Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D
Acq On : 17 Dec 101 11:01 am
Sample : 1 PPB
Misc :
Quant Time: Dec 17 11:32 19101

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration



Before missed peak



TIC: B8386.D

(76) Trans-1,4-Dichloro-2-butene
16.38min 0.11ppb
response 265

Ion	Exp%	Act%
53.00	100	100
75.00	160.70	143.92
0.00	0.00	0.00
0.00	0.00	0.00

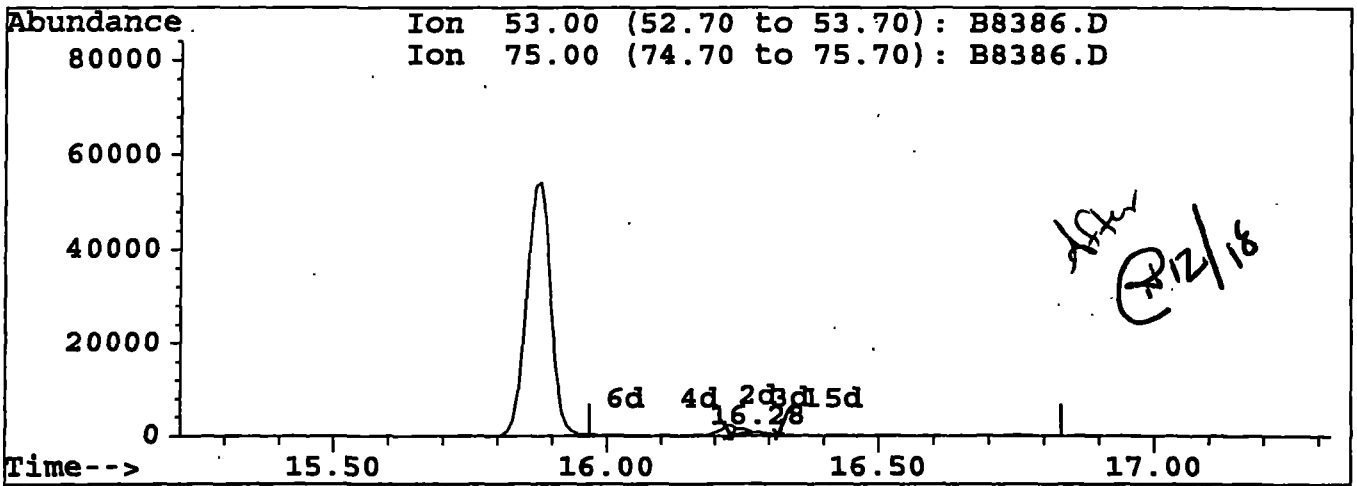
B8386.D EXP1217.M Mon Dec 17 11:34:41 2001

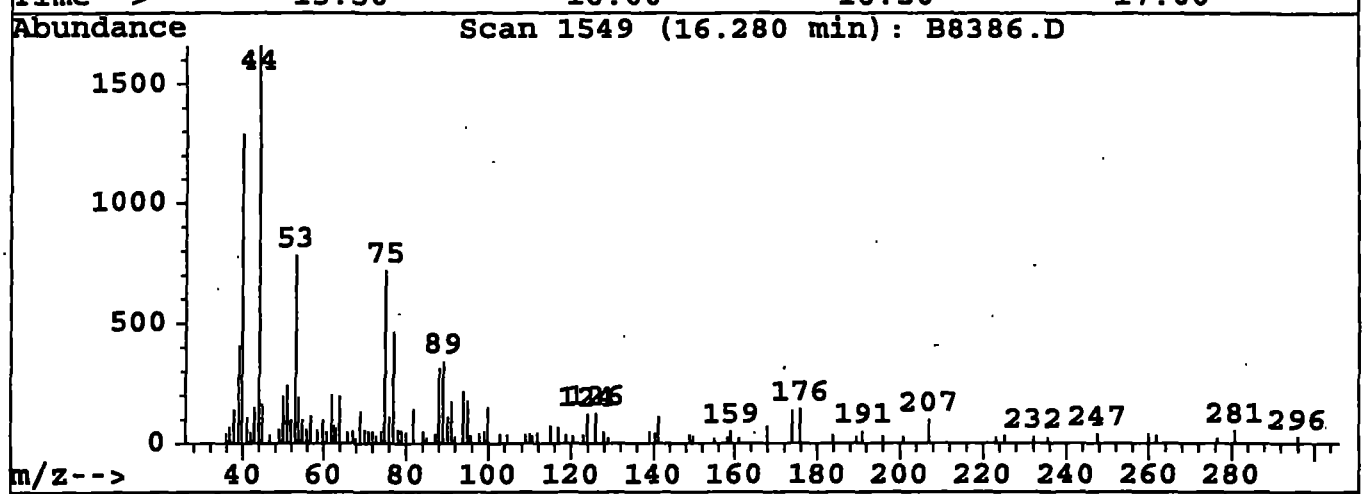
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D
Acq On : 17 Dec 101 11:01 am
Sample : 1 PPB
Misc :
Quant Time: Dec 17 11:34 19101

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration





TIC: B8386.D

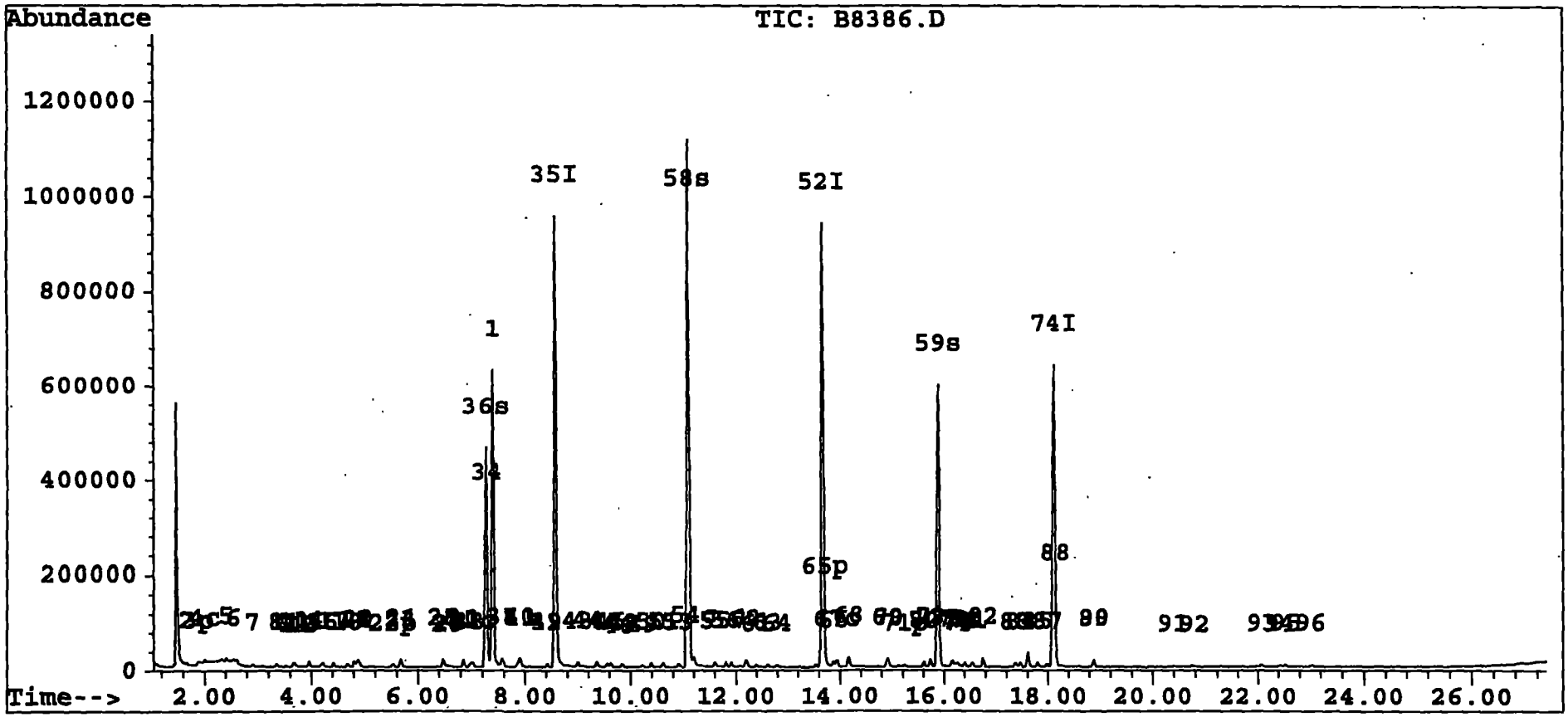
(76) Trans-1,4-Dichloro-2-butene
16.28min 1.04ppb m
response 2427

Ion	Exp%	Act%
53.00	100	100
75.00	160.70	92.07
0.00	0.00	0.00
0.00	0.00	0.00

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8386.D
Acq On : 17 Dec 101 11:01 am
Sample : 1 PPB
Misc :
Quant Time: Dec 17 11:34 19101

Vial: 4
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Wed Dec 05 07:11:54 2001
Response via : Multiple Level Calibration



165

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D Vial: 5
Acq On : 17 Dec 101 11:39 am Operator: droot
Sample : 5 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:27 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	7.39	168	620713	50.00	ppb		-0.09
35) 1,4 - Difluorobenzene	8.57	114	1155099	50.00	ppb		-0.10
52) d5 - Chlorobenzene	13.66	117	926942	50.00	ppb		-0.12
74) d4 - Dichlorobenzene	18.11	152	346357	50.00	ppb		-0.12
System Monitoring Compounds							%Recovery
36) surr4,Dibrflmethane	7.27	113	409377	56.42	ppb		112.83%
58) surr3,Toluene-d8	11.08	98	1102656	55.85	ppb		111.70%
59) surr2,bfb	15.87	95	429950	57.17	ppb		114.34%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.66	85	27681	5.20	ppb		99
3) Chloromethane	1.88	50	38167	5.00	ppb		93
4) Vinyl Chloride	2.00	62	30274	5.06	ppb		99
5) Bromomethane	2.41	94	20672	7.11	ppb	m	99
6) Chloroethane	2.55	64	19339	5.24	ppb		96
7) Trichlorofluoromethane	2.90	101	35130	5.26	ppb		97
8) Diethyl Ether	3.34	59	30782	4.98	ppb		99
9) Acrolein	3.50	56	37467	25.60	ppb		98
10) FREON 113	3.70	85	8828	6.07	ppb		68
11) 1,1-Diclethene	3.66	96	24137	5.56	ppb		95
12) Acetone	3.76	43	12836	5.13	ppb		100
13) Iodomethane	3.86	127	5779	2.88	ppb		99
14) Carbon Disulfide	3.95	76	68135	4.64	ppb	#	92
15) Acetonitrile	4.17	41	27650	104.08	ppb	#	79
16) Allyl Chloride	4.22	76	14487	5.26	ppb		90
17) Methylene Chloride	4.42	84	34273	5.54	ppb		93
18) TBA	4.67	59	79667	95.86	ppb		98
19) Acrylonitrile	4.80	53	87675	24.22	ppb		95
20) Methyl-t-Butyl Ether	4.89	73	95430	5.13	ppb		95
21) trans-1,2-Dichloroethene	4.86	96	29392	5.18	ppb		94
22) 1,1-Diclethane	5.52	63	51566	5.15	ppb		90
23) Vinyl Acetate	5.66	43	77285	6.36	ppb		99
24) 2-Chloro-1,3-butadiene	5.68	53	32493	4.43	PPB		99
25) 2,2-Dichloropropane	6.46	77	37367	5.97	ppb		100
26) 2-Butanone	6.52	43	26014	5.76	ppb		98
28) cis-1,2-Dichloroethene	6.47	96	34923	5.13	ppb	#	82
29) Propionitrile	6.59	54	33090	24.68	ppb		92
30) Methacrylonitrile	6.84	67	17028	4.63	ppb		85
31) Bromochloromethane	6.86	128	18324	5.38	ppb		95
32) Chloroform	7.01	83	51585	5.22	ppb		98
33) Tetrahydrofuran	6.96	42	21271	7.26	ppb		96
34) 1,1,1-Trichloroethane	7.29	97	37428	5.20	ppb		89
37) Carbontetrachloride	7.57	117	29079	4.99	ppb		95

(#) = qualifier out of range (m) = manual integration

166

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D Vial: 5
Acq On : 17 Dec 101 11:39 am Operator: droot
Sample : 5 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:27 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.58	75	37072	5.30	ppb	#	91
39)	Iso-Butyl Alcohol	8.42	43	27836	114.90	ppb		97
40)	Benzene	7.90	78	110164	5.35	ppb		98
41)	1,2-Dichloroethane	7.93	62	41791	5.18	ppb		99
42)	N-Heptane	8.42	43	27907	5.58	ppb		93
43)	Trichloroethene	8.99	95	28778	5.31	ppb		95
44)	1,2-Diclpropane	9.35	63	36166	5.24	ppb		99
45)	Methyl Methacrylate	9.61	69	25259	4.55	ppb		100
46)	1,4-Dioxane	9.61	88	8097	109.01	ppb		81
47)	Dibromomethane	9.54	93	22997	4.91	ppb		93
48)	Bromodichloromethane	9.83	83	38429	5.10	ppb		97
49)	2-Nitropropane	10.21	43	25576	9.31	ppb		94
50)	2-Chloroethylvinyl Ether	10.38	63	28624	4.99	ppb		100
51)	cis-1,3-Dichloropropene	10.62	75	51761	5.17	ppb		92
53)	4-Methyl-2-Pentanone	10.90	43	46991	4.59	ppb		96
54)	Toluene	11.20	91	97894	5.03	ppb		97
55)	trans-1,3-Dichloropropene	11.59	75	44811	4.88	ppb		94
56)	Ethyl Methacrylate	11.81	69	44511	4.80	ppb		94
57)	1,1,2-Trichloroethane	11.91	83	25345	5.03	ppb		97
60)	Tetrachloroethene	12.17	166	21638	4.93	ppb		97
61)	2-Hexanone	12.39	43	33251	4.69	ppb		90
62)	1,3-Dichloropropane	12.20	76	55511	4.99	ppb		88
63)	Dibromochloromethane	12.60	129	30043	4.70	ppb		90
64)	1,2-Dibromoethane	12.78	107	33016	4.81	ppb		91
65)	Chlorobenzene	13.71	112	64524	5.09	ppb		98
66)	1,1,1,2-Tetrachloroethane	13.87	131	23312	4.73	ppb		92
67)	Ethylbenzene	13.93	91	100185	5.16	ppb		99
68)	(m+p)Xylene	14.16	106	70316	10.37	ppb		97
69)	o-Xylene	14.89	106	34952	5.10	ppb		98
70)	Styrene	14.92	104	62429	5.18	ppb		92
71)	Bromoform	15.23	173	18633	4.48	ppb		98
72)	Isopropylbenzene	15.61	105	86632	5.27	ppb		97
73)	Cyclohexanone	15.73	55	68394	66.39	ppb		93
75)	1,1,2,2-Tetrachloroethane	16.16	83	39292	4.77	ppb		92
76)	Trans-1,4-Dichloro-2-buten	16.28	53	10517	4.20	ppb		80
77)	1,2,3-Trichloropropane	16.23	110	11431	4.45	ppb		95
78)	n-Propylbenzene	16.38	91	94085	5.22	ppb		98
79)	Bromobenzene	16.14	156	23357	4.86	ppb		92
80)	1,3,5-Trimethylbenzene	15.61	105	86647	5.23	ppb		97
81)	2-Chlorotoluene	16.53	91	60992	5.03	ppb		100
82)	4-Chlorotoluene	16.74	91	70340	5.27	ppb		97
83)	tert-Butylbenzene	17.36	119	49345	5.25	ppb		96
84)	1,2,4-Trimethylbenzene	17.46	105	61252	5.34	ppb		98
85)	sec-Butylbenzene	17.79	105	69690	5.17	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D
Acq On : 17 Dec 101 11:39 am
Sample : 5 PPB
Misc :
Quant Time: Dec 17 15:27 19101

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
86) p-Isopropyltoluene	17.36	119	49345	5.25 ppb		96
87) 1,3-Dclbenz	17.97	146	31934	4.70 ppb		95
88) 1,4-Dclbenz	18.16	146	37672	5.07 ppb		97
89) n-Butylbenzene	18.89	91	48054	5.21 ppb		96
90) 1,2-Dclbenz	18.87	146	35001	4.87 ppb		95
91) 1,2-Dibromo-3-chloropropan	20.39	157	5770	4.15 ppb		98
92) Nitrobenzene	20.80	77	2775	3.56 ppb	#	55
93) 1,2,4-Tcbenzene	22.05	180	18012	4.68 ppb		94
94) Hexachlorobt	22.43	225	6154	4.55 ppb		96
95) Naphthalen	22.53	128	48681	4.23 ppb		97
96) 1,2,3-Tclbenzene	23.01	180	16110	4.35 ppb	#	80

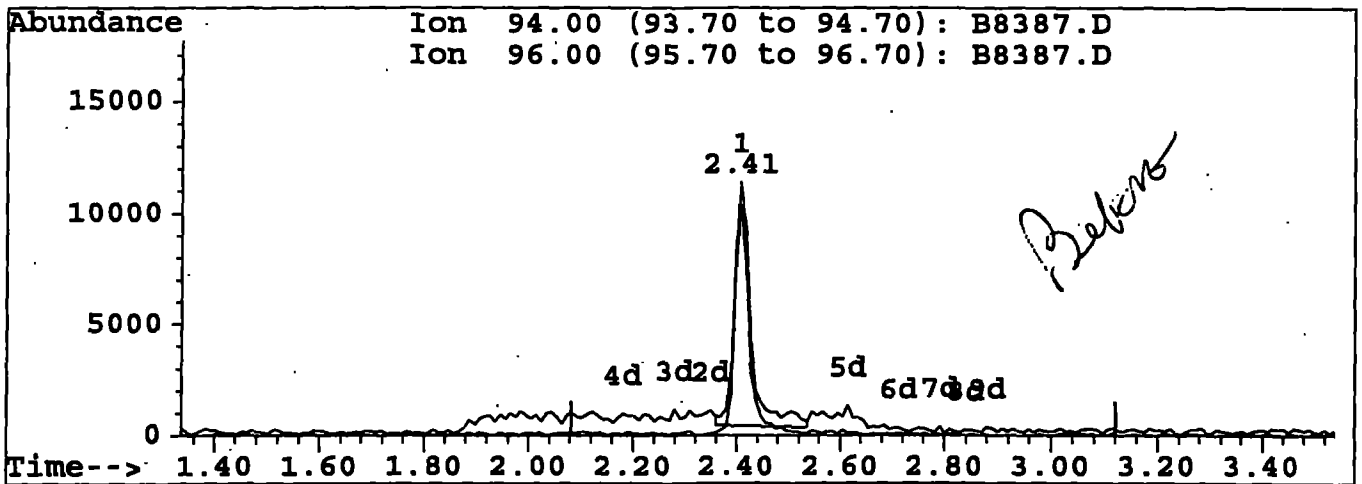
(#) = qualifier out of range (m) = manual integration

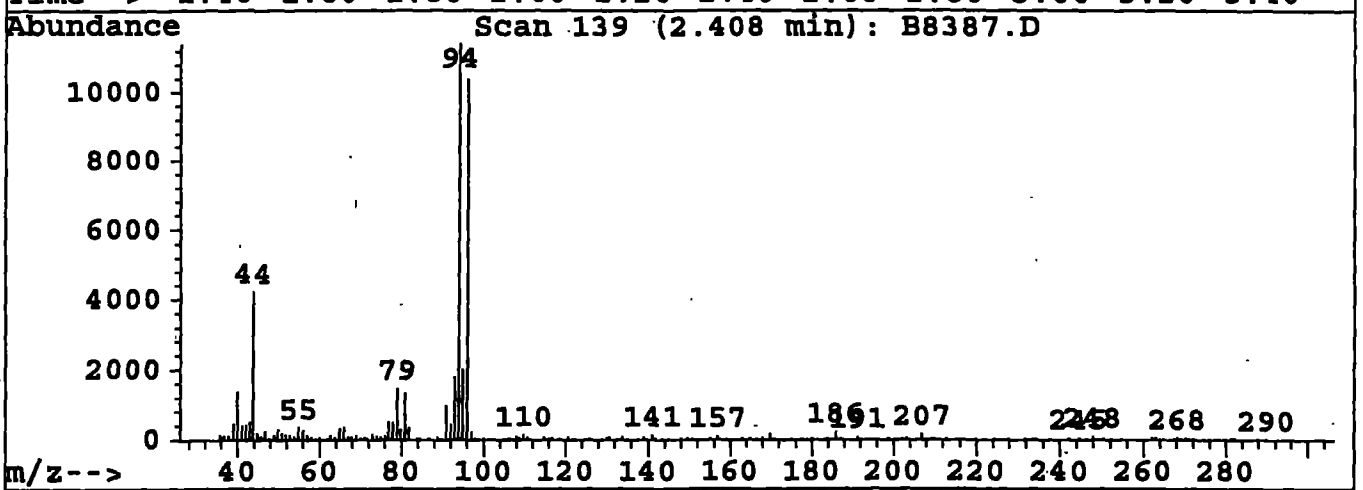
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D
Acq On : 17 Dec 101 11:39 am
Sample : 5 PPB
Misc :
Quant Time: Dec 17 12:06 19101

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:14:12 2001
Response via : Multiple Level Calibration





TIC: B8387.D

(5) Bromomethane
2.41min 8.57ppb
response 24930

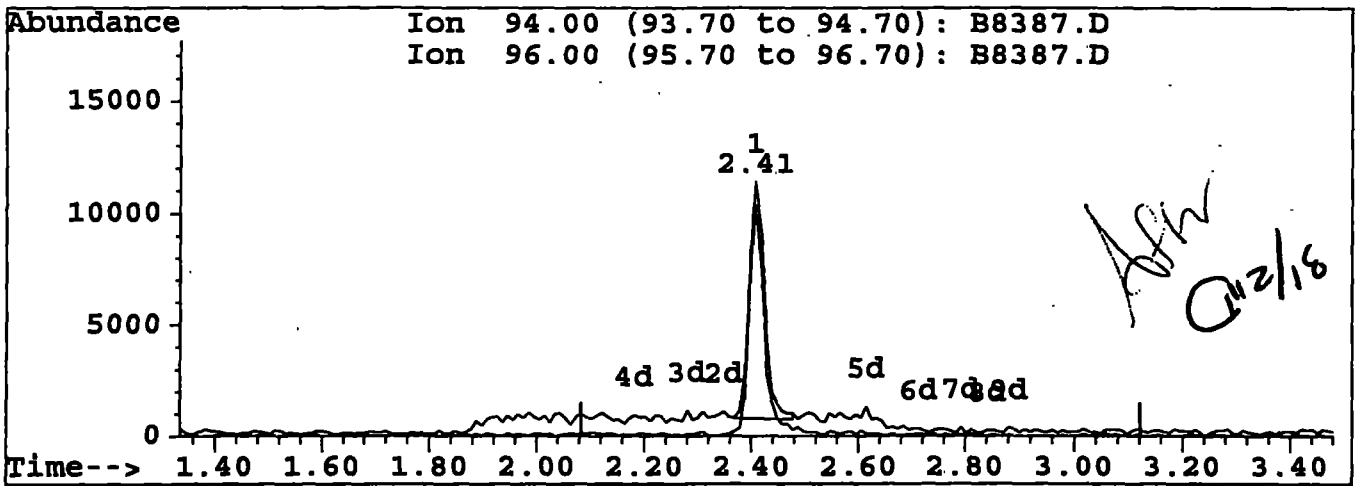
Ion	Exp%	Act%
94.00	100	100
96.00	90.30	90.82
0.00	0.00	0.00
0.00	0.00	0.00

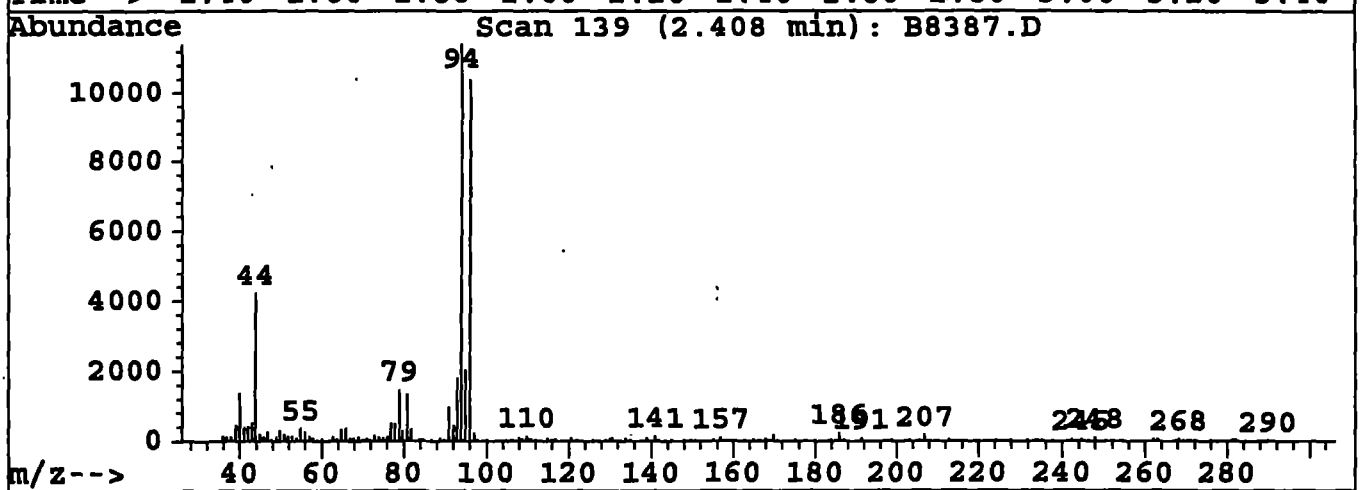
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D
Acq On : 17 Dec 101 11:39 am
Sample : 5 PPB
Misc :
Quant Time: Dec 17 15:27 19101

Vial: 5
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:14:12 2001
Response via : Multiple Level Calibration





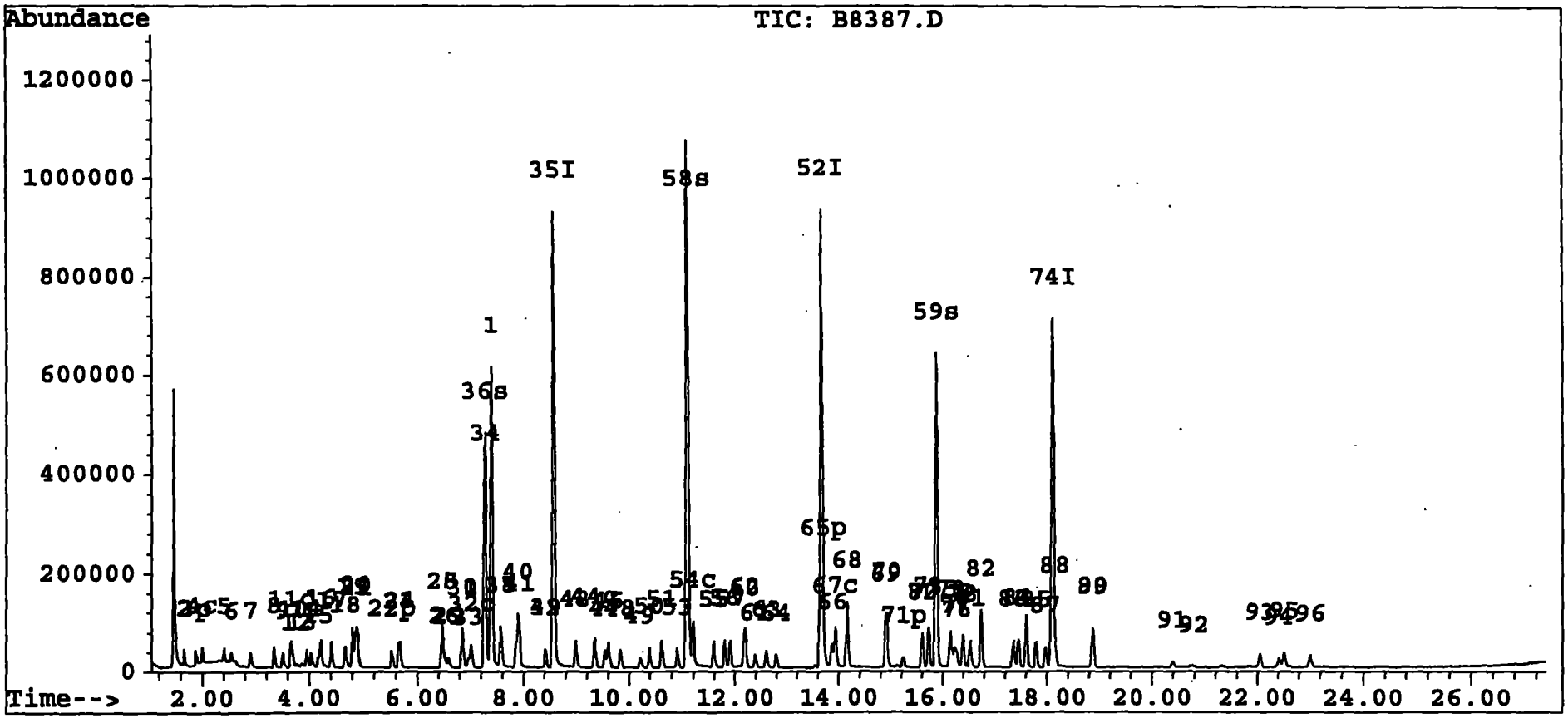
TIC: B8387.D

(5) Bromomethane
2.41min 7.11ppb m
response 20672

Ion	Exp%	Act%
94.00	100	100
96.00	90.30	90.82
0.00	0.00	0.00
0.00	0.00	0.00

Data Fi. : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.. Vial: 5
Acq On : 17 Dec 101 11:39 am Operator: droot
Sample : 5 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:27 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration



171

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8388.D
Acq On : 17 Dec 101 12:15 pm
Sample : 20 PPB
Misc :
Quant Time: Dec 17 15:36 19101

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	7.40	168	600770	50.00	ppb		-0.08
35) 1,4 - Difluorobenzene	8.58	114	1116522	50.00	ppb		-0.09
52) d5 - Chlorobenzene	13.67	117	893595	50.00	ppb		-0.11
74) d4 - Dichlorobenzene	18.11	152	348312	50.00	ppb		-0.12
System Monitoring Compounds							**%Recovery**
36) surr4,Dibrflmethane	7.27	113	532086	75.86	ppb		151.72%
58) surr3,Toluene-d8	11.09	98	1409321	74.05	ppb		148.09%
59) surr2,bfb	15.87	95	559523	77.17	ppb		154.34%
Target Compounds							**Qvalue**
2) Dichlorodifluoromethane	1.66	85	90100	17.47	ppb		99
3) Chloromethane	1.88	50	130322	18.29	ppb		98
4) Vinyl Chloride	2.00	62	103732	17.26	ppb		94
5) Bromomethane	2.41	94	71458	19.06	ppb	m	97
6) Chloroethane	2.55	64	64747	17.50	ppb		99
7) Trichlorofluoromethane	2.90	101	115379	17.39	ppb		96
8) Diethyl Ether	3.34	59	114362	19.57	ppb		99
9) Acrolein	3.50	56	126092	94.60	ppb		94
10) FREON 113	3.69	85	28134	16.61	ppb		91
11) 1,1-Diclethene	3.66	96	80774	18.66	ppb		97
12) Acetone	3.76	43	46696	16.90	ppb		99
13) Iodomethane	3.87	127	37839	19.38	ppb		96
14) Carbon Disulfide	3.96	76	305768	17.85	ppb		100
15) Acetonitrile	4.16	41	112751	308.77	ppb		97
16) Allyl Chloride	4.22	76	50530	18.68	ppb		91
17) Methylene Chloride	4.42	84	115264	19.19	ppb		94
18) TBA	4.67	59	286185	371.18	ppb		100
19) Acrylonitrile	4.80	53	322174	95.22	ppb		98
20) Methyl-t-Butyl Ether	4.89	73	344081	19.33	ppb		95
21) trans-1,2-Dichloroethene	4.86	96	101471	18.53	ppb		90
22) 1,1-Diclethane	5.53	63	185229	18.88	ppb		98
23) Vinyl Acetate	5.66	43	271230	19.91	ppb		99
24) 2-Chloro-1,3-butadiene	5.69	53	145372	17.01	PPB		96
25) 2,2-Dichloropropane	6.46	77	125831	17.79	ppb		97
26) 2-Butanone	6.52	43	84339	16.06	ppb		98
28) cis-1,2-Dichloroethene	6.48	96	122882	18.57	ppb		94
29) Propionitrile	6.58	54	121499	96.14	ppb		96
30) Methacrylonitrile	6.84	67	60093	18.04	ppb		98
31) Bromochloromethane	6.86	128	62486	19.28	ppb		87
32) Chloroform	7.01	83	177752	18.56	ppb		99
33) Tetrahydrofuran	6.96	42	59623	15.17	ppb		96
34) 1,1,1-Trichloroethane	7.29	97	123612	17.46	ppb		98
37) Carbontetrachloride	7.58	117	97327	17.00	ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8388.D Vial: 6
Acq On : 17 Dec 101 12:15 pm Operator: droot
Sample : 20 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:36 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.58	75	121811	17.37	ppb	93
39)	Iso-Butyl Alcohol	8.42	43	105215	417.77	ppb	99
40)	Benzene	7.90	78	373513	18.42	ppb	97
41)	1,2-Dichloroethane	7.93	62	151849	19.48	ppb	98
42)	N-Heptane	8.42	43	102287	20.21	ppb	98
43)	Trichloroethene	8.99	95	94618	17.57	ppb	99
44)	1,2-Diclpropane	9.36	63	127203	19.46	ppb	94
45)	Methyl Methacrylate	9.61	69	95656	18.64	ppb	95
46)	1,4-Dioxane	9.61	88	28824	400.40	ppb	89
47)	Dibromomethane	9.54	93	85334	19.46	ppb	96
48)	Bromodichloromethane	9.84	83	139966	19.03	ppb	96
49)	2-Nitropropane	10.21	43	97099	37.90	ppb	98
50)	2-Chloroethylvinyl Ether	10.39	63	98797	17.82	ppb	92
51)	cis-1,3-Dichloropropene	10.62	75	187501	19.47	ppb	95
3)	4-Methyl-2-Pentanone	10.90	43	160104	16.73	ppb	96
54)	Toluene	11.20	91	336446	17.65	ppb	99
55)	trans-1,3-Dichloropropene	11.59	75	162569	18.74	ppb	97
56)	Ethyl Methacrylate	11.81	69	160695	18.37	ppb	100
57)	1,1,2-Trichloroethane	11.91	83	93989	19.57	ppb	98
60)	Tetrachloroethene	12.17	166	68771	15.84	ppb	97
61)	2-Hexanone	12.39	43	110977	17.11	ppb	93
62)	1,3-Dichloropropane	12.20	76	203612	19.29	ppb	94
63)	Dibromochloromethane	12.61	129	107805	18.06	ppb	98
64)	1,2-Dibromoethane	12.79	107	119678	18.66	ppb	99
65)	Chlorobenzene	13.72	112	222776	17.85	ppb	96
66)	1,1,1,2-Tetrachloroethane	13.88	131	83429	17.64	ppb	94
67)	Ethylbenzene	13.94	91	333067	17.33	ppb	98
68)	(m+p)Xylene	14.17	106	234647	34.75	ppb	98
69)	o-Xylene	14.90	106	121234	18.30	ppb	100
70)	Styrene	14.92	104	220836	18.53	ppb	94
71)	Bromoform	15.24	173	69518	17.90	ppb	96
72)	Isopropylbenzene	15.61	105	278699	17.06	ppb	99
73)	Cyclohexanone	15.74	55	243530	282.03	ppb	98
75)	1,1,2,2-Tetrachloroethane	16.17	83	144017	17.83	ppb	97
76)	Trans-1,4-Dichloro-2-buten	16.28	53	42820	17.46	ppb	96
77)	1,2,3-Trichloropropane	16.24	110	41546	16.60	ppb	97
78)	n-Propylbenzene	16.40	91	320886	17.12	ppb	100
79)	Bromobenzene	16.14	156	82695	16.99	ppb	93
80)	1,3,5-Trimethylbenzene	15.61	105	280469	16.31	ppb	99
81)	2-Chlorotoluene	16.53	91	212765	17.47	ppb	99
82)	4-Chlorotoluene	16.75	91	240961	17.64	ppb	96
83)	tert-Butylbenzene	17.37	119	161372	16.31	ppb	96
84)	1,2,4-Trimethylbenzene	17.46	105	201482	17.18	ppb	98
85)	sec-Butylbenzene	17.79	105	243355	17.29	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8388.D
Acq On : 17 Dec 101 12:15 pm
Sample : 20 PPB
Misc :
Quant Time: Dec 17 15:36 19101

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.37	119	161372	16.31 ppb	97
87) 1,3-Dclbenz	17.98	146	116883	17.25 ppb	98
88) 1,4-Dclbenz	18.16	146	130389	17.27 ppb	97
89) n-Butylbenzene	18.89	91	182028	19.21 ppb	96
90) 1,2-Dclbenz	18.88	146	126401	17.54 ppb	98
91) 1,2-Dibromo-3-chloropropan	20.40	157	23310	16.97 ppb	98
92) Nitrobenzene	20.80	77	11050	15.13 ppb	90
93) 1,2,4-Tcbenzene	22.07	180	66347	17.86 ppb	99
94) Hexachlorobt	22.43	225	28179	21.07 ppb	96
95) Naphthalen	22.53	128	187631	17.50 ppb	99
96) 1,2,3-Tclbenzene	23.02	180	61451	17.94 ppb	97

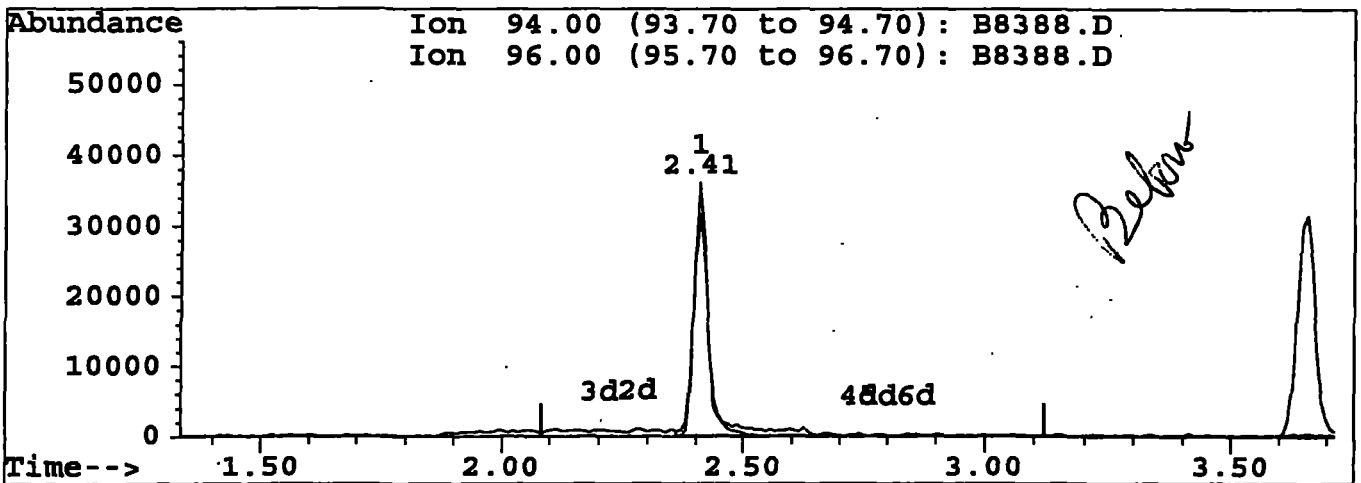
(#) = qualifier out of range (m) = manual integration
B8388.D EXP1217.M Mon Dec 17 15:37:39 2001

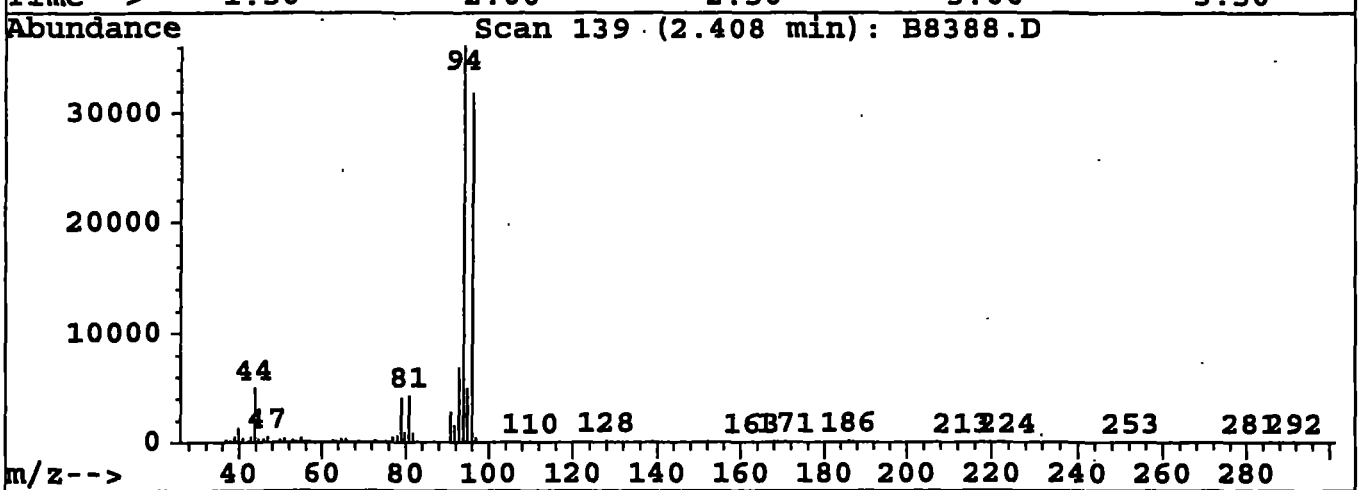
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8388.D
Acq On : 17 Dec 101 12:15 pm
Sample : 20 PPB
Misc :
Quant Time: Dec 17 12:43 19101

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration





TIC: B8388.D

(5) Bromomethane
2.41min 22.22ppb
response 83310

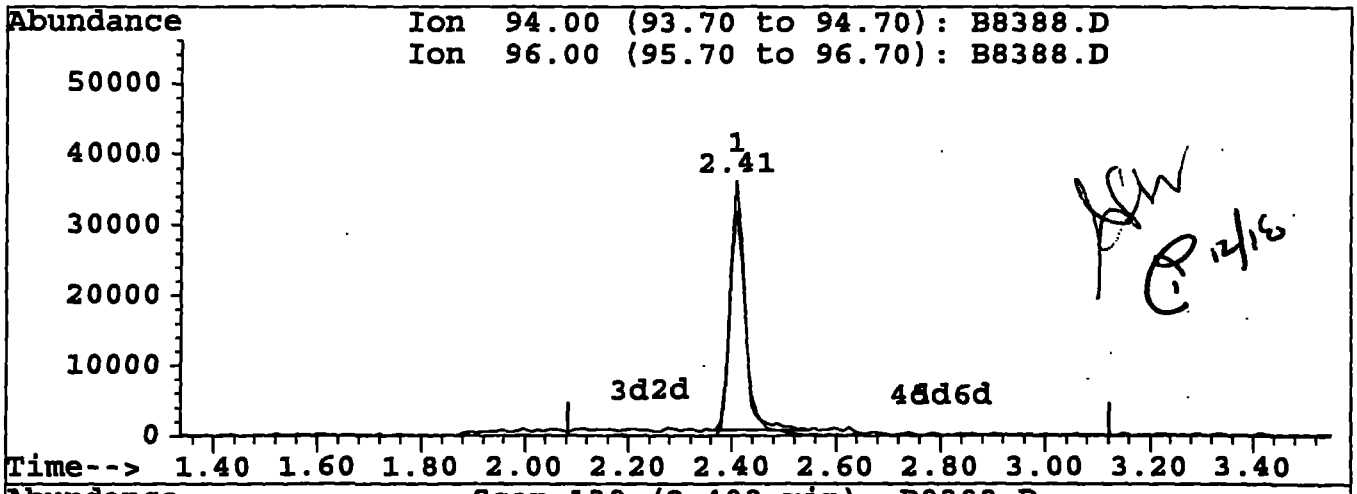
Ion	Exp%	Act%
94.00	100	100
96.00	90.30	87.91
0.00	0.00	0.00
0.00	0.00	0.00

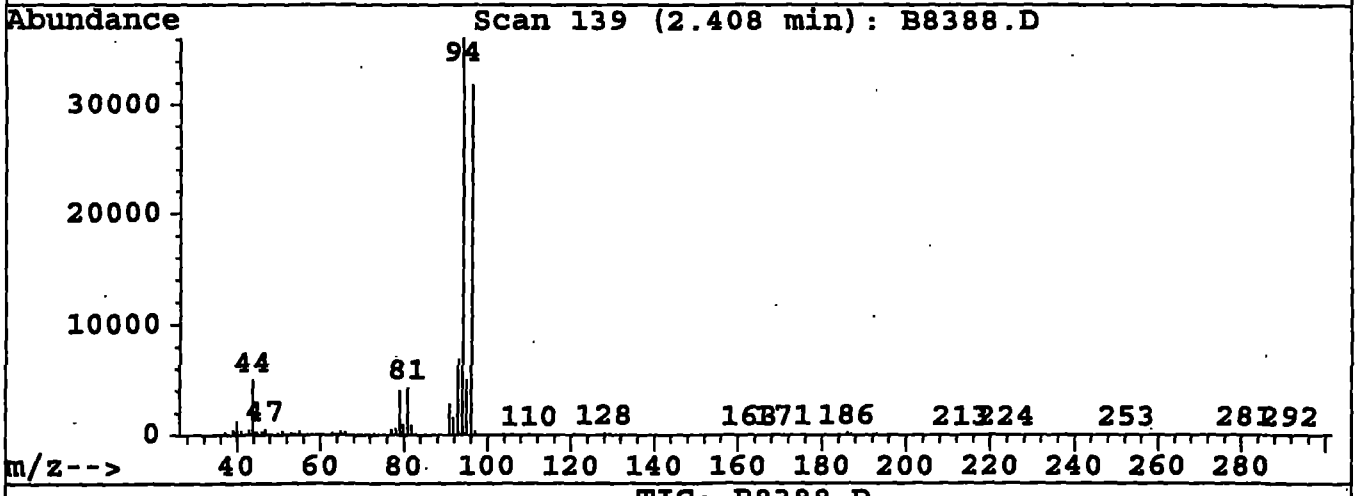
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8388.D
Acq On : 17 Dec 101 12:15 pm
Sample : 20 PPB
Misc :
Quant Time: Dec 17 15:36 19101

Vial: 6
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration





TIC: B8388.D

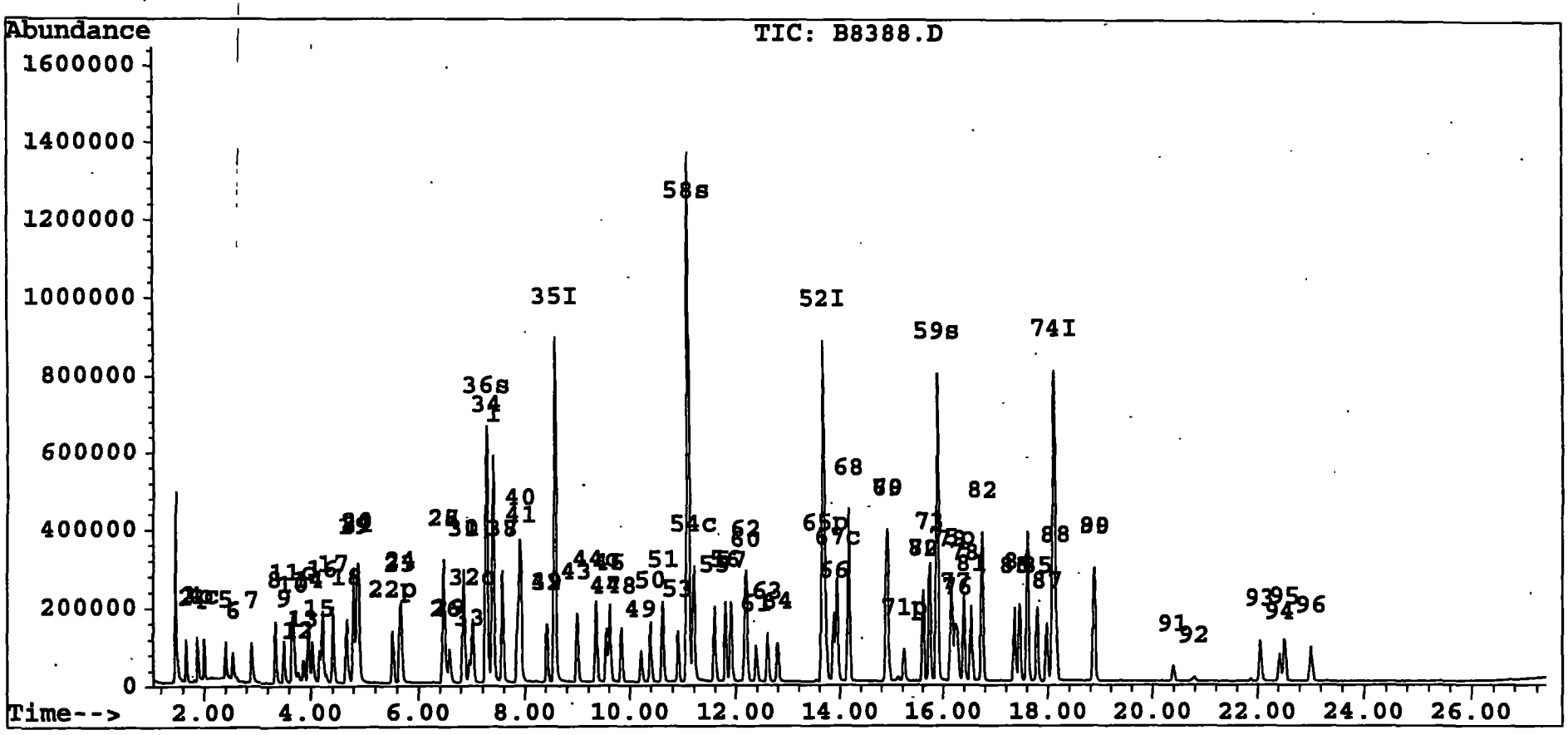
(5) Bromomethane
2.41min 19.06ppb m
response 71458

Ion	Exp%	Act%
94.00	100	100
96.00	90.30	87.91
0.00	0.00	0.00
0.00	0.00	0.00

B8388.D EXP1217.M Mon Dec 17 15:36:33 2001

Data Fi : J:\ACQUDATA\MSVOA3\DATA\121701\B8388. Vial: 6
Acq On : 17 Dec 101 12:15 pm Operator: droot
Sample : 20 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:36 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration



177

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D Vial: 7
g On : 17 Dec 101 12:52 pm Operator: droot
mple : 50 PPB Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1		Pentafluorobenzene	1.000	1.000	0.0	100	0.01
2		Dichlorodifluoromethane	0.426	0.365	14.2	100	0.00
3	p	Chloromethane	0.564	0.505	10.4	100	0.00
4	c	Vinyl Chloride	0.485	0.414	14.5	100	0.00
5		Bromomethane	0.345	0.281	18.5	100	0.00
6		Chloroethane	0.303	0.249	17.8	100	0.00
7		Trichlorofluoromethane	0.536	0.463	13.7	100	0.00
8		Diethyl Ether	0.481	0.438	9.0	100	0.00
9		Acrolein	0.108	0.109	-1.0	100	0.00
10		FREON 113	0.142	0.118	17.1	100	0.00
11	c	1,1-Diclethene	0.371	0.326	12.0	100	0.00
12		Acetone	0.215	0.201	6.5	100	0.00
13		Iodomethane	0.209	0.214	-2.4	100	0.00
14		Carbon Disulfide	1.431	1.448	-1.2	100	0.00
15		Acetonitrile	0.024	0.024	-0.8	100	0.00
16		Allyl Chloride	0.230	0.204	11.6	100	0.00
17		Methylene Chloride	0.505	0.442	12.5	100	0.00
18		TBA	0.059	0.056	4.8	100	0.00
19		Acrylonitrile	0.263	0.254	3.4	100	0.00
20		Methyl-t-Butyl Ether	1.432	1.318	8.0	100	0.00
21		trans-1,2-Dichloroethene	0.460	0.404	12.1	100	0.00
22	p	1,1-Diclethane	0.821	0.731	11.0	100	0.01
23		Vinyl Acetate	1.103	1.089	1.3	100	0.00
24		2-Chloro-1,3-butadiene	0.688	0.705	-2.4	100	0.01
25		2,2-Dichloropropane	0.580	0.503	13.2	100	0.00
26		2-Butanone	0.383	0.388	-1.4	100	0.00
27		Ethyl Acetate	0.000	0.000	0.0	100	0.00
28		cis-1,2-Dichloroethene	0.548	0.477	13.0	100	0.00
29		Propionitrile	0.099	0.093	6.0	100	0.00
30		Methacrylonitrile	0.256	0.237	7.7	100	0.00
31		Bromochloromethane	0.271	0.238	12.2	100	0.00
32	c	Chloroform	0.787	0.696	11.6	100	0.00
33		Tetrahydrofuran	0.252	0.224	11.4	100	0.00
34		1,1,1-Trichloroethane	0.581	0.508	12.5	100	0.00
35	I	1,4 - Difluorobenzene	1.000	1.000	0.0	100	0.00
36	s	surr4,Dibrflmethane	0.321	0.363	-13.1	100	0.00
		Carbontetrachloride	0.262	0.221	15.8	100	0.00
[illegible]		1,1-Dichloropropene	0.314	0.266	15.3	100	0.00
[illegible]		Iso-Butyl Alcohol	0.012	0.010	18.1	100	0.00
[illegible]		Benzene	0.899	0.789	12.2	100	0.00
41		1,2-Dichloroethane	0.343	0.309	9.8	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D Vial: 7
Acq On : 17 Dec 101 12:52 pm Operator: droot
ample : 50 PPB Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		N-Heptane	0.232	0.189	18.6	100	0.00
43		Trichloroethene	0.240	0.210	12.6	100	0.00
44	c	1,2-Diclpropane	0.295	0.263	10.7	100	0.00
45		Methyl Methacrylate	0.213	0.200	5.8	100	0.00
46		1,4-Dioxane	0.003	0.003	6.0	100	0.00
47		Dibromomethane	0.192	0.177	7.8	100	0.00
48		Bromodichloromethane	0.328	0.293	10.5	100	0.01
49		2-Nitropropane	0.109	0.102	5.9	100	0.00
50		2-Chloroethylvinyl Ether	0.243	0.236	2.8	100	0.00
51		cis-1,3-Dichloropropene	0.429	0.385	10.3	100	0.00
52	I	d5 - Chlorobenzene	1.000	1.000	0.0	100	0.00
5		4-Methyl-2-Pentanone	0.504	0.513	-1.9	100	0.00
5		Toluene	1.048	0.916	12.6	100	0.00
5		trans-1,3-Dichloropropene	0.472	0.439	7.1	100	0.00
56		Ethyl Methacrylate	0.461	0.437	5.1	100	0.00
57		1,1,2-Trichloroethane	0.265	0.247	6.6	100	0.00
58	s	surr3,Toluene-d8	1.066	1.220	-14.4	100	0.00
59	s	surr2,bfb	0.420	0.483	-15.0	100	0.00
60		Tetrachloroethene	0.234	0.196	16.2	100	0.00
61		2-Hexanone	0.341	0.352	-3.4	100	0.00
62		1,3-Dichloropropane	0.573	0.531	7.2	100	0.00
63		Dibromochloromethane	0.318	0.293	7.8	100	0.01
64		1,2-Dibromoethane	0.342	0.318	7.2	100	0.01
65	p	Chlorobenzene	0.678	0.594	12.4	100	0.00
66		1,1,1,2-Tetrachloroethane	0.254	0.223	12.2	100	0.00
67	c	Ethylbenzene	1.061	0.918	13.4	100	0.00
68		(m+p)Xylene	0.376	0.328	12.7	100	0.00
69		o-Xylene	0.370	0.330	10.7	100	0.01
70		Styrene	0.666	0.588	11.7	100	0.00
71	p	Bromoform	0.210	0.190	9.2	100	0.00
72		Isopropylbenzene	0.907	0.784	13.5	100	0.00
73		Cyclohexanone	0.035	0.033	4.7	100	0.00
74	I	d4 - Dichlorobenzene	1.000	1.000	0.0	100	0.00
75	p	1,1,2,2-Tetrachloroethane	1.067	0.946	11.3	100	0.01
76		Trans-1,4-Dichloro-2-butene	0.326	0.298	8.6	100	0.00
7		1,2,3-Trichloropropane	0.326	0.288	11.6	100	0.00
		n-Propylbenzene	2.661	2.273	14.6	100	0.01
		Bromobenzene	0.668	0.563	15.7	100	0.01
0		1,3,5-Trimethylbenzene	2.423	2.015	16.8	100	0.00
81		2-Chlorotoluene	1.707	1.478	13.4	100	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D Vial: 7
Acq On : 17 Dec 101 12:52 pm Operator: droot
Sample : 50 PPB Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	4-Chlorotoluene	1.924	1.663	13.6	100	0.00
83	tert-Butylbenzene	1.384	1.157	16.4	100	0.00
84	1,2,4-Trimethylbenzene	1.594	1.390	12.8	100	0.00
85	sec-Butylbenzene	1.994	1.703	14.6	100	0.00
86	p-Isopropyltoluene	1.384	1.157	16.4	100	0.00
87	1,3-Dclbenz	0.927	0.797	14.1	100	0.01
88	1,4-Dclbenz	1.029	0.884	14.1	100	0.00
89	n-Butylbenzene	1.332	1.160	12.9	100	0.00
90	1,2-Dclbenz	0.987	0.849	14.0	100	0.00
91	1,2-Dibromo-3-chloropropane	0.173	0.156	9.8	100	0.00
92	Nitrobenzene	0.095	0.084	11.7	100	-0.02
93	1,2,4-Tcbenzene	0.484	0.429	11.4	100	0.00
	Hexachlorobt	0.187	0.160	14.6	100	0.00
95	Naphthalen	1.339	1.250	6.6	100	0.00
96	1,2,3-Tclbenzene	0.444	0.405	8.8	100	0.01
97	TOTAL XYLENE	0.000	0.000	0.0	100	0.00

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D
Acq On : 17 Dec 101 12:52 pm
Sample : 50 PPB
Misc :
Quant Time: Dec 17 13:22 19101

Vial: 7
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	607475	50.00	ppb	-0.08
35) 1,4 - Difluorobenzene	8.57	114	1129082	50.00	ppb	-0.09
52) d5 - Chlorobenzene	13.66	117	890684	50.00	ppb	-0.11
74) d4 - Dichlorobenzene	18.11	152	346745	50.00	ppb	-0.12
System Monitoring Compounds						**%Recovery**
36) surr4,Dibrflmethane	7.27	113	409439	57.81	ppb	115.62%
58) surr3,Toluene-d8	11.08	98	1086357	57.27	ppb	114.54%
59) surr2,bfb	15.88	95	429989	58.54	ppb	117.07%
Target Compounds						**Qvalue**
2) Dichlorodifluoromethane	1.66	85	221895	42.78	ppb	m pl 77
3) Chloromethane	1.88	50	307049	43.28	ppb	98
4) Vinyl Chloride	2.00	62	251547	41.75	ppb	98
5) Bromomethane	2.41	94	170930	43.27	ppb	99
6) Chloroethane	2.55	64	151426	40.67	ppb	98
7) Trichlorofluoromethane	2.90	101	281078	42.24	ppb	96
8) Diethyl Ether	3.34	59	265887	45.25	ppb	98
9) Acrolein	3.49	56	330901	245.95	ppb	99
10) FREON 113	3.69	85	71432	41.80	ppb	89
11) 1,1-Diclethene	3.65	96	198170	45.32	ppb	95
12) Acetone	3.75	43	121893	43.81	ppb	96
13) Iodomethane	3.86	127	130134	63.83	ppb	99
14) Carbon Disulfide	3.96	76	879820	50.48	ppb	99
15) Acetonitrile	4.16	41	295225	961.08	ppb	96
16) Allyl Chloride	4.22	76	123674	45.40	ppb	97
17) Methylene Chloride	4.42	84	268555	44.25	ppb	98
18) TBA	4.68	59	679807	887.21	ppb	100
19) Acrylonitrile	4.80	53	770875	228.71	ppb	99
20) Methyl-t-Butyl Ether	4.89	73	800373	44.78	ppb	96
21) trans-1,2-Dichloroethene	4.86	96	245426	44.32	ppb	97
22) 1,1-Diclethane	5.53	63	443906	44.87	ppb	99
23) Vinyl Acetate	5.66	43	661650	48.14	ppb	97
24) 2-Chloro-1,3-butadiene	5.69	53	428158	49.38	PPB	96
25) 2,2-Dichloropropane	6.47	77	305826	43.18	ppb	98
26) 2-Butanone	6.52	43	235837	44.77	ppb	100
28) cis-1,2-Dichloroethene	6.48	96	289998	43.33	ppb	90
29) Propionitrile	6.59	54	282988	224.44	ppb	98
30) Methacrylonitrile	6.84	67	143775	43.41	ppb	96
31) Bromochloromethane	6.86	128	144567	44.34	ppb	98
32) Chloroform	7.02	83	422636	43.92	ppb	100
33) Tetrahydrofuran	6.95	42	135840	41.98	ppb	96
34) 1,1,1-Trichloroethane	7.29	97	308548	43.40	ppb	96
37) Carbontetrachloride	7.57	117	249354	43.50	ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D Vial: 7
Acq On : 17 Dec 101 12:52 pm Operator: droot
Sample : 50 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 13:22 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.57	75	299901	42.25	ppb	98
39)	Iso-Butyl Alcohol	8.43	43	214696	823.06	ppb	100
40)	Benzene	7.90	78	891249	43.72	ppb	97
41)	1,2-Dichloroethane	7.92	62	349420	44.51	ppb	98
42)	N-Heptane	8.43	43	213112	40.92	ppb	99
43)	Trichloroethene	9.00	95	236619	43.71	ppb	92
44)	1,2-Diclpropane	9.35	63	297322	44.80	ppb	95
45)	Methyl Methacrylate	9.62	69	226096	44.41	ppb	98
46)	1,4-Dioxane	9.62	88	67348	953.42	ppb	98
47)	Dibromomethane	9.55	93	199911	45.39	ppb	99
48)	Bromodichloromethane	9.84	83	331242	44.56	ppb	99
49)	2-Nitropropane	10.22	43	231435	90.19	ppb	99
50)	2-Chloroethylvinyl Ether	10.38	63	266760	47.77	ppb	98
51)	cis-1,3-Dichloropropene	10.62	75	435170	44.76	ppb	96
53)	4-Methyl-2-Pentanone	10.91	43	456803	48.42	ppb	97
54)	Toluene	11.20	91	815837	43.19	ppb	99
55)	trans-1,3-Dichloropropene	11.60	75	390925	45.71	ppb	98
56)	Ethyl Methacrylate	11.80	69	389457	45.18	ppb	97
57)	1,1,2-Trichloroethane	11.91	83	220172	46.13	ppb	98
60)	Tetrachloroethene	12.18	166	174748	40.96	ppb	100
61)	2-Hexanone	12.38	43	313749	49.01	ppb	93
62)	1,3-Dichloropropane	12.21	76	473112	45.29	ppb	92
63)	Dibromochloromethane	12.61	129	261138	44.41	ppb	97
64)	1,2-Dibromoethane	12.80	107	282974	44.80	ppb	99
65)	Chlorobenzene	13.71	112	529097	42.91	ppb	97
66)	1,1,1,2-Tetrachloroethane	13.88	131	198853	42.53	ppb	97
67)	Ethylbenzene	13.94	91	818043	42.79	ppb	97
68)	(m+p)Xylene	14.16	106	585147	86.57	ppb	100
69)	o-Xylene	14.90	106	294025	44.34	ppb	99
70)	Styrene	14.92	104	523929	43.77	ppb	95
71)	Bromoform	15.24	173	169582	44.46	ppb	100
72)	Isopropylbenzene	15.61	105	698519	42.75	ppb	99
73)	Cyclohexanone	15.73	55	588895	727.34	ppb	98
75)	1,1,2,2-Tetrachloroethane	16.17	83	328194	42.14	ppb	98
76)	Trans-1,4-Dichloro-2-buten	16.28	53	103261	43.52	ppb	92
77)	1,2,3-Trichloropropane	16.23	110	99863	41.24	ppb	93
78)	n-Propylbenzene	16.40	91	788316	42.40	ppb	99
79)	Bromobenzene	16.15	156	195238	41.23	ppb	97
80)	1,3,5-Trimethylbenzene	15.61	105	698519	41.33	ppb	99
81)	2-Chlorotoluene	16.54	91	512533	42.79	ppb	98
82)	4-Chlorotoluene	16.74	91	576484	42.80	ppb	98
83)	tert-Butylbenzene	17.36	119	401101	41.05	ppb	99
84)	1,2,4-Trimethylbenzene	17.46	105	481831	41.97	ppb	98
85)	sec-Butylbenzene	17.80	105	590480	42.22	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D
Acq On : 17 Dec 101 12:52 pm
Sample : 50 PPB
Misc :
Quant Time: Dec 17 13:22 19101

Vial: 7
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.36	119	401101	41.05 ppb	98
87) 1,3-Dclbenz	17.98	146	276215	41.55 ppb	98
88) 1,4-Dclbenz	18.16	146	306377	41.39 ppb	99
89) n-Butylbenzene	18.89	91	402155	42.12 ppb	97
90) 1,2-Dclbenz	18.87	146	294342	41.65 ppb	98
91) 1,2-Dibromo-3-chloropropan	20.40	157	54050	40.66 ppb	94
92) Nitrobenzene	20.79	77	29015	42.71 ppb	94
93) 1,2,4-Tcbenzene	22.06	180	148904	40.97 ppb	89
94) Hexachlorobt	22.43	225	55394	41.36 ppb	92
95) Naphthalen	22.53	128	433338	42.18 ppb	100
96) 1,2,3-Tclbenzene	23.02	180	140393	42.24 ppb	97

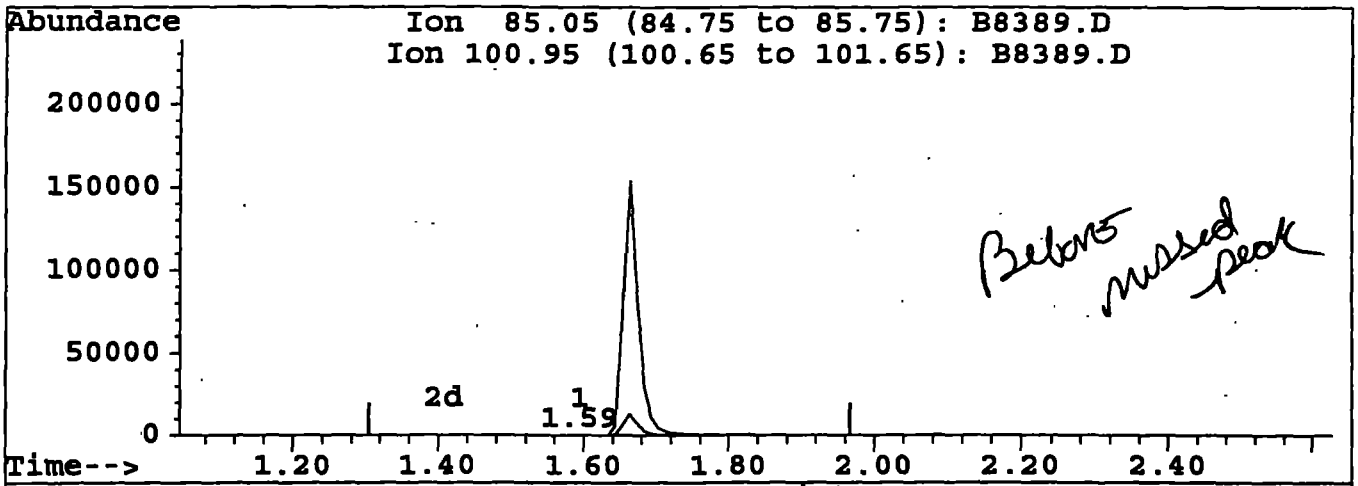
(#) = qualifier out of range (m) = manual integration

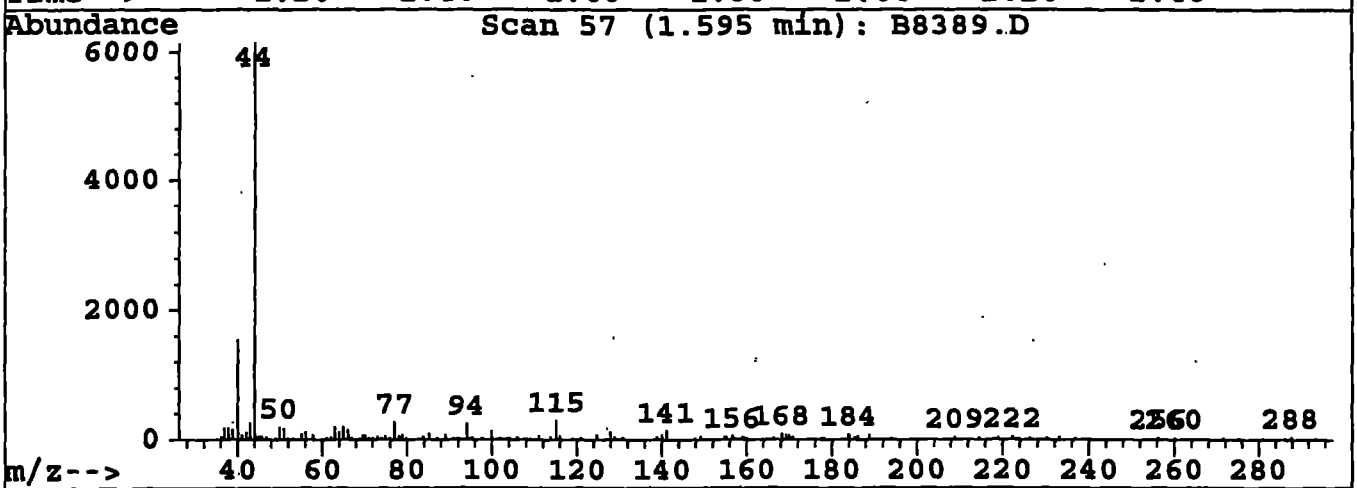
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D
Acq On : 17 Dec 101 12:52 pm
Sample : 50 PPB
Misc :
Quant Time: Dec 17 13:20 19101

Vial: 7
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 12:46:48 2001
Response via : Multiple Level Calibration





TIC: B8389.D

(2) Dichlorodifluoromethane
1.59min 0.06ppb
response 291

Ion	Exp%	Act%
85.05	100	100
100.95	8.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

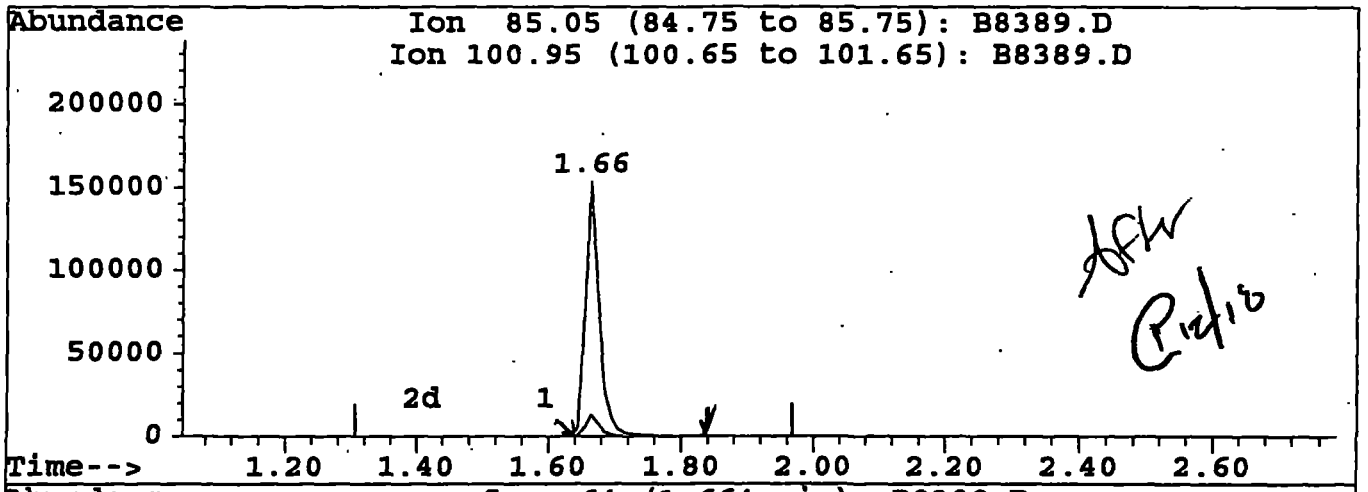
B8389.D EXP1217.M Mon Dec 17 13:21:59 2001

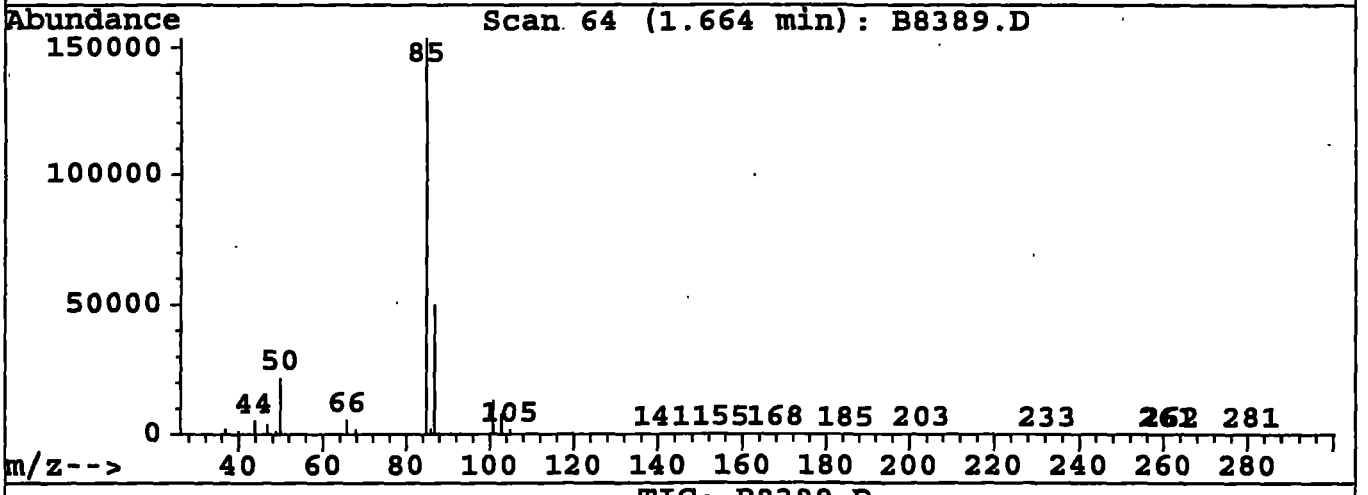
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D
Acq On : 17 Dec 101 12:52 pm
Sample : 50 PPB
Misc :
Quant Time: Dec 17 13:22 19101

Vial: 7
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 12:46:48 2001
Response via : Multiple Level Calibration





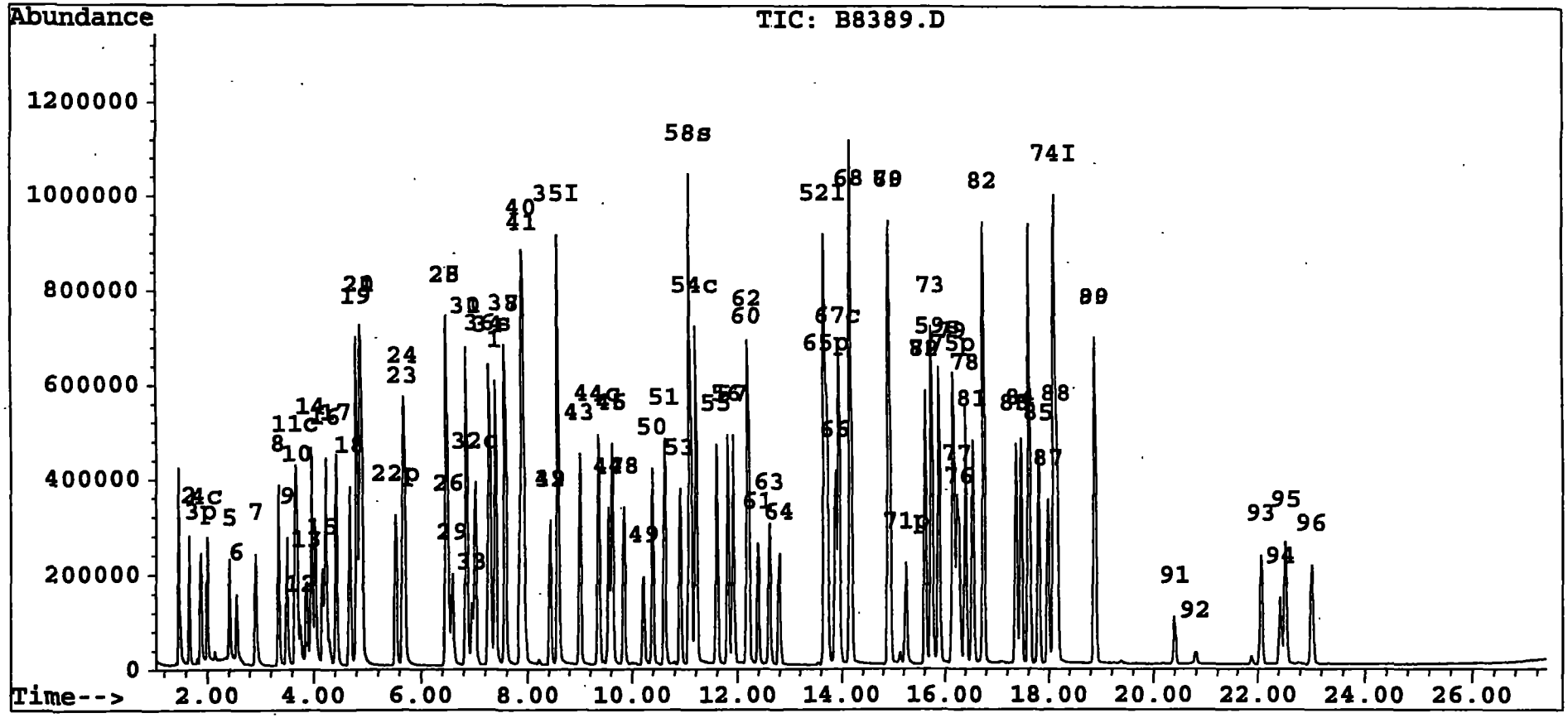
TIC: B8389.D

(2) Dichlorodifluoromethane
1.66min 42.78ppb m
response 221895

Ion	Exp%	Act%
85.05	100	100
100.95	8.10	8.49
0.00	0.00	0.00
0.00	0.00	0.00

Data F. . : J:\ACQUDATA\MSVOA3\DATA\121701\B8389. Vial: 7
Acq On : 17 Dec 101 12:52 pm Operator: droot
Sample : 50 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 13:22 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D Vial: 8
Acq On : 17 Dec 101 1:28 pm Operator: droot
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:04 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	611329	50.00 ppb	-0.08
35) 1,4 - Difluorobenzene	8.58	114	1147552	50.00 ppb	-0.09
52) d5 - Chlorobenzene	13.67	117	906345	50.00 ppb	-0.10
74) d4 - Dichlorobenzene	18.11	152	339130	50.00 ppb	-0.12
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.27	113	722125	99.75 ppb	199.50%
58) surr3,Toluene-d8	11.09	98	1904919	98.47 ppb	196.95%
59) surr2,bfb	15.88	95	745331	98.56 ppb	197.13%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.66	85	590277	115.92 ppb	m DL 77
3) Chloromethane	1.88	50	756760	110.03 ppb	98
4) Vinyl Chloride	2.01	62	662944	112.64 ppb	100
5) Bromomethane	2.40	94	439478	108.87 ppb	97
6) Chloroethane	2.55	64	384652	105.60 ppb	100
7) Trichlorofluoromethane	2.90	101	738540	113.77 ppb	95
8) Diethyl Ether	3.34	59	630585	109.13 ppb	96
9) Acrolein	3.50	56	685654	514.91 ppb	97
10) FREON 113	3.69	85	196830	117.39 ppb	95
11) 1,1-Diclethene	3.66	96	510868	118.37 ppb	98
12) Acetone	3.75	43	262331	96.58 ppb	96
13) Iodomethane	3.87	127	344291	161.51 ppb	94
14) Carbon Disulfide	3.97	76	2073184	120.44 ppb	100
15) Acetonitrile	4.16	41	642151	2102.27 ppb	97
16) Allyl Chloride	4.23	76	306580	113.54 ppb	98
17) Methylene Chloride	4.42	84	662784	110.70 ppb	97
18) TBA	4.67	59	1460608	1948.72 ppb	99
19) Acrylonitrile	4.80	53	1676047	506.63 ppb	100
20) Methyl-t-Butyl Ether	4.89	73	1886539	107.56 ppb	96
21) trans-1,2-Dichloroethene	4.86	96	641977	117.81 ppb	97
22) 1,1-Diclethane	5.53	63	1133368	116.38 ppb	97
23) Vinyl Acetate	5.66	43	1408293	102.96 ppb	99
24) 2-Chloro-1,3-butadiene	5.69	53	993543	116.79 PPB	98
25) 2,2-Dichloropropane	6.48	77	800450	115.29 ppb	95
26) 2-Butanone	6.52	43	469735	90.42 ppb	99
28) cis-1,2-Dichloroethene	6.49	96	737671	112.24 ppb	94
29) Propionitrile	6.58	54	630486	509.58 ppb	99
30) Methacrylonitrile	6.85	67	323802	100.39 ppb	100
31) Bromochloromethane	6.86	128	347561	107.87 ppb	94
32) Chloroform	7.02	83	1042112	110.08 ppb	98
33) Tetrahydrofuran	6.95	42	295372	93.43 ppb	96
34) 1,1,1-Trichloroethane	7.30	97	809618	116.47 ppb	99
37) Carbontetrachloride	7.58	117	671755	118.56 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D Vial: 8
Acq On : 17 Dec 101 1:28 pm Operator: droot
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:04 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.58	75	800022	114.02	ppb	97
39)	Iso-Butyl Alcohol	8.43	43	557987	2152.26	ppb	100
40)	Benzene	7.90	78	2285344	112.79	ppb	99
41)	1,2-Dichloroethane	7.93	62	843252	107.65	ppb	100
42)	N-Heptane	8.43	43	556080	107.54	ppb	99
43)	Trichloroethene	9.01	95	625083	116.45	ppb	99
44)	1,2-Diclpropane	9.36	63	736586	110.64	ppb	97
45)	Methyl Methacrylate	9.62	69	513541	101.71	ppb	97
46)	1,4-Dioxane	9.62	88	144347	2020.15	ppb	91
47)	Dibromomethane	9.55	93	471519	106.78	ppb	99
48)	Bromodichloromethane	9.84	83	824786	111.29	ppb	98
49)	2-Nitropropane	10.22	43	514091	201.01	ppb	99
50)	2-Chloroethylvinyl Ether	10.39	63	569831	101.43	ppb	98
51)	cis-1,3-Dichloropropene	10.62	75	1074095	110.70	ppb	97
53)	4-Methyl-2-Pentanone	10.91	43	930875	98.86	ppb	100
54)	Toluene	11.20	91	2135162	113.77	ppb	99
55)	trans-1,3-Dichloropropene	11.60	75	950177	111.71	ppb	100
56)	Ethyl Methacrylate	11.81	69	904830	105.74	ppb	99
57)	1,1,2-Trichloroethane	11.91	83	518947	108.82	ppb	97
60)	Tetrachloroethene	12.19	166	481281	114.60	ppb	96
61)	2-Hexanone	12.39	43	641183	99.97	ppb	97
62)	1,3-Dichloropropane	12.21	76	1123572	108.36	ppb	93
63)	Dibromochloromethane	12.61	129	639457	109.92	ppb	99
64)	1,2-Dibromoethane	12.80	107	677830	107.99	ppb	99
65)	Chlorobenzene	13.72	112	1367539	111.80	ppb	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	513267	110.84	ppb	99
67)	Ethylbenzene	13.95	91	2193857	115.77	ppb	98
68)	(m+p)Xylene	14.17	106	1559426	232.18	ppb	100
69)	o-Xylene	14.90	106	765342	115.73	ppb	98
70)	Styrene	14.93	104	1366198	114.42	ppb	99
71)	Bromoform	15.25	173	412397	109.66	ppb	99
72)	Isopropylbenzene	15.61	105	1888857	116.54	ppb	99
73)	Cyclohexanone	15.74	55	1264159	1638.23	ppb	98
75)	1,1,2,2-Tetrachloroethane	16.17	83	768431	103.81	ppb	100
76)	Trans-1,4-Dichloro-2-buten	16.28	53	235321	104.04	ppb	99
77)	1,2,3-Trichloropropane	16.24	110	225557	98.64	ppb	99
78)	n-Propylbenzene	16.40	91	2076217	117.19	ppb	99
79)	Bromobenzene	16.15	156	505466	112.54	ppb	99
80)	1,3,5-Trimethylbenzene	15.61	105	1892201	117.92	ppb	99
81)	2-Chlorotoluene	16.55	91	1314765	115.30	ppb	100
82)	4-Chlorotoluene	16.75	91	1458794	113.57	ppb	97
83)	tert-Butylbenzene	17.37	119	1056617	113.67	ppb	100
84)	1,2,4-Trimethylbenzene	17.46	105	1198548	110.13	ppb	98
85)	sec-Butylbenzene	17.80	105	1530690	114.91	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D Vial: 8
Acq On : 17 Dec 101 1:28 pm Operator: droot
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:04 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration

