# U.S. Environmental Protection Agency
# Region 7

Site: Agromac-Lockwood
ID# NESFN0703537
Break: 1.3
Other: 68-S7-01-41
8 of 9 3-26-02

## Superfund Technical Assessment and Response Team (START) 2 Contract

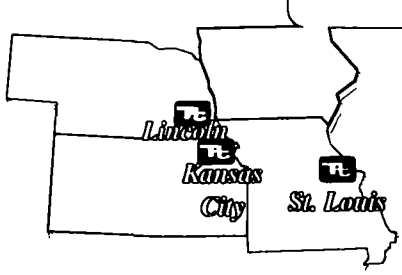
*Contract No. 68-S7-01-41*

# Attachment 8

# Agromac-Lockwood Operable Unit 2
# Gering, Nebraska

Volume 8 of 9

40088821
SUPERFUND RECORDS




Tetra Tech EM Inc.

Printed on Recycled Paper

Columbia Analytical Services Inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

February 26, 2002

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

PROJECT:AGROMAC-LOCKWOOD G9011.E01.0005.10
Submission #:R2210457

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.

Columbia Analytical Services Inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

**THIS IS AN ANALYTICAL TEST REPORT FOR:**

Client : Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD G9011.E01.0005.10
Lab Submission # : R2210457
Project Manager : Mark Wilson
Reported : 02/26/02

Report Contains a total of 346 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.

01

# SDG NARRATIVE

## CASE NARRATIVE

COMPANY: Tetra Tech EM Inc.
Agromack-Lockwood OU#2
SUBMISSION #: R2210457

Tetra Tech soil and water samples were collected on 01/19-23/02 and received at CAS on 01/25/02 in good condition.

### VOLATILE ORGANICS

Water and soil 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 Carbon Disulfide which was below limits in another LCS analyzed 01/31/02. This analyte 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-Kelso 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 BATCHING FORM / LOGIN SHEET

| | | | |
|---|---|---|---|
| SDG #: SG-5 | BATCH COMPLETE: __yes_____ | DATE REVISED: | |
| SUBMISSION R2210457 | DISKETTE REQUESTED: YES | DATE DUE: 02/23/02 | |
| CLIENT: Tetra Tech EM Inc. | DATE: 01/25/02 | PROTOCOL: 846 | |
| CLIENT REP: Mark Wilson | CUSTODY SEAL: PRESENT/ABSENT: | SHIPPING No.: | |
| PROJECT: AGROMAC-LOCKWOOD G9011. | CHAIN OF CUSTODY: PRESENT/ABSENT: | | |

| CAS JOB # | CLIENT/EPA ID | MATRIX | REQUESTED PARAMETERS | DATE SAMPLED | DATE RECEIVED | pH (SOLIDS) | % SOLIDS | sub to CAS-JAX |
|---|---|---|---|---|---|---|---|---|
| 526725 | SG-5-CON-14 | SOIL | 8260/5035 | 1/23/02 | 1/25/02 | | | |
| 526726 | SG-6-CON-12 | SOIL | 8260/5035 | 1/23/02 | 1/25/02 | | | |
| 526729 | SG-12-CON-12 | SOIL | 8260/5035 | 1/23/02 | 1/25/02 | | | |
| 526730 | SG-18-CON-11 | SOIL | 8260/5035 | 1/23/02 | 1/25/02 | | | |
| 526735 | RINSATE-S8 | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | 6020 |
| 526736 | SW BLANK | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | |
| 526738 | GB-GGW-3 | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | 6020 |
| 526740 | GB-GGW-5 | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | 6020 |
| 526741 | OSEDS-GGW-1 | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | 6020 |
| 526742 | SWD-GGW-1 | WATER | 8260/Met | 1/23/02 | 1/25/02 | | | 6020 |
| 526743 | SMWB-WW | WATER | pH | 1/19/02 | 1/25/02 | | | |

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

Columbia Analytical Services INC.

An Employee - Owned Company

Effective 2/8/02

# 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

American Industrial Hygiene Assoc. ID #:100314
Delaware Accredited
Connecticut ID # PH0556
Florida ID # E87674
Massachusetts ID # M-NY032
Navy Facilities Engineering Service Center Approved
Nebraska Accredited
NELAP Accredited
New York ID # 10145
New Jersey ID # NY004
New Hampshire ID # 294100 A/B
Rhode Island ID # 158
South Carolina ID #91012
West Virginia ID # 292

ACCREDITED IN ACCORDANCE WITH nelac

# CHAINS OF CUSTODY
# INTERNAL CHAINS

# CHAIN-OF-CUSTODY RECORD

**TETRA TECH EM INC.**
8030 Flint Street
Lenexa, Kansas 66214
(913) 894-2600

$H_2SO_4$, MeOH, Ice
Ice
HCl, Ice
$HNO_3$, Ice
$HNO_3$, Ice

Date: 01/23/02
Page: _____ of _____
Project No: G4011.E01.0006.10
Shipment Method: Fed Ex
Number of Coolers Shipped: _____

Project Name: Agromac – Lockwood
Project Manager: Curt Enos
Sampler: (Signature) Brad Weber

| Sample Number: | Date: | Time: | 8260b by 5035 | Percent % solids | 8260B | 6020 (Dissolved Metals) | 6010B (Total Metals) | pH | | | | | Matrix Type | No. of Containers | Laboratory Comments: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SG-5-Con-14 | 1/23/02 | 1525 | ✓ | ✓ | | | | | 57 | 67 | 25 | | S | 4 | 4oz jars listed for |
| SG-6-Con-12 | 1/23/02 | 1635 | ✓ | ✓ | | | | | | | 26 | | S | 4 | 8260B analysis should be |
| SG-12-Con-12 | 1/23/02 | 1350 | ✓ | ✓ | | | | | | | 29 | | S | 4 | used for % solids analysis |
| SG-18-Con-11 | 1/23/02 | 1715 | ✓ | ✓ | | | | | | | 30 | | S | 4 | unless needed for Further |
| Rinsate-58 | 1/23/02 | 1840 | | | ✓ | ✓ | ✓ | | | | 35 | | W | 5 | analysis. |
| SW Blank | 1/23/02 | 1840 | | | ✓ | | ✓ | | | | 36 | | W | 4 | |
| GB-GGW-3 | 1/23/02 | 0820 | | | ✓ | ✓ | ✓ | | | | 38 | | W | 5 | |
| GB-GGW-5 | 1/23/02 | 0920 | | | ✓ | ✓ | ✓ | | | | 40 | | W | 5 | |
| EDS-GGW-1 | 1/23/02 | 1135 | | | ✓ | ✓ | ✓ | | | | 41 | | W | 5 | |
| SWD-GGW-1 | 1/23/02 | 1035 | | | ✓ | ✓ | ✓ | | | | 42 | | W | 5 | |
| SmwB-WW | 01/19/02 | 1545 | | | | | | ✓ | | | 43 | | W | 1 | |

Turn-around Time Requested: Standard

Laboratory Comments: A2210457

Matrix: S = Soil M = Sediment W = Water A = Air
Preservatives: 1 = Ice 2 = HCl 3 = $H_2SO_4$ 4 = NaOH 5 = $HNO_3$

| Relinquished By: (Signature) | Received By: (Signature) | Date: | Time: |
|---|---|---|---|
| Brad Weber | | 1-23-02 | 1950 |
| Relinquished By: (Signature) | Received By: (Signature) | Date: | Time: |
| Relinquished By: (Signature) | Received By: (Signature) Brian Callen | Date: 1/25/02 | Time: 1000 |

White = Tetra Tech Yellow = Laboratory Pink = Return to Tetra Tech

## Cooler Receipt And Preservation Check Form

Project/Client Tetra Tech Submission Number RQ-10457

Cooler received on 1/25/02 by: BC 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: 0°

| | | | | | |
|---|---|---|---|---|---|
| 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: 1/25/02 1015

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

**If out of Temperature, Client Approval to Run Samples** _____

Cooler Breakdown: Date: 1-28-02 by: ME

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 | $HNO_3$ | ✓ | | | | |
| 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 | | | | |
| | | | | |
| | | | | 09 |

**Other Comments:**

INTERNAL CHAINS

LIENT NAME: Tetra Tech EM Inc.

DG#: SUBMISSION: R2210457 DATE REC'D: 01/25/02 1000

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE TIME | PH | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|---|
| 8260B | 526725 | 3 | [illegible] | [illegible] | 1-28-02 14:10 | — | C1 | 02/24/02 |
| 8260B | 526726 | 3 | | | | — | | 02/24/02 |
| 8260B | 526729 | 3 | | | | — | | 02/24/02 |
| 8260B | 526730 | 3 | | | | — | | 02/24/02 |
| 8260B | 526735 | 3 | | | | 12 | | 02/24/02 |
| 8260B | 526736 | 3 | | | | | | 02/24/02 |
| 8260B | 526738 | 3 | | | | | | 02/24/02 |
| 8260B | 526740 | 3 | | | | | | 02/24/02 |
| 8260B | 526741 | 3 | | | | | | 02/24/02 |
| 8260B | 526742 | 3 | | | | | | 02/24/02 |

INTERNAL CHAINS

CLIENT NAME: Tetra Tech EM Inc.

DG#: SUBMISSION: R2210457 DATE REC'D: 01/25/02 1000

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|
| ETALS | 526735 | 1 | KE | [signature] | 1-28-02 1410 | A1 | 02/24/02 |
| ETALS | 526736 | 1 | | | | | 02/24/02 |
| ETALS | 526738 | 1 | | | | | 02/24/02 |
| ETALS | 526740 | 1 | | | | | 02/24/02 |
| ETALS | 526741 | 1 | | | | | 02/24/02 |
| ETALS | 526742 | 1 | | | | | 02/24/02 |

INTERNAL CHAINS

CLIENT NAME: Tetra Tech EM Inc.

DG#: SUBMISSION: R2210457 DATE REC'D: 01/25/02 1000

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE | TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|---|
| G | 526735 | 1 | RE | DCB | 1-25-02 | 1410 | C-3 | 02/24/02 |
| G | 526736 | 1 | | | | | | 02/24/02 |
| G | 526738 | 1 | | | | | | 02/24/02 |
| G | 526740 | 1 | | | | | | 02/24/02 |
| G | 526741 | 1 | | | | | | 02/24/02 |
| G | 526742 | 1 | | | | | | 02/24/02 |

INTERNAL CHAINS

LIENT NAME: Tetra Tech EM Inc.

DG#: SUBMISSION: R2210457 DATE REC'D: 01/25/02 1000

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE | TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|---|
| ERCENT SOLIDS | 526725 | 1 | ME | TD | 1-28-02 | 14:10 | C-2 | 02/24/02 |
| ERCENT SOLIDS | 526726 | 1 | ↓ | ↓ | ↓ | ↓ | ↓ | 02/24/02 |
| ERCENT SOLIDS | 526729 | 1 | ↓ | ↓ | ↓ | ↓ | ↓ | 02/24/02 |
| ERCENT SOLIDS | 526730 | 1 | ↓ | ↓ | ↓ | ↓ | ↓ | 02/24/02 |

INTERNAL C[illegible]INS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210457 DATE REC'D: 01/25/02 1000

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE | TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|---|
| PH | 526743 | 1 | [illegible] | [illegible] | 1-28-02 | 14:10 | C-2 | 02/24/02 |
| | | | | | | | | |
| | | | | | | | | |

14

# VOLATILE ORGANICS

# QC SUMMARY

COLUMBIA ANALYTICAL SERVICES

QUALITY CONTROL SUMMARY MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

WATER

Spiked Order No. : 526735 Tetra Tech EM Inc.