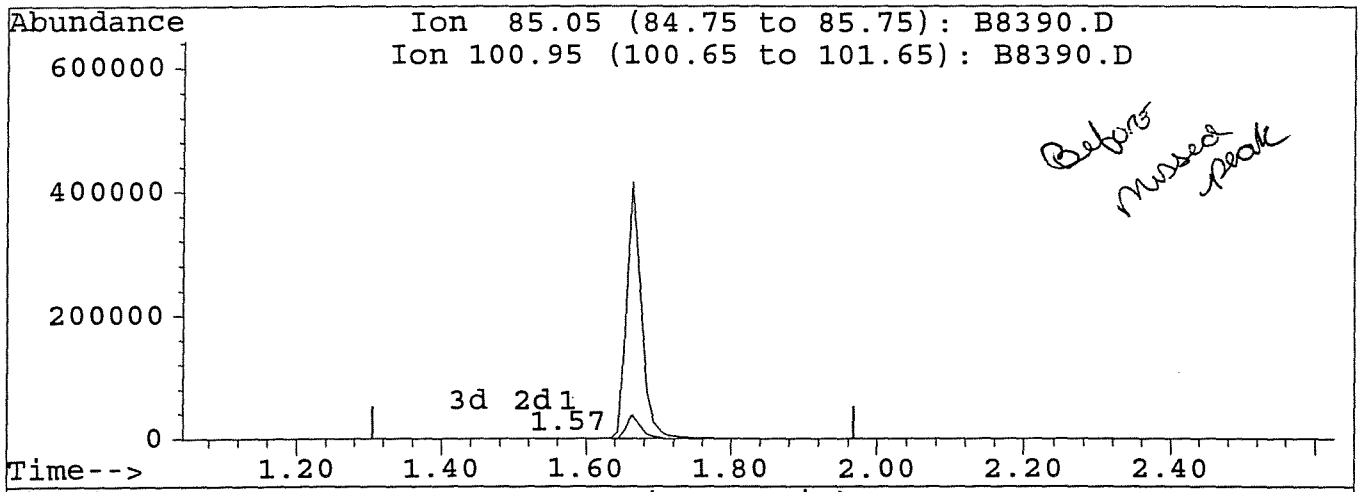
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.37	119	1056617	113.67 ppb	100
87) 1,3-Dclbenz	17.98	146	700468	110.85 ppb	99
88) 1,4-Dclbenz	18.16	146	756379	107.59 ppb	99
89) n-Butylbenzene	18.89	91	1003578	110.51 ppb	100
90) 1,2-Dclbenz	18.88	146	734173	109.10 ppb	98
91) 1,2-Dibromo-3-chloropropan	20.40	157	125710	100.87 ppb	97
92) Nitrobenzene	20.80	77	66181	102.30 ppb	92
93) 1,2,4-Tcbenzene	22.06	180	355076	103.52 ppb	100
94) Hexachlorobt	22.43	225	134530	106.17 ppb	98
95) Naphthalen	22.53	128	936618	96.44 ppb	99
96) 1,2,3-Tclbenzene	23.02	180	327637	104.29 ppb	99

(#) = qualifier out of range (m) = manual integration

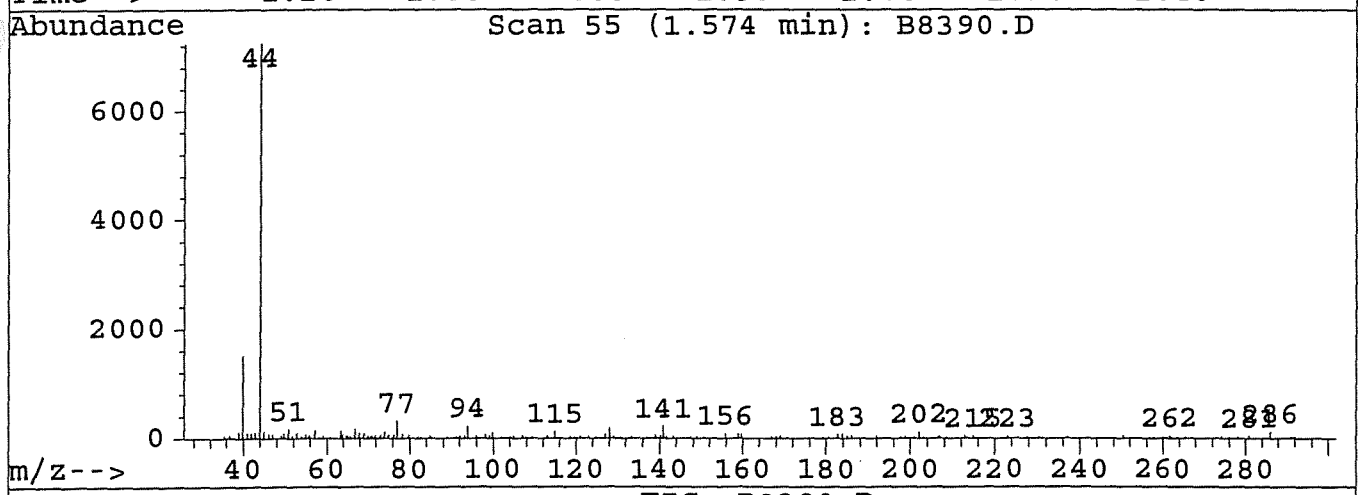
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D Vial: 8
Acq On : 17 Dec 101 1:28 pm Operator: droot
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 13:56 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration



Before missed peak



TIC: B8390.D

(2) Dichlorodifluoromethane
1.57min 0.02ppb
response 102

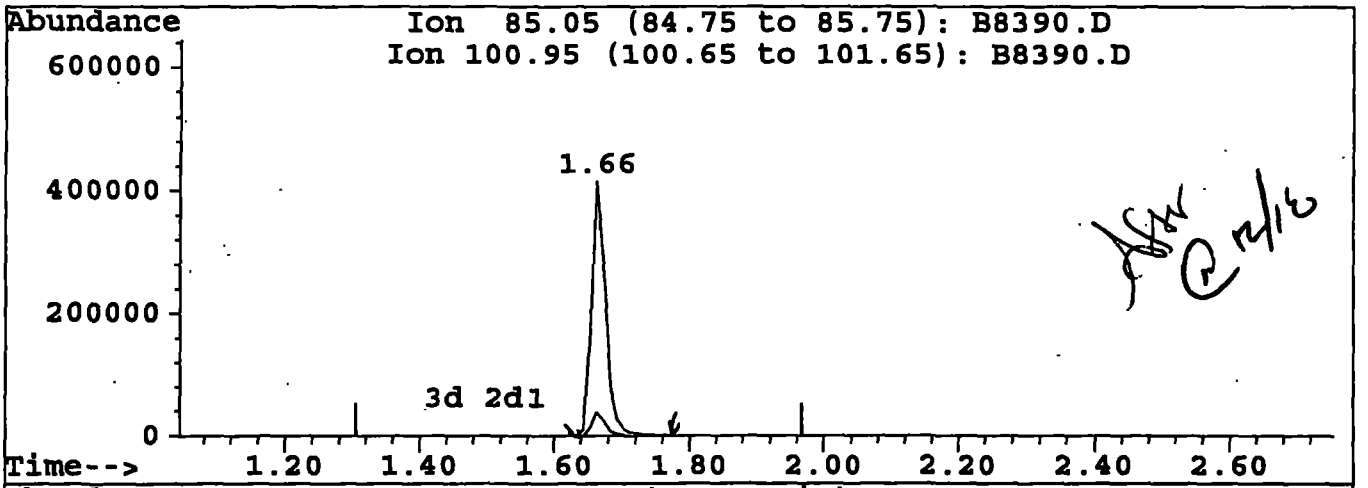
Ion	Exp%	Act%
85.05	100	100
100.95	8.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

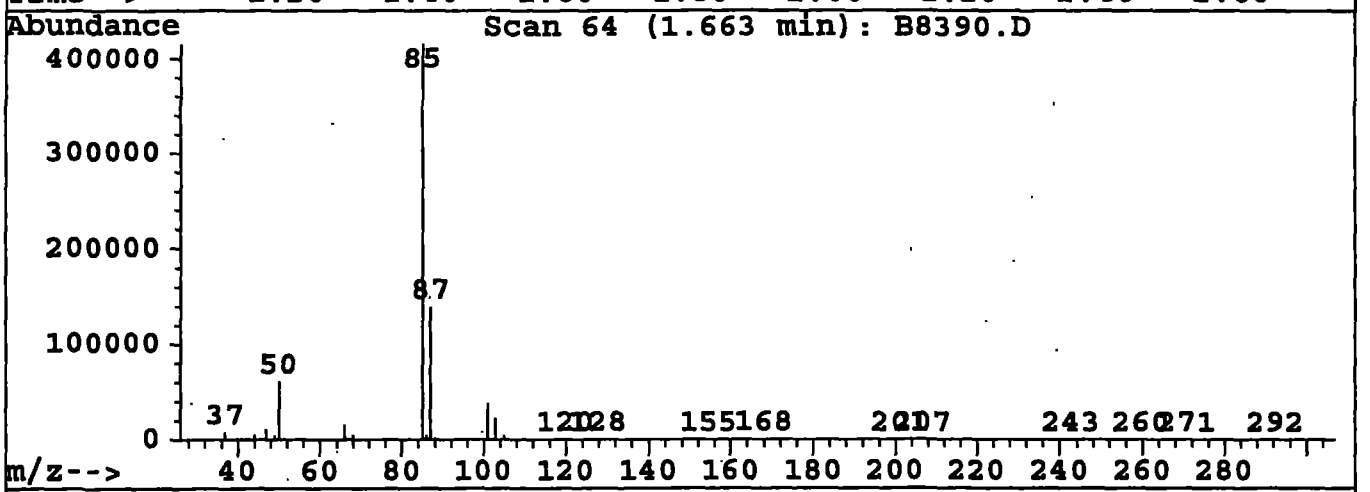
12/17

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D Vial: 8
Acq On : 17 Dec 101 1:28 pm Operator: droot
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:04 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration





TIC: B8390.D

(2) Dichlorodifluoromethane
1.66min 115.92ppb m
response 590277

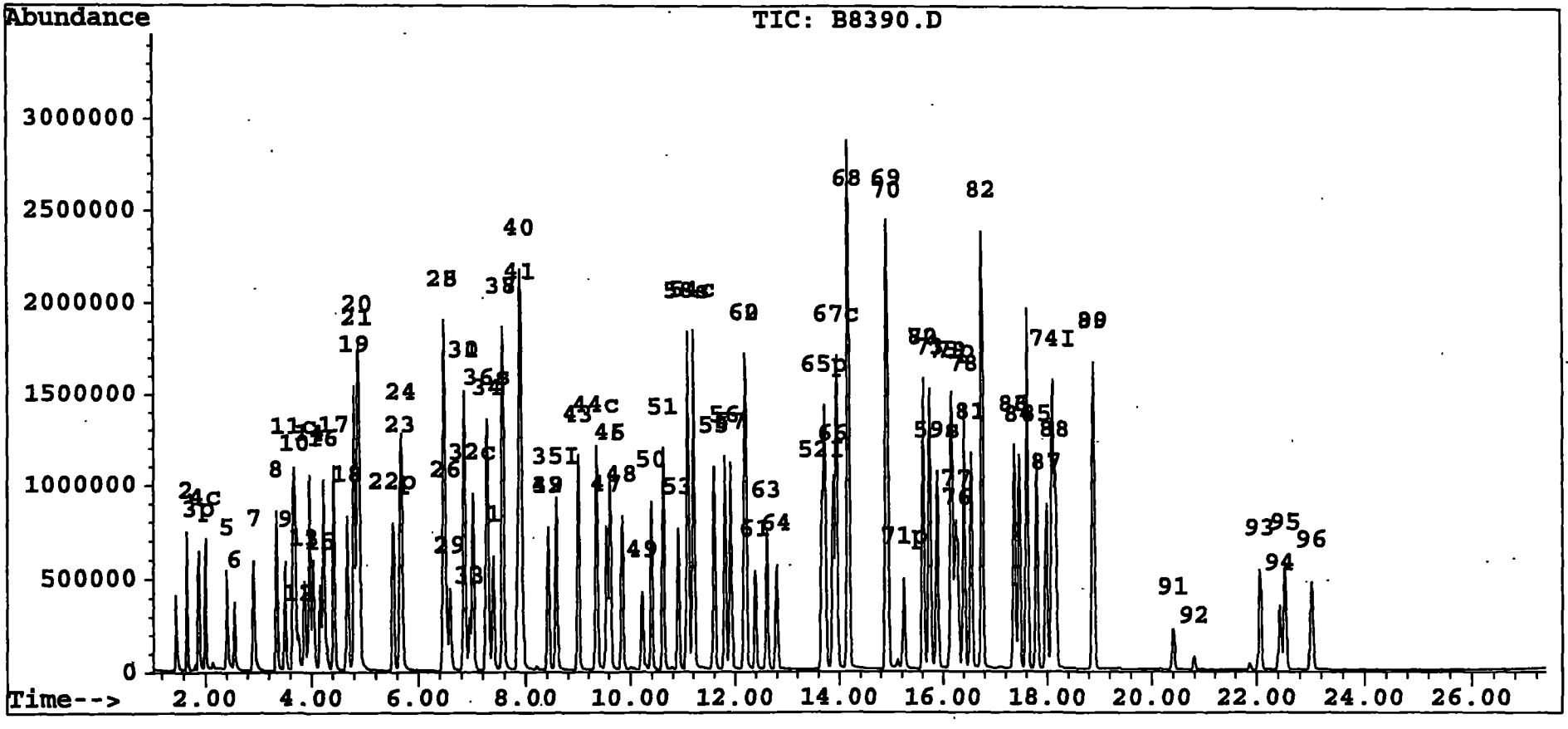
Ion	Exp%	Act%
85.05	100	100
100.95	8.10	9.12
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8390.D
Acq On : 17 Dec 101 1:28 pm
Sample : 100 PPB
Misc :
Quant Time: Dec 17 14:04 19101

Vial: 8
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration



Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D
Acq On : 17 Dec 101 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Dec 17 14:35 19101

Vial: 9
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:35:36 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	607427	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.58	114	1142955	50.00 ppb	0.00
52) d5 - Chlorobenzene	13.67	117	907775	50.00 ppb	0.00
74) d4 - Dichlorobenzene	18.12	152	343508	50.00 ppb	0.00
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.28	113	879864	121.68 ppb	243.35%
58) surr3,Toluene-d8	11.09	98	2304253	118.29 ppb	236.57%
59) surr2,bfb	15.88	95	914592	119.94 ppb	239.88%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.67	85	900030	173.98 ppb	m 77
3) Chloromethane	1.87	50	1144862	166.54 ppb	99
4) Vinyl Chloride	2.00	62	1002731	168.80 ppb	100
5) Bromomethane	2.40	94	675909	161.88 ppb	93
6) Chloroethane	2.54	64	594904	162.12 ppb	m 1
7) Trichlorofluoromethane	2.91	101	1115213	170.06 ppb	99
8) Diethyl Ether	3.34	59	931350	159.79 ppb	99
9) Acrolein	3.50	56	1010557	763.85 ppb	98
10) FREON 113	3.69	85	304058	177.83 ppb	93
11) 1,1-Diclethene	3.66	96	774605	175.83 ppb	99
12) Acetone	3.75	43	394226	146.37 ppb	98
13) Iodomethane	3.86	127	469773	209.62 ppb	97
14) Carbon Disulfide	3.96	76	2814843	161.23 ppb	99
15) Acetonitrile	4.16	41	909464	2976.96 ppb	98
16) Allyl Chloride	4.23	76	459896	168.04 ppb	94
17) Methylene Chloride	4.42	84	972410	160.26 ppb	99
18) TBA	4.68	59	2218013	2988.34 ppb	99
19) Acrylonitrile	4.81	53	2465587	750.28 ppb	99
20) Methyl-t-Butyl Ether	4.90	73	2759677	157.14 ppb	98
21) trans-1,2-Dichloroethene	4.87	96	959126	172.87 ppb	99
22) 1,1-Diclethane	5.54	63	1667764	168.89 ppb	99
23) Vinyl Acetate	5.66	43	1769557	129.52 ppb	99
24) 2-Chloro-1,3-butadiene	5.69	53	1358026	158.68 PPB	97
25) 2,2-Dichloropropane	6.47	77	1220186	173.65 ppb	97
26) 2-Butanone	6.52	43	716221	139.68 ppb	100
28) cis-1,2-Dichloroethene	6.48	96	1090739	164.25 ppb	93
29) Propionitrile	6.59	54	923297	749.95 ppb	97
30) Methacrylonitrile	6.85	67	482316	151.24 ppb	100
31) Bromochloromethane	6.87	128	499167	153.20 ppb	98
32) Chloroform	7.02	83	1551595	162.44 ppb	98
33) Tetrahydrofuran	6.95	42	427347	136.11 ppb	96
34) 1,1,1-Trichloroethane	7.30	97	1236924	175.88 ppb	99
37) Carbontetrachloride	7.57	117	1047011	182.46 ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D Vial: 9
Acq On : 17 Dec 101 2:05 pm Operator: droot
Sample : 150 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:35 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:35:36 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.58	75	1232570	173.31	ppb	98
39)	Iso-Butyl Alcohol	8.43	43	885878	3372.03	ppb	100
40)	Benzene	7.91	78	3473127	169.43	ppb	99
41)	1,2-Dichloroethane	7.94	62	1228572	156.03	ppb	98
42)	N-Heptane	8.43	43	885165	168.80	ppb	99
43)	Trichloroethene	9.00	95	949108	174.23	ppb	98
44)	1,2-Diclpropane	9.36	63	1097064	163.10	ppb	98
45)	Methyl Methacrylate	9.62	69	749982	149.47	ppb	99
46)	1,4-Dioxane	9.61	88	212802	2918.04	ppb	88
47)	Dibromomethane	9.55	93	691133	156.01	ppb	98
48)	Bromodichloromethane	9.85	83	1213279	161.79	ppb	99
49)	2-Nitropropane	10.22	43	763646	300.24	ppb	99
50)	2-Chloroethylvinyl Ether	10.40	63	814088	145.20	ppb	99
51)	cis-1,3-Dichloropropene	10.63	75	1556272	158.56	ppb	98
53)	4-Methyl-2-Pentanone	10.91	43	1368822	145.89	ppb	99
54)	Toluene	11.21	91	3265421	171.15	ppb	99
55)	trans-1,3-Dichloropropene	11.60	75	1381934	160.50	ppb	99
56)	Ethyl Methacrylate	11.82	69	1305177	151.69	ppb	99
57)	1,1,2-Trichloroethane	11.91	83	754381	156.27	ppb	99
60)	Tetrachloroethene	12.18	166	755226	177.24	ppb	99
61)	2-Hexanone	12.39	43	942178	147.41	ppb	96
62)	1,3-Dichloropropane	12.21	76	1635819	156.03	ppb	93
63)	Dibromochloromethane	12.61	129	940943	160.31	ppb	98
64)	1,2-Dibromoethane	12.80	107	970435	153.25	ppb	98
65)	Chlorobenzene	13.73	112	2041688	164.66	ppb	98
66)	1,1,1,2-Tetrachloroethane	13.88	131	772837	165.17	ppb	98
67)	Ethylbenzene	13.95	91	3343233	172.81	ppb	98
68)	(m+p)Xylene	14.17	106	2391306	348.58	ppb	99
69)	o-Xylene	14.91	106	1166141	173.00	ppb	96
70)	Styrene	14.93	104	2063364	169.59	ppb	97
71)	Bromoform	15.24	173	610197	162.45	ppb	100
72)	Isopropylbenzene	15.62	105	2946746	177.65	ppb	99
73)	Cyclohexanone	15.73	55	1854264	2531.74	ppb	97
75)	1,1,2,2-Tetrachloroethane	16.18	83	1094860	145.90	ppb	99
76)	Trans-1,4-Dichloro-2-buten	16.29	53	338172	147.66	ppb	98
77)	1,2,3-Trichloropropane	16.24	110	336212	145.93	ppb	98
78)	n-Propylbenzene	16.40	91	3212039	175.68	ppb	98
79)	Bromobenzene	16.16	156	761635	165.12	ppb	97
80)	1,3,5-Trimethylbenzene	15.62	105	2930636	176.10	ppb	99
81)	2-Chlorotoluene	16.54	91	2010962	171.50	ppb	98
82)	4-Chlorotoluene	16.76	91	2207020	167.14	ppb	100
83)	tert-Butylbenzene	17.38	119	1653616	172.96	ppb	100
84)	1,2,4-Trimethylbenzene	17.47	105	1838924	165.41	ppb	98
85)	sec-Butylbenzene	17.80	105	2423080	176.72	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D Vial: 9
Acq On : 17 Dec 101 2:05 pm Operator: droot
Sample : 150 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:35 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:35:36 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.38	119	1653616	172.96 ppb	100
87) 1,3-Dclbenz	17.99	146	1064949	164.99 ppb	98
88) 1,4-Dclbenz	18.17	146	1149842	160.74 ppb	98
89) n-Butylbenzene	18.89	91	1553613	167.18 ppb	99
90) 1,2-Dclbenz	18.87	146	1103024	160.58 ppb	98
91) 1,2-Dibromo-3-chloropropan	20.40	157	185253	147.88 ppb	98
92) Nitrobenzene	20.80	77	115248	175.27 ppb	97
93) 1,2,4-Tcbenzene	22.06	180	556045	161.19 ppb	98
94) Hexachlorobt	22.44	225	218271	168.78 ppb	98
95) Naphthalen	22.54	128	1500546	155.65 ppb	97
96) 1,2,3-Tclbenzene	23.02	180	507024	160.07 ppb	100

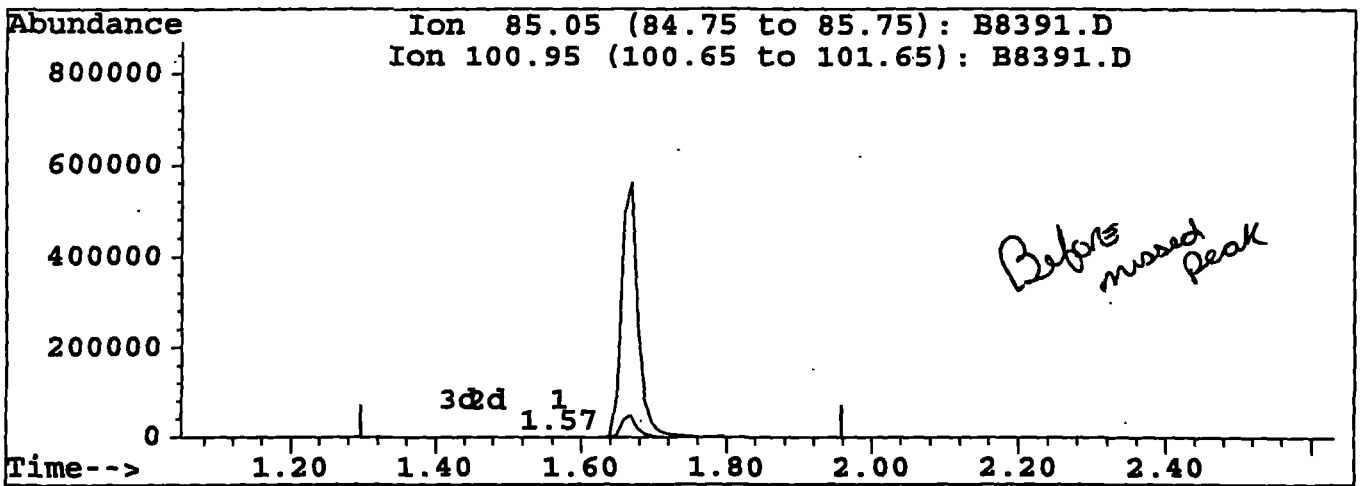
(#) = qualifier out of range (m) = manual integration

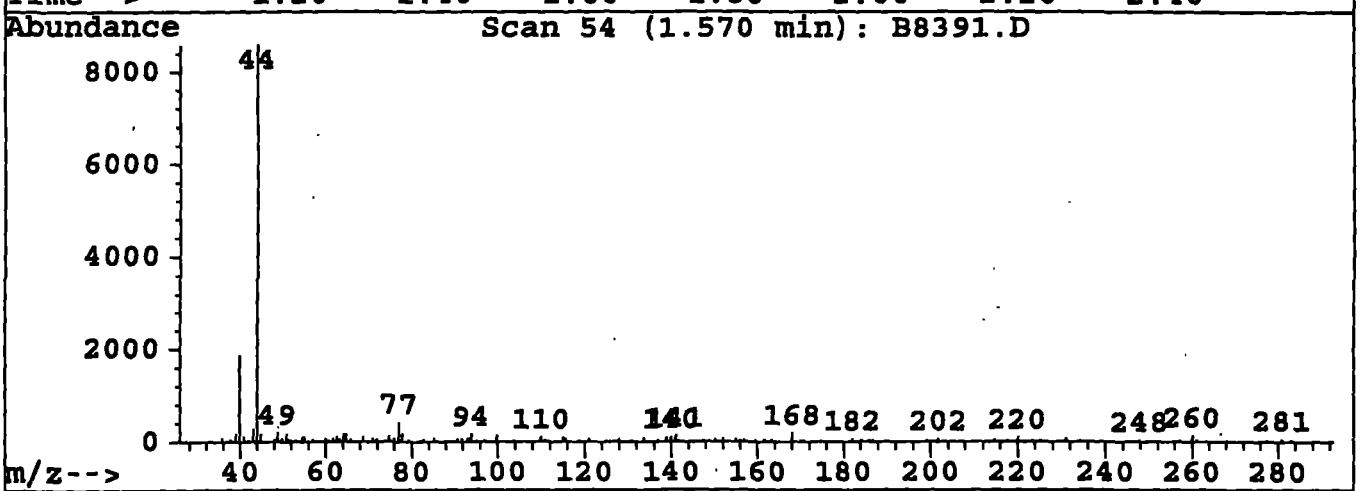
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D
Acq On : 17 Dec 101 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Dec 17 14:33 19101

Vial: 9
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration





TIC: B8391.D

(2) Dichlorodifluoromethane
1.57min 0.03ppb
response 159

Ion	Exp%	Act%
85.05	100	100
100.95	8.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

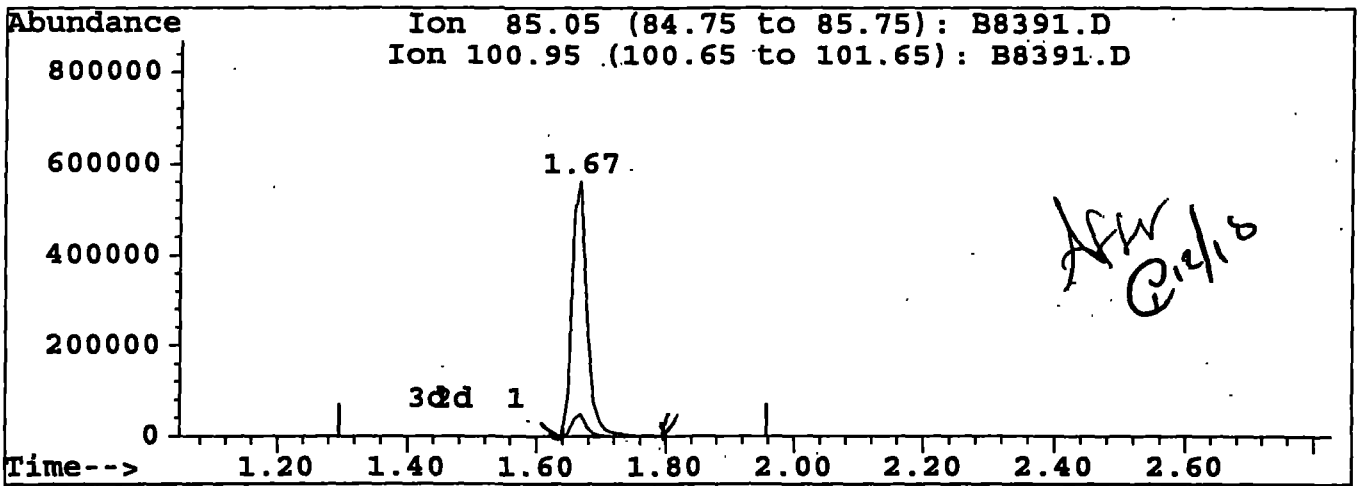
DW 12/17

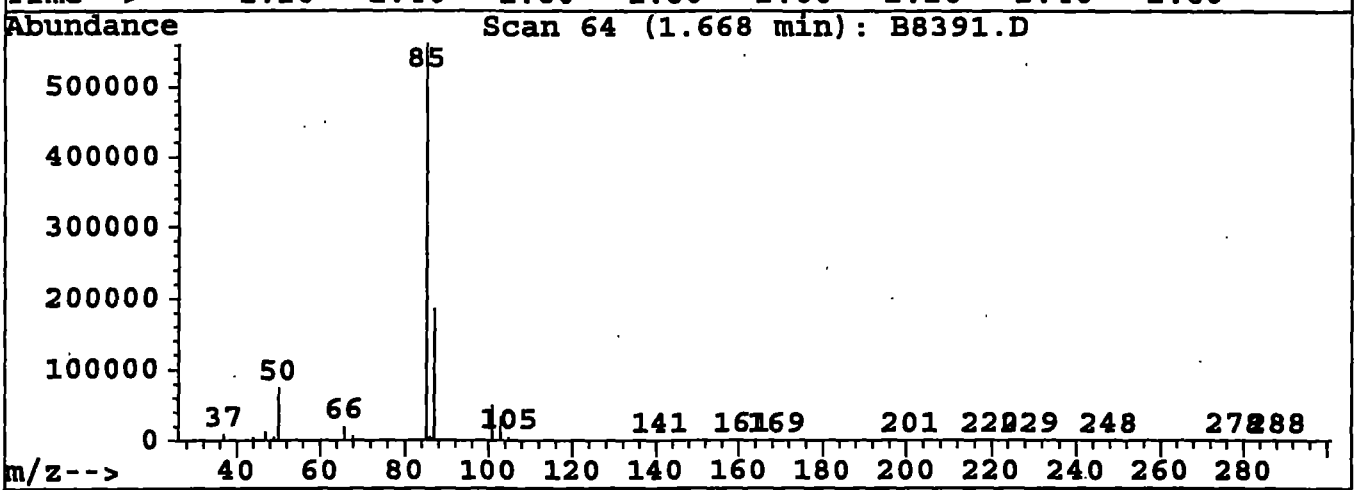
B8391.D EXP1217.M Mon Dec 17 14:34:57 2001

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D Vial: 9
Acq On : 17 Dec 101 2:05 pm Operator: droot
Sample : 150 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:35 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration





TIC: B8391.D

(2) Dichlorodifluoromethane
1.67min 173.98ppb m
response 900030

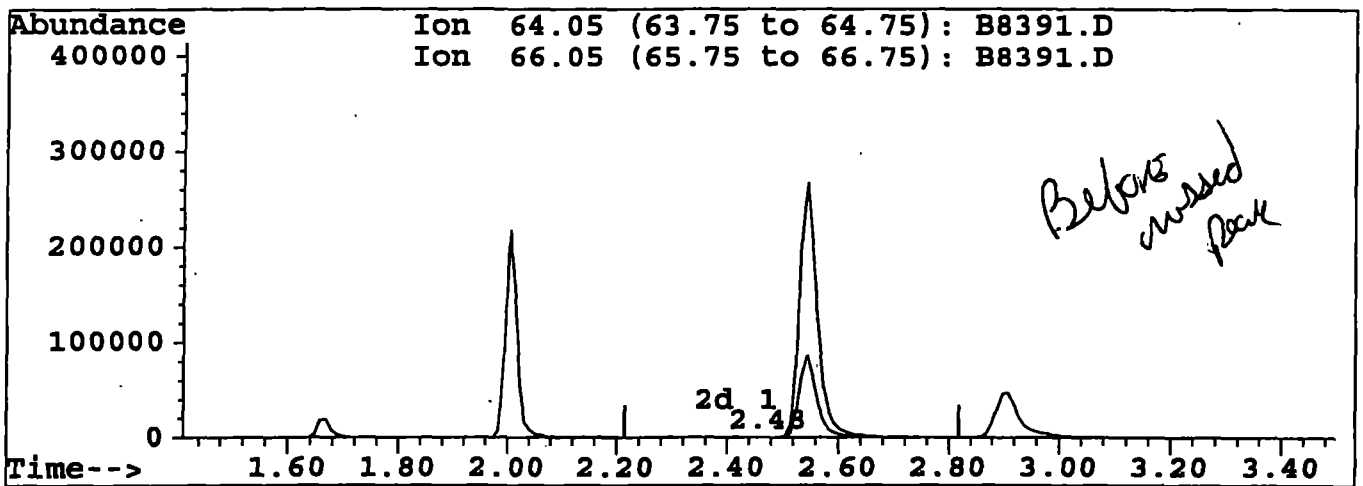
Ion	Exp%	Act%
85.05	100	100
100.95	8.10	8.81
0.00	0.00	0.00
0.00	0.00	0.00

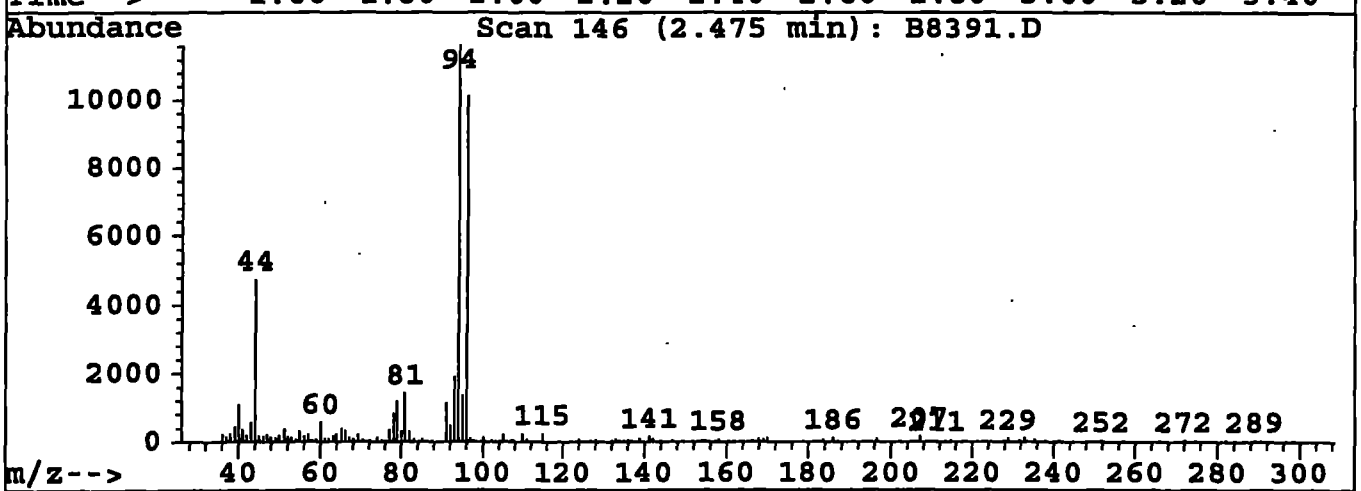
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D
Acq On : 17 Dec 101 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Dec 17 14:35 19101

Vial: 9
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration





TIC: B8391.D

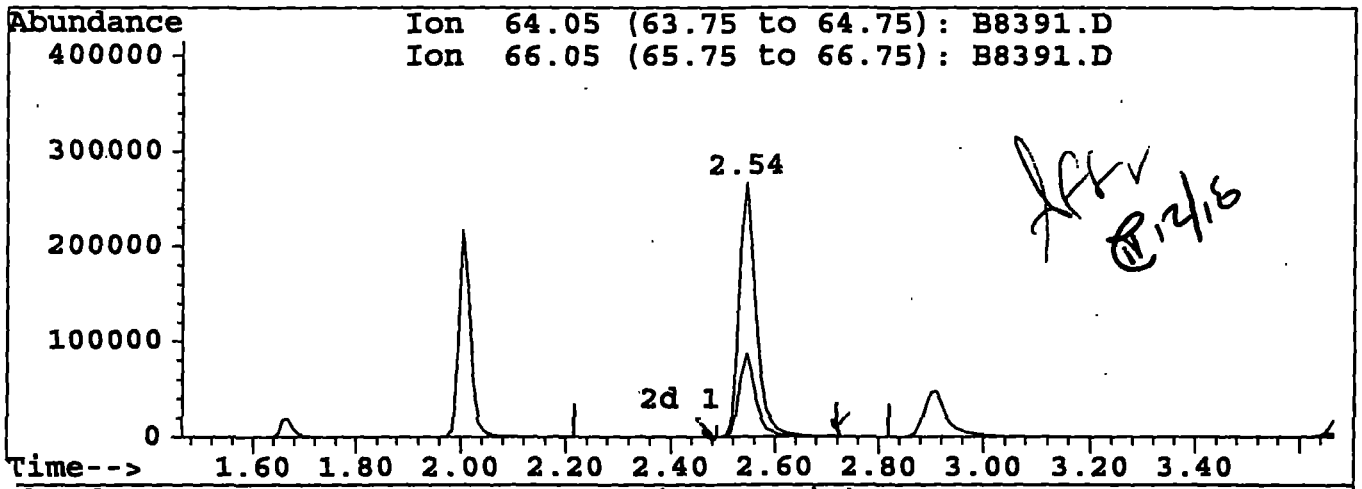
(6) Chloroethane
2.48min 0.08ppb
response 297

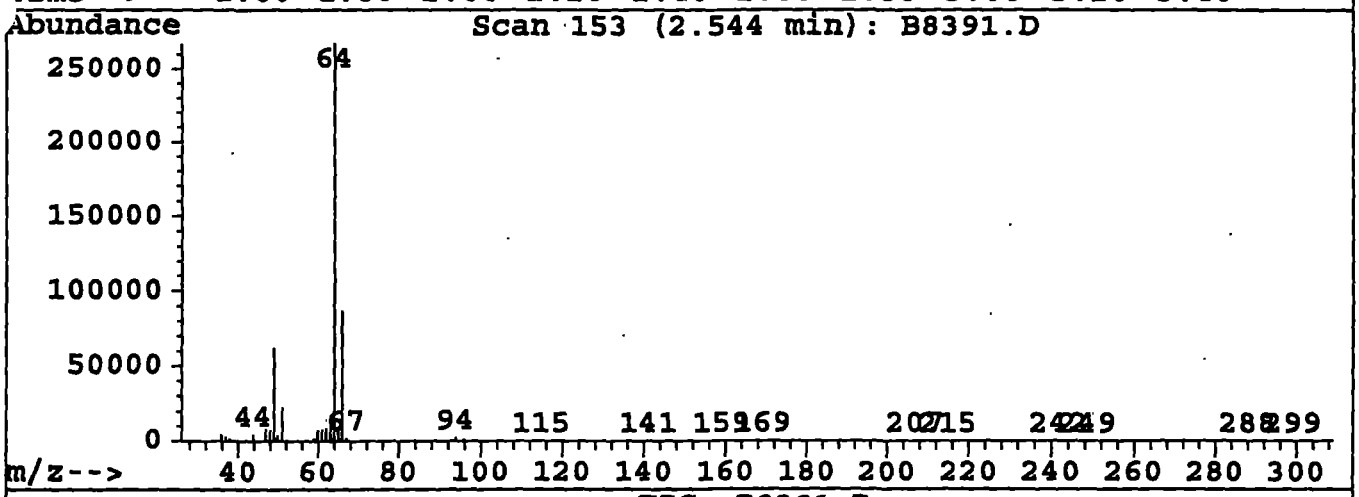
Ion	Exp%	Act%
64.05	100	100
66.05	31.90	142.24#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D Vial: 9
Acq On : 17 Dec 101 2:05 pm Operator: droot
Sample : 150 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:35 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration





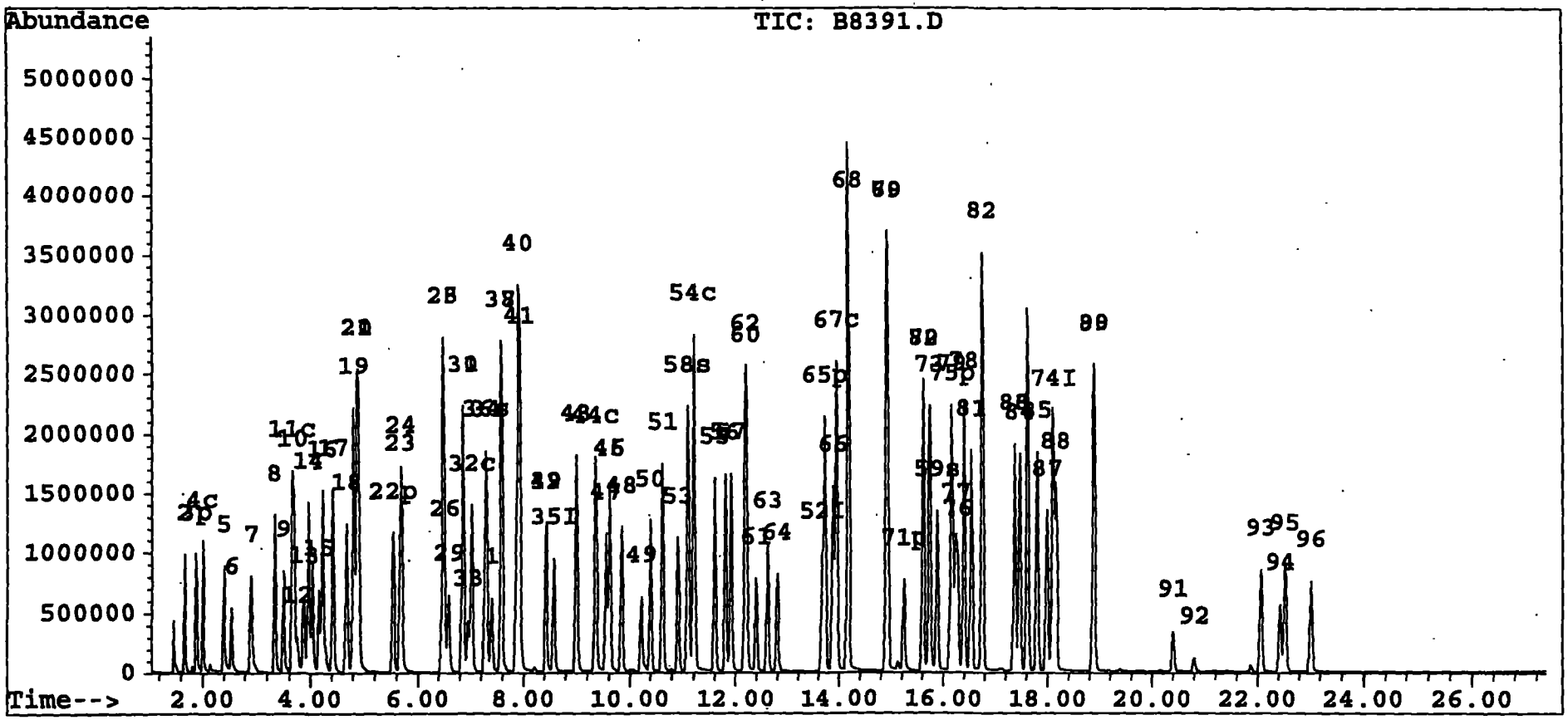
TIC: B8391.D

(6) Chloroethane
2.54min 162.12ppb m
response 594904

Ion	Exp%	Act%
64.05	100	100
66.05	31.90	32.44
0.00	0.00	0.00
0.00	0.00	0.00

Data Fil J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D Vial: 9
Acq On : 17 Dec 101 2:05 pm Operator: droot
Sample : 150 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 14:35 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:35:36 2001
Response via : Multiple Level Calibration



200

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D Vial: 10
Acq On : 17 Dec 101 2:42 pm Operator: droot
Sample : 200 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:13 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.40	168	641812	50.00	ppb	0.00
35) 1,4 - Difluorobenzene	8.58	114	1188833	50.00	ppb	0.00
52) d5 - Chlorobenzene	13.67	117	937159	50.00	ppb	0.00
74) d4 - Dichlorobenzene	18.12	152	348942	50.00	ppb	0.00
System Monitoring Compounds						**%Recovery**
36) surr4,Dibrflmethane	7.28	113	1068805	140.55	ppb	281.10%
58) surr3,Toluene-d8	11.09	98	2788622	139.01	ppb	278.02%
59) surr2,bfb	15.88	95	1082221	136.84	ppb	273.68%
Target Compounds						**Qvalue**
2) Dichlorodifluoromethane	1.67	85	1133491	205.77	ppb m	1
3) Chloromethane	1.87	50	1441463	197.62	ppb	99
4) Vinyl Chloride	2.00	62	1292059	205.36	ppb	99
5) Bromomethane	2.40	94	846101	185.64	ppb	94
6) Chloroethane	2.54	64	755542	193.27	ppb	99
7) Trichlorofluoromethane	2.90	101	1409338	203.06	ppb m	36
8) Diethyl Ether	3.34	59	1232184	199.31	ppb	99
9) Acrolein	3.50	56	1313790	938.92	ppb	96
10) FREON 113	3.69	85	394119	216.10	ppb	96
11) 1,1-Diclethene	3.66	96	999492	211.38	ppb	98
12) Acetone	3.74	43	480679	170.00	ppb	97
13) Iodomethane	3.86	127	643926	243.52	ppb	94
14) Carbon Disulfide	3.96	76	3914567	215.47	ppb	99
15) Acetonitrile	4.16	41	1197694	3770.02	ppb	97
16) Allyl Chloride	4.23	76	589085	200.75	ppb	94
17) Methylene Chloride	4.42	84	1259163	194.21	ppb	98
18) TBA	4.68	59	2936834	3792.73	ppb	99
19) Acrylonitrile	4.81	53	3214307	933.87	ppb	99
20) Methyl-t-Butyl Ether	4.90	73	3633604	195.92	ppb	98
21) trans-1,2-Dichloroethene	4.87	96	1246252	210.94	ppb	98
22) 1,1-Diclethane	5.54	63	2127561	201.71	ppb	99
23) Vinyl Acetate	5.66	43	2257903	156.70	ppb	97
24) 2-Chloro-1,3-butadiene	5.69	53	1891405	215.32	PPB	96
25) 2,2-Dichloropropane	6.47	77	1503314	200.88	ppb	96
26) 2-Butanone	6.52	43	926348	184.14	ppb	98
28) cis-1,2-Dichloroethene	6.48	96	1426316	202.24	ppb	95
29) Propionitrile	6.59	54	1238968	957.48	ppb	98
30) Methacrylonitrile	6.85	67	643153	192.49	ppb	99
31) Bromochloromethane	6.87	128	663509	191.00	ppb	99
32) Chloroform	7.02	83	2018951	198.98	ppb	98
33) Tetrahydrofuran	6.95	42	573972	174.75	ppb	96
34) 1,1,1-Trichloroethane	7.30	97	1603662	214.32	ppb	100
37) Carbontetrachloride	7.57	117	1354974	216.77	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D Vial: 10
Acq On : 17 Dec 101 2:42 pm Operator: droot
Sample : 200 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Dec 17 15:13 19101

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	1,1-Dichloropropene	7.58	75	1590981	213.63	ppb	100
39)	Iso-Butyl Alcohol	8.43	43	1079705	3906.74	ppb	99
40)	Benzene	7.91	78	4439344	206.92	ppb	99
41)	1,2-Dichloroethane	7.94	62	1609240	196.42	ppb	97
42)	N-Heptane	8.43	43	1089587	197.47	ppb	98
43)	Trichloroethene	9.00	95	1257801	220.90	ppb	99
44)	1,2-Diclpropane	9.36	63	1439802	204.93	ppb	100
45)	Methyl Methacrylate	9.62	69	986279	191.79	ppb	100
46)	1,4-Dioxane	9.61	88	291697	3859.00	ppb	94
47)	Dibromomethane	9.55	93	925950	201.56	ppb	98
48)	Bromodichloromethane	9.85	83	1590481	203.53	ppb	99
49)	2-Nitropropane	10.22	43	994251	378.75	ppb	100
50)	2-Chloroethylvinyl Ether	10.39	63	1082495	185.61	ppb	98
51)	cis-1,3-Dichloropropene	10.63	75	2076473	203.12	ppb	98
53)	4-Methyl-2-Pentanone	10.91	43	1778717	184.49	ppb	100
54)	Toluene	11.21	91	4228124	213.63	ppb	98
55)	trans-1,3-Dichloropropene	11.60	75	1836143	206.45	ppb	99
56)	Ethyl Methacrylate	11.82	69	1729510	196.76	ppb	99
57)	1,1,2-Trichloroethane	11.91	83	1014468	203.66	ppb	98
60)	Tetrachloroethene	12.18	166	999407	226.72	ppb	99
61)	2-Hexanone	12.40	43	1223488	187.24	ppb	97
62)	1,3-Dichloropropane	12.21	76	2175112	201.38	ppb	95
63)	Dibromochloromethane	12.61	129	1260835	209.37	ppb	99
64)	1,2-Dibromoethane	12.80	107	1320791	203.68	ppb	100
65)	Chlorobenzene	13.73	112	2685992	209.99	ppb	99
66)	1,1,1,2-Tetrachloroethane	13.88	131	1029558	213.91	ppb	99
67)	Ethylbenzene	13.95	91	4367081	218.20	ppb	96
68)	(m+p)Xylene	14.18	106	3117622	439.64	ppb	97
69)	o-Xylene	14.91	106	1532628	219.99	ppb	100
70)	Styrene	14.94	104	2707183	215.47	ppb	98
71)	Bromoform	15.24	173	827214	206.34	ppb	98
72)	Isopropylbenzene	15.62	105	3785523	220.92	ppb	100
73)	Cyclohexanone	15.74	55	2388277	3386.72	ppb	100
75)	1,1,2,2-Tetrachloroethane	16.18	83	1450733	191.62	ppb	99
76)	Trans-1,4-Dichloro-2-buten	16.29	53	449776	194.50	ppb	98
77)	1,2,3-Trichloropropane	16.24	110	444049	191.46	ppb	99
78)	n-Propylbenzene	16.40	91	4089504	219.45	ppb	98
79)	Bromobenzene	16.16	156	1006775	213.72	ppb	96
80)	1,3,5-Trimethylbenzene	15.62	105	3785523	222.59	ppb	100
81)	2-Chlorotoluene	16.54	91	2591051	216.56	ppb	98
82)	4-Chlorotoluene	16.76	91	2866218	212.88	ppb	100
83)	tert-Butylbenzene	17.38	119	2121229	217.92	ppb	99
84)	1,2,4-Trimethylbenzene	17.47	105	2252913	200.02	ppb	97
85)	sec-Butylbenzene	17.80	105	3062736	219.03	ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:13 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
86)	p-Isopropyltoluene	17.38	119	2121229	217.92 ppb		99
87)	1,3-Dclbenz	17.99	146	1380413	211.02 ppb		100
88)	1,4-Dclbenz	18.17	146	1517812	210.06 ppb		99
89)	n-Butylbenzene	18.89	91	1879371	199.78 ppb		99
90)	1,2-Dclbenz	18.87	146	1461235	210.42 ppb		99
91)	1,2-Dibromo-3-chloropropan	20.40	157	253356	202.68 ppb		95
92)	Nitrobenzene	20.80	77	162395	243.20 ppb		99
93)	1,2,4-Tcbenzene	22.06	180	673738	194.95 ppb		97
94)	Hexachlorobt	22.44	225	267757	203.03 ppb	m OL	1
95)	Naphthalen	22.54	128	1772457	184.73 ppb		98
96)	1,2,3-Tclbenzene	23.02	180	617009	194.57 ppb		97

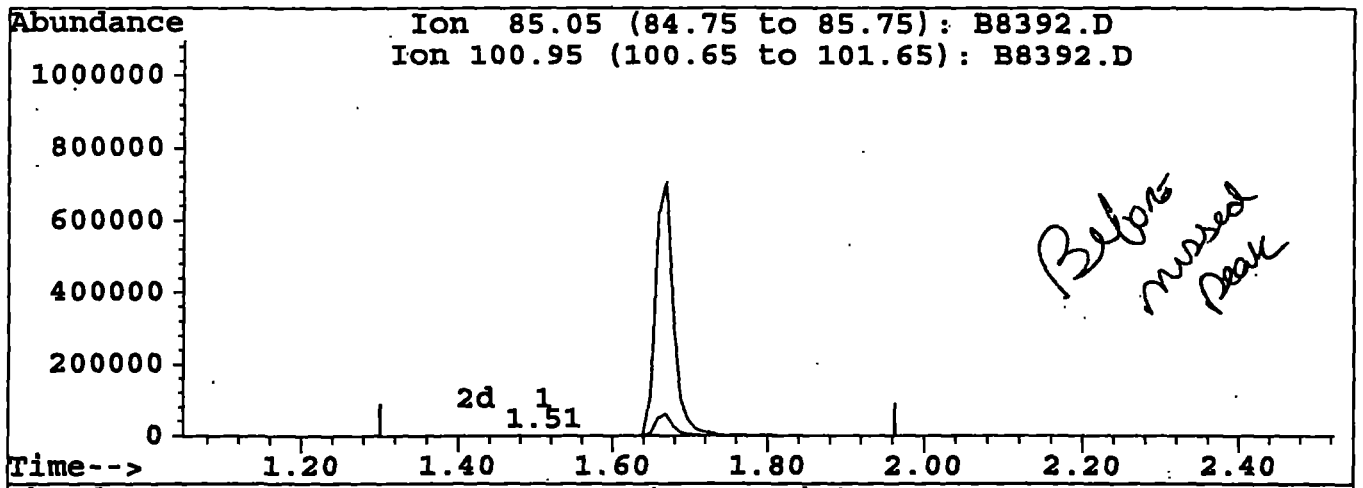
(#) = qualifier out of range (m) = manual integration

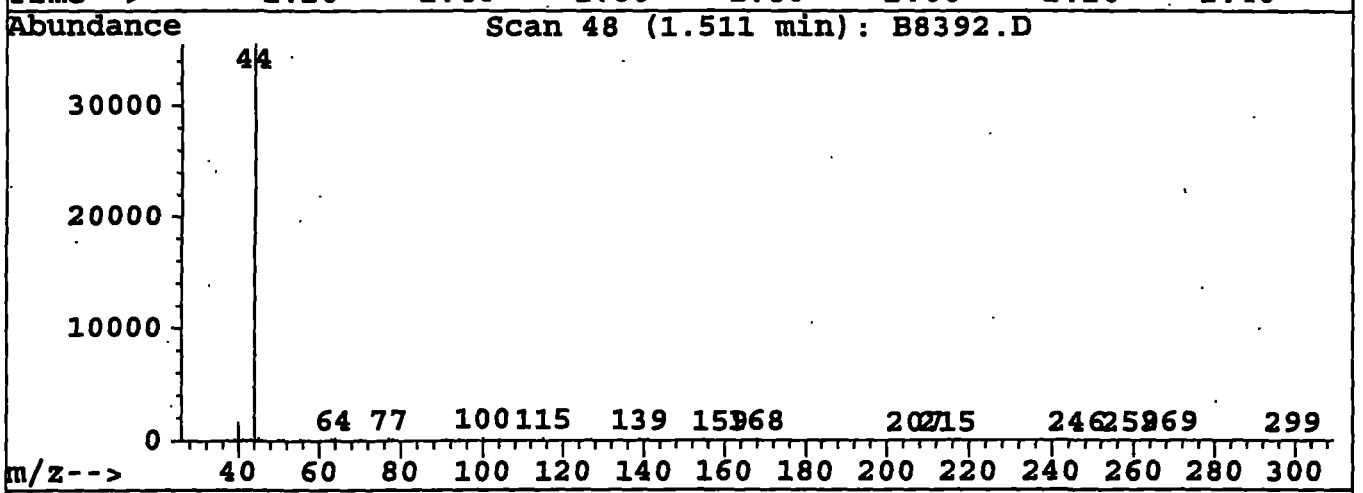
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:10 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(2) Dichlorodifluoromethane
1.51min 0.00ppb
response 14

Ion	Exp%	Act%
85.05	100	100
100.95	8.10	139.13#
0.00	0.00	0.00
0.00	0.00	0.00

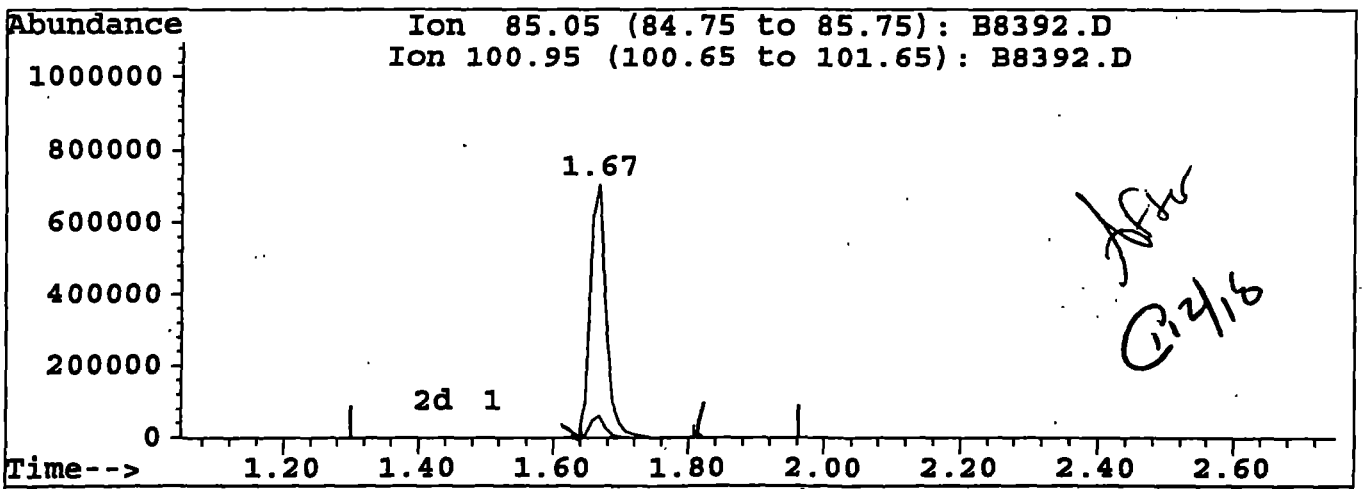
DW 12/17

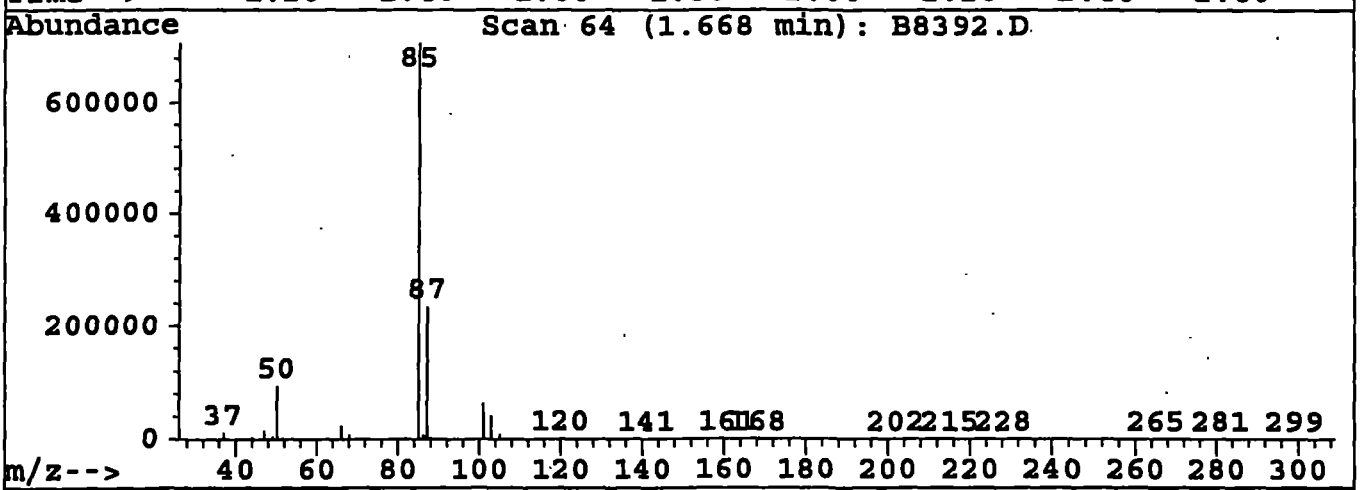
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:12 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(2) Dichlorodifluoromethane
1.67min 205.77ppb m
response 1133491

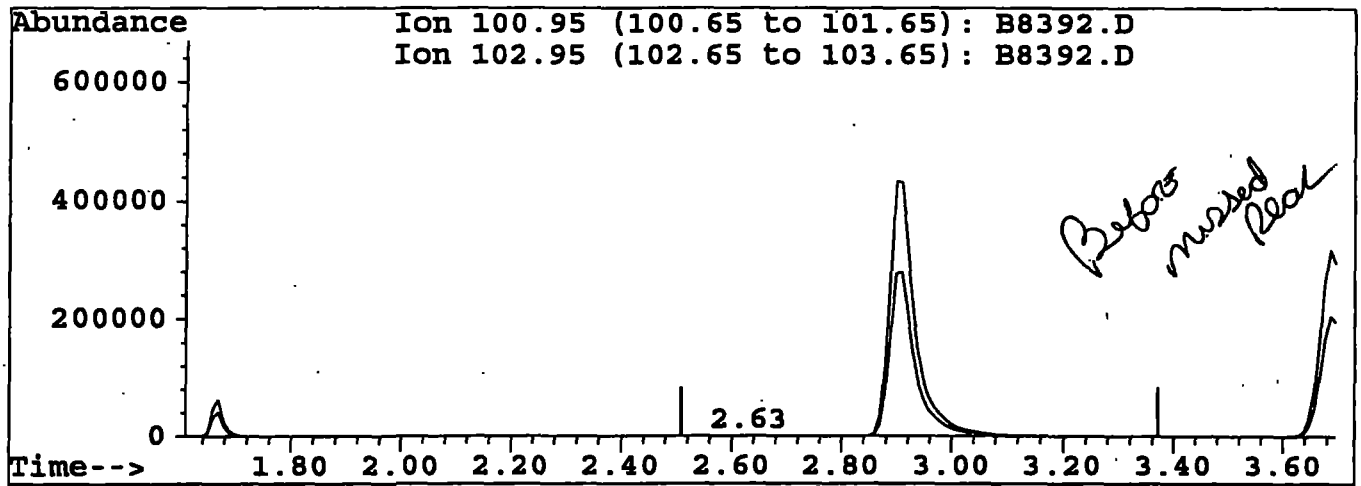
Ion	Exp%	Act%
85.05	100	100
100.95	8.10	8.82
0.00	0.00	0.00
0.00	0.00	0.00

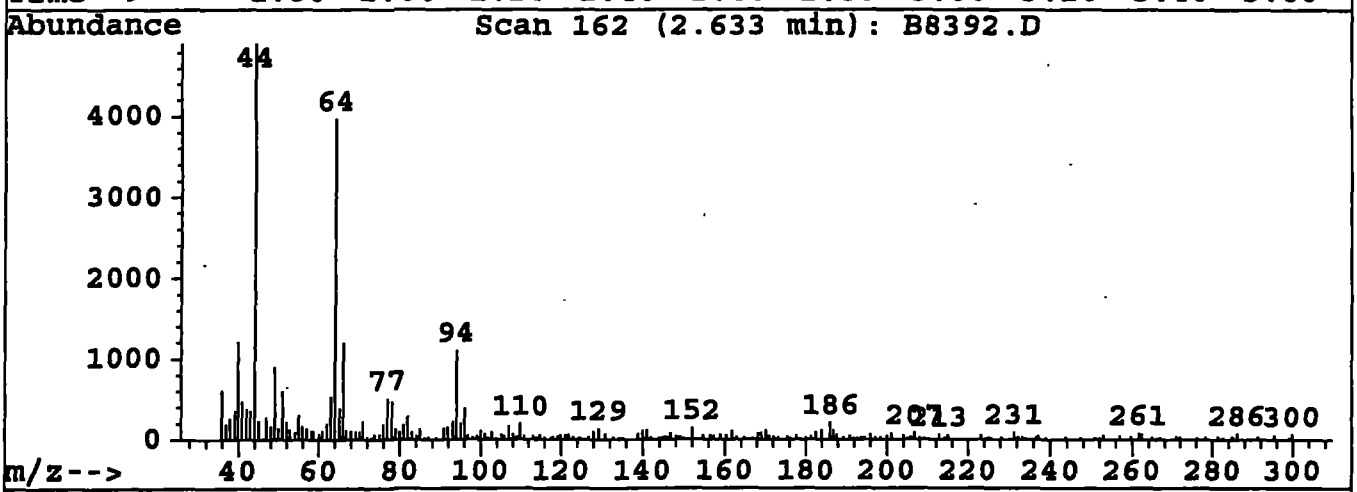
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:12 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(7) Trichlorofluoromethane
2.63min 0.02ppb
response 161

Ion	Exp%	Act%
100.95	100	100
102.95	65.90	116.87#
0.00	0.00	0.00
0.00	0.00	0.00

1/8/17

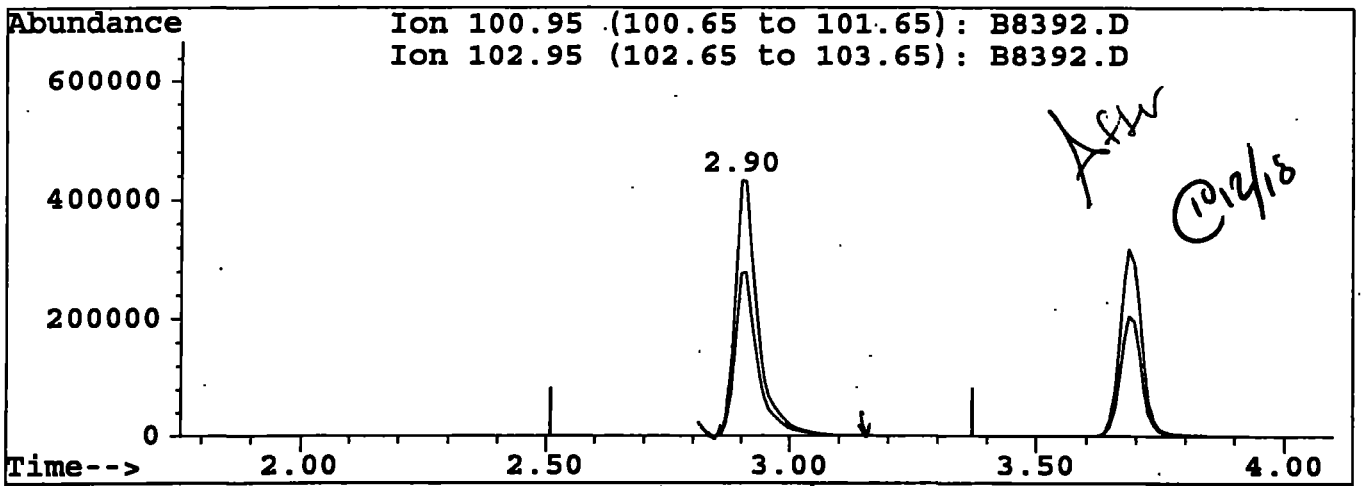
B8392.D EXP1217.M Mon Dec 17 15:12:54 2001

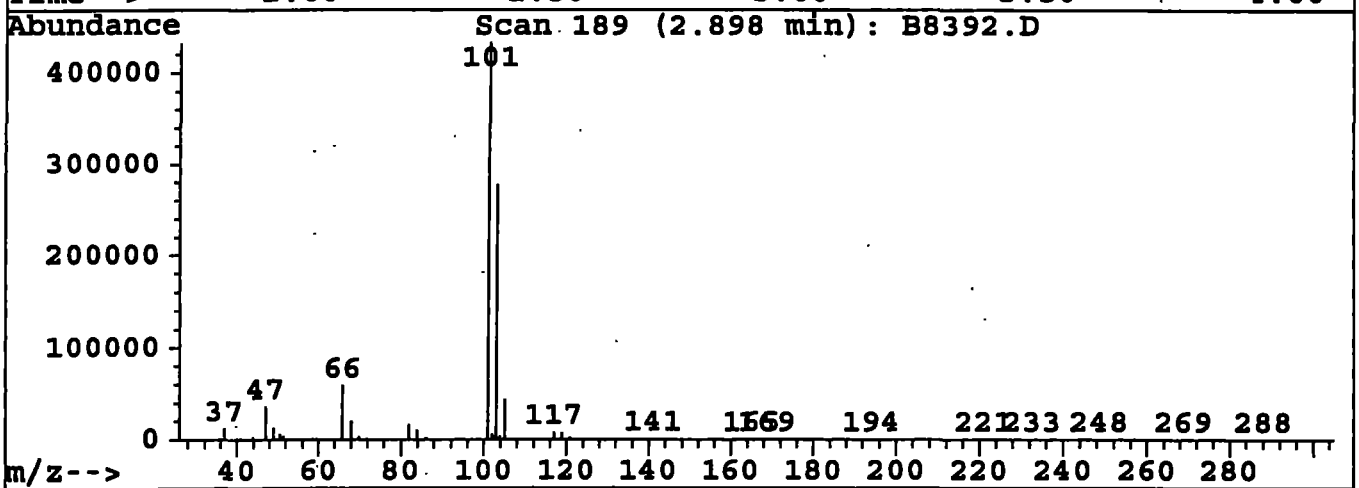
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:13 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(7) Trichlorofluoromethane
2.90min 203.06ppb m
response 1409338

Ion	Exp%	Act%
100.95	100	100
102.95	65.90	63.98
0.00	0.00	0.00
0.00	0.00	0.00

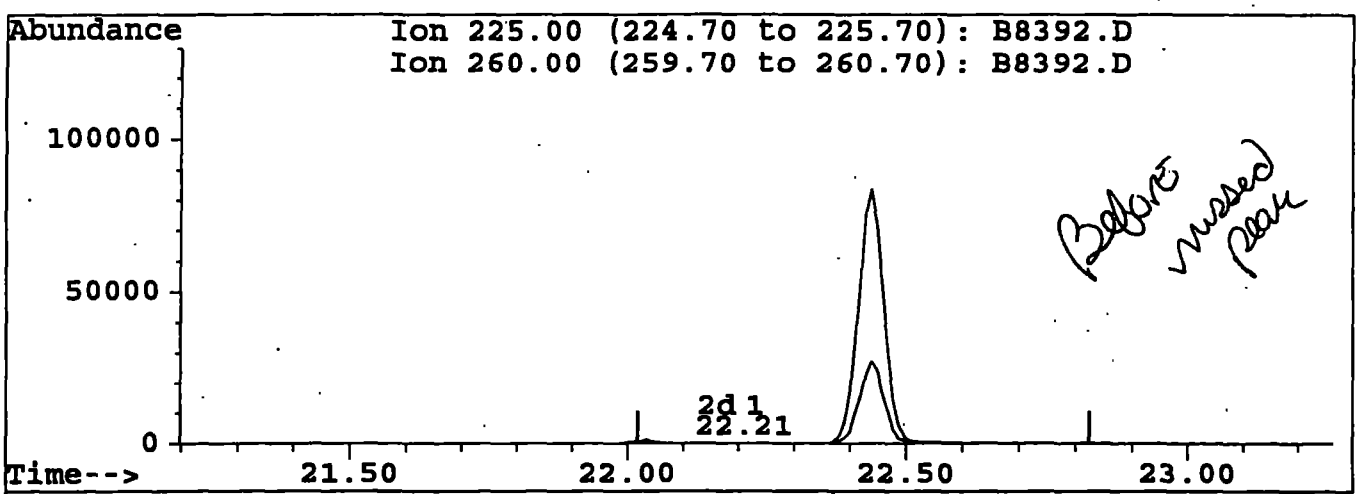
B8392.D EXP1217.M Mon Dec 17 15:13:03 2001

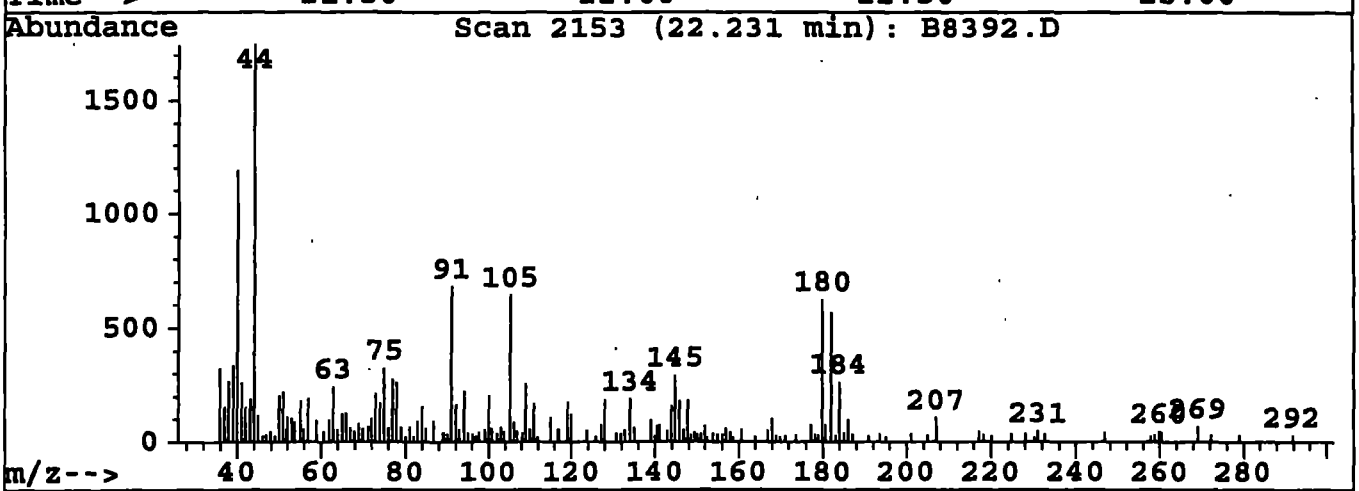
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:13 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(94) Hexachlorobt
22.23min 0.06ppb
response 74

Ion	Exp%	Act%
225.00	100	100
260.00	30.60	245.71#
0.00	0.00	0.00
0.00	0.00	0.00

DW 12/17

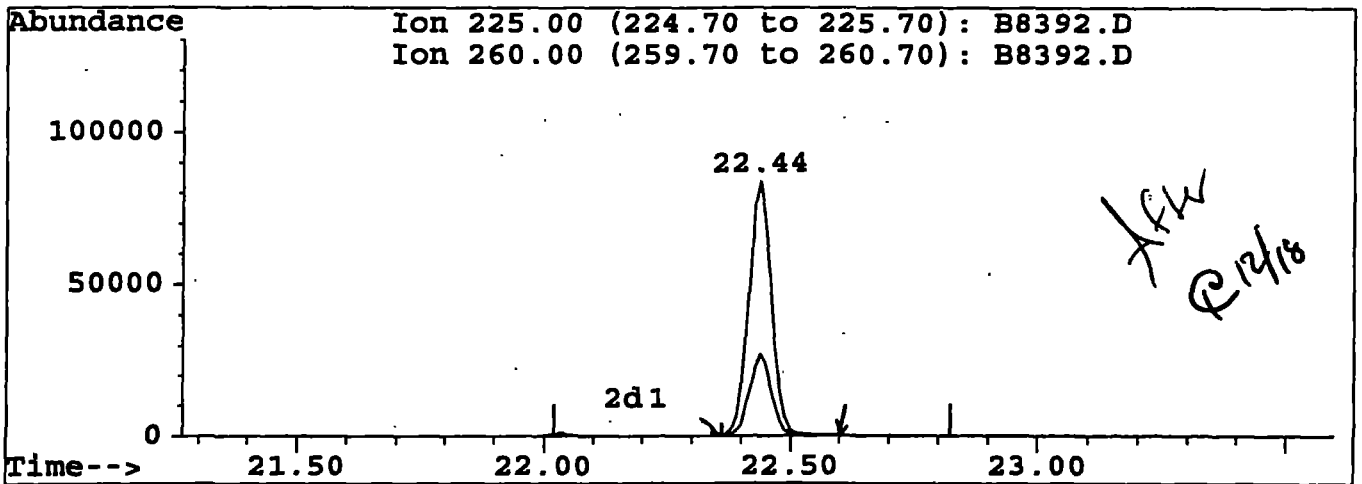
B8392.D EXP1217.M Mon Dec 17 15:13:16 2001

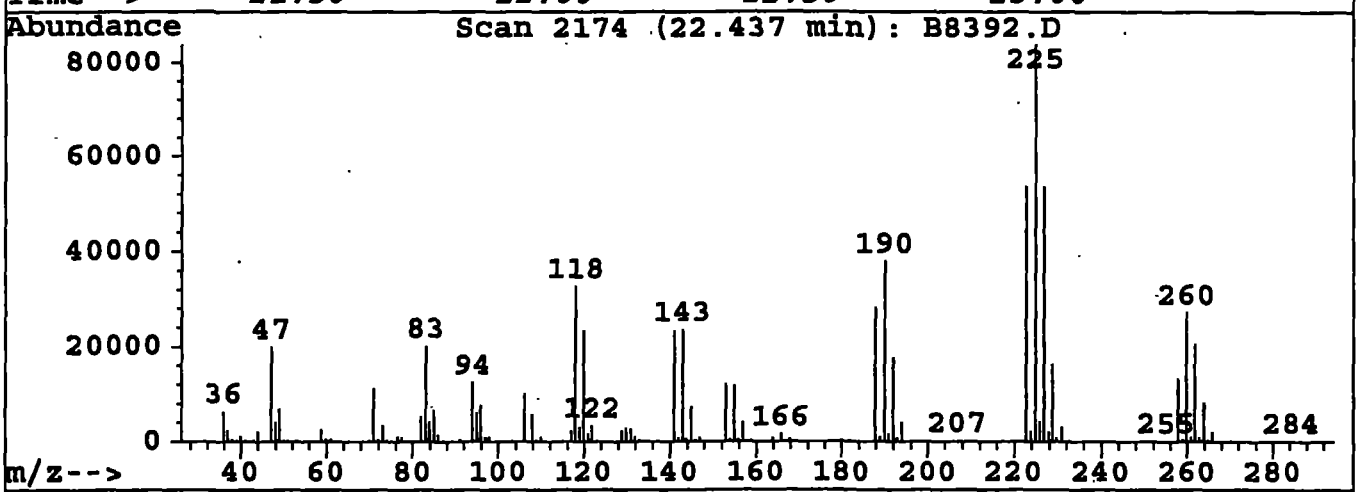
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:13 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration





TIC: B8392.D

(94) Hexachlorobt
22.44min 203.03ppb m
response 267757

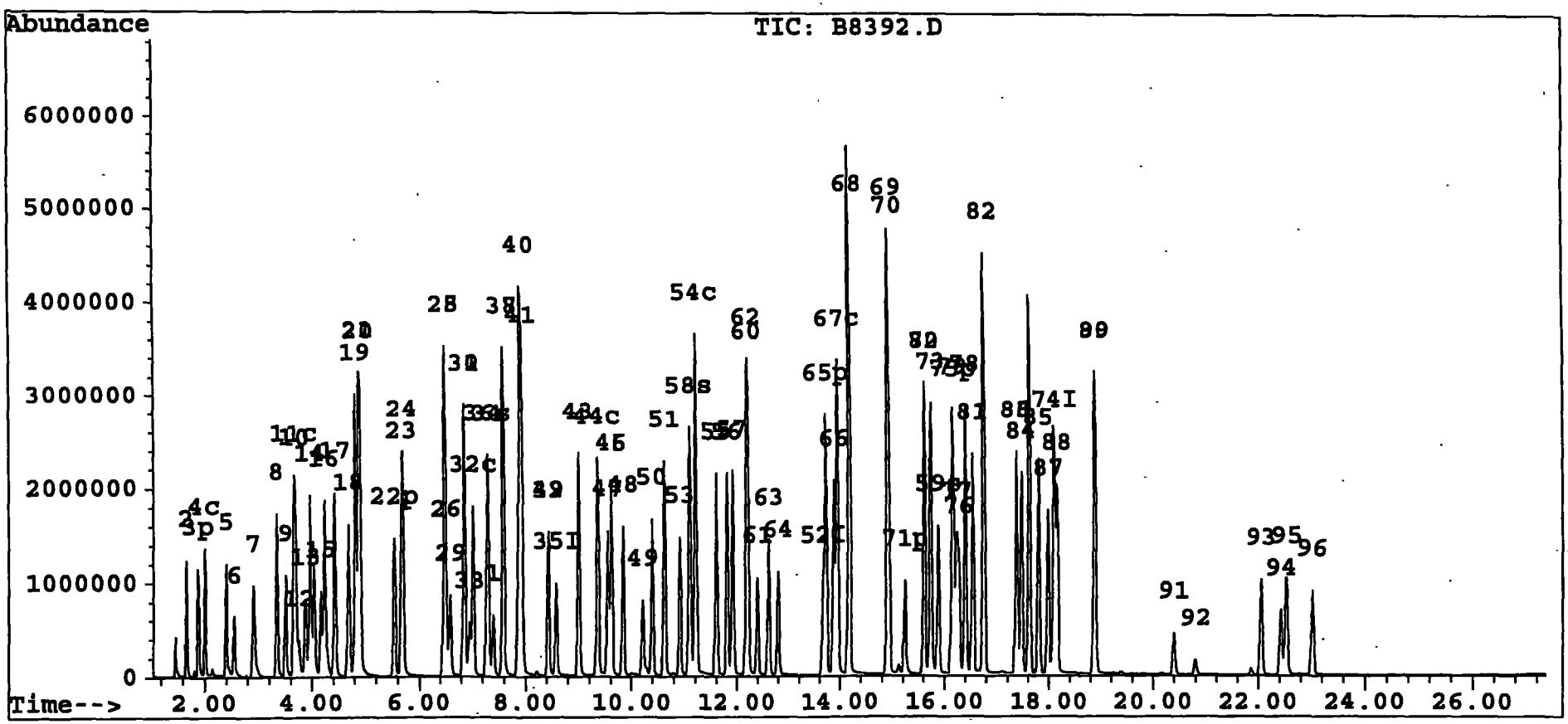
Ion	Exp%	Act%
225.00	100	100
260.00	30.60	32.46
0.00	0.00	0.00
0.00	0.00	0.00

B8392.D EXP1217.M Mon Dec 17 15:13:42 2001

Data Fi : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.
Acq On : 17 Dec 101 2:42 pm
Sample : 200 PPB
Misc :
Quant Time: Dec 17 15:13 19101

Vial: 10
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:55:41 2001
Response via : Multiple Level Calibration



210

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D Vial: 14
Acq On : 21 Jan 102 8:41 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1		Pentafluorobenzene	1.000	1.000	0.0	128	-0.01
2		Dichlorodifluoromethane	0.426	0.491	-15.2	172	0.00
3	p	Chloromethane	0.564	0.628	-11.3	159	0.00
4	c	Vinyl Chloride	0.485	0.502	-3.5	155	0.00
5		Bromomethane	0.338	0.315	6.9	143	0.00
6		Chloroethane	0.303	0.299	1.5	154	0.00
7		Trichlorofluoromethane	0.536	0.600	-11.9	166	0.00
8		Diethyl Ether	0.481	0.460	4.5	135	-0.01
9		Acrolein	0.108	0.113	-5.0	133	-0.01
10		FREON 113	0.142	0.144	-1.3	157	-0.01
11	c	1,1-Diclethene	0.371	0.372	-0.2	146	-0.01
12		Acetone	0.215	0.197	8.1	126	-0.01
13		Iodomethane	0.209	0.262	-25.3#	157	-0.01
14		Carbon Disulfide	1.431	1.737	-21.4	154	-0.01
		Acetonitrile	0.024	0.021	12.8	111	-0.01
16		Allyl Chloride	0.230	0.238	-3.5	150	0.00
17		Methylene Chloride	0.505	0.494	2.3	143	-0.01
18		TBA	0.059	0.052	11.1	120	-0.01
19		Acrylonitrile	0.263	0.247	6.0	125	-0.01
20		Methyl-t-Butyl Ether	1.432	1.388	3.1	135	0.00
21		trans-1,2-Dichloroethene	0.460	0.458	0.3	145	0.00
22	p	1,1-Diclethane	0.821	0.799	2.7	140	0.00
23		Vinyl Acetate	1.103	1.510	-36.9#	178	-0.01
24		2-Chloro-1,3-butadiene	0.688	0.804	-16.8	146	-0.01
25		2,2-Dichloropropane	0.580	0.617	-6.5	157	0.00
26		2-Butanone	0.383	0.359	6.1	119	-0.01
27		Ethyl Acetate	0.000	0.000	0.0	178	-0.01
28		cis-1,2-Dichloroethene	0.548	0.535	2.4	144	-0.01
29		Propionitrile	0.099	0.088	10.8	122	0.00
30		Methacrylonitrile	0.256	0.228	10.9	124	0.00
31		Bromochloromethane	0.271	0.258	5.0	139	-0.01
32	c	Chloroform	0.787	0.785	0.2	145	-0.01
33		Tetrahydrofuran	0.252	0.219	13.1	126	-0.01
34		1,1,1-Trichloroethane	0.581	0.613	-5.6	155	0.00
35	I	1,4 - Difluorobenzene	1.000	1.000	0.0	129	-0.01
36	s	surr4,Dibrflmethane	0.321	0.358	-11.7	127	-0.01
37		Carbontetrachloride	0.262	0.263	-0.3	154	-0.01
38		1,1-Dichloropropene	0.314	0.324	-3.3	157	-0.01
39		Iso-Butyl Alcohol	0.012	0.013	-9.7	173	0.00
40		Benzene	0.899	0.898	0.0	147	0.00
41		1,2-Dichloroethane	0.343	0.335	2.2	140	-0.01

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D Vial: 14
Acq On : 21 Jan 102 8:41 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		N-Heptane	0.232	0.259	-11.8	177	0.00
43		Trichloroethene	0.240	0.238	0.8	147	0.00
44	c	1,2-Diclpropane	0.295	0.289	1.9	142	-0.01
45		Methyl Methacrylate	0.213	0.192	9.5	124	0.00
46		1,4-Dioxane	0.003	0.003	17.0	114	-0.01
47		Dibromomethane	0.192	0.183	5.0	133	0.00
48		Bromodichloromethane	0.328	0.325	0.8	143	0.00
49		2-Nitropropane	0.109	0.102	6.1	129	-0.01
50		2-Chloroethylvinyl Ether	0.243	0.231	5.0	126	-0.01
51		cis-1,3-Dichloropropene	0.429	0.431	-0.4	144	0.00
52	I	d5 - Chlorobenzene	1.000	1.000	0.0	130	-0.01
53		4-Methyl-2-Pentanone	0.504	0.471	6.4	119	-0.01
[illegible]	c	Toluene	1.048	1.061	-1.2	150	0.00
		trans-1,3-Dichloropropene	0.472	0.469	0.6	139	0.00
[illegible]		Ethyl Methacrylate	0.461	0.416	9.7	123	-0.01
57		1,1,2-Trichloroethane	0.265	0.256	3.1	135	0.00
58	s	surr3,Toluene-d8	1.066	1.204	-12.9	128	-0.01
59	s	surr2,bfb	0.420	0.459	-9.4	124	0.00
60		Tetrachloroethene	0.234	0.242	-3.5	160	0.00
61		2-Hexanone	0.341	0.318	6.7	117	-0.01
62		1,3-Dichloropropane	0.573	0.555	3.0	136	0.00
63		Dibromochloromethane	0.318	0.310	2.6	137	0.00
64		1,2-Dibromoethane	0.342	0.329	4.0	134	0.00
65	p	Chlorobenzene	0.678	0.698	-2.9	152	-0.01
66		1,1,1,2-Tetrachloroethane	0.254	0.254	0.1	148	0.00
67	c	Ethylbenzene	1.061	1.087	-2.5	154	-0.01
68		(m+p)Xylene	0.376	0.369	2.0	146	-0.01
69		o-Xylene	0.370	0.360	2.6	141	0.00
70		Styrene	0.666	0.651	2.2	144	0.00
71	p	Bromoform	0.210	0.199	5.3	135	-0.01
72		Isopropylbenzene	0.907	0.908	-0.1	150	0.00
73		Cyclohexanone	0.035	0.012	66.8#	45#	-0.01
74	I	d4 - Dichlorobenzene	1.000	1.000	0.0	119	0.00
75	p	1,1,2,2-Tetrachloroethane	1.067	1.075	-0.8	136	-0.01
76		Trans-1,4-Dichloro-2-butene	0.326	0.315	3.4	126	0.00
77		1,2,3-Trichloropropane	0.326	0.314	3.6	130	-0.01
78		n-Propylbenzene	2.661	2.704	-1.6	142	0.00
[illegible]		Bromobenzene	0.668	0.691	-3.4	147	0.00
[illegible]		1,3,5-Trimethylbenzene	2.423	1.646	32.0#	98	-0.03
81		2-Chlorotoluene	1.707	1.773	-3.8	143	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D Vial: 14
Acq On : 21 Jan 102 8:41 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	4-Chlorotoluene	1.924	1.987	-3.3	143	0.00
83	tert-Butylbenzene	1.384	1.401	-1.3	145	0.00
84	1,2,4-Trimethylbenzene	1.594	1.640	-2.9	141	0.00
85	sec-Butylbenzene	1.994	2.056	-3.1	144	0.00
86	p-Isopropyltoluene	1.384	1.401	-1.3	145	0.00
87	1,3-Dclbenz	0.927	0.956	-3.0	143	0.00
88	1,4-Dclbenz	1.029	1.062	-3.2	144	0.00
89	n-Butylbenzene	1.332	1.401	-5.1	144	0.00
90	1,2-Dclbenz	0.987	1.003	-1.6	141	-0.01
91	1,2-Dibromo-3-chloropropane	0.173	0.170	1.7	130	-0.01
92	Nitrobenzene	0.095	0.073	23.3	104	0.00
93	1,2,4-Tcbenzene	0.484	0.507	-4.5	141	-0.01
94	Hexachlorobt	0.187	0.230	-23.1	172	0.00
95	Naphthalen	1.339	1.281	4.3	122	0.00
	1,2,3-Tclbenzene	0.444	0.451	-1.5	133	-0.01
97	TOTAL XYLENE	0.000	0.000	0.0	92	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
B9203.D EXP1217.M Mon Jan 21 09:19:10 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D Vial: 14
Acq On : 21 Jan 102 8:41 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 9:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	778046	50.00	ppb	-0.01
35) 1,4 - Difluorobenzene	8.57	114	1457363	50.00	ppb	-0.01
52) d5 - Chlorobenzene	13.66	117	1156043	50.00	ppb	-0.01
74) d4 - Dichlorobenzene	18.10	152	414185	50.00	ppb	0.00
System Monitoring Compounds						%Recovery
36) surr4,Dibrflmethane	7.26	113	521601	50.67	ppb	101.34%
58) surr3,Toluene-d8	11.08	98	1391547	50.88	ppb	101.77%
59) surr2,bfb	15.87	95	531053	47.93	ppb	95.87%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	381715	57.62	ppb	100
3) Chloromethane	1.87	50	488507	55.63	ppb	97
4) Vinyl Chloride	2.00	62	390308	51.76	ppb	100
5) Bromomethane	2.40	94	244789	46.54	ppb	97
6) Chloroethane	2.54	64	232517	49.26	ppb	97
7) Trichlorofluoromethane	2.90	101	467037	55.96	ppb	97
8) Diethyl Ether	3.33	59	357700	47.77	ppb	98
9) Acrolein	3.49	56	440278	262.42	ppb	97
10) FREON 113	3.67	85	111797	50.63	ppb	89
11) 1,1-Diclethene	3.65	96	289198	50.11	ppb	96
12) Acetone	3.74	43	153313	45.93	ppb	99
13) Iodomethane	3.85	127	203914	54.13	ppb	97
14) Carbon Disulfide	3.95	76	1351294	60.70	ppb	99
15) Acetonitrile	4.15	41	326910	871.88	ppb	99
16) Allyl Chloride	4.22	76	185459	51.75	ppb	97
17) Methylene Chloride	4.40	84	384322	48.87	ppb	96
18) TBA	4.66	59	813402	889.32	ppb	99
19) Acrylonitrile	4.79	53	960678	234.88	ppb	99
20) Methyl-t-Butyl Ether	4.89	73	1079658	48.44	ppb	99
21) trans-1,2-Dichloroethene	4.86	96	356593	49.85	ppb	97
22) 1,1-Diclethane	5.53	63	621356	48.65	ppb	98
23) Vinyl Acetate	5.64	43	1174855	68.45	ppb	99
24) 2-Chloro-1,3-butadiene	5.67	53	625272	54.49	PPB	98
25) 2,2-Dichloropropane	6.46	77	480382	53.26	ppb	97
26) 2-Butanone	6.51	43	279562	46.94	ppb	98
28) cis-1,2-Dichloroethene	6.47	96	416642	48.82	ppb	91
29) Propionitrile	6.58	54	344255	223.11	ppb	97
30) Methacrylonitrile	6.83	67	177675	44.54	ppb	100
31) Bromochloromethane	6.84	128	200542	47.52	ppb	88
32) Chloroform	7.00	83	610966	49.88	ppb	99
33) Tetrahydrofuran	6.94	42	170621	45.94	ppb	91
34) 1,1,1-Trichloroethane	7.29	97	476870	52.78	ppb	99
37) Carbontetrachloride	7.56	117	383246	50.14	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D
Acq On : 21 Jan 102 8:41 am
Sample : CCV
Misc :
Quant Time: Jan 21 9:09 19102

Vial: 14
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.56	75	472073	51.65	ppb		98
39)	Iso-Butyl Alcohol	8.42	43	371221	1097.28	ppb		96
40)	Benzene	7.90	78	1309128	49.98	ppb		100
41)	1,2-Dichloroethane	7.92	62	488681	48.88	ppb		99
42)	N-Heptane	8.42	43	377632	55.89	ppb		96
43)	Trichloroethene	8.99	95	346763	49.60	ppb		93
44)	1,2-Diclpropane	9.34	63	421545	49.06	ppb		96
45)	Methyl Methacrylate	9.61	69	280483	45.26	ppb		99
46)	1,4-Dioxane	9.60	88	76743	830.18	ppb		92
47)	Dibromomethane	9.54	93	266035	47.52	ppb		94
48)	Bromodichloromethane	9.84	83	473922	49.59	ppb		98
49)	2-Nitropropane	10.20	43	298087	93.92	ppb		98
50)	2-Chloroethylvinyl Ether	10.38	63	336464	47.49	ppb		98
51)	cis-1,3-Dichloropropene	10.61	75	628138	50.18	ppb		97
53)	4-Methyl-2-Pentanone	10.89	43	544658	46.79	ppb		96
54)	Toluene	11.19	91	1225986	50.60	ppb		99
55)	trans-1,3-Dichloropropene	11.59	75	542666	49.69	ppb		98
56)	Ethyl Methacrylate	11.80	69	480902	45.16	ppb		98
57)	1,1,2-Trichloroethane	11.90	83	296414	48.45	ppb		93
60)	Tetrachloroethene	12.17	166	280022	48.28	ppb		99
61)	2-Hexanone	12.38	43	367569	46.66	ppb		97
62)	1,3-Dichloropropane	12.20	76	642084	48.50	ppb		91
63)	Dibromochloromethane	12.60	129	357971	48.68	ppb		98
64)	1,2-Dibromoethane	12.79	107	379938	48.00	ppb		99
65)	Chlorobenzene	13.70	112	806444	51.43	ppb		97
66)	1,1,1,2-Tetrachloroethane	13.87	131	293778	49.95	ppb		96
67)	Ethylbenzene	13.93	91	1256578	51.24	ppb		99
68)	(m+p)Xylene	14.16	106	853313	98.03	ppb		97
69)	o-Xylene	14.90	106	415926	48.68	ppb		95
70)	Styrene	14.92	104	752804	48.90	ppb		97
71)	Bromoform	15.23	173	229485	47.33	ppb		97
72)	Isopropylbenzene	15.60	105	1049159	46.46	ppb		100
73)	Cyclohexanone	15.72	55	266325	332.13	ppb		99
75)	1,1,2,2-Tetrachloroethane	16.16	83	445368	50.40	ppb		100
76)	Trans-1,4-Dichloro-2-buten	16.27	53	130370	48.29	ppb		99
77)	1,2,3-Trichloropropane	16.22	110	130030	48.19	ppb		98
78)	n-Propylbenzene	16.39	91	1120153	50.82	ppb		99
79)	Bromobenzene	16.15	156	286113	51.69	ppb		97
80)	1,3,5-Trimethylbenzene	16.74	105	681925	33.05	ppb	#	54
81)	2-Chlorotoluene	16.53	91	734248	51.91	ppb		99
82)	4-Chlorotoluene	16.75	91	823077	51.65	ppb		99
83)	tert-Butylbenzene	17.37	119	580442	50.64	ppb		95
84)	1,2,4-Trimethylbenzene	17.46	105	679320	51.44	ppb		99
85)	sec-Butylbenzene	17.79	105	851693	51.57	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9203.D
Acq On : 21 Jan 102 8:41 am
Sample : CCV
Misc :
Quant Time: Jan 21 9:09 19102

Vial: 14
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

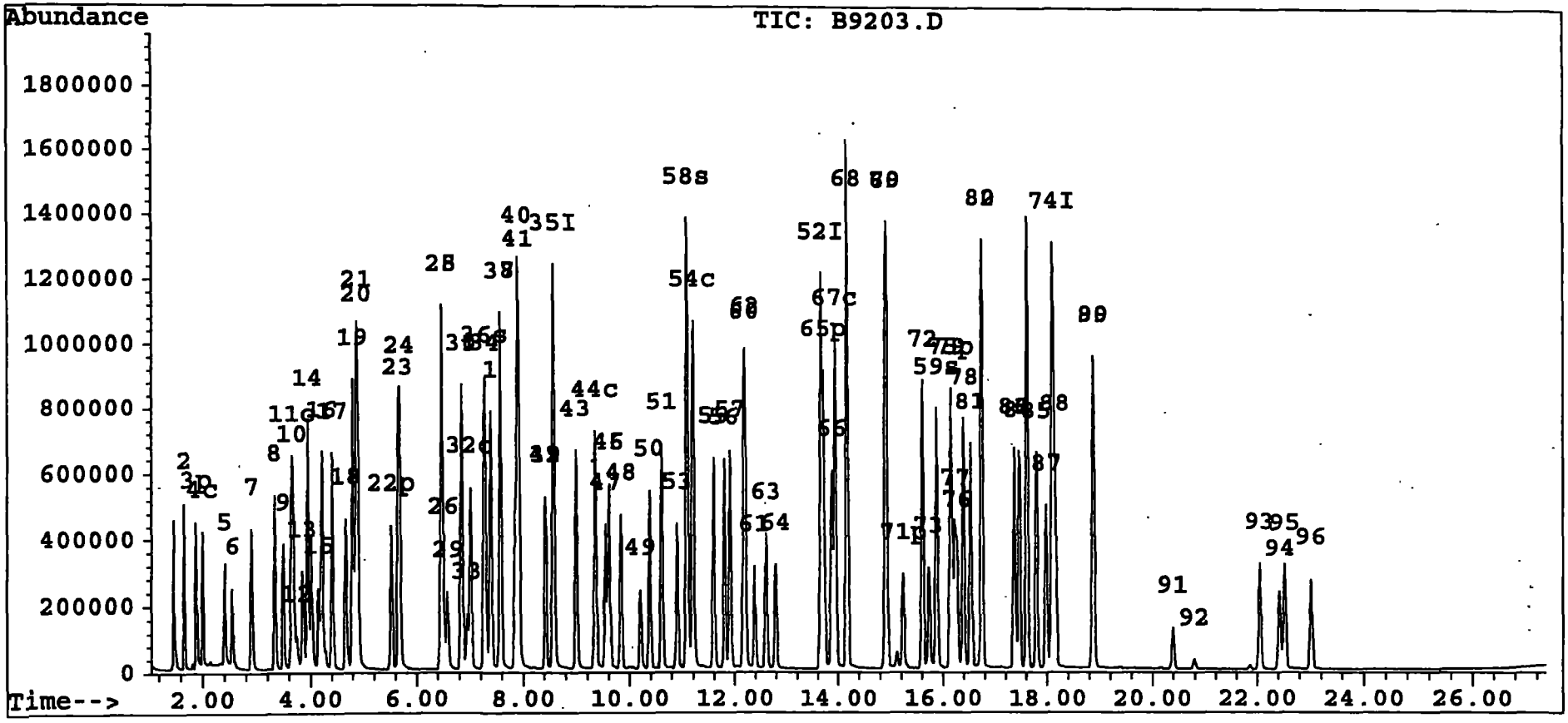
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86)	p-Isopropyltoluene	17.37	119	580442	50.64 ppb	97
87)	1,3-Dclbenz	17.98	146	395764	51.52 ppb	99
88)	1,4-Dclbenz	18.15	146	439968	51.61 ppb	95
89)	n-Butylbenzene	18.88	91	580207	52.57 ppb	99
90)	1,2-Dclbenz	18.86	146	415273	50.79 ppb	98
91)	1,2-Dibromo-3-chloropropan	20.39	157	70300	49.13 ppb	95
92)	Nitrobenzene	20.79	77	30119	39.42 ppb	91
93)	1,2,4-Tcbenzene	22.05	180	209793	52.27 ppb	92
94)	Hexachlorobt	22.43	225	95301	61.53 ppb	96
95)	Naphthalen	22.52	128	530500	47.84 ppb	98
96)	1,2,3-Tclbenzene	23.01	180	186599	50.73 ppb	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data . .e : J:\ACQUDATA\MSVOA3\DATA\012102\B9203 Vial: 14
Acq On : 21 Jan 102 8:41 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 9:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



217

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D Vial: 19
Acq On : 21 Jan 102 10:53 pm Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1		Pentafluorobenzene	1.000	1.000	0.0	127	-0.03
2		Dichlorodifluoromethane	0.426	0.448	-5.1	156	0.00
3	p	Chloromethane	0.564	0.581	-2.9	146	0.00
4	c	Vinyl Chloride	0.485	0.468	3.5	144	-0.02
5		Bromomethane	0.338	0.300	11.2	136	-0.02
6		Chloroethane	0.303	0.275	9.3	140	-0.02
7		Trichlorofluoromethane	0.536	0.533	0.6	146	-0.02
8		Diethyl Ether	0.481	0.444	7.7	129	-0.02
9		Acrolein	0.108	0.099	8.1	116	-0.02
10		FREON 113	0.142	0.128	9.9	138	-0.02
11	c	1,1-Diclethene	0.371	0.335	9.7	130	-0.02
12		Acetone	0.215	0.238	-11.1	151	-0.03
13		Iodomethane	0.209	0.237	-13.5	141	-0.02
		Carbon Disulfide	1.431	1.424	0.4	125	-0.03
15		Acetonitrile	0.024	0.023	4.4	120	-0.02
16		Allyl Chloride	0.230	0.206	10.6	129	0.00
17		Methylene Chloride	0.505	0.459	9.2	132	-0.02
18		TBA	0.059	0.054	8.0	123	-0.03
19		Acrylonitrile	0.263	0.240	8.5	120	-0.03
20		Methyl-t-Butyl Ether	1.432	1.329	7.2	128	-0.02
21		trans-1,2-Dichloroethene	0.460	0.424	7.8	133	-0.02
22	p	1,1-Diclethane	0.821	0.754	8.1	131	-0.02
23		Vinyl Acetate	1.103	0.672	39.1#	78	-0.02
24		2-Chloro-1,3-butadiene	0.688	0.678	1.5	122	-0.02
25		2,2-Dichloropropane	0.580	0.435	25.0#	110	-0.02
26		2-Butanone	0.383	0.391	-2.1	128	-0.03
27		Ethyl Acetate	0.000	0.000	0.0	78	-0.02
28		cis-1,2-Dichloroethene	0.548	0.483	11.9	129	-0.03
29		Propionitrile	0.099	0.091	8.7	124	-0.02
30		Methacrylonitrile	0.256	0.224	12.8	120	-0.02
31		Bromochloromethane	0.271	0.244	10.0	130	-0.03
32	c	Chloroform	0.787	0.728	7.6	133	-0.02
33		Tetrahydrofuran	0.252	0.215	14.9	122	-0.03
34		1,1,1-Trichloroethane	0.581	0.553	4.7	138	-0.02
35	I	1,4 - Difluorobenzene	1.000	1.000	0.0	129	-0.03
36	s	surr4,Dibrflmethane	0.321	0.364	-13.6	130	-0.02
37		Carbontetrachloride	0.262	0.238	9.4	139	-0.03
		1,1-Dichloropropene	0.314	0.279	11.2	135	-0.03
-		Iso-Butyl Alcohol	0.012	0.009	24.4	119	-0.02
40		Benzene	0.899	0.806	10.4	132	-0.02
41		1,2-Dichloroethane	0.343	0.312	9.2	130	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D Vial: 19
Acq On : 21 Jan 102 10:53 pm Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		N-Heptane	0.232	0.177	23.6	121	-0.02
43		Trichloroethene	0.240	0.247	-2.8	152	-0.02
44	c	1,2-Diclpropane	0.295	0.271	7.9	133	-0.03
45		Methyl Methacrylate	0.213	0.182	14.4	117	-0.02
46		1,4-Dioxane	0.003	0.003	13.5	119	-0.03
47		Dibromomethane	0.192	0.177	7.6	129	-0.02
48		Bromodichloromethane	0.328	0.302	7.9	133	-0.03
49		2-Nitropropane	0.109	0.095	13.2	119	-0.03
50		2-Chloroethylvinyl Ether	0.243	0.235	3.2	129	-0.03
51		cis-1,3-Dichloropropene	0.429	0.374	12.8	125	-0.03
52	I	d5 - Chlorobenzene	1.000	1.000	0.0	129	-0.03
		4-Methyl-2-Pentanone	0.504	0.526	-4.4	132	-0.02
	c	Toluene	1.048	0.971	7.4	136	-0.02
55		trans-1,3-Dichloropropene	0.472	0.429	9.3	126	-0.02
56		Ethyl Methacrylate	0.461	0.410	11.1	121	-0.03
57		1,1,2-Trichloroethane	0.265	0.248	6.4	129	-0.02
58	s	surr3,Toluene-d8	1.066	1.220	-14.5	129	-0.03
59	s	surr2,bfb	0.420	0.477	-13.6	127	-0.03
60		Tetrachloroethene	0.234	0.217	7.4	142	-0.02
61		2-Hexanone	0.341	0.357	-4.7	130	-0.03
62		1,3-Dichloropropane	0.573	0.536	6.3	130	-0.03
63		Dibromochloromethane	0.318	0.298	6.2	131	-0.03
64		1,2-Dibromoethane	0.342	0.317	7.3	129	-0.03
65	p	Chlorobenzene	0.678	0.632	6.8	137	-0.03
66		1,1,1,2-Tetrachloroethane	0.254	0.239	5.9	138	-0.03
67	c	Ethylbenzene	1.061	1.006	5.2	141	-0.03
68		(m+p)Xylene	0.376	0.357	5.2	140	-0.03
69		o-Xylene	0.370	0.358	3.0	140	-0.03
70		Styrene	0.666	0.634	4.8	139	-0.02
71	p	Bromoform	0.210	0.192	8.3	130	-0.03
72		Isopropylbenzene	0.907	0.881	2.8	145	-0.03
73		Cyclohexanone	0.035	0.027	23.1	104	-0.03
74	I	d4 - Dichlorobenzene	1.000	1.000	0.0	134	-0.03
75	p	1,1,2,2-Tetrachloroethane	1.067	0.795	25.5#	113	-0.03
76		Trans-1,4-Dichloro-2-butene	0.326	0.260	20.3	117	-0.03
		1,2,3-Trichloropropane	0.326	0.274	15.9	128	-0.04
		n-Propylbenzene	2.661	2.406	9.6	142	-0.03
79		Bromobenzene	0.668	0.586	12.3	140	-0.02
80		1,3,5-Trimethylbenzene	2.423	1.482	38.8#	99	-0.04
81		2-Chlorotoluene	1.707	1.530	10.4	139	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D Vial: 19
Acq On : 21 Jan 102 10:53 pm Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	4-Chlorotoluene	1.924	1.730	10.0	140	-0.03
83	tert-Butylbenzene	1.384	1.251	9.6	145	-0.03
84	1,2,4-Trimethylbenzene	1.594	1.542	3.3	149	-0.03
85	sec-Butylbenzene	1.994	1.819	8.8	143	-0.03
86	p-Isopropyltoluene	1.384	1.251	9.6	145	-0.03
87	1,3-Dclbenz	0.927	0.843	9.1	142	-0.03
88	1,4-Dclbenz	1.029	0.948	7.9	144	-0.03
89	n-Butylbenzene	1.332	1.258	5.6	146	-0.03
90	1,2-Dclbenz	0.987	0.926	6.2	146	-0.04
91	1,2-Dibromo-3-chloropropane	0.173	0.149	14.0	128	-0.04
92	Nitrobenzene	0.095	0.061	36.2#	97	-0.03
93	1,2,4-Tcbenzene	0.484	0.491	-1.3	153	-0.04
	Hexachlorobt	0.187	0.169	9.4	142	-0.03
95	Naphthalen	1.339	1.342	-0.3	144	-0.03
96	1,2,3-Tclbenzene	0.444	0.464	-4.6	154	-0.03
97	TOTAL XYLENE	0.000	0.000	0.0	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D
Acq On : 21 Jan 102 10:53 pm
Sample : CCV
Misc :
Quant Time: Jan 22 8:17 19102

Vial: 19
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	772171	50.00	ppb	-0.03
35) 1,4 - Difluorobenzene	8.55	114	1457239	50.00	ppb	-0.03
52) d5 - Chlorobenzene	13.64	117	1145903	50.00	ppb	-0.03
74) d4 - Dichlorobenzene	18.08	152	465651	50.00	ppb	-0.03
System Monitoring Compounds						**%Recovery**
36) surr4,Dibrflmethane	7.25	113	530434	51.78	ppb	103.57%
58) surr3,Toluene-d8	11.06	98	1398536	51.82	ppb	103.64%
59) surr2,bfb	15.85	95	546515	50.48	ppb	100.96%
Target Compounds						**Qvalue**
2) Dichlorodifluoromethane	1.65	85	345569	52.56	ppb	97
3) Chloromethane	1.87	50	448419	51.46	ppb	100
4) Vinyl Chloride	1.99	62	361255	48.27	ppb	99
5) Bromomethane	2.39	94	231774	44.40	ppb	99
6) Chloroethane	2.53	64	212490	45.36	ppb	m 11
7) Trichlorofluoromethane	2.88	101	411549	49.68	ppb	98
8) Diethyl Ether	3.33	59	342894	46.14	ppb	99
9) Acrolein	3.48	56	382730	229.86	ppb	93
10) FREON 113	3.67	85	98738	45.06	ppb	98
11) 1,1-Diclethene	3.64	96	258467	45.13	ppb	99
12) Acetone	3.73	43	183966	55.53	ppb	99
13) Iodomethane	3.85	127	183280	49.43	ppb	98
14) Carbon Disulfide	3.94	76	1099697	49.78	ppb	100
15) Acetonitrile	4.14	41	355594	955.60	ppb	97
16) Allyl Chloride	4.21	76	159021	44.71	ppb	93
17) Methylene Chloride	4.40	84	354392	45.41	ppb	97
18) TBA	4.65	59	834977	919.86	ppb	99
19) Acrylonitrile	4.77	53	928188	228.67	ppb	99
20) Methyl-t-Butyl Ether	4.87	73	1026205	46.40	ppb	96
21) trans-1,2-Dichloroethene	4.84	96	327296	46.10	ppb	98
22) 1,1-Diclethane	5.51	63	582376	45.94	ppb	98
23) Vinyl Acetate	5.64	43	519090	30.47	ppb	100
24) 2-Chloro-1,3-butadiene	5.67	53	523166	46.13	PPB	96
25) 2,2-Dichloropropane	6.45	77	335688	37.50	ppb	95
26) 2-Butanone	6.50	43	301643	51.03	ppb	100
28) cis-1,2-Dichloroethene	6.46	96	373075	44.04	ppb	94
29) Propionitrile	6.56	54	349527	228.25	ppb	99
30) Methacrylonitrile	6.82	67	172700	43.62	ppb	90
31) Bromochloromethane	6.83	128	188364	44.98	ppb	86
32) Chloroform	7.00	83	561791	46.22	ppb	95
33) Tetrahydrofuran	6.93	42	165783	44.91	ppb	97
34) 1,1,1-Trichloroethane	7.27	97	427131	47.64	ppb	97
37) Carbontetrachloride	7.55	117	346177	45.29	ppb	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D Vial: 19
Acq On : 21 Jan 102 10:53 pm Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 8:17 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.55	75	405895	44.41	ppb		97
39)	Iso-Butyl Alcohol	8.41	43	255803	756.18	ppb		100
40)	Benzene	7.88	78	1174026	44.82	ppb		99
41)	1,2-Dichloroethane	7.90	62	453982	45.41	ppb		99
42)	N-Heptane	8.41	43	258155	38.21	ppb		96
43)	Trichloroethene	8.98	95	359292	51.39	ppb		97
44)	1,2-Diclpropane	9.33	63	395463	46.03	ppb		99
45)	Methyl Methacrylate	9.60	69	265324	42.82	ppb		95
46)	1,4-Dioxane	9.59	88	79937	864.81	ppb		89
47)	Dibromomethane	9.53	93	258634	46.20	ppb		98
48)	Bromodichloromethane	9.81	83	440060	46.05	ppb		96
49)	2-Nitropropane	10.19	43	275503	86.81	ppb		99
50)	2-Chloroethylvinyl Ether	10.36	63	342802	48.39	ppb		97
51)	cis-1,3-Dichloropropene	10.59	75	545734	43.60	ppb		98
53)	4-Methyl-2-Pentanone	10.89	43	602515	52.21	ppb		98
54)	Toluene	11.18	91	1112272	46.31	ppb		98
55)	trans-1,3-Dichloropropene	11.57	75	491176	45.37	ppb		98
56)	Ethyl Methacrylate	11.78	69	469402	44.47	ppb		100
57)	1,1,2-Trichloroethane	11.89	83	283691	46.78	ppb		97
60)	Tetrachloroethene	12.16	166	248257	43.63	ppb		97
61)	2-Hexanone	12.36	43	408787	52.35	ppb		98
62)	1,3-Dichloropropane	12.18	76	614467	46.83	ppb		89
63)	Dibromochloromethane	12.58	129	341790	46.89	ppb		96
64)	1,2-Dibromoethane	12.77	107	363748	46.36	ppb		99
65)	Chlorobenzene	13.69	112	724229	46.60	ppb		99
66)	1,1,1,2-Tetrachloroethane	13.85	131	274321	47.06	ppb		98
67)	Ethylbenzene	13.92	91	1152213	47.40	ppb		98
68)	(m+p)Xylene	14.14	106	818186	94.83	ppb		96
69)	o-Xylene	14.87	106	410558	48.48	ppb		96
70)	Styrene	14.90	104	726549	47.61	ppb		97
71)	Bromoform	15.22	173	220319	45.85	ppb		100
72)	Isopropylbenzene	15.58	105	1009966	45.21	ppb		98
73)	Cyclohexanone	15.71	55	611311	769.09	ppb		98
75)	1,1,2,2-Tetrachloroethane	16.14	83	370181	37.26	ppb		99
76)	Trans-1,4-Dichloro-2-buten	16.25	53	120977	39.86	ppb		89
77)	1,2,3-Trichloropropane	16.20	110	127628	42.07	ppb		98
78)	n-Propylbenzene	16.37	91	1120452	45.21	ppb		98
79)	Bromobenzene	16.12	156	272825	43.84	ppb		97
80)	1,3,5-Trimethylbenzene	16.72	105	689918	30.12	ppb	#	50
81)	2-Chlorotoluene	16.52	91	712653	44.82	ppb		99
82)	4-Chlorotoluene	16.72	91	805755	44.98	ppb		98
83)	tert-Butylbenzene	17.34	119	582741	45.22	ppb		96
84)	1,2,4-Trimethylbenzene	17.43	105	718028	48.36	ppb		97
85)	sec-Butylbenzene	17.77	105	846935	45.61	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D Vial: 19
Acq On : 21 Jan 102 10:53 pm Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 8:17 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.34	119	582741	45.22 ppb	97
87) 1,3-Dclbenz	17.95	146	392341	45.43 ppb	97
88) 1,4-Dclbenz	18.13	146	441504	46.07 ppb	97
89) n-Butylbenzene	18.86	91	585705	47.21 ppb	99
90) 1,2-Dclbenz	18.84	146	431036	46.89 ppb	98
91) 1,2-Dibromo-3-chloropropan	20.36	157	69194	43.01 ppb	94
92) Nitrobenzene	20.77	77	28185	34.27 ppb	87
93) 1,2,4-Tcbenzene	22.03	180	228532	50.65 ppb	97
94) Hexachlorobt	22.40	225	78882	45.30 ppb	97
95) Naphthalen	22.50	128	625038	50.13 ppb	98
96) 1,2,3-Tclbenzene	22.99	180	216211	52.29 ppb	97

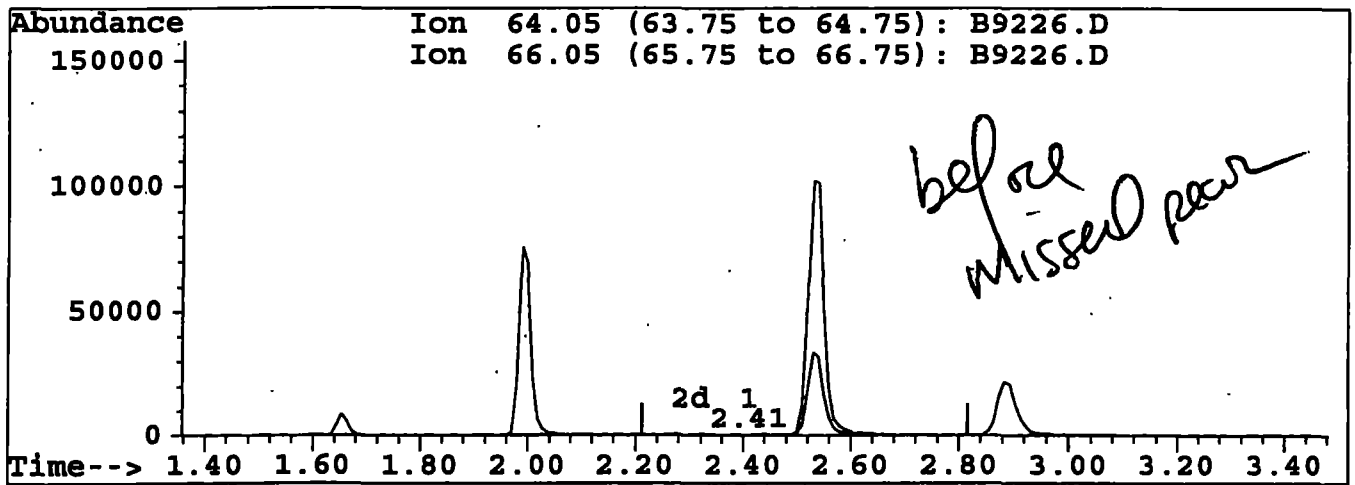
(#) = qualifier out of range (m) = manual integration

Quantitation Report

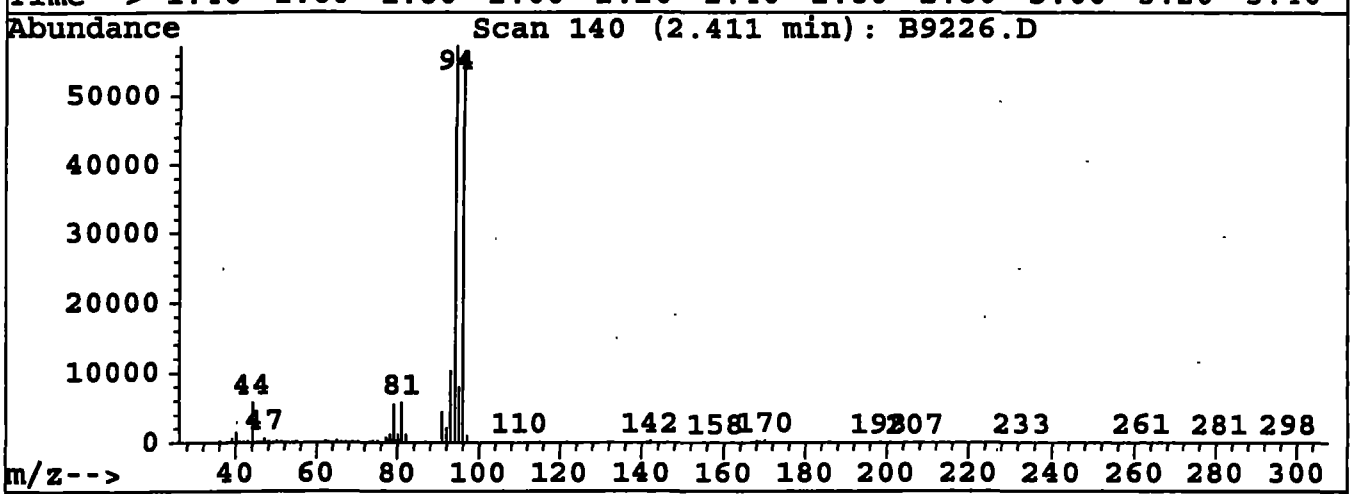
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D
Acq On : 21 Jan 102 10:53 pm
Sample : CCV
Misc :
Quant Time: Jan 21 23:21 19102

Vial: 19
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



before missed peak



TIC: B9226.D

(6) Chloroethane
2.41min 0.22ppb
response 1052

Ion	Exp%	Act%
64.05	100	100
66.05	31.90	81.28#
0.00	0.00	0.00
0.00	0.00	0.00

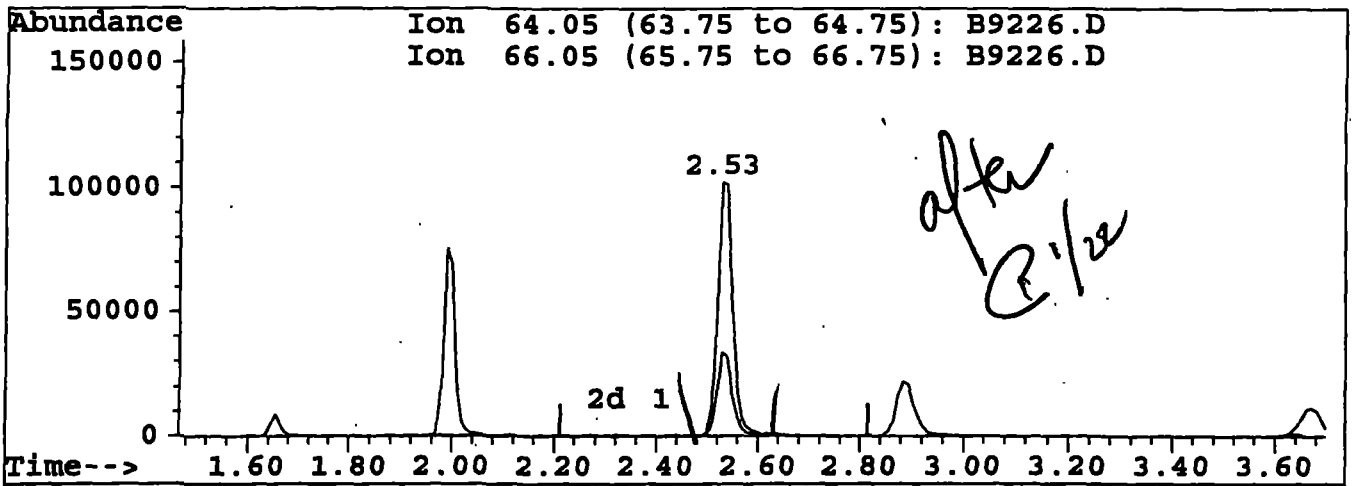
1/22

Quantitation Report

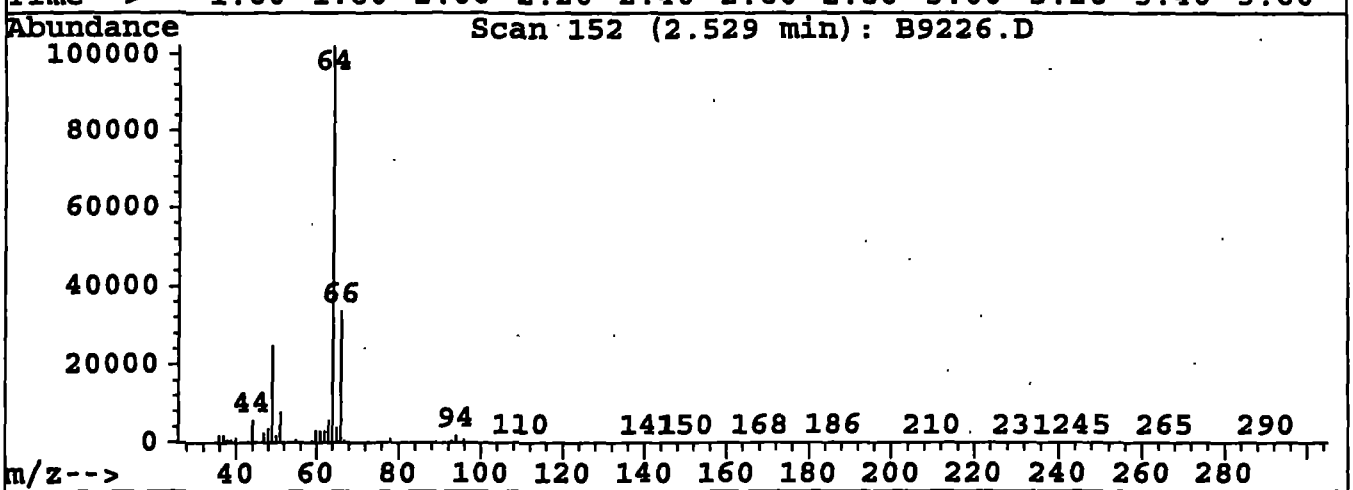
Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D
Acq On : 21 Jan 102 10:53 pm
Sample : CCV
Misc :
Quant Time: Jan 22 8:17 19102

Vial: 19
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



after 1/22



TIC: B9226.D

(6) Chloroethane
2.53min 45.36ppb m
response 212490

Ion	Exp%	Act%
64.05	100	100
66.05	31.90	33.03
0.00	0.00	0.00
0.00	0.00	0.00

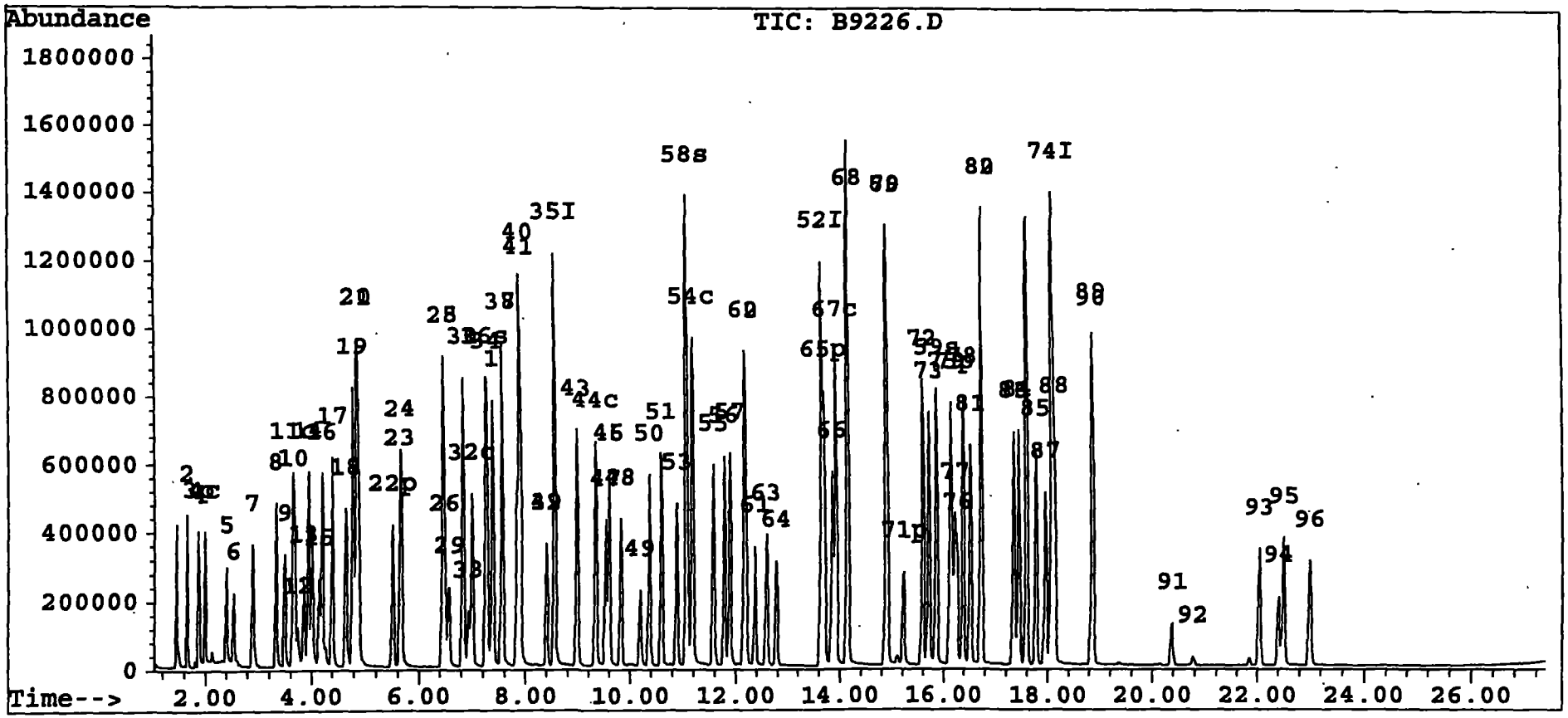
B9226.D EXP1217.M Tue Jan 22 08:17:48 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9226.D
Acq On : 21 Jan 102 10:53 pm
Sample : CCV
Misc :
Quant Time: Jan 22 8:17 19102

Vial: 19
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



226

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1		Pentafluorobenzene	1.000	1.000	0.0	128	-0.05
2		Dichlorodifluoromethane	0.426	0.495	-16.3	174	-0.02
3	p	Chloromethane	0.564	0.636	-12.8	161	-0.03
4	c	Vinyl Chloride	0.485	0.506	-4.5	157	-0.03
5		Bromomethane	0.338	0.299	11.6	136	-0.03
6		Chloroethane	0.303	0.302	0.5	155	-0.04
7		Trichlorofluoromethane	0.536	0.620	-15.5	172	-0.04
8		Diethyl Ether	0.481	0.493	-2.4	144	-0.05
9		Acrolein	0.108	0.115	-6.3	135	-0.05
10		FREON 113	0.142	0.155	-9.2	169	-0.05
11	c	1,1-Diclethene	0.371	0.376	-1.4	148	-0.05
12		Acetone	0.215	0.205	4.5	131	-0.05
13		Iodomethane	0.209	0.243	-16.2	145	-0.05
		Carbon Disulfide	1.431	1.490	-4.1	132	-0.05
		Acetonitrile	0.024	0.023	5.0	121	-0.05
16		Allyl Chloride	0.230	0.236	-2.4	148	-0.05
17		Methylene Chloride	0.505	0.518	-2.6	150	-0.05
18		TBA	0.059	0.060	-2.6	138	-0.05
19		Acrylonitrile	0.263	0.267	-1.7	135	-0.05
20		Methyl-t-Butyl Ether	1.432	1.496	-4.4	146	-0.05
21		trans-1,2-Dichloroethene	0.460	0.470	-2.3	149	-0.05
22	p	1,1-Diclethane	0.821	0.852	-3.8	149	-0.05
23		Vinyl Acetate	1.103	1.519	-37.7#	179	-0.05
24		2-Chloro-1,3-butadiene	0.688	0.711	-3.4	129	-0.05
25		2,2-Dichloropropane	0.580	0.637	-9.9	162	-0.05
26		2-Butanone	0.383	0.398	-4.0	131	-0.06
27		Ethyl Acetate	0.000	0.000	0.0	179	-0.05
28		cis-1,2-Dichloroethene	0.548	0.559	-1.9	150	-0.06
29		Propionitrile	0.099	0.100	-0.6	137	-0.05
30		Methacrylonitrile	0.256	0.253	1.5	137	-0.05
31		Bromochloromethane	0.271	0.278	-2.6	150	-0.05
32	c	Chloroform	0.787	0.824	-4.7	152	-0.05
33		Tetrahydrofuran	0.252	0.238	5.7	136	-0.06
34		1,1,1-Trichloroethane	0.581	0.636	-9.6	161	-0.05
35	I	1,4 - Difluorobenzene	1.000	1.000	0.0	131	-0.06
36	s	surr4,Dibrflmethane	0.321	0.357	-11.4	129	-0.05
37		Carbontetrachloride	0.262	0.269	-2.4	159	-0.06
		1,1-Dichloropropene	0.314	0.328	-4.5	161	-0.06
		Iso-Butyl Alcohol	0.012	0.014	-21.2	193	-0.05
40		Benzene	0.899	0.936	-4.1	155	-0.05
41		1,2-Dichloroethane	0.343	0.357	-4.0	151	-0.06

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
ample : CCV Inst : 5971 - In
.isc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		N-Heptane	0.232	0.282	-21.6	195	-0.05
43		Trichloroethene	0.240	0.245	-2.0	153	-0.05
44	c	1,2-Diclpropane	0.295	0.303	-2.7	150	-0.06
45		Methyl Methacrylate	0.213	0.210	1.2	137	-0.05
46		1,4-Dioxane	0.003	0.003	1.4	137	-0.06
47		Dibromomethane	0.192	0.202	-5.3	149	-0.05
48		Bromodichloromethane	0.328	0.346	-5.6	154	-0.05
49		2-Nitropropane	0.109	0.112	-2.6	142	-0.05
50		2-Chloroethylvinyl Ether	0.243	0.227	6.6	126	-0.06
51		cis-1,3-Dichloropropene	0.429	0.443	-3.2	150	-0.05
52	I	d5 - Chlorobenzene	1.000	1.000	0.0	131	-0.06
5[illegible]		4-Methyl-2-Pentanone	0.504	0.501	0.5	128	-0.05
[illegible]	[illegible]	Toluene	1.048	1.120	-6.8	160	-0.05
55		trans-1,3-Dichloropropene	0.472	0.506	-7.0	151	-0.05
56		Ethyl Methacrylate	0.461	0.464	-0.8	139	-0.06
57		1,1,2-Trichloroethane	0.265	0.277	-4.8	147	-0.05
58	s	surr3,Toluene-d8	1.066	1.218	-14.2	131	-0.06
59	s	surr2,bfb	0.420	0.487	-16.0	132	-0.05
60		Tetrachloroethene	0.234	0.248	-6.1	166	-0.05
61		2-Hexanone	0.341	0.340	0.2	127	-0.06
62		1,3-Dichloropropane	0.573	0.607	-6.0	150	-0.05
63		Dibromochloromethane	0.318	0.336	-5.7	150	-0.05
64		1,2-Dibromoethane	0.342	0.354	-3.4	146	-0.06
65	p	Chlorobenzene	0.678	0.728	-7.4	161	-0.06
66		1,1,1,2-Tetrachloroethane	0.254	0.265	-4.3	156	-0.06
67	c	Ethylbenzene	1.061	1.151	-8.5	164	-0.06
68		(m+p)Xylene	0.376	0.415	-10.2	166	-0.06
69		o-Xylene	0.370	0.407	-10.2	162	-0.06
70		Styrene	0.666	0.729	-9.5	163	-0.05
71	p	Bromoform	0.210	0.216	-3.1	149	-0.06
72		Isopropylbenzene	0.907	1.013	-11.6	169	-0.05
73		Cyclohexanone	0.035	0.033	4.3	132	-0.06
74	I	d4 - Dichlorobenzene	1.000	1.000	0.0	135	-0.06
75	p	1,1,2,2-Tetrachloroethane	1.067	1.065	0.2	151	-0.06
76		Trans-1,4-Dichloro-2-butene	0.326	0.317	2.7	143	-0.06
77		1,2,3-Trichloropropane	0.326	0.309	5.2	144	-0.06
		n-Propylbenzene	2.661	2.906	-9.2	172	-0.06
[illegible]		Bromobenzene	0.668	0.686	-2.7	164	-0.05
80		1,3,5-Trimethylbenzene	2.423	1.772	26.9#	118	-0.08
81		2-Chlorotoluene	1.707	1.825	-6.9	166	-0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	4-Chlorotoluene	1.924	2.068	-7.5	167	-0.06
83	tert-Butylbenzene	1.384	1.486	-7.4	173	-0.06
84	1,2,4-Trimethylbenzene	1.594	1.835	-15.1	178	-0.05
85	sec-Butylbenzene	1.994	2.272	-14.0	180	-0.05
86	p-Isopropyltoluene	1.384	1.486	-7.4	173	-0.06
87	1,3-Dclbenz	0.927	1.008	-8.7	170	-0.06
88	1,4-Dclbenz	1.029	1.110	-7.9	169	-0.06
89	n-Butylbenzene	1.332	1.623	-21.8	188	-0.06
90	1,2-Dclbenz	0.987	1.088	-10.2	172	-0.06
91	1,2-Dibromo-3-chloropropane	0.173	0.168	3.0	145	-0.06
92	Nitrobenzene	0.095	0.075	21.1	120	-0.05
93	1,2,4-Tcbenzene	0.484	0.603	-24.5	189	-0.07
	Hexachlorobt	0.187	0.240	-28.1#	202#	-0.06
	Naphthalen	1.339	1.561	-16.6	168	-0.06
96	1,2,3-Tclbenzene	0.444	0.540	-21.6	179	-0.07
97	TOTAL XYLENE	0.000	0.000	0.0	95	-0.02

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 10:30 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	778819	50.00 ppb	-0.05
35) 1,4 - Difluorobenzene	8.52	114	1475795	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1169005	50.00 ppb	-0.06
74) d4 - Dichlorobenzene	18.04	152	466710	50.00 ppb	-0.06
System Monitoring Compounds					**%Recovery**
36) surr4,Dibrflmethane	7.22	113	526889	50.51 ppb	101.01%
58) surr3,Toluene-d8	11.03	98	1423266	51.65 ppb	103.31%
59) surr2,bfb	15.82	95	569222	51.93 ppb	103.85%
Target Compounds					**Qvalue**
2) Dichlorodifluoromethane	1.64	85	385610	58.15 ppb	98
3) Chloromethane	1.85	50	495714	56.40 ppb	100
4) Vinyl Chloride	1.98	62	394221	52.23 ppb	100
5) Bromomethane	2.38	94	232740	44.21 ppb	91
6) Chloroethane	2.51	64	235052	49.75 ppb	99
7) Trichlorofluoromethane	2.87	101	482635	57.77 ppb	98
8) Diethyl Ether	3.30	59	383828	51.21 ppb	94
9) Acrolein	3.46	56	446202	265.69 ppb	97
10) FREON 113	3.64	85	120642	54.58 ppb	95
11) 1,1-Diclethene	3.61	96	292986	50.72 ppb	99
12) Acetone	3.70	43	159623	47.77 ppb	100
13) Iodomethane	3.82	127	189219	50.49 ppb	100
14) Carbon Disulfide	3.91	76	1160068	52.06 ppb	100
15) Acetonitrile	4.12	41	356459	949.75 ppb	98
16) Allyl Chloride	4.17	76	183631	51.19 ppb	90
17) Methylene Chloride	4.36	84	403692	51.28 ppb	93
18) TBA	4.62	59	939734	1026.43 ppb	99
19) Acrylonitrile	4.75	53	1040498	254.15 ppb	99
20) Methyl-t-Butyl Ether	4.84	73	1164826	52.21 ppb	97
21) trans-1,2-Dichloroethene	4.81	96	366104	51.13 ppb	98
22) 1,1-Diclethane	5.47	63	663299	51.88 ppb	100
23) Vinyl Acetate	5.60	43	1183332	68.87 ppb	100
24) 2-Chloro-1,3-butadiene	5.63	53	553956	48.37 PPB	98
25) 2,2-Dichloropropane	6.41	77	496011	54.93 ppb	100
26) 2-Butanone	6.46	43	310046	52.01 ppb	98
28) cis-1,2-Dichloroethene	6.42	96	435342	50.96 ppb	88
29) Propionitrile	6.53	54	388620	251.62 ppb	98
30) Methacrylonitrile	6.78	67	196765	49.27 ppb	91
31) Bromochloromethane	6.80	128	216685	51.30 ppb	92
32) Chloroform	6.96	83	641935	52.36 ppb	99
33) Tetrahydrofuran	6.89	42	185407	50.11 ppb	94
34) 1,1,1-Trichloroethane	7.24	97	495641	54.80 ppb	99
37) Carbontetrachloride	7.51	117	396252	51.19 ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 10:30 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.51	75	483478	52.24	ppb		98
39)	Iso-Butyl Alcohol	8.37	43	415209	1211.97	ppb		99
40)	Benzene	7.85	78	1380841	52.06	ppb		98
41)	1,2-Dichloroethane	7.87	62	526213	51.98	ppb		99
42)	N-Heptane	8.37	43	415857	60.78	ppb		97
43)	Trichloroethene	8.94	95	360909	50.98	ppb		97
44)	1,2-Diclpropane	9.29	63	446970	51.37	ppb		99
45)	Methyl Methacrylate	9.56	69	309984	49.39	ppb		97
46)	1,4-Dioxane	9.55	88	92304	986.05	ppb		90
47)	Dibromomethane	9.49	93	298453	52.65	ppb		95
48)	Bromodichloromethane	9.78	83	510708	52.78	ppb		98
49)	2-Nitropropane	10.16	43	329769	102.60	ppb		97
50)	2-Chloroethylvinyl Ether	10.33	63	335022	46.69	ppb		97
51)	cis-1,3-Dichloropropene	10.56	75	654046	51.60	ppb		97
53)	4-Methyl-2-Pentanone	10.85	43	585842	49.76	ppb		96
54)	Toluene	11.14	91	1308771	53.42	ppb		100
55)	trans-1,3-Dichloropropene	11.54	75	590977	53.51	ppb		100
56)	Ethyl Methacrylate	11.74	69	542755	50.41	ppb		99
57)	1,1,2-Trichloroethane	11.85	83	324228	52.40	ppb		97
60)	Tetrachloroethene	12.12	166	290250	49.38	ppb		99
61)	2-Hexanone	12.32	43	397519	49.90	ppb		94
62)	1,3-Dichloropropane	12.15	76	709320	52.99	ppb		93
63)	Dibromochloromethane	12.55	129	392933	52.84	ppb		99
64)	1,2-Dibromoethane	12.73	107	413842	51.71	ppb		97
65)	Chlorobenzene	13.65	112	851389	53.70	ppb		98
66)	1,1,1,2-Tetrachloroethane	13.81	131	310104	52.14	ppb		98
67)	Ethylbenzene	13.88	91	1345278	54.25	ppb		99
68)	(m+p)Xylene	14.11	106	969962	110.20	ppb		99
69)	o-Xylene	14.83	106	475826	55.08	ppb		95
70)	Styrene	14.86	104	852093	54.74	ppb		96
71)	Bromoform	15.18	173	252796	51.56	ppb		98
72)	Isopropylbenzene	15.55	105	1183666	51.45	ppb		99
73)	Cyclohexanone	15.67	55	775829	956.79	ppb		98
75)	1,1,2,2-Tetrachloroethane	16.10	83	496933	49.91	ppb		98
76)	Trans-1,4-Dichloro-2-buten	16.21	53	147974	48.64	ppb		93
77)	1,2,3-Trichloropropane	16.17	110	144166	47.42	ppb		99
78)	n-Propylbenzene	16.33	91	1356129	54.60	ppb		98
79)	Bromobenzene	16.08	156	320148	51.33	ppb		99
80)	1,3,5-Trimethylbenzene	16.69	105	826839	35.28	ppb	#	55
81)	2-Chlorotoluene	16.48	91	851785	53.45	ppb		99
82)	4-Chlorotoluene	16.69	91	965126	53.75	ppb		98
83)	tert-Butylbenzene	17.31	119	693643	53.71	ppb		95
84)	1,2,4-Trimethylbenzene	17.40	105	856373	57.55	ppb		99
85)	sec-Butylbenzene	17.74	105	1060526	56.99	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9243.D Vial: 14
Acq On : 22 Jan 102 10:02 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 10:30 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.31	119	693643	53.71 ppb	96
87) 1,3-Dclbenz	17.92	146	470595	54.37 ppb	97
88) 1,4-Dclbenz	18.09	146	518192	53.95 ppb	99
89) n-Butylbenzene	18.82	91	757559	60.92 ppb	98
90) 1,2-Dclbenz	18.81	146	507691	55.10 ppb	99
91) 1,2-Dibromo-3-chloropropan	20.34	157	78194	48.50 ppb	94
92) Nitrobenzene	20.74	77	34908	40.29 ppb	99
93) 1,2,4-Tcbenzene	21.99	180	281588	62.27 ppb	98
94) Hexachlorobt	22.36	225	111798	64.05 ppb	100
95) Naphthalen	22.46	128	728704	58.32 ppb	98
96) 1,2,3-Tclbenzene	22.95	180	251999	60.80 ppb	99

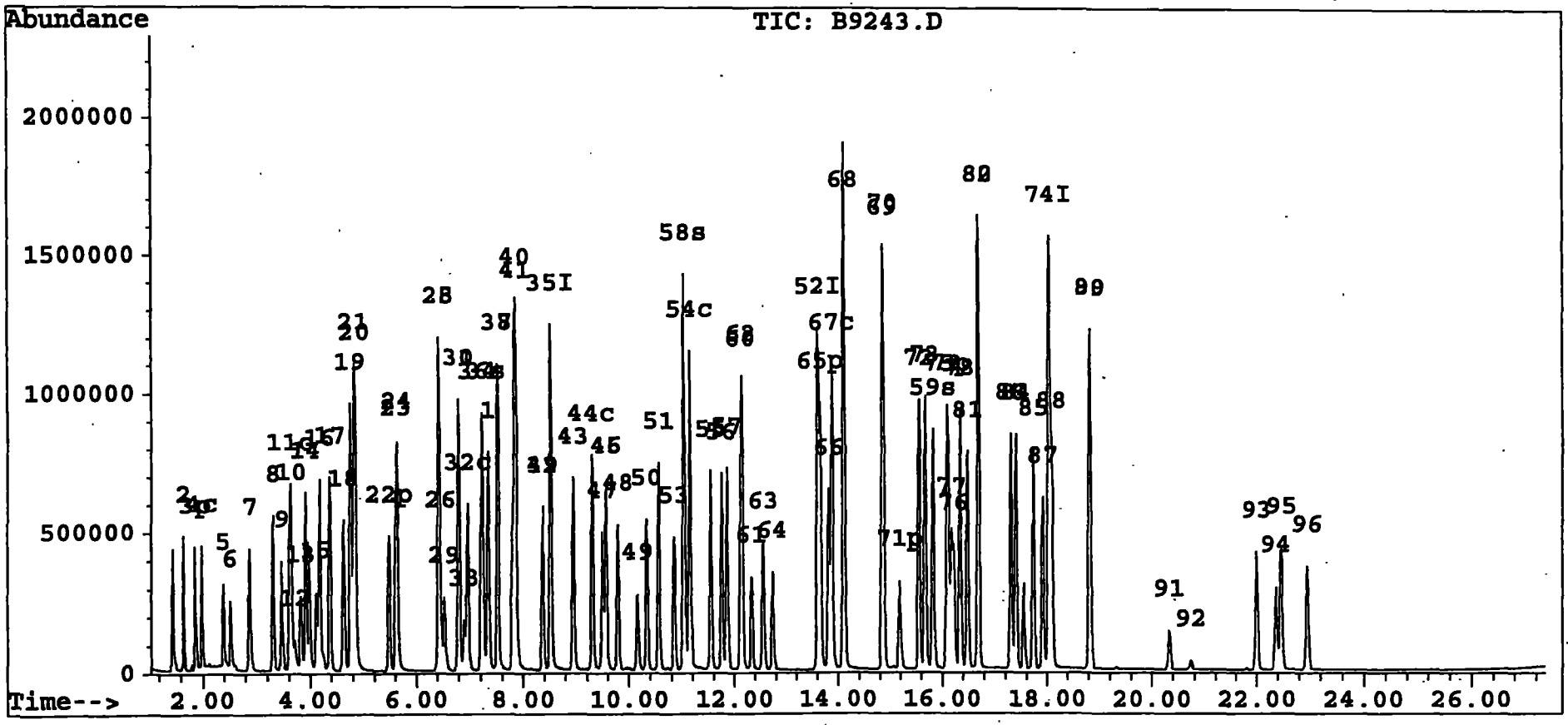
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data F. . : J:\ACQUDATA\MSVOA3\DATA\012202\B9243
Acq On : 22 Jan 102 10:02 am
Sample : CCV
Misc :
Quant Time: Jan 22 10:30 19102

Vial: 14
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



VOLATILE ORGANICS

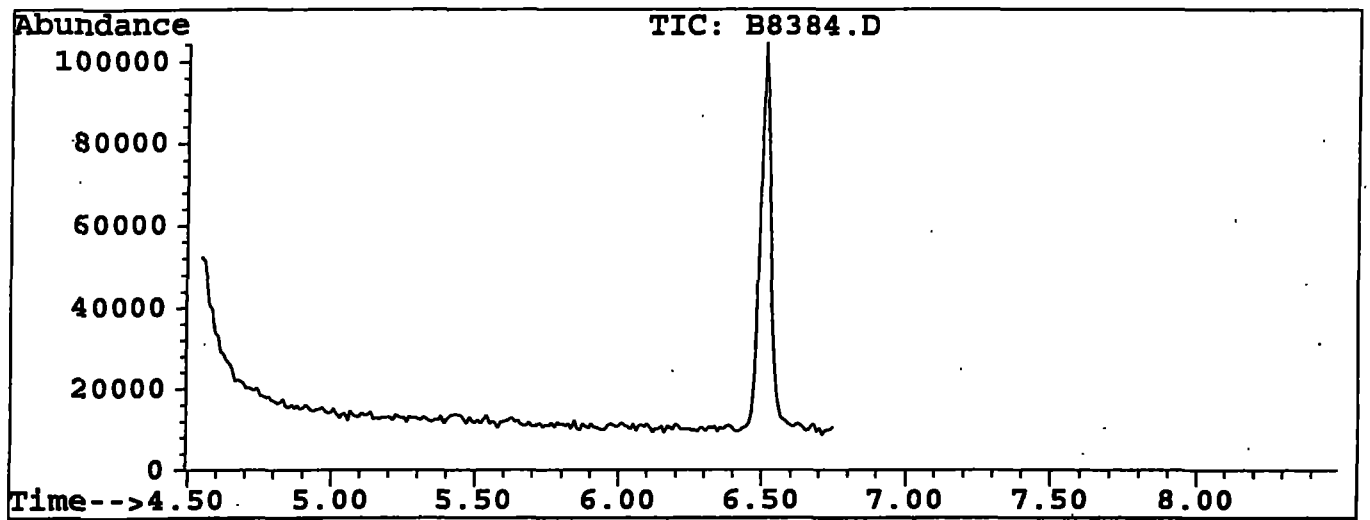
RAW QC DATA

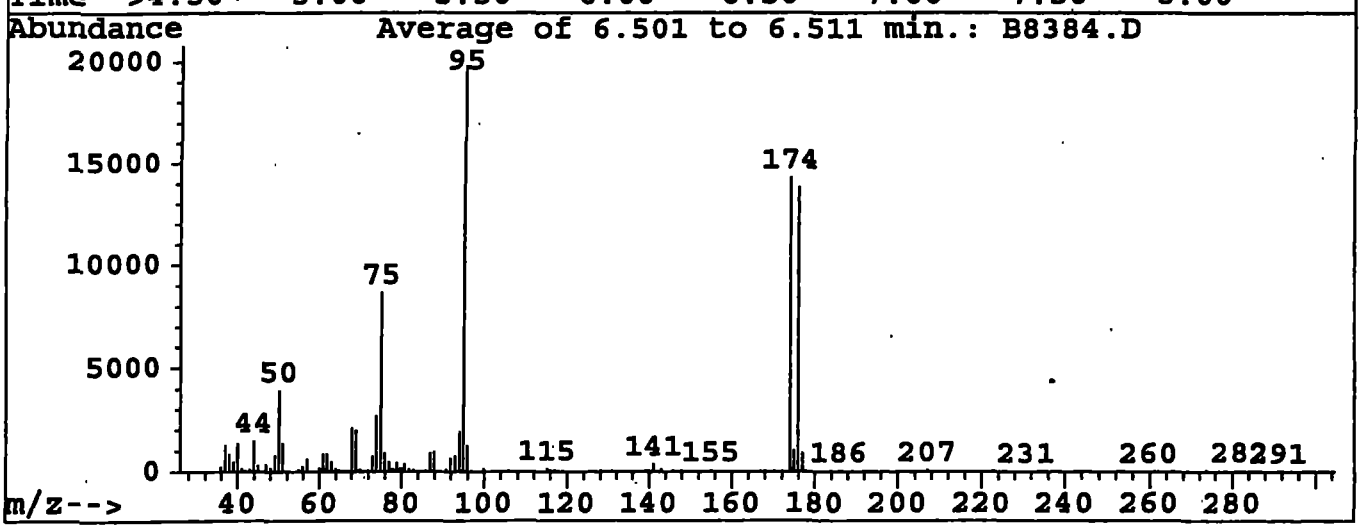
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8384.D
Acq On : 17 Dec 101 9:49 am
Sample : tune
Misc :

Vial: 2
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA1\METHODS\EXP1127W.M
Title : 8260B VOA COMPOUNDS GCMS#1





Peak Apex is scan: 199

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.9	3947	PASS
75	95	30	60	43.8	8675	PASS
95	95	100	100	100.0	19812	PASS
96	95	5	9	6.5	1284	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	72.4	14338	PASS
175	174	5	9	7.1	1014	PASS
176	174	95	101	96.5	13835	PASS
177	176	5	9	6.6	912	PASS