Client ID: RINSATE-88

Test: 8260B TCL

Analytical Units: UG/L

Run Number : 74109

| 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 | 50.0 | 100 | 48.0 | 96 | 4 | 11 | 70 - 130 |
| CHLOROBENZENE | 50.0 | 0 | 49.0 | 98 | 48.0 | 96 | 2 | 13 | 70 - 130 |
| 1,1-DICHLOROETHENE | 50.0 | 0 | 48.0 | 96 | 47.0 | 94 | 2 | 14 | 61 - 145 |
| TOLUENE | 50.0 | 0 | 51.0 | 102 | 50.0 | 100 | 2 | 13 | 70 - 130 |
| TRICHLOROETHENE | 50.0 | 0 | 50.0 | 100 | 48.0 | 96 | 4 | 14 | 70 - 130 |

**COLUMBIA ANALYTICAL SERVICES**

VOLATILE ORGANICS
METHOD: 8260B TCL

**LABORATORY CONTROL SAMPLE SUMMARY**

REFERENCE ORDER #: 528708 ANALYTICAL RUN # : 74109

DATE ANALYZED : 01/31/02
ANALYTICAL DILUTION: 1.0

| ANALYTE | TRUE VALUE | % RECOVERY | QC LIMITS |
|---|---|---|---|
| ACETONE | 20.0 | 76 | 50 - 150 |
| BENZENE | 20.0 | 105 | 70 - 130 |
| BROMODICHLOROMETHANE | 20.0 | 111 | 70 - 130 |
| BROMOFORM | 20.0 | 101 | 70 - 130 |
| BROMOMETHANE | 20.0 | 103 | 50 - 150 |
| 2-BUTANONE (MEK) | 20.0 | 73 | 50 - 150 |
| CARBON DISULFIDE | 20.0 | 66 * | 70 - 130 |
| CARBON TETRACHLORIDE | 20.0 | 91 | 70 - 130 |
| CHLOROBENZENE | 20.0 | 107 | 70 - 130 |
| CHLOROETHANE | 20.0 | 116 | 70 - 130 |
| CHLOROFORM | 20.0 | 108 | 70 - 130 |
| `HLOROMETHANE | 20.0 | 123 | 70 - 130 |
| ƖBROMOCHLOROMETHANE | 20.0 | 106 | 70 - 130 |
| 1,1-DICHLOROETHANE | 20.0 | 109 | 70 - 130 |
| 1,2-DICHLOROETHANE | 20.0 | 112 | 70 - 130 |
| 1,1-DICHLOROETHENE | 20.0 | 97 | 70 - 130 |
| CIS-1,2-DICHLOROETHENE | 20.0 | 105 | 70 - 130 |
| TRANS-1,2-DICHLOROETHENE | 20.0 | 103 | 70 - 130 |
| 1,2-DICHLOROPROPANE | 20.0 | 101 | 70 - 130 |
| CIS-1,3-DICHLOROPROPENE | 20.0 | 111 | 70 - 130 |
| TRANS-1,3-DICHLOROPROPENE | 20.0 | 115 | 70 - 130 |
| ETHYLBENZENE | 20.0 | 103 | 70 - 130 |
| 2-HEXANONE | 20.0 | 71 | 70 - 130 |
| METHYLENE CHLORIDE | 20.0 | 109 | 70 - 130 |
| 4-METHYL-2-PENTANONE (MIBK) | 20.0 | 77 | 70 - 130 |
| STYRENE | 20.0 | 110 | 70 - 130 |
| 1,1,2,2-TETRACHLOROETHANE | 20.0 | 106 | 70 - 130 |
| TETRACHLOROETHENE | 20.0 | 106 | 70 - 130 |
| TOLUENE | 20.0 | 105 | 70 - 130 |
| 1,1,1-TRICHLOROETHANE | 20.0 | 101 | 70 - 130 |
| 1,1,2-TRICHLOROETHANE | 20.0 | 112 | 70 - 130 |
| TRICHLOROETHENE | 20.0 | 98 | 70 - 130 |
| VINYL CHLORIDE | 20.0 | 108 | 70 - 130 |
| O-XYLENE | 20.0 | 105 | 70 - 130 |
| M+P-XYLENE | 40.0 | 103 | 70 - 130 |

**COLUMBIA ANALYTICAL SERVICES**

VOLATILE ORGANICS
METHOD: 8260B TCL

**LABORATORY CONTROL SAMPLE SUMMARY**

REFERENCE ORDER #: 530676 ANALYTICAL RUN # : 74477

| ANALYTE | TRUE VALUE | % RECOVERY | QC LIMITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 1.0 | | | |
| ACETONE | 20.0 | 164 | 50 - 150 |
| BENZENE | 20.0 | 99 | 70 - 130 |
| BROMODICHLOROMETHANE | 20.0 | 107 | 70 - 130 |
| BROMOFORM | 20.0 | 107 | 70 - 130 |
| BROMOMETHANE | 20.0 | 56 | 50 - 150 |
| 2-BUTANONE (MEK) | 20.0 | 134 | 50 - 150 |
| CARBON DISULFIDE | 20.0 | 90 | 70 - 130 |
| CARBON TETRACHLORIDE | 20.0 | 102 | 70 - 130 |
| CHLOROBENZENE | 20.0 | 97 | 70 - 130 |
| CHLOROETHANE | 20.0 | 84 | 70 - 130 |
| 'HLOROFORM | 20.0 | 99 | 70 - 130 |
| _HLOROMETHANE | 20.0 | 85 | 70 - 130 |
| DIBROMOCHLOROMETHANE | 20.0 | 101 | 70 - 130 |
| 1,1-DICHLOROETHANE | 20.0 | 101 | 70 - 130 |
| 1,2-DICHLOROETHANE | 20.0 | 107 | 70 - 130 |
| 1,1-DICHLOROETHENE | 20.0 | 94 | 70 - 130 |
| CIS-1,2-DICHLOROETHENE | 20.0 | 104 | 70 - 130 |
| TRANS-1,2-DICHLOROETHENE | 20.0 | 101 | 70 - 130 |
| 1,2-DICHLOROPROPANE | 20.0 | 97 | 70 - 130 |
| CIS-1,3-DICHLOROPROPENE | 20.0 | 102 | 70 - 130 |
| TRANS-1,3-DICHLOROPROPENE | 20.0 | 99 | 70 - 130 |
| ETHYLBENZENE | 20.0 | 97 | 70 - 130 |
| 2-HEXANONE | 20.0 | 94 | 70 - 130 |
| METHYLENE CHLORIDE | 20.0 | 97 | 70 - 130 |
| 4-METHYL-2-PENTANONE (MIBK) | 20.0 | 110 | 70 - 130 |
| STYRENE | 20.0 | 99 | 70 - 130 |
| 1,1,2,2-TETRACHLOROETHANE | 20.0 | 103 | 70 - 130 |
| TETRACHLOROETHENE | 20.0 | 103 | 70 - 130 |
| TOLUENE | 20.0 | 96 | 70 - 130 |
| 1,1,1-TRICHLOROETHANE | 20.0 | 95 | 70 - 130 |
| 1,1,2-TRICHLOROETHANE | 20.0 | 99 | 70 - 130 |
| TRICHLOROETHENE | 20.0 | 99 | 70 - 130 |
| VINYL CHLORIDE | 20.0 | 89 | 70 - 130 |
| O-XYLENE | 20.0 | 97 | 70 - 130 |
| M+P-XYLENE | 40.0 | 99 | 70 - 130 |

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MET BLK

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: SDG No.: SG-5

Lab File ID: B9510.D Lab Sample ID: 528706 1.0

Date Analyzed: 01/31/02 Time Analyzed: 09:49

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 | LCS | 528708 1.0 | B9512.D | 11:00 |
| 02 | RINSATE-S8 | 526735 1.0 | B9518.D | 14:33 |
| 03 | SW BLANK | 526736 1.0 | B9519.D | 15:08 |
| 04 | GB-GGW-3 | 526738 1.0 | B9520.D | 15:44 |
| 05 | GB-GGW-5 | 526740 1.0 | B9521.D | 16:19 |
| 06 | OSEDS-GGW-1 | 526741 1.0 | B9522.D | 16:55 |
| 07 | SWD-GGW-1 | 526742 1.0 | B9523.D | 17:31 |
| 08 | RINSATE-S8(MS) | 528709 1.0 | B9525.D | 18:44 |
| 09 | RINSATE-S8(MS | 528711 1.0 | B9526.D | 19:21 |

COMMENTS

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MET BLK2

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: SDG No.: SG-5

Lab File ID: B9624.D Lab Sample ID: 529260 1.0

Date Analyzed: 02/05/02 Time Analyzed: 12:05

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N 4/24/02

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 | LCS2 | 529261 1.0 | B9626.D | 13:16 |
| 02 | SG-5-CON-14 | 526725 0.79 | B9627.D | 13:52 |
| 03 | SG-6-CON-12 | 526726 0.68 | B9628.D | 14:27 |
| 04 | SG-12-CON-12 | 526729 0.86 | B9629.D | 15:03 |
| 05 | SG-18-CON-11 | 526730 0.90 | B9630.D | 15:38 |

COMMENTS

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: SDG No.: SG-5

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:

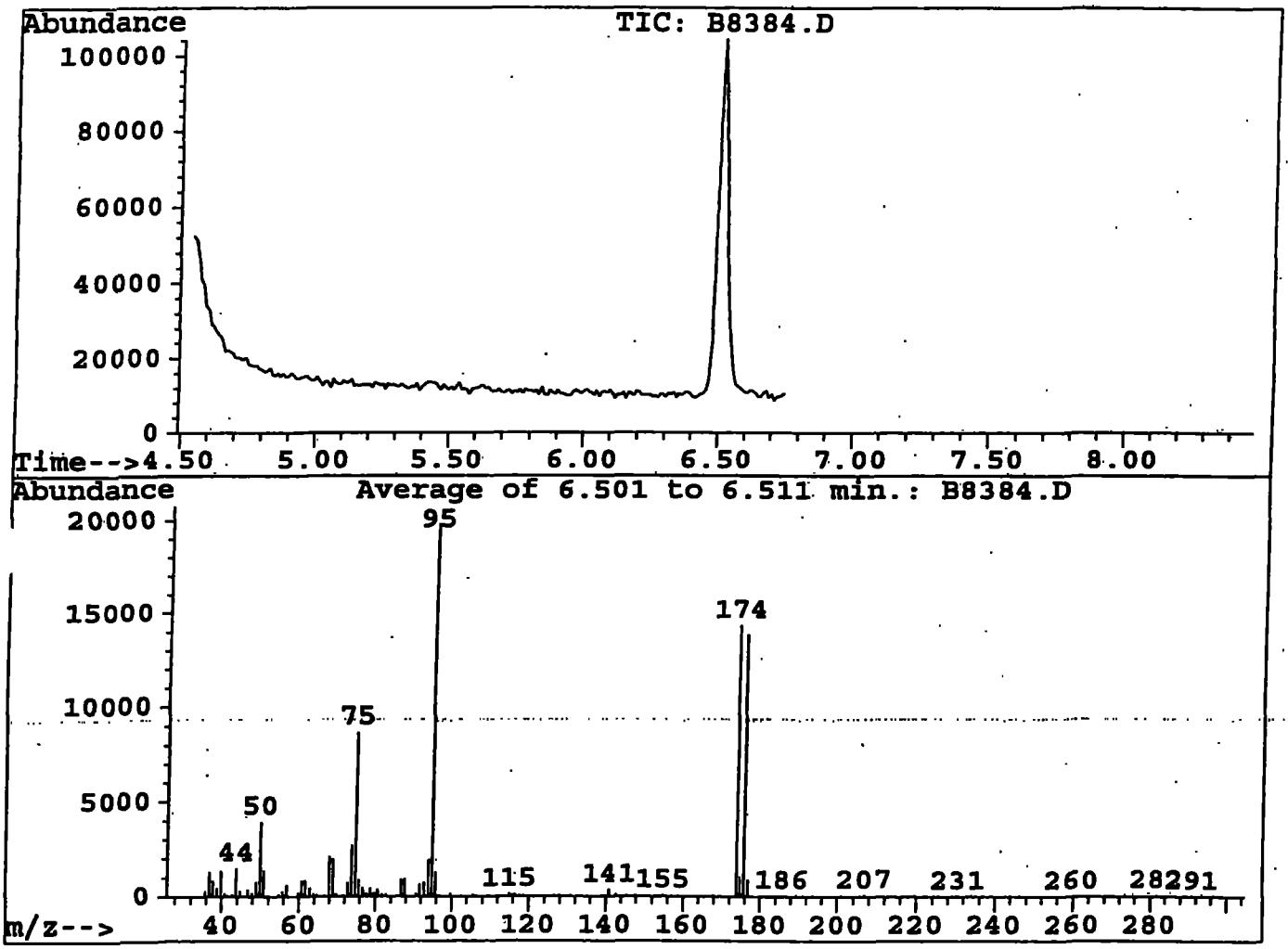
| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | 001 | 1 PPB | B8386.D | 12/17/01 | 11:01 |
| 02 | 005 | 5 PPB | B8387.D | 12/17/01 | 11:39 |
| 03 | 020 | 20 PPB | B8388.D | 12/17/01 | 12:15 |
| 04 | 050 | 50 PPB | B8389.D | 12/17/01 | 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
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

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: SDG No.: SG-5

Lab File ID: B9507.D BFB Injection Date: 01/31/02

Instrument ID: MS#3 BFB Injection Time: 08:03

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 | 16.2 |
| 75 | 30.0 - 66.0% of mass 95 | 41.7 |
| 95 | Base peak, 100% relative abundance | 100.0 |
| 96 | 5.0 - 9.0% of mass 95 | 6.6 |
| 173 | Less than 2.0% of mass 174 | 0.5 ( 0.7)1 |
| 174 | 50.0 - 120.0% of mass 95 | 70.9 |
| 175 | 4.0 - 9.0% of mass 174 | 4.4 ( 6.2)1 |
| 176 | 93.0 - 101.0% of mass 174 | 70.3 ( 99.1)1 |
| 177 | 5.0 - 9.0% of mass 176 | 4.6 ( 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:

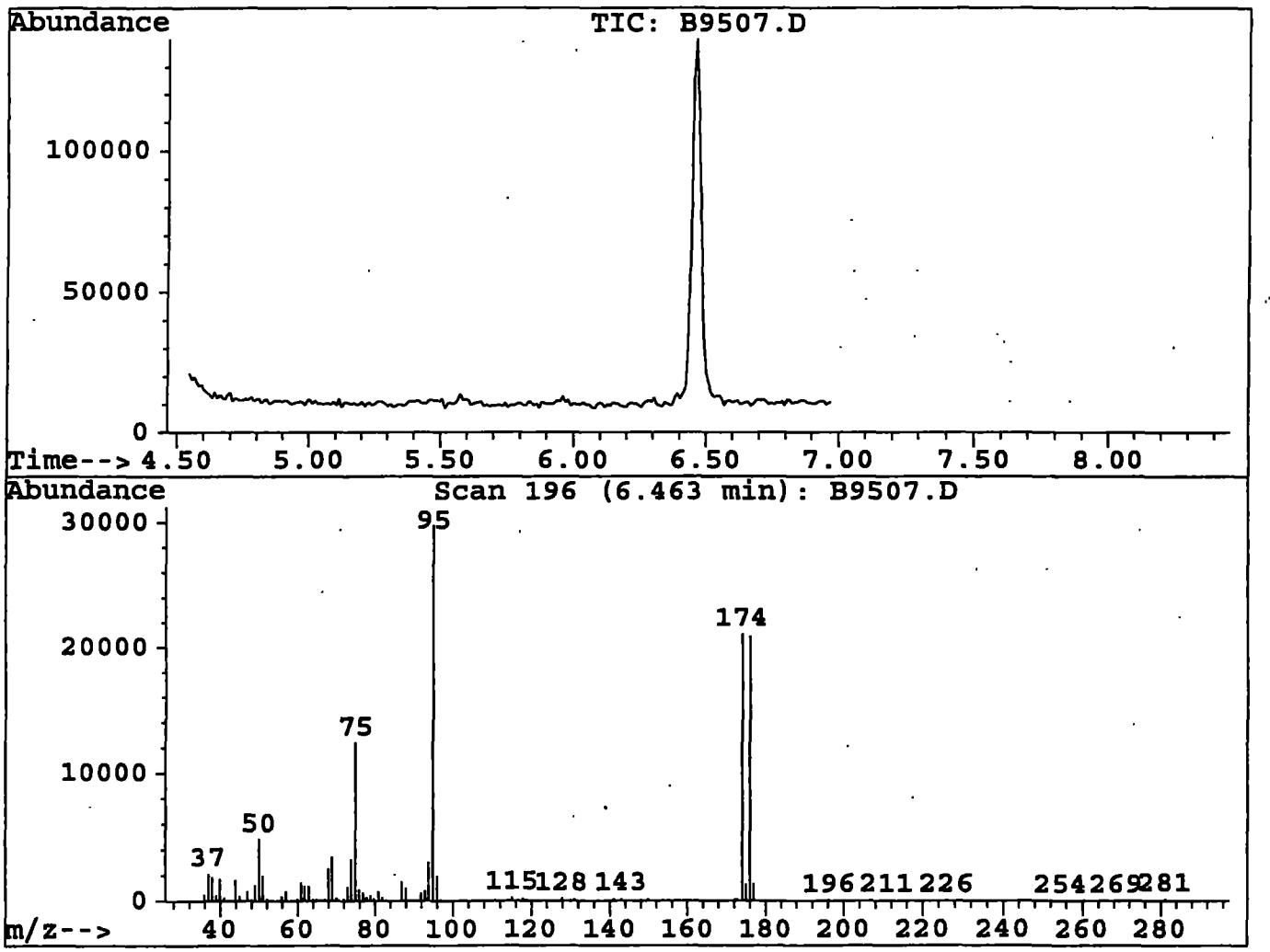
| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | CCV1 | CCV | B9508.D | 01/31/02 | 08:37 |
| 02 | MET BLK | 528706 1.0 | B9510.D | 01/31/02 | 09:49 |
| 03 | LCS | 528708 1.0 | B9512.D | 01/31/02 | 11:00 |
| 04 | RINSATE-S8 | 526735 1.0 | B9518.D | 01/31/02 | 14:33 |
| 05 | SW BLANK | 526736 1.0 | B9519.D | 01/31/02 | 15:08 |
| 06 | GB-GGW-3 | 526738 1.0 | B9520.D | 01/31/02 | 15:44 |
| 07 | GB-GGW-5 | 526740 1.0 | B9521.D | 01/31/02 | 16:19 |
| 08 | OSEDS-GGW-1 | 526741 1.0 | B9522.D | 01/31/02 | 16:55 |
| 09 | SWD-GGW-1 | 526742 1.0 | B9523.D | 01/31/02 | 17:31 |
| 10 | RINSATE-S8(MS) | 528709 1.0 | B9525.D | 01/31/02 | 18:44 |
| 11 | RINSATE-S8(MS | 528711 1.0 | B9526.D | 01/31/02 | 19:21 |

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9507.D
Acq On : 31 Jan 102 8:03 am
Sample : TUNE
Misc :

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

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




Peak Apex is scan: 196

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 16.2 | 4835 | PASS |
| 75 | 95 | 30 | 60 | 41.7 | 12422 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 29768 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 1968 | PASS |
| 173 | 174 | 0 | 2 | 0.7 | 146 | PASS |
| 174 | 95 | 50 | 120 | 70.9 | 21120 | PASS |
| 175 | 174 | 5 | 9 | 6.2 | 1312 | PASS |
| 176 | 174 | 95 | 101 | 99.1 | 20920 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 1365 | PASS |

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

## BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: _____ SDG No.: SG-5

Lab File ID: B9550.D BFB Injection Date: 02/01/02

Instrument ID: MS#3 BFB Injection Time: 10:22

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N 2/02

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 8.0 - 40.0% of mass 95 | 18.5 |
| 75 | 30.0 - 66.0% of mass 95 | 42.1 |
| 95 | Base peak, 100% relative abundance | 100.0 |
| 96 | 5.0 - 9.0% of mass 95 | 7.1 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0)1 |
| 174 | 50.0 - 120.0% of mass 95 | 70.6 |
| 175 | 4.0 - 9.0% of mass 174 | 5.4 ( 7.6)1 |
| 176 | 93.0 - 101.0% of mass 174 | 71.0 ( 100.5)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.1 ( 7.2)2 |

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

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

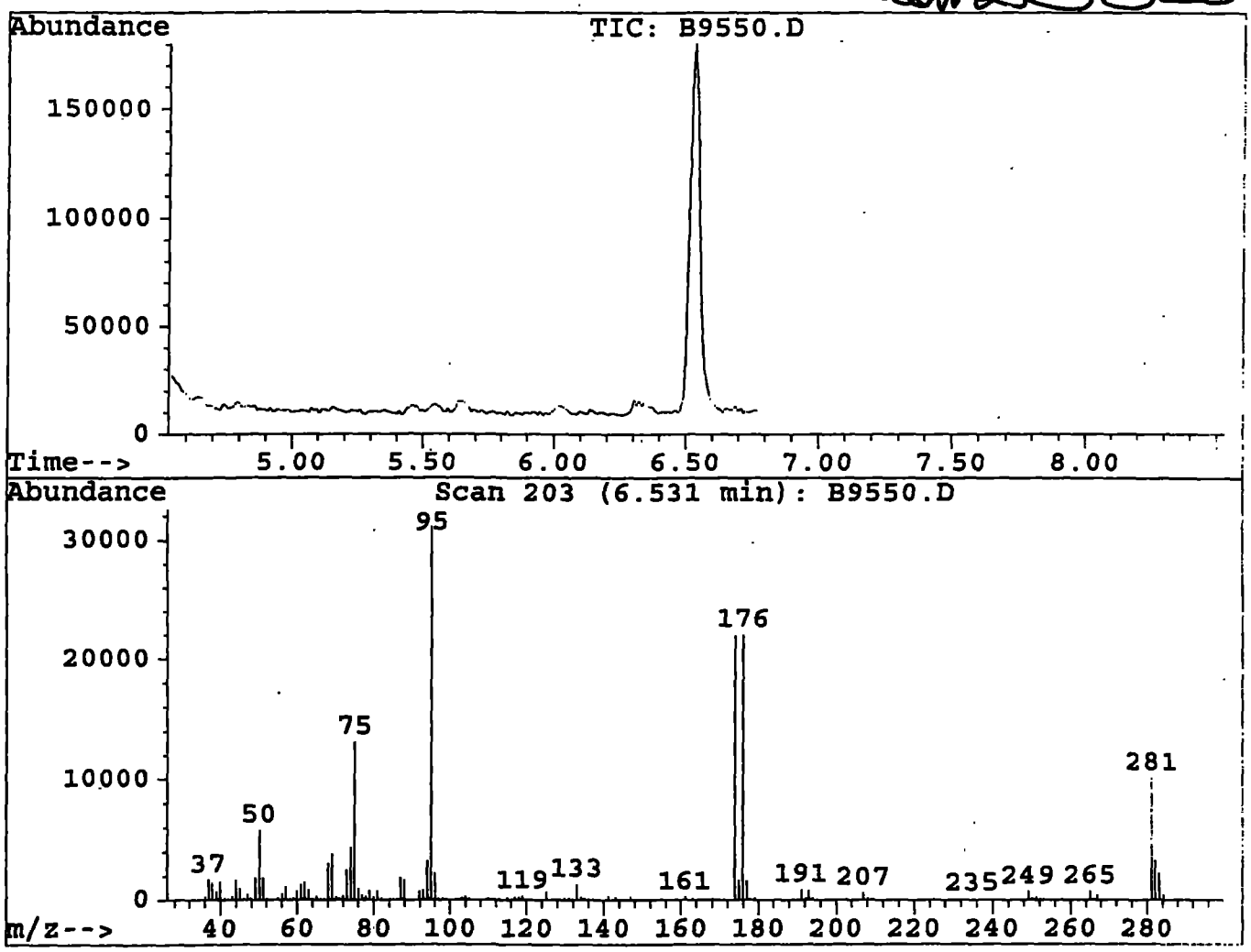
| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | 020 | 20 PPB | B9553.D | 02/01/02 | 12:18 |
| 02 | 050 | 50 PPB | B9554.D | 02/01/02 | 12:54 |
| 03 | 100 | 100 PPB | B9555.D | 02/01/02 | 13:30 |
| 04 | 150 | 150 PPB | B9556.D | 02/01/02 | 14:05 |
| 05 | 200 | 200 PPB | B9557.D | 02/01/02 | 14:41 |
| 06 | 005 | 5 PPB | B9559.D | 02/01/02 | 16:09 |

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9550.D
Acq On : 1 Feb 102 10:22 am
Sample : TUNE CHECK
Misc : SOIL SIDE

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

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




Peak Apex is scan: 203

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 18.5 | 5749 | PASS |
| 75 | 95 | 30 | 60 | 42.1 | 13106 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 31096 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 2196 | PASS |
| 173 | 174 | 0 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 70.6 | 21952 | PASS |
| 175 | 174 | 5 | 9 | 7.6 | 1664 | PASS |
| 176 | 174 | 95 | 101 | 100.5 | 22072 | PASS |
| 177 | 176 | 5 | 9 | 7.2 | 1597 | PASS |

5A

# VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
## BROMOFLUOROBENZENE (BFB)

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: _____ SDG No.: SG-5

Lab File ID: B9619.D BFB Injection Date: 02/05/02

Instrument ID: MS#3 BFB Injection Time: 09:04

GC Column: DB-624 ID: 0.32 (mm) Heated Purge: (Y/N) N YE 2/24

| 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 | 40.1 |
| 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 | 79.3 |
| 175 | 4.0 - 9.0% of mass 174 | 5.0 ( 6.3)1 |
| 176 | 93.0 - 101.0% of mass 174 | 79.0 ( 99.6)1 |
| 177 | 5.0 - 9.0% of mass 176 | 5.2 ( 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:

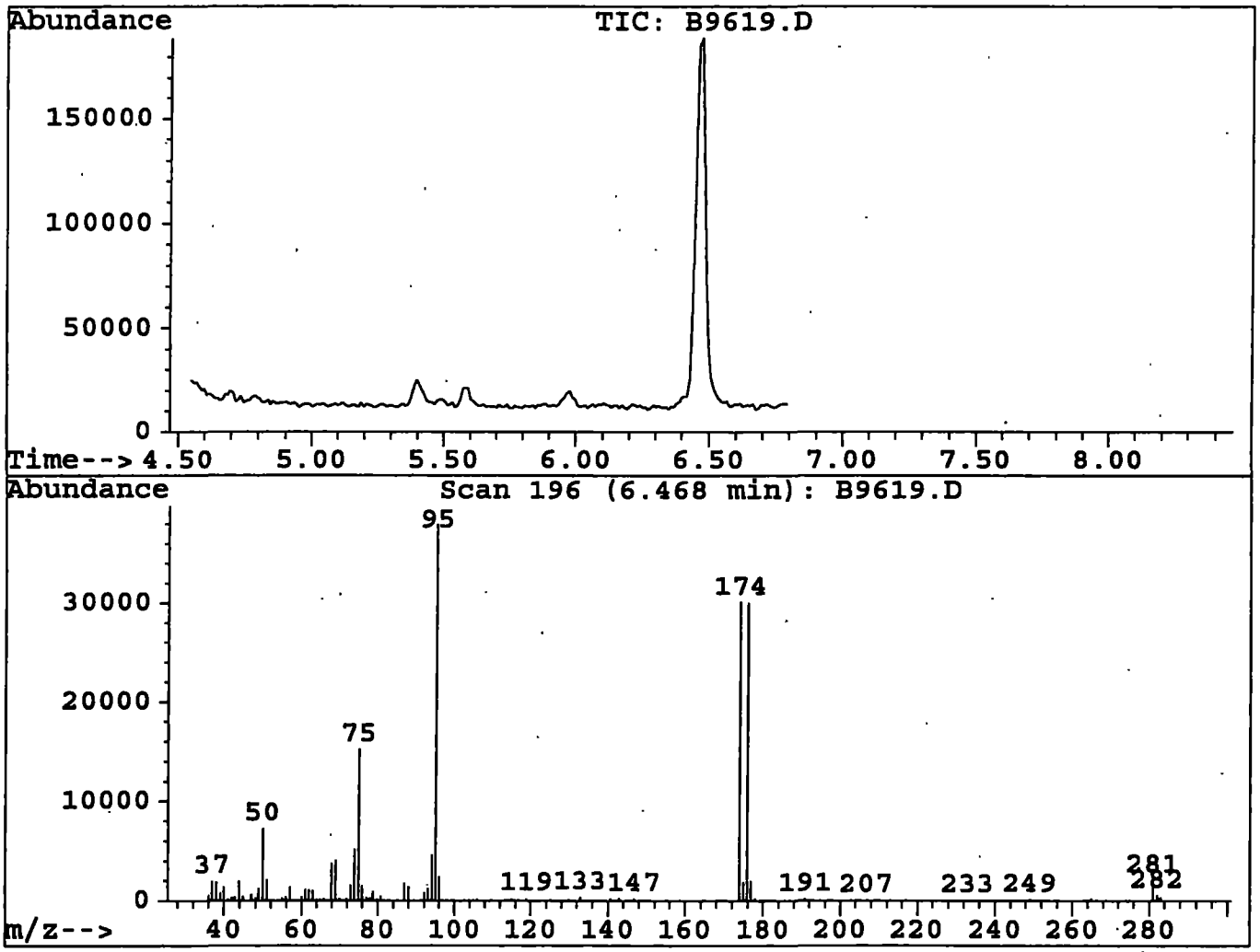
| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | CCV2 | CCV | B9620.D | 02/05/02 | 09:40 |
| 02 | MET BLK2 | 529260 1.0 | B9624.D | 02/05/02 | 12:05 |
| 03 | LCS2 | 529261 1.0 | B9626.D | 02/05/02 | 13:16 |
| 04 | SG-5-CON-14 | 526725 0.79 | B9627.D | 02/05/02 | 13:52 |
| 05 | SG-6-CON-12 | 526726 0.68 | B9628.D | 02/05/02 | 14:27 |
| 06 | SG-12-CON-12 | 526729 0.86 | B9629.D | 02/05/02 | 15:03 |
| 07 | SG-18-CON-11 | 526730 0.90 | B9630.D | 02/05/02 | 15:38 |