B8384.D EXP1127W.M Mon Dec 17 09:57:22 2001

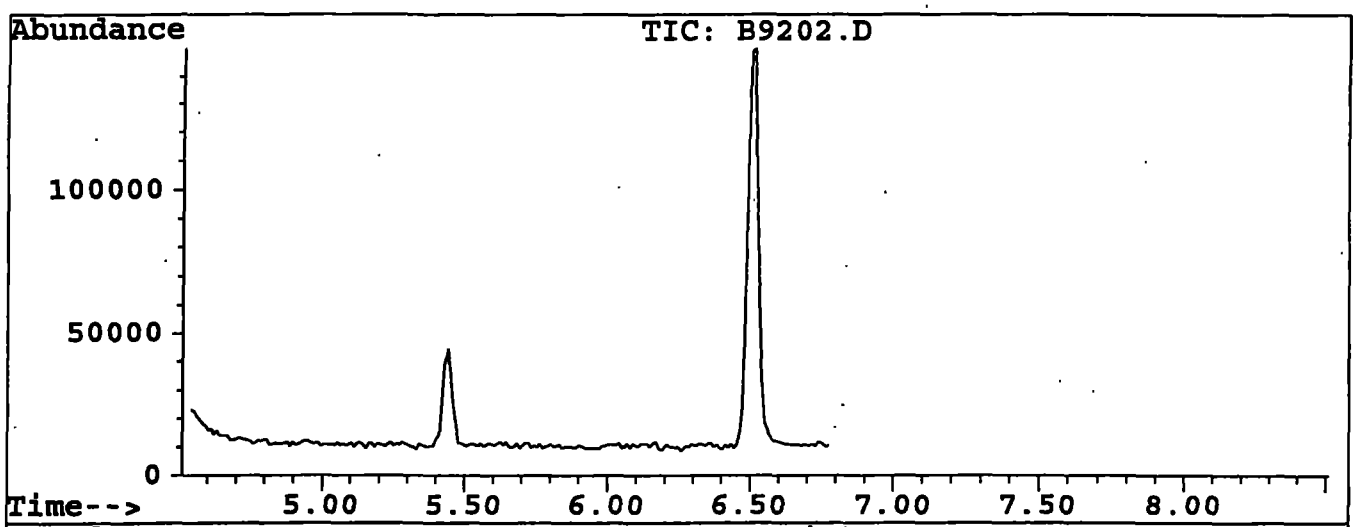
12/17

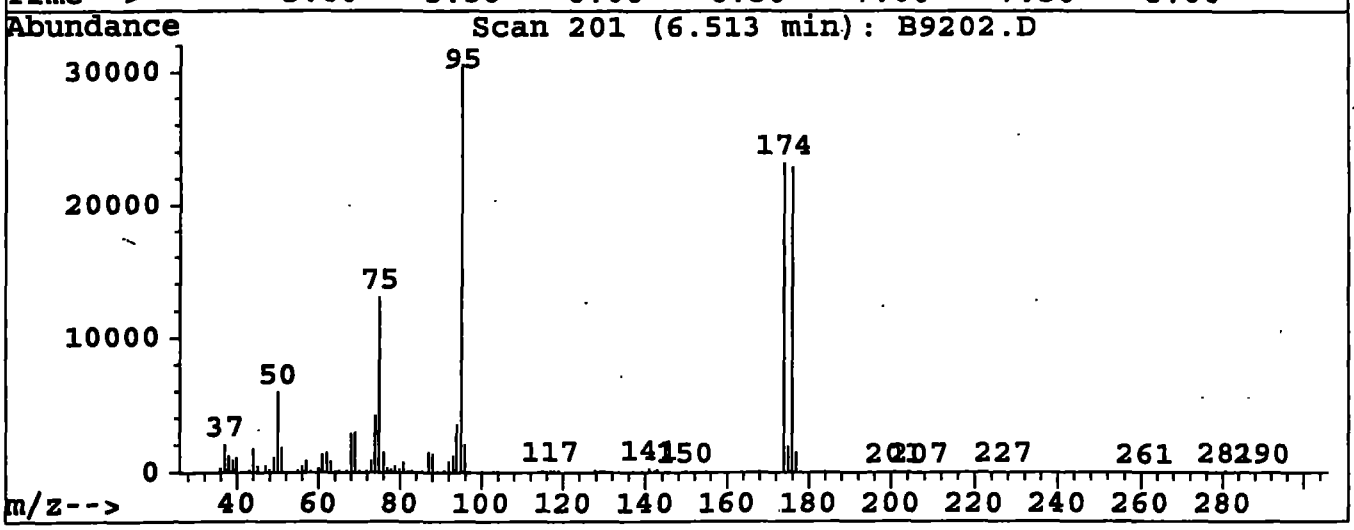
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9202.D
Acq On : 21 Jan 102 8:06 am
Sample : TUNE
Misc :

Vial: 13
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa





Peak Apex is scan: 201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	5961	PASS
75	95	30	60	42.6	13047	PASS
95	95	100	100	100.0	30608	PASS
96	95	5	9	6.7	2060	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	75.8	23208	PASS
175	174	5	9	8.5	1966	PASS
176	174	95	101	98.7	22896	PASS
177	176	5	9	6.5	1495	PASS

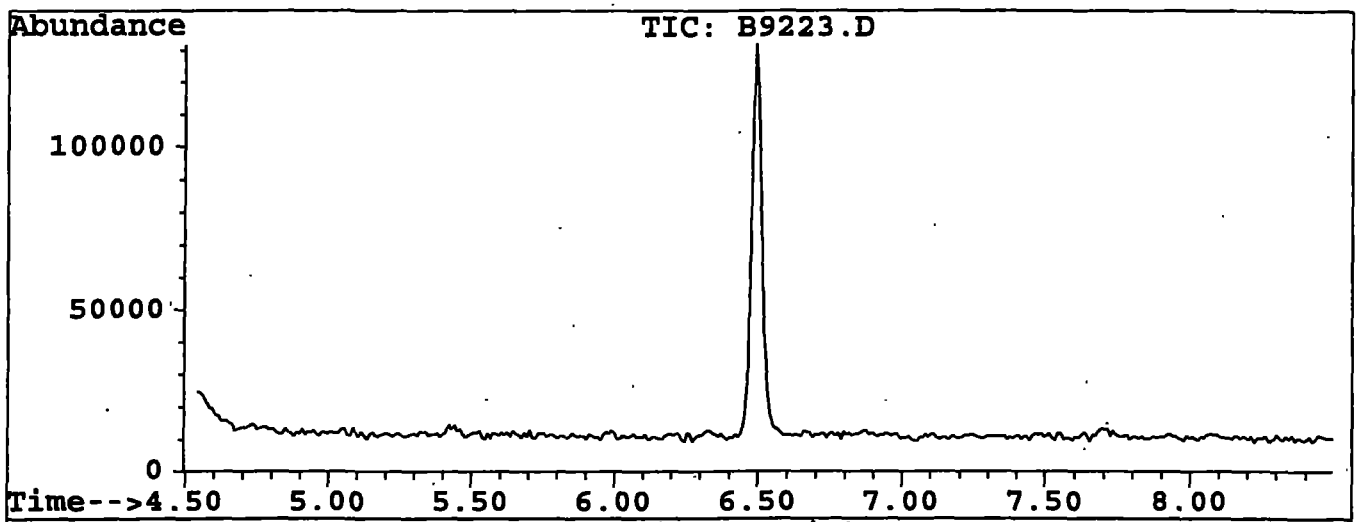
B9202.D EXP1217.M Mon Jan 21 08:13:40 2002

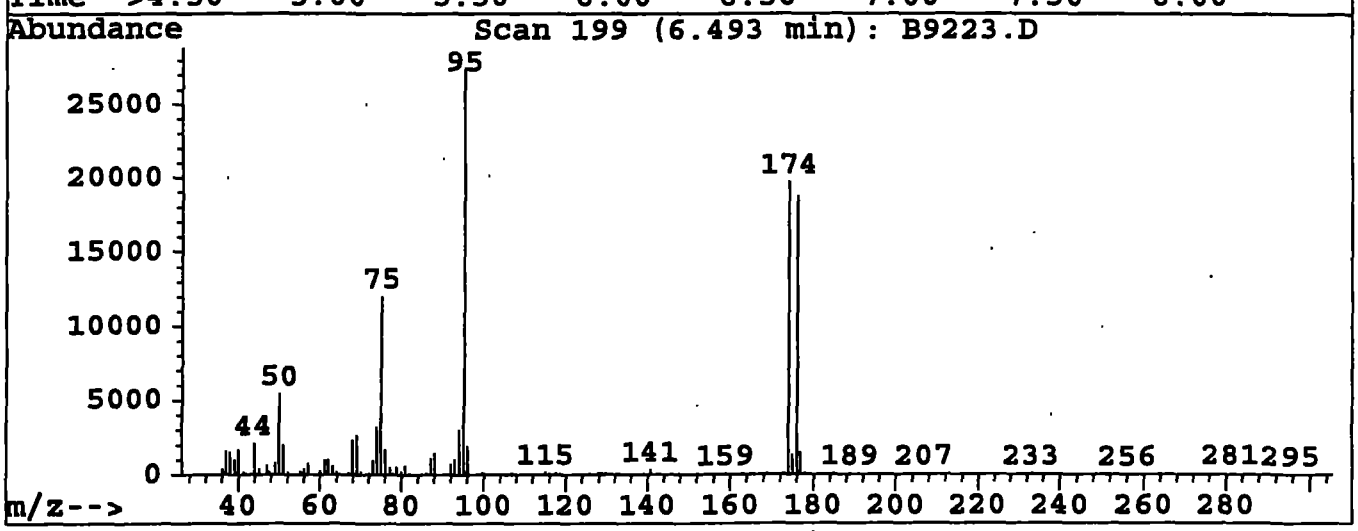
BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9223.D
Acq On : 21 Jan 102 9:06 pm
Sample : TUNE
Misc :

Vial: 16
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa





Peak Apex is scan: 199

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	5433	PASS
75	95	30	60	43.7	12029	PASS
95	95	100	100	100.0	27536	PASS
96	95	5	9	6.8	1885	PASS
173	174	0	2	0.5	93	PASS
174	95	50	120	71.5	19696	PASS
175	174	5	9	6.8	1339	PASS
176	174	95	101	95.0	18720	PASS
177	176	5	9	7.8	1451	PASS

B9223.D EXP1217.M Tue Jan 22 08:11:38 2002

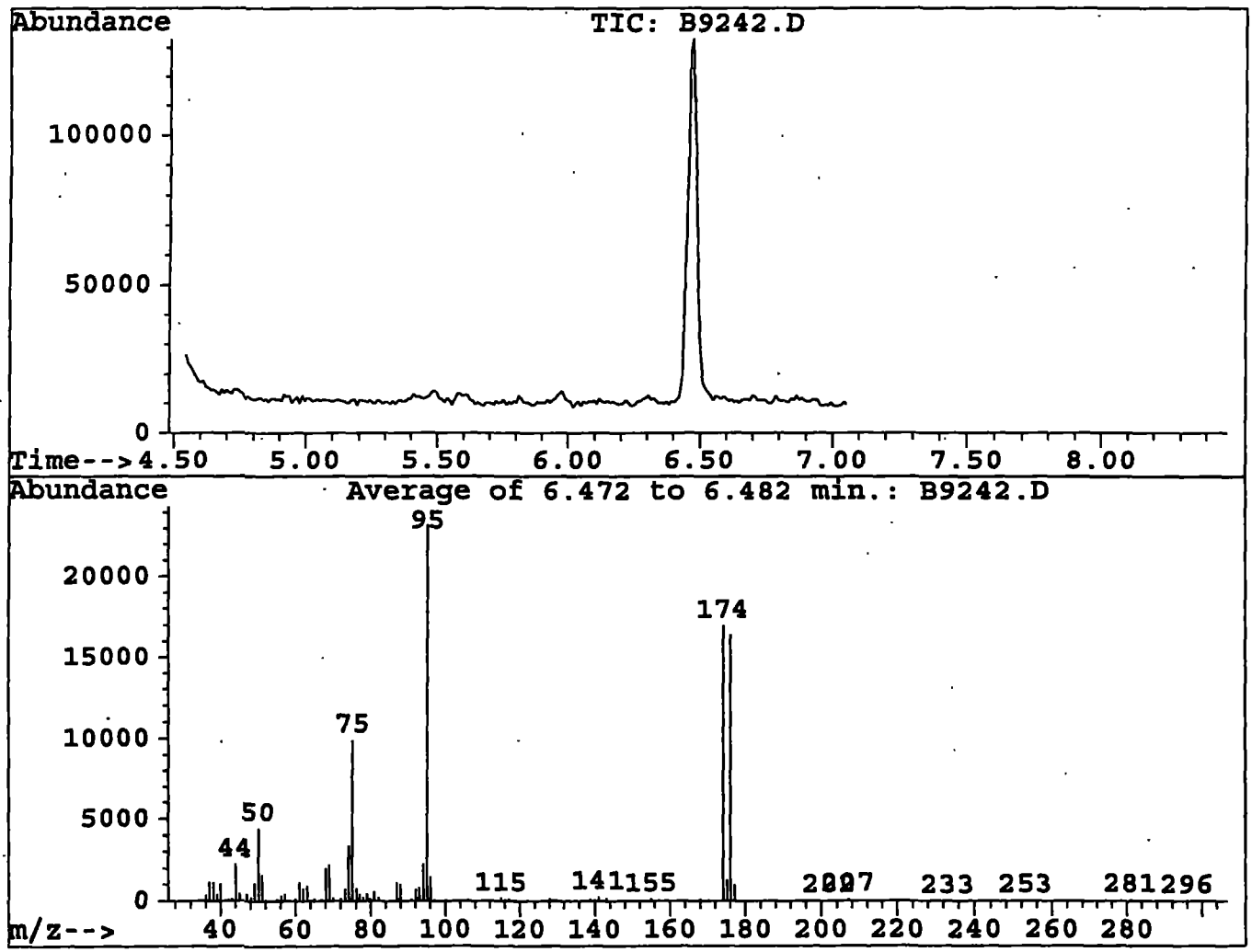
1/22 237

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9242.D
Acq On : 22 Jan 102 9:26 am
Sample : TUNE
Misc :

Vial: 13
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa



Peak Apex is scan: 198

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	4436	PASS
75	95	30	60	42.7	9907	PASS
95	95	100	100	100.0	23200	PASS
96	95	5	9	6.5	1510	PASS
173	174	0	2	0.0	0	PASS
174	95	50	120	73.2	16981	PASS
175	174	5	9	7.5	1279	PASS
176	174	95	101	96.8	16434	PASS
177	176	5	9	6.0	980	PASS

B9242.D EXP1217.M Tue Jan 22 09:34:25 2002

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 525621 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
BROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	95	%
TOLUENE-D8	(87 - 108 %)	107	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9205.D
Acq On : 21 Jan 102 9:55 am
Sample : ~~AM~~ BLK (Mc+Blk) 525621
Misc :
Quant Time: Jan 21 10:23 19102

Vial: 16
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	759372	50.00 ppb	0.00
35) 1,4 - Difluorobenzene	8.56	114	1424201	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.65	117	1106631	50.00 ppb	-0.02
74) d4 - Dichlorobenzene	18.10	152	384229	50.00 ppb	0.00

System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.26	113	508504	50.51 ppb	101.02%
58) surr3,Toluene-d8	11.07	98	1381292	53.37 ppb	106.74%
59) surr2,bfb	15.87	95	504779	47.47 ppb	94.93%

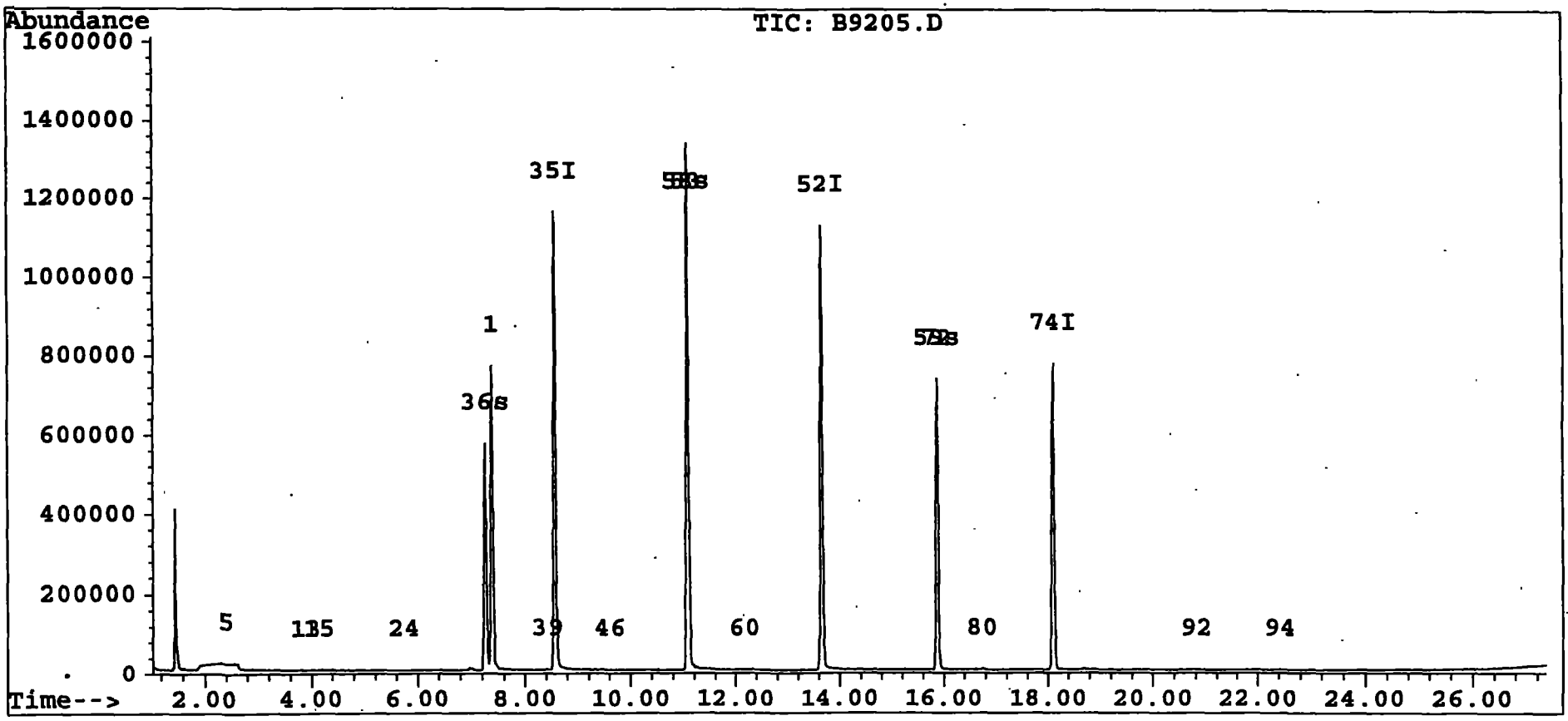
Target Compounds					Qvalue
5) Bromomethane	2.40	94	2771	~~0.54 ppb #~~	~~13~~
13) Iodomethane	3.88	127	199	~~4.38 ppb~~	~~78~~
15) Acetonitrile	4.15	41	182	~~0.50 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.75	53	181	~~1.20 PPB~~	~~100~~
39) Iso-Butyl Alcohol	8.42	43	2207	~~6.68 ppb~~	~~92~~
46) 1,4-Dioxane	9.60	88	353	~~3.91 ppb #~~	~~12~~
53) 4-Methyl-2-Pentanone	11.07	43	9198	~~0.83 ppb #~~	~~1~~
60) Tetrachloroethene	12.18	166	369	~~4.31 ppb #~~	~~58~~
72) Isopropylbenzene	15.88	105	978	~~3.32 ppb~~	~~97~~
80) 1,3,5-Trimethylbenzene	16.73	105	987	3.78 ppb	99 <NT
92) Nitrobenzene	20.82	77	298	~~9.03 ppb #~~	~~27~~
94) Hexachlorobt	22.42	225	~~758~~	~~0.53 ppb #~~	~~44~~

1/21

(#) = qualifier out of range (m) = manual integration
B9205.D EXP1217.M Mon Jan 21 10:23:27 2002

Data F_ : J:\ACQUDATA\MSVOA3\DATA\012102\B9205 Vial: 16
Acq On : 21 Jan 102 9:55 am Operator: droot
Sample : AM BLK Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 10:23 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 525625 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
DIBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	101	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9228.D
Acq On : 22 Jan 102 12:05 am
Sample : MET BLK 525625
Misc :
Quant Time: Jan 22 0:33 19102

Vial: 21
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	782801	50.00 ppb	-0.03
35) 1,4 - Difluorobenzene	8.55	114	1481223	50.00 ppb	-0.03
52) d5 - Chlorobenzene	13.63	117	1152300	50.00 ppb	-0.04
74) d4 - Dichlorobenzene	18.08	152	438334	50.00 ppb	-0.03

System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.24	113	526089	50.17 ppb	100.34%
58) surr3,Toluene-d8	11.06	98	1405070	51.76 ppb	103.52%
59) surr2,bfb	15.85	95	549515	50.47 ppb	100.94%

Target Compounds						Qvalue
13) Iodomethane	3.83	127	80	~~4.35 ppb~~		~~1~~
15) Acetonitrile	4.14	41	282	~~0.75 ppb~~	#	~~1~~
24) 2-Chloro-1,3-butadiene	5.67	53	498	~~1.22 PPB~~		~~83~~
39) Iso-Butyl Alcohol	8.41	43	1834	~~5.33 ppb~~		~~94~~
46) 1,4-Dioxane	9.64	88	304	~~3.24 ppb~~	#	~~73~~
60) Tetrachloroethene	12.17	166	537	~~4.34 ppb~~	#	~~6~~
72) Isopropylbenzene	15.59	105	1116	~~3.33 ppb~~		~~97~~
73) Cyclohexanone	15.63	55	373	~~0.47 ppb~~		~~99~~
80) 1,3,5-Trimethylbenzene	16.72	105	1226	3.79 ppb	#	59 < M
92) Nitrobenzene	20.82	77	886	~~9.56 ppb~~	#	~~27~~
94) Hexachlorobt	22.39	225	872	0.53 ppb	#	65 < M

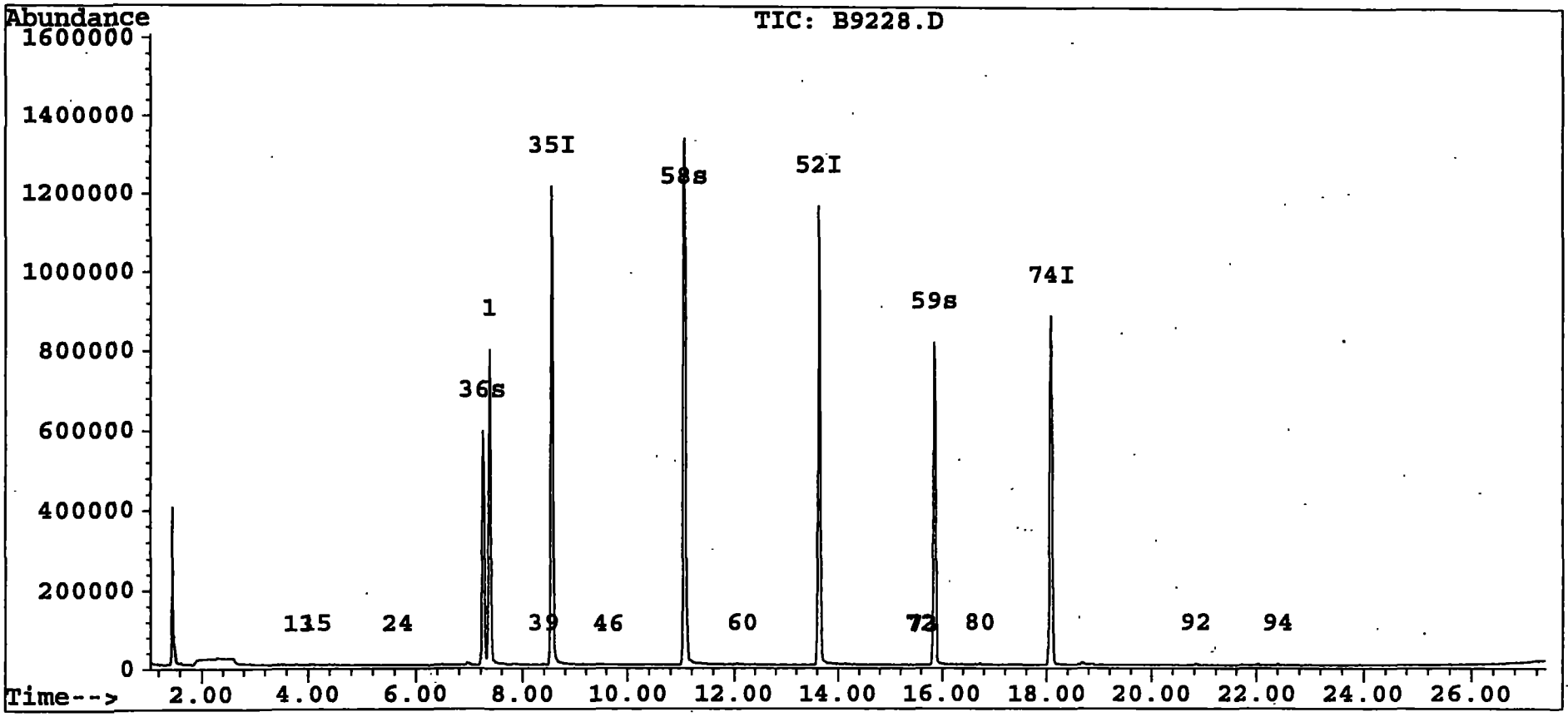
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9228.
Acq On : 22 Jan 102 12:05 am
Sample : MET BLK
Misc :
Quant Time: Jan 22 0:33 19102

Vial: 21
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : METHOD BLANK

Date Sampled : **Order #:** 525812 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/22/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	10 U	UG/L
BENZENE	1.0	1.0 U	UG/L
BROMODICHLOROMETHANE	1.0	1.0 U	UG/L
BROMOFORM	1.0	1.0 U	UG/L
BROMOMETHANE	1.0	1.0 U	UG/L
2-BUTANONE (MEK)	5.0	5.0 U	UG/L
CARBON DISULFIDE	5.0	5.0 U	UG/L
CARBON TETRACHLORIDE	1.0	1.0 U	UG/L
CHLOROBENZENE	1.0	1.0 U	UG/L
CHLOROETHANE	1.0	1.0 U	UG/L
CHLOROFORM	1.0	1.0 U	UG/L
CHLOROMETHANE	1.0	1.0 U	UG/L
IBROMOCHLOROMETHANE	1.0	1.0 U	UG/L
,1-DICHLOROETHANE	1.0	1.0 U	UG/L
1,2-DICHLOROETHANE	1.0	1.0 U	UG/L
1,1-DICHLOROETHENE	1.0	1.0 U	UG/L
CIS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	1.0 U	UG/L
1,2-DICHLOROPROPANE	1.0	1.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	1.0 U	UG/L
ETHYLBENZENE	1.0	1.0 U	UG/L
2-HEXANONE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	1.0	1.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	5.0 U	UG/L
STYRENE	1.0	1.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	1.0 U	UG/L
TETRACHLOROETHENE	1.0	1.0 U	UG/L
TOLUENE	1.0	1.0 U	UG/L
1,1,1-TRICHLOROETHANE	1.0	1.0 U	UG/L
1,1,2-TRICHLOROETHANE	1.0	1.0 U	UG/L
TRICHLOROETHENE	1.0	1.0 U	UG/L
VINYL CHLORIDE	1.0	1.0 U	UG/L
O-XYLENE	1.0	1.0 U	UG/L
M+P-XYLENE	1.0	1.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	102	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9245.D
Acq On : 22 Jan 102 11:15 am
Sample : MET BLK 525812
Misc :
Quant Time: Jan 22 11:43 19102

Vial: 16
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

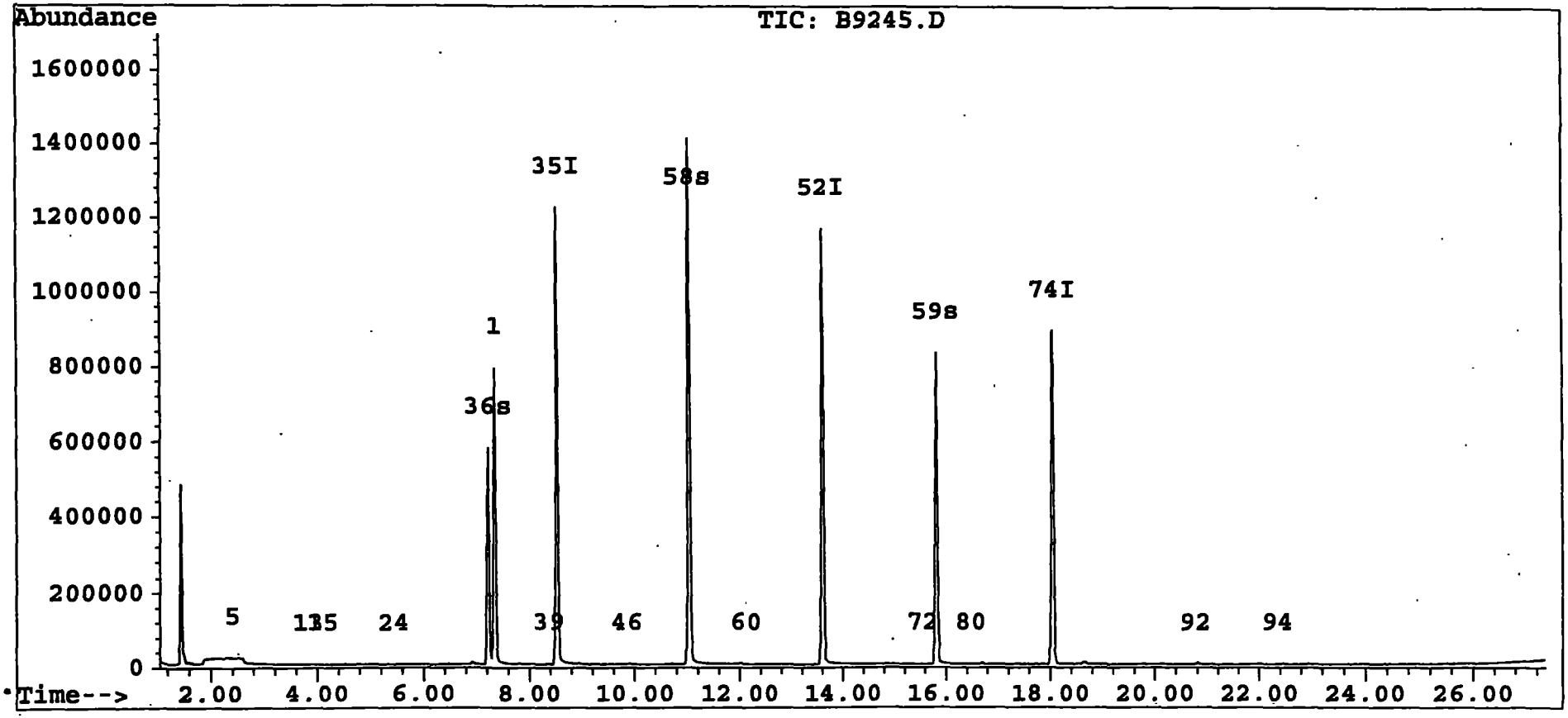
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	780843	50.00 ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1469093	50.00 ppb	-0.06
52) d5 - Chlorobenzene	13.60	117	1173098	50.00 ppb	-0.07
74) d4 - Dichlorobenzene	18.05	152	438851	50.00 ppb	-0.06
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.22	113	519394	49.87 ppb	99.74%
58) surr3,Toluene-d8	11.03	98	1418388	51.18 ppb	102.37%
59) surr2,bfb	15.81	95	555276	49.96 ppb	99.92%
Target Compounds					Qvalue
5) Bromomethane	2.41	94	3595	~~0.68 ppb #~~	~~13~~
13) Iodomethane	3.82	127	317	~~4.41 ppb~~	~~1~~
15) Acetonitrile	4.12	41	184	~~0.49 ppb #~~	~~1~~
24) 2-Chloro-1,3-butadiene	5.44	53	105	~~1.19 PPB~~	~~84~~
39) Iso-Butyl Alcohol	8.36	43	2453	~~7.19 ppb~~	~~96~~
46) 1,4-Dioxane	9.87	88	81	~~0.87 ppb~~	~~96~~
60) Tetrachloroethene	12.13	166	459	~~4.32 ppb #~~	~~83~~
72) Isopropylbenzene	15.55	105	1114	~~3.33 ppb~~	~~96~~
80) 1,3,5-Trimethylbenzene	16.48	105	222	~~3.74 ppb~~	~~96~~
92) Nitrobenzene	20.75	77	95	~~8.80 ppb #~~	~~27~~
94) Hexachlorobt	22.36	225	695	~~0.42 ppb~~	~~90~~

Qh 1/28

(#) = qualifier out of range (m) = manual integration

Data F. : J:\ACQUDATA\MSVOA3\DATA\012202\B9245. Vial: 16
Acq On : 22 Jan 102 11:15 am Operator: droot
Sample : MET BLK Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 11:43 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



247

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : LABORATORY CONTROL SAMPLE

Date Sampled : **Order #:** 525622 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

DATE ANALYZED : 01/21/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	17	UG/L
BENZENE	1.0	19	UG/L
BROMODICHLOROMETHANE	1.0	20	UG/L
BROMOFORM	1.0	18	UG/L
BROMOMETHANE	1.0	17	UG/L
2-BUTANONE (MEK)	5.0	17	UG/L
CARBON DISULFIDE	5.0	16	UG/L
CARBON TETRACHLORIDE	1.0	19	UG/L
CHLOROBENZENE	1.0	20	UG/L
CHLOROETHANE	1.0	20	UG/L
CHLOROFORM	1.0	20	UG/L
CHLOROMETHANE	1.0	22	UG/L
IBROMOCHLOROMETHANE	1.0	19	UG/L
1,1-DICHLOROETHANE	1.0	20	UG/L
1,2-DICHLOROETHANE	1.0	19	UG/L
1,1-DICHLOROETHENE	1.0	19	UG/L
CIS-1,2-DICHLOROETHENE	1.0	20	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	20	UG/L
1,2-DICHLOROPROPANE	1.0	19	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	20	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	21	UG/L
ETHYLBENZENE	1.0	21	UG/L
2-HEXANONE	5.0	17	UG/L
METHYLENE CHLORIDE	1.0	19	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	18	UG/L
STYRENE	1.0	20	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	18	UG/L
TETRACHLOROETHENE	1.0	21	UG/L
TOLUENE	1.0	20	UG/L
1,1,1-TRICHLOROETHANE	1.0	20	UG/L
1,1,2-TRICHLOROETHANE	1.0	19	UG/L
TRICHLOROETHENE	1.0	19	UG/L
VINYL CHLORIDE	1.0	21	UG/L
O-XYLENE	1.0	21	UG/L
M+P-XYLENE	1.0	41	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	100	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9206.D
Acq On : 21 Jan 102 10:32 am
Sample : LCS 525622
Misc :
Quant Time: Jan 21 11:00 19102

Vial: 17
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.39	168	746634	50.00	ppb	0.00
35) 1,4 - Difluorobenzene	8.57	114	1434406	50.00	ppb	0.00
52) d5 - Chlorobenzene	13.66	117	1111264	50.00	ppb	0.00
74) d4 - Dichlorobenzene	18.10	152	428964	50.00	ppb	0.00
System Monitoring Compounds						%Recovery
36) surr4,Dibrflmethane	7.26	113	506353	49.77	ppb	99.55%
58) surr3,Toluene-d8	11.08	98	1374448	52.74	ppb	105.47%
59) surr2,bfb	15.88	95	527183	50.11	ppb	100.22%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.66	85	147160	23.15	ppb	99
3) Chloromethane	1.87	50	188256	22.34	ppb	98
4) Vinyl Chloride	2.00	62	154657	21.37	ppb	97
5) Bromomethane	2.40	94	87651	17.37	ppb	100
6) Chloroethane	2.54	64	89834	19.83	ppb	95
7) Trichlorofluoromethane	2.89	101	183542	22.92	ppb	98
8) Diethyl Ether	3.34	59	142572	19.84	ppb	99
9) Acrolein	3.49	56	157659	97.92	ppb	99
10) FREON 113	3.68	85	48917	23.09	ppb	87
11) 1,1-Diclethene	3.65	96	106134	19.16	ppb	99
12) Acetone	3.75	43	54216	16.93	ppb	100
13) Iodomethane	3.86	127	52383	17.66	ppb	91
14) Carbon Disulfide	3.96	76	340318	15.93	ppb	99
15) Acetonitrile	4.15	41	121361	337.29	ppb	98
16) Allyl Chloride	4.22	76	71636	20.83	ppb	87
17) Methylene Chloride	4.41	84	141653	18.77	ppb	97
18) TBA	4.67	59	296542	337.86	ppb	99
19) Acrylonitrile	4.79	53	370639	94.43	ppb	99
20) Methyl-t-Butyl Ether	4.88	73	425825	19.91	ppb	96
21) trans-1,2-Dichloroethene	4.85	96	137109	19.97	ppb	98
22) 1,1-Diclethane	5.52	63	252018	20.56	ppb	97
23) Vinyl Acetate	5.65	43	406182	24.66	ppb	99
24) 2-Chloro-1,3-butadiene	5.68	53	173437	16.59	PPB	99
25) 2,2-Dichloropropane	6.47	77	177072	20.46	ppb	98
26) 2-Butanone	6.52	43	98985	17.32	ppb	97
28) cis-1,2-Dichloroethene	6.48	96	162304	19.82	ppb	97
29) Propionitrile	6.58	54	133190	89.95	ppb	100
30) Methacrylonitrile	6.84	67	73721	19.26	ppb	97
31) Bromochloromethane	6.85	128	77922	19.24	ppb	89
32) Chloroform	7.01	83	234253	19.93	ppb	100
33) Tetrahydrofuran	6.95	42	68016	17.45	ppb	95
34) 1,1,1-Trichloroethane	7.28	97	173380	20.00	ppb	99
37) Carbontetrachloride	7.57	117	144010	19.14	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9206.D Vial: 17
Acq On : 21 Jan 102 10:32 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 11:00 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.57	75	171846	19.10	ppb		98
39)	Iso-Butyl Alcohol	8.42	43	137424	412.71	ppb		97
40)	Benzene	7.89	78	502011	19.47	ppb		98
41)	1,2-Dichloroethane	7.92	62	186700	18.97	ppb		98
42)	N-Heptane	8.42	43	139887	21.04	ppb		98
43)	Trichloroethene	9.00	95	131932	19.17	ppb		100
44)	1,2-Diclpropane	9.35	63	159417	18.85	ppb		94
45)	Methyl Methacrylate	9.61	69	117308	19.23	ppb		93
46)	1,4-Dioxane	9.61	88	28931	317.98	ppb		91
47)	Dibromomethane	9.54	93	102040	18.52	ppb		95
48)	Bromodichloromethane	9.83	83	185424	19.71	ppb		99
49)	2-Nitropropane	10.21	43	105114	33.65	ppb		97
50)	2-Chloroethylvinyl Ether	10.38	63	117309	16.82	ppb		94
51)	cis-1,3-Dichloropropene	10.61	75	241307	19.59	ppb		94
53)	4-Methyl-2-Pentanone	10.90	43	201167	17.98	ppb		95
54)	Toluene	11.19	91	476550	20.46	ppb		100
55)	trans-1,3-Dichloropropene	11.60	75	218115	20.78	ppb		99
56)	Ethyl Methacrylate	11.80	69	201364	19.67	ppb		99
57)	1,1,2-Trichloroethane	11.91	83	114563	19.48	ppb		95
60)	Tetrachloroethene	12.17	166	104998	21.43	ppb		97
61)	2-Hexanone	12.38	43	129490	17.10	ppb		92
62)	1,3-Dichloropropane	12.20	76	235845	18.53	ppb		90
63)	Dibromochloromethane	12.60	129	132019	18.67	ppb		99
64)	1,2-Dibromoethane	12.79	107	144536	19.00	ppb		99
65)	Chlorobenzene	13.71	112	298782	19.82	ppb		98
66)	1,1,1,2-Tetrachloroethane	13.87	131	111029	19.64	ppb		98
67)	Ethylbenzene	13.94	91	488325	20.71	ppb		99
68)	(m+p)Xylene	14.16	106	346064	41.36	ppb		98
69)	o-Xylene	14.89	106	169542	20.64	ppb		97
70)	Styrene	14.92	104	301607	20.38	ppb		98
71)	Bromoform	15.24	173	83793	17.98	ppb		98
72)	Isopropylbenzene	15.60	105	412047	20.92	ppb		95
73)	Cyclohexanone	15.73	55	85155	110.47	ppb		93
75)	1,1,2,2-Tetrachloroethane	16.16	83	165480	18.08	ppb		99
76)	Trans-1,4-Dichloro-2-buten	16.28	53	51001	18.24	ppb		80
77)	1,2,3-Trichloropropane	16.23	110	49892	17.85	ppb		93
78)	n-Propylbenzene	16.39	91	468236	20.51	ppb		100
79)	Bromobenzene	16.14	156	111538	19.46	ppb		96
80)	1,3,5-Trimethylbenzene	16.74	105	287195	15.66	ppb	#	52
81)	2-Chlorotoluene	16.54	91	288223	19.68	ppb		98
82)	4-Chlorotoluene	16.74	91	325998	19.75	ppb		97
83)	tert-Butylbenzene	17.36	119	242932	20.47	ppb		99
84)	1,2,4-Trimethylbenzene	17.45	105	287260	21.00	ppb		99
85)	sec-Butylbenzene	17.80	105	350179	20.47	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9206.D Vial: 17
Acq On : 21 Jan 102 10:32 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 11:00 19102

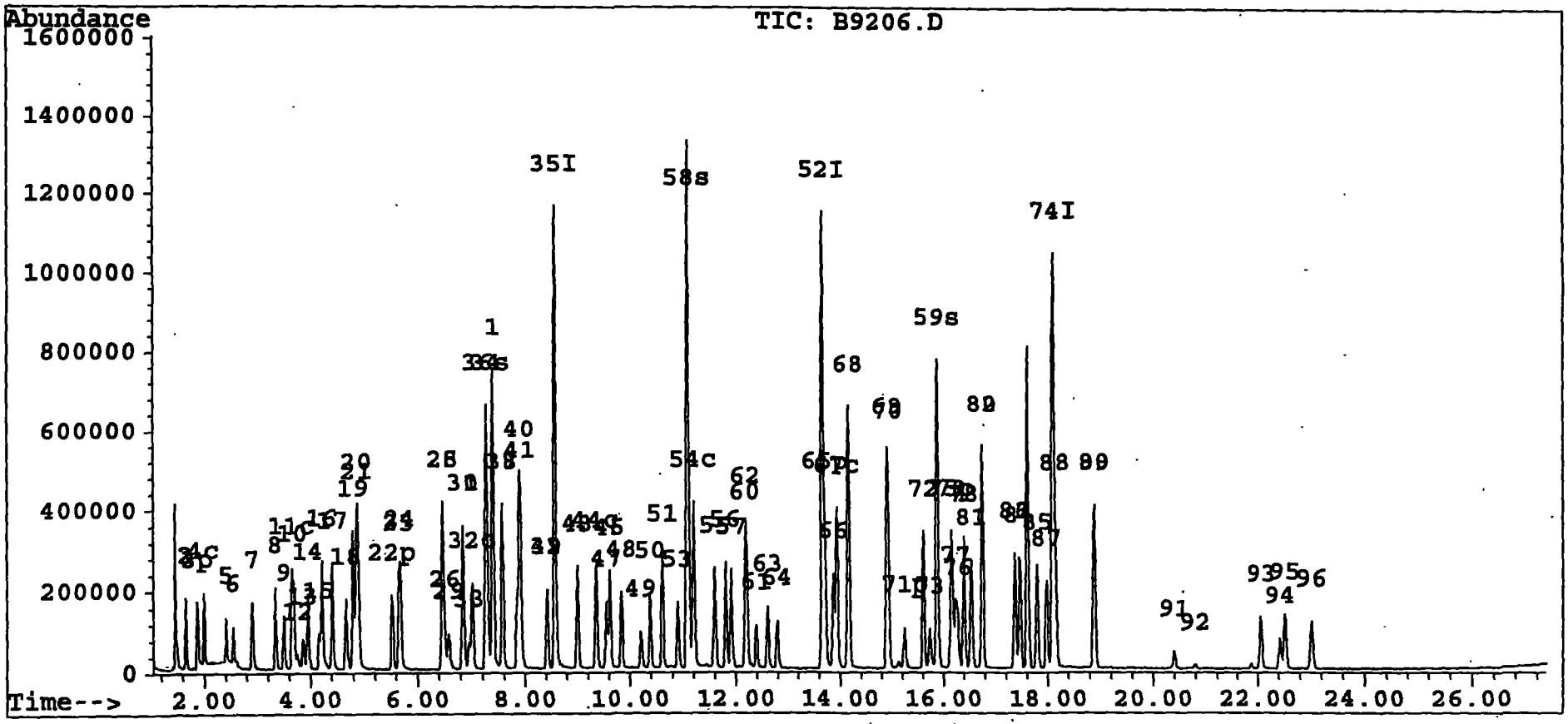
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86)	p-Isopropyltoluene	17.36	119	242932	20.47 ppb	99
87)	1,3-Dclbenz	17.97	146	169242	21.27 ppb	94
88)	1,4-Dclbenz	18.15	146	177728	20.13 ppb	98
89)	n-Butylbenzene	18.89	91	239647	20.97 ppb	98
90)	1,2-Dclbenz	18.87	146	169961	20.07 ppb	97
91)	1,2-Dibromo-3-chloropropan	20.40	157	23163	15.63 ppb	91
92)	Nitrobenzene	20.79	77	8857	17.43 ppb	83
93)	1,2,4-Tcbenzene	22.06	180	85542	20.58 ppb	96
94)	Hexachlorobt	22.42	225	30031	18.72 ppb	92
95)	Naphthalen	22.52	128	222262	19.35 ppb	97
96)	1,2,3-Tclbenzene	23.01	180	78620	20.64 ppb	95

(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B92( ) Vial: 17
Acq : 21 Jan 102 10:32 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 21 11:00 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : LABORATORY CONTROL SAMPLE

Date Sampled : **Order #:** 525626 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	18	UG/L
BENZENE	1.0	24	UG/L
BROMODICHLOROMETHANE	1.0	24	UG/L
BROMOFORM	1.0	21	UG/L
BROMOMETHANE	1.0	21	UG/L
2-BUTANONE (MEK)	5.0	19	UG/L
CARBON DISULFIDE	5.0	25	UG/L
CARBON TETRACHLORIDE	1.0	24	UG/L
CHLOROBENZENE	1.0	25	UG/L
CHLOROETHANE	1.0	24	UG/L
CHLOROFORM	1.0	25	UG/L
CHLOROMETHANE	1.0	28	UG/L
IBROMOCHLOROMETHANE	1.0	22	UG/L
1,1-DICHLOROETHANE	1.0	25	UG/L
1,2-DICHLOROETHANE	1.0	23	UG/L
1,1-DICHLOROETHENE	1.0	24	UG/L
CIS-1,2-DICHLOROETHENE	1.0	23	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	25	UG/L
1,2-DICHLOROPROPANE	1.0	22	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	24	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	24	UG/L
ETHYLBENZENE	1.0	26	UG/L
2-HEXANONE	5.0	19	UG/L
METHYLENE CHLORIDE	1.0	23	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	20	UG/L
STYRENE	1.0	23	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	24	UG/L
TETRACHLOROETHENE	1.0	26	UG/L
TOLUENE	1.0	25	UG/L
1,1,1-TRICHLOROETHANE	1.0	26	UG/L
1,1,2-TRICHLOROETHANE	1.0	23	UG/L
TRICHLOROETHENE	1.0	24	UG/L
VINYL CHLORIDE	1.0	26	UG/L
O-XYLENE	1.0	23	UG/L
M+P-XYLENE	1.0	47	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	94	%
TOLUENE-D8	(87 - 108 %)	101	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	99	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9241.D
Acq On : 22 Jan 102 8:47 am
Sample : LCS 525604
Misc :
Quant Time: Jan 22 9:15 19102

Vial: 34
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	797519	50.00	ppb	-0.05
35) 1,4 - Difluorobenzene	8.53	114	1516583	50.00	ppb	-0.05
52) d5 - Chlorobenzene	13.60	117	1206135	50.00	ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	410128	50.00	ppb	-0.05
System Monitoring Compounds						**%Recovery**
36) surr4,Dibrflmethane	7.22	113	534062	49.62	ppb	99.23%
58) surr3,Toluene-d8	11.04	98	1440456	50.36	ppb	100.71%
59) surr2,bfb	15.82	95	544639	46.80	ppb	93.60%
Target Compounds						**Qvalue**
2) Dichlorodifluoromethane	1.65	85	198383	29.21	ppb	100
3) Chloromethane	1.85	50	255618	28.40	ppb	99
4) Vinyl Chloride	1.98	62	197899	25.60	ppb	99
5) Bromomethane	2.38	94	115013	21.33	ppb	99
6) Chloroethane	2.51	64	115706	23.92	ppb	95
7) Trichlorofluoromethane	2.87	101	240809	28.15	ppb	97
8) Diethyl Ether	3.30	59	179076	23.33	ppb	100
9) Acrolein	3.46	56	191998	111.64	ppb	92
10) FREON 113	3.64	85	68420	30.23	ppb	90
11) 1,1-Diclethene	3.61	96	139048	23.51	ppb	94
12) Acetone	3.71	43	62337	18.22	ppb	99
13) Iodomethane	3.82	127	78599	23.06	ppb	96
14) Carbon Disulfide	3.92	76	566202	24.81	ppb	100
15) Acetonitrile	4.12	41	166363	432.86	ppb	97
16) Allyl Chloride	4.17	76	95982	26.13	ppb	89
17) Methylene Chloride	4.37	84	186624	23.15	ppb	96
18) TBA	4.62	59	388230	414.10	ppb	100
19) Acrylonitrile	4.76	53	469923	112.09	ppb	99
20) Methyl-t-Butyl Ether	4.84	73	530617	23.23	ppb	99
21) trans-1,2-Dichloroethene	4.81	96	181279	24.72	ppb	98
22) 1,1-Diclethane	5.47	63	324975	24.82	ppb	98
23) Vinyl Acetate	5.60	43	519903	29.55	ppb	99
24) 2-Chloro-1,3-butadiene	5.63	53	302784	26.37	PPB	99
25) 2,2-Dichloropropane	6.42	77	242401	26.22	ppb	98
26) 2-Butanone	6.47	43	117556	19.26	ppb	95
28) cis-1,2-Dichloroethene	6.43	96	205459	23.48	ppb	90
29) Propionitrile	6.53	54	166154	105.06	ppb	91
30) Methacrylonitrile	6.79	67	88559	21.66	ppb	89
31) Bromochloromethane	6.80	128	101390	23.44	ppb	92
32) Chloroform	6.96	83	310229	24.71	ppb	97
33) Tetrahydrofuran	6.90	42	85316	20.98	ppb	93
34) 1,1,1-Trichloroethane	7.24	97	238067	25.71	ppb	98
37) Carbontetrachloride	7.52	117	191912	24.13	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9241.D Vial: 34
Acq On : 22 Jan 102 8:47 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 9:15 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.52	75	230333	24.22	ppb		99
39)	Iso-Butyl Alcohol	8.38	43	208344	591.79	ppb		98
40)	Benzene	7.85	78	657399	24.12	ppb		97
41)	1,2-Dichloroethane	7.88	62	239177	22.99	ppb		98
42)	N-Heptane	8.38	43	207609	29.53	ppb	NT	96
43)	Trichloroethene	8.94	95	175731	24.15	ppb		90
44)	1,2-Diclpropane	9.30	63	200475	22.42	ppb		98
45)	Methyl Methacrylate	9.56	69	147889	22.93	ppb		91
46)	1,4-Dioxane	9.57	88	37669	391.58	ppb		96
47)	Dibromomethane	9.49	93	132206	22.69	ppb		96
48)	Bromodichloromethane	9.79	83	243188	24.45	ppb		99
49)	2-Nitropropane	10.16	43	139589	42.26	ppb		96
50)	2-Chloroethylvinyl Ether	10.34	63	144252	19.56	ppb		97
51)	cis-1,3-Dichloropropene	10.56	75	314083	24.11	ppb		97
53)	4-Methyl-2-Pentanone	10.85	43	239863	19.75	ppb		98
54)	Toluene	11.14	91	631735	24.99	ppb		99
55)	trans-1,3-Dichloropropene	11.55	75	275011	24.13	ppb		97
56)	Ethyl Methacrylate	11.75	69	258947	23.31	ppb		99
57)	1,1,2-Trichloroethane	11.85	83	144613	22.65	ppb		98
60)	Tetrachloroethene	12.12	166	143131	25.82	ppb		99
61)	2-Hexanone	12.33	43	155131	18.87	ppb		99
62)	1,3-Dichloropropane	12.15	76	305363	22.11	ppb		87
63)	Dibromochloromethane	12.55	129	170599	22.23	ppb		99
64)	1,2-Dibromoethane	12.74	107	183364	22.20	ppb		98
65)	Chlorobenzene	13.66	112	402464	24.60	ppb		98
66)	1,1,1,2-Tetrachloroethane	13.82	131	145864	23.77	ppb		97
67)	Ethylbenzene	13.89	91	660043	25.80	ppb		99
68)	(m+p)Xylene	14.12	106	428245	47.16	ppb		100
69)	o-Xylene	14.84	106	206511	23.17	ppb		95
70)	Styrene	14.87	104	363110	22.61	ppb		97
71)	Bromoform	15.18	173	106809	21.12	ppb		93
72)	Isopropylbenzene	15.55	105	527924	24.10	ppb		100
73)	Cyclohexanone	15.67	55	138997	166.14	ppb	NT	97
75)	1,1,2,2-Tetrachloroethane	16.11	83	210329	24.04	ppb		100
76)	Trans-1,4-Dichloro-2-buten	16.22	53	64399	24.09	ppb		89
77)	1,2,3-Trichloropropane	16.18	110	63969	23.94	ppb		98
78)	n-Propylbenzene	16.34	91	566703	25.96	ppb		100
79)	Bromobenzene	16.10	156	143116	26.11	ppb	NT	96
80)	1,3,5-Trimethylbenzene	16.70	105	354639	19.13	ppb	#	57
81)	2-Chlorotoluene	16.48	91	352488	25.17	ppb		97
82)	4-Chlorotoluene	16.70	91	394686	25.01	ppb		94
83)	tert-Butylbenzene	17.32	119	285748	25.18	ppb		94
84)	1,2,4-Trimethylbenzene	17.40	105	338749	25.90	ppb		97
85)	sec-Butylbenzene	17.74	105	420764	25.73	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9241.D Vial: 34
Acq On : 22 Jan 102 8:47 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 9:15 19102

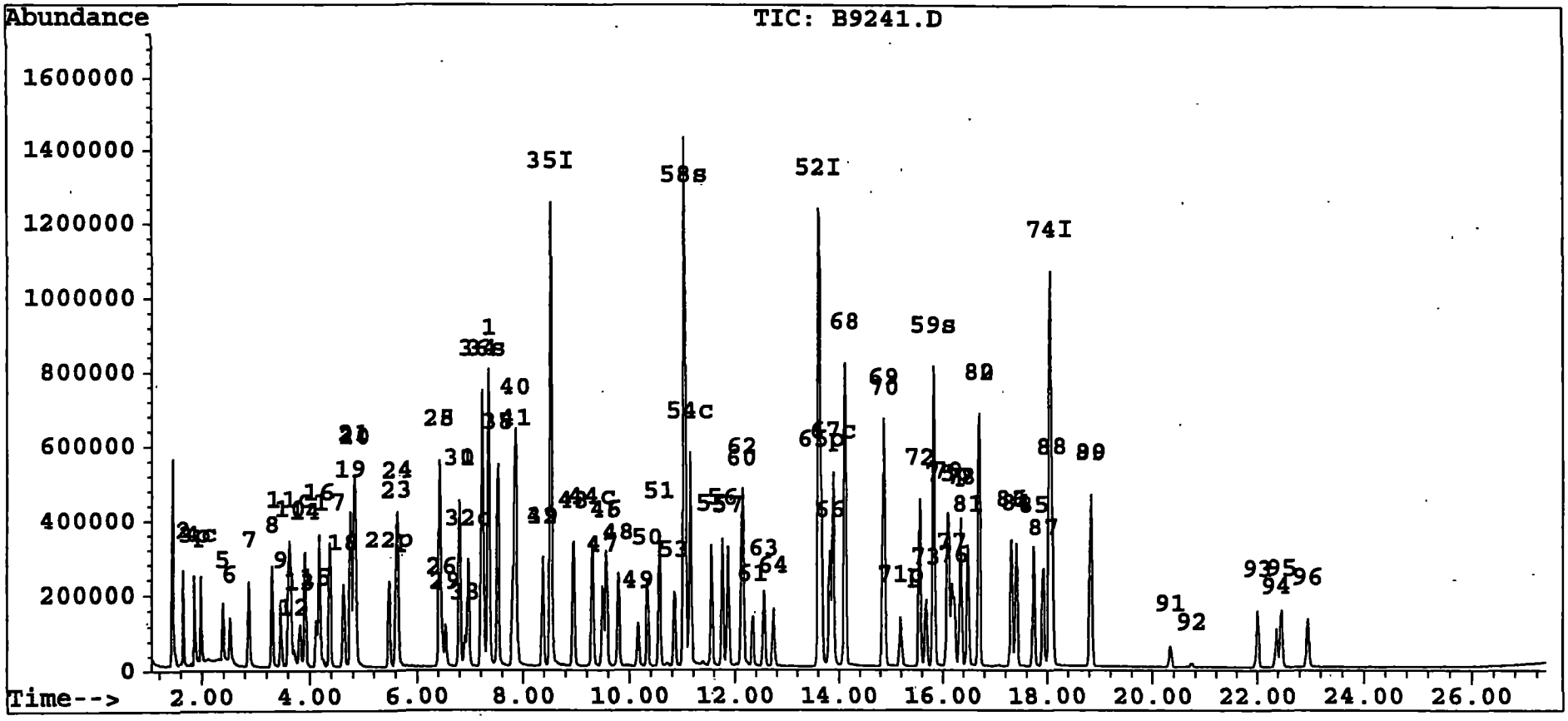
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.32	119	285748	25.18 ppb	95
87) 1,3-Dclbenz	17.93	146	205906	27.07 ppb NT	99
88) 1,4-Dclbenz	18.09	146	203730	24.14 ppb	97
89) n-Butylbenzene	18.83	91	279732	25.60 ppb	99
90) 1,2-Dclbenz	18.81	146	198468	24.51 ppb	99
91) 1,2-Dibromo-3-chloropropan	20.34	157	27887	19.68 ppb	90
92) Nitrobenzene	20.73	77	9884	18.88 ppb	97
93) 1,2,4-Tcbenzene	22.00	180	93937	23.64 ppb	89
94) Hexachlorobt	22.38	225	40888	26.66 ppb NT	99
95) Naphthalen	22.46	128	238036	21.68 ppb	96
96) 1,2,3-Tclbenzene	22.96	180	84076	23.08 ppb	94

(#) = qualifier out of range (m) = manual integration

Data F : J:\ACQUDATA\MSVOA3\DATA\012102\B9241 Vial: 34
Acq On : 22 Jan 102 8:47 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 9:15 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : LABORATORY CONTROL SAMPLE

Date Sampled : **Order #:** 525813 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

DATE ANALYZED : 01/22/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	23	UG/L
BENZENE	1.0	21	UG/L
BROMODICHLOROMETHANE	1.0	20	UG/L
BROMOFORM	1.0	18	UG/L
BROMOMETHANE	1.0	21	UG/L
2-BUTANONE (MEK)	5.0	23	UG/L
CARBON DISULFIDE	5.0	26	UG/L
CARBON TETRACHLORIDE	1.0	20	UG/L
CHLOROBENZENE	1.0	20	UG/L
CHLOROETHANE	1.0	21	UG/L
CHLOROFORM	1.0	20	UG/L
CHLOROMETHANE	1.0	23	UG/L
BROMOCHLOROMETHANE	1.0	18	UG/L
1,1-DICHLOROETHANE	1.0	21	UG/L
1,2-DICHLOROETHANE	1.0	20	UG/L
1,1-DICHLOROETHENE	1.0	20	UG/L
CIS-1,2-DICHLOROETHENE	1.0	20	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	21	UG/L
1,2-DICHLOROPROPANE	1.0	20	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	19	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	20	UG/L
ETHYLBENZENE	1.0	21	UG/L
2-HEXANONE	5.0	22	UG/L
METHYLENE CHLORIDE	1.0	19	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	22	UG/L
STYRENE	1.0	21	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	18	UG/L
TETRACHLOROETHENE	1.0	22	UG/L
TOLUENE	1.0	21	UG/L
1,1,1-TRICHLOROETHANE	1.0	21	UG/L
1,1,2-TRICHLOROETHANE	1.0	20	UG/L
TRICHLOROETHENE	1.0	21	UG/L
VINYL CHLORIDE	1.0	22	UG/L
O-XYLENE	1.0	21	UG/L
M+P-XYLENE	1.0	43	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	101	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9246.D Vial: 17
Acq On : 22 Jan 102 11:51 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : 525813 Multiplr: 1.00
Quant Time: Jan 22 12:19 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.34	168	776136	50.00	ppb	-0.06
35) 1,4 - Difluorobenzene	8.52	114	1468141	50.00	ppb	-0.06
52) d5 - Chlorobenzene	13.61	117	1164616	50.00	ppb	-0.06
74) d4 - Dichlorobenzene	18.05	152	445279	50.00	ppb	-0.06
System Monitoring Compounds						**%Recovery**
36) surr4,Dibrflmethane	7.22	113	523270	50.40	ppb	100.79%
58) surr3,Toluene-d8	11.03	98	1427850	52.13	ppb	104.26%
59) surr2,bfb	15.81	95	557623	50.75	ppb	101.50%
Target Compounds						**Qvalue**
2) Dichlorodifluoromethane	1.64	85	159090	24.07	ppb	100
3) Chloromethane	1.86	50	205036	23.41	ppb	98
4) Vinyl Chloride	1.97	62	165526	22.01	ppb	98
5) Bromomethane	2.38	94	109516	20.87	ppb	98
6) Chloroethane	2.52	64	96977	20.60	ppb	94
7) Trichlorofluoromethane	2.87	101	197041	23.67	ppb	97
8) Diethyl Ether	3.30	59	146858	19.66	ppb	100
9) Acrolein	3.46	56	201012	120.11	ppb	98
10) FREON 113	3.65	85	55051	24.99	ppb	98
11) 1,1-Diclethene	3.62	96	113050	19.64	ppb	94
12) Acetone	3.71	43	76607	23.01	ppb	96
13) Iodomethane	3.82	127	77928	23.41	ppb	100
14) Carbon Disulfide	3.91	76	579555	26.10	ppb	130.5% 100
15) Acetonitrile	4.12	41	120310	321.66	ppb	98
16) Allyl Chloride	4.18	76	77079	21.56	ppb	98
17) Methylene Chloride	4.37	84	149634	19.07	ppb	94
18) TBA	4.62	59	314060	344.22	ppb	100
19) Acrylonitrile	4.75	53	380137	93.17	ppb	98
20) Methyl-t-Butyl Ether	4.84	73	425071	19.12	ppb	98
21) trans-1,2-Dichloroethene	4.81	96	147713	20.70	ppb	95
22) 1,1-Diclethane	5.48	63	273588	21.47	ppb	98
23) Vinyl Acetate	5.61	43	545430	31.86	ppb	100
24) 2-Chloro-1,3-butadiene	5.64	53	309544	27.64	PPB	99
25) 2,2-Dichloropropane	6.41	77	189522	21.06	ppb	99
26) 2-Butanone	6.46	43	134973	22.72	ppb	95
28) cis-1,2-Dichloroethene	6.42	96	167899	19.72	ppb	93
29) Propionitrile	6.53	54	134895	87.64	ppb	98
30) Methacrylonitrile	6.79	67	75409	18.95	ppb	91
31) Bromochloromethane	6.81	128	76954	18.28	ppb	92
32) Chloroform	6.96	83	247704	20.27	ppb	93
33) Tetrahydrofuran	6.90	42	73191	18.16	ppb	93
34) 1,1,1-Trichloroethane	7.24	97	190426	21.13	ppb	97
37) Carbontetrachloride	7.52	117	156763	20.36	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9246.D Vial: 17
Acq On : 22 Jan 102 11:51 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 12:19 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	1,1-Dichloropropene	7.53	75	182481	19.82	ppb		98
39)	Iso-Butyl Alcohol	8.37	43	160344	470.47	ppb		97
40)	Benzene	7.85	78	543622	20.60	ppb		97
41)	1,2-Dichloroethane	7.87	62	196938	19.55	ppb		97
42)	N-Heptane	8.37	43	160482	23.58	ppb		99
43)	Trichloroethene	8.94	95	147435	20.93	ppb		91
44)	1,2-Diclpropane	9.30	63	169738	19.61	ppb		99
45)	Methyl Methacrylate	9.56	69	119124	19.08	ppb		98
46)	1,4-Dioxane	9.56	88	30061	322.80	ppb		97
47)	Dibromomethane	9.49	93	106495	18.88	ppb		98
48)	Bromodichloromethane	9.78	83	191296	19.87	ppb	#	96
49)	2-Nitropropane	10.16	43	106236	33.23	ppb	#	91
50)	2-Chloroethylvinyl Ether	10.33	63	157971	22.13	ppb		96
51)	cis-1,3-Dichloropropene	10.56	75	245143	19.44	ppb		94
53)	4-Methyl-2-Pentanone	10.84	43	262639	22.39	ppb		94
54)	Toluene	11.14	91	511283	20.95	ppb		100
55)	trans-1,3-Dichloropropene	11.54	75	219214	19.92	ppb		98
56)	Ethyl Methacrylate	11.75	69	209875	19.56	ppb		97
57)	1,1,2-Trichloroethane	11.86	83	120487	19.55	ppb		95
60)	Tetrachloroethene	12.12	166	115518	22.28	ppb		96
61)	2-Hexanone	12.33	43	174824	22.03	ppb		94
62)	1,3-Dichloropropane	12.14	76	248372	18.62	ppb		93
63)	Dibromochloromethane	12.55	129	135891	18.34	ppb		100
64)	1,2-Dibromoethane	12.73	107	149852	18.79	ppb		99
65)	Chlorobenzene	13.66	112	316141	20.01	ppb		99
66)	1,1,1,2-Tetrachloroethane	13.82	131	117458	19.82	ppb		96
67)	Ethylbenzene	13.88	91	527931	21.37	ppb		98
68)	(m+p)Xylene	14.11	106	377286	43.02	ppb		97
69)	o-Xylene	14.84	106	182021	21.15	ppb		97
70)	Styrene	14.86	104	325527	20.99	ppb		96
71)	Bromoform	15.17	173	89189	18.26	ppb		98
72)	Isopropylbenzene	15.55	105	457093	21.95	ppb		100
73)	Cyclohexanone	15.67	55	335213	414.96	ppb		97
75)	1,1,2,2-Tetrachloroethane	16.11	83	173144	18.23	ppb		97
76)	Trans-1,4-Dichloro-2-buten	16.22	53	49509	17.06	ppb		95
77)	1,2,3-Trichloropropane	16.17	110	51180	17.64	ppb		94
78)	n-Propylbenzene	16.34	91	503114	21.23	ppb		99
79)	Bromobenzene	16.09	156	118420	19.90	ppb		93
80)	1,3,5-Trimethylbenzene	16.69	105	307774	16.04	ppb	#	57
81)	2-Chlorotoluene	16.47	91	312048	20.52	ppb		97
82)	4-Chlorotoluene	16.69	91	350007	20.43	ppb		97
83)	tert-Butylbenzene	17.31	119	260443	21.14	ppb		98
84)	1,2,4-Trimethylbenzene	17.40	105	305374	21.51	ppb		95
85)	sec-Butylbenzene	17.73	105	376011	21.18	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012202\B9246.D
Acq On : 22 Jan 102 11:51 am
Sample : LCS
Misc :
Quant Time: Jan 22 12:19 19102

Vial: 17
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

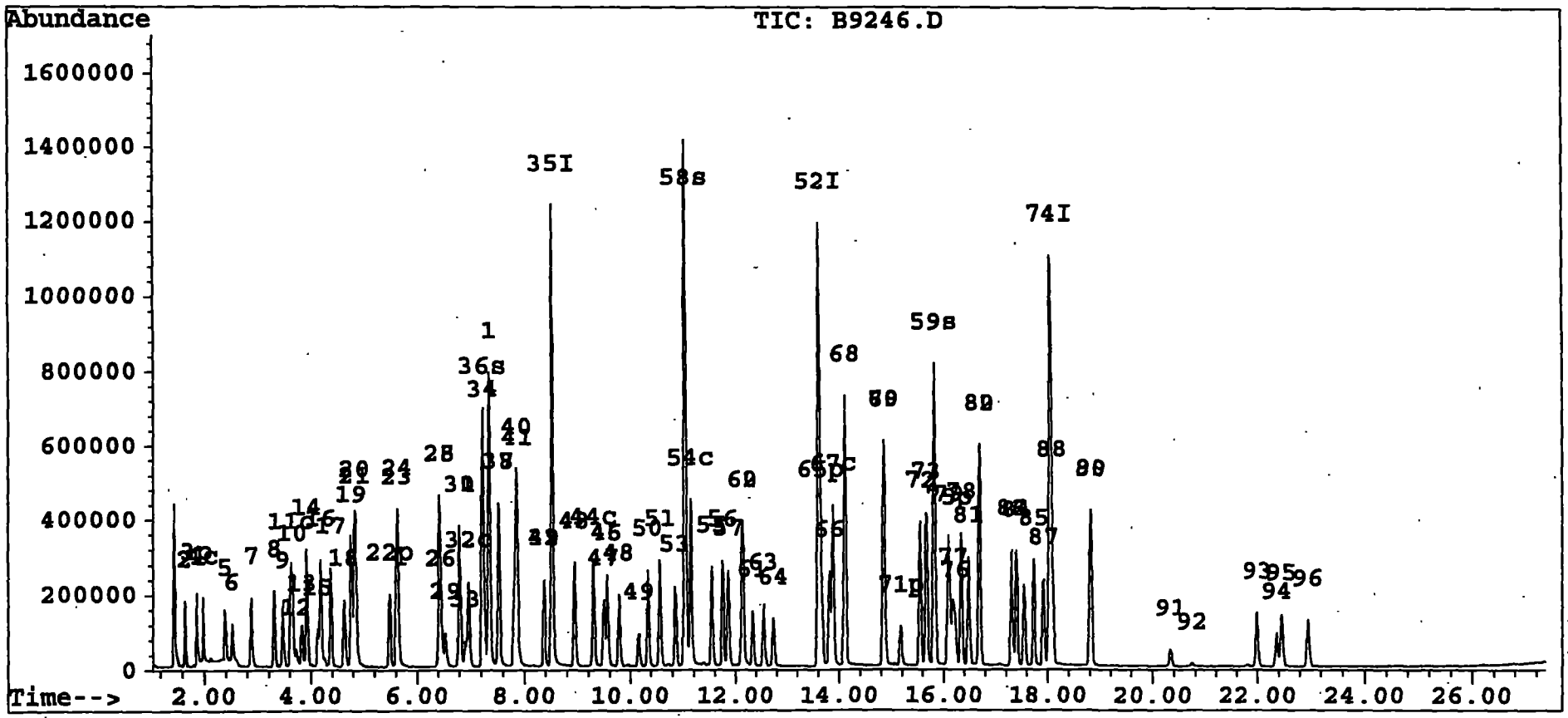
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) p-Isopropyltoluene	17.31	119	260443	21.14 ppb	98
87) 1,3-Dclbenz	17.92	146	179177	21.70 ppb	97
88) 1,4-Dclbenz	18.09	146	190104	20.74 ppb	95
89) n-Butylbenzene	18.83	91	265524	22.38 ppb	97
90) 1,2-Dclbenz	18.81	146	176581	20.09 ppb	96
91) 1,2-Dibromo-3-chloropropan	20.33	157	23332	15.17 ppb	89
92) Nitrobenzene	20.73	77	8217	16.50 ppb	87
93) 1,2,4-Tcbenzene	22.00	180	90275	20.92 ppb	95
94) Hexachlorobt	22.37	225	32875	19.74 ppb	93
95) Naphthalen	22.46	128	226690	19.01 ppb	96
96) 1,2,3-Tclbenzene	22.95	180	83620	21.15 ppb	97

(#) = qualifier out of range (m) = manual integration

Data Fi : J:\ACQUDATA\MSVOA3\DATA\012202\B9246. Vial: 17
Acq On : 22 Jan 102 11:51 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 22 12:19 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



262

COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : MATRIX SPIKE

Date Sampled : **Order #:** 525623 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 01/21/02			
ANALYTICAL DILUTION: 1.00			
ACETONE	10	46	UG/L
BENZENE	1.0	44	UG/L
BROMODICHLOROMETHANE	1.0	45	UG/L
BROMOFORM	1.0	43	UG/L
BROMOMETHANE	1.0	38	UG/L
2-BUTANONE (MEK)	5.0	44	UG/L
CARBON DISULFIDE	5.0	46	UG/L
CARBON TETRACHLORIDE	1.0	46	UG/L
CHLOROBENZENE	1.0	44	UG/L
CHLOROETHANE	1.0	46	UG/L
CHLOROFORM	1.0	44	UG/L
LOROMETHANE	1.0	51	UG/L
BROMOCHLOROMETHANE	1.0	43	UG/L
1,1-DICHLOROETHANE	1.0	47	UG/L
1,2-DICHLOROETHANE	1.0	44	UG/L
1,1-DICHLOROETHENE	1.0	44	UG/L
CIS-1,2-DICHLOROETHENE	1.0	44	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	45	UG/L
1,2-DICHLOROPROPANE	1.0	43	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	44	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	45	UG/L
ETHYLBENZENE	1.0	47	UG/L
2-HEXANONE	5.0	44	UG/L
METHYLENE CHLORIDE	1.0	43	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	44	UG/L
STYRENE	1.0	46	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	43	UG/L
TETRACHLOROETHENE	1.0	42	UG/L
TOLUENE	1.0	46	UG/L
1,1,1-TRICHLOROETHANE	1.0	46	UG/L
1,1,2-TRICHLOROETHANE	1.0	43	UG/L
TRICHLOROETHENE	1.0	45	UG/L
VINYL CHLORIDE	1.0	50	UG/L
O-XYLENE	1.0	47	UG/L
M+P-XYLENE	1.0	94	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	102	%
TOLUENE-D8	(87 - 108 %)	104	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	102	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220.D Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS 525623 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 9:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.38	168	749589	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.56	114	1400959	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.65	117	1107233	50.00 ppb	-0.02
74) d4 - Dichlorobenzene	18.08	152	437870	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.25	113	502491	50.81 ppb	101.62%
58) surr3,Toluene-d8	11.07	98	1353909	51.95 ppb	103.90%
59) surr2,bfb	15.85	95	531009	50.86 ppb	101.73%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.66	85	348711	54.63 ppb	99
3) Chloromethane	1.87	50	431919	51.06 ppb	99
4) Vinyl Chloride	1.99	62	359766	49.52 ppb	100
5) Bromomethane	2.39	94	194710	38.43 ppb	93
6) Chloroethane	2.53	64	209972	46.17 ppb m	1
7) Trichlorofluoromethane	2.89	101	410865	51.09 ppb	99
8) Diethyl Ether	3.32	59	324386	44.96 ppb	94
9) Acrolein	3.49	56	366793	226.92 ppb	100
10) FREON 113	3.67	85	113061	53.15 ppb	92
11) 1,1-Diclethene	3.64	96	245610	44.18 ppb	99
12) Acetone	3.73	43	148766	46.26 ppb	99
13) Iodomethane	3.84	127	152746	43.05 ppb	98
14) Carbon Disulfide	3.94	76	976456	45.53 ppb	100
15) Acetonitrile	4.15	41	344217	952.89 ppb	99
16) Allyl Chloride	4.21	76	165308	47.88 ppb	90
17) Methylene Chloride	4.40	84	327250	43.19 ppb	97
18) TBA	4.65	59	825077	936.33 ppb	99
19) Acrylonitrile	4.78	53	891223	226.17 ppb	100
20) Methyl-t-Butyl Ether	4.88	73	952293	44.35 ppb	98
21) trans-1,2-Dichloroethene	4.85	96	312118	45.29 ppb	99
22) 1,1-Diclethane	5.51	63	578732	47.03 ppb	99
23) Vinyl Acetate	5.64	43	917965	55.51 ppb	100
24) 2-Chloro-1,3-butadiene	5.67	53	524576	47.61 PPB	100
25) 2,2-Dichloropropane	6.45	77	363080	41.78 ppb	93
26) 2-Butanone	6.50	43	252375	43.99 ppb	97
28) cis-1,2-Dichloroethene	6.46	96	360708	43.87 ppb	91
29) Propionitrile	6.57	54	337296	226.90 ppb	96
30) Methacrylonitrile	6.82	67	173230	45.07 ppb	94
31) Bromochloromethane	6.83	128	170452	41.93 ppb	87
32) Chloroform	7.00	83	524585	44.46 ppb	99
33) Tetrahydrofuran	6.93	42	153147	42.61 ppb	95
34) 1,1,1-Trichloroethane	7.28	97	398268	45.75 ppb	98
37) Carbontetrachloride	7.55	117	339448	46.20 ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220.D Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 9:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	1,1-Dichloropropene	7.55	75	384202	43.73 ppb		97
39)	Iso-Butyl Alcohol	8.41	43	252573	776.63 ppb		99
40)	Benzene	7.89	78	1121195	44.53 ppb	95	100
41)	1,2-Dichloroethane	7.91	62	423192	44.04 ppb		98
42)	N-Heptane	8.41	43	253353	39.01 ppb		97
43)	Trichloroethene	8.98	95	300616	44.73 ppb	95	98
44)	1,2-Diclpropane	9.33	63	354546	42.92 ppb		98
45)	Methyl Methacrylate	9.59	69	278160	46.69 ppb		94
46)	1,4-Dioxane	9.59	88	77927	876.93 ppb		88
47)	Dibromomethane	9.53	93	236287	43.91 ppb		95
48)	Bromodichloromethane	9.82	83	417216	45.42 ppb		98
49)	2-Nitropropane	10.19	43	266225	87.26 ppb		98
51)	cis-1,3-Dichloropropene	10.59	75	524708	43.61 ppb		98
53)	4-Methyl-2-Pentanone	10.88	43	489725	43.92 ppb		98
54)	Toluene	11.17	91	1070528	46.13 ppb	97	99
55)	trans-1,3-Dichloropropene	11.58	75	466672	44.61 ppb		98
56)	Ethyl Methacrylate	11.79	69	474431	46.52 ppb		100
57)	1,1,2-Trichloroethane	11.89	83	253897	43.33 ppb		98
60)	Tetrachloroethene	12.16	166	232914	42.49 ppb		99
61)	2-Hexanone	12.37	43	331558	43.94 ppb		97
62)	1,3-Dichloropropane	12.18	76	528059	41.65 ppb		93
63)	Dibromochloromethane	12.58	129	301095	42.75 ppb		99
64)	1,2-Dibromoethane	12.77	107	330872	43.65 ppb		98
65)	Chlorobenzene	13.69	112	664428	44.24 ppb	87	99
66)	1,1,1,2-Tetrachloroethane	13.85	131	250092	44.40 ppb		96
67)	Ethylbenzene	13.92	91	1098055	46.75 ppb		100
68)	(m+p)Xylene	14.15	106	786122	94.29 ppb		97
69)	o-Xylene	14.88	106	384051	46.93 ppb		93
70)	Styrene	14.91	104	673485	45.68 ppb		98
71)	Bromoform	15.21	173	201639	43.42 ppb		99
72)	Isopropylbenzene	15.58	105	945536	43.91 ppb		99
73)	Cyclohexanone	15.70	55	274198	357.02 ppb		93
75)	1,1,2,2-Tetrachloroethane	16.15	83	398894	42.70 ppb		98
76)	Trans-1,4-Dichloro-2-buten	16.25	53	114956	40.28 ppb		96
77)	1,2,3-Trichloropropane	16.21	110	114831	40.26 ppb		97
78)	n-Propylbenzene	16.37	91	1073551	46.07 ppb		99
79)	Bromobenzene	16.13	156	247008	42.21 ppb		99
80)	1,3,5-Trimethylbenzene	16.73	105	662990	30.70 ppb	#	55
81)	2-Chlorotoluene	16.51	91	667011	44.61 ppb		98
82)	4-Chlorotoluene	16.73	91	748698	44.44 ppb		99
83)	tert-Butylbenzene	17.35	119	553721	45.70 ppb		98
84)	1,2,4-Trimethylbenzene	17.44	105	661379	47.37 ppb		99
85)	sec-Butylbenzene	17.77	105	801483	45.91 ppb		99
86)	p-Isopropyltoluene	17.35	119	553721	45.70 ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220.D Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 9:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

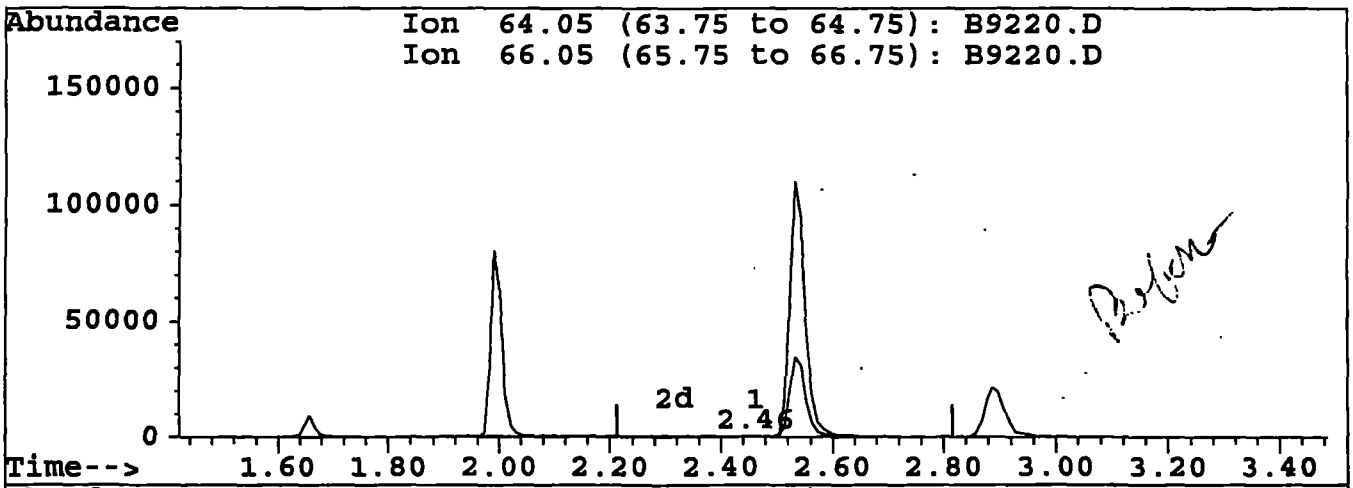
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
87) 1,3-Dclbenz	17.96	146	384358	47.33 ppb	97
88) 1,4-Dclbenz	18.13	146	394601	43.79 ppb	96
89) n-Butylbenzene	18.86	91	532589	45.65 ppb	97
90) 1,2-Dclbenz	18.85	146	384119	44.44 ppb	97
91) 1,2-Dibromo-3-chloropropan	20.38	157	61145	40.42 ppb	94
92) Nitrobenzene	20.77	77	27226	34.97 ppb	96
93) 1,2,4-Tcbenzene	22.03	180	199901	47.11 ppb	99
94) Hexachlorobt	22.41	225	61435	37.52 ppb	98
95) Naphthalen	22.50	128	548133	46.75 ppb	99
96) 1,2,3-Tclbenzene	23.00	180	192121	49.41 ppb	99

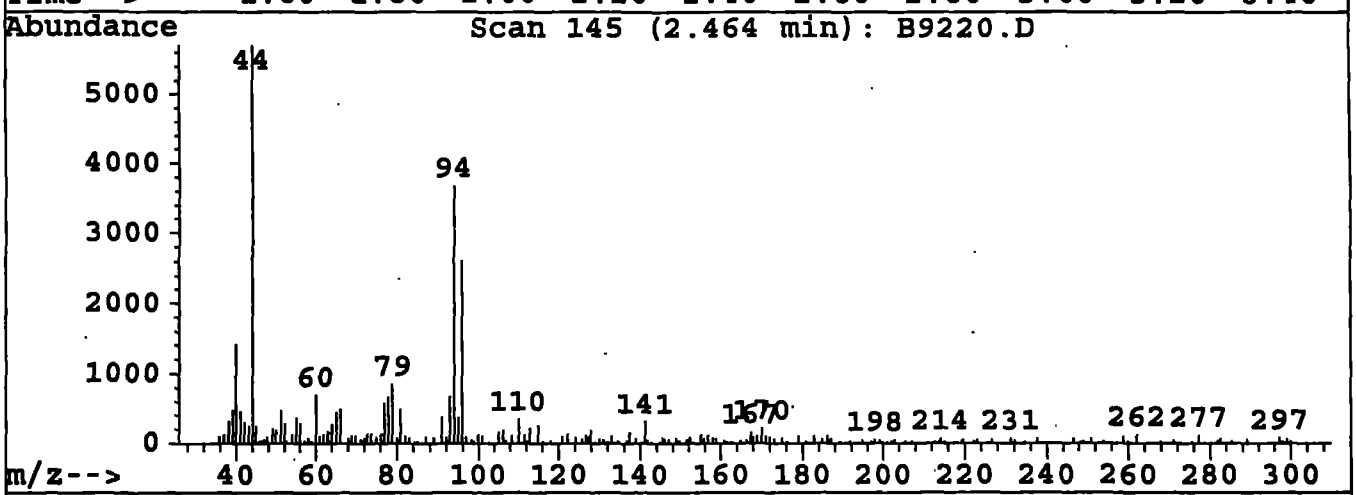
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220.D Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 19:45 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration





TIC: B9220.D

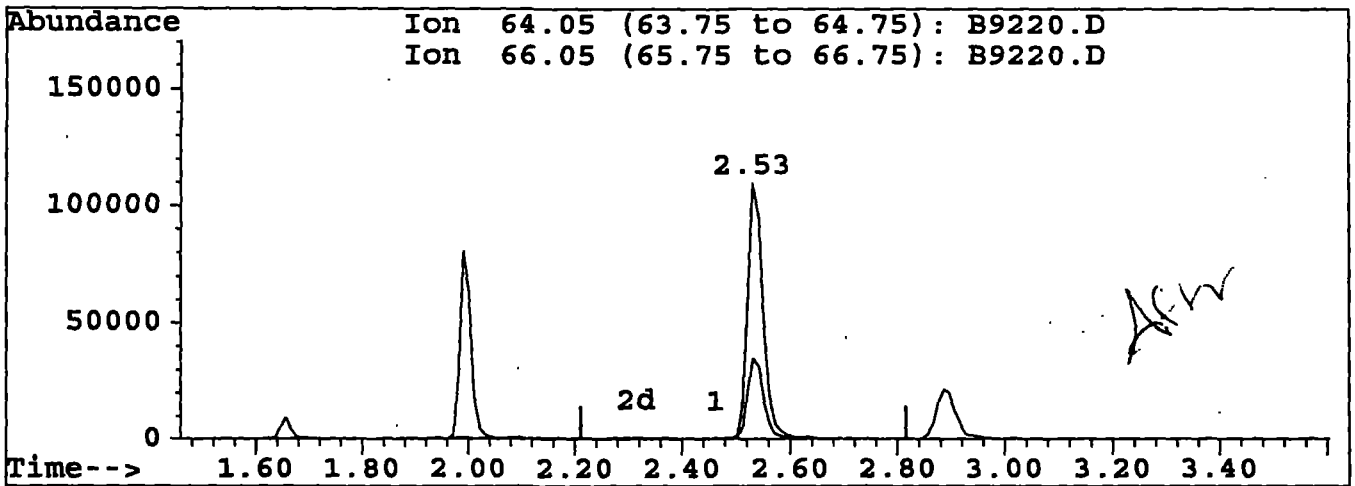
(6) Chloroethane
2.46min 0.12ppb
response 565

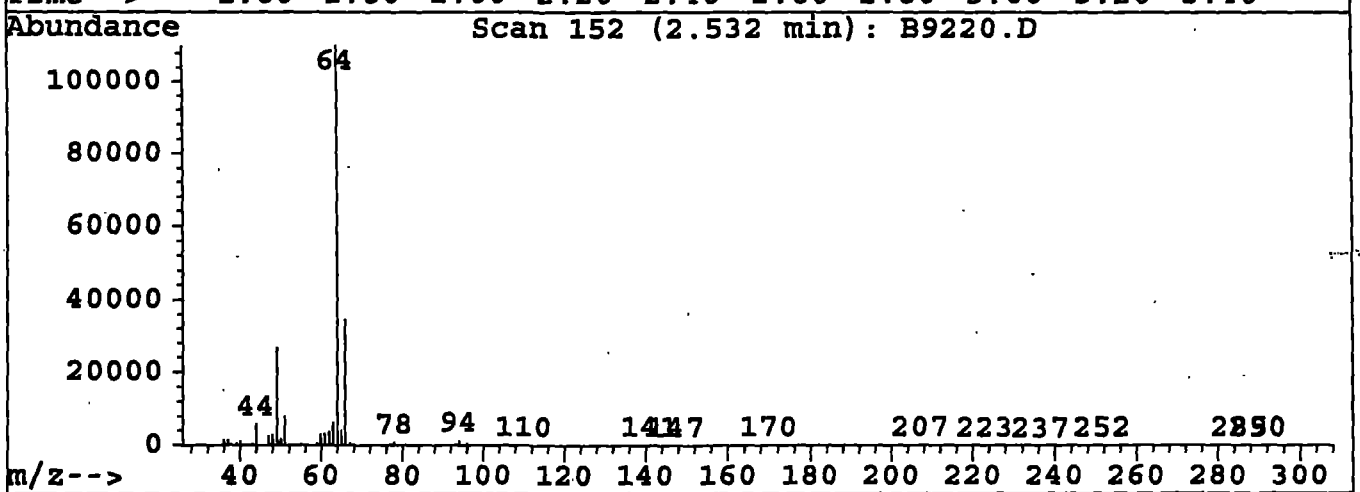
Ion	Exp%	Act%
64.05	100	100
66.05	31.90	181.99#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220.D Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 9:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration





TIC: B9220.D

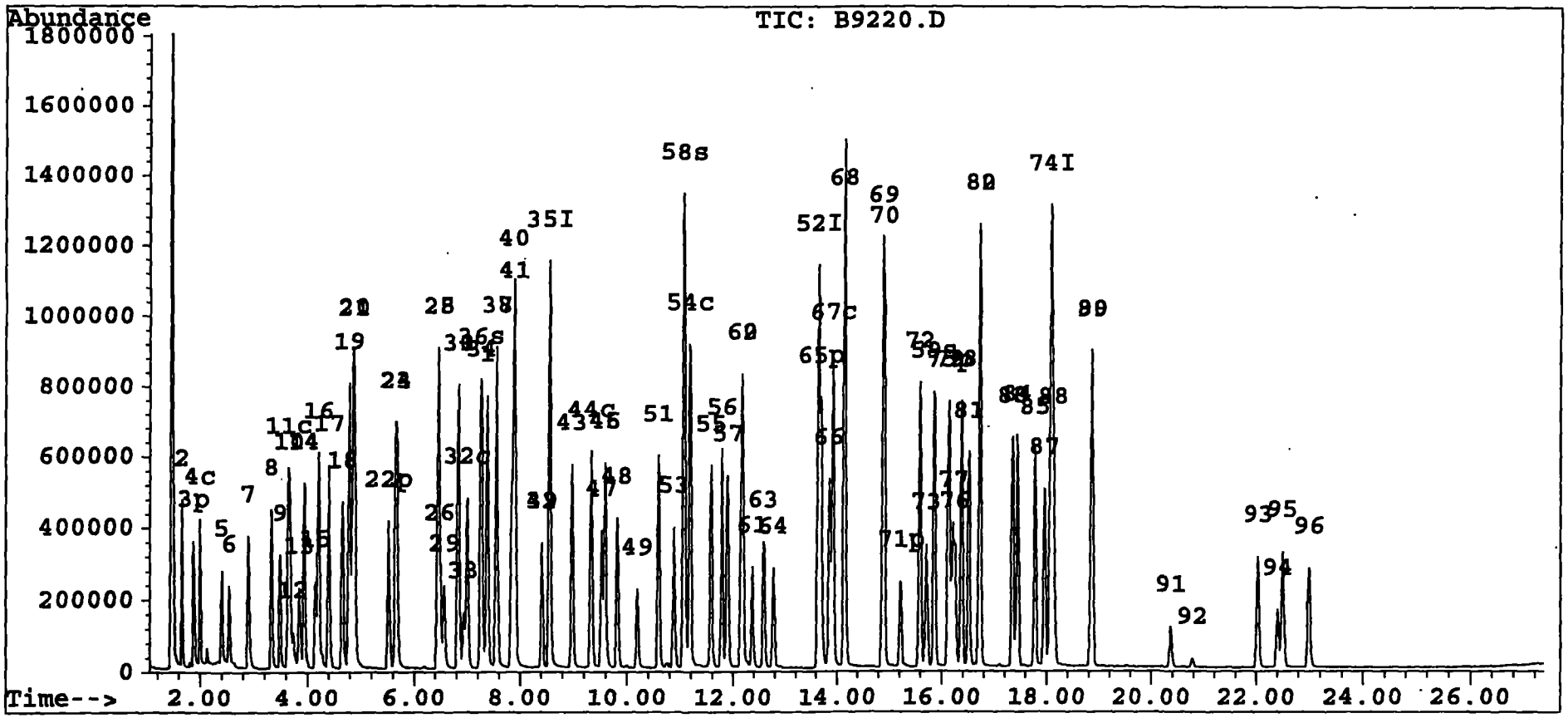
(6) Chloroethane
2.53min 46.17ppb m
response 209972

Ion	Exp%	Act%
64.05	100	100
66.05	31.90	31.60
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9220. Vial: 14
Acq On : 21 Jan 102 7:17 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 22 9:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 01/30/02

Project Reference:
Client Sample ID : MATRIX SPIKE DUPLICATE

Date Sampled : **Order #:** 525624 **Sample Matrix:** WATER
Date Received: **Submission #:** **Analytical Run** 73718

DATE ANALYZED : 01/21/02
ANALYTICAL DILUTION: 1.00

ANALYTE	PQL	RESULT	UNITS
ACETONE	10	43	UG/L
BENZENE	1.0	44	UG/L
BROMODICHLOROMETHANE	1.0	44	UG/L
BROMOFORM	1.0	43	UG/L
BROMOMETHANE	1.0	44	UG/L
2-BUTANONE (MEK)	5.0	44	UG/L
CARBON DISULFIDE	5.0	45	UG/L
CARBON TETRACHLORIDE	1.0	44	UG/L
CHLOROBENZENE	1.0	44	UG/L
CHLOROETHANE	1.0	46	UG/L
CHLOROFORM	1.0	44	UG/L
LOROMETHANE	1.0	52	UG/L
DIBROMOCHLOROMETHANE	1.0	43	UG/L
1,1-DICHLOROETHANE	1.0	46	UG/L
1,2-DICHLOROETHANE	1.0	42	UG/L
1,1-DICHLOROETHENE	1.0	44	UG/L
CIS-1,2-DICHLOROETHENE	1.0	44	UG/L
TRANS-1,2-DICHLOROETHENE	1.0	45	UG/L
1,2-DICHLOROPROPANE	1.0	42	UG/L
CIS-1,3-DICHLOROPROPENE	1.0	42	UG/L
TRANS-1,3-DICHLOROPROPENE	1.0	44	UG/L
ETHYLBENZENE	1.0	47	UG/L
2-HEXANONE	5.0	43	UG/L
METHYLENE CHLORIDE	1.0	42	UG/L
4-METHYL-2-PENTANONE (MIBK)	5.0	43	UG/L
STYRENE	1.0	45	UG/L
1,1,2,2-TETRACHLOROETHANE	1.0	42	UG/L
TETRACHLOROETHENE	1.0	42	UG/L
TOLUENE	1.0	46	UG/L
1,1,1-TRICHLOROETHANE	1.0	46	UG/L
1,1,2-TRICHLOROETHANE	1.0	43	UG/L
TRICHLOROETHENE	1.0	43	UG/L
VINYL CHLORIDE	1.0	50	UG/L
O-XYLENE	1.0	47	UG/L
M+P-XYLENE	1.0	94	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(87 - 111 %)	104	%
TOLUENE-D8	(87 - 108 %)	105	%
DIBROMOFLUOROMETHANE	(86 - 117 %)	100	%

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9221.D Vial: 14
Acq On : 21 Jan 102 7:53 pm Operator: droot
Sample : 524669 1.0 MS 525624 Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 20:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.37	168	750626	50.00 ppb	-0.02
35) 1,4 - Difluorobenzene	8.56	114	1437160	50.00 ppb	-0.02
52) d5 - Chlorobenzene	13.63	117	1110145	50.00 ppb	-0.03
74) d4 - Dichlorobenzene	18.08	152	438627	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
36) surr4,Dibrflmethane	7.25	113	509731	50.08 ppb	100.16%
58) surr3,Toluene-d8	11.07	98	1370367	52.60 ppb	105.20%
59) surr2,bfb	15.85	95	542726	52.21 ppb	104.42%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.66	85	352228	55.11 ppb	100
3) Chloromethane	1.87	50	443405	52.34 ppb	98
4) Vinyl Chloride	1.99	62	363651	49.99 ppb	99
5) Bromomethane	2.39	94	224158	44.18 ppb	98
6) Chloroethane	2.53	64	209365	45.98 ppb	100
7) Trichlorofluoromethane	2.89	101	411460	51.10 ppb	98
8) Diethyl Ether	3.32	59	321238	44.47 ppb	95
9) Acrolein	3.49	56	360050	222.44 ppb	96
10) FREON 113	3.67	85	114790	53.89 ppb	97
11) 1,1-Diclethene	3.63	96	243994	43.82 ppb	97
12) Acetone	3.73	43	138788	43.10 ppb	93
13) Iodomethane	3.85	127	153480	43.18 ppb	97
14) Carbon Disulfide	3.94	76	970569	45.19 ppb	100
15) Acetonitrile	4.15	41	343449	949.45 ppb	95
16) Allyl Chloride	4.21	76	165492	47.87 ppb	88
17) Methylene Chloride	4.40	84	321015	42.31 ppb	92
18) TBA	4.65	59	804016	911.17 ppb	100
19) Acrylonitrile	4.79	53	875066	221.77 ppb	99
20) Methyl-t-Butyl Ether	4.87	73	956650	44.49 ppb	98
21) trans-1,2-Dichloroethene	4.84	96	312311	45.25 ppb	100
22) 1,1-Diclethane	5.51	63	573626	46.55 ppb	100
23) Vinyl Acetate	5.63	43	887805	53.61 ppb	100
24) 2-Chloro-1,3-butadiene	5.66	53	508198	46.10 PPB	99
25) 2,2-Dichloropropane	6.45	77	361251	41.51 ppb	98
26) 2-Butanone	6.50	43	254407	44.28 ppb	97
28) cis-1,2-Dichloroethene	6.46	96	359104	43.61 ppb	99
29) Propionitrile	6.57	54	329666	221.46 ppb	98
30) Methacrylonitrile	6.82	67	167589	43.54 ppb	95
31) Bromochloromethane	6.83	128	171930	42.23 ppb	89
32) Chloroform	6.99	83	526676	44.57 ppb	96
33) Tetrahydrofuran	6.93	42	154711	43.01 ppb	92
34) 1,1,1-Trichloroethane	7.28	97	399693	45.85 ppb	100
37) Carbontetrachloride	7.55	117	333508	44.24 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9221.D Vial: 14
Acq On : 21 Jan 102 7:53 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 20:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	1,1-Dichloropropene	7.55	75	382028	42.39 ppb		98
39)	Iso-Butyl Alcohol	8.41	43	246908	740.08 ppb		98
40)	Benzene	7.88	78	1138775	44.09 ppb		99
41)	1,2-Dichloroethane	7.91	62	418991	42.50 ppb		100
42)	N-Heptane	8.41	43	251563	37.76 ppb		98
43)	Trichloroethene	8.98	95	294765	42.75 ppb		98
44)	1,2-Diclpropane	9.33	63	355092	41.91 ppb		97
45)	Methyl Methacrylate	9.59	69	271685	44.46 ppb		97
46)	1,4-Dioxane	9.59	88	77122	846.01 ppb		83
47)	Dibromomethane	9.52	93	235832	42.72 ppb		95
48)	Bromodichloromethane	9.82	83	414100	43.94 ppb		99
49)	2-Nitropropane	10.19	43	262241	83.78 ppb	#	93
51)	cis-1,3-Dichloropropene	10.59	75	512791	41.54 ppb		95
53)	4-Methyl-2-Pentanone	10.88	43	482780	43.18 ppb		100
54)	Toluene	11.17	91	1067831	45.89 ppb		99
55)	trans-1,3-Dichloropropene	11.58	75	462930	44.14 ppb		100
56)	Ethyl Methacrylate	11.78	69	460075	44.99 ppb		99
57)	1,1,2-Trichloroethane	11.88	83	252980	43.06 ppb		100
60)	Tetrachloroethene	12.16	166	231082	42.09 ppb		97
61)	2-Hexanone	12.37	43	326253	43.13 ppb		95
62)	1,3-Dichloropropane	12.18	76	530766	41.75 ppb		93
63)	Dibromochloromethane	12.58	129	301846	42.74 ppb		99
64)	1,2-Dibromoethane	12.77	107	329177	43.31 ppb		98
65)	Chlorobenzene	13.69	112	664421	44.13 ppb		99
66)	1,1,1,2-Tetrachloroethane	13.85	131	251800	44.59 ppb		100
67)	Ethylbenzene	13.92	91	1102422	46.81 ppb		99
68)	(m+p)Xylene	14.15	106	787278	94.18 ppb		98
69)	o-Xylene	14.88	106	383579	46.75 ppb		93
70)	Styrene	14.89	104	669523	45.29 ppb		97
71)	Bromoform	15.22	173	199560	42.86 ppb		98
72)	Isopropylbenzene	15.58	105	952463	44.10 ppb		100
73)	Cyclohexanone	15.70	55	262886	341.39 ppb		96
75)	1,1,2,2-Tetrachloroethane	16.14	83	396009	42.32 ppb		99
76)	Trans-1,4-Dichloro-2-buten	16.25	53	115051	40.24 ppb		91
77)	1,2,3-Trichloropropane	16.21	110	116054	40.61 ppb		99
78)	n-Propylbenzene	16.37	91	1079666	46.25 ppb		99
79)	Bromobenzene	16.13	156	249634	42.59 ppb		97
80)	1,3,5-Trimethylbenzene	16.73	105	651099	30.17 ppb	#	51
81)	2-Chlorotoluene	16.51	91	669123	44.67 ppb		98
82)	4-Chlorotoluene	16.73	91	746157	44.22 ppb		97
83)	tert-Butylbenzene	17.35	119	550258	45.33 ppb		100
84)	1,2,4-Trimethylbenzene	17.43	105	642446	45.94 ppb		100
85)	sec-Butylbenzene	17.77	105	784615	44.86 ppb		100
86)	p-Isopropyltoluene	17.35	119	550258	45.33 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9221.D Vial: 14
Acq On : 21 Jan 102 7:53 pm Operator: droot
Sample : 524669 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10310 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 21 20:21 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
87) 1,3-Dclbenz	17.96	146	393660	48.39 ppb	99
88) 1,4-Dclbenz	18.13	146	399815	44.29 ppb	98
89) n-Butylbenzene	18.86	91	527337	45.12 ppb	100
90) 1,2-Dclbenz	18.85	146	383118	44.24 ppb	99
91) 1,2-Dibromo-3-chloropropan	20.37	157	60792	40.12 ppb	91
92) Nitrobenzene	20.76	77	24289	32.09 ppb	83
93) 1,2,4-Tcbenzene	22.03	180	205962	48.46 ppb	99
94) Hexachlorobt	22.41	225	68052	41.49 ppb	96
95) Naphthalen	22.50	128	541108	46.08 ppb	99
96) 1,2,3-Tclbenzene	22.99	180	193171	49.59 ppb	98

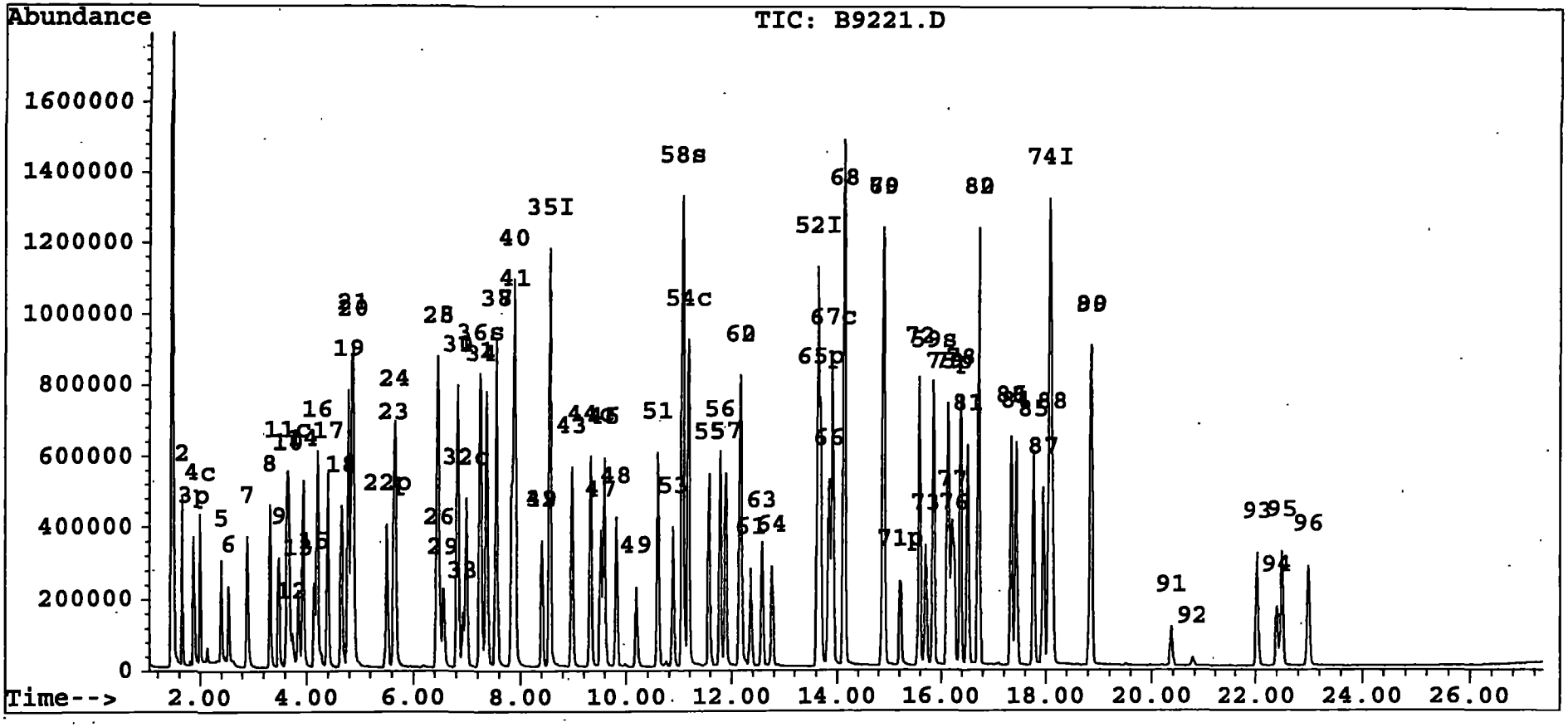
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\012102\B9221.D
Acq On : 21 Jan 102 7:53 pm
Sample : 524669 1.0 MS
Misc : TTEM-KS R22-10310 8260B.TCLL
Quant Time: Jan 21 20:21 19102

Vial: 14
Operator: droot
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration



274

8260

Tune 1217
exp 1217

1/21/02

|012102|B...

	1	AmBlk			B9201	–	
	1	Tune	8:06am		B9202	YT	
	1	CCV			B9203	YC	
	1	Blk			B9204	–	
	2	MetBlk			B9205	Ym	
	3	LCS			B9206	YQ	
	1	521703	50.0	Casella R22-10146 82608.SFPL	B9207	N	rpt 1/100
	2	703	100.0	↓	B9208	Y	
pkg2	3	524665	1.0	TTEM-KS R22-10310 82608.TC11	B9209	Y	
pkg5	4	666	1.0		B9210	Y	
	5	669	1.0		B9211	Y	
2	6	670	1.0		B9212	Y	
pkg2	7	671	1.0		B9213	Y	
	8	674	1.0		B9214	Y	
	9	675	1.0		B9215	Y	
	10	676	1.0		B9216	Y	
	11	677	1.0		B9217	Y	
	12	678	1.0		B9218	Y	
	13	679	1.0		B9219	Y	
	14	669ms	1.0		B9220	YQ	
	14	669msD	1.0		B9221	YQ	
	15	Blk			B9222	–	
	16	Tune	9:06 pm		B9223	YT	
	17	Tune	9:41pm		B9224	YT	
	18	CCV			B9225	YC	
	19	CCV			B9226	YC	
	20	Blk			B9227	–	
	21	MetBlk			B9228	Ym	
	22	LCS			B9229		Carbon disulfide ↓
	23	524683	1.0	TTEM-KS R22-10310 82608-TC11	B9230	Y	
	24	685	1.0		B9231	Y	
	25	686	1.0		B9232	Y	
	26	687	1.0		B9233	Y	
	27	688	1.0		B9234	Y	
	28	689	1.0		B9235	Y	
	29	690	1.0		B9236	Y	
	30	691	1.0		B9237	Y	
	31	692	1.0		B9238	Y	
	32	LCS			~~B9239~~ B9241	YQ	Chloromethane
		524693	1.0		B9239	Y	
		694	1.0		B9240	Y	

Surr MSV6094 F 20ul → 50 mls Tune
1° Targ MSV6087A } 5ul → 50mls CCV
1° HSL MSV6087B
SS Targ MSV6088A } 2ul → 50mls LCS
SS HSL MSV6088B

8260

Tune 1217
expires

1/22/02

1012202/B...

	1	Tune 9:26am			B9242	YT	
	1	CCU			B9243	Y	
	1	BIK			B9244	—	
	2	MetBIK			B9245	Ym	
	3	LCS			B9246	YG	Carbondsul
	1	LCS			B9247	N	↑
↔	2	524695	1.0	TIE M-KS R22-10310 8260B TCH	B9248	Y	
↔	3	696	1.0		B9249	Y	
↔	4	697	1.0		B9250	Y	
↔	5	698	1.0		B9251	Y	
↔	6	706	1.0		B9252	Y	
	7	707	1.0		B9253	Y	
	8	708	1.0		B9254	Y	
	9	709	1.0		B9255	Y	
	10	524710	1.0	NYSDEC-RAY R22-10311 8260B 3408	B9256	Y	
	11	711	1.0		B9257	Y	
	12	712	1.0		B9258	Y	
	13	524602	2.0	WECH R22-10305 8260B TCH	B9259	RG	1/25
	14	710 ms	1.0	NYSDEC R22-10311 8260B 3408	B9260	YG	
	14	710 msd	1.0		B9261	YG	
	15	BK			B9262	—	
	16	Tune			B9263	—	
	17	Tune			B9264		Me
	18	CCU			B9265		
	19	CCU			B9266		Sfc
	20	BIK			B9267		
	21	MetBIK			B9268		
	22	LCS			B9269		
	23	524988	1.0	NYSDEC-ALCO R22-10326 8260B TCH	B9270		
	24	989	1.0		B9271		
	25	994	1.0		B9272		
	26	524407	1.0	Chazen R22-10325 8260B TCH	B9273		
	27	408	1.0		B9274		
	28	409	1.0		B9275		
	29	410	1.0		B9276		
	30	411	1.0		B9277		
	31	408 ms	1.0		B9278		
	31	408 msd	1.0		B9279		

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276

METALS DATA

METALS
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

C ract: R2210310 SDG No.: MW LW-3

Lab Code: Case No.: SAS No.:

SOW No.: SW846 CLP-M Client: Tetra Tech EM Inc.

Sample No.	Lab Sample ID.
MW LW-3	524665
MW LW-4	524666
MW LW-8	524669
MW LW-8D	524669D
MW LW-8S	524669S
MW LW-1	524670
MW RF5-FD	524671
RF 5	524674
MW LW-7	524675
MW LW-7-FD	524676
RF 3	524677
MW MI-2	524678
MW M-6	524679
MW M-3	524683
MW M-8	524685
RF4	524686
RF1-FD	524687
MWLW-2	524688
MWLW-5	524689
RF-1	524690
RF-2	524691

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attached Case Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Michael K. Perry Name: Michael K. Perry

Date: 2/27/02 Title: Laboratory Manager

Columbia Analytical Services

METALS
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

C ract: R2210310 SDG No.: MW LW-3

Lab Code: Case No.: SAS No.:

SOW No.: SW846 CLP-M Client: Tetra Tech EM Inc.

Sample No.	Lab Sample ID.
MW LW-6	524692
MW M-7	524693
MW M-4	524694
MW M-5	524695
MW MI-1	524696
MW M-1	524697
MW M-2	524698

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attached Case Narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Michael K. Perry Name: Michael K. Perry

Date: 2/27/02 Title: Laboratory Manager

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW LW-1

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524670

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	19.0			P
7440-39-3	Barium	87.6			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	3.4	B		P
7439-92-1	Lead	4.8	B		P
7439-96-5	Manganese	64.9			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	4.9	B		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	9.7	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW LW-3

ntract: R2210310

b Code: Case No.: SAS No.: SDG NO.: MW LW-3

trix (soil/water): WATER Lab Sample ID: 524665

vel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.8	B		P
7440-39-3	Barium	57.6			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	1.6	B		P
7439-92-1	Lead	2.1	B		P
7439-96-5	Manganese	1300			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	241			P

Color Before: YELLOW Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW LW-4

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524666

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	14.5			P
7440-39-3	Barium	73.5			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.3	B		P
7439-92-1	Lead	1.3	B		P
7439-96-5	Manganese	3450			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.5	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW LW-6

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524692

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	25.0			P
7440-39-3	Barium	59.7			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	4.9	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	11.1			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	4.0	B		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.8	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW LW-7

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524675

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	13.8			P
7440-39-3	Barium	900			P
7440-43-9	Cadmium	4.3	B		P
7440-47-3	Chromium	60.5			P
7439-92-1	Lead	33.3			P
7439-96-5	Manganese	1980			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	8.1			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	150			P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW LW-7-FD

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524676

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	24.1			P
7440-39-3	Barium	997			P
7440-43-9	Cadmium	4.8	B		P
7440-47-3	Chromium	66.2			P
7439-92-1	Lead	36.2			P
7439-96-5	Manganese	2230			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	10.5			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	165			P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW LW-8

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524669

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	51.3			P
7440-39-3	Barium	354			P
7440-43-9	Cadmium	1.6	B		P
7440-47-3	Chromium	22.2			P
7439-92-1	Lead	8.6			P
7439-96-5	Manganese	554			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	7.5			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	52.8			P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW M-1

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524697

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	30.0			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	1.3	B		P
7439-92-1	Lead	0.92	B		P
7439-96-5	Manganese	989			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	6.3			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	134			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW M-2

ntract: R2210310

b Code: Case No.: SAS No.: SDG NO.: MW LW-3

trix (soil/water): WATER Lab Sample ID: 524698

vel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	15.7			P
7440-39-3	Barium	46.8			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.0	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	257			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.3	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW M-3

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524683

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	19.1			P
7440-39-3	Barium	68.5			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	1.7	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	1.3	U		P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	4.1	B		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.3	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW M-4

ontract: R2210310

b Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524694

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	17.7	B		P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.3	B		P
7439-92-1	Lead	2.6	B		P
7439-96-5	Manganese	2590			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	186			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW M-5

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524695

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	15.6			P
7440-39-3	Barium	63.7			P
7440-43-9	Cadmium	0.75	B		P
7440-47-3	Chromium	2.2	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	293			P
7439-97-6	Mercury	0.70			CV
7782-49-2	Selenium	4.8	B		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.3	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW M-6

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524679

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	60.3			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	1.3	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	926			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	199			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

olumbia Analytical Services

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW M-7

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524693

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	14.4			P
7440-39-3	Barium	93.1			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.0	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	73.6			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	4.5	B		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.9	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW M-8

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524685

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	15.3			P
7440-39-3	Barium	69.3			P
7440-43-9	Cadmium	0.93	B		P
7440-47-3	Chromium	2.4	B		P
7439-92-1	Lead	0.82	U		P
7439-96-5	Manganese	12.9			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	4.3	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MW MI-1

ɔntract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524696

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.3	B		P
7440-39-3	Barium	10.7	B		P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	1.8	B		P
7439-92-1	Lead	2.8	B		P
7439-96-5	Manganese	445			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	6.0			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	390			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW MI-2

ɔntract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524678

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.6	B		P
7440-39-3	Barium	200			P
7440-43-9	Cadmium	2.8	B		P
7440-47-3	Chromium	1.2	U		P
7439-92-1	Lead	2.4	B		P
7439-96-5	Manganese	4940			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	3.5	U		P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	1040			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MW RF5-FD

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524671

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	22.9			P
7440-39-3	Barium	153			P
7440-43-9	Cadmium	0.69	B		P
7440-47-3	Chromium	12.4			P
7439-92-1	Lead	4.8	B		P
7439-96-5	Manganese	195			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	7.2			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	24.0	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

Form I - IN

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MWLW-2

:tract: R2210310

Code: Case No.: SAS No.: SDG NO.: MW LW-3

:rix (soil/water): WATER Lab Sample ID: 524688

'el (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	29.1			P
7440-39-3	Barium	115			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	10.1			P
7439-92-1	Lead	2.3	B		P
7439-96-5	Manganese	66.1			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	8.1			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	12.0	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MWLW-5

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524689

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	242			P
7440-39-3	Barium	77.8			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.5	B		P
7439-92-1	Lead	3.3	B		P
7439-96-5	Manganese	1510			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	8.8			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	20.2	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF 3

ntract: R2210310

b Code: Case No.: SAS No.: SDG NO.: MW LW-3

trix (soil/water): WATER Lab Sample ID: 524677

vel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	14.8			P
7440-39-3	Barium	29.4			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	2.4	B		P
7439-92-1	Lead	1.5	B		P
7439-96-5	Manganese	38.7			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	8.2			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	13.4	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF 5

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524674

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	23.2			P
7440-39-3	Barium	128			P
7440-43-9	Cadmium	0.57	B		P
7440-47-3	Chromium	10.8			P
7439-92-1	Lead	4.0	B		P
7439-96-5	Manganese	157			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	7.6			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	18.8	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF-1

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

atrix (soil/water): WATER Lab Sample ID: 524690

evel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	16.8			P
7440-39-3	Barium	68.6			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	4.0	B		P
7439-92-1	Lead	2.0	B		P
7439-96-5	Manganese	323			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	13.7			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	12.6	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF1-FD

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524687

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	16.5			P
7440-39-3	Barium	65.3			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	4.8	B		P
7439-92-1	Lead	1.9	B		P
7439-96-5	Manganese	333			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	11.7			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	11.8	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF-2

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Lab Sample ID: 524691

Level (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	10.2			P
7440-39-3	Barium	291			P
7440-43-9	Cadmium	1.1	B		P
7440-47-3	Chromium	13.9			P
7439-92-1	Lead	7.0			P
7439-96-5	Manganese	469			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	14.2			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	38.9	B		P

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
RF4

ntract: R2210310

o Code: Case No.: SAS No.: SDG NO.: MW LW-3

trix (soil/water): WATER Lab Sample ID: 524686

vel (low/med): LOW Date Received: 01/17/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	21.4			P
7440-39-3	Barium	82.0			P
7440-43-9	Cadmium	0.44	U		P
7440-47-3	Chromium	3.6	B		P
7439-92-1	Lead	1.3	B		P
7439-96-5	Manganese	22.2			P
7439-97-6	Mercury	0.02	U		CV
7782-49-2	Selenium	11.4			P
7440-22-4	Silver	0.76	U		P
7440-66-6	Zinc	6.6	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

nitial Calibration Source: PE PURE

ontinuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	1000.0	1025.20	102.5	1000.0	1013.53	101.4	1027.52	102.8	P
Barium	10000.0	10576.58	105.8	10000.0	10530.30	105.3	10549.59	105.5	P
Cadmium	500.0	518.39	103.7	500.0	513.28	102.7	514.05	102.8	P
Chromium	500.0	512.29	102.5	500.0	506.02	101.2	510.13	102.0	P
Lead	500.0	521.34	104.3	500.0	515.83	103.2	516.05	103.2	P
Manganese	750.0	773.93	103.2	750.0	765.44	102.1	777.68	103.7	P
Mercury	3.0	3.10	103.3	3.0	3.11	103.7	3.09	103.0	CV
Selenium	500.0	513.28	102.7	500.0	509.16	101.8	509.68	101.9	P
Silver	500.0	510.21	102.0	500.0	504.26	100.9	509.57	101.9	P
Zinc	1000.0	1034.98	103.5	1000.0	1024.05	102.4	1025.25	102.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Initial Calibration Source:

Continuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				1000.0	1039.29	103.9	1039.36	103.9	P
Barium				10000.0	10560.53	105.6	10535.38	105.4	P
Cadmium				500.0	512.57	102.5	511.65	102.3	P
Chromium				500.0	512.73	102.5	515.87	103.2	P
Lead				500.0	512.24	102.4	508.07	101.6	P
Manganese				750.0	784.87	104.6	793.58	105.8	P
Mercury				3.0	3.08	102.7	3.08	102.7	CV
Selenium				500.0	508.66	101.7	507.80	101.6	P
Silver				500.0	509.32	101.9	513.11	102.6	P
Zinc				1000.0	1025.95	102.6	1023.08	102.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Initial Calibration Source:

Continuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1038.94	103.9	1029.19	102.9	P
Barium				10000.0	10478.00	104.8	10465.19	104.7	P
Cadmium				500.0	507.13	101.4	511.76	102.4	P
Chromium				500.0	510.85	102.2	514.81	103.0	P
Lead				500.0	506.76	101.4	506.00	101.2	P
Manganese				750.0	786.26	104.8	788.83	105.2	P
Mercury				3.0	3.07	102.3	3.03	101.0	CV
Selenium				500.0	504.28	100.9	500.31	100.1	P
Silver				500.0	510.70	102.1	512.78	102.6	P
Zinc				1000.0	1013.62	101.4	1021.91	102.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Initial Calibration Source:

Continuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1025.64	102.6			P
Barium				10000.0	10476.89	104.8			P
Cadmium				500.0	511.96	102.4			P
Chromium				500.0	511.31	102.3			P
Lead				500.0	511.69	102.3			P
Manganese				750.0	781.82	104.2			P
Selenium				500.0	501.16	100.2			P
Silver				500.0	511.58	102.3			P
Zinc				1000.0	1020.80	102.1			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Initial Calibration Source: PE PURE

Continuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	1000.0	1004.00	100.4	1000.0	1002.79	100.3	987.82	98.8	P
Selenium	500.0	496.19	99.2	500.0	495.05	99.0	494.83	99.0	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

nitial Calibration Source:

ontinuing Calibration Source: PE PURE

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	984.25	98.4			P
Selenium				500.0	497.04	99.4			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG No.: MW LW-3

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	21.01	105.1	21.31	106.6
Barium								
Cadmium				10.0	10.30	103.0	10.35	103.5
Chromium				20.0	20.36	101.8	20.95	104.8
Lead				6.0	6.66	111.0	6.65	110.8
Manganese				30.0	31.04	103.5	31.79	106.0
Mercury	0.2	0.19	95.0					
Selenium				10.0	13.88	138.8	9.18	91.8
Silver				20.0	19.01	95.1	19.30	96.5
Zinc				40.0	41.95	104.9	41.74	104.3

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG No.: MW LW-3

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	23.16	115.8	19.29	96.4
Selenium				10.0	12.13	121.3	13.08	130.8

METALS

-3-

BLANKS

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	4.0	U	4.0	U	4.0	U	4.0	U	3.970	U	P
Barium	7.4	U	7.4	U	7.4	U	7.4	U	7.350	U	P
Cadmium	0.4	U	0.4	U	0.4	U	0.4	U	0.442	U	P
Chromium	1.2	U	1.2	U	1.2	U	1.2	U	1.230	U	P
Lead	0.8	U	0.8	U	0.8	U	0.8	U	0.818	U	P
Manganese	1.3	U	1.3	U	1.3	U	1.3	U	1.280	U	P
Mercury	0.02	U	0.02	U	-0.02	B	0.02	U	-0.017	B	CV
Selenium	3.5	U	3.5	U	3.5	U	3.5	U	3.460	U	P
Silver	0.8	U	0.8	U	0.8	U	0.8	U	0.762	U	P
Zinc	4.3	U	4.3	U	4.3	U	4.3	U	4.280	U	P

METALS

-3-

BLANKS

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.0	U	4.0	U	4.0	U	3.970	U	P
Barium			7.4	U	7.4	U	7.4	U	7.350	U	P
Cadmium			0.4	U	0.4	U	0.4	U	0.442	U	P
Chromium			1.2	U	1.2	U	1.2	U	1.230	U	P
Lead			0.8	U	0.8	U	0.8	U	0.818	U	P
Manganese			1.3	U	1.3	U	1.3	U	1.280	U	P
Mercury			0.02	U	0.02	U	0.02	U	-0.016	B	CV
Selenium			3.5	U	3.5	U	3.5	U	3.460	U	P
Silver			0.8	B	0.8	U	0.8	U	0.762	U	P
Zinc			4.3	U	4.3	U	4.3	U	4.280	U	P

METALS

-3-

BLANKS

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.0	U							P
Barium			7.4	U							P
Cadmium			0.4	U							P
Chromium			1.2	U							P
Lead			0.8	U							P
Manganese			1.3	U							P
Selenium			3.5	U							P
Silver			0.8	U							P
Zinc			4.3	U							P

METALS

-3-

BLANKS

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	4.0	U	4.0	U	4.0	U	4.0	U			P
Selenium	3.5	U	3.8	B	3.5	U	3.5	U			P

-4-

ICP INTERFERENCE CHECK SAMPLE

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

CP ID Number: Optima ICP 2 ICS Source: PE PURE

Concentration Units): ug/L

Analyte	True Sol.A	True Sol.AB	Initial Found Sol.A	Initial Found Sol.AB	Initial Found %R	Final Found Sol.A	Final Found Sol.AB	Final Found %R
Arsenic			1	-6.7		0	-3.7	
Barium		500	-4	544.2	108.8	-4	541.6	108.3
Cadmium		1000	3	952.9	95.3	4	945.8	94.6
Chromium		500	7	493.2	98.6	7	497.0	99.4
Lead		1000	-5	960.5	96.1	-5	948.9	94.9
Manganese		500	2	500.9	100.2	2	509.8	102.0
Selenium			-11	-12.0		-10	-13.3	
Silver		1000	-13	1093.3	109.3	-13	1104.1	110.4
Zinc		1000	5	949.5	94.9	5	941.5	94.2

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

ICP ID Number: Optima ICP 2 ICS Source: PE PURE

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic			1	-4.1		0	-3.9	
Selenium			-11	-11.2		-5	-12.6	

METALS
-5A-
SPIKE SAMPLE RECOVERY

SAMPLE NO.

MW LW-8S

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	92.4055		51.3450		40.00	102.7		P
Barium	75 - 125	2511.7681		354.3256		2000.00	107.9		P
Cadmium	75 - 125	51.8484		1.5522	B	50.00	100.6		P
Chromium	75 - 125	223.6112		22.1680		200.00	100.7		P
Lead	75 - 125	516.7698		8.5778		500.00	101.6		P
Manganese	75 - 125	1097.7712		553.6849		500.00	108.8		P
Mercury	75 - 125	0.9900		0.0157	U	1.00	99.0		CV
Selenium	75 - 125	1000.1651		7.5009		1010.00	98.3		P
Silver	75 - 125	50.8993		0.7620	U	50.00	101.8		P
Zinc	75 - 125	562.9744		52.8221		500.00	102.0		P

Comments:

METALS
-5B-
POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

MW LW-8A

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic		86.75		51.34		40.0	88.5		P
Barium		2409.27		354.33		2000.0	102.7		P
Cadmium		49.43		1.55	B	50.0	95.8		P
Chromium		214.78		22.17		200.0	96.3		P
Lead		492.84		8.58		500.0	96.9		P
Manganese		1067.06		553.68		500.0	102.7		P
Selenium		998.86		7.50		1010.0	98.2		P
Silver		48.33		0.76	U	50.0	96.7		P
Zinc		541.30		52.82		500.0	97.7		P

Comments:

METALS

-6-

DUPLICATES

SAMPLE NO.

MW LW-8D

ntract: R2210310

b Code: Case No.: SAS No.: SDG NO.: MW LW-3

trix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		51.3450		50.6810		1.3		P
Barium		354.3256		360.9368		1.8		P
Cadmium		1.5522	B	1.5549	B	0.2		P
Chromium	10.0	22.1680		22.4238		1.1		P
Lead	5.0	8.5778		8.9058		3.8		P
Manganese		553.6849		569.1940		2.8		P
Mercury		0.0157	U	0.0157	U			CV
Selenium	5.0	7.5009		8.1294		8.0		P
Silver		0.7620	U	0.7620	U			P
Zinc	40.0	52.8221		53.9859		2.2		P

METALS
-7-
LABORATORY CONTROL SAMPLE

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

olid LCS Source:

queous LCS Source: CPI

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Arsenic	40.0	38.20	95.5						
Barium	2000.0	2146.96	107.3						
Cadmium	50.0	52.33	104.7						
Chromium	200.0	202.39	101.2						
Lead	500.0	526.31	105.3						
Manganese	500.0	519.10	103.8						
Mercury	1.0	1.01	101.0						
Selenium	1010.0	1024.44	101.4						
Silver	50.0	51.11	102.2						
Zinc	500.0	530.57	106.1						

METALS
-7-
LABORATORY CONTROL SAMPLE

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

olid LCS Source:

queous LCS Source: CPI

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Arsenic	40.0	38.58	96.4						
Barium	2000.0	2221.17	111.1						
Cadmium	50.0	52.72	105.4						
Chromium	200.0	212.37	106.2						
Lead	500.0	531.89	106.4						
Manganese	500.0	542.25	108.4						
Mercury	1.0	0.99	99.0						
Selenium	1010.0	983.87	97.4						
Silver	50.0	52.41	104.8						
Zinc	500.0	540.68	108.1						

METALS
-9-
ICP SERIAL DILUTIONS

SAMPLE NO.

MW LW-8L

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	51.34		54.80		6.7		P
Barium	354.33		368.86		4.1		P
Cadmium	1.55	B	2.21	U	100.0		P
Chromium	22.17		23.75	B	7.1		P
Lead	8.58		10.73	B	25.3		P
Manganese	553.68		580.72		4.9		P
Selenium	7.50		21.00	B	180.0		P
Silver	0.76	U	3.81	U			P
Zinc	52.82		58.33	B	10.5		P

METALS

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

MW M-2L

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	15.70		21.18	B	35.0		P
Barium	46.82		41.96	B	10.4		P
Cadmium	0.44	U	2.21	U			P
Chromium	1.98	B	6.15	U	100.0		P
Lead	0.82	U	4.09	U			P
Manganese	257.49		258.65		0.5		P
Selenium	3.46	U	17.30	U			P
Silver	0.76	U	3.81	U			P
Zinc	4.28	U	21.40	U			P

METALS

-10-

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

ICP ID Number: Optima ICP 2 Date: 11/14/01

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Arsenic	188.979		10.0	4.0	P
Barium	233.53		20.0	7.3	P
Cadmium	226.50		5.0	0.4	P
Chromium	267.72		10.0	1.2	P
Lead	220.35		5.0	0.8	P
Manganese	257.61		10.0	1.3	P
Selenium	196.03		5.0	3.5	P
Silver	328.07		10.0	0.8	P
Zinc	206.20		40.0	4.3	P

Comments

METALS
-10-
INSTRUMENT DETECTION LIMITS (QUARTERLY)

ontract: R2210310

ab Code: Case No.: SAS No.: SDG NO.: MW LW-3

CP ID Number: Date: 12/28/01

lame AA ID Number: PE FAA/CVAA

urnace AA ID Number:

Analyte	Wave-length	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70	BD	0.2	0.02	CV

ents

METALS

-11A-

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

ICP ID Number: Optima ICP 2 Date: 1/17/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg
Aluminum	308.215	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	188.979	0.0000000	0.0000000	-0.1870080	0.0000000
Barium	233.527	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.107	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.773	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0591243	0.0000000
Calcium	315.887	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	-0.0611971	0.0000000
Iron	238.863	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0810553	0.0000000	0.0188515	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	-0.0862938	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	404.721	0.0000000	0.0000000	-135.93299	0.0000000
Selenium	196.026	-0.0130206	0.0000000	0.0000000	0.0471245
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.237	0.0000000	1.2022200	-3.8306799	0.0000000
Thallium	190.800	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.933	0.0000000	0.0000000	0.0000000	3.8366499
Titanium	334.941	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.191	0.0000000	0.0000000	0.0000000	0.0271025

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

ICP ID Number: Optima ICP 2 Date: 12/12/01

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Arsenic	0.20	5000.0	P
Barium	0.20	20000.0	P
Cadmium	0.20	5000.0	P
Chromium	0.20	10000.0	P
Lead	0.20	100000.0	P
Manganese	0.20	10000.0	P
Selenium	0.20	5000.0	P
Silver	0.20	4000.0	P
Zinc	0.20	5000.0	P

Comments:

METALS
-13-
PREPARATION LOG

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Method: P

Sample No.	Preparation Date	Initial Volume	Volume (mL)
LCSW	01/23/02	50	50
MW LW-1	01/23/02	50	50
MW LW-3	01/23/02	50	50
MW LW-4	01/23/02	50	50
MW LW-6	01/23/02	50	50
MW LW-7	01/23/02	50	50
MW LW-7-FD	01/23/02	50	50
MW LW-8	01/23/02	50	50
MW LW-8D	01/23/02	50	50
MW LW-8S	01/23/02	50	50
MW M-3	01/23/02	50	50
MW M-6	01/23/02	50	50
MW M-8	01/23/02	50	50
MW MI-2	01/23/02	50	50
MW RF5-FD	01/23/02	50	50
MWLW-2	01/23/02	50	50
MWLW-5	01/23/02	50	50
PBW	01/23/02	50	50
RF 3	01/23/02	50	50
RF 5	01/23/02	50	50
RF-1	01/23/02	50	50
RF1-FD	01/23/02	50	50
RF-2	01/23/02	50	50
RF4	01/23/02	50	50

METALS
-13-
PREPARATION LOG

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Method: P

Sample No.	Preparation Date	Initial Volume	Volume (mL)
LCSW	01/24/02	50	50
MW M-1	01/24/02	50	50
MW M-2	01/24/02	50	50
MW M-4	01/24/02	50	50
MW M-5	01/24/02	50	50
MW M-7	01/24/02	50	50
MW MI-1	01/24/02	50	50
PBW	01/24/02	50	50

METALS
-13-
PREPARATION LOG

Contract: R2210310

Lab Code: Case No.: SAS No.: SDG NO.: MW LW-3

Method: CV

Sample No.	Preparation Date	Initial Volume	Volume (mL)
LCSW	01/25/02	100	100
MW LW-1	01/25/02	100	100
MW LW-3	01/25/02	100	100
MW LW-4	01/25/02	100	100
MW LW-6	01/25/02	100	100
MW LW-7	01/25/02	100	100
MW LW-7-FD	01/25/02	100	100
MW LW-8	01/25/02	100	100
MW LW-8D	01/25/02	100	100
MW LW-8S	01/25/02	100	100
MW M-3	01/25/02	100	100
MW M-6	01/25/02	100	100
MW M-8	01/25/02	100	100
MW MI-2	01/25/02	100	100
MW RF5-FD	01/25/02	100	100
MWLW-2	01/25/02	100	100
MWLW-5	01/25/02	100	100
PBW	01/25/02	100	100
RF 3	01/25/02	100	100
RF 5	01/25/02	100	100
RF-1	01/25/02	100	100
RF1-FD	01/25/02	100	100
RF-2	01/25/02	100	100
RF4	01/25/02	100	100

METALS
-13-
PREPARATION LOG

ɔntract: R2210310

ıb Code: Case No.: SAS No.: SDG NO.: MW LW-3

ıthod: CV

Sample No.	Preparation Date	Initial Volume	Volume (mL)
LCSW	01/25/02	100	100
MW M-1	01/25/02	100	100
MW M-2	01/25/02	100	100
MW M-4	01/25/02	100	100
MW M-5	01/25/02	100	100
MW M-7	01/25/02	100	100
MW MI-1	01/25/02	100	100
PBW	01/25/02	100	100

METALS

-14-

ANALYSIS RUN LOG

Contract: R2210310

Lab Code Case No.: SAS No.: SDG No.: MW LW-3

Instrument ID Number: Optima ICP 2 Method: P

Start Date: 1/28/02 End Date: 1/28/02

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
IS Init	1.00	15:59																									
Calib Blank 1	1.00	16:02				X	X		X		X				X		X				X	X				X	
Calib Std 1	1.00	16:07				X	X		X		X				X		X				X	X				X	
HIGH CHECK	1.00	16:13				X	X		X		X				X		X				X	X				X	
ICV1	1.00	16:18				X	X		X		X				X		X				X	X				X	
ICB1	1.00	16:23				X	X		X		X				X		X				X	X				X	
CRDL1	1.00	16:28				X	X		X		X				X		X				X	X				X	
ICS-A1	1.00	16:34				X	X		X		X				X		X				X	X				X	
ICS-AB1	1.00	16:40				X	X		X		X				X		X				X	X				X	
CCV1	1.00	16:46				X	X		X		X				X		X				X	X				X	
B1	1.00	16:51				X	X		X		X				X		X				X	X				X	
ZZZZZZ	1.00	16:56																									
ZZZZZZ	1.00	17:01																									
ZZZZZZ	1.00	17:06																									
ZZZZZZ	5.00	17:11																									
PBW	1.00	17:16				X	X		X		X				X		X				X	X				X	
LCSW	1.00	17:22				X	X		X		X				X		X				X	X				X	
ZZZZZZ	1.00	17:27																									
ZZZZZZ	1.00	17:32																									
ZZZZZZ	1.00	17:37																									
ZZZZZZ	1.00	17:42																									
CCV2	1.00	17:48				X	X		X		X				X		X				X	X				X	
CCB2	1.00	17:53				X	X		X		X				X		X				X	X				X	
ZZZZZZ	5.00	17:58																									
ZZZZZZ	1.00	18:03																									
ZZZZZZ	1.00	18:08																									
ZZZZZZ	1.00	18:14																									
ZZZZZZ	5.00	18:19																									
MW M-7	1.00	18:24				X	X		X		X				X		X				X	X				X	
MW M-4	1.00	18:30				X	X		X		X				X		X				X	X				X	
MW M-5	1.00	18:35				X	X		X		X				X		X				X	X				X	
MW MI-1	1.00	18:40				X	X		X		X				X		X				X	X				X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

-14-

ANALYSIS RUN LOG

Contract: R2210310

Lab Code | Case No.: | SAS No.: | SDG No.: MW LW-3

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 1/28/02 | End Date: 1/28/02

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MW M-1	1.00	18:46				X	X		X		X				X		X				X	X				X	
CCV3	1.00	18:51				X	X		X		X				X		X				X	X				X	
CCB3	1.00	18:56				X	X		X		X				X		X				X	X				X	
MW M-2	1.00	19:01					X		X		X				X		X				X	X				X	
MW M-2L	5.00	19:06					X		X		X				X		X				X	X				X	
ZZZZZZ	1.00	19:12																									
ZZZZZZ	1.00	19:18																									
ZZZZZZ	1.00	19:24																									
CCV4	1.00	19:29				X	X		X		X				X		X				X	X				X	
[illegible]	1.00	19:34				X	X		X		X				X		X				X	X				X	
[illegible]	1.00	19:39				X	X		X		X				X		X				X	X				X	
LCSW	1.00	19:44				X	X		X		X				X		X				X	X				X	
MW LW-3	1.00	19:50				X	X		X		X				X		X				X	X				X	
MW LW-4	1.00	19:55				X	X		X		X				X		X				X	X				X	
MW LW-8	1.00	20:00				X	X		X		X				X		X					X				X	
MW LW-8D	1.00	20:06				X	X		X		X				X		X					X				X	
MW LW-8S	1.00	20:11				X	X		X		X				X		X					X				X	
MW LW-8A	1.00	20:16				X	X		X		X				X		X					X				X	
MW LW-8L	5.00	20:21				X	X		X		X				X		X					X				X	
MW LW-1	1.00	20:27				X	X		X		X				X		X				X	X				X	
CCV5	1.00	20:32				X	X		X		X				X		X				X	X				X	
CCB5	1.00	20:37				X	X		X		X				X		X				X	X				X	
MW RF5-FD	1.00	20:42				X	X		X		X				X		X				X	X				X	
RF 5	1.00	20:47				X	X		X		X				X		X					X				X	
MW LW-7	1.00	20:53				X	X		X		X				X		X				X	X				X	
MW LW-7-FD	1.00	20:58				X	X		X		X				X		X					X				X	
RF 3	1.00	21:04				X	X		X		X				X		X				X	X				X	
MW MI-2	1.00	21:09				X	X		X		X				X		X				X	X				X	
MW M-6	1.00	21:14				X	X		X		X				X		X				X	X				X	
M-3	1.00	21:19				X	X		X		X				X		X				X	X				X	
M-8	1.00	21:25				X	X		X		X				X		X				X	X				X	
RF4	1.00	21:30				X	X		X		X				X		X					X				X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

-14-

ANALYSIS RUN LOG

Contract: R2210310

Lab Code Case No.: SAS No.: SDG No.: MW LW-3

Instrument ID Number: Optima ICP 2 Method: P

Start Date: 1/28/02 End Date: 1/28/02

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV6	1.00	21:35				X	X		X		X				X		X				X	X				X	
CCB6	1.00	21:40				X	X		X		X				X		X				X	X				X	
RF1-FD	1.00	21:45				X	X		X		X				X		X				X	X				X	
MWLW-2	1.00	21:51				X	X		X		X				X		X				X	X				X	
MWLW-5	1.00	21:56				X	X		X		X				X		X				X	X				X	
RF-1	1.00	22:01				X	X		X		X				X		X				X	X				X	
RF-2	1.00	22:06				X	X		X		X				X		X				X	X				X	
MW LW-6	1.00	22:11				X	X		X		X				X		X				X	X				X	
CRDL3	1.00	22:16				X	X		X		X				X		X				X	X				X	
ICS-A3	1.00	22:22				X	X		X		X				X		X				X	X				X	
ICS-AB3	1.00	22:28				X	X		X		X				X		X				X	X				X	
CCV7	1.00	22:34				X	X		X		X				X		X				X	X				X	
CCB7	1.00	22:39				X	X		X		X				X		X				X	X				X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

-14-

ANALYSIS RUN LOG

ıtract: R2210310

Lab Code | Case No.: | SAS No.: | SDG No.: MW LW-3

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 1/29/02 | End Date: 1/29/02

Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
IS Init	1.00	10:22																									
Calib Blank 1	1.00	10:25				X															X						
Calib Std 1	1.00	10:30				X															X						
HIGH CHECK	1.00	10:35				X															X						
ICV2	1.00	10:40				X															X						
ICB2	1.00	10:45				X															X						
CRDL1	1.00	10:50				X															X						
ICS-A1	1.00	10:56				X															X						
ICS-AB1	1.00	11:02				X															X						
CCV1	1.00	11:07				X															X						
CB1	1.00	11:12				X															X						
ZZZZZ	1.00	11:17																									
ZZZZZZ	1.00	11:22																									
MW M-2	1.00	11:27				X																					
MW M-2L	5.00	11:32				X																					
ZZZZZZ	1.00	11:37																									
ZZZZZZ	1.00	11:42																									
MW LW-8	1.00	11:47																			X						
MW LW-8D	1.00	11:52																			X						
MW LW-8S	1.00	11:57																			X						
MW LW-8A	1.00	12:03																			X						
CCV2	1.00	12:08				X															X						
CCB2	1.00	12:13				X															X						
MW LW-8L	5.00	12:18																			X						
RF 5	1.00	12:23																			X						
MW LW-7-FD	1.00	12:28																			X						
RF4	1.00	12:34																			X						
CRDL2	1.00	12:39				X															X						
ICS-A2	1.00	12:44				X															X						
ICS-AB2	1.00	12:50				X															X						
CCV3	1.00	12:55				X															X						
CCB3	1.00	13:00				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Form XIV - IN

METALS

-14-

ANALYSIS RUN LOG

ıtract: R2210310

Lab Code | Case No.: | SAS No.: | SDG No.: MW LW-3

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 1/25/02 | End Date: 1/25/02

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank	1.00	12:10																X									
0.2ppb std	1.00	12:12																X									
0.5ppb std	1.00	12:13																X									
1ppb std	1.00	12:15																X									
2ppb std	1.00	12:17																X									
5ppb std	1.00	12:19																X									
10ppb std	1.00	12:21																X									
ICV1	1.00	12:22																X									
ICB1	1.00	12:24																X									
CRDL1	1.00	12:26																X									
CCV1	1.00	12:28																X									
CB1	1.00	12:30																X									
PBW	1.00	12:32																X									
LCSW	1.00	12:33																X									
MW M-7	1.00	12:35																X									
MW M-4	1.00	12:37																X									
MW M-5	1.00	12:39																X									
MW MI-1	1.00	12:41																X									
MW M-1	1.00	12:42																X									
MW M-2	1.00	12:44																X									
ZZZZZZ	1.00	12:46																									
ZZZZZZ	1.00	12:48																									
CCV2	1.00	12:50																X									
CCB2	1.00	12:52																X									
ZZZZZZ	1.00	12:53																									
ZZZZZZ	1.00	12:55																									
ZZZZZZ	1.00	12:57																									
ZZZZZZ	1.00	12:59																									
ZZZZZZ	1.00	13:00																									
ZZZZZZ	1.00	13:02																									
ZZZZZZ	1.00	13:04																									
ZZZZZ	1.00	13:06																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Form XIV - IN

METALS
-14-
ANALYSIS RUN LOG

Contract: R2210310

Lab Code | Case No.: | SAS No.: | SDG No.: MW LW-3

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 1/25/02 | End Date: 1/25/02

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	13:08																									
ZZZZZZ	1.00	13:09																									
CCV3	1.00	13:11																X									
CCB3	1.00	13:13																X									
ZZZZZZ	1.00	13:15																									
PBW	1.00	13:17																X									
LCSW	1.00	13:19																X									
MW LW-3	1.00	13:20																X									
MW LW-4	1.00	13:22																X									
MW LW-8	1.00	13:24																X									
LW-8D	1.00	13:26																X									
MW LW-8S	1.00	13:27																X									
MW LW-1	1.00	13:29																X									
MW RF5-FD	1.00	13:31																X									
CCV4	1.00	13:33																X									
CCB4	1.00	13:35																X									
RF 5	1.00	13:36																X									
MW LW-7	1.00	13:38																X									
MW LW-7-FD	1.00	13:40																X									
RF 3	1.00	13:42																X									
MW MI-2	1.00	13:44																X									
MW M-6	1.00	13:46																X									
MW M-3	1.00	13:47																X									
MW M-8	1.00	13:49																X									
RF4	1.00	13:51																X									
RF1-FD	1.00	13:53																X									
CCV5	1.00	13:55																X									
CCB5	1.00	13:56																X									
MWLW-2	1.00	13:58																X									
MWLW-5	1.00	14:00																X									
RF-1	1.00	14:02																X									
RF-2	1.00	14:03																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS

-14-

ANALYSIS RUN LOG

Contract: R2210310

Lab Code | Case No.: | SAS No.: | SDG No.: MW LW-3

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 1/25/02 | End Date: 1/25/02

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MW LW-6	1.00	14:05																X									
CCV6	1.00	14:07																X									
CCB6	1.00	14:09																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals Cover Page

Instrument: Optima 2

Analyst: SD

Date: 1/28/02

Data File: 2jan28b

Reviewed By: CK 1/29/02

Entered By: CK 1/29/02

Manager Approval: SD 1/29/02

Starlims Run #	Analytes Used	Batch ID	Method Requested	Failed Analytes	Comments / Problems
73934	Pb	M2620136	200.7		

Package Data:

Client Sub. #	Type Of Package	Analytes Used	Failed Metals	Batch ID	Standards Attached	How Was Data Transferred To LIMS	Raw Data Copied
R10311	Pkg 5 / ASP	Tal+B wout K, Na	K	M2620141	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
R10326	Pkg 5 / ASP	Tal wout K, Na	K	M2620141	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
R10310	Pkg 5 / ASP	AsPbSeAgBaCdCrMnZn	–	M2620141	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP	repeat #524698	Au		YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP			135	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
R10310	Pkg 5 / ASP	AsPbSeAgBaCdCrMnZn	–	M2620141	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP	repeat #524698	Pb, 674, 676, 686	Sc	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO

Calibration Summary
Method: Method 6010B Date: 01/28/02 3:58:08 PM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.

Method: Method 6010B
Results: 2jan28b
Sample Info: 6010b
Method Description: Optima 3000XL #2

IEC: 011702.iec
Spectra Stored: Yes
User: User1

MSF:
Method Stored: Yes
Date: 01/28/02 3:58:08 PM

Mean Data
ID: IS Init
Seq. No.: 1
Data: Original
A/S Pos: 1
Date: 01/28/02 3:59:43 PM

Element	Mean Corr. Intensity	Std.Dev.	RSD
Y 371.030	5149309.7	1417.93	0.03%

Mean Data
ID: Calib Blank 1
Seq. No.: 2
Data: Original
A/S Pos: 1
Date: 01/28/02 4:01:20 PM

Element	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.030	5083039.1	56319.11	1.11%	0.987	mg/L
Ag 328.068	-2259.3	0.88	0.04%	0	mg/L
Al 308.215	5825.1	42.91	0.74%	0	mg/L
As 188.979	-35.6	0.15	0.41%	0	mg/L
B 249.773	1723.8	31.85	1.85%	0	mg/L
Ba 233.527	223.4	9.16	4.10%	0	mg/L
Be 313.107	-3356.7	10.78	0.32%	0	mg/L
Ca 315.887	2426.0	372.24	15.34%	0	mg/L
[illegible] 226.502	-143.5	0.06	0.04%	0	mg/L
[illegible] 28.616	-238.5	7.88	3.31%	0	mg/L
[illegible] 267.716	65.2	61.46	94.30%	0	mg/L
Cu 324.754	2125.6	22.48	1.06%	0	mg/L
Fe 238.863	219.1	6.22	2.84%	0	mg/L
K 404.721	-633.8	90.78	14.32%	0	mg/L
Mg 279.079	-539.8	49.48	9.17%	0	mg/L
Mn 257.610	511.5	27.55	5.39%	0	mg/L
Mo 202.030	-12.4	2.66	21.44%	0	mg/L
Na 330.237	849.2	37.57	4.42%	0	mg/L
Ni 231.604	-274.8	2.42	0.88%	0	mg/L
Pb 220.353	21.4	4.21	19.65%	0	mg/L
Sb 206.833	46.2	2.08	4.50%	0	mg/L
Se 196.026	-23.6	1.42	6.02%	0	mg/L
Sn 189.933	136.4	1.67	1.22%	0	mg/L
Ti 334.941	-460.8	20.09	4.36%	0	mg/L
Tl 190.800	-19.0	1.41	7.41%	0	mg/L
V 292.402	720.0	41.29	5.73%	0	mg/L
Zn 206.191	19.0	0.76	4.02%	0	mg/L

SDeVito
1/28/02

Mean Data
ID: Calib Std 1
Seq. No.: 3
Data: Original
A/S Pos: 2
Date: 01/28/02 4:06:37 PM

Element	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.030	4875315.8	27720.23	0.57%	0.947	mg/L
Ag 328.068	227505.4	396.90	0.17%	1.0000	mg/L
Al 308.215	498737.3	643.48	0.13%	20.0000	mg/L
As 188.979	3983.0	19.68	0.49%	2.0000	mg/L
B 249.773	446205.1	11123.09	2.49%	5.0000	mg/L
Ba 233.527	2713092.9	2595.16	0.10%	20.0000	mg/L
Be 313.107	3793090.2	1418.23	0.04%	0.5000	mg/L
315.887	8868852.2	7203.84	0.08%	50.0000	mg/L
226.502	138834.6	381.06	0.27%	1.0000	mg/L
Co 228.616	157197.1	1107.83	0.70%	5.0000	mg/L
Cr 267.716	151580.6	846.76	0.56%	1.0000	mg/L

Cu 324.754	819676.4	141.67	0.02%	2.5000 mg/L
Fe 238.863	320339.3	1452.32	0.45%	10.0000 mg/L
K 404.721	3398.6	92.07	2.71%	50.0000 mg/L
Mg 279.079	1341359.8	1502.70	0.11%	50.0000 mg/L
Mn 257.610	769765.5	3168.89	0.41%	1.5000 mg/L
Mo 202.030	110729.1	306.32	0.28%	5.0000 mg/L
Na 330.237	50211.6	22.53	0.04%	50.0000 mg/L
Ni 231.604	209590.4	783.29	0.37%	4.0000 mg/L
Pb 220.353	7946.7	55.52	0.70%	1.0000 mg/L
Sb 206.833	27978.4	203.36	0.73%	10.0000 mg/L
Se 196.026	3454.4	23.87	0.69%	1.0000 mg/L
Sn 189.933	9311.3	41.53	0.45%	10.0000 mg/L
Ti 334.941	2844646.0	9723.47	0.34%	5.0000 mg/L
Tl 190.800	4934.2	40.86	0.83%	2.0000 mg/L
V 292.402	1325609.4	291.37	0.02%	5.0000 mg/L
Zn 206.191	183802.2	976.00	0.53%	2.0000 mg/L

Calibration Summary
Method: Method 6010B Date: 01/28/02 4:07:57 PM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.
Ag 328.068	1	Linear	-2259.3	229764.6	0.00000	1.000000
Al 308.215	1	Linear	5825.1	24645.6	0.00000	1.000000
As 188.979	1	Linear	-35.6	2009.3	0.00000	1.000000
B 249.773	1	Linear	1723.8	88896.3	0.00000	1.000000
Ba 233.527	1	Linear	223.4	135643.5	0.00000	1.000000
Be 313.107	1	Linear	-3356.7	7592893.8	0.00000	1.000000
Ca 315.887	1	Linear	2426.0	177328.5	0.00000	1.000000
Cd 226.502	1	Linear	-143.5	138978.1	0.00000	1.000000
Co 228.616	1	Linear	-238.5	31487.1	0.00000	1.000000
Cr 267.716	1	Linear	65.2	151515.5	0.00000	1.000000
Cu 324.754	1	Linear	2125.6	327020.3	0.00000	1.000000
Fe 238.863	1	Linear	219.1	32012.0	0.00000	1.000000
K 404.721	1	Linear	-633.8	80.6	0.00000	1.000000
Mg 279.079	1	Linear	-539.8	26838.0	0.00000	1.000000
Mn 257.610	1	Linear	511.5	512836.0	0.00000	1.000000
Mo 202.030	1	Linear	-12.4	22148.3	0.00000	1.000000
Na 330.237	1	Linear	849.2	987.2	0.00000	1.000000
Ni 231.604	1	Linear	-274.8	52466.3	0.00000	1.000000
Pb 220.353	1	Linear	21.4	7925.2	0.00000	1.000000
Sb 206.833	1	Linear	46.2	2793.2	0.00000	1.000000
Se 196.026	1	Linear	-23.6	3478.0	0.00000	1.000000
Sn 189.933	1	Linear	136.4	917.5	0.00000	1.000000
Ti 334.941	1	Linear	-460.8	569021.3	0.00000	1.000000
Tl 190.800	1	Linear	-19.0	2476.6	0.00000	1.000000
V 292.402	1	Linear	720.0	264977.9	0.00000	1.000000
Zn 206.191	1	Linear	19.0	91891.6	0.00000	1.000000

Mean Data
ID: HIGH CHECK Seq. No.: 4 Sample No.: 10 A/S Pos: 2
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:12:00 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4877591.2	0.947	0.0052	mg/L				0.55%
Ag 328.068	225954.3	0.9932	0.00608	mg/L				0.61%
Al 308.215	496564.1	19.91	0.109	mg/L				0.55%
As 188.979	3987.6	2.002	0.0087	mg/L				0.43%
B 249.773	457237.0	5.124	0.0505	mg/L				0.98%
Ba 233.527	2710833.5	19.98	0.004	mg/L				0.02%
Be 313.107	3791565.3	0.4998	0.00017	mg/L				0.03%
Ca 315.887	8856144.1	49.93	0.011	mg/L				0.02%
Cd 226.502	138267.7	0.9959	0.00260	mg/L				0.26%
Co 228.616	156634.2	4.982	0.0169	mg/L				0.34%
Cr 267.716	150688.0	0.9941	0.00309	mg/L				0.31%
Cu 324.754	823348.6	2.511	0.0024	mg/L				0.09%
Fe 238.863	318618.1	9.946	0.0276	mg/L				0.28%
K 404.721	3350.4	49.40	0.511	mg/L				1.03%
Mg 279.079	1339393.4	49.93	0.008	mg/L				0.02%
Mn 257.610	769614.6	1.500	0.0015	mg/L				0.10%

Mo 202.030	110361.1	4.983	0.0081	mg/L	0.16%
Na 330.237	49887.2	49.67	0.474	mg/L	0.96%
Ni 231.604	208610.3	3.981	0.0119	mg/L	0.30%
P 0.353	7978.1	1.004	0.0024	mg/L	0.24%
Sb 206.833	27895.7	9.970	0.0407	mg/L	0.41%
Se 196.026	3474.5	1.006	0.0054	mg/L	0.53%
Sn 189.933	9326.7	10.02	0.046	mg/L	0.46%
Ti 334.941	2844430.7	5.000	0.0092	mg/L	0.18%
Tl 190.800	4949.6	2.006	0.0058	mg/L	0.29%
V 292.402	1323484.6	4.992	0.0039	mg/L	0.08%
Zn 206.191	183247.9	1.994	0.0008	mg/L	0.04%

Mean Data ----------

ID: ICV Seq. No.: 5 Sample No.: 1 A/S Pos: 3
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:17:19 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4907378.7	0.953	0.0041	mg/L				0.43%
Ag 328.068	114969.1	0.5102	0.00537	mg/L				1.05%
Al 308.215	250930.6	9.945	0.1084	mg/L				1.09%
As 188.979	2024.3	1.025	0.0039	mg/L				0.38%
B 249.773	236462.3	2.641	0.0123	mg/L				0.47%
Ba 233.527	1434866.9	10.58	0.000	mg/L				0.00%
Be 313.107	1939371.3	0.2559	0.00016	mg/L				0.06%
Ca 315.887	4532966.2	25.55	0.007	mg/L				0.03%
Cd 226.502	71901.5	0.5184	0.00477	mg/L				0.92%
Co 228.616	80817.3	2.574	0.0215	mg/L				0.84%
Cr 267.716	77684.8	0.5123	0.00554	mg/L				1.08%
Cu 324.754	424912.3	1.293	0.0130	mg/L				1.00%
Fe 238.863	165771.8	5.172	0.0491	mg/L				0.95%
K 404.721	1276.6	23.69	1.076	mg/L				4.54%
Mg 279.079	681676.5	25.42	0.254	mg/L				1.00%
Mn 257.610	397408.5	0.7739	0.00702	mg/L				0.91%
Mo 202.030	55406.0	2.502	0.0236	mg/L				0.94%
Na 330.237	24112.0	23.56	0.298	mg/L				1.26%
Ni 231.604	109667.3	2.095	0.0197	mg/L				0.94%
Pb 220.353	4153.1	0.5213	0.00240	mg/L				0.46%
Sb 206.833	13921.7	4.968	0.0100	mg/L				0.20%
Se 196.026	1761.6	0.5133	0.00391	mg/L				0.76%
Sn 189.933	63739.0	69.32	0.524	mg/L				0.76%
*QC exceeds upper limit for Sn 189.933 Recovery = 1386.45% Action = Continue								
Ti 334.941	1424379.9	2.504	0.0016	mg/L				0.06%
Tl 190.800	2596.3	1.056	0.0058	mg/L				0.55%
V 292.402	675704.6	2.547	0.0004	mg/L				0.01%
Zn 206.191	95125.1	1.035	0.0095	mg/L				0.91%

Mean Data ----------

ID: ICB Seq. No.: 6 Sample No.: 3 A/S Pos: 1
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:22:24 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5124389.6	0.995	0.0006	mg/L				0.06%
Ag 328.068	-2118.7	0.0006	0.00008	mg/L				12.31%
Al 308.215	5655.1	-0.0069	0.00027	mg/L				3.96%
As 188.979	-31.0	0.0023	0.00296	mg/L				126.87%
B 249.773	11646.3	0.1116	0.02032	mg/L				18.20%
Ba 233.527	290.5	0.0005	0.00014	mg/L				28.73%
Be 313.107	-3060.9	0.0000	0.00001	mg/L				17.79%
Ca 315.887	2611.6	0.0010	0.00038	mg/L				35.90%
Cd 226.502	-135.2	0.0001	0.00003	mg/L				55.90%
Co 228.616	-233.8	0.0002	0.00006	mg/L				42.43%
Cr 267.716	110.6	0.0003	0.00007	mg/L				23.05%
Cu 324.754	2903.2	0.0024	0.00030	mg/L				12.66%
Fe 238.863	170.6	-0.0015	0.00042	mg/L				27.43%
K 404.721	-483.9	1.859	0.2057	mg/L				11.07%
Mg 279.079	-581.5	-0.0016	0.00001	mg/L				0.47%
Mn 257.610	489.6	0.0000	0.00001	mg/L				34.17%
Mo 202.030	14.7	0.0012	0.00031	mg/L				25.51%
Na 330.237	813.5	-0.0361	0.13254	mg/L				367.01%

i 231.604	-274.4	0.0000	0.00004 mg/L		472.04%
b 220.353	21.0	-0.0001	0.00047 mg/L		770.20%
b 206.833	104.5	0.0209	0.00501 mg/L		24.02%
C ceeds upper limit for Sb 206.833 Action = Continue					
e .026	-22.1	0.0004	0.00163 mg/L		375.34%
n 189.933	226.9	0.0987	0.02132 mg/L		21.60%
i 334.941	-58.5	0.0007	0.00014 mg/L		20.41%
l 190.800	-15.6	0.0014	0.00107 mg/L		76.13%
/ 292.402	783.7	0.0002	0.00001 mg/L		2.41%
n 206.191	57.9	0.0004	0.00009 mg/L		20.96%