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9619.D
Acq On : 5 Feb 102 9:04 am
Sample : TUNE
Misc :

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

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




Peak Apex is scan: 196

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 19.1 | 7242 | PASS |
| 75 | 95 | 30 | 60 | 40.1 | 15220 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 37936 | PASS |
| 96 | 95 | 5 | 9 | 6.5 | 2457 | PASS |
| 173 | 174 | 0 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 79.3 | 30096 | PASS |
| 175 | 174 | 5 | 9 | 6.3 | 1909 | PASS |
| 176 | 174 | 95 | 101 | 99.6 | 29976 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 1986 | PASS |

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CAS/ROCH Contract: TTEM-KS

Lab Code: 10145 Case No.: R22-1045 SAS No.: _____ SDG No.: SG-5

Lab File ID (Standard): B9508.D Date Analyzed: 01/31/02

Instrument ID: MS#3 Time Analyzed: 08:37

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 | 817422 | 7.34 | 1553390 | 8.52 | 1214541 | 13.60 |
| | UPPER LIMIT | 1634844 | 6.84 | 3106780 | 8.02 | 2429082 | 13.10 |
| | LOWER LIMIT | 408711 | 7.84 | 776695 | 9.02 | 607271 | 14.10 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | MET BLK | 819875 | 7.35 | 1517133 | 8.53 | 1214806 | 13.61 |
| 02 | LCS | 821241 | 7.35 | 1540378 | 8.53 | 1206245 | 13.61 |
| 03 | RINSATE-S8 | 841354 | 7.37 | 1557794 | 8.55 | 1222086 | 13.64 |
| 04 | SW BLANK | 832871 | 7.37 | 1548410 | 8.55 | 1202484 | 13.64 |
| 05 | GB-GGW-3 | 827793 | 7.37 | 1547110 | 8.55 | 1206545 | 13.64 |
| 06 | GB-GGW-5 | 813953 | 7.37 | 1505758 | 8.55 | 1186786 | 13.64 |
| 07 | OSEDS-GGW | 806059 | 7.38 | 1516383 | 8.55 | 1176731 | 13.64 |
| 08 | SWD-GGW-1 | 809456 | 7.38 | 1519986 | 8.55 | 1192081 | 13.64 |
| 09 | RINSATE-S8( | 796620 | 7.36 | 1482256 | 8.54 | 1177425 | 13.62 |
| 10 | RINSATE-S8( | 785356 | 7.36 | 1470584 | 8.54 | 1146876 | 13.62 |

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.: R22-1045 SAS No.: _____ SDG No.: SG-5

Lab File ID (Standard): B9508.D Date Analyzed: 01/31/02

Instrument ID: MS#3 Time Analyzed: 08:37

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

| | | IS4 AREA # | RT # | AREA # | RT # | AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 476162 | 18.05 | | | | |
| | UPPER LIMIT | 952324 | 17.55 | | | | |
| | LOWER LIMIT | 238081 | 18.55 | | | | |
| | EPA SAMPLE NO. | | | | | | |
| 01 | MET BLK | 446925 | 18.05 | | | | |
| 02 | LCS | 442593 | 18.06 | | | | |
| 03 | RINSATE-S8 | 455360 | 18.08 | | | | |
| 04 | SW BLANK | 440579 | 18.08 | | | | |
| 05 | GB-GGW-3 | 423090 | 18.08 | | | | |
| 06 | GB-GGW-5 | 439127 | 18.08 | | | | |
| 07 | OSEDS-GGW | 410858 | 18.09 | | | | |
| 08 | SWD-GGW-1 | 434099 | 18.08 | | | | |
| 09 | RINSATE-S8( | 456864 | 18.06 | | | | |
| 10 | RINSATE-S8( | 462085 | 18.07 | | | | |

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.: R22-1045 SAS No.: _____ SDG No.: SG-5

Lab File ID (Standard): B9620.D Date Analyzed: 02/05/02

Instrument ID: MS#3 Time Analyzed: 09:40

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N 02/26

| | | IS1 AREA # | RT # | IS2 AREA # | RT # | IS3 AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 794272 | 7.34 | 1526428 | 8.52 | 1198137 | 13.61 |
| | UPPER LIMIT | 1588544 | 6.84 | 3052856 | 8.02 | 2396274 | 13.11 |
| | LOWER LIMIT | 397136 | 7.84 | 763214 | 9.02 | 599069 | 14.11 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | MET BLK2 | 712548 | 7.37 | 1351999 | 8.55 | 1069304 | 13.63 |
| 02 | LCS2 | 755787 | 7.37 | 1411499 | 8.55 | 1125263 | 13.63 |
| 03 | SG-5-CON-14 | 796355 | 7.37 | 1503964 | 8.55 | 1148983 | 13.63 |
| 04 | SG-6-CON-12 | 861374 | 7.37 | 1575102 | 8.56 | 1220068 | 13.63 |
| 05 | SG-12-CON-1 | 760610 | 7.37 | 1440650 | 8.55 | 1098833 | 13.64 |
| 06 | SG-18-CON-1 | 770968 | 7.37 | 1481771 | 8.55 | 1134544 | 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.: R22-1045 SAS No.: SDG No.: SG-5

Lab File ID (Standard): B9620.D Date Analyzed: 02/05/02

Instrument ID: MS#3 Time Analyzed: 09:40

GC Column: DB-624 ID: 0.32 (mm) Heated Purge (Y/N): N 4/24/02

| | | IS4 AREA # | RT # | AREA # | RT # | AREA # | RT # |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 463728 | 18.05 | | | | |
| | UPPER LIMIT | 927456 | 17.55 | | | | |
| | LOWER LIMIT | 231864 | 18.55 | | | | |
| | EPA SAMPLE NO. | | | | | | |
| 01 | MET BLK2 | 431844 | 18.08 | | | | |
| 02 | LCS2 | 448232 | 18.08 | | | | |
| 03 | SG-5-CON-14 | 434019 | 18.08 | | | | |
| 04 | SG-6-CON-12 | 458770 | 18.08 | | | | |
| 05 | SG-12-CON-1 | 411802 | 18.08 | | | | |
| 06 | SG-18-CON-1 | 417860 | 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

# VOLATILE ORGANICS

# SAMPLE DATA

**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-5-CON-14

**Date Sampled :** 01/23/02 15:25 **Order #:** 526725 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457 **Percent Solid:** 77.3

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 0.79 | | | Dry Weight |
| ACETONE | 20 | 17 J | UG/KG |
| BENZENE | 5.0 | 5.1 U | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 5.1 U | UG/KG |
| BROMOFORM | 5.0 | 5.1 U | UG/KG |
| BROMOMETHANE | 5.0 | 5.1 U | UG/KG |
| 2-BUTANONE (MEK) | 10 | 11 J | UG/KG |
| CARBON DISULFIDE | 10 | 10 U | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 5.1 U | UG/KG |
| CHLOROBENZENE | 5.0 | 5.1 U | UG/KG |
| CHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| CHLOROFORM | 5.0 | 5.1 U | UG/KG |
| CHLOROMETHANE | 5.0 | 5.1 U | UG/KG |
| IBROMOCHLOROMETHANE | 5.0 | 5.1 U | UG/KG |
| 1,1-DICHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 5.1 U | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 5.1 U | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 5.1 U | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 5.1 U | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 5.1 U | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 5.1 U | UG/KG |
| ETHYLBENZENE | 5.0 | 5.1 U | UG/KG |
| 2-HEXANONE | 10 | 8.5 J | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 5.1 U | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 7.9 J | UG/KG |
| STYRENE | 5.0 | 5.1 U | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| TETRACHLOROETHENE | 5.0 | 5.1 U | UG/KG |
| TOLUENE | 5.0 | 5.1 U | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 5.1 U | UG/KG |
| TRICHLOROETHENE | 5.0 | 5.1 U | UG/KG |
| VINYL CHLORIDE | 5.0 | 5.1 U | UG/KG |
| O-XYLENE | 5.0 | 5.1 U | UG/KG |
| M+P-XYLENE | 5.0 | 5.1 U | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (42 - 149 %) | 98 | % |
| TOLUENE-D8 | (71 - 128 %) | 105 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 118 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9627.D  Vial: 2
Acq On : 5 Feb 102 1:52 pm  Operator: DROOT
Sample : 526725 0.79  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5  Multiplr: 1.00
Quant Time: Feb 5 14:19 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 796355 | 50.00 | ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1503964 | 50.00 | ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.63 | 117 | 1148983 | 50.00 | ug/Kg | -0.05 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 434019 | 50.00 | ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 425651 | 59.04 | ug/Kg | 118.09% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1386613 | 52.74 | ug/Kg | 105.49% |
| 59) surr2,bfb | 15.85 | 95 | 516701 | 49.21 | ug/Kg | 98.42% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.73 | 43 | 33611 | 16.90 | ug/Kg | 98 |
| 15) Acetonitrile | 4.15 | 41 | ~~23246~~ | ~~122.45~~ | ~~ug/Kg#~~ | ~~51~~ |
| 18) TBA | 4.64 | 59 | 208170 | 283.53 | ug/Kg | 100 |
| 19) Acrylonitrile | 4.78 | 53 | 37259 | 15.30 | ug/Kg | 97 |
| 26) 2-Butanone | 6.51 | 43 | 43807 | 10.73 | ug/Kg | 94 |
| 29) Propionitrile | 6.57 | 54 | 39386 | 36.11 | ug/Kg | 97 |
| 30) Methacrylonitrile | 6.82 | 67 | 13063 | 5.18 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.93 | 42 | 24624 | 4.82 | ug/Kg | 85 |
| 39) Iso-Butyl Alcohol | 8.39 | 43 | ~~2489~~ | ~~3.66~~ | ~~ug/Kg~~ | ~~91~~ |
| 45) Methyl Methacrylate | 9.60 | 69 | 26950 | 4.59 | ug/Kg | 83 |
| 46) 1,4-Dioxane | 9.60 | 88 | ~~5356~~ | ~~58.05~~ | ~~ug/Kg~~ | ~~99~~ |
| 49) 2-Nitropropane | 10.19 | 43 | 15836 | ~~6.40~~ | ~~ug/Kg#~~ | ~~93~~ |
| 53) 4-Methyl-2-Pentanone | 10.88 | 43 | 83036 | 7.76 | ug/Kg | 97 |
| 56) Ethyl Methacrylate | 11.78 | 69 | 62181 | 6.11 | ug/Kg | 99 |
| 61) 2-Hexanone | 12.36 | 43 | 64539 | 8.42 | ug/Kg | 90 |
| 92) Nitrobenzene | 20.75 | 77 | 2793 | ~~4.43~~ | ~~ug/Kg#~~ | ~~60~~ |