Mean Data ----------

ID: CRI Seq. No.: 7 Sample No.: 5 A/S Pos: 6
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:27:28 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	5127194.6	0.996	0.0013	mg/L				0.13%
Ag 328.068	2109.3	0.0190	0.00009	mg/L				0.48%
Al 308.215	5774.3	-0.0021	0.00289	mg/L				140.42%
As 188.979	6.6	0.0210	0.00112	mg/L				5.33%
B 249.773	5805.6	0.0459	0.00380	mg/L				8.27%
Ba 233.527	251.7	0.0002	0.00008	mg/L				39.85%
Be 313.107	71553.9	0.0099	0.00000	mg/L				0.04%
Ca 315.887	4802.7	0.0134	0.00018	mg/L				1.38%
Cd 226.502	1288.3	0.0103	0.00000	mg/L				0.03%
Co 228.616	3088.4	0.1057	0.00006	mg/L				0.06%
Cr 267.716	3149.8	0.0204	0.00011	mg/L				0.54%
Cu 324.754	18521.5	0.0501	0.00003	mg/L				0.06%
Fe 238.863	236.4	0.0005	0.00014	mg/L				25.29%
K 404.721	-494.0	1.734	0.2574	mg/L				14.85%
Mg 279.079	-582.4	-0.0016	0.00059	mg/L				37.22%
Mn 257.610	16429.8	0.0310	0.00020	mg/L				0.65%
Mo 202.030	-3.0	0.0004	0.00001	mg/L				1.65%
30.237	834.6	-0.0148	0.00511	mg/L				34.62%
31.604	4182.5	0.0850	0.00003	mg/L				0.03%
Pb 220.353	74.2	0.0067	0.00010	mg/L				1.47%
Sb 206.833	397.2	0.1257	0.00054	mg/L				0.43%
Se 196.026	24.7	0.0139	0.00089	mg/L				6.39%
Sn 189.933	172.5	0.0393	0.00743	mg/L				18.91%
Ti 334.941	-277.9	0.0003	0.00009	mg/L				27.13%
Tl 190.800	37.7	0.0229	0.00074	mg/L				3.21%
V 292.402	27174.5	0.0998	0.00017	mg/L				0.17%
Zn 206.191	3874.1	0.0420	0.00007	mg/L				0.17%

Mean Data ----------

ID: ICSA Seq. No.: 8 Sample No.: 6 A/S Pos: 7
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:33:05 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	4380706.9	0.851	0.0020	mg/L				0.24%
Ag 328.068	-5310.7	-0.0133	0.00014	mg/L				1.08%
Al 308.215	12371559.2	501.7	3.01	mg/L				0.60%
As 188.979	-103.0	0.0010	0.00589	mg/L				601.60%
B 249.773	16249.9	0.1634	0.00387	mg/L				2.37%
Ba 233.527	-256.5	-0.0035	0.00009	mg/L				2.44%
Be 313.107	-4336.7	-0.0001	0.00002	mg/L				11.79%
Ca 315.887	82587653.3	465.7	3.11	mg/L				0.67%
Cd 226.502	1837.5	0.0033	0.00004	mg/L				1.29%
Co 228.616	-297.0	-0.0019	0.00004	mg/L				2.34%
Cr 267.716	1063.8	0.0066	0.00011	mg/L				1.65%
Cu 324.754	-1510.1	0.0002	0.00053	mg/L				300.92%
Fe 238.863	5907981.0	184.5	0.31	mg/L				0.17%
K 404.721	-2842.4	-2.300	1.5455	mg/L				67.20%
279.079	13738100.5	511.9	3.35	mg/L				0.66%
257.610	-6741.7	0.0018	0.00011	mg/L				6.19%
202.030	44.0	0.0025	0.00001	mg/L				0.43%
Na 330.237	557.9	-0.1480	0.02961	mg/L				20.00%
Ni 231.604	-285.1	-0.0002	0.00005	mg/L				23.28%
Pb 220.353	-310.4	-0.0047	0.00092	mg/L				19.62%

b 206.833	58.5	0.0044	0.00161 mg/L		36.42%
e 196.026	-1.8	-0.0113	0.00007 mg/L		0.61%
n .933	16416.9	15.78	0.022 mg/L		0.14%
i .941	-4330.5	-0.0068	0.00003 mg/L		0.48%
l 190.800	-46.3	-0.0110	0.00312 mg/L		28.34%
/ 292.402	13741.7	0.0491	0.00031 mg/L		0.64%
Zn 206.191	1749.5	0.0050	0.00004 mg/L		0.89%

Mean Data ----------

ID: ICSAB Seq. No.: 9 Sample No.: 7 A/S Pos: 8
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:39:12 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4360046.2	0.847	0.0022	mg/L				0.27%
Ag 328.068	248938.1	1.093	0.0038	mg/L				0.35%
Al 308.215	12454702.7	505.1	0.51	mg/L				0.10%
As 188.979	-118.8	-0.0067	0.00312	mg/L				46.85%
B 249.773	15013.1	0.1495	0.00131	mg/L				0.88%
Ba 233.527	74041.6	0.5442	0.00042	mg/L				0.08%
Be 313.107	3829988.8	0.5049	0.00005	mg/L				0.01%
Ca 315.887	83015393.1	468.1	0.25	mg/L				0.05%
Cd 226.502	133815.3	0.9529	0.00241	mg/L				0.25%
Co 228.616	14344.1	0.4631	0.00139	mg/L				0.30%
Cr 267.716	74789.5	0.4932	0.00087	mg/L				0.18%
Cu 324.754	177283.5	0.5470	0.00368	mg/L				0.67%
Fe 238.863	5943096.3	185.6	0.04	mg/L				0.02%
K 404.721	-2733.7	-0.8022	1.29176	mg/L				161.04%
Mg 279.079	13805696.9	514.4	0.35	mg/L				0.07%
Mn 257.610	249180.3	0.5009	0.00036	mg/L				0.07%
Mo 202.030	47.0	0.0027	0.00007	mg/L				2.45%
Na 330.237	790.4	0.0888	0.01269	mg/L				14.29%
Ni 231.604	48445.5	0.9286	0.00288	mg/L				0.31%
[illegible] 220.353	7337.1	0.9605	0.00258	mg/L				0.27%
[illegible]06.833	52.8	0.0024	0.00155	mg/L				65.33%
[illegible] 196.026	-3.9	-0.0120	0.00017	mg/L				1.41%
Sn 189.933	16457.2	15.81	0.073	mg/L				0.46%
Ti 334.941	-4208.9	-0.0066	0.00000	mg/L				0.08%
Tl 190.800	-54.3	-0.0142	0.00087	mg/L				6.12%
V 292.402	144841.2	0.5439	0.00117	mg/L				0.22%
Zn 206.191	88548.9	0.9495	0.00093	mg/L				0.10%

Mean Data ----------

ID: CCV Seq. No.: 10 Sample No.: 2 A/S Pos: 3
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:44:55 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4946110.8	0.961	0.0016	mg/L				0.17%
Ag 328.068	113602.3	0.5043	0.00285	mg/L				0.56%
Al 308.215	249444.1	9.885	0.0768	mg/L				0.78%
As 188.979	2000.9	1.014	0.0032	mg/L				0.31%
B 249.773	219801.8	2.453	0.0708	mg/L				2.89%
Ba 233.527	1428589.6	10.53	0.007	mg/L				0.06%
Be 313.107	1926894.5	0.2542	0.00003	mg/L				0.01%
Ca 315.887	4509472.9	25.42	0.031	mg/L				0.12%
Cd 226.502	71191.2	0.5133	0.00441	mg/L				0.86%
Co 228.616	79995.3	2.548	0.0196	mg/L				0.77%
Cr 267.716	76735.4	0.5060	0.00424	mg/L				0.84%
Cu 324.754	420042.9	1.278	0.0047	mg/L				0.36%
Fe 238.863	164213.1	5.123	0.0408	mg/L				0.80%
K 404.721	1468.3	26.06	0.130	mg/L				0.50%
Mg 279.079	675564.4	25.19	0.257	mg/L				1.02%
Mn 257.610	393057.1	0.7654	0.00728	mg/L				0.95%
Mo 202.030	54801.4	2.475	0.0234	mg/L				0.94%
[illegible]a 330.237	23977.1	23.43	0.133	mg/L				0.57%
[illegible]i 231.604	108509.7	2.073	0.0156	mg/L				0.75%
Pb 220.353	4109.5	0.5158	0.00102	mg/L				0.20%
Sb 206.833	13722.7	4.896	0.0029	mg/L				0.06%
Se 196.026	1747.3	0.5092	0.00056	mg/L				0.11%
Sn 189.933	63133.9	68.66	0.644	mg/L				0.94%

*QC exceeds upper limit for Sn 189.933 Recovery = 1373.26% Action = Continue

Ti 334.941	1416411.5	2.490	0.0035	mg/L	0.14%
Tl 190.800	2567.8	1.045	0.0037	mg/L	0.36%
V 402	669907.7	2.525	0.0004	mg/L	0.01%
Zn 206.191	94120.9	1.024	0.0083	mg/L	0.81%

Mean Data

ID: CCB Seq. No.: 11 Sample No.: 4 A/S Pos: 1
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:50:01 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	5065025.6	0.984	0.0026	mg/L				0.27%
Ag 328.068	-2159.2	0.0004	0.00008	mg/L				18.12%
Al 308.215	5792.0	-0.0013	0.00193	mg/L				144.12%
As 188.979	-35.1	0.0003	0.00009	mg/L				32.86%
B 249.773	7878.5	0.0692	0.01252	mg/L				18.09%
Ba 233.527	264.4	0.0003	0.00014	mg/L				45.57%
Be 313.107	-3242.9	0.0000	0.00000	mg/L				4.50%
Ca 315.887	3959.0	0.0086	0.00252	mg/L				29.14%
Cd 226.502	-131.3	0.0001	0.00003	mg/L				34.32%
Co 228.616	-237.4	0.0000	0.00023	mg/L				671.93%
Cr 267.716	142.3	0.0005	0.00011	mg/L				20.92%
Cu 324.754	2734.1	0.0019	0.00036	mg/L				19.11%
Fe 238.863	291.5	0.0023	0.00015	mg/L				6.45%
K 404.721	-418.3	2.671	0.1701	mg/L				6.37%
*QC exceeds upper limit for K 404.721 Action = Continue								
Mg 279.079	-502.4	0.0014	0.00021	mg/L				14.76%
Mn 257.610	436.8	-0.0001	0.00001	mg/L				8.67%
Mo 202.030	7.9	0.0009	0.00038	mg/L				41.75%
Na 330.237	850.7	0.0015	0.07151	mg/L				>999.9%
Ni 231.604	-276.6	0.0000	0.00002	mg/L				65.62%
Pb 220.353	20.3	-0.0001	0.00018	mg/L				121.30%
Sb 206.833	93.1	0.0168	0.00253	mg/L				15.04%
exceeds upper limit for Sb 206.833 Action = Continue								
Se 196.026	-24.2	-0.0002	0.00031	mg/L				184.37%
Sn 189.933	241.1	0.1141	0.02625	mg/L				23.01%
Ti 334.941	-227.6	0.0004	0.00011	mg/L				26.06%
Tl 190.800	-16.1	0.0012	0.00005	mg/L				4.51%
V 292.402	758.9	0.0001	0.00018	mg/L				123.01%
Zn 206.191	61.5	0.0005	0.00006	mg/L				12.36%

Mean Data

ID: PBW-M2620136 Seq. No.: 12 Sample No.: 1 A/S Pos: 9
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 4:55:02 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	5281782.5	1.026	0.0065	mg/L				0.64%
Ag 328.068	-2209.6	0.0002	0.00002	mg/L				9.03%
Al 308.215	5603.6	-0.0090	0.00382	mg/L				42.48%
As 188.979	-33.7	0.0009	0.00084	mg/L				88.55%
B 249.773	4673.7	0.0332	0.00473	mg/L				14.24%
Ba 233.527	158.8	-0.0005	0.00004	mg/L				8.45%
Be 313.107	-3165.5	0.0000	0.00001	mg/L				29.46%
Ca 315.887	6225.9	0.0214	0.00015	mg/L				0.71%
Cd 226.502	-125.0	0.0001	0.00002	mg/L				12.86%
Co 228.616	-236.1	0.0001	0.00024	mg/L				311.48%
Cr 267.716	158.0	0.0006	0.00001	mg/L				1.24%
Cu 324.754	2530.6	0.0012	0.00029	mg/L				23.32%
Fe 238.863	115.1	-0.0032	0.00049	mg/L				15.17%
K 404.721	-388.4	3.043	1.1658	mg/L				38.31%
Mg 279.079	-457.0	0.0031	0.00099	mg/L				31.94%
Mn 257.610	229.7	-0.0005	0.00001	mg/L				1.09%
Mo 202.030	-7.0	0.0002	0.00003	mg/L				14.34%
Na 330.237	840.6	-0.0087	0.01793	mg/L				206.05%
Ni 231.604	-272.9	0.0000	0.00002	mg/L				54.10%
Pb 220.353	20.7	-0.0001	0.00024	mg/L				249.64%
Sb 206.833	59.5	0.0047	0.00011	mg/L				2.36%
Se 196.026	-20.8	0.0008	0.00177	mg/L				215.61%
Sn 189.933	165.4	0.0316	0.00176	mg/L				5.55%

Ti 334.941	-345.4	0.0002	0.00012 mg/L	61.12%
Tl 190.800	-17.2	0.0008	0.00032 mg/L	41.72%
V 292.402	700.4	-0.0001	0.00006 mg/L	75.72%
Zn 206.191	212.3	0.0021	0.00010 mg/L	4.90%

Mean Data

ID: LCSW-M2620136 Seq. No.: 13 Sample No.: 2 A/S Pos: 10
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:00:08 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	5110756.0	0.993	0.0063	mg/L				0.63%
Ag 328.068	9116.2	0.0495	0.00002	mg/L				0.05%
Al 308.215	52936.5	1.912	0.0046	mg/L				0.24%
As 188.979	41.3	0.0383	0.00016	mg/L				0.43%
B 249.773	87063.1	0.9600	0.01789	mg/L				1.86%
Ba 233.527	288178.0	2.123	0.0000	mg/L				0.00%
Be 313.107	370536.7	0.0492	0.00004	mg/L				0.07%
Ca 315.887	359653.9	2.014	0.0037	mg/L				0.18%
Cd 226.502	6974.2	0.0512	0.00022	mg/L				0.42%
Co 228.616	16256.0	0.5238	0.00173	mg/L				0.33%
Cr 267.716	30354.3	0.1999	0.00044	mg/L				0.22%
Cu 324.754	88333.9	0.2636	0.00182	mg/L				0.69%
Fe 238.863	32680.2	1.014	0.0004	mg/L				0.04%
K 404.721	1276.7	23.69	0.386	mg/L				1.63%
Mg 279.079	52231.3	1.966	0.0041	mg/L				0.21%
Mn 257.610	261001.8	0.5079	0.00015	mg/L				0.03%
Mo 202.030	10780.6	0.4873	0.00055	mg/L				0.11%
Na 330.237	18178.6	17.55	0.081	mg/L				0.46%
Ni 231.604	27076.3	0.5213	0.00055	mg/L				0.11%
Pb 220.353	4162.4	0.5225	0.00256	mg/L				0.49%
Sb 206.833	1407.7	0.4874	0.00031	mg/L				0.06%
Se 196.026	3207.7	0.9291	0.00372	mg/L				0.40%
Sn 189.933	993.5	0.9342	0.01200	mg/L				1.28%
Ti 334.941	281985.5	0.4964	0.00027	mg/L				0.05%
Tl 190.800	5031.6	2.039	0.0155	mg/L				0.76%
V 292.402	131869.6	0.4949	0.00059	mg/L				0.12%
Zn 206.191	47807.5	0.5201	0.00096	mg/L				0.19%

Mean Data

ID: 523463 Seq. No.: 14 Sample No.: 3 A/S Pos: 11
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:05:29 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4900292.9	0.952	0.0011	mg/L				0.11%
Ag 328.068	-2690.1	-0.0019	0.00009	mg/L				4.92%
Al 308.215	7235.9	0.0572	0.00069	mg/L				1.21%
As 188.979	-36.2	-0.0003	0.00049	mg/L				182.74%
B 249.773	8424.5	0.0754	0.00842	mg/L				11.17%
Ba 233.527	4665.6	0.0327	0.00009	mg/L				0.27%
Be 313.107	-3629.7	0.0000	0.00000	mg/L				0.34%
Ca 315.887	48556392.6	273.8	0.66	mg/L				0.24%
Cd 226.502	-127.9	0.0001	0.00002	mg/L				21.31%
Co 228.616	-238.6	0.0000	0.00020	mg/L				>999.9%
Cr 267.716	390.0	0.0021	0.00001	mg/L				0.58%
Cu 324.754	32573.5	0.0931	0.00101	mg/L				1.08%
Fe 238.863	15923.1	0.4906	0.00417	mg/L				0.85%
K 404.721	-242.9	4.847	0.2861	mg/L				5.90%
Mg 279.079	112861.6	4.225	0.0178	mg/L				0.42%
Mn 257.610	17230.3	0.0326	0.00025	mg/L				0.75%
Mo 202.030	23.7	0.0016	0.00026	mg/L				16.11%
Na 330.237	72153.2	72.23	0.096	mg/L				0.13%
Ni 231.604	-201.7	0.0014	0.00026	mg/L				18.71%
Pb 220.353	26.5	0.0006	0.00048	mg/L				75.14%
Sb 206.833	57.2	0.0039	0.00077	mg/L				19.59%
196.026	-26.7	-0.0009	0.00166	mg/L				188.90%
189.933	1477.7	1.462	0.0044	mg/L				0.30%
Ti 334.941	-1937.5	-0.0026	0.00009	mg/L				3.39%
Tl 190.800	-14.3	0.0019	0.00054	mg/L				28.52%
V 292.402	1012.7	0.0011	0.00009	mg/L				7.87%

Zn 206.191	7115.5	0.0772	0.00021 mg/L	0.27%

Mean Data

I 23463L
Sample Qty: 1.0000 mL
Seq. No.: 15 Sample No.: 4 A/S Pos: 12
Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:10:49 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5105912.1	0.992	0.0041	mg/L				0.42%
Ag 328.068	-2299.3	-0.0002	0.00017	mg/L				99.70%
Al 308.215	6143.1	0.0129	0.00421	mg/L				32.66%
As 188.979	-34.5	0.0006	0.00004	mg/L				7.35%
B 249.773	2803.7	0.0121	0.00013	mg/L				1.09%
Ba 233.527	979.6	0.0056	0.00009	mg/L				1.60%
Be 313.107	-3396.9	0.0000	0.00001	mg/L				233.43%
Ca 315.887	10276102.5	57.94	0.074	mg/L				0.13%
Cd 226.502	-125.7	0.0001	0.00002	mg/L				17.08%
Co 228.616	-234.2	0.0001	0.00006	mg/L				46.97%
Cr 267.716	161.9	0.0006	0.00003	mg/L				4.40%
Cu 324.754	9153.6	0.0215	0.00138	mg/L				6.42%
Fe 238.863	2938.2	0.0849	0.00048	mg/L				0.56%
K 404.721	-483.3	1.866	0.1065	mg/L				5.70%
Mg 279.079	22950.2	0.8753	0.01332	mg/L				1.52%
Mn 257.610	3435.8	0.0057	0.00002	mg/L				0.27%
Mo 202.030	-2.7	0.0004	0.00002	mg/L				4.26%
Na 330.237	13077.9	12.39	0.238	mg/L				1.92%
Ni 231.604	-262.3	0.0002	0.00009	mg/L				39.49%
Pb 220.353	24.5	0.0004	0.00075	mg/L				192.37%
Sb 206.833	47.8	0.0006	0.00003	mg/L				5.38%
Se 196.026	-16.4	0.0021	0.00216	mg/L				103.28%
Sn 189.933	176.2	0.0434	0.00594	mg/L				13.69%
Ti 334.941	-701.7	-0.0004	0.00000	mg/L				0.29%
Tl 190.800	-14.9	0.0017	0.00081	mg/L				48.82%
V 292.402	740.0	0.0001	0.00019	mg/L				245.69%
Zn 206.191	1534.3	0.0165	0.00004	mg/L				0.22%

Mean Data

ID: PBW-M2620141
Sample Qty: 1.0000 mL
Seq. No.: 16 Sample No.: 5 A/S Pos: 13
Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:15:53 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5171298.1	1.004	0.0044	mg/L				0.43%
Ag 328.068	-2248.9	0.0000	0.00013	mg/L				295.07%
Al 308.215	5725.6	-0.0040	0.00071	mg/L				17.53%
As 188.979	-30.1	0.0028	0.00026	mg/L				9.56%
B 249.773	2449.6	0.0082	0.00101	mg/L				12.35%
Ba 233.527	264.2	0.0003	0.00005	mg/L				15.72%
Be 313.107	-3300.8	0.0000	0.00002	mg/L				207.06%
Ca 315.887	728.4	-0.0096	0.00141	mg/L				14.73%
Cd 226.502	-132.6	0.0001	0.00003	mg/L				38.88%
Co 228.616	-229.0	0.0003	0.00003	mg/L				9.21%
Cr 267.716	99.0	0.0002	0.00005	mg/L				23.44%
Cu 324.754	2421.2	0.0009	0.00024	mg/L				26.01%
Fe 238.863	174.4	-0.0014	0.00003	mg/L				2.16%
K 404.721	-295.5	4.194	0.8856	mg/L				21.12%
Mg 279.079	-552.0	-0.0005	0.00070	mg/L				154.90%
Mn 257.610	387.4	-0.0002	0.00000	mg/L				1.71%
Mo 202.030	-12.1	0.0000	0.00006	mg/L				486.33%
Na 330.237	796.6	-0.0533	0.01959	mg/L				36.78%
Ni 231.604	-269.7	0.0001	0.00010	mg/L				98.40%
Pb 220.353	21.8	0.0000	0.00009	mg/L				195.92%
Sb 206.833	50.0	0.0013	0.00043	mg/L				31.71%
Se 196.026	-20.0	0.0010	0.00001	mg/L				0.66%
Sn 189.933	123.1	-0.0145	0.00566	mg/L				39.01%
Ti 334.941	-410.6	0.0001	0.00008	mg/L				88.07%
Tl 190.800	-17.8	0.0005	0.00097	mg/L				191.73%
V 292.402	705.7	-0.0001	0.00043	mg/L				799.65%
Zn 206.191	141.9	0.0013	0.00011	mg/L				8.30%

Mean Data

ID: LCSW-M2620141 Seq. No.: 17 Sample No.: 6 A/S Pos: 14
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:21:01 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5126308.2	0.996	0.0005	mg/L				0.05%
Ag 328.068	9484.5	0.0511	0.00045	mg/L				0.89%
Al 308.215	54361.4	1.969	0.0280	mg/L				1.42%
As 188.979	41.1	0.0382	0.00370	mg/L				9.67%
B 249.773	90293.9	0.9963	0.00644	mg/L				0.65%
Ba 233.527	291444.7	2.147	0.0189	mg/L				0.88%
Be 313.107	381243.2	0.0507	0.00003	mg/L				0.05%
Ca 315.887	363819.1	2.038	0.0139	mg/L				0.68%
Cd 226.502	7128.8	0.0523	0.00005	mg/L				0.09%
Co 228.616	16572.7	0.5339	0.00449	mg/L				0.84%
Cr 267.716	30730.6	0.2024	0.00164	mg/L				0.81%
Cu 324.754	89592.4	0.2675	0.00318	mg/L				1.19%
Fe 238.863	33167.0	1.029	0.0090	mg/L				0.88%
~~K 404.721~~	1477.8	26.18	0.284	mg/L				1.09%
Mg 279.079	53157.1	2.001	0.0099	mg/L				0.49%
Mn 257.610	266724.2	0.5191	0.00042	mg/L				0.08%
Mo 202.030	10837.8	0.4899	0.00407	mg/L				0.83%
Na 330.237	18564.9	17.94	0.231	mg/L				1.29%
Ni 231.604	27547.0	0.5303	0.00428	mg/L				0.81%
Pb 220.353	4192.6	0.5263	0.00059	mg/L				0.11%
Sb 206.833	1440.4	0.4991	0.00111	mg/L				0.22%
Se 196.026	3539.4	1.024	0.0015	mg/L				0.15%
Sn 189.933	939.2	0.8751	0.00063	mg/L				0.07%
Ti 334.941	287385.7	0.5059	0.00015	mg/L				0.03%
Tl 190.800	5104.4	2.069	0.0009	mg/L				0.04%
V 292.402	133816.6	0.5023	0.00449	mg/L				0.89%
Zn 206.191	48773.8	0.5306	0.00333	mg/L				0.63%

Mean Data

524710 Seq. No.: 18 Sample No.: 7 A/S Pos: 15
le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:26:09 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5179307.6	1.006	0.0052	mg/L				0.52%
Ag 328.068	-2302.5	-0.0002	0.00033	mg/L				177.75%
Al 308.215	8489.1	0.1081	0.00093	mg/L				0.86%
As 188.979	-40.0	-0.0022	0.00174	mg/L				80.15%
B 249.773	5667.6	0.0444	0.00613	mg/L				13.81%
Ba 233.527	1280.9	0.0078	0.00002	mg/L				0.30%
Be 313.107	-3332.7	0.0000	0.00000	mg/L				73.64%
Ca 315.887	2023485.2	11.40	0.005	mg/L				0.04%
Cd 226.502	-62.1	0.0006	0.00002	mg/L				4.10%
Co 228.616	-232.4	0.0002	0.00003	mg/L				14.81%
Cr 267.716	127.3	0.0004	0.00007	mg/L				17.55%
Cu 324.754	2149.7	0.0001	0.00017	mg/L				225.19%
Fe 238.863	280805.5	8.765	0.0692	mg/L				0.79%
K 404.721	-299.1	4.150	0.1951	mg/L				4.70%
Mg 279.079	89196.1	3.344	0.0187	mg/L				0.56%
Mn 257.610	225981.6	0.4397	0.00285	mg/L				0.65%
Mo 202.030	-3.8	0.0004	0.00011	mg/L				27.37%
Na 330.237	3275.5	2.458	0.0418	mg/L				1.70%
Ni 231.604	-260.3	0.0003	0.00000	mg/L				0.05%
Pb 220.353	22.8	0.0002	0.00028	mg/L				164.09%
Sb 206.833	50.8	0.0016	0.00004	mg/L				2.64%
Se 196.026	-17.9	0.0016	0.00165	mg/L				100.52%
Sn 189.933	1375.1	1.350	0.0120	mg/L				0.89%
Ti 334.941	2107.1	0.0045	0.00003	mg/L				0.70%
Tl 190.800	-23.5	-0.0018	0.00017	mg/L				9.72%
V 292.402	1298.0	0.0022	0.00013	mg/L				5.86%
Zn 206.191	261.8	0.0026	0.00004	mg/L				1.56%

an Data

ID: 524710D Seq. No.: 19 Sample No.: 8 A/S Pos: 16
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:31:15 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y .030	5290418.9	1.027	0.0055	mg/L				0.53%
Ag 328.068	-2319.0	-0.0003	0.00030	mg/L				117.08%
Al 308.215	8181.6	0.0956	0.00163	mg/L				1.71%
As 188.979	-38.1	-0.0012	0.00092	mg/L				74.28%
B 249.773	3916.0	0.0247	0.00090	mg/L				3.64%
Ba 233.527	1253.5	0.0076	0.00009	mg/L				1.17%
Be 313.107	-3260.5	0.0000	0.00001	mg/L				41.75%
Ca 315.887	1997895.5	11.25	0.008	mg/L				0.07%
Cd 226.502	-63.4	0.0006	0.00003	mg/L				5.38%
Co 228.616	-224.7	0.0004	0.00000	mg/L				0.41%
Cr 267.716	115.2	0.0003	0.00001	mg/L				4.35%
Cu 324.754	2030.7	-0.0003	0.00015	mg/L				51.26%
Fe 238.863	275111.4	8.587	0.0385	mg/L				0.45%
K 404.721	-301.7	4.118	1.6925	mg/L				41.10%
Mg 279.079	87513.4	3.281	0.0087	mg/L				0.27%
Mn 257.610	221007.6	0.4300	0.00245	mg/L				0.57%
Mo 202.030	-4.8	0.0003	0.00007	mg/L				20.07%
Na 330.237	3155.2	2.336	0.0710	mg/L				3.04%
Ni 231.604	-259.9	0.0003	0.00006	mg/L				21.29%
Pb 220.353	23.4	0.0002	0.00032	mg/L				126.94%
Sb 206.833	45.3	-0.0003	0.00122	mg/L				359.31%
Se 196.026	-19.9	0.0011	0.00062	mg/L				58.01%
Sn 189.933	1347.9	1.320	0.0180	mg/L				1.36%
Ti 334.941	1899.0	0.0041	0.00006	mg/L				1.45%
Tl 190.800	-26.7	-0.0031	0.00083	mg/L				26.74%
V 292.402	1234.0	0.0019	0.00004	mg/L				2.28%
Zn 206.191	241.4	0.0024	0.00005	mg/L				1.87%

Mean Data

ID: 524710S Seq. No.: 20 Sample No.: 9 A/S Pos: 17
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:36:25 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5087570.4	0.988	0.0001	mg/L				0.01%
Ag 328.068	9189.9	0.0498	0.00023	mg/L				0.45%
Al 308.215	56939.0	2.074	0.0113	mg/L				0.55%
As 188.979	39.0	0.0372	0.00168	mg/L				4.51%
B 249.773	95411.6	1.054	0.0103	mg/L				0.98%
Ba 233.527	291853.3	2.150	0.0066	mg/L				0.31%
Be 313.107	379696.6	0.0504	0.00002	mg/L				0.04%
Ca 315.887	2432875.7	13.71	0.047	mg/L				0.34%
Cd 226.502	7155.1	0.0525	0.00024	mg/L				0.46%
Co 228.616	16361.9	0.5272	0.00100	mg/L				0.19%
Cr 267.716	30597.1	0.2015	0.00085	mg/L				0.42%
Cu 324.754	88240.3	0.2633	0.00027	mg/L				0.10%
Fe 238.863	317564.7	9.913	0.0324	mg/L				0.33%
K 404.721	1493.1	26.37	0.288	mg/L				1.09%
Mg 279.079	144129.8	5.390	0.0213	mg/L				0.40%
Mn 257.610	490943.2	0.9563	0.00098	mg/L				0.10%
Mo 202.030	10813.1	0.4888	0.00295	mg/L				0.60%
Na 330.237	21575.0	20.99	0.067	mg/L				0.32%
Ni 231.604	27181.4	0.5233	0.00134	mg/L				0.26%
Pb 220.353	4141.4	0.5199	0.00073	mg/L				0.14%
Sb 206.833	1441.1	0.4994	0.00176	mg/L				0.35%
Se 196.026	3527.4	1.021	0.0005	mg/L				0.05%
Sn 189.933	2104.6	2.145	0.0048	mg/L				0.22%
Ti 334.941	288202.5	0.5073	0.00145	mg/L				0.29%
Tl 190.800	5057.9	2.050	0.0035	mg/L				0.17%
V 292.402	134182.9	0.5037	0.00255	mg/L				0.51%
Zn 206.191	47735.5	0.5193	0.00080	mg/L				0.15%

Mean Data

D: 524710A Seq. No.: 21 Sample No.: 10 A/S Pos: 18
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:41:39 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD

Y 371.030	4991598.2	0.969	0.0033	mg/L	0.34%
Ag 328.068	8656.7	0.0475	0.00009	mg/L	0.20%
Al 308.215	55324.4	2.008	0.0109	mg/L	0.54%
As 188.979	36.1	0.0357	0.00278	mg/L	7.80%
B 249.773	96516.6	1.066	0.0157	mg/L	1.47%
Ba 233.527	278474.0	2.051	0.0120	mg/L	0.59%
Be 313.107	366512.9	0.0487	0.00003	mg/L	0.06%
Ca 315.887	2387887.1	13.45	0.017	mg/L	0.13%
Cd 226.502	6763.4	0.0497	0.00005	mg/L	0.10%
Co 228.616	15627.9	0.5039	0.00290	mg/L	0.58%
Cr 267.716	29119.1	0.1918	0.00060	mg/L	0.31%
Cu 324.754	84633.6	0.2523	0.00042	mg/L	0.17%
Fe 238.863	307041.9	9.585	0.0465	mg/L	0.49%
K 404.721	1431.5	25.61	0.568	mg/L	2.22%
Mg 279.079	138622.6	5.185	0.0287	mg/L	0.55%
Mn 257.610	479701.8	0.9344	0.00079	mg/L	0.08%
Mo 202.030	10430.0	0.4715	0.00286	mg/L	0.61%
Na 330.237	20720.3	20.13	0.118	mg/L	0.59%
Ni 231.604	25954.2	0.4999	0.00205	mg/L	0.41%
Pb 220.353	3969.0	0.4981	0.00074	mg/L	0.15%
Sb 206.833	1393.7	0.4824	0.00116	mg/L	0.24%
Se 196.026	3423.8	0.9912	0.00328	mg/L	0.33%
Sn 189.933	2050.7	2.087	0.0022	mg/L	0.11%
Ti 334.941	282605.4	0.4975	0.00073	mg/L	0.15%
Tl 190.800	4872.3	1.975	0.0015	mg/L	0.08%
V 292.402	127835.3	0.4797	0.00237	mg/L	0.49%
Zn 206.191	45501.6	0.4950	0.00180	mg/L	0.36%

Mean Data ----------

ID: CCV Seq. No.: 22 Sample No.: 2 A/S Pos: 3
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:46:56 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
71.030	4943860.0	0.960	0.0026	mg/L				0.27%
328.068	114821.6	0.5096	0.00239	mg/L				0.47%
Al 308.215	251952.7	9.987	0.0687	mg/L				0.69%
As 188.979	2029.0	1.028	0.0003	mg/L				0.03%
B 249.773	227562.2	2.540	0.0647	mg/L				2.55%
Ba 233.527	1431206.0	10.55	0.002	mg/L				0.02%
Be 313.107	1929925.4	0.2546	0.00016	mg/L				0.06%
Ca 315.887	4526390.9	25.51	0.002	mg/L				0.01%
Cd 226.502	71297.9	0.5140	0.00072	mg/L				0.14%
Co 228.616	81195.0	2.586	0.0059	mg/L				0.23%
Cr 267.716	77358.3	0.5101	0.00026	mg/L				0.05%
Cu 324.754	424346.0	1.291	0.0115	mg/L				0.89%
Fe 238.863	164490.5	5.132	0.0015	mg/L				0.03%
K 404.721	1782.8	29.96	1.930	mg/L				6.44%
*QC exceeds upper limit for K 404.721 Recovery = 119.86% Action = Continue								
Mg 279.079	679625.9	25.34	0.009	mg/L				0.04%
Mn 257.610	399331.7	0.7777	0.00258	mg/L				0.33%
Mo 202.030	54901.6	2.479	0.0092	mg/L				0.37%
Na 330.237	24153.0	23.60	0.204	mg/L				0.87%
Ni 231.604	108964.8	2.082	0.0027	mg/L				0.13%
Pb 220.353	4111.3	0.5161	0.00101	mg/L				0.20%
Sb 206.833	13890.4	4.956	0.0007	mg/L				0.01%
Se 196.026	1749.1	0.5097	0.00306	mg/L				0.60%
Sn 189.933	63583.3	69.15	0.184	mg/L				0.27%
*QC exceeds upper limit for Sn 189.933 Recovery = 1383.06% Action = Continue								
Ti 334.941	1434383.1	2.522	0.0034	mg/L				0.14%
Tl 190.800	2582.5	1.050	0.0035	mg/L				0.34%
V 292.402	675648.9	2.547	0.0019	mg/L				0.08%
Zn 206.191	94230.7	1.025	0.0010	mg/L				0.09%

Mean Data ----------

ID: CCB Seq. No.: 23 Sample No.: 4 A/S Pos: 1
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:52:02 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5124280.9	0.995	0.0031	mg/L				0.31%

Ag 328.068	-2179.7	0.0003	0.00030	mg/L	86.19%
Al 308.215	5634.6	-0.0077	0.00258	mg/L	33.41%
As 188.979	-34.5	0.0006	0.00069	mg/L	118.41%
B 773	7414.2	0.0640	0.01390	mg/L	21.72%
Ba 233.527	261.8	0.0003	0.00010	mg/L	36.55%
Be 313.107	-3288.9	0.0000	0.00000	mg/L	5.24%
Ca 315.887	3919.7	0.0084	0.00242	mg/L	28.67%
Cd 226.502	-135.9	0.0001	0.00000	mg/L	4.65%
Co 228.616	-232.0	0.0002	0.00005	mg/L	22.45%
Cr 267.716	103.2	0.0003	0.00002	mg/L	7.89%
Cu 324.754	2343.3	0.0007	0.00012	mg/L	17.88%
Fe 238.863	112.4	-0.0033	0.00034	mg/L	10.16%
K 404.721	-272.6	4.479	0.5270	mg/L	11.77%
*QC exceeds upper limit for K 404.721 Action = Continue					
Mg 279.079	-578.0	-0.0014	0.00042	mg/L	29.29%
Mn 257.610	436.3	-0.0001	0.00001	mg/L	5.93%
Mo 202.030	12.9	0.0011	0.00026	mg/L	22.84%
Na 330.237	859.8	0.0107	0.03814	mg/L	355.75%
Ni 231.604	-275.3	0.0000	0.00010	mg/L	>999.9%
Pb 220.353	21.1	0.0000	0.00027	mg/L	555.06%
Sb 206.833	89.7	0.0156	0.00336	mg/L	21.56%
*QC exceeds upper limit for Sb 206.833 Action = Continue					
Se 196.026	-21.0	0.0008	0.00295	mg/L	387.90%
Sn 189.933	215.5	0.0862	0.01958	mg/L	22.70%
Ti 334.941	-197.2	0.0005	0.00019	mg/L	40.36%
Tl 190.800	-15.8	0.0013	0.00005	mg/L	3.96%
V 292.402	716.7	0.0000	0.00013	mg/L	>999.9%
Zn 206.191	36.3	0.0002	0.00014	mg/L	74.18%

Mean Data

ID: 524710L Seq. No.: 24 Sample No.: 11 A/S Pos: 19
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 5:57:07 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5211358.1	1.012	0.0021	mg/L				0.20%
Ag 328.068	-2268.9	0.0000	0.00013	mg/L				308.43%
Al 308.215	6201.7	0.0153	0.00276	mg/L				18.04%
As 188.979	-32.5	0.0016	0.00093	mg/L				58.97%
B 249.773	3002.9	0.0144	0.00130	mg/L				9.03%
Ba 233.527	266.2	0.0003	0.00004	mg/L				11.98%
Be 313.107	-3352.7	0.0000	0.00001	mg/L				>999.9%
Ca 315.887	408815.2	2.292	0.0106	mg/L				0.46%
Cd 226.502	-121.3	0.0002	0.00002	mg/L				10.08%
Co 228.616	-237.4	0.0000	0.00002	mg/L				55.57%
Cr 267.716	67.6	0.0000	0.00016	mg/L				>999.9%
Cu 324.754	2442.8	0.0010	0.00005	mg/L				5.14%
Fe 238.863	56806.3	1.768	0.0099	mg/L				0.56%
K 404.721	-307.0	4.052	0.6279	mg/L				15.50%
Mg 279.079	17419.9	0.6692	0.00218	mg/L				0.33%
Mn 257.610	45469.3	0.0877	0.00035	mg/L				0.40%
Mo 202.030	-6.4	0.0003	0.00002	mg/L				7.70%
Na 330.237	1204.1	0.3595	0.05498	mg/L				15.29%
Ni 231.604	-257.2	0.0003	0.00008	mg/L				24.66%
Pb 220.353	18.7	-0.0003	0.00015	mg/L				43.53%
Sb 206.833	54.3	0.0029	0.00130	mg/L				44.90%
Se 196.026	-17.9	0.0017	0.00196	mg/L				118.45%
Sn 189.933	339.8	0.2217	0.00677	mg/L				3.05%
Ti 334.941	257.7	0.0013	0.00032	mg/L				25.47%
Tl 190.800	-18.2	0.0003	0.00075	mg/L				221.58%
V 292.402	851.3	0.0005	0.00011	mg/L				21.58%
Zn 206.191	139.1	0.0013	0.00004	mg/L				3.16%

Mean Data

ID: 524711 Seq. No.: 25 Sample No.: 12 A/S Pos: 20
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:02:19 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4988769.8	0.969	0.0005	mg/L				0.05%
Ag 328.068	-3006.8	-0.0033	0.00015	mg/L				4.70%

l 308.215	9865.3	0.1639	0.00156	mg/L	0.95%
s 188.979	-56.6	0.0014	0.00020	mg/L	13.90%
773	14009.6	0.1382	0.00045	mg/L	0.32%
a .527	6159.7	0.0438	0.00001	mg/L	0.03%
e 313.107	-3540.0	0.0000	0.00001	mg/L	49.00%
a 315.887	8289475.9	46.73	0.068	mg/L	0.15%
d 226.502	369.4	0.0037	0.00009	mg/L	2.36%
o 228.616	-166.1	0.0023	0.00023	mg/L	9.84%
r 267.716	137.2	0.0005	0.00004	mg/L	8.48%
u 324.754	1189.4	-0.0029	0.00012	mg/L	4.26%
e 238.863	2034581.9	63.55	0.075	mg/L	0.12%
404.721	-177.1	14.30	2.364	mg/L	16.53%
g 279.079	311737.2	11.64	0.080	mg/L	0.69%
n 257.610	1044039.0	2.035	0.0010	mg/L	0.05%
o 202.030	-16.7	-0.0002	0.00021	mg/L	109.37%
a 330.237	6589.5	5.814	0.0650	mg/L	1.12%
i 231.604	-223.0	0.0010	0.00005	mg/L	5.52%
b 220.353	32.1	0.0013	0.00030	mg/L	22.48%
b 206.833	47.4	0.0004	0.00033	mg/L	76.28%
e 196.026	-17.1	0.0019	0.00181	mg/L	96.56%
n 189.933	3875.1	4.075	0.0018	mg/L	0.04%
i 334.941	1856.1	0.0041	0.00007	mg/L	1.62%
l 190.800	-61.0	-0.0169	0.00098	mg/L	5.78%
292.402	4666.9	0.0149	0.00025	mg/L	1.71%
n 206.191	350.8	0.0036	0.00001	mg/L	0.40%

Mean Data ----------

ID: 524988 Seq. No.: 26 Sample No.: 13 A/S Pos: 21
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:07:41 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4696564.6	0.912	0.0079	mg/L				0.87%
Ar 9.068	-2528.3	-0.0012	0.00010	mg/L				8.97%
A. .215	10364.5	0.1842	0.00462	mg/L				2.51%
As 188.979	-37.4	-0.0009	0.00333	mg/L				377.78%
B 249.773	10272.1	0.0962	0.00037	mg/L				0.39%
Ba 233.527	20954.1	0.1528	0.00174	mg/L				1.14%
Be 313.107	-3734.9	0.0000	0.00000	mg/L				0.14%
Ca 315.887	25801609.4	145.5	1.63	mg/L				1.12%
Cd 226.502	-76.3	0.0005	0.00003	mg/L				5.26%
Co 228.616	-28.1	0.0067	0.00006	mg/L				0.86%
Cr 267.716	389.5	0.0021	0.00009	mg/L				4.26%
Cu 324.754	3703.4	0.0048	0.00022	mg/L				4.47%
Fe 238.863	163042.1	5.086	0.0547	mg/L				1.08%
K 404.721	238.8	10.82	0.772	mg/L				7.13%
Mg 279.079	690740.4	25.76	0.058	mg/L				0.22%
Mn 257.610	89728.5	0.1740	0.00207	mg/L				1.19%
Mo 202.030	82.8	0.0043	0.00009	mg/L				2.11%
~~Na 330.237~~	793503.1	802.9 ir	0.07	mg/L				0.01%
Ni 231.604	1562.1	0.0350	0.00043	mg/L				1.24%
Pb 220.353	36.7	0.0019	0.00017	mg/L				8.59%
Sb 206.833	53.2	0.0025	0.00061	mg/L				24.04%
Se 196.026	-20.1	0.0010	0.00015	mg/L				14.86%
Sn 189.933	6730.8	7.188	0.0680	mg/L				0.95%
Ti 334.941	-96.4	0.0006	0.00004	mg/L				5.56%
Tl 190.800	-25.5	-0.0026	0.00005	mg/L				1.79%
V 292.402	1266.8	0.0021	0.00006	mg/L				2.93%
Zn 206.191	1372.8	0.0147	0.00006	mg/L				0.41%

Mean Data ----------

ID: 524989 Seq. No.: 27 Sample No.: 14 A/S Pos: 22
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:13:12 PM

nt	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y .1.030	4933044.2	0.958	0.0009	mg/L				0.10%
Ag 328.068	-2578.3	-0.0014	0.00022	mg/L				15.80%
Al 308.215	7494.6	0.0677	0.00179	mg/L				2.64%
As 188.979	-35.9	-0.0001	0.00040	mg/L				330.08%
B 249.773	16778.9	0.1694	0.00143	mg/L				0.84%

233.527	15193.9	0.1104	0.00016	mg/L	0.15%
3 07	-3669.1	0.0000	0.00001	mg/L	21.87%
3 87	30672758.6	173.0	0.60	mg/L	0.35%
226.502	-83.6	0.0004	0.00001	mg/L	2.05%
228.616	-74.2	0.0052	0.00009	mg/L	1.70%
267.716	837.4	0.0051	0.00007	mg/L	1.44%
324.754	2367.4	0.0007	0.00014	mg/L	19.45%
238.863	222321.2	6.938	0.0057	mg/L	0.08%
404.721	2.7	7.892	0.3774	mg/L	4.78%
279.079	1340103.5	49.95	0.024	mg/L	0.05%
257.610	52242.4	0.1009	0.00029	mg/L	0.29%
202.030	30.3	0.0019	0.00000	mg/L	0.18%
~~330.~~237	180012.4	181.5 LR	0.01	mg/L	0.01%
231.604	-25.4	0.0048	0.00022	mg/L	4.64%
220.353	28.5	0.0009	0.00007	mg/L	7.95%
206.833	51.2	0.0018	0.00139	mg/L	78.42%
196.026	-19.0	0.0013	0.00015	mg/L	11.24%
189.933	8846.2	9.493	0.0044	mg/L	0.05%
334.941	-1620.2	-0.0020	0.00003	mg/L	1.41%
190.800	-22.8	-0.0015	0.00076	mg/L	49.80%
292.402	1212.4	0.0019	0.00020	mg/L	10.78%
206.191	602.8	0.0064	0.00007	mg/L	1.16%

an Data ----------

D: 524989L Seq. No.: 28 Sample No.: 15 A/S Pos: 23
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:18:32 PM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	5066531.7	0.984	0.0084	mg/L				0.85%
g 328.068	-2279.8	-0.0001	0.00003	mg/L				32.06%
l 308.215	6007.8	0.0074	0.00297	mg/L				40.00%
s .979	-34.6	0.0005	0.00016	mg/L				31.93%
773	4441.2	0.0306	0.00036	mg/L				1.17%
a .527	3126.4	0.0214	0.00012	mg/L				0.56%
e 313.107	-3442.1	0.0000	0.00002	mg/L				135.44%
a 315.887	6493127.2	36.60	0.004	mg/L				0.01%
d 226.502	-124.0	0.0001	0.00000	mg/L				2.26%
o 228.616	-203.2	0.0011	0.00009	mg/L				7.65%
r 267.716	245.1	0.0012	0.00002	mg/L				1.57%
u 324.754	2462.5	0.0010	0.00026	mg/L				24.99%
Fe 238.863	45943.3	1.428	0.0178	mg/L				1.25%
K 404.721	-307.0	4.052	0.3422	mg/L				8.44%
Mg 279.079	271079.5	10.12	0.119	mg/L				1.17%
Mn 257.610	10600.7	0.0197	0.00033	mg/L				1.70%
Mo 202.030	-0.2	0.0005	0.00005	mg/L				8.95%
Na 330.237	30488.9	30.02	0.340	mg/L				1.13%
Ni 231.604	-219.7	0.0010	0.00021	mg/L				20.23%
Pb 220.353	18.3	-0.0004	0.00030	mg/L				76.47%
Sb 206.833	45.7	-0.0002	0.00087	mg/L				517.10%
Se 196.026	-19.7	0.0011	0.00158	mg/L				139.50%
Sn 189.933	3401.9	3.559	0.0325	mg/L				0.91%
Ti 334.941	-692.2	-0.0004	0.00011	mg/L				25.92%
Tl 190.800	-18.3	0.0003	0.00170	mg/L				537.37%
V 292.402	764.4	0.0002	0.00012	mg/L				70.15%
Zn 206.191	143.6	0.0014	0.00009	mg/L				6.64%

Mean Data ----------

ID: 524693 Seq. No.: 29 Sample No.: 16 A/S Pos: 24
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:23:40 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	5004657.7	0.972	0.0060	mg/L				0.62%
8.068	-2305.1	-0.0002	0.00006	mg/L				28.90%
08.215	6691.1	0.0351	0.00257	mg/L				7.30%
As 188.979	-6.7	0.0144	0.00018	mg/L				1.22%
B 249.773	16480.5	0.1660	0.00393	mg/L				2.36%
Ba 233.527	12856.2	0.0931	0.00041	mg/L				0.44%
Be 313.107	-3542.2	0.0000	0.00002	mg/L				78.41%
Ca 315.887	13890423.3	78.32	0.056	mg/L				0.07%

354A

226.502	-128.7	0.0001	0.00007 mg/L	68.50%
616	-233.8	0.0001	0.00017 mg/L	113.49%
716	368.2	0.0020	0.00001 mg/L	0.56%
.754	3014.4	0.0027	0.00006 mg/L	2.36%
238.863	1032.1	0.0254	0.00004 mg/L	0.17%
404.721	1772.2	29.83	0.352 mg/L	1.18%
279.079	653573.1	24.37	0.322 mg/L	1.32%
257.610	38248.0	0.0736	0.00086 mg/L	1.17%
202.030	200.6	0.0096	0.00003 mg/L	0.32%
330.237	129909.7	130.7	1.83 mg/L	1.40%
231.604	-204.1	0.0013	0.00017 mg/L	12.61%
220.353	24.3	0.0004	0.00010 mg/L	28.76%
206.833	46.6	0.0002	0.00100 mg/L	646.00%
196.026	-8.1	0.0045	0.00072 mg/L	16.13%
189.933	6370.2	6.794	0.0481 mg/L	0.71%
334.941	-417.8	0.0001	0.00001 mg/L	11.05%
190.800	-20.4	-0.0006	0.00026 mg/L	46.94%
292.402	6374.2	0.0213	0.00012 mg/L	0.55%
206.191	471.8	0.0049	0.00005 mg/L	0.91%

ean Data

D: 524694 Seq. No.: 30 Sample No.: 17 A/S Pos: 25
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:29:03 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4884795.6	0.949	0.0034	mg/L				0.36%
g 328.068	-2743.3	-0.0021	0.00013	mg/L				6.04%
l 308.215	8788.4	0.1202	0.00748	mg/L				6.22%
s 188.979	-32.3	0.0017	0.00173	mg/L				102.44%
249.773	20368.1	0.2097	0.00321	mg/L				1.53%
a 233.527	2629.0	0.0177	0.00016	mg/L				0.88%
e 313.107	-3735.9	0.0000	0.00002	mg/L				30.50%
.887	67528541.5	380.8	1.53	mg/L				0.40%
.502	-119.8	0.0002	0.00001	mg/L				3.26%
o 228.616	-12.4	0.0072	0.00005	mg/L				0.63%
r 267.716	407.3	0.0023	0.00007	mg/L				3.01%
u 324.754	4023.0	0.0058	0.00012	mg/L				2.12%
e 238.863	46413.0	1.443	0.0009	mg/L				0.06%
404.721	3196.6	47.50	0.514	mg/L				1.08%
g 279.079	814360.2	30.36	0.055	mg/L				0.18%
n 257.610	1328980.9	2.590	0.0019	mg/L				0.07%
o 202.030	101.8	0.0052	0.00012	mg/L				2.41%
a 330.237	149597.8	150.7	1.03	mg/L				0.68%
i 231.604	8012.7	0.1580	0.00054	mg/L				0.34%
b 220.353	41.7	0.0026	0.00003	mg/L				1.19%
b 206.833	48.2	0.0007	0.00080	mg/L				110.06%
e 196.026	-16.1	0.0022	0.00189	mg/L				87.67%
n 189.933	6999.7	7.481	0.0035	mg/L				0.05%
i 334.941	-1204.8	-0.0013	0.00001	mg/L				0.94%
l 190.800	-70.7	-0.0209	0.00032	mg/L				1.53%
292.402	1288.2	0.0021	0.00018	mg/L				8.51%
n 206.191	17121.3	0.1861	0.00045	mg/L				0.24%

Mean Data

ID: 524695 Seq. No.: 31 Sample No.: 18 A/S Pos: 26
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:34:23 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4883569.7	0.948	0.0044	mg/L				0.47%
Ag 328.068	-2345.9	-0.0004	0.00030	mg/L				78.93%
Al 308.215	6788.4	0.0391	0.00311	mg/L				7.96%
As 188.979	-4.4	0.0156	0.00191	mg/L				12.25%
P 9.773	14338.8	0.1419	0.00098	mg/L				0.69%
3.527	8857.8	0.0637	0.00026	mg/L				0.41%
Be 13.107	-3726.5	0.0000	0.00001	mg/L				16.32%
Ca 315.887	15357873.8	86.59	0.035	mg/L				0.04%
Cd 226.502	-39.7	0.0007	0.00004	mg/L				5.00%
Co 228.616	-228.8	0.0003	0.00026	mg/L				83.15%
Cr 267.716	406.0	0.0022	0.00009	mg/L				3.89%

324.754	2685.9	0.0017	0.00016	mg/L	9.26%
2? 3	1201.3	0.0307	0.00060	mg/L	1.96%
04	1680.6	28.70	1.286	mg/L	4.48%
279.079	706161.3	26.33	0.243	mg/L	0.92%
257.610	150885.3	0.2932	0.00324	mg/L	1.10%
202.030	85.6	0.0044	0.00001	mg/L	0.29%
330.237	105073.5	105.6	1.60	mg/L	1.52%
231.604	-232.8	0.0008	0.00002	mg/L	3.11%
220.353	26.0	0.0006	0.00024	mg/L	41.28%
206.833	45.1	-0.0004	0.00001	mg/L	1.38%
196.026	-6.8	0.0048	0.00222	mg/L	45.86%
189.933	6660.6	7.111	0.0350	mg/L	0.49%
334.941	-386.0	0.0001	0.00007	mg/L	52.33%
190.800	-25.7	-0.0027	0.00091	mg/L	34.18%
92.402	5503.9	0.0181	0.00027	mg/L	1.52%
206.191	324.4	0.0033	0.00012	mg/L	3.67%

an Data

: 524696 Seq. No.: 32 Sample No.: 19 A/S Pos: 27
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:39:39 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4855929.0	0.943	0.0115	mg/L				1.22%
328.068	-2452.8	-0.0008	0.00007	mg/L				8.31%
308.215	8348.3	0.1024	0.00445	mg/L				4.34%
188.979	-24.9	0.0053	0.00128	mg/L				24.10%
249.773	26806.5	0.2822	0.00661	mg/L				2.34%
233.527	1677.6	0.0107	0.00008	mg/L				0.74%
313.107	-3721.8	0.0000	0.00000	mg/L				6.17%
315.887	27243625.1	153.6	1.68	mg/L				1.09%
226.502	-124.0	0.0001	0.00000	mg/L				2.19%
616	-198.8	0.0013	0.00015	mg/L				11.93%
716	343.5	0.0018	0.00003	mg/L				1.38%
.754	2809.5	0.0021	0.00004	mg/L				1.75%
238.863	31064.2	0.9635	0.01427	mg/L				1.48%
404.721	980.9	20.02	0.957	mg/L				4.78%
g 279.079	544618.7	20.31	0.037	mg/L				0.18%
n 257.610	228800.9	0.4452	0.00652	mg/L				1.46%
o 202.030	118.6	0.0059	0.00004	mg/L				0.76%
a 330.237	191514.5	193.1	2.22	mg/L				1.15%
i 231.604	119.6	0.0075	0.00011	mg/L				1.40%
b 220.353	44.0	0.0028	0.00061	mg/L				21.60%
b 206.833	44.5	-0.0006	0.00071	mg/L				115.87%
e 196.026	-2.6	0.0060	0.00023	mg/L				3.75%
n 189.933	5617.3	5.974	0.0677	mg/L				1.13%
i 334.941	208.1	0.0012	0.00003	mg/L				2.63%
l 190.800	-29.4	-0.0042	0.00056	mg/L				13.50%
292.402	1747.3	0.0039	0.00008	mg/L				2.18%
n 206.191	35851.3	0.3899	0.00611	mg/L				1.57%

ean Data

D: 524697 Seq. No.: 33 Sample No.: 20 A/S Pos: 28
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:45:07 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4650437.2	0.903	0.0009	mg/L				0.10%
Ag 328.068	-2627.9	-0.0016	0.00003	mg/L				2.08%
Al 308.215	6775.7	0.0386	0.00012	mg/L				0.30%
As 188.979	-31.9	0.0019	0.00116	mg/L				62.46%
B 249.773	18204.6	0.1854	0.00042	mg/L				0.23%
Ba 233.527	4286.7	0.0300	0.00001	mg/L				0.05%
Be 313.107	-3811.1	-0.0001	0.00000	mg/L				3.49%
C 5.887	47933497.8	270.3	2.24	mg/L				0.83%
C 6.502	-87.0	0.0004	0.00003	mg/L				8.39%
Co 228.616	-176.1	0.0020	0.00003	mg/L				1.41%
Cr 267.716	266.5	0.0013	0.00008	mg/L				6.24%
Cu 324.754	2820.7	0.0021	0.00009	mg/L				4.19%
Fe 238.863	22338.3	0.6910	0.00213	mg/L				0.31%
K 404.721	497.6	14.03	0.931	mg/L				6.64%

279.079	284507.6	10.62	0.025	mg/L	0.23%
610	507743.6	0.9891	0.00238	mg/L	0.24%
030	230.0	0.0109	0.00005	mg/L	0.44%
330.237	131768.3	132.6	0.22	mg/L	0.17%
231.604	238.8	0.0098	0.00011	mg/L	1.10%
220.353	28.8	0.0009	0.00031	mg/L	33.66%
206.833	49.9	0.0013	0.00066	mg/L	50.64%
196.026	-1.6	0.0063	0.00082	mg/L	12.94%
189.933	3460.4	3.623	0.0066	mg/L	0.18%
334.941	-2127.8	-0.0029	0.00011	mg/L	3.67%
190.800	-36.6	-0.0071	0.00047	mg/L	6.70%
292.402	2799.4	0.0078	0.00006	mg/L	0.76%
206.191	12312.8	0.1338	0.00026	mg/L	0.19%

ean Data ----------

D: CCV Seq. No.: 34 Sample No.: 2 A/S Pos: 3
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:50:32 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4811894.5	0.934	0.0067	mg/L				0.71%
g 328.068	114764.7	0.5093	0.00498	mg/L				0.98%
l 308.215	250510.1	9.928	0.1268	mg/L				1.28%
s 188.979	2052.6	1.039	0.0116	mg/L				1.11%
249.773	228398.5	2.550	0.0209	mg/L				0.82%
a 233.527	1432690.2	10.56	0.010	mg/L				0.10%
e 313.107	1933106.2	0.2550	0.00009	mg/L				0.04%
a 315.887	4530350.1	25.53	0.019	mg/L				0.08%
d 226.502	71092.9	0.5126	0.00650	mg/L				1.27%
o 228.616	81793.8	2.605	0.0285	mg/L				1.09%
r 267.716	77751.6	0.5127	0.00620	mg/L				1.21%
u 324.754	420585.9	1.280	0.0128	mg/L				1.00%
e 238.863	164429.0	5.130	0.0619	mg/L				1.21%
721	1997.0	32.62	0.341	mg/L				1.05%

*QC exceeds upper limit for K 404.721 Recovery = 130.48% Action = Continue

Mg 279.079	681100.7	25.40	0.013	mg/L	0.05%
Mn 257.610	403022.3	0.7849	0.00918	mg/L	1.17%
Mo 202.030	54393.7	2.456	0.0250	mg/L	1.02%
Na 330.237	23941.5	23.39	0.450	mg/L	1.92%
Ni 231.604	108708.3	2.077	0.0271	mg/L	1.30%
Pb 220.353	4081.1	0.5122	0.00541	mg/L	1.06%
Sb 206.833	13972.1	4.986	0.0277	mg/L	0.56%
Se 196.026	1745.5	0.5087	0.00010	mg/L	0.02%
Sn 189.933	63369.6	68.92	0.815	mg/L	1.18%

*QC exceeds upper limit for Sn 189.933 Recovery = 1378.40% Action = Continue

Ti 334.941	1454269.8	2.557	0.0070	mg/L	0.27%
Tl 190.800	2555.0	1.039	0.0087	mg/L	0.84%
V 292.402	681084.7	2.568	0.0025	mg/L	0.10%
Zn 206.191	94294.8	1.026	0.0122	mg/L	1.19%

Mean Data ----------

ID: CCB Seq. No.: 35 Sample No.: 4 A/S Pos: 1
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 6:55:38 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4953574.8	0.962	0.0037	mg/L				0.39%
Ag 328.068	-2199.1	0.0003	0.00013	mg/L				51.23%
Al 308.215	5776.1	-0.0020	0.00195	mg/L				98.04%
As 188.979	-34.9	0.0004	0.00023	mg/L				64.76%
B 249.773	5787.9	0.0457	0.01149	mg/L				25.14%
Ba 233.527	327.1	0.0008	0.00001	mg/L				1.94%
Be 313.107	-3389.0	0.0000	0.00000	mg/L				106.05%
Ca 315.887	4214.8	0.0101	0.00417	mg/L				41.29%
Cd 226.502	-142.4	0.0000	0.00001	mg/L				145.77%
Co 228.616	-241.6	-0.0001	0.00004	mg/L				40.77%
Cr 267.716	108.5	0.0003	0.00001	mg/L				3.48%
Cu 324.754	2472.8	0.0011	0.00035	mg/L				32.71%
Fe 238.863	135.7	-0.0026	0.00040	mg/L				15.24%
K 404.721	-187.0	5.539	0.0486	mg/L				0.88%

*QC exceeds upper limit for K 404.721 Action = Continue

Mg 279.079	-575.8	-0.0013	0.00058 mg/L	43.11%
Mn 257.610	516.7	0.0000	0.00001 mg/L	87.66%
Mo 202.030	10.0	0.0010	0.00047 mg/L	46.69%
N 330.237	869.3	0.0203	0.03984 mg/L	196.03%
Ni 231.604	-277.6	-0.0001	0.00012 mg/L	225.08%
Pb 220.353	21.1	0.0000	0.00016 mg/L	403.91%
Sb 206.833	86.5	0.0144	0.00472 mg/L	32.72%
*QC exceeds upper limit for Sb 206.833 Action = Continue				
Se 196.026	-19.2	0.0013	0.00215 mg/L	170.84%
Sn 189.933	217.0	0.0879	0.01811 mg/L	20.62%
Ti 334.941	-233.0	0.0004	0.00014 mg/L	34.43%
Tl 190.800	-15.4	0.0015	0.00023 mg/L	15.92%
V 292.402	753.2	0.0001	0.00003 mg/L	24.69%
Zn 206.191	34.7	0.0002	0.00001 mg/L	5.19%

Mean Data ----------

ID: 524698 Seq. No.: 36 Sample No.: 21 A/S Pos: 29
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:00:45 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4790367.9	0.930	0.0032	mg/L				0.34%
Ag 328.068	-2279.2	-0.0001	0.00023	mg/L				266.50%
Al 308.215	6291.2	0.0189	0.00024	mg/L				1.27%
~~As 188.979~~	-3.7	0.0159	0.00478	mg/L				30.07%
B 249.773	17316.3	0.1754	0.00062	mg/L				0.35%
Ba 233.527	6574.1	0.0468	0.00003	mg/L				0.06%
Be 313.107	-3672.8	0.0000	0.00000	mg/L				6.21%
Ca 315.887	13474160.0	75.97	0.110	mg/L				0.14%
Cd 226.502	-136.0	0.0001	0.00001	mg/L				20.09%
Co 228.616	-242.1	-0.0001	0.00012	mg/L				105.88%
Cr 267.716	364.7	0.0020	0.00013	mg/L				6.65%
Cu 324.754	3104.2	0.0030	0.00007	mg/L				2.34%
Fe 238.863	676.0	0.0143	0.00032	mg/L				2.22%
K 404.721	1535.3	26.90	0.316	mg/L				1.18%
Mg 279.079	765566.8	28.55	0.147	mg/L				0.52%
Mn 257.610	132560.2	0.2575	0.00109	mg/L				0.42%
Mo 202.030	146.0	0.0072	0.00000	mg/L				0.03%
Na 330.237	117859.3	118.5	0.73	mg/L				0.61%
Ni 231.604	-163.6	0.0021	0.00001	mg/L				0.70%
Pb 220.353	24.0	0.0003	0.00008	mg/L				24.58%
Sb 206.833	63.1	0.0060	0.00016	mg/L				2.71%
Se 196.026	-19.7	0.0011	0.00136	mg/L				121.43%
Sn 189.933	7155.8	7.651	0.0261	mg/L				0.34%
Ti 334.941	-850.3	-0.0007	0.00002	mg/L				3.17%
Tl 190.800	-25.8	-0.0027	0.00026	mg/L				9.41%
V 292.402	6803.9	0.0230	0.00022	mg/L				0.98%
Zn 206.191	411.6	0.0043	0.00004	mg/L				0.99%

Mean Data ----------

ID: 524698L Seq. No.: 37 Sample No.: 22 A/S Pos: 30
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:05:52 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4982560.2	0.968	0.0044	mg/L				0.45%
Ag 328.068	-2180.2	0.0003	0.00020	mg/L				59.47%
Al 308.215	5872.2	0.0019	0.00143	mg/L				74.79%
As 188.979	-31.9	0.0019	0.00021	mg/L				11.06%
B 249.773	4720.5	0.0337	0.00054	mg/L				1.59%
Ba 233.527	1361.7	0.0084	0.00000	mg/L				0.04%
Be 313.107	-3562.7	0.0000	0.00000	mg/L				13.86%
Ca 315.887	2716750.0	15.31	0.006	mg/L				0.04%
Cd 226.502	-134.3	0.0001	0.00001	mg/L				8.94%
Co 228.616	-245.0	-0.0002	0.00013	mg/L				61.89%
Cr 267.716	139.5	0.0005	0.00004	mg/L				8.23%
Cu 324.754	2666.5	0.0017	0.00004	mg/L				2.69%
Fe 238.863	-146.0	-0.0114	0.00039	mg/L				3.40%
K 404.721	87.3	8.941	0.4706	mg/L				5.26%
Mg 279.079	153556.6	5.742	0.0404	mg/L				0.70%
Mn 257.610	27040.2	0.0517	0.00059	mg/L				1.14%

o 202.030	20.8	0.0015	0.00012	mg/L	7.97%
a 330.237	20834.4	20.24	0.175	mg/L	0.86%
i 604	-253.3	0.0004	0.00006	mg/L	15.82%
b .353	23.0	0.0002	0.00027	mg/L	139.65%
b 206.833	49.1	0.0010	0.00082	mg/L	79.06%
e 196.026	-23.6	0.0000	0.00066	mg/L	>999.9%
n 189.933	2149.9	2.195	0.0145	mg/L	0.66%
i 334.941	-566.1	-0.0002	0.00002	mg/L	9.38%
l 190.800	-19.7	-0.0003	0.00063	mg/L	232.55%
292.402	1919.4	0.0045	0.00002	mg/L	0.54%
n 206.191	98.0	0.0009	0.00004	mg/L	4.92%

ean Data

D: CRI Seq. No.: 38 Sample No.: 5 A/S Pos: 6
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:10:56 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4967059.6	0.965	0.0052	mg/L				0.53%
g 328.068	2295.9	0.0198	0.00012	mg/L				0.61%
l 308.215	5770.6	-0.0022	0.00021	mg/L				9.62%
s 188.979	4.8	0.0201	0.00048	mg/L				2.37%
249.773	2151.0	0.0048	0.00091	mg/L				18.90%
a 233.527	334.5	0.0008	0.00008	mg/L				9.16%
e 313.107	72254.7	0.0100	0.00005	mg/L				0.47%
a 315.887	5325.6	0.0164	0.00032	mg/L				1.98%
d 226.502	1287.6	0.0103	0.00004	mg/L				0.42%
o 228.616	3187.7	0.1088	0.00053	mg/L				0.49%
r 267.716	3234.6	0.0209	0.00007	mg/L				0.35%
u 324.754	18437.1	0.0499	0.00051	mg/L				1.02%
e 238.863	162.5	-0.0018	0.00028	mg/L				16.02%
404.721	-200.4	5.374	0.0681	mg/L				1.27%
g 279.079	-587.4	-0.0018	0.00019	mg/L				10.94%
n 7.610	17065.1	0.0323	0.00021	mg/L				0.66%
.030	-12.3	0.0000	0.00001	mg/L				232.82%
Na 0.237	794.3	-0.0556	0.04326	mg/L				77.81%
Ni 231.604	4202.6	0.0853	0.00023	mg/L				0.27%
Pb 220.353	69.0	0.0060	0.00009	mg/L				1.57%
Sb 206.833	388.5	0.1225	0.00027	mg/L				0.22%
Se 196.026	12.1	0.0103	0.00045	mg/L				4.39%
Sn 189.933	134.7	-0.0019	0.00528	mg/L				285.26%
Ti 334.941	-440.4	0.0000	0.00002	mg/L				66.04%
Tl 190.800	34.6	0.0217	0.00031	mg/L				1.45%
V 292.402	27829.6	0.1023	0.00056	mg/L				0.55%
Zn 206.191	3857.7	0.0418	0.00007	mg/L				0.16%

Mean Data

ID: ICSA Seq. No.: 39 Sample No.: 6 A/S Pos: 7
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:16:33 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4393203.0	0.853	0.0014	mg/L				0.16%
Ag 328.068	-5104.0	-0.0124	0.00051	mg/L				4.14%
Al 308.215	12438549.1	504.5	2.26	mg/L				0.45%
As 188.979	-107.1	-0.0010	0.00069	mg/L				68.10%
B 249.773	13911.2	0.1371	0.00167	mg/L				1.22%
Ba 233.527	-312.7	-0.0040	0.00027	mg/L				6.72%
Be 313.107	-4450.8	-0.0001	0.00000	mg/L				0.92%
Ca 315.887	81994984.8	462.4	3.05	mg/L				0.66%
Cd 226.502	1874.9	0.0036	0.00012	mg/L				3.31%
Co 228.616	-289.2	-0.0016	0.00009	mg/L				5.52%
Cr 267.716	1027.0	0.0063	0.00021	mg/L				3.36%
Cu 324.754	-1789.9	-0.0007	0.00011	mg/L				16.88%
Fe 238.863	5910516.0	184.6	0.75	mg/L				0.41%
K .721	-2357.6	3.723	0.4484	mg/L				12.05%
Mg 9.079	13666192.9	509.2	3.39	mg/L				0.67%
Mn 257.610	-6327.2	0.0026	0.00011	mg/L				4.30%
Mo 202.030	45.8	0.0026	0.00032	mg/L				12.01%
Na 330.237	577.3	-0.1240	0.03946	mg/L				31.82%
Ni 231.604	-271.5	0.0001	0.00012	mg/L				186.60%

220.353	-317.6	-0.0054	0.00026	mg/L	4.77%
2 33	41.7	-0.0016	0.00025	mg/L	15.29%
1 26	0.8	-0.0104	0.00340	mg/L	32.62%
189.933	16325.4	15.69	0.054	mg/L	0.35%
334.941	-4376.7	-0.0069	0.00009	mg/L	1.31%
190.800	-43.2	-0.0098	0.00189	mg/L	19.34%
292.402	13277.7	0.0474	0.00018	mg/L	0.39%
206.191	1733.4	0.0049	0.00010	mg/L	2.09%

an Data ----------

: ICSAB Seq. No.: 40 Sample No.: 7 A/S Pos: 8
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:22:40 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4334872.4	0.842	0.0073	mg/L				0.86%
328.068	255661.0	1.123	0.0092	mg/L				0.82%
308.215	12697995.8	515.0	3.97	mg/L				0.77%
188.979	-112.8	-0.0035	0.00430	mg/L				124.09%
249.773	14141.4	0.1397	0.00234	mg/L				1.68%
233.527	74924.4	0.5507	0.00680	mg/L				1.23%
313.107	3835176.3	0.5055	0.00070	mg/L				0.14%
315.887	83665508.7	471.8	3.96	mg/L				0.84%
226.502	134856.5	0.9603	0.01190	mg/L				1.24%
228.616	14852.4	0.4793	0.00360	mg/L				0.75%
267.716	76860.1	0.5068	0.00534	mg/L				1.05%
324.754	180376.8	0.5565	0.00290	mg/L				0.52%
238.863	5976748.2	186.7	0.26	mg/L				0.14%
404.721	-2272.9	5.053	0.5177	mg/L				10.24%
279.079	13966061.8	520.4	4.24	mg/L				0.81%
257.610	260408.6	0.5229	0.00447	mg/L				0.85%
202.030	45.1	0.0026	0.00009	mg/L				3.56%
.237	862.6	0.1616	0.00029	mg/L				0.18%
.604	49069.3	0.9405	0.01107	mg/L				1.18%
.353	7287.1	0.9550	0.00797	mg/L				0.83%
206.833	47.3	0.0004	0.00043	mg/L				113.99%
196.026	-11.1	-0.0142	0.00021	mg/L				1.48%
189.933	16593.8	15.94	0.141	mg/L				0.88%
334.941	-4322.8	-0.0068	0.00010	mg/L				1.40%
190.800	-53.0	-0.0137	0.00183	mg/L				13.35%
292.402	148849.5	0.5590	0.00548	mg/L				0.98%
206.191	89312.8	0.9576	0.01147	mg/L				1.20%

Mean Data ----------

ID: CCV Seq. No.: 41 Sample No.: 2 A/S Pos: 3
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:28:24 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4963485.9	0.964	0.0071	mg/L				0.74%
Ag 328.068	115636.2	0.5131	0.00511	mg/L				1.00%
Al 308.215	253523.9	10.05	0.096	mg/L				0.96%
As 188.979	2052.8	1.039	0.0093	mg/L				0.89%
B 249.773	231781.9	2.588	0.0841	mg/L				3.25%
Ba 233.527	1429279.2	10.54	0.023	mg/L				0.22%
Be 313.107	1928969.8	0.2545	0.00040	mg/L				0.16%
Ca 315.887	4527542.1	25.52	0.067	mg/L				0.26%
Cd 226.502	70964.3	0.5116	0.00374	mg/L				0.73%
Co 228.616	82402.8	2.625	0.0221	mg/L				0.84%
Cr 267.716	78227.4	0.5159	0.00481	mg/L				0.93%
Cu 324.754	423990.0	1.290	0.0126	mg/L				0.97%
Fe 238.863	165076.9	5.150	0.0456	mg/L				0.89%
K 404.721	1971.6	32.31	0.383	mg/L				1.19%
*QC exceeds upper limit for K 404.721 Recovery = 129.22% Action = Continue								
9.079	681117.4	25.40	0.063	mg/L				0.25%
57.610	407488.9	0.7936	0.00685	mg/L				0.86%
Mo 202.030	54348.8	2.454	0.0189	mg/L				0.77%
Na 330.237	24089.6	23.54	0.238	mg/L				1.01%
Ni 231.604	108733.0	2.078	0.0174	mg/L				0.84%
Pb 220.353	4048.0	0.5081	0.00446	mg/L				0.88%
Sb 206.833	13993.3	4.993	0.0560	mg/L				1.12%

196.026	1742.5	0.5078	0.00402	mg/L	0.79%
1' 33	63343.0	68.89	0.728	mg/L	1.06%

eds upper limit for Sn 189.933 Recovery = 1377.82% Action = Continue

334.941	1466250.4	2.578	0.0030	mg/L	0.12%
190.800	2542.5	1.034	0.0120	mg/L	1.16%
92.402	683528.0	2.577	0.0039	mg/L	0.15%
206.191	94031.3	1.023	0.0073	mg/L	0.72%

n Data

: CCB Seq. No.: 42 Sample No.: 4 A/S Pos: 1
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:33:30 PM

ement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	5136102.5	0.997	0.0043	mg/L				0.43%
328.068	-2083.9	0.0008	0.00004	mg/L				4.67%
308.215	5523.3	-0.0122	0.00097	mg/L				7.95%
188.979	-33.5	0.0011	0.00030	mg/L				28.16%
249.773	5713.1	0.0449	0.01315	mg/L				29.30%
233.527	292.3	0.0005	0.00012	mg/L				24.17%
313.107	-3206.9	0.0000	0.00001	mg/L				31.99%
315.887	4563.6	0.0121	0.00369	mg/L				30.64%
226.502	-126.5	0.0001	0.00005	mg/L				42.12%
228.616	-239.0	0.0000	0.00000	mg/L				18.05%
267.716	101.0	0.0002	0.00004	mg/L				16.66%
324.754	2469.2	0.0011	0.00028	mg/L				26.92%
238.863	341.9	0.0038	0.00051	mg/L				13.29%
404.721	-168.0	5.775	0.2615	mg/L				4.53%

QC exceeds upper limit for K 404.721 Action = Continue

279.079	-470.0	0.0026	0.00256	mg/L	98.37%
257.610	416.0	-0.0002	0.00001	mg/L	6.93%
202.030	12.8	0.0011	0.00031	mg/L	26.90%
.237	848.3	-0.0009	0.02641	mg/L	>999.9%
604	-260.1	0.0003	0.00001	mg/L	2.58%
.353	18.4	-0.0004	0.00031	mg/L	82.33%
206.833	87.1	0.0147	0.00324	mg/L	22.14%

QC exceeds upper limit for Sb 206.833 Action = Continue

e 196.026	-18.3	0.0015	0.00151	mg/L	99.43%
n 189.933	229.1	0.1011	0.02147	mg/L	21.24%
i 334.941	-189.0	0.0005	0.00023	mg/L	48.16%
l 190.800	-15.3	0.0015	0.00066	mg/L	44.26%
292.402	749.8	0.0001	0.00001	mg/L	5.78%
n 206.191	49.6	0.0003	0.00006	mg/L	17.61%

lean Data

ID: PBW-M2620135 Seq. No.: 43 Sample No.: 23 A/S Pos: 31
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:38:33 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	5283555.8	1.026	0.0042	mg/L				0.41%
Ag 328.068	-2208.4	0.0002	0.00014	mg/L				64.42%
Al 308.215	5457.3	-0.0149	0.00037	mg/L				2.45%
As 188.979	-29.5	0.0031	0.00225	mg/L				73.02%
B 249.773	3023.6	0.0146	0.00207	mg/L				14.14%
Ba 233.527	195.7	-0.0002	0.00001	mg/L				6.13%
Be 313.107	-3278.4	0.0000	0.00000	mg/L				20.73%
Ca 315.887	1039.2	-0.0078	0.00087	mg/L				11.09%
Cd 226.502	-124.8	0.0001	0.00001	mg/L				5.87%
Co 228.616	-236.3	0.0001	0.00010	mg/L				139.91%
Cr 267.716	142.9	0.0005	0.00004	mg/L				8.04%
Cu 324.754	2348.4	0.0007	0.00022	mg/L				32.22%
Fe 238.863	239.3	0.0006	0.00068	mg/L				107.36%
K 404.721	-272.3	4.482	0.2529	mg/L				5.64%
9.079	-461.8	0.0029	0.00049	mg/L				16.83%
7.610	355.0	-0.0003	0.00001	mg/L				2.94%
Mo 202.030	-5.5	0.0003	0.00007	mg/L				23.55%
Na 330.237	967.6	0.1199	0.08238	mg/L				68.70%
Ni 231.604	-257.6	0.0003	0.00012	mg/L				37.04%
Pb 220.353	15.7	-0.0007	0.00012	mg/L				16.25%
Sb 206.833	56.6	0.0037	0.00152	mg/L				40.75%

196.026	-22.6	0.0003	0.00119 mg/L		398.48%
1[illegible]33	183.0	0.0508	0.00136 mg/L		2.68%
3 [illegible]1	-350.4	0.0002	0.00006 mg/L		33.17%
19[illegible].d00	-19.7	-0.0002	0.00019 mg/L		78.31%
92.402	653.4	-0.0003	0.00002 mg/L		9.22%
206.191	179.1	0.0017	0.00002 mg/L		1.13%

an Data

: LCSW-M2620135 Seq. No.: 44 Sample No.: 24 A/S Pos: 32
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:43:42 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5115481.3	0.993	0.0005	mg/L				0.05%
328.068	9783.7	0.0524	0.00024	mg/L				0.45%
308.215	55777.1	2.027	0.0059	mg/L				0.29%
188.979	41.9	0.0386	0.00082	mg/L				2.13%
249.773	94518.4	1.044	0.0163	mg/L				1.56%
. 233.527	301510.9	2.221	0.0061	mg/L				0.27%
: 313.107	383258.8	0.0509	0.00002	mg/L				0.04%
ı 315.887	376124.5	2.107	0.0051	mg/L				0.24%
l 226.502	7183.0	0.0527	0.00012	mg/L				0.22%
) 228.616	17424.7	0.5610	0.00209	mg/L				0.37%
: 267.716	32243.1	0.2124	0.00008	mg/L				0.04%
ı 324.754	92569.4	0.2766	0.00095	mg/L				0.34%
: 238.863	34330.3	1.066	0.0029	mg/L				0.27%
404.721	1764.0	29.73	0.166	mg/L				0.56%
g 279.079	54849.1	2.064	0.0076	mg/L				0.37%
n 257.610	278598.8	0.5423	0.00012	mg/L				0.02%
o 202.030	11136.7	0.5034	0.00127	mg/L				0.25%
a 330.237	19064.7	18.45	0.015	mg/L				0.08%
i 231.604	28348.1	0.5455	0.00150	mg/L				0.28%
b 220.353	4236.8	0.5319	0.00108	mg/L				0.20%
b 833	1474.0	0.5112	0.00186	mg/L				0.36%
e .026	3398.3	0.9839	0.00089	mg/L				0.09%
n 189.933	1006.1	0.9480	0.00557	mg/L				0.59%
i 334.941	301089.7	0.5299	0.00004	mg/L				0.01%
l 190.800	5140.6	2.083	0.0074	mg/L				0.35%
292.402	140243.9	0.5265	0.00237	mg/L				0.45%
n 206.191	49702.6	0.5407	0.00056	mg/L				0.10%

lean Data

:D: 524665 Seq. No.: 45 Sample No.: 25 A/S Pos: 33
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:48:54 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5087836.3	0.988	0.0073	mg/L				0.74%
Ag 328.068	-2234.7	0.0001	0.00019	mg/L				176.54%
Al 308.215	7817.9	0.0809	0.00350	mg/L				4.32%
As 188.979	-25.9	0.0048	0.00078	mg/L				16.03%
B 249.773	24047.5	0.2511	0.00369	mg/L				1.47%
Ba 233.527	8031.7	0.0576	0.00053	mg/L				0.92%
Be 313.107	-3520.1	0.0000	0.00000	mg/L				16.22%
Ca 315.887	15102004.2	85.15	0.145	mg/L				0.17%
Cd 226.502	-115.3	0.0002	0.00000	mg/L				1.68%
Co 228.616	-203.1	0.0011	0.00019	mg/L				17.15%
Cr 267.716	312.7	0.0016	0.00002	mg/L				1.04%
Cu 324.754	2452.7	0.0010	0.00011	mg/L				10.75%
Fe 238.863	8683.7	0.2644	0.00014	mg/L				0.05%
K 404.721	604.1	15.35	0.566	mg/L				3.69%
Mg 279.079	513029.4	19.14	0.022	mg/L				0.12%
Mn 257.610	664927.3	1.296	0.0002	mg/L				0.02%
Mo 202.030	198.1	0.0095	0.00008	mg/L				0.83%
N 330.237	151064.0	152.2	0.32	mg/L				0.21%
Ni 231.604	-47.8	0.0043	0.00002	mg/L				0.37%
Pb 220.353	38.2	0.0021	0.00015	mg/L				7.06%
Sb 206.833	53.1	0.0025	0.00031	mg/L				12.66%
Se 196.026	-14.9	0.0025	0.00001	mg/L				0.42%
Sn 189.933	5511.8	5.859	0.0571	mg/L				0.97%
Ti 334.941	587.5	0.0018	0.00001	mg/L				0.41%

190.800	-41.8	-0.0092	0.00090	mg/L	9.76%
97 `2	982.3	0.0010	0.00003	mg/L	2.70%
2 91	22178.9	0.2412	0.00029	mg/L	0.12%

n Data

524666 Seq. No.: 46 Sample No.: 26 A/S Pos: 34
ple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:54:16 PM

ment	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4634647.4	0.900	0.0092	mg/L				1.03%
328.068	-2431.7	-0.0008	0.00017	mg/L				22.53%
308.215	9518.1	0.1498	0.00223	mg/L				1.49%
188.979	-6.6	0.0145	0.00040	mg/L				2.75%
249.773	34197.2	0.3653	0.00257	mg/L				0.70%
233.527	10192.1	0.0735	0.00001	mg/L				0.02%
313.107	-3860.9	-0.0001	0.00001	mg/L				12.75%
315.887	33738149.6	190.2	1.94	mg/L				1.02%
226.502	-119.9	0.0002	0.00005	mg/L				26.90%
228.616	-203.4	0.0011	0.00021	mg/L				19.08%
267.716	416.8	0.0023	0.00001	mg/L				0.64%
324.754	3575.2	0.0044	0.00016	mg/L				3.50%
238.863	2606.8	0.0746	0.00075	mg/L				1.00%
404.721	7708.2	103.4	0.96	mg/L				0.93%
279.079	1004259.4	37.44	0.068	mg/L				0.18%
257.610	1768534.7	3.448	0.0037	mg/L				0.11%
202.030	247.8	0.0117	0.00005	mg/L				0.43%
330.237	230141.3	232.3	0.68	mg/L				0.29%
231.604	-43.4	0.0044	0.00019	mg/L				4.24%
220.353	31.7	0.0013	0.00006	mg/L				4.49%
206.833	51.8	0.0020	0.00189	mg/L				94.77%
196.026	-21.0	0.0008	0.00563	mg/L				735.56%
189.933	8252.9	8.846	0.0861	mg/L				0.97%
941	510.7	0.0017	0.00015	mg/L				8.81%
.800	-87.2	-0.0275	0.00070	mg/L				2.53%
292.402	11559.7	0.0409	0.00003	mg/L				0.07%
n 206.191	428.5	0.0045	0.00018	mg/L				3.93%

ean Data

D: 524669 Seq. No.: 47 Sample No.: 27 A/S Pos: 35
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 7:59:41 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4992955.4	0.970	0.0089	mg/L				0.92%
g 328.068	-2526.9	-0.0012	0.00027	mg/L				23.61%
l 308.215	660965.6	26.58	0.453	mg/L				1.70%
s 188.979	67.5	0.0513	0.00156	mg/L				3.04%
3 249.773	44680.2	0.4832	0.00271	mg/L				0.56%
Ba 233.527	48285.4	0.3543	0.00528	mg/L				1.49%
Be 313.107	-9472.3	-0.0008	0.00001	mg/L				1.46%
Ca 315.887	14841203.8	83.68	0.030	mg/L				0.04%
Cd 226.502	72.2	0.0016	0.00000	mg/L				0.15%
Co 228.616	29.7	0.0085	0.00002	mg/L				0.28%
Cr 267.716	3424.0	0.0222	0.00030	mg/L				1.37%
Cu 324.754	7454.3	0.0163	0.00038	mg/L				2.36%
Fe 238.863	580521.0	18.13	0.286	mg/L				1.58%
K 404.721	1868.3	33.49	0.509	mg/L				1.52%
Mg 279.079	575320.4	21.46	0.321	mg/L				1.50%
Mn 257.610	284461.1	0.5537	0.00963	mg/L				1.74%
Mo 202.030	638.0	0.0294	0.00039	mg/L				1.34%
Na 330.237	320318.8	323.6	4.70	mg/L				1.45%
Ni 231.604	343.7	0.0118	0.00004	mg/L				0.35%
Pb 220.353	89.4	0.0086	0.00039	mg/L				4.50%
S `6.833	46.1	0.0000	0.00026	mg/L				751.95%
S 6.026	1.2	0.0071	0.00158	mg/L				22.12%
Sn 189.933	6003.2	6.394	0.0690	mg/L				1.08%
Ti 334.941	630434.1	1.109	0.0202	mg/L				1.82%
Tl 190.800	-31.9	-0.0052	0.00047	mg/L				9.11%
V 292.402	22453.4	0.0820	0.00148	mg/L				1.81%
Zn 206.191	4872.9	0.0528	0.00054	mg/L				1.03%

n a
69D Seq. No.: 48 Sample No.: 28 A/S Pos: 36
pl. Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:04:59 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4695595.5	0.912	0.0014	mg/L				0.16%
328.068	-2553.5	-0.0013	0.00001	mg/L				0.59%
308.215	671549.9	27.01	0.075	mg/L				0.28%
188.979	66.2	0.0507	0.00118	mg/L				2.34%
249.773	47543.8	0.5154	0.00248	mg/L				0.48%
233.527	49182.1	0.3609	0.00022	mg/L				0.06%
313.107	-9624.0	-0.0008	0.00001	mg/L				1.03%
315.887	15749697.0	88.80	0.131	mg/L				0.15%
226.502	72.6	0.0016	0.00002	mg/L				0.98%
228.616	21.2	0.0082	0.00010	mg/L				1.23%
267.716	3462.7	0.0224	0.00012	mg/L				0.52%
324.754	7775.7	0.0173	0.00031	mg/L				1.79%
238.863	590037.8	18.42	0.015	mg/L				0.08%
404.721	1937.5	34.39	0.215	mg/L				0.62%
279.079	601452.7	22.43	0.035	mg/L				0.15%
257.610	292414.7	0.5692	0.00093	mg/L				0.16%
202.030	668.7	0.0308	0.00014	mg/L				0.46%
330.237	339788.6	343.3	1.57	mg/L				0.46%
231.604	324.5	0.0114	0.00007	mg/L				0.63%
220.353	92.0	0.0089	0.00004	mg/L				0.41%
206.833	50.6	0.0016	0.00108	mg/L				68.66%
196.026	1.1	0.0071	0.00118	mg/L				16.61%
189.933	6342.5	6.764	0.0147	mg/L				0.22%
334.941	634336.2	1.116	0.0026	mg/L				0.24%
190.800	-31.1	-0.0049	0.00038	mg/L				7.81%
402	23124.5	0.0846	0.00033	mg/L				0.39%
.191	4979.9	0.0540	0.00004	mg/L				0.07%

ean Data
D: 524669S Seq. No.: 49 Sample No.: 29 A/S Pos: 37
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:10:18 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4785730.6	0.929	0.0041	mg/L				0.44%
Ag 328.068	9435.6	0.0509	0.00015	mg/L				0.29%
Al 308.215	708384.6	28.51	0.352	mg/L				1.24%
As 188.979	150.0	0.0924	0.00035	mg/L				0.38%
B 249.773	143956.5	1.600	0.0003	mg/L				0.02%
Ba 233.527	340928.4	2.512	0.0186	mg/L				0.74%
Be 313.107	381554.5	0.0507	0.00046	mg/L				0.91%
Ca 315.887	16136262.8	90.98	0.009	mg/L				0.01%
Cd 226.502	7062.3	0.0518	0.00003	mg/L				0.06%
Co 228.616	16888.3	0.5439	0.00142	mg/L				0.26%
Cr 267.716	33945.7	0.2236	0.00200	mg/L				0.89%
Cu 324.754	97460.2	0.2915	0.00475	mg/L				1.63%
Fe 238.863	609123.4	19.02	0.152	mg/L				0.80%
K 404.721	4375.9	64.70	1.048	mg/L				1.62%
Mg 279.079	653346.6	24.36	0.116	mg/L				0.47%
Mn 257.610	563488.1	1.098	0.0086	mg/L				0.79%
Mo 202.030	11408.6	0.5157	0.00046	mg/L				0.09%
Na 330.237	369046.8	373.0	5.80	mg/L				1.56%
Ni 231.604	27334.5	0.5262	0.00108	mg/L				0.21%
Pb 220.353	4117.0	0.5168	0.00202	mg/L				0.39%
Sb 206.833	1434.1	0.4969	0.00030	mg/L				0.06%
Se 196.026	3467.3	1.004	0.0022	mg/L				0.22%
Sn 189.933	6736.9	7.194	0.0181	mg/L				0.25%
34.941	898572.4	1.580	0.0140	mg/L				0.89%
90.800	4834.6	1.960	0.0013	mg/L				0.07%
V 292.402	160919.0	0.6046	0.00604	mg/L				1.00%
Zn 206.191	51751.6	0.5630	0.00229	mg/L				0.41%

Mean Data
ID: 524669A Seq. No.: 50 Sample No.: 30 A/S Pos: 38

Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:15:39 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4810442.4	0.934	0.0008	mg/L				0.08%
Ag 328.068	8846.3	0.0483	0.00002	mg/L				0.04%
Al 308.215	716458.8	28.83	0.210	mg/L				0.73%
As 188.979	138.7	0.0867	0.00138	mg/L				1.59%
B 249.773	141706.5	1.575	0.0102	mg/L				0.65%
Ba 233.527	327025.2	2.409	0.0093	mg/L				0.39%
Be 313.107	360726.0	0.0480	0.00020	mg/L				0.41%
Ca 315.887	15398747.8	86.82	0.183	mg/L				0.21%
Cd 226.502	6726.6	0.0494	0.00010	mg/L				0.20%
Co 228.616	16136.4	0.5201	0.00090	mg/L				0.17%
Cr 267.716	32607.5	0.2148	0.00130	mg/L				0.61%
Cu 324.754	92963.4	0.2778	0.00216	mg/L				0.78%
Fe 238.863	615503.0	19.22	0.067	mg/L				0.35%
K 404.721	4186.2	62.38	0.202	mg/L				0.32%
Mg 279.079	632174.5	23.58	0.074	mg/L				0.32%
Mn 257.610	547737.2	1.067	0.0060	mg/L				0.56%
Mo 202.030	10893.2	0.4924	0.00144	mg/L				0.29%
Na 330.237	348469.2	352.1	2.64	mg/L				0.75%
Ni 231.604	26136.9	0.5034	0.00134	mg/L				0.27%
Pb 220.353	3927.3	0.4928	0.00133	mg/L				0.27%
Sb 206.833	1430.1	0.4955	0.00244	mg/L				0.49%
Se 196.026	3433.3	0.9939	0.00174	mg/L				0.17%
Sn 189.933	6561.2	7.003	0.0258	mg/L				0.37%
Ti 334.941	923735.2	1.624	0.0099	mg/L				0.61%
Tl 190.800	4631.3	1.878	0.0040	mg/L				0.21%
V 292.402	154698.1	0.5811	0.00230	mg/L				0.40%
Zn 206.191	49759.9	0.5413	0.00080	mg/L				0.15%

Mean Data

I[illegible] 524669L Seq. No.: 51 Sample No.: 31 A/S Pos: 39
[illegible]e Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:20:51 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5003597.0	0.972	0.0034	mg/L				0.35%
Ag 328.068	-2200.9	0.0003	0.00036	mg/L				143.11%
Al 308.215	138392.0	5.379	0.0243	mg/L				0.45%
As 188.979	-13.6	0.0110	0.00228	mg/L				20.78%
B 249.773	12045.0	0.1161	0.00085	mg/L				0.73%
Ba 233.527	10230.2	0.0738	0.00037	mg/L				0.50%
Be 313.107	-4722.8	-0.0002	0.00001	mg/L				3.79%
Ca 315.887	3150536.8	17.75	0.052	mg/L				0.29%
Cd 226.502	-85.8	0.0004	0.00001	mg/L				1.34%
Co 228.616	-179.5	0.0019	0.00035	mg/L				18.92%
Cr 267.716	784.8	0.0047	0.00000	mg/L				0.10%
Cu 324.754	3591.3	0.0045	0.00025	mg/L				5.56%
Fe 238.863	123650.1	3.856	0.0005	mg/L				0.01%
K 404.721	91.1	8.988	0.2777	mg/L				3.09%
Mg 279.079	121730.5	4.556	0.0011	mg/L				0.02%
Mn 257.610	60074.3	0.1161	0.00018	mg/L				0.16%
Mo 202.030	130.2	0.0064	0.00005	mg/L				0.74%
Na 330.237	55680.5	55.54	0.335	mg/L				0.60%
Ni 231.604	-141.4	0.0025	0.00018	mg/L				6.92%
Pb 220.353	38.4	0.0021	0.00015	mg/L				6.84%
Sb 206.833	47.9	0.0006	0.00050	mg/L				79.46%
Se 196.026	-18.9	0.0013	0.00061	mg/L				45.58%
Sn 189.933	1746.2	1.755	0.0183	mg/L				1.04%
Ti 334.941	130581.4	0.2303	0.00135	mg/L				0.58%
Tl 190.800	-17.8	0.0005	0.00068	mg/L				138.73%
V 292.402	5288.2	0.0172	0.00009	mg/L				0.52%
Zn 206.191	1091.1	0.0117	0.00004	mg/L				0.30%

[illegible] Data

ID: 524670 Seq. No.: 52 Sample No.: 32 A/S Pos: 40
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1
Data: Original Date: 01/28/02 8:25:59 [illegible]

	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
71 J	4928896.1	0.957	0.0061	mg/L				0.64%
328.068	-2290.7	-0.0001	0.00003	mg/L				25.06%
308.215	70733.5	2.634	0.0005	mg/L				0.02%
188.979	2.6	0.0190	0.00260	mg/L				13.68%
49.773	31402.6	0.3339	0.00124	mg/L				0.37%
233.527	12100.5	0.0876	0.00056	mg/L				0.63%
313.107	-3742.8	-0.0001	0.00001	mg/L				18.92%
315.887	11330044.4	63.88	0.333	mg/L				0.52%
226.502	-108.7	0.0003	0.00002	mg/L				7.92%
228.616	-185.5	0.0017	0.00004	mg/L				2.42%
267.716	583.5	0.0034	0.00017	mg/L				4.89%
324.754	4391.9	0.0069	0.00014	mg/L				2.00%
238.863	44155.9	1.373	0.0087	mg/L				0.63%
104.721	1558.3	27.18	0.128	mg/L				0.47%
279.079	697170.2	26.00	0.180	mg/L				0.69%
257.610	33793.4	0.0649	0.00032	mg/L				0.49%
202.030	80.0	0.0042	0.00003	mg/L				0.66%
330.237	249846.8	252.2	0.40	mg/L				0.16%
231.604	-205.4	0.0013	0.00005	mg/L				3.58%
220.353	59.2	0.0048	0.00024	mg/L				5.14%
206.833	50.3	0.0015	0.00101	mg/L				68.88%
196.026	-6.6	0.0049	0.00190	mg/L				38.89%
189.933	6741.1	7.199	0.0391	mg/L				0.54%
334.941	38117.0	0.0678	0.00034	mg/L				0.50%
190.800	-21.8	-0.0011	0.00069	mg/L				61.33%
292.402	4067.7	0.0126	0.00002	mg/L				0.17%
206.191	906.8	0.0097	0.00007	mg/L				0.77%

ean Data

D: CCV Seq. No.: 53 Sample No.: 8 A/S Pos: 4
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:31:15 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4906989.4	0.953	0.0060	mg/L				0.63%
g 328.068	115081.3	0.5107	0.00215	mg/L				0.42%
l 308.215	250029.5	9.909	0.0476	mg/L				0.48%
s 188.979	2051.9	1.039	0.0023	mg/L				0.22%
249.773	229479.2	2.562	0.0630	mg/L				2.46%
a 233.527	1421495.8	10.48	0.011	mg/L				0.10%
e 313.107	1919524.9	0.2532	0.00017	mg/L				0.07%
a 315.887	4493345.1	25.33	0.030	mg/L				0.12%
d 226.502	70335.8	0.5071	0.00230	mg/L				0.45%
o 228.616	81765.0	2.604	0.0090	mg/L				0.34%
r 267.716	77466.5	0.5108	0.00181	mg/L				0.36%
u 324.754	421120.3	1.281	0.0093	mg/L				0.73%
Fe 238.863	163309.4	5.095	0.0184	mg/L				0.36%
K 404.721	2059.4	33.39	0.733	mg/L				2.19%
*QC exceeds upper limit for K 404.721 Recovery = 133.58% Action = Continue								
Mg 279.079	672432.8	25.08	0.068	mg/L				0.27%
Mn 257.610	403736.3	0.7863	0.00303	mg/L				0.39%
Mo 202.030	53827.7	2.431	0.0135	mg/L				0.56%
Na 330.237	24085.4	23.54	0.201	mg/L				0.86%
Ni 231.604	107901.6	2.062	0.0064	mg/L				0.31%
Pb 220.353	4037.6	0.5068	0.00121	mg/L				0.24%
Sb 206.833	13953.7	4.979	0.0250	mg/L				0.50%
Se 196.026	1730.3	0.5043	0.00191	mg/L				0.38%
Sn 189.933	62926.7	68.44	0.302	mg/L				0.44%
*QC exceeds upper limit for Sn 189.933 Recovery = 1368.75% Action = Continue								
Ti 334.941	1457586.5	2.562	0.0019	mg/L				0.07%
Tl 190.800	2536.7	1.032	0.0039	mg/L				0.38%
V 292.402	680389.3	2.565	0.0033	mg/L				0.13%
Z 206.191	93162.3	1.014	0.0036	mg/L				0.36%

Data

ID: CCB Seq. No.: 54 Sample No.: 9 A/S Pos: 5
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:36:22 PM

	Mean Corr.	Mean	Calib	Mean	Sample

ment	Intensity	Conc.	Std.Dev.	Units	Conc.	Std.Dev.	Units	RSD
71	4959970.2	0.963	0.0042	mg/L				0.44%
32 8	-2187.2	0.0003	0.00002	mg/L				4.91%
308.215	5686.2	-0.0056	0.00355	mg/L				62.90%
188.979	-34.9	0.0003	0.00054	mg/L				154.91%
49.773	6734.7	0.0564	0.01456	mg/L				25.82%
233.527	333.4	0.0008	0.00014	mg/L				17.05%
313.107	-3278.5	0.0000	0.00002	mg/L				188.01%
315.887	2400.6	-0.0001	0.00030	mg/L				208.45%
226.502	-140.5	0.0000	0.00002	mg/L				89.66%
228.616	-244.6	-0.0002	0.00034	mg/L				175.28%
267.716	98.7	0.0002	0.00000	mg/L				0.88%
324.754	2519.1	0.0012	0.00028	mg/L				23.33%
238.863	167.8	-0.0016	0.00045	mg/L				27.87%
04.721	-228.3	5.028	0.6354	mg/L				12.64%
: exceeds upper limit for K 404.721		Action = Continue						
279.079	-554.2	-0.0005	0.00009	mg/L				15.95%
257.610	486.7	0.0000	0.00001	mg/L				15.05%
202.030	8.3	0.0009	0.00038	mg/L				40.21%
330.237	903.5	0.0550	0.07997	mg/L				145.35%
231.604	-279.9	-0.0001	0.00030	mg/L				306.68%
220.353	24.0	0.0003	0.00026	mg/L				80.37%
206.833	91.1	0.0161	0.00298	mg/L				18.54%
C exceeds upper limit for Sb 206.833		Action = Continue						
196.026	-23.1	0.0001	0.00153	mg/L				>999.9%
189.933	233.5	0.1059	0.02629	mg/L				24.83%
334.941	-154.6	0.0005	0.00020	mg/L				37.54%
190.800	-17.8	0.0005	0.00009	mg/L				18.65%
292.402	735.6	0.0001	0.00012	mg/L				199.59%
206.191	29.7	0.0001	0.00003	mg/L				25.00%

an Data

): 524671 Seq. No.: 55 Sample No.: 33 A/S Pos: 41
ur Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:41:30 PM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	4793542.0	0.931	0.0004	mg/L				0.04%
g 328.068	-2392.9	-0.0006	0.00004	mg/L				7.08%
l 308.215	247677.4	9.813	0.0006	mg/L				0.01%
s 188.979	10.3	0.0229	0.00169	mg/L				7.38%
249.773	49064.3	0.5325	0.00535	mg/L				1.00%
a 233.527	20982.9	0.1530	0.00072	mg/L				0.47%
e 313.107	-5235.9	-0.0002	0.00000	mg/L				1.82%
a 315.887	11143818.1	62.83	0.176	mg/L				0.28%
d 226.502	-48.3	0.0007	0.00000	mg/L				0.04%
o 228.616	-146.8	0.0029	0.00016	mg/L				5.64%
r 267.716	1948.2	0.0124	0.00003	mg/L				0.25%
u 324.754	5077.7	0.0090	0.00018	mg/L				2.00%
e 238.863	206361.8	6.440	0.0340	mg/L				0.53%
K 404.721	1460.7	25.97	0.125	mg/L				0.48%
Mg 279.079	510086.6	19.03	0.159	mg/L				0.83%
Mn 257.610	100608.0	0.1952	0.00112	mg/L				0.58%
Mo 202.030	276.3	0.0130	0.00007	mg/L				0.55%
Na 330.237	334475.8	337.9	1.65	mg/L				0.49%
Ni 231.604	43.6	0.0061	0.00004	mg/L				0.62%
Pb 220.353	59.8	0.0048	0.00051	mg/L				10.45%
Sb 206.833	64.1	0.0064	0.00049	mg/L				7.59%
Se 196.026	1.3	0.0072	0.00067	mg/L				9.34%
Sn 189.933	5690.7	6.054	0.0075	mg/L				0.12%
Ti 334.941	211431.8	0.3724	0.00188	mg/L				0.50%
Tl 190.800	-26.2	-0.0029	0.00044	mg/L				15.42%
V 292.402	13696.2	0.0490	0.00041	mg/L				0.83%
Zn 206.191	2223.0	0.0240	0.00012	mg/L				0.48%

Data

IL 524674 Seq. No.: 56 Sample No.: 34 A/S Pos: 42
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:46:37 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD

71.030	4956796.8	0.963	0.0046	mg/L	0.48%
32[illegible]068	-2373.1	-0.0005	0.00004	mg/L	8.97%
3[illegible]15	197418.8	7.774	0.0133	mg/L	0.17%
18[illegible].979	10.9	0.0232	0.00370	mg/L	15.97%
49.773	46703.0	0.5060	0.00365	mg/L	0.72%
233.527	17554.4	0.1278	0.00085	mg/L	0.67%
313.107	-4798.2	-0.0002	0.00001	mg/L	5.48%
315.887	10278625.1	57.95	0.023	mg/L	0.04%
226.502	-64.7	0.0006	0.00002	mg/L	2.80%
228.616	-156.7	0.0026	0.00014	mg/L	5.38%
267.716	1698.7	0.0108	0.00003	mg/L	0.28%
324.754	4366.0	0.0069	0.00024	mg/L	3.43%
238.863	161609.9	5.042	0.0210	mg/L	0.42%
404.721	1392.6	25.13	0.133	mg/L	0.53%
279.079	472662.7	17.63	0.131	mg/L	0.74%
257.610	80867.8	0.1567	0.00059	mg/L	0.38%
202.030	257.7	0.0122	0.00003	mg/L	0.21%
330.237	318520.8	321.8	1.63	mg/L	0.51%
231.604	-9.1	0.0051	0.00015	mg/L	2.98%
220.353	52.9	0.0040	0.00032	mg/L	7.96%
206.833	54.0	0.0028	0.00054	mg/L	19.35%
196.026	1.8	0.0073	0.00299	mg/L	40.92%
189.933	5336.4	5.668	0.0161	mg/L	0.28%
334.941	163243.3	0.2877	0.00081	mg/L	0.28%
190.800	-24.0	-0.0020	0.00022	mg/L	11.15%
292.402	12374.4	0.0440	0.00070	mg/L	1.58%
206.191	1750.2	0.0188	0.00004	mg/L	0.19%

ean Data

D: 524675 Seq. No.: 57 Sample No.: 35 A/S Pos: 43
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:52:01 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
[illegible]t [illegible]030	4910022.0	0.954	0.0000	mg/L				0.00%
g 328.068	-3142.9	-0.0038	0.00015	mg/L				3.96%
l 308.215	1871847.5	75.71	0.088	mg/L				0.12%
s 188.979	-7.9	0.0138	0.00015	mg/L				1.12%
249.773	53348.8	0.5807	0.00644	mg/L				1.11%
a 233.527	122337.9	0.9003	0.00283	mg/L				0.31%
e 313.107	-18621.4	-0.0020	0.00002	mg/L				1.17%
a 315.887	32683580.9	184.3	0.26	mg/L				0.14%
d 226.502	453.6	0.0043	0.00003	mg/L				0.73%
o 228.616	572.6	0.0258	0.00018	mg/L				0.68%
r 267.716	9233.5	0.0605	0.00006	mg/L				0.11%
u 324.754	17747.5	0.0478	0.00002	mg/L				0.04%
e 238.863	1668209.6	52.11	0.022	mg/L				0.04%
404.721	2999.6	52.13	0.145	mg/L				0.28%
Ig 279.079	1225308.9	45.68	0.063	mg/L				0.14%
In 257.610	1013686.6	1.976	0.0008	mg/L				0.04%
Io 202.030	147.0	0.0072	0.00014	mg/L				1.88%
Ia 330.237	298117.6	301.1	2.26	mg/L				0.75%
Ni 231.604	1442.9	0.0327	0.00010	mg/L				0.29%
Pb 220.353	236.7	0.0333	0.00051	mg/L				1.54%
Sb 206.833	43.2	-0.0011	0.00040	mg/L				36.81%
Se 196.026	4.7	0.0081	0.00007	mg/L				0.80%
Sn 189.933	8875.9	9.525	0.0040	mg/L				0.04%
Ti 334.941	1698357.8	2.986	0.0009	mg/L				0.03%
Tl 190.800	-61.5	-0.0171	0.00022	mg/L				1.27%
V 292.402	44412.1	0.1649	0.00016	mg/L				0.10%
Zn 206.191	13766.3	0.1496	0.00013	mg/L				0.09%

Mean Data

ID: 524676 Seq. No.: 58 Sample No.: 36 A/S Pos: 44
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 8:57:37 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4698658.3	0.912	0.0035	mg/L				0.39%
Ag 328.068	-3243.5	-0.0043	0.00004	mg/L				1.02%
Al 308.215	2054224.5	83.11	0.102	mg/L				0.12%

.88.979	-8.9	0.0241	0.00010	mg/L	0.43%
.9	55472.9	0.6046	0.00132	mg/L	0.22%
:3 7	135400.4	0.9966	0.00083	mg/L	0.08%
313.107	-19941.3	-0.0022	0.00001	mg/L	0.66%
315.887	38998686.7	219.9	1.21	mg/L	0.55%
226.502	521.8	0.0048	0.00001	mg/L	0.15%
228.616	651.3	0.0283	0.00015	mg/L	0.52%
267.716	10094.6	0.0662	0.00015	mg/L	0.22%
324.754	19389.5	0.0528	0.00072	mg/L	1.35%
238.863	1840193.4	57.48	0.056	mg/L	0.10%
04.721	3182.8	55.14	1.241	mg/L	2.25%
279.079	1317626.5	49.12	0.016	mg/L	0.03%
257.610	1146083.1	2.234	0.0025	mg/L	0.11%
202.030	134.6	0.0066	0.00028	mg/L	4.27%
330.237	306057.0	309.2	1.61	mg/L	0.52%
231.604	1588.5	0.0355	0.00015	mg/L	0.43%
220.353	255.0	0.0362	0.00036	mg/L	0.99%
206.833	44.7	-0.0005	0.00109	mg/L	203.18%
196.026	-1.0	0.0065	0.00148	mg/L	22.70%
189.933	9322.2	10.01	0.047	mg/L	0.47%
334.941	1872725.2	3.292	0.0021	mg/L	0.06%
190.800	-65.9	-0.0189	0.00032	mg/L	1.69%
292.402	48614.8	0.1808	0.00123	mg/L	0.68%
206.191	15195.8	0.1652	0.00026	mg/L	0.16%

an Data ----------

: 524677 Seq. No.: 59 Sample No.: 37 A/S Pos: 45
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:02:57 PM

ement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	4895619.6	0.951	0.0055	mg/L				0.58%
[illegible] 068	-2298.7	-0.0002	0.00013	mg/L				73.09%
215	15624.7	0.3976	0.00607	mg/L				1.53%
[illegible] .979	-5.9	0.0148	0.00211	mg/L				14.24%
249.773	26713.0	0.2811	0.00120	mg/L				0.43%
a 233.527	4209.9	0.0294	0.00011	mg/L				0.39%
e 313.107	-3654.7	0.0000	0.00001	mg/L				18.05%
a 315.887	10384383.4	58.55	0.113	mg/L				0.19%
d 226.502	-114.7	0.0002	0.00005	mg/L				22.63%
o 228.616	-234.9	0.0001	0.00020	mg/L				178.35%
r 267.716	427.2	0.0024	0.00002	mg/L				0.70%
u 324.754	2705.5	0.0018	0.00016	mg/L				9.10%
e 238.863	8021.9	0.2437	0.00256	mg/L				1.05%
: 404.721	1585.1	27.51	0.415	mg/L				1.51%
Mg 279.079	536989.2	20.03	0.070	mg/L				0.35%
Mn 257.610	20337.4	0.0387	0.00027	mg/L				0.70%
Mo 202.030	148.6	0.0073	0.00001	mg/L				0.19%
Na 330.237	202284.0	204.0	1.99	mg/L				0.97%
Ni 231.604	-234.3	0.0008	0.00008	mg/L				10.34%
Pb 220.353	33.3	0.0015	0.00022	mg/L				14.82%
Sb 206.833	47.7	0.0005	0.00222	mg/L				406.35%
Se 196.026	4.8	0.0082	0.00121	mg/L				14.77%
Sn 189.933	5787.9	6.160	0.0397	mg/L				0.64%
Ti 334.941	6469.8	0.0122	0.00016	mg/L				1.29%
Tl 190.800	-21.7	-0.0011	0.00086	mg/L				79.95%
V 292.402	5955.9	0.0198	0.00018	mg/L				0.90%
Zn 206.191	1252.7	0.0134	0.00003	mg/L				0.22%

Mean Data ----------

ID: 524678 Seq. No.: 60 Sample No.: 38 A/S Pos: 46
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:08:05 PM

F nt	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
A ..030	4852176.1	0.942	0.0049	mg/L				0.52%
Ag 328.068	-2251.6	0.0000	0.00007	mg/L				220.20%
Al 308.215	7329.0	0.0610	0.00351	mg/L				5.75%
As 188.979	-24.5	0.0056	0.00114	mg/L				20.44%
B 249.773	8217.8	0.0731	0.00152	mg/L				2.07%
Ba 233.527	27363.7	0.2001	0.00177	mg/L				0.88%

Be 313.107	-3633.8	0.0000	0.00000	mg/L	7.17%
Ca 315.887	8981385.5	50.63	0.032	mg/L	0.06%
Cd 226.502	240.4	0.0028	0.00006	mg/L	2.00%
Co [illegible].616	-12.1	0.0072	0.00015	mg/L	2.14%
Cr [illegible].716	150.8	0.0006	0.00011	mg/L	20.30%
Cu 324.754	3308.4	0.0036	0.00004	mg/L	1.15%
Fe 238.863	8044.8	0.2445	0.00106	mg/L	0.43%
K 404.721	531.6	14.45	0.339	mg/L	2.35%
Mg 279.079	157456.5	5.887	0.0446	mg/L	0.76%
Mn 257.610	2534501.4	4.941	0.0035	mg/L	0.07%
Mo 202.030	265.3	0.0125	0.00015	mg/L	1.16%
Na 330.237	13352.0	12.66	0.081	mg/L	0.64%
Ni 231.604	118.7	0.0075	0.00006	mg/L	0.81%
Pb 220.353	40.8	0.0024	0.00013	mg/L	5.42%
Sb 206.833	51.0	0.0017	0.00146	mg/L	85.49%
Se 196.026	-13.9	0.0028	0.00024	mg/L	8.72%
Sn 189.933	2211.7	2.262	0.0116	mg/L	0.51%
Ti 334.941	2159.1	0.0046	0.00007	mg/L	1.58%
Tl 190.800	-121.9	-0.0415	0.00108	mg/L	2.61%
V 292.402	9834.6	0.0344	0.00051	mg/L	1.48%
Zn 206.191	95557.0	1.040	0.0079	mg/L	0.76%

Mean Data ----------

ID: 524679 Seq. No.: 61 Sample No.: 39 A/S Pos: 47
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:13:23 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4820298.2	0.936	0.0029	mg/L				0.31%
Ag 328.068	-2375.2	-0.0005	0.00038	mg/L				74.42%
Al 308.215	6737.1	0.0370	0.00131	mg/L				3.55%
As 188.979	-34.8	0.0004	0.00049	mg/L				111.80%
B 249.773	18403.3	0.1876	0.00124	mg/L				0.66%
Ba 233.527	8402.1	0.0603	0.00015	mg/L				0.26%
B 3.107	-3856.8	-0.0001	0.00001	mg/L				7.89%
C 5.887	20685494.1	116.6	0.51	mg/L				0.44%
Cd 226.502	-125.7	0.0001	0.00001	mg/L				6.01%
Co 228.616	-173.5	0.0021	0.00017	mg/L				8.10%
Cr 267.716	258.9	0.0013	0.00009	mg/L				6.73%
Cu 324.754	2291.3	0.0005	0.00001	mg/L				2.56%
Fe 238.863	21902.2	0.6773	0.00039	mg/L				0.06%
K 404.721	1065.5	21.07	0.917	mg/L				4.35%
Mg 279.079	369273.3	13.78	0.008	mg/L				0.06%
Mn 257.610	475439.9	0.9261	0.00011	mg/L				0.01%
Mo 202.030	101.6	0.0051	0.00016	mg/L				3.20%
Na 330.237	107126.0	107.6	0.41	mg/L				0.39%
Ni 231.604	-16.5	0.0049	0.00001	mg/L				0.17%
Pb 220.353	27.1	0.0007	0.00019	mg/L				26.34%
Sb 206.833	47.2	0.0004	0.00107	mg/L				289.91%
Se 196.026	-19.3	0.0012	0.00233	mg/L				189.61%
Sn 189.933	4410.3	4.658	0.0159	mg/L				0.34%
Ti 334.941	-818.3	-0.0006	0.00002	mg/L				2.45%
Tl 190.800	-37.7	-0.0075	0.00158	mg/L				20.99%
V 292.402	851.5	0.0005	0.00007	mg/L				13.53%
Zn 206.191	18336.5	0.1993	0.00034	mg/L				0.17%

Mean Data ----------

ID: 524683 Seq. No.: 62 Sample No.: 40 A/S Pos: 48
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:18:42 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4892342.6	0.950	0.0028	mg/L				0.30%
Ag 328.068	-2212.5	0.0002	0.00012	mg/L				58.87%
Al 308.215	6707.8	0.0358	0.00051	mg/L				1.42%
As 188.979	2.8	0.0191	0.00002	mg/L				0.13%
B [illegible].773	25556.2	0.2681	0.00290	mg/L				1.08%
Ba 233.527	9518.1	0.0685	0.00038	mg/L				0.56%
Be 313.107	-3665.4	0.0000	0.00000	mg/L				3.09%
Ca 315.887	9939027.2	56.03	0.044	mg/L				0.08%
Cd 226.502	-121.9	0.0002	0.00002	mg/L				10.9[illegible]

3

o 228.616	-249.6	-0.0004	0.00008	mg/L	23.01%
r 267.716	329.4	0.0017	0.00008	mg/L	4.45%
u 754	2475.2	0.0011	0.00010	mg/L	9.25%
e .863	478.8	0.0081	0.00003	mg/L	0.39%
404.721	1237.9	23.21	0.033	mg/L	0.14%
g 279.079	418952.3	15.63	0.059	mg/L	0.37%
n 257.610	690.2	0.0003	0.00004	mg/L	12.56%
o 202.030	151.9	0.0074	0.00020	mg/L	2.64%
a 330.237	118076.5	118.7	0.40	mg/L	0.34%
i 231.604	-268.5	0.0001	0.00007	mg/L	58.49%
b 220.353	20.8	-0.0001	0.00003	mg/L	40.11%
b 206.833	46.1	0.0000	0.00142	mg/L	>999.9%
e 196.026	-9.4	0.0041	0.00113	mg/L	27.67%
n 189.933	4890.6	5.182	0.0366	mg/L	0.71%
i 334.941	-580.5	-0.0002	0.00000	mg/L	1.44%
l 190.800	-21.8	-0.0011	0.00034	mg/L	30.45%
292.402	6117.1	0.0204	0.00010	mg/L	0.51%
n 206.191	277.7	0.0028	0.00004	mg/L	1.38%

lean Data

:D: 524685 Seq. No.: 63 Sample No.: 41 A/S Pos: 49
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:23:53 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	4912511.1	0.954	0.0018	mg/L				0.18%
Ag 328.068	-2379.1	-0.0005	0.00008	mg/L				15.21%
Al 308.215	6135.2	0.0126	0.00014	mg/L				1.13%
As 188.979	-4.9	0.0153	0.00073	mg/L				4.78%
B 249.773	19106.1	0.1955	0.00028	mg/L				0.14%
Ba 233.527	9621.4	0.0693	0.00011	mg/L				0.16%
Be 313.107	-3685.0	0.0000	0.00001	mg/L				25.82%
Ca 315.887	16455340.4	92.78	0.081	mg/L				0.09%
Cd 226.502	-14.1	0.0009	0.00002	mg/L				2.57%
C .616	-241.2	-0.0001	0.00023	mg/L				271.83%
Cr 267.716	435.6	0.0024	0.00004	mg/L				1.67%
Cu 324.754	2818.4	0.0021	0.00008	mg/L				3.68%
Fe 238.863	783.2	0.0176	0.00007	mg/L				0.39%
K 404.721	1576.1	27.40	1.812	mg/L				6.61%
Mg 279.079	913557.8	34.06	0.031	mg/L				0.09%
Mn 257.610	7109.3	0.0129	0.00000	mg/L				0.02%
Mo 202.030	113.5	0.0057	0.00016	mg/L				2.74%
Na 330.237	123765.8	124.5	0.37	mg/L				0.30%
Ni 231.604	-232.8	0.0008	0.00012	mg/L				14.81%
Pb 220.353	23.1	0.0002	0.00032	mg/L				153.59%
Sb 206.833	47.6	0.0005	0.00054	mg/L				107.51%
Se 196.026	-13.6	0.0029	0.00156	mg/L				54.11%
Sn 189.933	7739.0	8.286	0.0057	mg/L				0.07%
Ti 334.941	-997.1	-0.0009	0.00003	mg/L				3.11%
Tl 190.800	-23.0	-0.0016	0.00040	mg/L				25.23%
V 292.402	7254.1	0.0247	0.00007	mg/L				0.30%
Zn 206.191	229.2	0.0023	0.00000	mg/L				0.07%

Mean Data

ID: 524686 Seq. No.: 64 Sample No.: 42 A/S Pos: 50
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:29:05 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	4846738.3	0.941	0.0008	mg/L				0.08%
Ag 328.068	-2277.0	-0.0001	0.00022	mg/L				281.24%
Al 308.215	33433.8	1.120	0.0139	mg/L				1.24%
As 188.979	7.4	0.0214	0.00113	mg/L				5.26%
B 249.773	49270.4	0.5349	0.01142	mg/L				2.14%
Ba 233.527	11351.1	0.0820	0.00020	mg/L				0.25%
13.107	-3860.3	-0.0001	0.00001	mg/L				14.13%
15.887	11820007.4	66.64	0.090	mg/L				0.14%
Cd 226.502	-121.6	0.0002	0.00001	mg/L				5.09%
Co 228.616	-243.2	-0.0002	0.00021	mg/L				142.39%
Cr 267.716	606.9	0.0036	0.00005	mg/L				1.30%
Cu 324.754	3202.5	0.0033	0.00019	mg/L				5.87%

: 238.863	23164.9	0.7168	0.00524	mg/L	0.73%
404 721	1983.3	32.45	1.120	mg/L	3.45%
f 079	755539.2	28.17	0.109	mg/L	0.39%
1 .610	11904.4	0.0222	0.00007	mg/L	0.31%
202.030	69.8	0.0037	0.00012	mg/L	3.33%
1 330.237	321270.3	324.6	3.97	mg/L	1.22%
i 231.604	-227.2	0.0009	0.00011	mg/L	11.94%
220.353	31.6	0.0013	0.00016	mg/L	12.15%
206.833	48.0	0.0006	0.00073	mg/L	114.18%
196.026	1.7	0.0073	0.00213	mg/L	29.19%
n 189.933	7138.0	7.631	0.0076	mg/L	0.10%
i 334.941	22470.1	0.0403	0.00027	mg/L	0.67%
l 190.800	-22.5	-0.0014	0.00135	mg/L	97.91%
292.402	5486.4	0.0180	0.00037	mg/L	2.03%
n 206.191	627.0	0.0066	0.00002	mg/L	0.36%

ean Data ----------

D: CCV Seq. No.: 65 Sample No.: 8 A/S Pos: 4
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:34:24 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
: 371.030	4941404.3	0.960	0.0001	mg/L				0.01%
g 328.068	115560.5	0.5128	0.00369	mg/L				0.72%
l 308.215	251574.6	9.971	0.1078	mg/L				1.08%
s 188.979	2032.3	1.029	0.0019	mg/L				0.19%
249.773	231690.9	2.587	0.0232	mg/L				0.90%
a 233.527	1419758.3	10.47	0.012	mg/L				0.12%
e 313.107	1919195.9	0.2532	0.00017	mg/L				0.07%
a 315.887	4493291.8	25.33	0.041	mg/L				0.16%
d 226.502	70979.4	0.5118	0.00290	mg/L				0.57%
o 228.616	82116.7	2.616	0.0103	mg/L				0.39%
r 267.716	78067.5	0.5148	0.00170	mg/L				0.33%
r 1.754	422283.5	1.285	0.0163	mg/L				1.27%
F .863	164367.5	5.128	0.0209	mg/L				0.41%
K 404.721	1891.7	31.31	0.392	mg/L				1.25%
*QC exceeds upper limit for K 404.721 Recovery = 125.26% Action = Continue								
Mg 279.079	676160.4	25.21	0.042	mg/L				0.17%
Mn 257.610	405051.6	0.7888	0.00382	mg/L				0.48%
Mo 202.030	54289.4	2.452	0.0162	mg/L				0.66%
Na 330.237	24187.8	23.64	0.272	mg/L				1.15%
Ni 231.604	108555.1	2.074	0.0125	mg/L				0.60%
Pb 220.353	4031.6	0.5060	0.00078	mg/L				0.15%
Sb 206.833	13826.7	4.934	0.0290	mg/L				0.59%
Se 196.026	1716.5	0.5003	0.00003	mg/L				0.01%
Sn 189.933	63515.6	69.08	0.307	mg/L				0.44%
*QC exceeds upper limit for Sn 189.933 Recovery = 1381.58% Action = Continue								
Ti 334.941	1453710.4	2.556	0.0014	mg/L				0.05%
Tl 190.800	2526.6	1.028	0.0056	mg/L				0.55%
V 292.402	679853.4	2.563	0.0004	mg/L				0.01%
Zn 206.191	93924.0	1.022	0.0032	mg/L				0.31%

Mean Data ----------

ID: CCB Seq. No.: 66 Sample No.: 9 A/S Pos: 5
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:39:32 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5022304.7	0.975	0.0042	mg/L				0.43%
Ag 328.068	-2175.1	0.0004	0.00005	mg/L				13.13%
Al 308.215	5643.6	-0.0074	0.00245	mg/L				33.33%
As 188.979	-34.2	0.0007	0.00045	mg/L				61.75%
B 249.773	5731.9	0.0451	0.01116	mg/L				24.75%
Ba 233.527	389.5	0.0012	0.00049	mg/L				40.18%
P 313.107	-3178.7	0.0000	0.00002	mg/L				81.36%
15.887	3155.3	0.0041	0.00228	mg/L				55.55%
C 226.502	-131.4	0.0001	0.00003	mg/L				38.13%
Co 228.616	-237.8	0.0000	0.00003	mg/L				119.68%
Cr 267.716	97.4	0.0002	0.00004	mg/L				17.94%
Cu 324.754	2420.3	0.0009	0.00034	mg/L				38.10%
Fe 238.863	120.7	-0.0031	0.00052	mg/L				16.78%

4.721	-179.7	5.631	0.6940 mg/L	12.33%
e ds upper limit for K 404.721 Action = Continue				
9	-521.6	0.0007	0.00004 mg/L	6.41%
257.610	503.8	0.0000	0.00005 mg/L	311.74%
202.030	13.4	0.0012	0.00048 mg/L	41.37%
330.237	876.8	0.0279	0.05194 mg/L	185.97%
231.604	-264.9	0.0002	0.00010 mg/L	53.41%
220.353	20.2	-0.0002	0.00035 mg/L	219.28%
206.833	92.8	0.0167	0.00494 mg/L	29.60%
exceeds upper limit for Sb 206.833 Action = Continue				
196.026	-21.8	0.0005	0.00053 mg/L	101.13%
189.933	220.6	0.0918	0.02646 mg/L	28.82%
334.941	-75.0	0.0007	0.00018 mg/L	27.28%
190.800	-14.2	0.0020	0.00028 mg/L	14.44%
92.402	766.2	0.0002	0.00007 mg/L	39.80%
206.191	31.3	0.0001	0.00007 mg/L	52.52%

an Data ----------

: 524687 Seq. No.: 67 Sample No.: 43 A/S Pos: 51
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:44:41 PM

ement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	4956364.9	0.963	0.0008	mg/L				0.09%
328.068	-2350.7	-0.0004	0.00020	mg/L				51.13%
308.215	60858.0	2.233	0.0003	mg/L				0.02%
188.979	-2.5	0.0165	0.00124	mg/L				7.49%
249.773	29974.3	0.3178	0.00037	mg/L				0.12%
233.527	9082.6	0.0653	0.00008	mg/L				0.12%
313.107	-3957.5	-0.0001	0.00000	mg/L				2.23%
315.887	11385736.8	64.19	0.028	mg/L				0.04%
226.502	-96.4	0.0003	0.00002	mg/L				6.00%
616	-206.2	0.0010	0.00002	mg/L				1.82%
716	788.5	0.0048	0.00008	mg/L				1.66%
.754	3367.7	0.0038	0.00001	mg/L				0.22%
238.863	45248.6	1.407	0.0009	mg/L				0.07%
404.721	1371.2	24.86	0.398	mg/L				1.60%
279.079	572237.6	21.34	0.001	mg/L				0.00%
257.610	171300.5	0.3330	0.00028	mg/L				0.08%
202.030	115.7	0.0058	0.00003	mg/L				0.57%
330.237	231185.1	233.3	0.31	mg/L				0.13%
231.604	-114.2	0.0031	0.00000	mg/L				0.08%
220.353	36.4	0.0019	0.00036	mg/L				18.88%
206.833	60.8	0.0052	0.00205	mg/L				39.12%
196.026	16.9	0.0117	0.00176	mg/L				15.05%
189.933	5994.4	6.385	0.0046	mg/L				0.07%
334.941	49058.3	0.0870	0.00003	mg/L				0.03%
190.800	-28.3	-0.0037	0.00023	mg/L				6.18%
292.402	8297.2	0.0286	0.00020	mg/L				0.70%
206.191	1099.9	0.0118	0.00001	mg/L				0.12%

lean Data ----------

D: 524688 Seq. No.: 68 Sample No.: 44 A/S Pos: 52
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:49:54 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	4903273.5	0.952	0.0006	mg/L				0.06%
Ag 328.068	-2342.7	-0.0004	0.00016	mg/L				42.73%
Al 308.215	117256.0	4.521	0.0213	mg/L				0.47%
As 188.979	22.7	0.0291	0.00095	mg/L				3.27%
B 249.773	64351.7	0.7045	0.00330	mg/L				0.47%
Ba 233.527	15818.4	0.1150	0.00004	mg/L				0.04%
Be 313.107	-4326.7	-0.0001	0.00000	mg/L				0.21%
C 5.887	12363129.8	69.71	0.080	mg/L				0.11%
C 6.502	-103.8	0.0003	0.00001	mg/L				1.99%
Co 228.616	-214.1	0.0008	0.00008	mg/L				9.83%
Cr 267.716	1601.1	0.0101	0.00001	mg/L				0.10%
Cu 324.754	3872.1	0.0053	0.00002	mg/L				0.32%
Fe 238.863	76334.1	2.378	0.0057	mg/L				0.24%
K 404.721	2087.8	33.75	0.437	mg/L				1.29%

g 279.079	725995.1	27.07	0.049	mg/L	0.18%
n 257.610	34406.8	0.0661	0.00036	mg/L	0.55%
o [illegible].030	186.7	0.0090	0.00000	mg/L	0.01%
a 237	375720.4	379.7	1.48	mg/L	0.39%
i [illegible].604	-190.0	0.0016	0.00004	mg/L	2.39%
o 220.353	39.9	0.0023	0.00021	mg/L	8.89%
o 206.833	54.0	0.0028	0.00103	mg/L	36.60%
e 196.026	4.4	0.0081	0.00039	mg/L	4.78%
n 189.933	6981.5	7.461	0.0023	mg/L	0.03%
i 334.941	79060.5	0.1398	0.00047	mg/L	0.33%
l 190.800	-20.9	-0.0007	0.00020	mg/L	27.98%
292.402	9399.7	0.0328	0.00054	mg/L	1.65%
n 206.191	1124.8	0.0120	0.00001	mg/L	0.09%

ean Data ----------

D: 524689 Seq. No.: 69 Sample No.: 45 A/S Pos: 53
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 9:55:06 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
' 371.030	4815917.0	0.935	0.0005	mg/L				0.05%
g 328.068	-2263.9	0.0000	0.00022	mg/L				>999.9%
l 308.215	116544.1	4.492	0.0430	mg/L				0.96%
s 188.979	451.4	0.2424	0.00124	mg/L				0.51%
249.773	68336.9	0.7493	0.01784	mg/L				2.38%
a 233.527	10773.2	0.0778	0.00022	mg/L				0.28%
e 313.107	-3267.3	0.0000	0.00001	mg/L				73.96%
a 315.887	2963865.1	16.70	0.005	mg/L				0.03%
d 226.502	-93.2	0.0004	0.00001	mg/L				3.27%
o 228.616	-215.3	0.0007	0.00002	mg/L				3.02%
r 267.716	438.1	0.0025	0.00003	mg/L				1.04%
u 324.754	3826.9	0.0052	0.00008	mg/L				1.46%
e 238.863	62908.0	1.958	0.0223	mg/L				1.14%
404.721	976.9	19.97	0.191	mg/L				0.95%
g [illegible].079	157417.3	5.886	0.0680	mg/L				1.16%
n [illegible].610	774553.4	1.509	0.0008	mg/L				0.05%
o 202.030	713.0	0.0328	0.00006	mg/L				0.19%
a 330.237	406870.4	411.3	3.82	mg/L				0.93%
i 231.604	21.8	0.0057	0.00021	mg/L				3.69%
b 220.353	47.7	0.0033	0.00027	mg/L				8.26%
b 206.833	51.7	0.0020	0.00135	mg/L				68.32%
e 196.026	7.0	0.0088	0.00061	mg/L				6.95%
n 189.933	2355.6	2.419	0.0036	mg/L				0.15%
i 334.941	39755.2	0.0707	0.00076	mg/L				1.07%
l 190.800	-50.7	-0.0128	0.00046	mg/L				3.59%
V 292.402	35871.9	0.1327	0.00098	mg/L				0.74%
n 206.191	1872.7	0.0202	0.00010	mg/L				0.52%

Mean Data ----------

ID: 524690 Seq. No.: 70 Sample No.: 46 A/S Pos: 54
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:00:17 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4817212.3	0.936	0.0036	mg/L				0.38%
Ag 328.068	-2369.2	-0.0005	0.00022	mg/L				46.56%
Al 308.215	60445.5	2.216	0.0272	mg/L				1.23%
As 188.979	-1.9	0.0168	0.00193	mg/L				11.48%
B 249.773	31548.3	0.3355	0.00397	mg/L				1.18%
Ba 233.527	9522.8	0.0686	0.00018	mg/L				0.27%
Be 313.107	-4111.5	-0.0001	0.00001	mg/L				7.25%
Ca 315.887	12159079.1	68.55	0.062	mg/L				0.09%
Cd 226.502	-109.1	0.0002	0.00002	mg/L				6.41%
Co 228.616	-204.1	0.0011	0.00019	mg/L				17.56%
Cr 267.716	666.9	0.0040	0.00015	mg/L				3.68%
C [illegible]24.754	3217.0	0.0033	0.00031	mg/L				9.31%
[illegible]8.863	45066.4	1.401	0.0166	mg/L				1.19%
K [illegible]4.721	1520.3	26.71	0.163	mg/L				0.61%
Mg 279.079	595708.5	22.22	0.223	mg/L				1.00%
Mn 257.610	166053.1	0.3228	0.00337	mg/L				1.04%
Mo 202.030	123.5	0.0061	0.00004	mg/L				0.71%

330.237	241499.1	243.8	2.97	mg/L	1.22%
22 4	-160.1	0.0022	0.00008	mg/L	3.54%
22 3	37.2	0.0020	0.00019	mg/L	9.64%
206.833	52.9	0.0024	0.00112	mg/L	46.79%
196.026	24.0	0.0137	0.00095	mg/L	6.96%
189.933	6208.6	6.618	0.0125	mg/L	0.19%
334.941	48330.7	0.0857	0.00086	mg/L	1.00%
190.800	-30.1	-0.0044	0.00003	mg/L	0.67%
92.402	8815.2	0.0306	0.00034	mg/L	1.11%
206.191	1181.2	0.0126	0.00010	mg/L	0.76%

.n Data ----------

524691 Seq. No.: 71 Sample No.: 47 A/S Pos: 55
ıple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:05:30 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4854046.2	0.943	0.0013	mg/L				0.13%
328.068	-2573.8	-0.0014	0.00023	mg/L				16.84%
308.215	408781.5	16.35	0.097	mg/L				0.59%
188.979	-15.1	0.0102	0.00109	mg/L				10.65%
249.773	33436.6	0.3567	0.00064	mg/L				0.18%
233.527	39675.1	0.2908	0.00065	mg/L				0.22%
313.107	-7171.0	-0.0005	0.00001	mg/L				2.46%
315.887	18743473.7	105.7	0.01	mg/L				0.01%
226.502	11.4	0.0011	0.00001	mg/L				0.65%
228.616	-54.3	0.0059	0.00025	mg/L				4.33%
267.716	2174.9	0.0139	0.00002	mg/L				0.18%
324.754	5597.5	0.0106	0.00021	mg/L				1.98%
238.863	379062.6	11.83	0.038	mg/L				0.32%
404.721	1710.6	29.07	0.023	mg/L				0.08%
279.079	684563.3	25.53	0.061	mg/L				0.24%
610	240988.7	0.4689	0.00220	mg/L				0.47%
030	122.7	0.0061	0.00021	mg/L				3.45%
.237	245751.3	248.1	1.63	mg/L				0.66%
231.604	142.2	0.0079	0.00003	mg/L				0.40%
220.353	77.1	0.0070	0.00005	mg/L				0.69%
206.833	48.6	0.0009	0.00052	mg/L				60.14%
196.026	25.6	0.0142	0.00044	mg/L				3.13%
189.933	6687.6	7.140	0.0067	mg/L				0.09%
334.941	389248.3	0.6849	0.00408	mg/L				0.60%
190.800	-31.5	-0.0050	0.00009	mg/L				1.79%
292.402	16347.5	0.0590	0.00037	mg/L				0.63%
206.191	3594.0	0.0389	0.00007	mg/L				0.17%

ean Data ----------

D: 524692 Seq. No.: 72 Sample No.: 48 A/S Pos: 56
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:10:37 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4775296.5	0.927	0.0028	mg/L				0.30%
Ag 328.068	-2330.3	-0.0003	0.00015	mg/L				47.63%
Al 308.215	6499.7	0.0274	0.00387	mg/L				14.14%
As 188.979	14.6	0.0250	0.00096	mg/L				3.86%
B 249.773	36703.6	0.3935	0.00454	mg/L				1.15%
Ba 233.527	8319.9	0.0597	0.00007	mg/L				0.12%
Be 313.107	-3773.2	-0.0001	0.00001	mg/L				16.36%
Ca 315.887	10955041.7	61.76	0.102	mg/L				0.17%
Cd 226.502	-121.6	0.0002	0.00003	mg/L				20.66%
Co 228.616	-254.7	-0.0005	0.00024	mg/L				46.59%
Cr 267.716	801.7	0.0049	0.00003	mg/L				0.56%
Cu 324.754	2771.5	0.0020	0.00012	mg/L				6.19%
Fe 238.863	43963.4	1.366	0.0079	mg/L				0.58%
K .721	1292.0	23.88	0.618	mg/L				2.59%
Mg 9.079	583997.9	21.78	0.116	mg/L				0.53%
Mn 257.610	6192.3	0.0111	0.00009	mg/L				0.85%
Mo 202.030	122.9	0.0061	0.00007	mg/L				1.11%
Na 330.237	255114.7	257.5	1.38	mg/L				0.54%
Ni 231.604	-270.3	0.0001	0.00007	mg/L				81.50%
Pb 220.353	22.8	0.0002	0.00016	mg/L				94.35%

Sb 206.833	52.5	0.0023	0.00154	mg/L	68.02%
Se 196.026	-9.6	0.0040	0.00119	mg/L	29.53%
Sn 189.933	6161.0	6.566	0.0186	mg/L	0.28%
Ti .941	-637.9	-0.0003	0.00005	mg/L	16.16%
Tl .800	-23.0	-0.0016	0.00080	mg/L	50.96%
V 292.402	4837.0	0.0155	0.00011	mg/L	0.69%
Zn 206.191	460.8	0.0048	0.00005	mg/L	0.95%

Mean Data ----------

ID: CRI Seq. No.: 73 Sample No.: 5 A/S Pos: 6

Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0

Data: Original Date: 01/28/02 10:15:42 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5038563.7	0.978	0.0016	mg/L				0.17%
Ag 328.068	2176.0	0.0193	0.00006	mg/L				0.33%
Al 308.215	5732.4	-0.0038	0.00079	mg/L				20.91%
As 188.979	7.2	0.0213	0.00198	mg/L				9.30%
B 249.773	2264.1	0.0061	0.00109	mg/L				17.90%
Ba 233.527	258.3	0.0003	0.00008	mg/L				30.62%
Be 313.107	72489.3	0.0100	0.00005	mg/L				0.49%
Ca 315.887	5134.1	0.0153	0.00305	mg/L				20.00%
Cd 226.502	1294.6	0.0103	0.00004	mg/L				0.39%
Co 228.616	3170.0	0.1082	0.00033	mg/L				0.30%
Cr 267.716	3239.2	0.0209	0.00003	mg/L				0.15%
Cu 324.754	18112.7	0.0489	0.00024	mg/L				0.49%
Fe 238.863	137.9	-0.0025	0.00083	mg/L				32.75%
K 404.721	-205.4	5.312	0.2709	mg/L				5.10%
Mg 279.079	-521.7	0.0007	0.00025	mg/L				37.08%
Mn 257.610	16815.6	0.0318	0.00027	mg/L				0.84%
Mo 202.030	-12.2	0.0000	0.00009	mg/L				>999.9%
Na 330.237	891.5	0.0428	0.00736	mg/L				17.19%
Ni 231.604	4212.0	0.0855	0.00045	mg/L				0.52%
Pb 220.353	74.2	0.0067	0.00012	mg/L				1.77%
Sb .833	382.1	0.1203	0.00151	mg/L				1.25%
Se .026	8.3	0.0092	0.00182	mg/L				19.80%
Sn 189.933	124.1	-0.0134	0.00314	mg/L				23.51%
Ti 334.941	-454.6	0.0000	0.00001	mg/L				47.18%
Tl 190.800	36.5	0.0224	0.00058	mg/L				2.61%
V 292.402	27473.3	0.1010	0.00085	mg/L				0.85%
Zn 206.191	3854.3	0.0417	0.00006	mg/L				0.15%

Mean Data ----------

ID: ICSA Seq. No.: 74 Sample No.: 6 A/S Pos: 7

Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0

Data: Original Date: 01/28/02 10:21:19 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	4343226.2	0.843	0.0014	mg/L				0.17%
Ag 328.068	-5204.5	-0.0128	0.00003	mg/L				0.26%
Al 308.215	12438758.6	504.5	2.53	mg/L				0.50%
As 188.979	-104.0	0.0005	0.00000	mg/L				0.16%
B 249.773	14029.1	0.1384	0.00144	mg/L				1.04%
Ba 233.527	-268.8	-0.0036	0.00002	mg/L				0.62%
Be 313.107	-4491.1	-0.0001	0.00001	mg/L				8.78%
Ca 315.887	82569919.8	465.6	1.45	mg/L				0.31%
Cd 226.502	1874.0	0.0036	0.00003	mg/L				0.84%
Co 228.616	-285.1	-0.0015	0.00016	mg/L				10.82%
Cr 267.716	1078.0	0.0067	0.00017	mg/L				2.52%
Cu 324.754	-1945.3	-0.0012	0.00027	mg/L				23.55%
Fe 238.863	5904868.6	184.5	0.01	mg/L				0.01%
K 404.721	-2376.2	3.468	1.6069	mg/L				46.34%
Mg 279.079	13737716.0	511.9	1.76	mg/L				0.34%
Mn 257.610	-6496.4	0.0023	0.00002	mg/L				0.77%
Mo 202.030	44.6	0.0026	0.00006	mg/L				2.29%
Na 330.237	610.3	-0.0952	0.01642	mg/L				17.25%
Ni 231.604	-273.5	0.0000	0.00023	mg/L				923.53%
Pb 220.353	-315.8	-0.0051	0.00111	mg/L				21.67%
Sb 206.833	37.9	-0.0030	0.00158	mg/L				53.62%
Se 196.026	2.5	-0.0100	0.00042	mg/L				4.19%
Sn 189.933	16491.5	15.86	0.060	mg/L				0.3[illegible]

Ti 334.941	-4391.5	-0.0069	0.00012	mg/L	1.74%
Tl 190.800	-46.5	-0.0111	0.00141	mg/L	12.74%
V [illegible]2.402	13582.8	0.0485	0.00006	mg/L	0.12%
[illegible] 6.191	1737.5	0.0048	0.00009	mg/L	1.88%

Mean Data ----------

ID: ICSAB Seq. No.: 75 Sample No.: 7 A/S Pos: 8
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:27:26 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4331546.3	0.841	0.0020	mg/L				0.24%
Ag 328.068	251421.0	1.104	0.0006	mg/L				0.06%
Al 308.215	12453265.1	505.1	2.44	mg/L				0.48%
As 188.979	-112.8	-0.0037	0.00359	mg/L				96.14%
B 249.773	13951.1	0.1375	0.00108	mg/L				0.78%
Ba 233.527	73684.6	0.5416	0.00046	mg/L				0.09%
Be 313.107	3828320.1	0.5046	0.00031	mg/L				0.06%
Ca 315.887	82507392.0	465.3	2.48	mg/L				0.53%
Cd 226.502	132828.3	0.9458	0.00137	mg/L				0.14%
Co 228.616	14486.7	0.4677	0.00230	mg/L				0.49%
Cr 267.716	75361.8	0.4970	0.00052	mg/L				0.10%
Cu 324.754	177529.1	0.5477	0.00108	mg/L				0.20%
Fe 238.863	5932603.2	185.3	0.07	mg/L				0.04%
K 404.721	-2485.5	2.230	1.2236	mg/L				54.88%
Mg 279.079	13732946.9	511.7	2.70	mg/L				0.53%
Mn 257.610	253774.4	0.5098	0.00125	mg/L				0.25%
Mo 202.030	41.9	0.0025	0.00026	mg/L				10.67%
Na 330.237	819.1	0.1201	0.01383	mg/L				11.52%
Ni 231.604	48369.4	0.9272	0.00057	mg/L				0.06%
Pb 220.353	7244.9	0.9489	0.00265	mg/L				0.28%
Sb 206.833	42.8	-0.0012	0.00110	mg/L				90.89%
Se 196.026	-8.9	-0.0133	0.00273	mg/L				20.49%
Sn 189.933	16539.2	15.91	0.033	mg/L				0.21%
[illegible] 14.941	-4272.3	-0.0067	0.00003	mg/L				0.49%
[illegible] 90.800	-51.0	-0.0129	0.00267	mg/L				20.72%
V 292.402	145967.3	0.5481	0.00032	mg/L				0.06%
Zn 206.191	87805.5	0.9415	0.00156	mg/L				0.17%

Mean Data ----------

ID: CCV Seq. No.: 76 Sample No.: 8 A/S Pos: 4
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:33:11 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4915212.4	0.955	0.0061	mg/L				0.64%
Ag 328.068	115283.9	0.5116	0.00001	mg/L				0.00%
Al 308.215	255511.1	10.13	0.052	mg/L				0.52%
As 188.979	2025.2	1.026	0.0066	mg/L				0.64%
B 249.773	229593.8	2.563	0.0540	mg/L				2.10%
Ba 233.527	1421344.7	10.48	0.003	mg/L				0.03%
Be 313.107	1922122.8	0.2536	0.00007	mg/L				0.03%
Ca 315.887	4523836.6	25.50	0.025	mg/L				0.10%
Cd 226.502	71008.0	0.5120	0.00089	mg/L				0.17%
Co 228.616	81485.2	2.595	0.0018	mg/L				0.07%
Cr 267.716	77537.2	0.5113	0.00099	mg/L				0.19%
Cu 324.754	424085.8	1.290	0.0029	mg/L				0.22%
Fe 238.863	166310.4	5.188	0.0094	mg/L				0.18%
K 404.721	2070.8	33.54	0.358	mg/L				1.07%
*QC exceeds upper limit for K 404.721 Recovery = 134.14% Action = Continue								
Mg 279.079	679250.9	25.33	0.016	mg/L				0.06%
Mn 257.610	401455.9	0.7818	0.00051	mg/L				0.06%
Mo 202.030	54398.7	2.457	0.0006	mg/L				0.02%
Na 330.237	24051.8	23.50	0.024	mg/L				0.10%
Ni 231.604	108489.4	2.073	0.0034	mg/L				0.17%
[illegible] 20.353	4076.7	0.5117	0.00344	mg/L				0.67%
[illegible] 06.833	13808.7	4.927	0.0254	mg/L				0.5[illegible]
Se 196.026	1719.4	0.5012	0.00459	mg/L				0.[illegible]
Sn 189.933	63255.3	68.80	0.077	mg/L				[illegible]
*QC exceeds upper limit for Sn 189.933 Recovery = 1375.91% Action = Continue								
Ti 334.941	1440867.2	2.533	0.0029	mg/L				

'l 190.800	2546.7	1.036	0.0090	mg/L	0.86%
' 292.402	675526.9	2.547	0.0008	mg/L	0.03%
;r 5.191	93821.7	1.021	0.0016	mg/L	0.15%

Mean Data ----------

:D: CCB Seq. No.: 77 Sample No.: 9 A/S Pos: 5
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:38:19 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
' 371.030	5019923.2	0.975	0.0138	mg/L				1.41%
Ag 328.068	-2191.9	0.0003	0.00003	mg/L				11.26%
Al 308.215	5754.2	-0.0029	0.00065	mg/L				22.65%
As 188.979	-32.2	0.0017	0.00042	mg/L				24.23%
B 249.773	5458.0	0.0420	0.01022	mg/L				24.33%
Ba 233.527	731.4	0.0037	0.00013	mg/L				3.50%
Be 313.107	-2622.4	0.0001	0.00000	mg/L				0.28%
Ca 315.887	4235.2	0.0102	0.00033	mg/L				3.21%
Cd 226.502	-111.5	0.0002	0.00002	mg/L				6.67%
Co 228.616	-216.9	0.0007	0.00013	mg/L				18.67%
Cr 267.716	125.0	0.0004	0.00006	mg/L				14.80%
Cu 324.754	2787.4	0.0020	0.00043	mg/L				21.24%
Fe 238.863	377.9	0.0050	0.00068	mg/L				13.64%
K 404.721	-236.9	4.921	0.1759	mg/L				3.57%
*QC exceeds upper limit for K 404.721 Action = Continue								
Mg 279.079	-312.2	0.0085	0.00021	mg/L				2.45%
Mn 257.610	523.8	0.0000	0.00001	mg/L				60.65%
Mo 202.030	30.9	0.0020	0.00021	mg/L				10.85%
Na 330.237	866.7	0.0177	0.02935	mg/L				165.90%
Ni 231.604	-245.8	0.0006	0.00012	mg/L				22.52%
Pb 220.353	22.7	0.0002	0.00037	mg/L				237.19%
Sb 206.833	102.9	0.0203	0.00363	mg/L				17.90%
*QC exceeds upper limit for Sb 206.833 Action = Continue								
S' 96.026	-17.9	0.0016	0.00072	mg/L				44.22%
S 9.933	238.2	0.1109	0.01754	mg/L				15.81%
T. 34.941	258.8	0.0013	0.00020	mg/L				16.19%
Tl 190.800	-16.2	0.0012	0.00172	mg/L				148.45%
V 292.402	912.4	0.0007	0.00017	mg/L				23.75%
Zn 206.191	92.1	0.0008	0.00012	mg/L				14.86%

Mean Data ----------

ID: 527210 Seq. No.: 78 Sample No.: 49 A/S Pos: 57
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:43:22 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	7545562.0	1.465	0.0120	mg/L				0.82%
Ag 328.068	-2269.0	0.0000	0.00005	mg/L				108.58%
Al 308.215	4362.1	-0.0594	0.00362	mg/L				6.10%
As 188.979	-22.5	0.0066	0.00099	mg/L				15.08%
B 249.773	5200.3	0.0391	0.00068	mg/L				1.74%
Ba 233.527	121.1	-0.0008	0.00008	mg/L				10.22%
Be 313.107	-2167.1	0.0002	0.00001	mg/L				5.88%
Ca 315.887	17135.8	0.0830	0.00031	mg/L				0.37%
Cd 226.502	-89.6	0.0004	0.00002	mg/L				4.78%
Co 228.616	-160.1	0.0025	0.00011	mg/L				4.33%
Cr 267.716	100.8	0.0002	0.00001	mg/L				3.52%
Cu 324.754	1522.8	-0.0018	0.00010	mg/L				5.67%
Fe 238.863	174.8	-0.0014	0.00063	mg/L				45.46%
K 404.721	-192.8	5.469	0.0428	mg/L				0.78%
Mg 279.079	-161.7	0.0141	0.00243	mg/L				17.26%
Mn 257.610	410.9	-0.0002	0.00000	mg/L				1.79%
Mo 202.030	-2.5	0.0004	0.00001	mg/L				1.83%
Na 330.237	689.5	-0.1618	0.02030	mg/L				12.55%
Ni 231.604	-172.4	0.0020	0.00007	mg/L				3.72%
20.353	15.5	-0.0008	0.00005	mg/L				6.00%
06.833	40.3	-0.0021	0.00083	mg/L				39.00
Se 196.026	-14.9	0.0025	0.00000	mg/L				0.
Sn 189.933	110.2	-0.0285	0.00280	mg/L				9
Ti 334.941	-154.6	0.0005	0.00001	mg/L				
Tl 190.800	-13.2	0.0024	0.00053	mg/L				

2.402	485.7	-0.0009	0.00006 mg/L		7.01%
0[illegible]1	1018.1	0.0109	0.00013 mg/L		1.19%

[illegible] Data

527211 Seq. No.: 79 Sample No.: 50 A/S Pos: 58
[illegible]le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:48:28 PM

[illegible]ment	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
71.030	7361592.9	1.430	0.0047	mg/L				0.33%
328.068	35819.9	0.1657	0.00022	mg/L				0.14%
308.215	43491.7	1.528	0.0010	mg/L				0.07%
188.979	3411.2	1.715	0.0104	mg/L				0.60%
49.773	152072.5	1.691	0.0354	mg/L				2.09%
233.527	243714.0	1.795	0.0002	mg/L				0.01%
313.107	2524054.4	0.3329	0.00044	mg/L				0.13%
315.887	16687.0	0.0804	0.00006	mg/L				0.08%
226.502	93668.1	0.6750	0.00094	mg/L				0.14%
228.616	22410.2	0.7193	0.00199	mg/L				0.28%
267.716	252752.9	1.668	0.0017	mg/L				0.10%
324.754	527992.5	1.608	0.0044	mg/L				0.27%
238.863	55436.7	1.725	0.0004	mg/L				0.02%
404.721	-101.3	6.602	0.1741	mg/L				2.64%
279.079	-516.5	0.0009	0.00116	mg/L				134.01%
257.610	360700.2	0.7023	0.00000	mg/L				0.00%
202.030	35008.5	1.581	0.0021	mg/L				0.13%
330.237	1105.7	0.2598	0.06331	mg/L				24.37%
231.604	182552.4	3.485	0.0006	mg/L				0.02%
220.353	13911.8	1.753	0.0049	mg/L				0.28%
206.833	4396.2	1.557	0.0063	mg/L				0.40%
196.026	5345.0	1.544	0.0084	mg/L				0.54%
189.933	166.6	0.0329	0.01196	mg/L				36.33%
[illegible] 941	386.2	0.0015	0.00022	mg/L				14.82%
[illegible] 800	4107.6	1.666	0.0096	mg/L				0.58%
2[illegible] 02	173919.8	0.6536	0.00176	mg/L				0.27%
[illegible] 206.191	152538.4	1.660	0.0015	mg/L				0.09%

[illegible]an Data

[illegible]: 527173 Seq. No.: 80 Sample No.: 51 A/S Pos: 59
[illegible]mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 10:53:34 PM

[illegible]lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	7039014.8	1.367	0.0046	mg/L				0.34%
[illegible]g 328.068	-2164.8	0.0004	0.00017	mg/L				41.61%
[illegible]l 308.215	6262.9	0.0178	0.00034	mg/L				1.89%
[illegible]s 188.979	-26.2	0.0047	0.00083	mg/L				17.78%
[illegible] 249.773	13770.3	0.1355	0.01912	mg/L				14.11%
[illegible]a 233.527	1146.1	0.0068	0.00001	mg/L				0.09%
[illegible]e 313.107	-1891.5	0.0002	0.00005	mg/L				28.20%
[illegible]a 315.887	1866436.0	10.51	0.004	mg/L				0.04%
[illegible]d 226.502	-78.4	0.0005	0.00005	mg/L				11.64%
[illegible]o 228.616	-170.4	0.0022	0.00003	mg/L				1.56%
[illegible]r 267.716	5516.2	0.0360	0.00012	mg/L				0.35%
[illegible]u 324.754	7596.3	0.0167	0.00250	mg/L				14.94%
[illegible]e 238.863	23617.3	0.7309	0.00158	mg/L				0.22%
K 404.721	14570.9	188.5	1.45	mg/L				0.77%
Mg 279.079	49677.0	1.871	0.0012	mg/L				0.06%
Mn 257.610	5040.1	0.0088	0.00010	mg/L				1.16%
Mo 202.030	71.6	0.0038	0.00080	mg/L				21.09%
Na 330.237	498829.4	504.4	1.71	mg/L				0.34%
Ni 231.604	-130.8	0.0027	0.00023	mg/L				8.22%
Pb 220.353	22.7	0.0002	0.00001	mg/L				8.28%
Sb 206.833	60.6	0.0052	0.00318	mg/L				61.58%
S 6.026	-12.4	0.0032	0.00055	mg/L				16.89%
S 9.933	885.7	0.8167	0.01293	mg/L				1.58%
Ti 334.941	-253.8	0.0004	0.00002	mg/L				4.60%
Tl 190.800	-8.6	0.0042	0.00092	mg/L				21.70%
V 292.402	494.6	-0.0009	0.00007	mg/L				8.48%
Zn 206.191	67650.3	0.7360	0.00107	mg/L				0.15%

n Data

r 73L	Seq. No.: 81	Sample No.: 52	A/S Pos: 60
p. :y: 1.0000 mL	Prep. Vol.: 50.0 mL		Dilution: 1.0: 1.0
	Data: Original		Date: 01/28/02 10:58:38 PM

ment	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
71.030	5529949.8	1.074	0.0235	mg/L				2.19%
328.068	-2179.5	0.0003	0.00014	mg/L				39.23%
308.215	5879.6	0.0022	0.00108	mg/L				48.79%
188.979	-29.0	0.0033	0.00125	mg/L				37.89%
49.773	5587.3	0.0435	0.00228	mg/L				5.24%
233.527	319.6	0.0007	0.00005	mg/L				7.48%
313.107	-3004.9	0.0000	0.00001	mg/L				20.73%
315.887	506197.2	2.841	0.0046	mg/L				0.16%
226.502	-118.7	0.0002	0.00002	mg/L				10.07%
228.616	-214.9	0.0007	0.00017	mg/L				22.56%
267.716	1536.5	0.0097	0.00018	mg/L				1.86%
324.754	4040.0	0.0059	0.00057	mg/L				9.77%
238.863	6060.3	0.1825	0.00299	mg/L				1.64%
404.721	2977.3	44.78	0.333	mg/L				0.74%
279.079	13412.7	0.5199	0.00611	mg/L				1.18%
257.610	1228.8	0.0014	0.00003	mg/L				2.45%
202.030	6.8	0.0009	0.00002	mg/L				1.79%
330.237	110505.2	111.1	0.86	mg/L				0.77%
231.604	-233.0	0.0008	0.00005	mg/L				5.81%
220.353	19.2	-0.0003	0.00018	mg/L				64.41%
206.833	48.2	0.0007	0.00081	mg/L				111.77%
196.026	-21.2	0.0007	0.00079	mg/L				113.83%
189.933	275.1	0.1512	0.00850	mg/L				5.62%
334.941	-377.0	0.0001	0.00002	mg/L				13.82%
190.800	-15.0	0.0016	0.00069	mg/L				41.96%
292.402	633.7	-0.0003	0.00004	mg/L				12.29%
.191	18638.7	0.2026	0.00295	mg/L				1.46%

ean Data

D: 999991	Seq. No.: 82	Sample No.: 53	A/S Pos: 61
ample Qty: 1.0000 mL	Prep. Vol.: 50.0 mL		Dilution: 1.0: 1.0
	Data: Original		Date: 01/28/02 11:03:40 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5096882.9	0.990	0.0018	mg/L				0.18%
g 328.068	-2186.6	0.0003	0.00029	mg/L				92.47%
l 308.215	5689.6	-0.0055	0.00031	mg/L				5.69%
s 188.979	-32.5	0.0016	0.00093	mg/L				58.53%
249.773	3107.2	0.0156	0.00259	mg/L				16.61%
a 233.527	54.3	-0.0012	0.00002	mg/L				1.42%
e 313.107	-3245.8	0.0000	0.00001	mg/L				78.91%
a 315.887	113.4	-0.0130	0.00090	mg/L				6.94%
d 226.502	-136.7	0.0000	0.00000	mg/L				0.62%
o 228.616	-233.3	0.0002	0.00002	mg/L				14.05%
r 267.716	66.1	0.0000	0.00012	mg/L				>999.9%
u 324.754	2316.3	0.0006	0.00050	mg/L				86.18%
Fe 238.863	-326.2	-0.0170	0.00052	mg/L				3.06%
K 404.721	-186.3	5.548	0.7000	mg/L				12.62%
Mg 279.079	-500.2	0.0015	0.00177	mg/L				119.79%
Mn 257.610	-96.6	-0.0012	0.00001	mg/L				1.09%
Mo 202.030	-7.1	0.0002	0.00010	mg/L				39.70%
Na 330.237	687.0	-0.1642	0.02624	mg/L				15.98%
Ni 231.604	-272.4	0.0000	0.00010	mg/L				212.34%
Pb 220.353	18.9	-0.0003	0.00024	mg/L				72.47%
Sb 206.833	45.1	-0.0004	0.00006	mg/L				15.11%
Se 196.026	-16.8	0.0020	0.00068	mg/L				34.41%
Sn 189.933	70.4	-0.0719	0.00628	mg/L				8.73%
Ti 334.941	-457.0	0.0000	0.00000	mg/L				21.31%
0.800	-18.1	0.0004	0.00005	mg/L				12.07%
V .402	681.3	-0.0001	0.00012	mg/L				84.15%
Zn 206.191	29.8	0.0001	0.00005	mg/L				45.68%