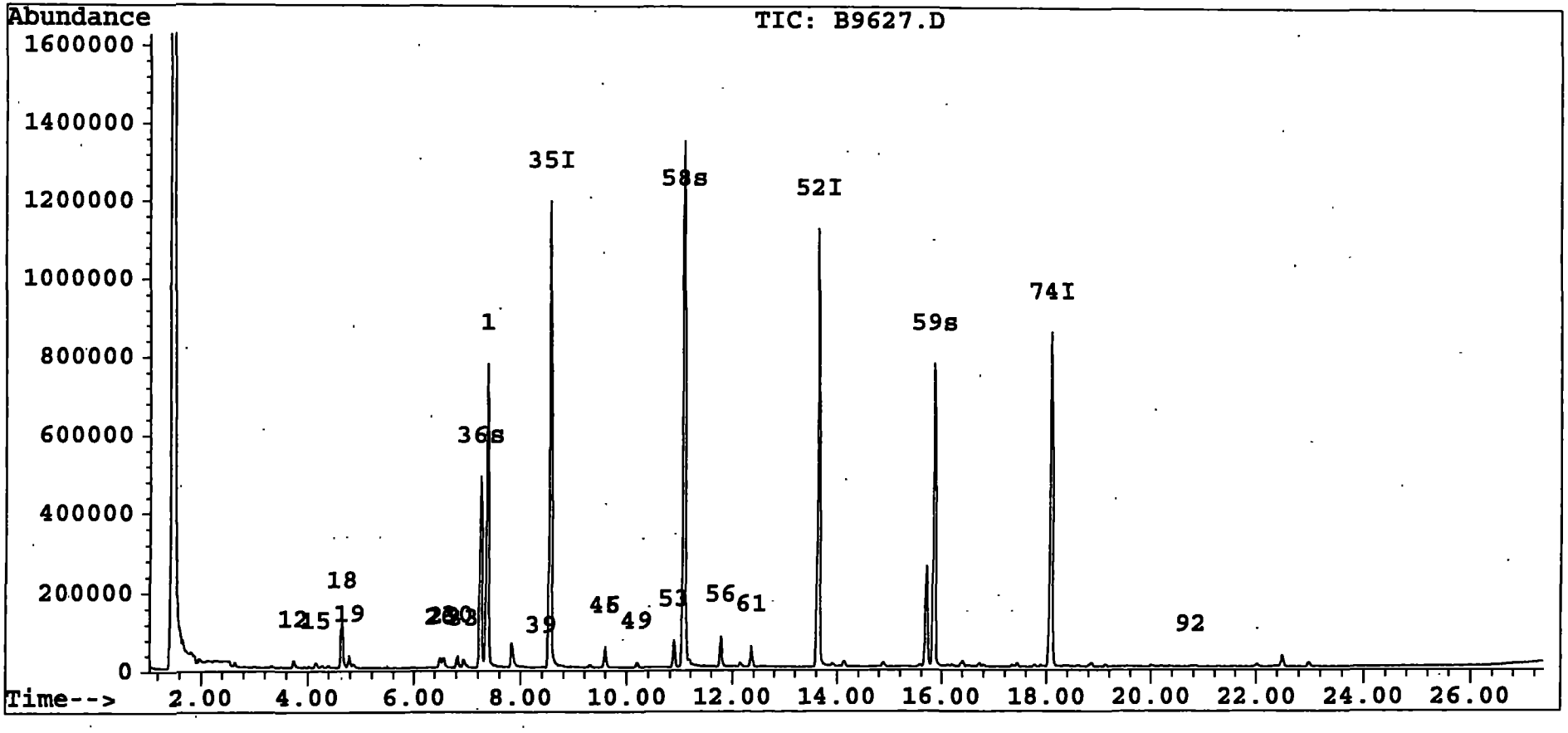
(#) = qualifier out of range (m) = manual integration

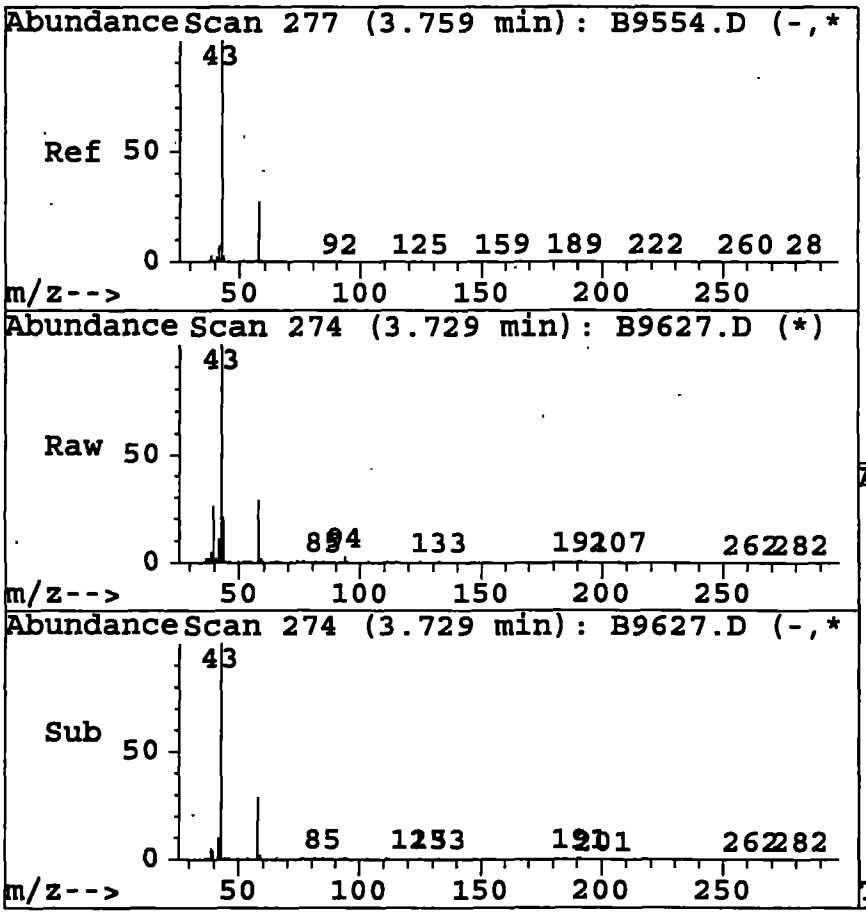
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9627.D
Acq On : 5 Feb 102 1:52 pm
Sample : 526725 0.79
Misc : TTEM-KS R22-10457 8260B.TC5
Quant Time: Feb 5 14:19 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

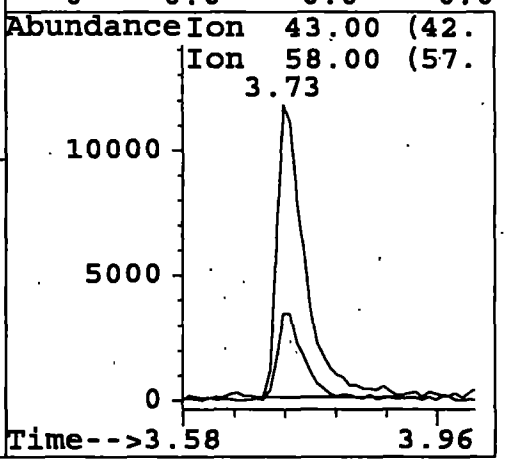


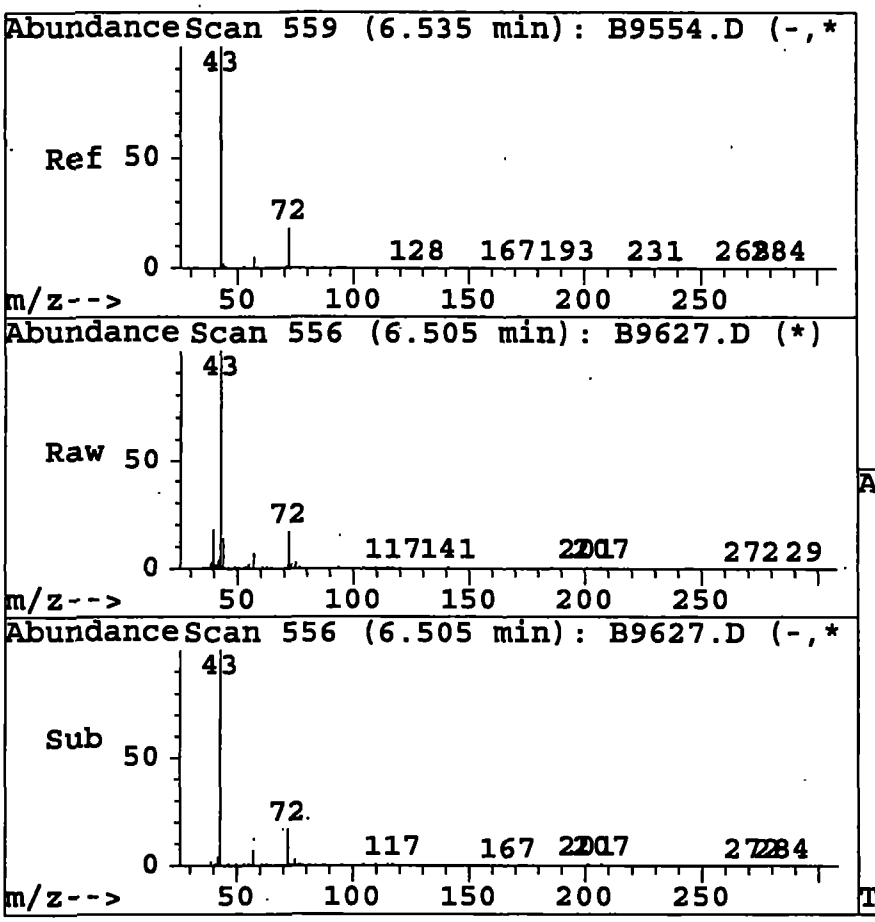



#12
Acetone
Concen: 16.90 ug/Kg
RT: 3.73 min Scan# 274
Delta R.T. -0.02 min
Lab File: B9627.D
Acq: 5 Feb 102 1:52 pm

Tgt Ion:43 Resp: 33611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.2 | 22.8 | 34.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

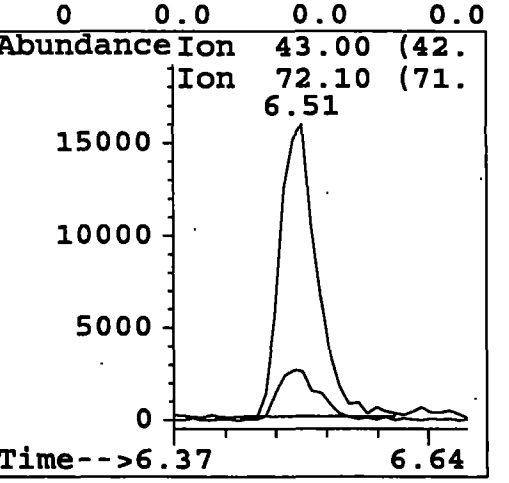


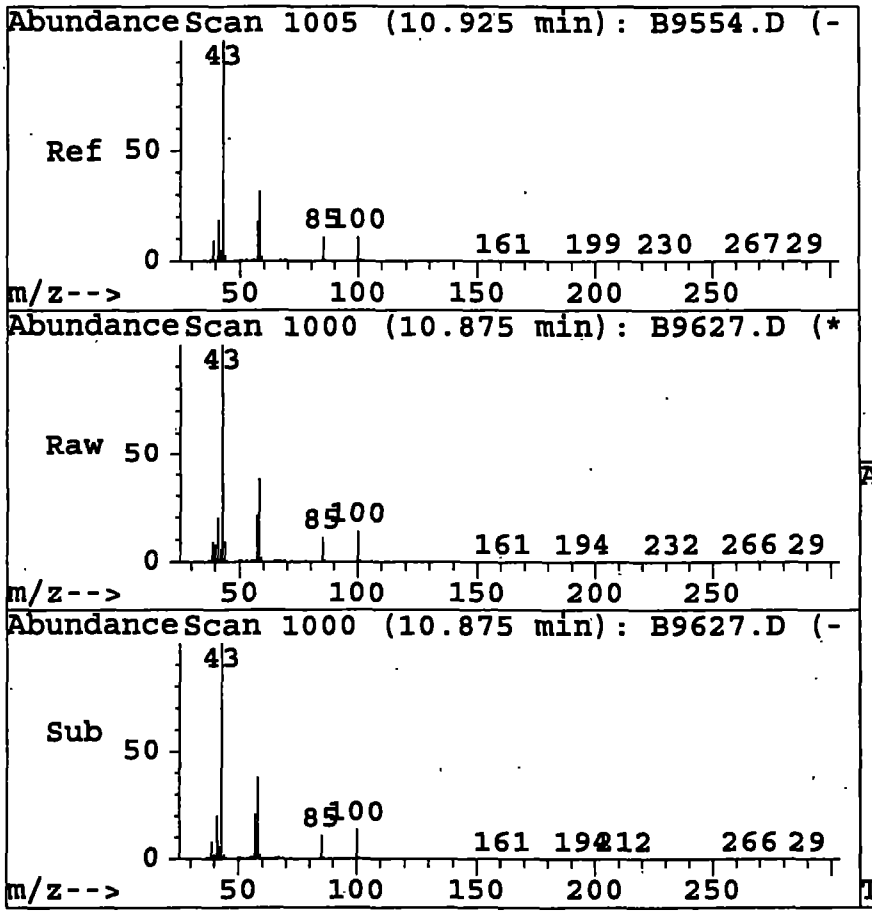



#26
2-Butanone
Concen: 10.73 ug/Kg
RT: 6.51 min Scan# 556
Delta R.T. -0.02 min
Lab File: B9627.D
Acq: 5 Feb 102 1:52 pm

Tgt Ion:43 Resp: 43807

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 16.6 | 14.5 | 24.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

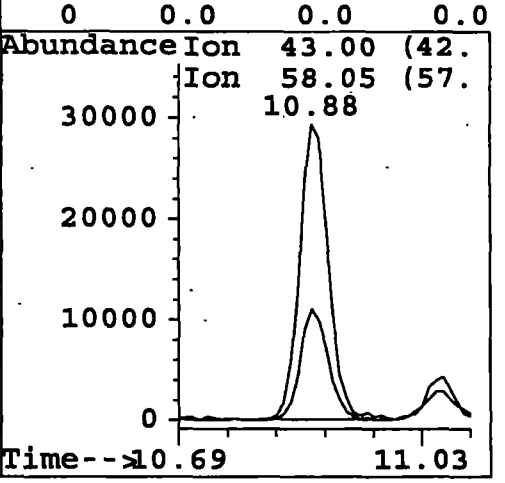


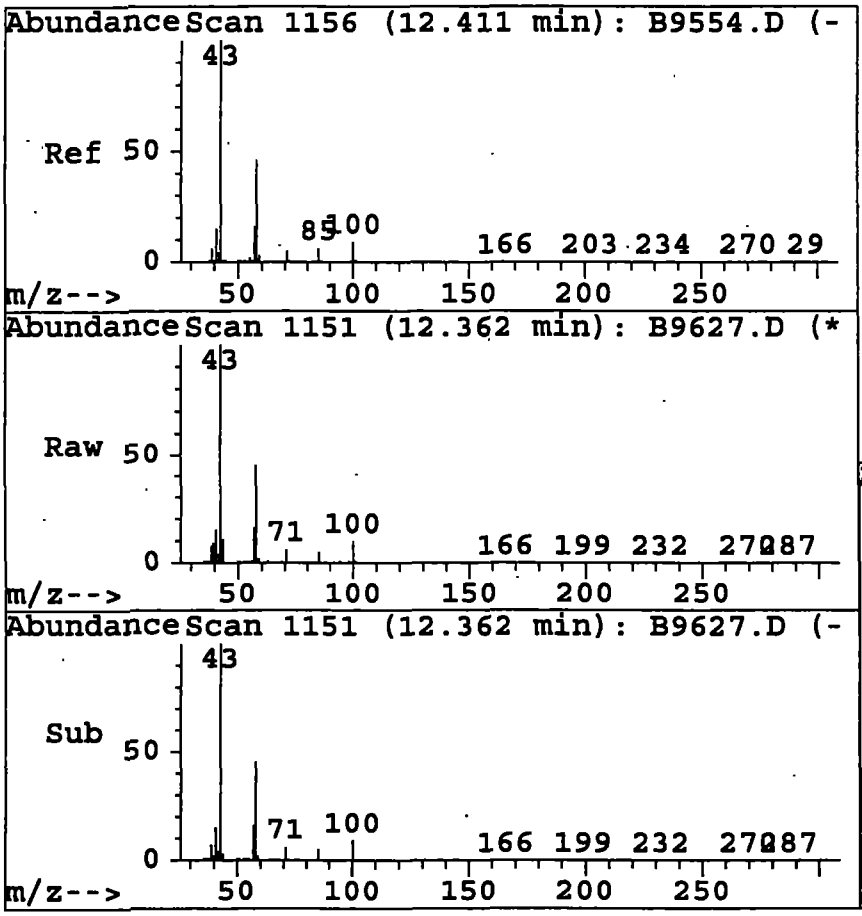



#53
4-Methyl-2-Pentanone
Concen: 7.76 ug/Kg
RT: 10.88 min Scan# 1000
Delta R.T. -0.04 min
Lab File: B9627.D
Acq: 5 Feb 102 1:52 pm

Tgt Ion:43 Resp: 83036

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.7 | 27.0 | 44.9 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

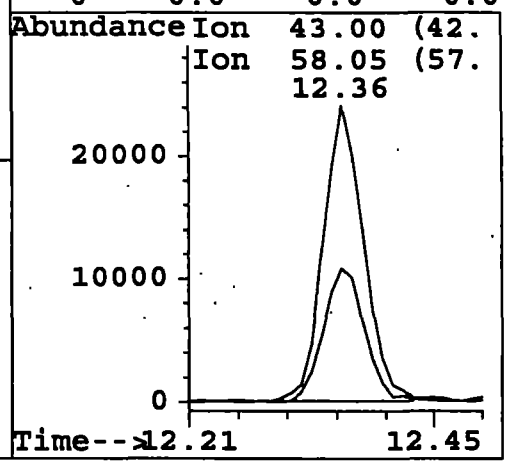





#61
2-Hexanone
Concen: 8.42 ug/Kg
RT: 12.36 min Scan# 1151
Delta R.T. -0.04 min
Lab File: B9627.D
Acq: 5 Feb 102 1:52 pm

Tgt Ion:43 Resp: 64539

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 45.0 | 41.5 | 62.2 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-6-CON-12

**Date Sampled :** 01/23/02 16:35 **Order #:** 526726 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457 **Percent Solid:** 82.8

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 0.68 | | | Dry Weight |
| ACETONE | 20 | 12 J | UG/KG |
| BENZENE | 5.0 | 4.1 U | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 4.1 U | UG/KG |
| BROMOFORM | 5.0 | 4.1 U | UG/KG |
| BROMOMETHANE | 5.0 | 4.1 U | UG/KG |
| 2-BUTANONE (MEK) | 10 | 2.7 J | UG/KG |
| CARBON DISULFIDE | 10 | 8.2 U | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 4.1 U | UG/KG |
| CHLOROBENZENE | 5.0 | 4.1 U | UG/KG |
| CHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| CHLOROFORM | 5.0 | 4.1 U | UG/KG |
| CHLOROMETHANE | 5.0 | 4.1 U | UG/KG |
| BROMOCHLOROMETHANE | 5.0 | 4.1 U | UG/KG |
| 1,1-DICHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 4.1 U | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 4.1 U | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 4.1 U | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 4.1 U | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 4.1 U | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 4.1 U | UG/KG |
| ETHYLBENZENE | 5.0 | 4.1 U | UG/KG |
| 2-HEXANONE | 10 | 1.8 J | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 4.1 U | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 1.2 J | UG/KG |
| STYRENE | 5.0 | 4.1 U | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| TETRACHLOROETHENE | 5.0 | 4.1 U | UG/KG |
| TOLUENE | 5.0 | 4.1 U | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 4.1 U | UG/KG |
| TRICHLOROETHENE | 5.0 | 4.1 U | UG/KG |
| VINYL CHLORIDE | 5.0 | 4.1 U | UG/KG |
| O-XYLENE | 5.0 | 4.1 U | UG/KG |
| M+P-XYLENE | 5.0 | 4.1 U | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (42 - 149 %) | 96 | % |
| TOLUENE-D8 | (71 - 128 %) | 105 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 125 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9628.D  Vial: 3
Acq On : 5 Feb 102 2:27 pm  Operator: DROOT
Sample : 526726 0.68  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5  Multiplr: 1.00
Quant Time: Feb 5 14:55 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 861374 | 50.00 ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.56 | 114 | 1575102 | 50.00 ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.63 | 117 | 1220068 | 50.00 ug/Kg | -0.05 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 458770 | 50.00 ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.25 | 113 | 473424 | 62.71 ug/Kg | 125.41% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1464397 | 52.46 ug/Kg | 104.92% |
| 59) surr2,bfb | 15.85 | 95 | 537557 | 48.21 ug/Kg | 96.42% |
| **Target Compounds** | | | | | Qvalue |
| 12) Acetone | 3.73 | 43 | 33479 | 15.56 ug/Kg | 96 |
| 18) TBA | 4.65 | 59 | 39958 | 50.31 ug/Kg | 99 |
| 19) Acrylonitrile | 4.80 | 53 | 4714 | 1.79 ug/Kg# | 76 |
| 26) 2-Butanone | 6.51 | 43 | 14617 | 3.31 ug/Kg | 92 |
| 29) Propionitrile | 6.58 | 54 | 7729 | 6.55 ug/Kg# | 88 |
| 39) Iso-Butyl Alcohol | 8.41 | 43 | 4182 | 5.88 ug/Kg | 96 |
| 46) 1,4-Dioxane | 9.73 | 88 | 276 | 2.86 ug/Kg | 87 |
| 49) 2-Nitropropane | 10.19 | 43 | 5869 | 2.26 ug/Kg# | 84 |
| 53) 4-Methyl-2-Pentanone | 10.88 | 43 | 17083 | 1.50 ug/Kg | 94 |
| 61) 2-Hexanone | 12.35 | 43 | 17699 | 2.17 ug/Kg | 97 |
| 92) Nitrobenzene | 20.78 | 77 | 1601 | 2.40 ug/Kg# | 61 |

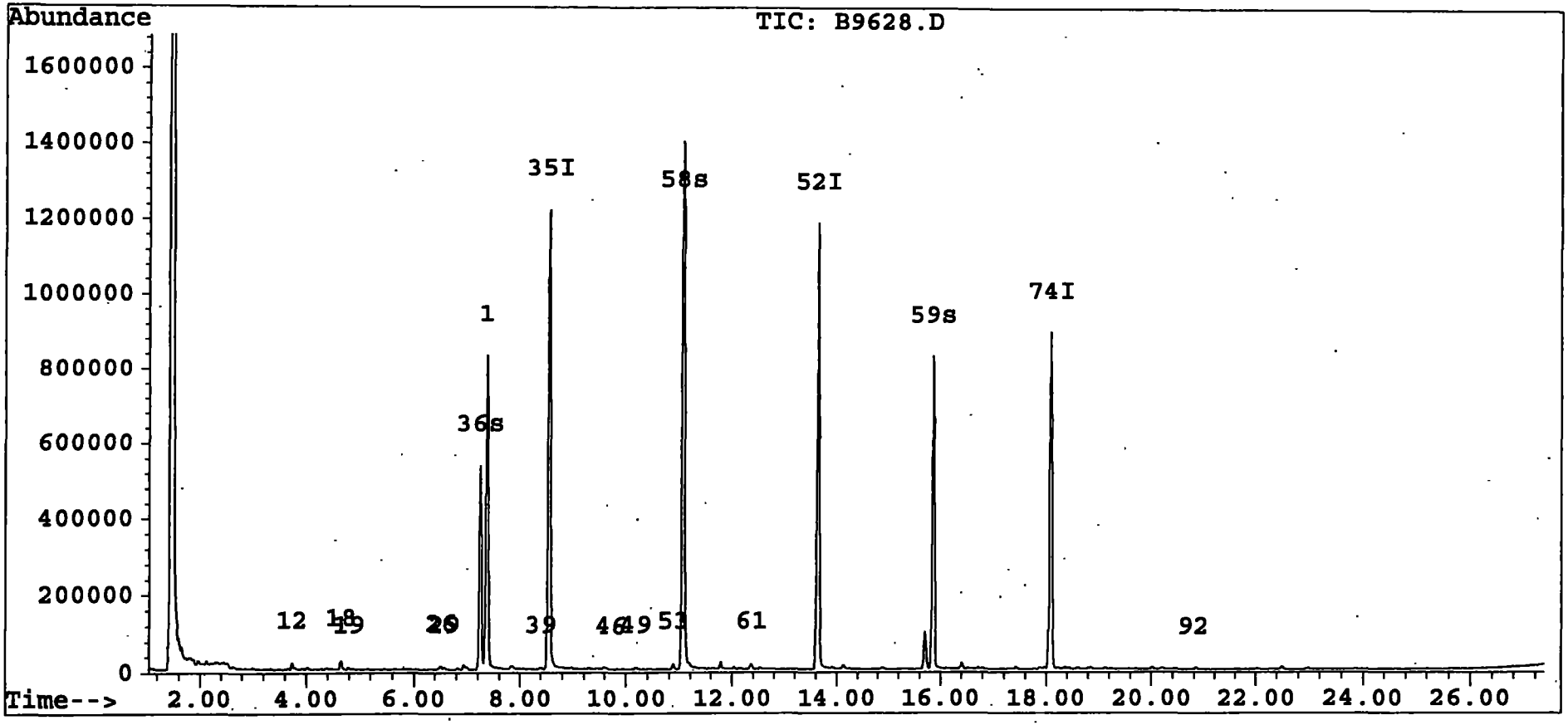
2/5

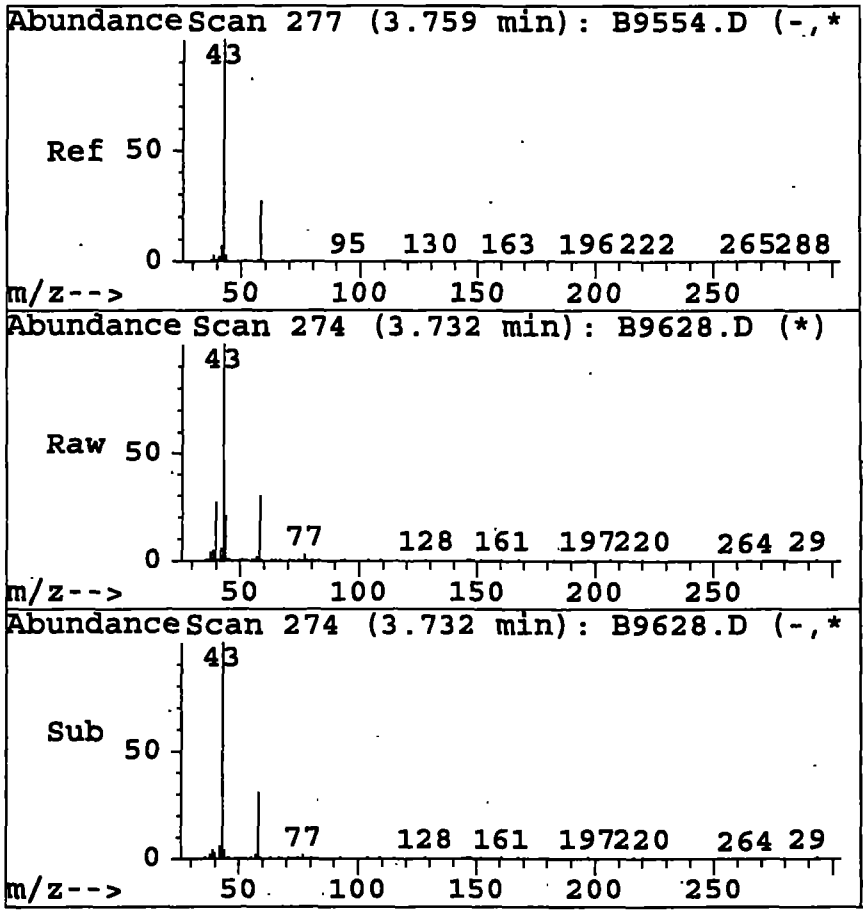
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9628.D
Acq On : 5 Feb 102 2:27 pm
Sample : 526726 0.68
Misc : TTEM-KS R22-10457 8260B.TC5
Quant Time: Feb 5 14:55 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