Mean Data

ID: CRI	Seq. No.: 83	Sample No.: 5	A/S Pos: 6
Sample Qty: 1.0000 g	Prep. Vol.: 1.0 L		Dilution: 1.0: 1.0

Data: Original Date: 01/28/02 11:08:44 PM

ment	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
71.030	5059815.5	0.983	0.0098	mg/L				1.00%
328.068	2267.4	0.0197	0.00000	mg/L				0.00%
308.215	5642.3	-0.0074	0.00548	mg/L				73.95%
188.979	9.5	0.0224	0.00057	mg/L				2.55%
49.773	3821.6	0.0236	0.00464	mg/L				19.67%
233.527	451.8	0.0017	0.00024	mg/L				14.42%
313.107	73274.6	0.0101	0.00008	mg/L				0.79%
315.887	5611.4	0.0180	0.00092	mg/L				5.12%
226.502	1287.8	0.0103	0.00013	mg/L				1.24%
228.616	3176.2	0.1084	0.00103	mg/L				0.95%
267.716	3222.5	0.0208	0.00023	mg/L				1.09%
324.754	19235.6	0.0523	0.00146	mg/L				2.79%
238.863	384.3	0.0052	0.00092	mg/L				17.75%
104.721	-218.1	5.154	0.7120	mg/L				13.81%
279.079	-559.1	-0.0007	0.00020	mg/L				27.81%
257.610	17088.8	0.0323	0.00029	mg/L				0.89%
202.030	-8.8	0.0002	0.00002	mg/L				9.81%
330.237	924.1	0.0759	0.06883	mg/L				90.73%
231.604	4194.8	0.0852	0.00081	mg/L				0.95%
220.353	73.0	0.0065	0.00050	mg/L				7.71%
206.833	387.6	0.1222	0.00107	mg/L				0.87%
196.026	7.4	0.0089	0.00314	mg/L				35.20%
189.933	165.2	0.0314	0.02026	mg/L				64.54%
334.941	-429.5	0.0001	0.00009	mg/L				171.32%
190.800	35.4	0.0220	0.00047	mg/L				2.12%
292.402	27937.6	0.1027	0.00078	mg/L				0.76%
206.191	3880.5	0.0420	0.00058	mg/L				1.38%

an Data

: ICSA Seq. No.: 84 Sample No.: 6 A/S Pos: 7
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 11:14:21 PM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4378307.3	0.850	0.0026	mg/L				0.30%
g 328.068	-5100.6	-0.0124	0.00026	mg/L				2.10%
l 308.215	12533913.1	508.3	2.55	mg/L				0.50%
s 188.979	-100.0	0.0025	0.00171	mg/L				67.96%
249.773	15788.4	0.1582	0.00588	mg/L				3.72%
a 233.527	-166.6	-0.0029	0.00043	mg/L				14.97%
e 313.107	-4103.2	-0.0001	0.00001	mg/L				8.96%
a 315.887	82922611.7	467.6	2.22	mg/L				0.48%
d 226.502	1898.1	0.0038	0.00009	mg/L				2.32%
o 228.616	-290.2	-0.0016	0.00011	mg/L				6.92%
r 267.716	1065.9	0.0066	0.00001	mg/L				0.12%
u 324.754	-1340.9	0.0007	0.00059	mg/L				85.63%
e 238.863	5908304.1	184.6	0.36	mg/L				0.19%
404.721	-2380.0	3.436	3.0687	mg/L				89.32%
g 279.079	13799743.8	514.2	2.83	mg/L				0.55%
n 257.610	-6348.8	0.0025	0.00014	mg/L				5.42%
o 202.030	42.9	0.0025	0.00009	mg/L				3.60%
a 330.237	608.0	-0.0995	0.01792	mg/L				18.01%
i 231.604	-273.2	0.0000	0.00004	mg/L				124.14%
b 220.353	-317.7	-0.0051	0.00135	mg/L				26.73%
b 206.833	42.0	-0.0015	0.00194	mg/L				130.28%
e 196.026	-5.5	-0.0124	0.00039	mg/L				3.18%
n 189.933	16457.9	15.82	0.084	mg/L				0.53%
i 334.941	-4379.9	-0.0069	0.00002	mg/L				0.30%
l 190.800	-47.9	-0.0117	0.00030	mg/L				2.55%
V 292.402	13476.6	0.0481	0.00031	mg/L				0.65%
Zn 206.191	1757.2	0.0050	0.00008	mg/L				1.64%

Me Data

ID: ICSAB Seq. No.: 85 Sample No.: 7 A/S Pos: 8
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 11:20:28 PM

Mean Corr.	Mean	Calib	Mean	Sample

ıment	Intensity	Conc.	Std.Dev.	Units	Conc.	Std.Dev.	Units	RSD
77)	4379785.0	0.851	0.0023	mg/L				0.27%
3: ,8	252774.9	1.110	0.0029	mg/L				0.26%
308.215	12565810.2	509.6	0.80	mg/L				0.16%
188.979	-119.8	-0.0072	0.00074	mg/L				10.31%
49.773	15805.6	0.1584	0.00272	mg/L				1.72%
233.527	73976.1	0.5437	0.00032	mg/L				0.06%
313.107	3832209.0	0.5052	0.00033	mg/L				0.06%
315.887	83050679.2	468.3	0.32	mg/L				0.07%
226.502	132994.5	0.9470	0.00095	mg/L				0.10%
228.616	14593.3	0.4710	0.00073	mg/L				0.16%
267.716	75895.9	0.5005	0.00133	mg/L				0.27%
324.754	178566.1	0.5509	0.00196	mg/L				0.36%
238.863	5934674.0	185.4	0.33	mg/L				0.18%
404.721	-2447.5	2.710	0.3462	mg/L				12.78%
279.079	13835740.6	515.5	0.27	mg/L				0.05%
257.610	255998.8	0.5142	0.00109	mg/L				0.21%
202.030	44.6	0.0026	0.00013	mg/L				4.98%
330.237	847.9	0.1458	0.02343	mg/L				16.07%
231.604	48425.7	0.9282	0.00112	mg/L				0.12%
220.353	7224.7	0.9467	0.00121	mg/L				0.13%
206.833	47.4	0.0004	0.00090	mg/L				210.49%
196.026	2.4	-0.0102	0.00332	mg/L				32.64%
189.933	16458.0	15.81	0.027	mg/L				0.17%
334.941	-4284.2	-0.0067	0.00006	mg/L				0.95%
190.800	-56.5	-0.0151	0.00199	mg/L				13.17%
292.402	146992.2	0.5520	0.00131	mg/L				0.24%
ı 206.191	87656.6	0.9397	0.00312	mg/L				0.33%

ıan Data ----------

): CCV Seq. No.: 86 Sample No.: 8 A/S Pos: 4
ımple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 11:26:13 PM

lem...t	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5030980.3	0.977	0.0055	mg/L				0.56%
g 328.068	114250.4	0.5071	0.00015	mg/L				0.03%
l 308.215	250233.4	9.917	0.0195	mg/L				0.20%
s 188.979	2012.9	1.020	0.0091	mg/L				0.89%
. 249.773	228086.8	2.546	0.0539	mg/L				2.12%
ıa 233.527	1417201.3	10.45	0.030	mg/L				0.29%
ıe 313.107	1919376.9	0.2532	0.00035	mg/L				0.14%
:a 315.887	4503677.3	25.38	0.055	mg/L				0.21%
:d 226.502	70007.9	0.5048	0.00115	mg/L				0.23%
:o 228.616	80742.9	2.572	0.0053	mg/L				0.20%
:r 267.716	77010.9	0.5078	0.00102	mg/L				0.20%
:u 324.754	419733.9	1.277	0.0027	mg/L				0.21%
?e 238.863	163793.5	5.110	0.0085	mg/L				0.17%
K 404.721	1975.4	32.35	0.112	mg/L				0.35%
*QC exceeds upper limit for K 404.721 Recovery = 129.41% Action = Continue								
Mg 279.079	676168.1	25.21	0.044	mg/L				0.18%
Mn 257.610	398801.0	0.7766	0.00159	mg/L				0.20%
Mo 202.030	53611.8	2.421	0.0040	mg/L				0.17%
Na 330.237	23737.3	23.18	0.024	mg/L				0.10%
Ni 231.604	107197.1	2.048	0.0003	mg/L				0.02%
Pb 220.353	4020.2	0.5046	0.00449	mg/L				0.89%
Sb 206.833	13704.2	4.890	0.0562	mg/L				1.15%
Se 196.026	1703.3	0.4965	0.00658	mg/L				1.33%
Sn 189.933	62148.4	67.59	0.143	mg/L				0.21%
*QC exceeds upper limit for Sn 189.933 Recovery = 1351.78% Action = Continue								
Ti 334.941	1447472.0	2.545	0.0013	mg/L				0.05%
Tl 190.800	2514.9	1.023	0.0084	mg/L				0.82%
V 292.402	677320.8	2.553	0.0022	mg/L				0.08%
Zn 206.191	92430.0	1.006	0.0014	mg/L				0.14%

N Data ----------

1. :CB Seq. No.: 87 Sample No.: 9 A/S Pos: 5
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/28/02 11:31:21 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD

371.030	5111221.2	0.993	0.0067	mg/L	0.67%
3[illegible].068	-2130.7	0.0006	0.00012	mg/L	22.33%
215	5673.9	-0.0061	0.00093	mg/L	15.13%
[illegible].979	-33.5	0.0011	0.00058	mg/L	53.94%
249.773	11617.1	0.1113	0.04025	mg/L	36.17%
233.527	817.9	0.0044	0.00087	mg/L	19.91%
313.107	-2220.8	0.0001	0.00005	mg/L	32.84%
315.887	4549.1	0.0120	0.00577	mg/L	48.22%
226.502	-111.6	0.0002	0.00007	mg/L	28.97%
228.616	-206.2	0.0010	0.00007	mg/L	6.70%
267.716	146.1	0.0005	0.00009	mg/L	16.22%
324.754	3441.5	0.0040	0.00147	mg/L	36.62%
238.863	492.3	0.0085	0.00219	mg/L	25.63%
404.721	-260.5	4.629	0.4490	mg/L	9.70%
QC exceeds upper limit for K 404.721		Action = Continue			
279.079	-352.3	0.0070	0.00150	mg/L	21.52%
257.610	569.5	0.0001	0.00009	mg/L	75.44%
202.030	74.0	0.0039	0.00177	mg/L	45.27%
330.237	884.9	0.0362	0.04120	mg/L	113.89%
231.604	-239.3	0.0007	0.00005	mg/L	7.43%
220.353	23.9	0.0003	0.00026	mg/L	85.54%
206.833	165.9	0.0429	0.01790	mg/L	41.76%
QC exceeds upper limit for Sb 206.833		Action = Continue			
196.026	-23.0	0.0002	0.00206	mg/L	>999.9%
189.933	341.8	0.2239	0.07364	mg/L	32.89%
334.941	1031.7	0.0026	0.00131	mg/L	50.12%
190.800	-11.6	0.0030	0.00038	mg/L	12.80%
292.402	964.6	0.0009	0.00023	mg/L	24.91%
206.191	137.5	0.0013	0.00038	mg/L	29.11%

Metals Cover Page

Instrument: Optima 2

Analyst: SD(V.b   Date: 1/29/02

Data File: 2jan29   Reviewed By: SD 1/29/02

Entered By: CK 1/31/02   Manager Approval: CK 1/31/02

Starlims Run #	Analytes Used	Batch ID	Method Requested	Failed Analytes	Comments / Problems

SD 1/29/02

Package Data:

Client Sub. #	Type Of Package	Analytes Used	Failed Metals	Batch ID	Standards Attached	How Was Data Transferred To LIMS	Raw Data Copied
10310	Pkg 5 / ASP	As		MJ020041	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
↓	Pkg 5 / ASP	Se		MJ020135	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO

.ib ion Summary
:h Method 6010B misc Date: 01/29/02 10:20:52 AM

ement	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.

:hod: Method 6010B misc
sults: 2jan29
mple Info: 6010b
thod Description: Optima 3000XL #2

IEC: 011702.iec
Spectra Stored: Yes
User: User1

MSF:
Method Stored: Yes
Date: 01/29/02 10:20:52 AM

an Data
: IS Init
Seq. No.: 1
Data: Original
A/S Pos: 1
Date: 01/29/02 10:22:27 AM

ement	Mean Corr. Intensity	Std.Dev.	RSD
371.030	5299982.0	17038.87	0.32%

:an Data
): Calib Blank 1
Seq. No.: 2
Data: Original
A/S Pos: 1
Date: 01/29/02 10:24:01 AM

lement	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
371.030	5235259.4	5386.96	0.10%	0.988	mg/L
l 308.215	8153.2	41.27	0.51%	0	mg/L
s 188.979	-36.6	2.00	5.46%	0	mg/L
a 315.887	1523.0	107.64	7.07%	0	mg/L
e 238.863	114.1	5.09	4.46%	0	mg/L
g 279.079	-521.5	25.88	4.96%	0	mg/L
e .026	-29.2	6.98	23.88%	0	mg/L

SDeNito
1/29/02

.ean Data
D: Calib Std 1
Seq. No.: 3
Data: Original
A/S Pos: 2
Date: 01/29/02 10:29:06 AM

:lement	Mean Corr. Intensity	Std.Dev.	RSD	Conc.	Calib Units
:371.030	5052908.6	23544.41	0.47%	0.953	mg/L
\l 308.215	466718.3	687.88	0.15%	20.0000	mg/L
\s 188.979	4074.6	16.02	0.39%	2.0000	mg/L
:a 315.887	8523658.4	7434.16	0.09%	50.0000	mg/L
Fe 238.863	316678.4	420.47	0.13%	10.0000	mg/L
Mg 279.079	1308723.0	789.54	0.06%	50.0000	mg/L
Se 196.026	3413.2	29.24	0.86%	1.0000	mg/L

Calibration Summary
Method: Method 6010B misc Date: 01/29/02 10:30:21 AM

Element	Stds	Equation	Intercept	Slope	Curvature	Corr. Coeff.
Al 308.215	1	Linear	8153.2	22928.3	0.00000	1.000000
As 188.979	1	Linear	-36.6	2055.6	0.00000	1.000000
Ca 315.887	1	Linear	1523.0	170442.7	0.00000	1.000000
Fe 238.863	1	Linear	114.1	31656.4	0.00000	1.000000
Mg 279.079	1	Linear	-521.5	26184.9	0.00000	1.000000
Se 196.026	1	Linear	-29.2	3442.4	0.00000	1.000000

Mean Data
ID: HIGH CHECK
Sample Qty: 1.0000 g
Seq. No.: 4
Prep. Vol.:
Data: Original
Sample No.: 10
1.0 L
A/S Pos: 2
Dilution: 1.0: 1.0
Date: 01/29/02 10:34:13 AM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5113975.9	0.965	0.0007	mg/L				0.07%
Al 308.215	462598.6	19.82	0.071	mg/L				0.36%
As 188.979	4017.6	1.972	0.0085	mg/L				0.43%

315.887	8510008.9	49.92	0.025	mg/L	0.05%
238.863	313324.7	9.894	0.0339	mg/L	0.34%
279.079	1306281.7	49.91	0.018	mg/L	0.04%
196.026	3365.2	0.9861	0.00468	mg/L	0.48%

an Data ----------

: ICV — Seq. No.: 5 — Sample No.: 1 — A/S Pos: 3
mple Qty: 1.0000 g — Prep. Vol.: 1.0 L — Dilution: 1.0: 1.0
Data: Original — Date: 01/29/02 10:39:18 AM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	5140914.2	0.970	0.0034	mg/L				0.35%
308.215	232815.3	9.798	0.0188	mg/L				0.19%
188.979	2027.2	1.004	0.0016	mg/L				0.16%
315.887	4333193.3	25.41	0.034	mg/L				0.14%
238.863	161945.6	5.112	0.0046	mg/L				0.09%
279.079	661085.3	25.27	0.006	mg/L				0.03%
196.026	1678.9	0.4962	0.00031	mg/L				0.06%

ean Data ----------

D: ICB — Seq. No.: 6 — Sample No.: 3 — A/S Pos: 1
ample Qty: 1.0000 g — Prep. Vol.: 1.0 L — Dilution: 1.0: 1.0
Data: Original — Date: 01/29/02 10:44:19 AM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	5268741.0	0.994	0.0011	mg/L				0.11%
1 308.215	8292.9	0.0061	0.00070	mg/L				11.52%
s 188.979	-32.0	0.0022	0.00147	mg/L				65.70%
a 315.887	1232.1	-0.0017	0.00258	mg/L				150.98%
e 238.863	144.7	0.0010	0.00012	mg/L				12.18%
g 279.079	-541.3	-0.0008	0.00005	mg/L				6.83%
e 196.026	-20.1	0.0027	0.00086	mg/L				32.51%

le ata ----------

D: ICI — Seq. No.: 7 — Sample No.: 5 — A/S Pos: 6
ample Qty: 1.0000 g — Prep. Vol.: 1.0 L — Dilution: 1.0: 1.0
Data: Original — Date: 01/29/02 10:49:22 AM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	5359132.9	1.011	0.0085	mg/L				0.84%
l 308.215	8140.3	-0.0006	0.00162	mg/L				288.58%
s 188.979	11.0	0.0232	0.00108	mg/L				4.65%
a 315.887	3730.0	0.0129	0.00153	mg/L				11.81%
e 238.863	237.1	0.0039	0.00189	mg/L				48.54%
g 279.079	-544.8	-0.0009	0.00071	mg/L				79.79%
e 196.026	12.6	0.0121	0.00091	mg/L				7.52%

Mean Data ----------

ID: ICSA — Seq. No.: 8 — Sample No.: 6 — A/S Pos: 7
Sample Qty: 1.0000 g — Prep. Vol.: 1.0 L — Dilution: 1.0: 1.0
Data: Original — Date: 01/29/02 10:54:50 AM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4650397.2	0.877	0.0025	mg/L				0.28%
Al 308.215	11440423.6	498.6	0.44	mg/L				0.09%
As 188.979	-104.1	0.0009	0.00164	mg/L				190.98%
Ca 315.887	78397622.7	460.0	0.49	mg/L				0.11%
Fe 238.863	5708450.7	180.3	0.08	mg/L				0.04%
Mg 279.079	13252679.2	506.1	0.55	mg/L				0.11%
Se 196.026	-7.1	-0.0109	0.00080	mg/L				7.28%

Mean Data ----------

ID: ICSAB — Seq. No.: 9 — Sample No.: 7 — A/S Pos: 8
S e Qty: 1.0000 g — Prep. Vol.: 1.0 L — Dilution: 1.0: 1.0
Data: Original — Date: 01/29/02 11:00:39 AM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	4555555.2	0.860	0.0079	mg/L				0.92%

308.215	11720644.3	510.8	4.42	mg/L	0.87%
18[illegible] 979	-115.8	-0.0041	0.00065	mg/L	15.79%
3 37	80082121.4	469.8	4.29	mg/L	0.91%
2[illegible] ,63	5826576.7	184.1	0.24	mg/L	0.13%
279.079	13554907.9	517.7	4.51	mg/L	0.87%
196.026	-6.5	-0.0112	0.00032	mg/L	2.85%

an Data ----------
: CCV Seq. No.: 10 Sample No.: 2 A/S Pos: 3
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:06:04 AM

ement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	5166807.0	0.975	0.0016	mg/L				0.17%
308.215	230075.5	9.679	0.0840	mg/L				0.87%
188.979	2024.7	1.003	0.0032	mg/L				0.32%
315.887	4338709.9	25.45	0.026	mg/L				0.10%
238.863	160878.4	5.078	0.0407	mg/L				0.80%
279.079	660378.1	25.24	0.031	mg/L				0.12%
196.026	1674.9	0.4950	0.00472	mg/L				0.95%

an Data ----------
): CCB Seq. No.: 11 Sample No.: 4 A/S Pos: 1
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:11:05 AM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	5273883.0	0.995	0.0008	mg/L				0.08%
l 308.215	8297.5	0.0063	0.00665	mg/L				105.76%
s 188.979	-34.4	0.0011	0.00085	mg/L				79.56%
a 315.887	1106.9	-0.0024	0.00012	mg/L				4.98%
e 238.863	305.7	0.0061	0.00072	mg/L				11.85%
g 079	-486.9	0.0013	0.00030	mg/L				22.92%
e .026	-16.2	0.0038	0.00113	mg/L				29.87%

ean Data ----------
D: PBW-M2620141 Seq. No.: 12 Sample No.: 1 A/S Pos: 9
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:16:04 AM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
371.030	5388650.6	1.017	0.0068	mg/L				0.67%
l 308.215	8199.5	0.0020	0.00019	mg/L				9.64%
s 188.979	-30.7	0.0028	0.00014	mg/L				4.85%
a 315.887	-1343.5	-0.0168	0.00069	mg/L				4.08%
e 238.863	276.2	0.0051	0.00077	mg/L				15.08%
g 279.079	-492.7	0.0011	0.00001	mg/L				0.71%
e 196.026	-19.5	0.0028	0.00174	mg/L				61.98%

Mean Data ----------
ID: LCSW-M2620141 Seq. No.: 13 Sample No.: 2 A/S Pos: 10
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:21:05 AM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Units	Mean Conc.	Sample Std.Dev.	Units	RSD
Y 371.030	5347011.0	1.009	0.0058	mg/L				0.57%
Al 308.215	52042.1	1.914	0.0088	mg/L				0.46%
As 188.979	41.9	0.0382	0.00118	mg/L				3.08%
Ca 315.887	345783.1	2.020	0.0014	mg/L				0.07%
Fe 238.863	32544.2	1.024	0.0050	mg/L				0.48%
Mg 279.079	51456.7	1.985	0.0029	mg/L				0.14%
Se 196.026	3440.3	1.008	0.0050	mg/L				0.49%

N Data ----------
ID. 524698 Seq. No.: 14 Sample No.: 3 A/S Pos: 11
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:26:09 AM

	Mean Corr.	Mean	Calib	Mean	Sample

ment	Intensity	Conc.	Std.Dev.	Units	Conc.	Std.Dev.	Units	RSD
371.030	5214019.5	0.984	0.0020	mg/L				0.20%
2 15	8665.1	0.0223	0.00423	mg/L				18.95%
1. 79	-4.3	0.0157	0.00083	mg/L				5.27%
315.887	12744515.4	74.76	0.138	mg/L				0.18%
238.863	745.3	0.0199	0.00030	mg/L				1.52%
279.079	730371.0	27.91	0.047	mg/L				0.17%
196.026	-19.6	0.0028	0.00322	mg/L				114.66%

an Data ----------

: 524698L Seq. No.: 15 Sample No.: 4 A/S Pos: 12
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:31:14 AM

ement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5418805.0	1.022	0.0055	mg/L				0.53%
308.215	8507.5	0.0155	0.00365	mg/L				23.61%
188.979	-27.9	0.0042	0.00010	mg/L				2.36%
315.887	2595530.0	15.22	0.041	mg/L				0.27%
238.863	-89.5	-0.0064	0.00020	mg/L				3.16%
279.079	147788.0	5.664	0.0195	mg/L				0.34%
196.026	-18.2	0.0032	0.00111	mg/L				34.73%

an Data ----------

): PBW-M2620135 Seq. No.: 16 Sample No.: 5 A/S Pos: 13
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:36:16 AM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5422796.5	1.023	0.0000	mg/L				0.00%
308.215	8199.3	0.0020	0.00061	mg/L				30.46%
188.979	-39.0	-0.0012	0.00077	mg/L				65.74%
.887	888.7	-0.0037	0.00065	mg/L				17.55%
.863	204.6	0.0029	0.00044	mg/L				15.38%
279.079	-429.5	0.0035	0.00035	mg/L				9.90%
196.026	-21.9	0.0021	0.00149	mg/L				69.66%

ean Data ----------

D: LCSW-M2620135 Seq. No.: 17 Sample No.: 6 A/S Pos: 14
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:41:18 AM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5283709.6	0.997	0.0003	mg/L				0.03%
308.215	52856.4	1.950	0.0171	mg/L				0.88%
188.979	37.6	0.0361	0.00063	mg/L				1.75%
315.887	357602.0	2.089	0.0003	mg/L				0.01%
238.863	33438.2	1.053	0.0034	mg/L				0.32%
279.079	52795.0	2.036	0.0021	mg/L				0.10%
196.026	3301.6	0.9676	0.00190	mg/L				0.20%

Mean Data ----------

ID: 524669 Seq. No.: 18 Sample No.: 7 A/S Pos: 15
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:46:26 AM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5060839.0	0.955	0.0022	mg/L				0.23%
Al 308.215	643616.4	27.72	0.167	mg/L				0.60%
As 188.979	66.8	0.0503	0.00048	mg/L				0.95%
Ca 315.887	14991896.2	87.95	0.360	mg/L				0.41%
Fe 238.863	594033.6	18.76	0.104	mg/L				0.56%
Mg 279.079	588639.9	22.50	0.136	mg/L				0.61%
S 6.026	-3.4	0.0075	0.00108	mg/L				14.43%

Mean Data ----------

ID: 524669D Seq. No.: 19 Sample No.: 8 A/S Pos: 16
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:51:37 AM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
? 030	5030673.0	0.949	0.0026	mg/L				0.27%
l .215	619829.3	26.68	0.091	mg/L				0.34%
s .979	66.9	0.0503	0.00234	mg/L				4.65%
a 315.887	15071110.7	88.41	0.173	mg/L				0.20%
e 238.863	571428.4	18.05	0.073	mg/L				0.40%
g 279.079	581707.4	22.24	0.060	mg/L				0.27%
e 196.026	-1.2	0.0081	0.00138	mg/L				17.03%

ean Data
D: 524669S Seq. No.: 20 Sample No.: 9 A/S Pos: 17
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 11:56:48 AM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5038321.5	0.951	0.0009	mg/L				0.09%
l 308.215	674023.2	29.04	0.055	mg/L				0.19%
s 188.979	150.9	0.0912	0.00238	mg/L				2.61%
a 315.887	15687025.3	92.03	0.371	mg/L				0.40%
e 238.863	605607.3	19.13	0.011	mg/L				0.06%
g 279.079	648465.9	24.78	0.037	mg/L				0.15%
e 196.026	3413.8	1.000	0.0021	mg/L				0.21%

Mean Data
ID: 524669A Seq. No.: 21 Sample No.: 10 A/S Pos: 18
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:01:59 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5088100.4	0.960	0.0100	mg/L				1.04%
Al 308.215	674862.1	29.08	0.277	mg/L				0.95%
A 188.979	137.7	0.0848	0.00106	mg/L				1.25%
5.887	14988958.7	87.93	1.053	mg/L				1.20%
38.863	607135.7	19.18	0.178	mg/L				0.93%
Mg 279.079	622698.1	23.80	0.171	mg/L				0.72%
Se 196.026	3409.3	0.9989	0.00595	mg/L				0.60%

Mean Data
ID: CCV Seq. No.: 22 Sample No.: 2 A/S Pos: 3
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:07:06 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5223655.9	0.986	0.0059	mg/L				0.60%
Al 308.215	230006.9	9.676	0.0454	mg/L				0.47%
As 188.979	1994.0	0.9878	0.00372	mg/L				0.38%
Ca 315.887	4326008.4	25.37	0.038	mg/L				0.15%
Fe 238.863	160122.0	5.055	0.0149	mg/L				0.29%
Mg 279.079	657892.8	25.14	0.040	mg/L				0.16%
Se 196.026	1674.2	0.4948	0.00329	mg/L				0.67%

Mean Data
ID: CCB Seq. No.: 23 Sample No.: 4 A/S Pos: 1
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:12:08 PM

Element	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
Y 371.030	5292417.8	0.999	0.0080	mg/L				0.80%
Al 308.215	8190.5	0.0016	0.00054	mg/L				33.45%
As 188.979	-33.8	0.0013	0.00108	mg/L				81.15%
Ca 315.887	985.2	-0.0032	0.00187	mg/L				59.30%
Fe 238.863	166.4	0.0017	0.00041	mg/L				24.68%
279.079	-483.5	0.0014	0.00055	mg/L				38.17%
196.026	-21.5	0.0022	0.00101	mg/L				45.35%

Mean Data
ID: 524669L Seq. No.: 24 Sample No.: 11 A/S Pos: 19

le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:17:12 PM

ment	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
71.030	5356871.2	1.011	0.0029	mg/L				0.29%
308.215	128029.5	5.228	0.0397	mg/L				0.76%
188.979	-11.0	0.0124	0.00023	mg/L				1.82%
315.887	3019871.5	17.71	0.039	mg/L				0.22%
238.863	120662.1	3.808	0.0159	mg/L				0.42%
279.079	117565.3	4.510	0.0143	mg/L				0.32%
196.026	-14.8	0.0042	0.00163	mg/L				38.80%

n Data
524674 Seq. No.: 25 Sample No.: 12 A/S Pos: 20
ple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:22:21 PM

ment	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
71.030	5179768.6	0.977	0.0022	mg/L				0.22%
308.215	189567.6	7.912	0.0064	mg/L				0.08%
188.979	11.4	0.0233	0.00032	mg/L				1.38%
315.887	10120793.4	59.37	0.069	mg/L				0.12%
238.863	162008.2	5.114	0.0146	mg/L				0.29%
279.079	471062.3	18.01	0.098	mg/L				0.54%
196.026	-3.1	0.0076	0.00199	mg/L				26.27%

SD i b/ol OK to report

2nd analysis

an Data
: 524676 Seq. No.: 26 Sample No.: 13 A/S Pos: 21
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:27:39 PM

e	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
3 30	5192231.7	0.980	0.0081	mg/L				0.82%
308.215	1846670.9	80.19	0.041	mg/L				0.05%
188.979	-7.0	0.0247	0.00081	mg/L				3.26%
315.887	36476883.0	214.0	0.11	mg/L				0.05%
238.863	1744650.3	55.11	0.006	mg/L				0.01%
279.079	1242392.6	47.47	0.057	mg/L				0.12%
196.026	6.9	0.0105	0.00213	mg/L				20.29%

ean Data
D: 524686 Seq. No.: 27 Sample No.: 14 A/S Pos: 22
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:32:55 PM

lement	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
371.030	5105381.7	0.963	0.0045	mg/L				0.47%
308.215	34560.3	1.152	0.0179	mg/L				1.56%
188.979	5.5	0.0205	0.00049	mg/L				2.39%
315.887	11484990.0	67.37	0.136	mg/L				0.20%
238.863	23185.5	0.7288	0.00655	mg/L				0.90%
279.079	748210.7	28.59	0.250	mg/L				0.87%
196.026	9.9	0.0114	0.00137	mg/L				12.06%

ean Data
ID: CRI Seq. No.: 28 Sample No.: 5 A/S Pos: 6
Sample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:38:02 PM

Element	Mean Corr. Intensity	Mean Conc.	Calib Std.Dev.	Calib Units	Mean Conc.	Sample Std.Dev.	Sample Units	RSD
Y 371.030	5435452.4	1.026	0.0066	mg/L				0.64%
A 9.215	8038.1	-0.0050	0.00045	mg/L				9.03%
A 1.979	3.1	0.0193	0.00021	mg/L				1.08%
Ca 315.887	3367.7	0.0108	0.00018	mg/L				1.64%
Fe 238.863	212.8	0.0031	0.00026	mg/L				8.38%
Mg 279.079	-450.5	0.0027	0.00031	mg/L				11.26%
Se 196.026	15.8	0.0131	0.00215	mg/L				16.45%

ean Data
D: ICSA
ample Qty: 1.0000 g
Seq. No.: 29 Sample No.: 6 A/S Pos: 7
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:43:30 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4674579.2	0.882	0.0009	mg/L				0.11%
l 308.215	11447904.1	498.9	0.43	mg/L				0.09%
s 188.979	-104.7	0.0005	0.00179	mg/L				369.12%
a 315.887	78516403.4	460.7	0.62	mg/L				0.13%
e 238.863	5696408.7	179.9	0.31	mg/L				0.17%
g 279.079	13254670.9	506.2	0.49	mg/L				0.10%
e 196.026	12.5	-0.0052	0.00326	mg/L				62.26%

ean Data
D: ICSAB
ample Qty: 1.0000 g
Seq. No.: 30 Sample No.: 7 A/S Pos: 8
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:49:18 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	4563553.0	0.861	0.0070	mg/L				0.81%
l 308.215	11690472.7	509.5	3.29	mg/L				0.65%
s 188.979	-115.3	-0.0039	0.00191	mg/L				48.59%
a 315.887	80121825.3	470.1	3.57	mg/L				0.76%
e 238.863	5816745.0	183.7	0.17	mg/L				0.09%
g 279.079	13529004.3	516.7	3.89	mg/L				0.75%
e 196.026	-11.7	-0.0126	0.00225	mg/L				17.85%

ean Data
D: CCV
ample Qty: 1.0000 g
Seq. No.: 31 Sample No.: 2 A/S Pos: 3
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:54:44 PM

l :	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
3...030	5225246.1	0.986	0.0017	mg/L				0.17%
l 308.215	231554.8	9.744	0.1138	mg/L				1.17%
s 188.979	1986.6	0.9843	0.00687	mg/L				0.70%
a 315.887	4338274.7	25.44	0.061	mg/L				0.24%
e 238.863	161107.4	5.086	0.0466	mg/L				0.92%
g 279.079	657723.9	25.14	0.156	mg/L				0.62%
e 196.026	1681.8	0.4970	0.00289	mg/L				0.58%

ean Data
D: CCB
ample Qty: 1.0000 g
Seq. No.: 32 Sample No.: 4 A/S Pos: 1
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 01/29/02 12:59:45 PM

lement	Mean Corr. Intensity	Mean Conc.	Std.Dev.	Calib Units	Mean Conc.	Std.Dev.	Sample Units	RSD
371.030	5370352.4	1.013	0.0201	mg/L				1.99%
l 308.215	8125.4	-0.0012	0.00750	mg/L				618.46%
s 188.979	-35.2	0.0007	0.00035	mg/L				50.85%
a 315.887	705.8	-0.0048	0.00014	mg/L				2.97%
e 238.863	288.3	0.0055	0.00033	mg/L				6.06%
g 279.079	-469.4	0.0020	0.00056	mg/L				28.11%
e 196.026	-25.3	0.0011	0.00013	mg/L				11.77%

Metals Cover Page

Instrument: FIMS

Analyst: DCB

Date: 1/25/02

Data File: Jan-25W

Reviewed By: DCB

Entered By: DCB

Manager Approval: CK 1/25/02

Starlims Run #	Analytes Used	Batch ID	Method Requested	Failed Analytes	Comments / Problems
73853	Hg	m2480126A	7470		R-10323 RL = 0.2ppb
			245.1		

Package Data:

Client Sub. #	Type Of Package	Analytes Used	Failed Metals	Batch ID	Standards Attached	How Was Data Transferred To LIMS	Raw Data Copied
R-10311	Pkg 5 / ASP	Hg		m2480126A	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
R-10310	Pkg 5 / ASP	Hg		m2480126A	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
R-10310	Pkg 5 / ASP	Hg		m2480126B	YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO
	Pkg 5 / ASP				YES / NO	MARRS to LIMS / Run Created Above	YES / NO

Perkin-Elmer AAWinLab: 01/25/2002, 12:08:46 AM

Method Name: Hg_CLP
Method Description: Method 245.1A FIMS
Element: Hg

1/25/02
DCB

Date: 01/25/2002
Technique: FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: ROUTINE.SIF Results Data Set Name: Jan-25W

Element: Hg Seq. No.: 4 AS Loc.: 1 Date: 01/25/2002
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0004	0.0022	0.0004	12:09:41	No
2			0.0004	0.0026	0.0004	12:10:10	No
Mean:			0.0004				
SD :			0.0000				
%RSD:			4.1272				

Auto-zero performed.

Element: Hg Seq. No.: 5 AS Loc.: 8 Date: 01/25/2002
Sample ID: 0.2ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0017	0.0092	0.0021	12:11:30	No
2			0.0017	0.0090	0.0021	12:12:00	No
Mean:			0.0017				
SD :			0.0000				
%RSD:							

[Hg] Standard number 1 applied. [0.2000]
Correlation Coefficient: 1.00000 Slope: 0.00854

Element: Hg Seq. No.: 6 AS Loc.: 2 Date: 01/25/2002
Sample ID: 0.5ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0043	0.0201	0.0047	12:13:21	No
2			0.0043	0.0189	0.0047	12:13:50	No
Mean:			0.0043				
SD :			0.0000				
%RSD:			0.5446				

[Hg] Standard number 2 applied. [0.5000]
Correlation Coefficient: 0.99993 Slope: 0.00863

Element: Hg Seq. No.: 7 AS Loc.: 3 Date: 01/25/2002
Sample ID: 1ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0092	0.0413	0.0096	12:15:08	No
2			0.0092	0.0411	0.0096	12:15:37	No
Mean:			0.0092				
SD :			0.0000				
%RSD:			0.5409				

[Hg] Standard number 3 applied. [1.000]

Correlation Coefficient: 0.99863 Slope: 0.00908

Element: Hg Seq. No.: 8 AS Loc.: 4 Date: 01/25/2002
Sample ID: 2ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0188	0.0822	0.0192	12:16:59	No
2			0.0184	0.0801	0.0188	12:17:29	No
Mean:			0.0186				
SD :			0.0003				
%RSD:			1.4586				

[Hg] Standard number 4 applied. [2.000]
Correlation Coefficient: 0.99961 Slope: 0.00925

Element: Hg Seq. No.: 9 AS Loc.: 5 Date: 01/25/2002
Sample ID: 5ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0460	0.2010	0.0464	12:18:49	No
2			0.0456	0.2000	0.0460	12:19:19	No
Mean:			0.0458				
SD :			0.0003				
%RSD:			0.6145				

[Hg] Standard number 5 applied. [5.000]
Correlation Coefficient: 0.99994 Slope: 0.00918

Element: Hg Seq. No.: 10 AS Loc.: 6 Date: 01/25/2002
Sample ID: 10ppb std

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0937	0.4072	0.0941	12:20:40	No
2			0.0918	0.3984	0.0922	12:21:09	No
Mean:			0.0927				
SD :			0.0013				
%RSD:			1.4500				

[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99997 Slope: 0.00925

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0004	----	----	----	----
0.2ppb std	0.0017	0.2000	0.1845	0.00000	----
0.5ppb std	0.0043	0.5000	0.4674	0.00002	0.5
1ppb std	0.0092	1.0000	0.9947	0.00005	0.5
2ppb std	0.0186	2.0000	2.012	0.00027	1.5
5ppb std	0.0458	5.0000	4.952	0.00028	0.6
10ppb std	0.0927	10.0000	10.02	0.00134	1.5

Correlation Coefficient: 0.99997 Slope: 0.00925 ----

Element: Hg Seq. No.: 11 AS Loc.: 7 Date: 01/25/2002
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	3.145	3.145	0.0291	0.1270	0.0295	12:22:30	No
2	3.065	3.065	0.0284	0.1244	0.0287	12:22:59	No
Mean:	3.105	3.105	0.0287				
SD :	0.05664	0.05664	0.0005				
%RSD:	1.8	1.8	1.8242				

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 1 Date: 01/25/2002
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0149	-0.0149	-0.0001	0.0010	0.0003	12:24:18	No
2	-0.0142	-0.0142	-0.0001	0.0009	0.0003	12:24:47	No
Mean:	-0.0145	-0.0145	-0.0001				
SD :	0.00047	0.00047	0.0000				
%RSD:	3.2	3.2	3.2306				

QC value within specified limits.

==========

Element: Hg Seq. No.: 13 AS Loc.: 8 Date: 01/25/2002
Sample ID: CRII

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1944	0.1944	0.0018	0.0096	0.0022	12:26:07	No
2	0.1843	0.1843	0.0017	0.0086	0.0021	12:26:36	No
Mean:	0.1893	0.1893	0.0018				
SD :	0.00714	0.00714	0.0001				
%RSD:	3.8	3.8	3.7719				

QC value within specified limits.

==========

Element: Hg Seq. No.: 14 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.120	3.120	0.0289	0.1267	0.0293	12:27:59	No
2	3.104	3.104	0.0287	0.1253	0.0291	12:28:28	No
Mean:	3.112	3.112	0.0288				
SD :	0.01137	0.01137	0.0001				
%RSD:	0.4	0.4	0.3655				

QC value within specified limits.

==========

Element: Hg Seq. No.: 15 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0144	-0.0144	-0.0001	0.0010	0.0003	12:29:47	No
2	-0.0168	-0.0168	-0.0002	0.0009	0.0002	12:30:16	No
Mean:	-0.0156	-0.0156	-0.0001				
SD :	0.00171	0.00171	0.0000				
%RSD:	11.0	11.0	10.9593				

QC value within specified limits.

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Element: Hg Seq. No.: 16 1/25/02 DCB AS Loc.: 9 Date: 01/25/2002
Sample ID: PBW-M2480126A 526427

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.0149	-0.0149	-0.0001	0.0011	0.0003	12:31:31	No
2	-0.0196	-0.0196	-0.0002	0.0007	0.0002	12:32:00	No
Mean:	-0.0172	-0.0172	-0.0002				
SD :	0.00330	0.00330	0.0000				
%RSD:	19.1	19.1	19.1498				

Element: Hg Seq. No.: 17 1/25/02 DLS AS Loc.: 10 Date: 01/25/2002
Sample ID: LCSW-M2480126A 524628

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.008	1.008	0.0093	0.0418	0.0097	12:33:18	No
2	1.005	1.005	0.0093	0.0410	0.0097	12:33:47	No
Mean:	1.006	1.006	0.0093				
SD :	0.00253	0.00253	0.0000				
%RSD:	0.3	0.3	0.2509				

Element: Hg Seq. No.: 18 AS Loc.: 11 Date: 01/25/2002
Sample ID: 524693

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0053	-0.0053	0.0000	0.0015	0.0003	12:35:05	No
2	-0.0045	-0.0045	0.0000	0.0016	0.0003	12:35:34	No
Mean:	-0.0049	-0.0049	0.0000				
SD :	0.00057	0.00057	0.0000				
%RSD:	11.6	11.6	11.5804				

Element: Hg Seq. No.: 19 AS Loc.: 12 Date: 01/25/2002
Sample ID: 524694

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0054	-0.0054	-0.0001	0.0013	0.0003	12:36:54	No
2	-0.0064	-0.0064	-0.0001	0.0012	0.0003	12:37:24	No
Mean:	-0.0059	-0.0059	-0.0001				
SD :	0.00067	0.00067	0.0000				
%RSD:	11.4	11.4	11.3519				

Element: Hg Seq. No.: 20 AS Loc.: 13 Date: 01/25/2002
Sample ID: 524695

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.7177	0.7177	0.0066	0.0306	0.0070	12:38:45	No
2	0.6897	0.6897	0.0064	0.0293	0.0068	12:39:14	No
Mean:	0.7037	0.7037	0.0065				
SD :	0.01983	0.01983	0.0002				
%RSD:	2.8	2.8	2.8178				

Element: Hg Seq. No.: 21 AS Loc.: 14 Date: 01/25/2002
Sample ID: 524696

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0097	-0.0097	-0.0001	0.0010	0.0003	12:40:35	No
2	-0.0125	-0.0125	-0.0001	0.0012	0.0003	12:41:04	No
Mean:	-0.0111	-0.0111	-0.0001				
SD :	0.00199	0.00199	0.0000				
%RSD:	17.9	17.9	17.9086				

Element: Hg Seq. No.: 22 AS Loc.: 15 Date: 01/25/2002
Sample ID: 524697

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0084	-0.0084	-0.0001	0.0013	0.0003	12:42:26	No
2	-0.0109	-0.0109	-0.0001	0.0012	0.0003	12:42:55	No
Mean:	-0.0097	-0.0097	-0.0001				
SD :	0.00180	0.00180	0.0000				
%RSD:	18.6	18.6	18.6084				

Element: Hg Seq. No.: 23 AS Loc.: 16 Date: 01/25/2002
Sample ID: 524698

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0157	-0.0157	-0.0001	0.0009	0.0002	12:44:19	No
2	-0.0184	-0.0184	-0.0002	0.0007	0.0002	12:44:48	No
Mean:	-0.0171	-0.0171	-0.0002				
SD :	0.00191	0.00191	0.0000				
%RSD:	11.2	11.2	11.1921				

Element: Hg Seq. No.: 24 AS Loc.: 17 Date: 01/25/2002
Sample ID: 525794

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0101	-0.0101	-0.0001	0.0012	0.0003	12:46:07	No
2	-0.0121	-0.0121	-0.0001	0.0012	0.0003	12:46:37	No
Mean:	-0.0111	-0.0111	-0.0001				
SD :	0.00141	0.00141	0.0000				
%RSD:	12.7	12.7	12.7146				

Element: Hg Seq. No.: 25 AS Loc.: 18 Date: 01/25/2002
Sample ID: 525795

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0091	-0.0091	-0.0001	0.0013	0.0003	12:47:52	No
2	-0.0104	-0.0104	-0.0001	0.0013	0.0003	12:48:21	No
Mean:	-0.0098	-0.0098	-0.0001				
SD :	0.00095	0.00095	0.0000				
%RSD:	9.7	9.7	9.7332				

Element: Hg Seq. No.: 26 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.104	3.104	0.0287	0.1270	0.0291	12:49:40	No
2	3.080	3.080	0.0285	0.1268	0.0289	12:50:09	No
Mean:	3.092	3.092	0.0286				
SD :	0.01738	0.01738	0.0002				
%RSD:	0.6	0.6	0.5622				

QC value within specified limits.

Element: Hg Seq. No.: 27 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.0149	-0.0149	-0.0001	0.0009	0.0003	12:51:31	No
2	-0.0198	-0.0198	-0.0002	0.0002	0.0002	12:52:00	No
Mean:	-0.0173	-0.0173	-0.0002				
SD :	0.00347	0.00347	0.0000				
%RSD:	20.0	20.0	19.9906				

QC value within specified limits.

Element: Hg Seq. No.: 28 AS Loc.: 19 Date: 01/25/2002
Sample ID: 525796

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0001	-0.0001	0.0000	0.0024	0.0004	12:53:16	No
2	-0.0031	-0.0031	0.0000	0.0018	0.0004	12:53:46	No
Mean:	-0.0016	-0.0016	0.0000				
SD :	0.00212	0.00212	0.0000				
%RSD:	130.0	130.0	130.0360				

Element: Hg Seq. No.: 29 AS Loc.: 20 Date: 01/25/2002
Sample ID: 524710

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0158	-0.0158	-0.0001	0.0005	0.0002	12:55:03	No
2	-0.0075	-0.0075	-0.0001	0.0015	0.0003	12:55:33	No
Mean:	-0.0116	-0.0116	-0.0001				
SD :	0.00588	0.00588	0.0001				
%RSD:	50.7	50.7	50.6625				

Element: Hg Seq. No.: 30 AS Loc.: 21 Date: 01/25/2002
Sample ID: 524711

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0058	0.0058	0.0001	0.0028	0.0004	12:56:50	No
2	-0.0053	-0.0053	0.0000	0.0017	0.0003	12:57:19	No
Mean:	0.0002	0.0002	0.0000				
SD :	0.00780	0.00780	0.0001				
%RSD:	3369	3369	3369.2167				

Element: Hg Seq. No.: 31 AS Loc.: 22 Date: 01/25/2002
Sample ID: 524711D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0056	-0.0056	-0.0001	0.0019	0.0003	12:58:37	No
2	-0.0063	-0.0063	-0.0001	0.0018	0.0003	12:59:06	No
Mean:	-0.0060	-0.0060	-0.0001				
SD :	0.00049	0.00049	0.0000				
%RSD:	8.1	8.1	8.1344				

Element: Hg Seq. No.: 32 AS Loc.: 23 Date: 01/25/2002
Sample ID: 524711S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9881	0.9881	0.0091	0.0424	0.0095	01:00:24	No
2	0.9812	0.9812	0.0091	0.0414	0.0095	01:00:53	No
Mean:	0.9846	0.9846	0.0091				
SD :	0.00486	0.00486	0.0000				

%RSD: 0.5 0.5 0.4932

Element: Hg Seq. No.: 33 AS Loc.: 24 Date: 01/25/2002
Sample ID: 522144

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0059	-0.0059	-0.0001	0.0014	0.0003	01:02:12	No
2	-0.0043	-0.0043	0.0000	0.0015	0.0004	01:02:41	No
Mean:	-0.0051	-0.0051	0.0000				
SD :	0.00108	0.00108	0.0000				
%RSD:	21.1	21.1	21.1058				

Element: Hg Seq. No.: 34 AS Loc.: 25 Date: 01/25/2002
Sample ID: 522155

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0004	0.0004	0.0000	0.0015	0.0004	01:04:00	No
2	0.0029	0.0029	0.0000	0.0018	0.0004	01:04:29	No
Mean:	0.0016	0.0016	0.0000				
SD :	0.00180	0.00180	0.0000				
%RSD:	109.3	109.3	109.3457				

Element: Hg Seq. No.: 35 AS Loc.: 26 Date: 01/25/2002
Sample ID: 524954

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0123	-0.0123	-0.0001	0.0011	0.0003	01:05:49	No
2	-0.0125	-0.0125	-0.0001	0.0011	0.0003	01:06:18	No
Mean:	-0.0124	-0.0124	-0.0001				
SD :	0.00020	0.00020	0.0000				
%RSD:	1.6	1.6	1.6235				

Element: Hg Seq. No.: 36 1/25/02 DCB AS Loc.: 27 Date: 01/25/2002
Sample ID: 524954D 526925

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0104	-0.0104	-0.0001	0.0010	0.0003	01:07:38	No
2	-0.0086	-0.0086	-0.0001	0.0014	0.0003	01:08:07	No
Mean:	-0.0095	-0.0095	-0.0001				
SD :	0.00129	0.00129	0.0000				
%RSD:	13.6	13.6	13.6104				

Element: Hg Seq. No.: 37 1/25/02 DCB AS Loc.: 28 Date: 01/25/2002
Sample ID: 524954S 526926

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.007	1.007	0.0093	0.0426	0.0097	01:09:28	No
2	0.9853	0.9853	0.0091	0.0416	0.0095	01:09:57	No
Mean:	0.9960	0.9960	0.0092				
SD :	0.01512	0.01512	0.0001				
%RSD:	1.5	1.5	1.5182				

Element: Hg Seq. No.: 38 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.102	3.102	0.0287	0.1270	0.0291	01:11:24	No
2	3.062	3.062	0.0283	0.1252	0.0287	01:11:53	No
Mean:	3.082	3.082	0.0285				
SD :	0.02804	0.02804	0.0003				
%RSD:	0.9	0.9	0.9098				

QC value within specified limits.

Element: Hg Seq. No.: 39 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0126	-0.0126	-0.0001	0.0010	0.0003	01:13:12	No
2	-0.0111	-0.0111	-0.0001	0.0013	0.0003	01:13:41	No
Mean:	-0.0118	-0.0118	-0.0001				
SD :	0.00101	0.00101	0.0000				
%RSD:	8.5	8.5	8.5160				

QC value within specified limits.

Element: Hg Seq. No.: 40 AS Loc.: 29 Date: 01/25/2002
Sample ID: 524956

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0108	-0.0108	-0.0001	0.0014	0.0003	01:15:00	No
2	-0.0172	-0.0172	-0.0002	0.0008	0.0002	01:15:29	No
Mean:	-0.0140	-0.0140	-0.0001				
SD :	0.00457	0.00457	0.0000				
%RSD:	32.6	32.6	32.6270				

Element: Hg Seq. No.: 41 AS Loc.: 30 Date: 01/25/2002
Sample ID: PBW-M2480126B

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0168	-0.0168	-0.0002	0.0008	0.0002	01:16:51	No
2	-0.0146	-0.0146	-0.0001	0.0010	0.0003	01:17:20	No
Mean:	-0.0157	-0.0157	-0.0001				
SD :	0.00158	0.00158	0.0000				
%RSD:	10.1	10.1	10.0573				

Element: Hg Seq. No.: 42 AS Loc.: 31 Date: 01/25/2002
Sample ID: LCSW-M2480126B

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9890	0.9890	0.0091	0.0419	0.0095	01:18:42	No
2	0.9862	0.9862	0.0091	0.0417	0.0095	01:19:11	No
Mean:	0.9876	0.9876	0.0091				
SD :	0.00195	0.00195	0.0000				
%RSD:	0.2	0.2	0.1975				

Element: Hg Seq. No.: 43 AS Loc.: 32 Date: 01/25/2002
Sample ID: 524665

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	-0.0149	-0.0149	-0.0001	0.0010	0.0003	01:20:30	No
2	-0.0159	-0.0159	-0.0001	0.0008	0.0002	01:20:59	No
Mean:	-0.0154	-0.0154	-0.0001				
SD :	0.00068	0.00068	0.0000				
%RSD:	4.4	4.4	4.4499				

Element: Hg Seq. No.: 44 AS Loc.: 33 Date: 01/25/2002
Sample ID: 524666

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0090	-0.0090	-0.0001	0.0013	0.0003	01:22:14	No
2	-0.0095	-0.0095	-0.0001	0.0013	0.0003	01:22:42	No
Mean:	-0.0092	-0.0092	-0.0001				
SD :	0.00036	0.00036	0.0000				
%RSD:	3.9	3.9	3.8644				

Element: Hg Seq. No.: 45 AS Loc.: 34 Date: 01/25/2002
Sample ID: 524669

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0020	-0.0020	0.0000	0.0017	0.0004	01:23:57	No
2	-0.0030	-0.0030	0.0000	0.0016	0.0004	01:24:26	No
Mean:	-0.0025	-0.0025	0.0000				
SD :	0.00070	0.00070	0.0000				
%RSD:	28.3	28.3	28.3015				

Element: Hg Seq. No.: 46 AS Loc.: 35 Date: 01/25/2002
Sample ID: 524669D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0029	-0.0029	0.0000	0.0017	0.0004	01:25:42	No
2	-0.0066	-0.0066	-0.0001	0.0014	0.0003	01:26:11	No
Mean:	-0.0047	-0.0047	0.0000				
SD :	0.00259	0.00259	0.0000				
%RSD:	54.8	54.8	54.8343				

Element: Hg Seq. No.: 47 AS Loc.: 36 Date: 01/25/2002
Sample ID: 524669S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9952	0.9952	0.0092	0.0425	0.0096	01:27:28	No
2	0.9849	0.9849	0.0091	0.0419	0.0095	01:27:59	No
Mean:	0.9900	0.9900	0.0092				
SD :	0.00724	0.00724	0.0001				
%RSD:	0.7	0.7	0.7309				

Element: Hg Seq. No.: 48 AS Loc.: 37 Date: 01/25/2002
Sample ID: 524670

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0094	-0.0094	-0.0001	0.0014	0.0003	01:29:16	No
2	-0.0102	-0.0102	-0.0001	0.0013	0.0003	01:29:45	No
Mean:	-0.0098	-0.0098	-0.0001				
SD :	0.00060	0.00060	0.0000				
%RSD:	6.1	6.1	6.1028				

Element: Hg Seq. No.: 49 AS Loc.: 38 Date: 01/25/2002
Sample ID: 524671

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0044	-0.0044	0.0000	0.0017	0.0004	01:31:03	No
2	-0.0043	-0.0043	0.0000	0.0017	0.0004	01:31:32	No
Mean:	-0.0043	-0.0043	0.0000				
SD :	0.00009	0.00009	0.0000				
%RSD:	2.0	2.0	2.0496				

Element: Hg Seq. No.: 50 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.092	3.092	0.0286	0.1273	0.0290	01:32:51	No
2	3.071	3.071	0.0284	0.1263	0.0288	01:33:20	No
Mean:	3.081	3.081	0.0285				
SD :	0.01505	0.01505	0.0001				
%RSD:	0.5	0.5	0.4885				

QC value within specified limits.

Element: Hg Seq. No.: 51 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0098	-0.0098	-0.0001	0.0014	0.0003	01:34:40	No
2	-0.0098	-0.0098	-0.0001	0.0011	0.0003	01:35:10	No
Mean:	-0.0098	-0.0098	-0.0001				
SD :	0.00003	0.00003	0.0000				
%RSD:	0.3	0.3	0.3019				

QC value within specified limits.

Element: Hg Seq. No.: 52 AS Loc.: 39 Date: 01/25/2002
Sample ID: 524674

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0076	-0.0076	-0.0001	0.0013	0.0003	01:36:27	No
2	-0.0053	-0.0053	0.0000	0.0018	0.0003	01:36:57	No
Mean:	-0.0064	-0.0064	-0.0001				
SD :	0.00164	0.00164	0.0000				
%RSD:	25.6	25.6	25.5576				

Element: Hg Seq. No.: 53 AS Loc.: 40 Date: 01/25/2002
Sample ID: 524675

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0006	0.0006	0.0000	0.0018	0.0004	01:38:15	No
2	-0.0014	-0.0014	0.0000	0.0014	0.0004	01:38:45	No
Mean:	-0.0004	-0.0004	0.0000				
SD :	0.00143	0.00143	0.0000				
%RSD:	344.6	344.6	344.6225				

Element: Hg Seq. No.: 54 AS Loc.: 41 Date: 01/25/2002
Sample ID: 524676

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	µg/L	µg/L	Signal	Area	Height		Stored
1	0.0093	0.0093	0.0001	0.0022	0.0005	01:40:04	No
2	0.0103	0.0103	0.0001	0.0022	0.0005	01:40:33	No
Mean:	0.0098	0.0098	0.0001				
SD :	0.00065	0.00065	0.0000				
%RSD:	6.6	6.6	6.6393				

Element: Hg Seq. No.: 55 AS Loc.: 42 Date: 01/25/2002
Sample ID: 524677

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0019	-0.0019	0.0000	0.0014	0.0004	01:41:52	No
2	-0.0019	-0.0019	0.0000	0.0016	0.0004	01:42:22	No
Mean:	-0.0019	-0.0019	0.0000				
SD :	0.00006	0.00006	0.0000				
%RSD:	3.0	3.0	2.9832				

Element: Hg Seq. No.: 56 AS Loc.: 43 Date: 01/25/2002
Sample ID: 524678

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0093	-0.0093	-0.0001	0.0013	0.0003	01:43:42	No
2	-0.0118	-0.0118	-0.0001	0.0010	0.0003	01:44:11	No
Mean:	-0.0106	-0.0106	-0.0001				
SD :	0.00178	0.00178	0.0000				
%RSD:	16.8	16.8	16.8296				

Element: Hg Seq. No.: 57 AS Loc.: 44 Date: 01/25/2002
Sample ID: 524679

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0100	-0.0100	-0.0001	0.0011	0.0003	01:45:31	No
2	-0.0148	-0.0148	-0.0001	0.0008	0.0003	01:46:01	No
Mean:	-0.0124	-0.0124	-0.0001				
SD :	0.00339	0.00339	0.0000				
%RSD:	27.4	27.4	27.3501				

Element: Hg Seq. No.: 58 AS Loc.: 45 Date: 01/25/2002
Sample ID: 524683

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0068	0.0068	0.0001	0.0020	0.0005	01:47:22	No
2	0.0086	0.0086	0.0001	0.0023	0.0005	01:47:51	No
Mean:	0.0077	0.0077	0.0001				
SD :	0.00128	0.00128	0.0000				
%RSD:	16.7	16.7	16.6502				

Element: Hg Seq. No.: 59 AS Loc.: 46 Date: 01/25/2002
Sample ID: 524685

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0082	-0.0082	-0.0001	0.0015	0.0003	01:49:12	No
2	-0.0063	-0.0063	-0.0001	0.0016	0.0003	01:49:41	No
Mean:	-0.0073	-0.0073	-0.0001				
SD :	0.00135	0.00135	0.0000				

%RSD: 18.5 18.5 18.5117

Element: Hg Seq. No.: 60 AS Loc.: 47 Date: 01/25/2002
Sample ID: 524686

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0097	-0.0097	-0.0001	0.0011	0.0003	01:51:02	No
2	-0.0083	-0.0083	-0.0001	0.0013	0.0003	01:51:32	No
Mean:	-0.0090	-0.0090	-0.0001				
SD :	0.00097	0.00097	0.0000				
%RSD:	10.8	10.8	10.8226				

Element: Hg Seq. No.: 61 AS Loc.: 48 Date: 01/25/2002
Sample ID: 524687

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0035	-0.0035	0.0000	0.0016	0.0004	01:52:50	No
2	-0.0065	-0.0065	-0.0001	0.0015	0.0003	01:53:20	No
Mean:	-0.0050	-0.0050	0.0000				
SD :	0.00217	0.00217	0.0000				
%RSD:	43.4	43.4	43.4061				

Element: Hg Seq. No.: 62 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.069	3.069	0.0284	0.1274	0.0288	01:54:38	No
2	3.066	3.066	0.0284	0.1268	0.0288	01:55:07	No
Mean:	3.067	3.067	0.0284				
SD :	0.00197	0.00197	0.0000				
%RSD:							

QC value within specified limits.

Element: Hg Seq. No.: 63 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0074	-0.0074	-0.0001	0.0015	0.0003	01:56:27	No
2	-0.0105	-0.0105	-0.0001	0.0011	0.0003	01:56:56	No
Mean:	-0.0089	-0.0089	-0.0001				
SD :	0.00215	0.00215	0.0000				
%RSD:	24.0	24.0	24.0016				

QC value within specified limits.

Element: Hg Seq. No.: 64 AS Loc.: 49 Date: 01/25/2002
Sample ID: 524688

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0122	-0.0122	-0.0001	0.0009	0.0003	01:58:12	No
2	-0.0075	-0.0075	-0.0001	0.0015	0.0003	01:58:41	No
Mean:	-0.0099	-0.0099	-0.0001				
SD :	0.00327	0.00327	0.0000				
%RSD:	33.2	33.2	33.2145				

Perkin-Elmer AAWinLab: 01/25/2002, 01:59:01 PM

Element: Hg Seq. No.: 65 AS Loc.: 50 Date: 01/25/2002
Sample ID: 524689

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0113	-0.0113	-0.0001	0.0011	0.0003	01:59:55	No
2	-0.0102	-0.0102	-0.0001	0.0014	0.0003	02:00:25	No
Mean:	-0.0107	-0.0107	-0.0001				
SD :	0.00081	0.00081	0.0000				
%RSD:	7.6	7.6	7.5603				

Element: Hg Seq. No.: 66 AS Loc.: 51 Date: 01/25/2002
Sample ID: 524690

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0071	-0.0071	-0.0001	0.0013	0.0003	02:01:41	No
2	-0.0068	-0.0068	-0.0001	0.0014	0.0003	02:02:10	No
Mean:	-0.0069	-0.0069	-0.0001				
SD :	0.00017	0.00017	0.0000				
%RSD:	2.4	2.4	2.3894				

Element: Hg Seq. No.: 67 AS Loc.: 52 Date: 01/25/2002
Sample ID: 524691

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0070	-0.0070	-0.0001	0.0015	0.0003	02:03:26	No
2	-0.0105	-0.0105	-0.0001	0.0010	0.0003	02:03:55	No
Mean:	-0.0087	-0.0087	-0.0001				
SD :	0.00249	0.00249	0.0000				
%RSD:	28.6	28.6	28.5761				

Element: Hg Seq. No.: 68 AS Loc.: 53 Date: 01/25/2002
Sample ID: 524692

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0092	-0.0092	-0.0001	0.0015	0.0003	02:05:12	No
2	-0.0125	-0.0125	-0.0001	0.0012	0.0003	02:05:41	No
Mean:	-0.0108	-0.0108	-0.0001				
SD :	0.00232	0.00232	0.0000				
%RSD:	21.5	21.5	21.5086				

Element: Hg Seq. No.: 69 AS Loc.: 7 Date: 01/25/2002
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.020	3.020	0.0279	0.1261	0.0283	02:07:00	No
2	3.033	3.033	0.0281	0.1260	0.0285	02:07:30	No
Mean:	3.027	3.027	0.0280				
SD :	0.00954	0.00954	0.0001				
%RSD:	0.3	0.3	0.3151				

QC value within specified limits.

Element: Hg Seq. No.: 70 AS Loc.: 1 Date: 01/25/2002
Sample ID: CCB

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

Perkin-Elmer AAWinLab: 01/25/2002, 02:07:53 PM

#	µg/L	µg/L	Signal	Area	Height		Stored
1	-0.0095	-0.0095	-0.0001	0.0014	0.0003	02:08:48	No
2	-0.0115	-0.0115	-0.0001	0.0013	0.0003	02:09:18	No
Mean:	-0.0105	-0.0105	-0.0001				
SD :	0.00144	0.00144	0.0000				
%RSD:	13.7	13.7	13.6792				

QC value within specified limits.

CAS-Rochester ICP Water Digestion Log

Analyst: JM Date: 1/23/02 Spk Witness: SD Batch ID: M26201 2

Prep Method: 3010 // 3010 TCLP // 3005 // CLP Report Type: Routine // ASP // Pkg5

Digest: Initial // Redigest of: _____ Approval: CK

	Submission / Order #	pH	Initial Vol (ml)	Final Vol (ml)	Initial Color / Clarity	Final Color / Clarity	Metals	Spike Vol (ml)
1	PBW	NA	50	50	C-CLR	C-CLR	2As, 2Pb, 2Se, Ag, Ba, Cd, Cr, Mn, Zn	
2	LCSW	↓			↓			+0.5 ml spk A,B +0.05 ml Se
3	R10310 524665	<2			Y-CLR			
4	666				C-CLR			
5	669				B-CDY			
6	669 D							
7	669 S							+0.5 ml spk A,B +0.05 ml Se
8	670							
9	671							
10	674					↓		
11	675					Y-CDY		
12	676				↓	↓		
13	677				C-CLR	C-CLR		
14	678							
15	679							
16	683							
17	685							
18	686				↓			
19	687				B-CDY			
20	688							
21	689							
22	690							
23	691				↓			
24	692		↓	↓	C-CLR	↓	↓	

Spiking Standards / Reagent Lot #:

Spike A,B: M1780032 D E Spike #4: —

TCLP Spk: — TCLP Ba: —

Se Std: M1780029 Q Sn Std: —

HNO3: M1780031 I HCL: M1780030 A

Color / Clarity Key:

Color: C = Colorless ; Y = Yellow ; B = Brown
BL = Black ; G = Grey

Clarity: CDY = Cloudy ; CLR = Clear ; OP = Opaque

Comments: Hot Block

B 135

407

CAS-Ro[illegible]er ICP Water Digestion Log

6010B/84[illegible] // 200.7/136 // ASP/CLP4.1

Batch: M2620141

Analyst: JM

Date: 1/24/02

Spk Witness: CK 1/24/02

Prep Method: 3010 // 3010 TCLP // 3005 // CLP

Report Type: Routine // ASP // Pkg5

Digest: Initial // Redigest of: _____

Approval: CK

	Submission / Order #	pH	Initial Vol (ml)	Final Vol (ml)	Initial Color / Clarity	Final Color / Clarity	Metals	Spike Vol (ml)
1	PBW	NA	50	50	C-CLR	C-CLR	TAL, B	
2	LCSW	↓	↓	↓	↓	↓	↓	0.05ml Se 0.50ml spk A,B
3	R10311 524710	<2						
4	710 D							
5	710 S							0.05ml Se 0.50ml spk A,B
6	711						↓	
7	R10326 524988	<2					TAL	
8	989						↓	
9	R10310 524693	<2					aAs, aPb, aSe, Ag, Ba, Cd, Cr, Mn, Zn	
10	694							
11	695							
12	696							
13	697							
14	698		↓	↓	↓	↓	↓	
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

JM 1/24/02

Spiking Standards / Reagent Lot #:

Spike A,B: M1780032DE Spike #4: —

TCLP Spk: — TCLP Ba: —

Se Std: M1780029Q Sn Std: —

HNO3: M1780031E HCL: M1780030A

Color / Clarity Key:

Color: C = Colorless ; Y = Yellow ; B = Brown
BL = Black ; G = Grey

Clarity: CDY = Cloudy ; CLR = Clear ; OP = Opaque

[illegible]s: Hot Block

Columbia Analytical Services

ly for:	Hg	EPA Method: (1470) 7471 (245.1) / 245.5	Analyst: DCB
Temp:	In 95 / Out 95	Report: (Routine) / ASP (Pkg.5)	Date Prepped: 1/25/02
e In:	935	File Name: Jan-25W	Date Analyzed: 1/25/02
e Out:	1135		

	Client / Submission #	Sample Number	Initial Wgt/Volume (g/ml)	Final Volume (ml)			Client / Submission #	Sample Number	Initial Wgt/Volume (g/ml)	Final Volume (ml)
		PBLW A	100	100		31	R-10310	524674	100	100
		LCSW A				32		675		
	R-10310	524643				33		676		
		644				34		677		
		645				35		678		
		646				36		679		
		647				37		683		
		648				38		685		
9	R-10394	525794				39		686		
10		795				40		687		
11		796				41		688		
12	R-10311	524710				42		689		
13		711				43		690		
14		711DUP				44		691		
15		711SPK				45		692		
1	10166	522144				46				
17	R-10167	522155				47				
18	R-10323	524954				48		1/25/02		
19		954DUP				49		DCB		
20		954SPK								
21		956						ICB	100ml DI Water	100
22		PBLW B						Std 0	100ml DI Water	100
23		LCSW B						Std 0.2*	0.20ml of 0.1ppm	100
24	R-10310	524665						Std 0.5*	0.50ml of 0.1ppm	100
25		666						Std 1.0*	1.00ml of 0.1ppm	100
26		669						Std 2.0*	2.00ml of 0.1ppm	100
27		669DUP						Std 5.0*	5.00ml of 0.1ppm	100
28		669SPK						Std 10.0*	10.0ml of 0.1ppm	100
29		670						ICV/CCV**	3.00ml of 0.1ppm	100
30		671						LCSW/MS**	1.00ml of 0.1ppm	100
								CRDL*	0.20ml of 0.1ppm	100

Lot # of Reagents Used:

HNO3: M17800311 H2SO4: M17800294 HCL: M17800317 K2S2O8: M17800288 KMnO4: M17800272

SnCl2: M17800310 NaCl: M17800308 NH2OH-HCL: M17800308 LCSS CAS Lot#: —

LCSS ERA Lot#: —

*Source Standard: (Vendor/Lot #) M17800308

*(10ppm stock Lot#: M26500175A)

(0.1ppm working std Lot#: M26500175E)

**ICV Standard: (Vendor/Lot #) M17800268

**(10ppm stock Lot#: M26500215A)

**(0.1ppm working std Lot#: M26500215E)

Comments/Problems:

Batch Name: M24800126A M24800126B

TIMA CALIBRATION STANDARD (Standard is prepared daily.)

	Element	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
al Std 1	CA	M178003 1W	5000	2.00	200	50.0	2%HNO3	SD 1/21/02	A	M178003 1 I	M178003 1 J	M18
	MG		5000			50.0	5%HCl	SD 1/22/02	B	1	1	1
	K		5000			50.0	*6% HNO_3	SD 1/23/02	C	1	1	M18
	NA		5000			50.0	15% HCl	SD 1/24/02	*D	1	1	M18
al Std 2	AG	M178003 1L	100	2.00		1.00	+ 2% HCl	SD 1/24/02	E	1	1	1
	CR		100			1.00	15% HNO_3	DCB 1/25/02	F			
	MN		150			1.50		SD 1/28/02	*G	M178003 1 E	M178003 1 J	M18
	NI		400			4.00		↓	+ H	1	1	M18
	ZN		200			2.00		SD 1/29/02	I	1	1	1
Cal Std 3	AL	M178003 1N	2000	2.00		20.0			J			M18
	BA		2000			20.0			K			
	BE		50			0.500			L			
	CO		500			5.00			M			
	CU		250			2.50			N			
	FE		1000			10.0			O			
	V		500			5.00			P			
Cal Std 4	AS	M178003 1U	100	4.00		2.00			Q			
	CD		50			1.00			R			
	PB		50			1.00			S			
	SE		50			1.00			T			
	TL		100			2.00			U			
Single Elements	SB	M178002 9J	1000	2.00		10.0			V			
	SN	30J	1000	2.00		10.0			W			
	B	28E	1000	1.00		5.00			X			
	MO	25N	1000	1.00		5.00			Y			
		29H	1000	1.00		5.00			Z			

IA ICV/CCV STANDARD (Standard is prepared daily.)

	Element	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
Std 1	CA	M1780031F	5000	1.00	200	25.0	2%HNO3	SD 1/21/02	A	M1780031I	M1780031J	M18/M10
	MG		5000			25.0	5%HCl	SD 1/22/02	B	1	1	1
	K		5000			25.0	* 6% HNO_3	SD 1/23/02	C	1	1	M18/M10
	NA		5000			25.0	15%HCl	SD 1/24/02	✓ D	1	1	M18/M10
Std 2	AG	M1780029Y	100	1.00		0.500	+ 2% HCl	SD 1/24/02	E			1
	CR		100			0.500	15% HNO_3	DCS 1/25/02	F	M1780031E	M1780031J	M18/M10
	MN		150			0.750		SD 1/28/02	G	1	1	M18/M10
	NI		400			2.00		1	+ H	1	1	F
	ZN		200			1.00		SD 1/29/02	I	1	1	M18/M10
Std 3	AL	M1780031H	2000	1.00		10.0			J			
	BA		2000			10.0			K			
	BE		50			0.250			L			
	CO		500			2.50			M			
	CU		250			1.25			N			
	FE		1000			5.00			O			
	V		500			2.50			P			
al Std 4	AS	M1780031B	100	2.00		1.00			Q			
	CD		50			0.500			R			
	PB		50			0.500			S			
	SE		50			0.500			T			
	TL		100			1.00			U			
Single	SB	M1780030G	1000	1.00		5.00			V			
lements	SN	31V	1000	1.00		5.00			W			
	B	31P	1000	0.500		2.50			X			
	MO	27C	1000	0.500		2.50			Y			
	TI	27H	1000	0.500		2.50			Z			

411

OPTIMA CRI STANDARD

nt	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
L D	M17800260	Multi	0.500	500	Multi	5% HCL 2%HNO3	SD 11/26/01	A	M1780028N	M1780030A	5/26/02	M10
		20			0.0200		SD 12/4/01	B	↑	↑	6/4/02	M10
S		20			0.0200		SD 12/12/01	C	M1780029E	M1780030A	6/12/02	M10
E		10			0.0100		SD 12/19/01	D	↑	M1780031J	6/19/02	M10
D		10			0.0100		SD 1/2/02	E	↑	↑	7/2/02	M10
R		20			0.0200		SD 1/9/02	F	↑	↑	7/9/02	M10
O		100			0.100		SD 1/16/02	G	M17800311	↑	7/16/02	M10
U		50			0.0500		SD 1/24/02	H	↑	↑	7/24/02	M10
IN		30			0.0300			I				
NI		80			0.0800			J				
PB		6			0.00600			K				
SB		120			0.120			L				
SE		10			0.0100			M				
TL		20			0.0200			N				
V		100			0.100			O				
ZN		40			0.0400			P				
								Q				

412

ICSA / ICSAB STANDAR

ICSA

ment	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
A Sol'n	M1780032 I	Multi	100	1000	Multi	5% HCL	SD 1/11/02	A	M1780029E	M1780031J	7/11/02	—
AL		5000			500	2%HNO3	SD 1/28/02	B	M1780031 I	"	7/28/02	—
CA		5000			500			C				
FE		2000			200			D				
MG		5000			500			E				

ICSAB

. A Sol'n	M1780031E	Multi	100	1000	Multi		SD 12/26/01	AA	M1780029E	M1780031J	6/26/02	AH
AL		5000			500		SD 1/11/02	BB	"	"	7/11/02	—
CA		5000			500		SD 1/28/02	CC	M1780031 I	"	7/28/02	—
FE		2000			200			DD				
MG		5000			500			EE				
t. B Sol'n	M1780028J	Multi	10.0		Multi			FF				
AG		100			1.00			GG				
BA		50			0.500			HH				
BE		50			0.500			II				
CD		100			1.00			JJ				
CO		50			0.500			KK				
CR		50			0.500			LL				
CU		50			0.500			MM				
MN		50			0.500			NN				
NI		100			1.00			OO				
PB		100			1.00			PP				
V		50			0.500			QQ				
ZN		100			1.00			RR				
								SS				
								TT				
								UU				

H13

OPTIMA INTERNAL STANDARD

nt	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
	M1780029N	1000	50.0	500	100	2% HNO3	SD 10/22/01	A	M1780028N	M1780029V	4/22/02	—
	M17800290	1000	50.0	500	100	5% HCL	SD 11/7/01	B	"	M1780030A	5/7/02	-
							SD 11/26/01	C	"	"	5/26/02	—
							SD 12/12/01	D	M1780029E	M1780030A	6/12/02	—
							SD 12/28/01	E	"	M1780031J	6/28/02	—
							SD 1/16/02	F	M17800311	"	7/16/02	-
								G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				

414

MERCURY CALIBRATION / CRDL STANDARDS

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Expiration Date	Nitric Acid Lot#	Pipet ID
Hg Cal Stk A	M17800030N	1000	1.00	100	10.0	0.5% HNO3	DCB 1/21/02	A	1/27/02	M17800031I	M4

(PREPARED DAILY)

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot#	Pipet ID
Hg Cal Stk B	Hg Cal Stk A	10.0	1.00	100	0.100	0.5% HNO3	DCB 1/21/02	B	M17800031I	M4
							DCB 1/22/02	C	M17800031I	M4
							DCB 1/23/02	D	M17800031I	M4
							DCB 1/25/02	E	M17800031I	M4
								F		
								G		
								H		

(PREPARED WITH EACH RUN)

Calibration Standards (ppb)	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot#	Pipet ID
0.200	Hg Cal Stk B	0.100	0.200	100	0.200	0.5% HNO3	DCB 1/21/02	I	M17800031I	—
0.500			0.500		0.500		DCB 1/22/02	J	M17800031I	—
1.00			1.00		1.00		DCB 1/23/02	K	M17800031I	—
2.00			2.00		2.00		DCB 1/25/02	L	M17800031I	—
5.00			5.00		5.00			M		
10.0			10.0		10.0			N		
CRA			0.200		0.200			O		

MERCURY CCV / LCSW /MS STANDARDS

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Expiration Date	Nitric Acid Lot#	Pipet ID
Hg CCV Stk A	M178[illegible]	1000	1.00	100	10.0	0.5% HNO3	DCB 1/21/02	A	1/27/02	M178[illegible]31I	M4

(PREPARED DAILY)

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot#	Pipet ID
Hg CCV Stk B	Hg CCV Stk A	10.0	1.00	100	0.100	0.5% HNO3	DCB 1/21/02	B	M178[illegible]31I	M4
							DCB 1/22/02	C	M178[illegible]31I	M4
							DCB 1/23/02	D	M178[illegible]31I	M4
							DCB 1/25/02	E	M178[illegible]31I	M4
								F		
								G		
								H		

(PREPARED WITH EACH RUN)

CCV Standard (ppb)	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot#	Pipet ID
3.00	Hg CCV Stk B	0.100	3.00	100	3.00	0.5% HNO3	DCB 1/21/02	I	M178[illegible]31I	—
LCSW / MS			1.00		1.00		DCB 1/22/02	J	M178[illegible]31I	—
							DCB 1/23/02	K	M178[illegible]31I	—
							DCB 1/25/02	L	M178[illegible]31I	—
								M		
								N		
								O		