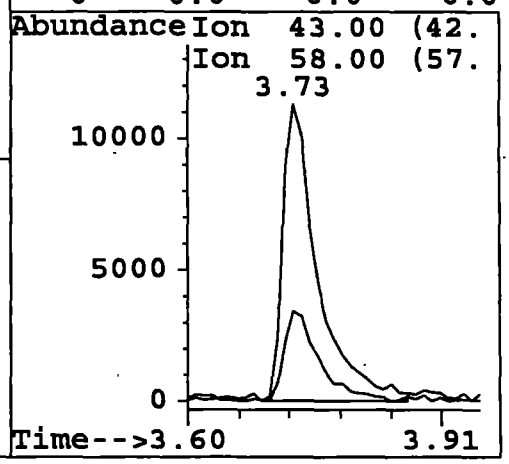


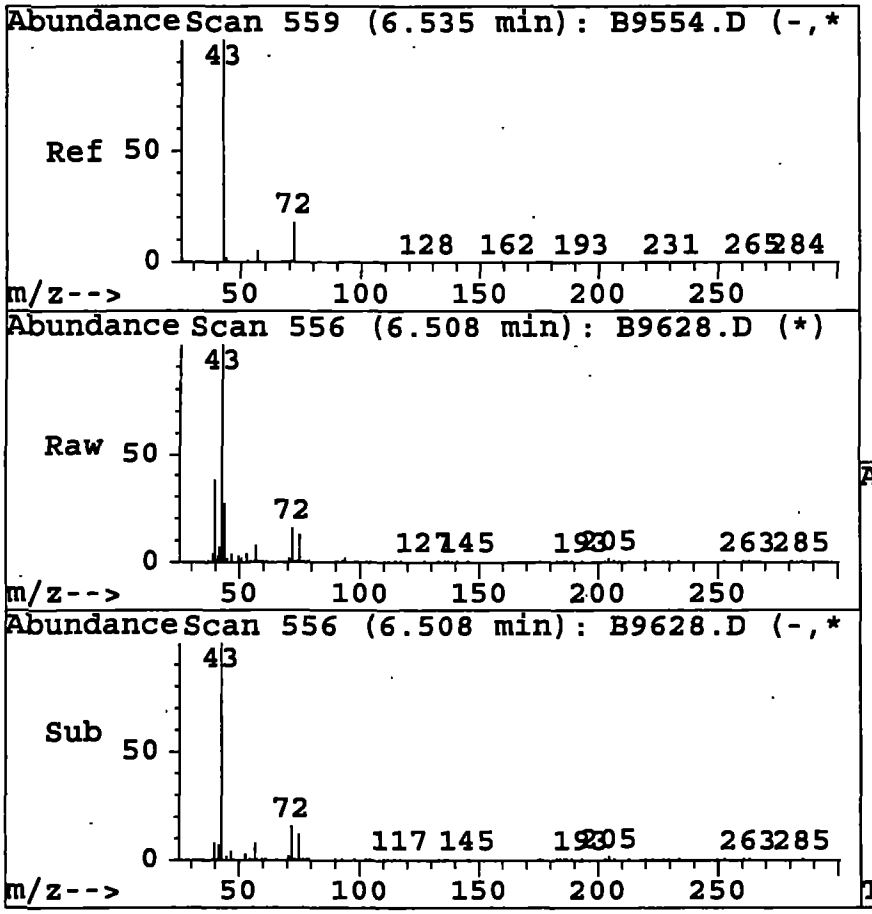



#12
Acetone
Concen: 15.56 ug/Kg
RT: 3.73 min Scan# 274
Delta R.T. -0.02 min
Lab File: B9628.D
Acq: 5 Feb 102 2:27 pm

Tgt Ion:43 Resp: 33479

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.4 | 22.8 | 34.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

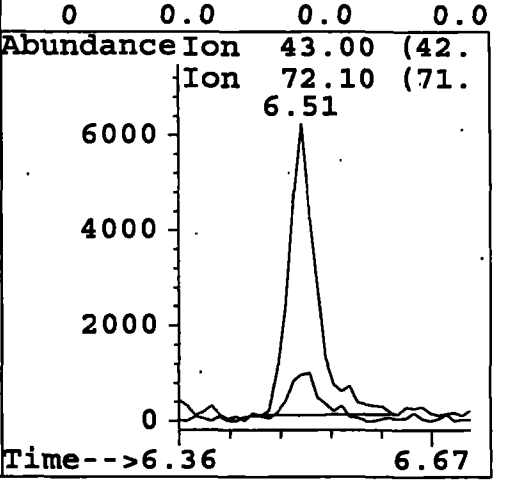


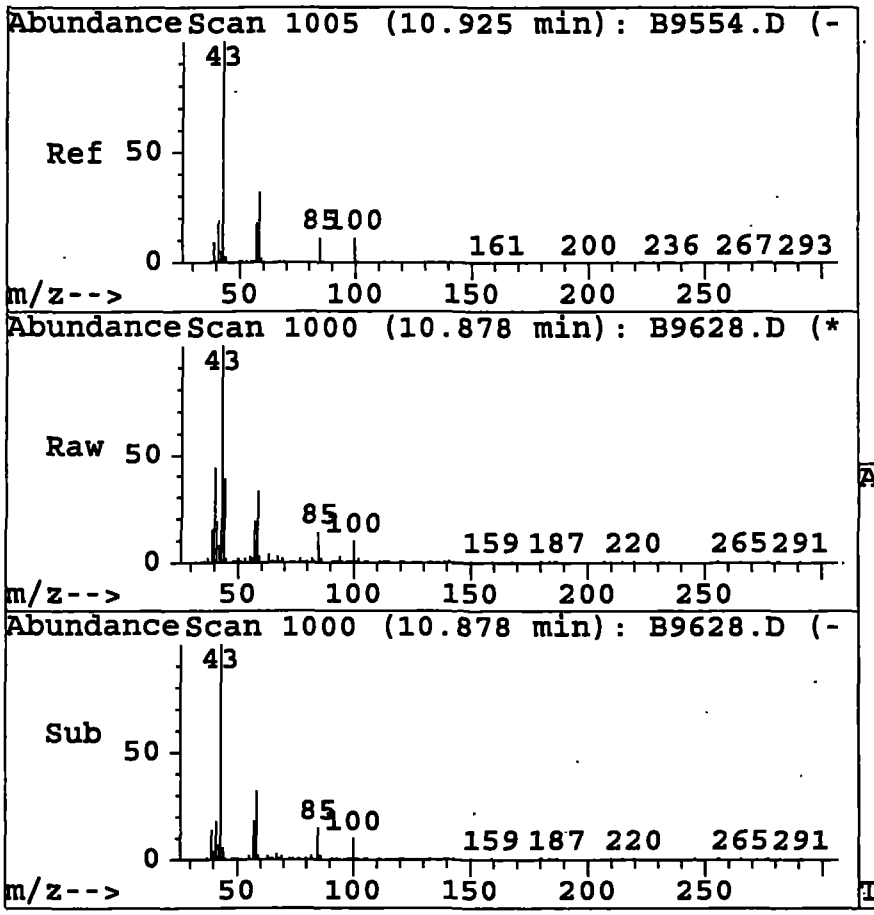



#26
2-Butanone
Concen: 3.31 ug/Kg
RT: 6.51 min Scan# 556
Delta R.T. -0.02 min
Lab File: B9628.D
Acq: 5 Feb 102 2:27 pm

Tgt Ion:43 Resp: 14617

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 15.8 | 14.5 | 24.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

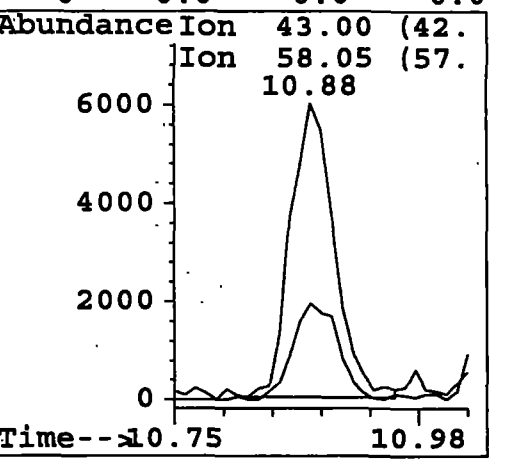


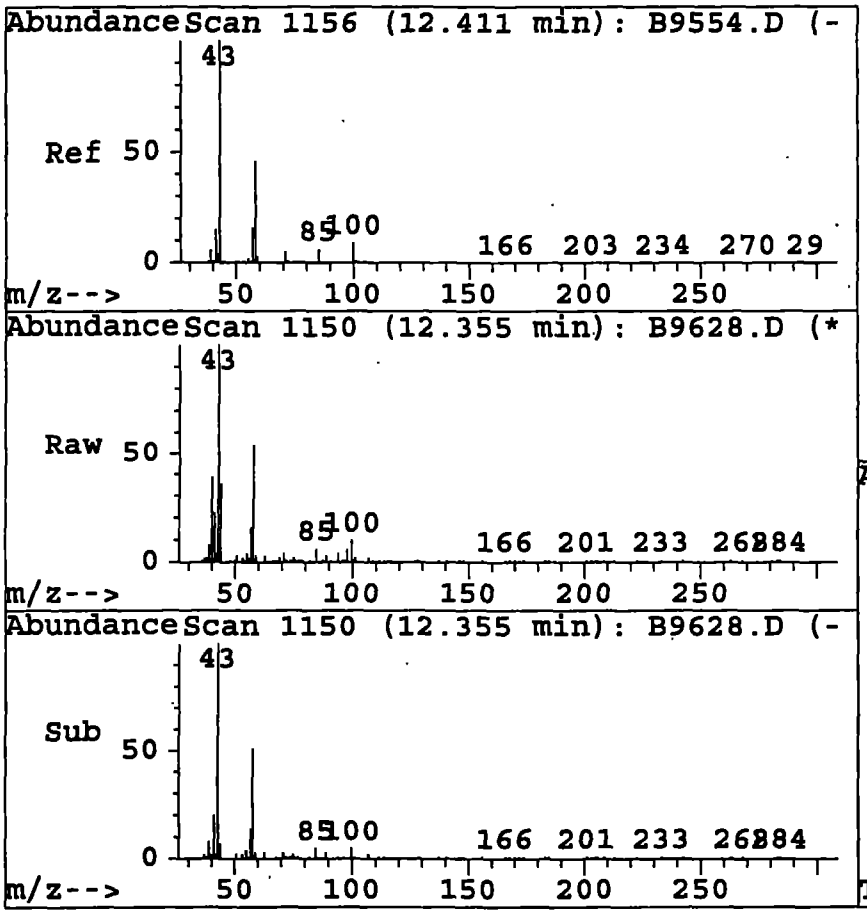



#53
4-Methyl-2-Pentanone
Concen: 1.50 ug/Kg
RT: 10.88 min Scan# 1000
Delta R.T. -0.04 min
Lab File: B9628.D
Acq: 5 Feb 102 2:27 pm

Tgt Ion:43 Resp: 17083

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 32.6 | 27.0 | 44.9 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

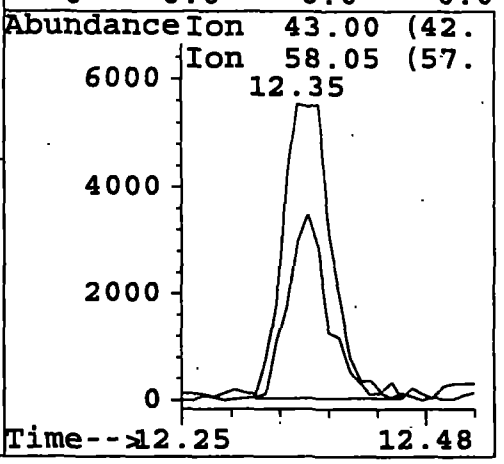





#61
2-Hexanone
Concen: 2.17 ug/Kg
RT: 12.35 min Scan# 1150
Delta R.T. -0.05 min
Lab File: B9628.D
Acq: 5 Feb 102 2:27 pm

Tgt Ion:43 Resp: 17699

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 53.8 | 41.5 | 62.2 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-12-CON-12

**Date Sampled :** 01/23/02 13:50 **Order #:** 526729 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457 **Percent Solid:** 80.2

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 0.86 | | | Dry Weight |
| ACETONE | 20 | 16 J | UG/KG |
| BENZENE | 5.0 | 5.4 U | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 5.4 U | UG/KG |
| BROMOFORM | 5.0 | 5.4 U | UG/KG |
| BROMOMETHANE | 5.0 | 5.4 U | UG/KG |
| 2-BUTANONE (MEK) | 10 | 2.1 J | UG/KG |
| CARBON DISULFIDE | 10 | 11 U | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 5.4 U | UG/KG |
| CHLOROBENZENE | 5.0 | 5.4 U | UG/KG |
| CHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| CHLOROFORM | 5.0 | 5.4 U | UG/KG |
| CHLOROMETHANE | 5.0 | 5.4 U | UG/KG |
| BROMOCHLOROMETHANE | 5.0 | 5.4 U | UG/KG |
| 1,1-DICHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 5.4 U | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 5.4 U | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 5.4 U | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 5.4 U | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 5.4 U | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 5.4 U | UG/KG |
| ETHYLBENZENE | 5.0 | 5.4 U | UG/KG |
| 2-HEXANONE | 10 | 11 U | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 5.4 U | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 11 U | UG/KG |
| STYRENE | 5.0 | 5.4 U | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| TETRACHLOROETHENE | 5.0 | 2.5 J | UG/KG |
| TOLUENE | 5.0 | 5.4 U | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 5.4 U | UG/KG |
| TRICHLOROETHENE | 5.0 | 5.4 U | UG/KG |
| VINYL CHLORIDE | 5.0 | 5.4 U | UG/KG |
| O-XYLENE | 5.0 | 5.4 U | UG/KG |
| M+P-XYLENE | 5.0 | 5.4 U | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (42 - 149 %) | 97 | % |
| TOLUENE-D8 | (71 - 128 %) | 107 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 121 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9629.D  Vial: 4
Acq On : 5 Feb 102 3:03 pm  Operator: DROOT
Sample : 526729 0.86  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5  Multiplr: 1.00
Quant Time: Feb 5 15:31 19102

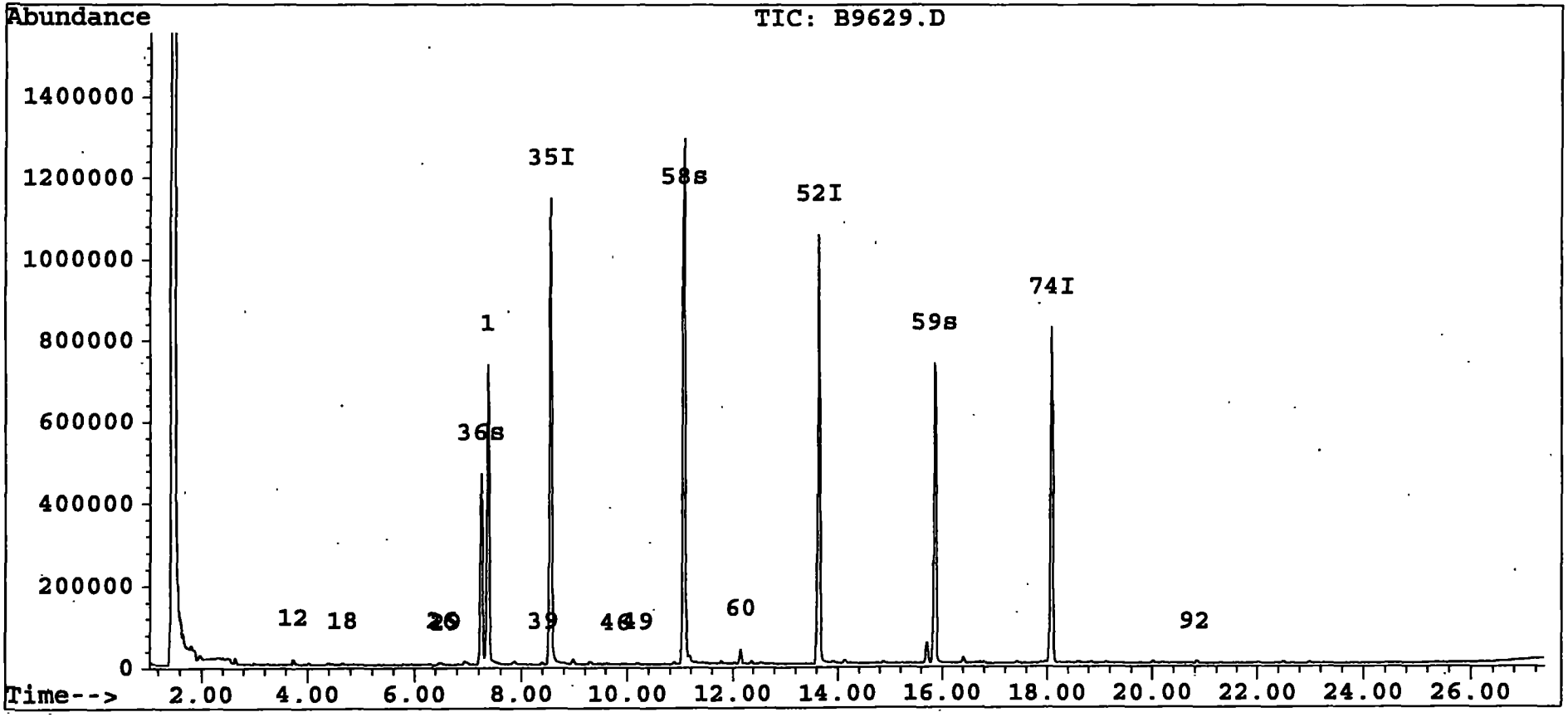
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 760610 | 50.00 | ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1440650 | 50.00 | ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1098833 | 50.00 | ug/Kg | -0.04 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 411802 | 50.00 | ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 417128 | 60.41 | ug/Kg | 120.81% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1342692 | 53.40 | ug/Kg | 106.81% |
| 59) surr2,bfb | 15.85 | 95 | 487817 | 48.58 | ug/Kg | 97.15% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.73 | 43 | 28328 | 14.91 | ug/Kg | 96 |
| 18) TBA | 4.65 | 59 | 10195 | 14.54 | ug/Kg | 98 |
| 26) 2-Butanone | 6.52 | 43 | 7929 | 2.03 | ug/Kg | 91 |
| 29) Propionitrile | 6.59 | 54 | 2287 | 2.20 | ug/Kg | 98 |
| 39) Iso-Butyl Alcohol | 8.41 | 43 | 3719 | 5.71 | ug/Kg | 82 |
| 46) 1,4-Dioxane | 9.77 | 88 | 230 | 2.60 | ug/Kg | 92 |
| 49) 2-Nitropropane | 10.19 | 43 | 3818 | 1.61 | ug/Kg# | 67 |
| 60) Tetrachloroethene | 12.16 | 166 | 18441 | 2.33 | ug/Kg | 93 |
| 92) Nitrobenzene | 20.78 | 77 | 1054 | 1.76 | ug/Kg# | 65 |

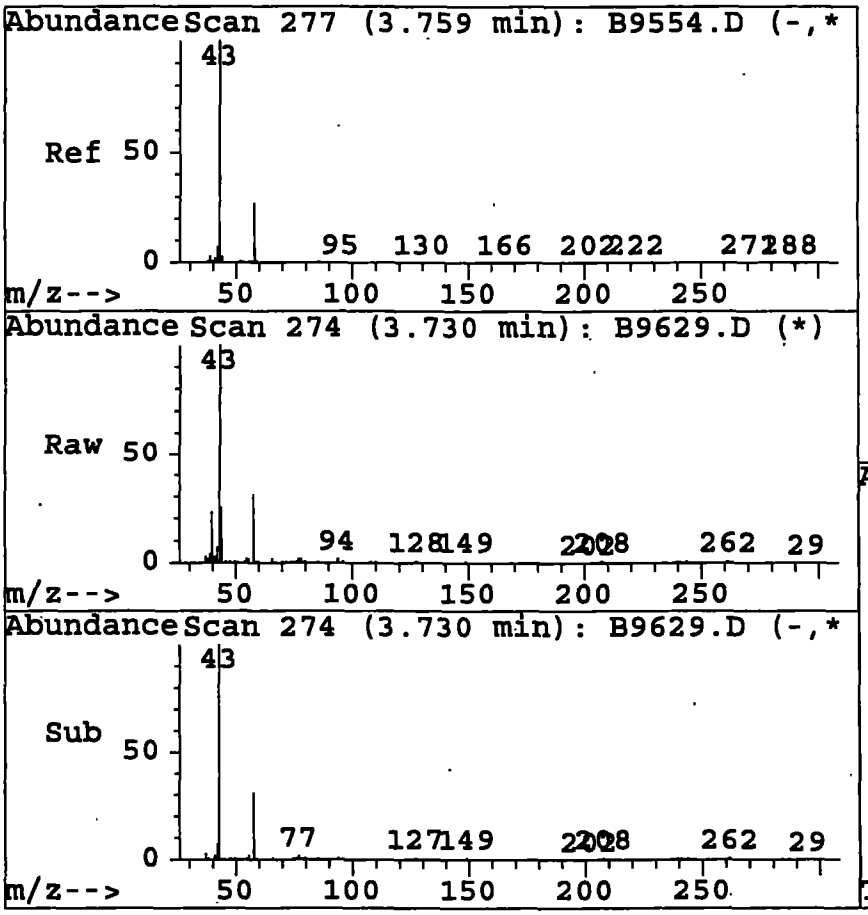
(#) = qualifier out of range (m) = manual integration

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9629.D  Vial: 4
Acq On : 5 Feb 102 3:03 pm  Operator: DROOT
Sample : 526729 0.86  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5  Multiplr: 1.00
Quant Time: Feb 5 15:31 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration



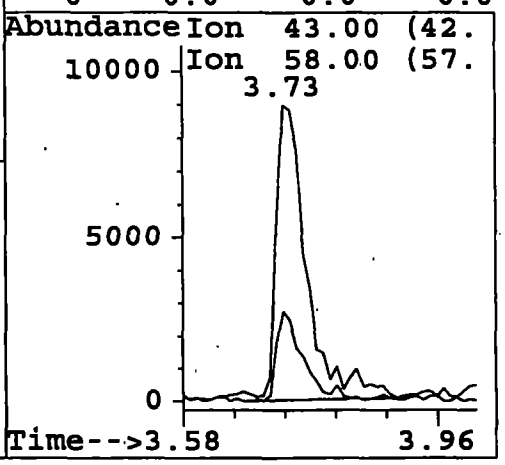

50

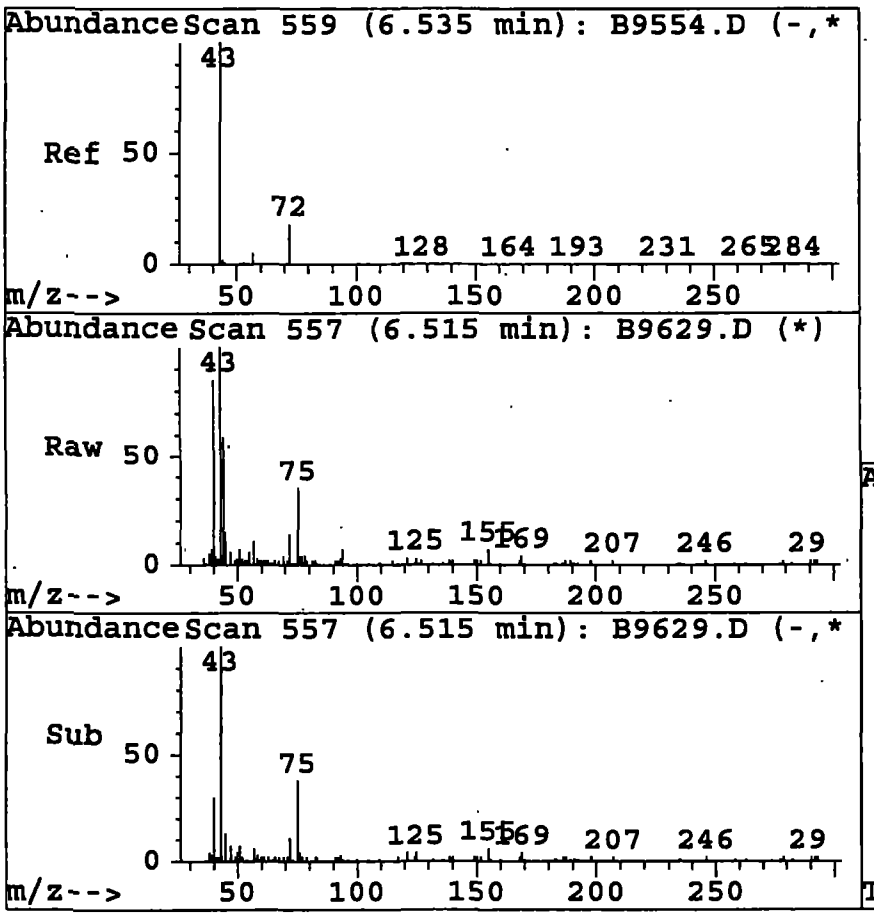



#12
Acetone
Concen: 14.91 ug/Kg
RT: 3.73 min Scan# 274
Delta R.T. -0.02 min
Lab File: B9629.D
Acq: 5 Feb 102 3:03 pm

Tgt Ion:43 Resp: 28328

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 30.5 | 22.8 | 34.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

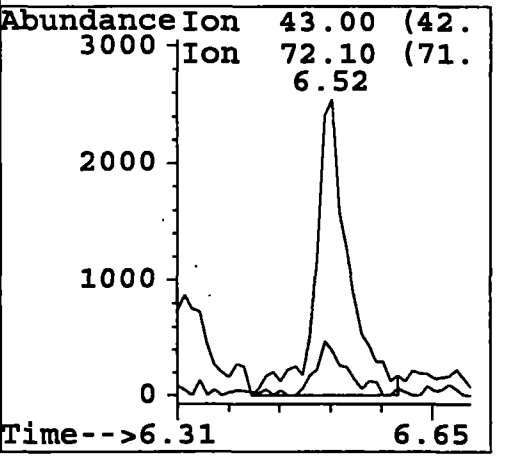


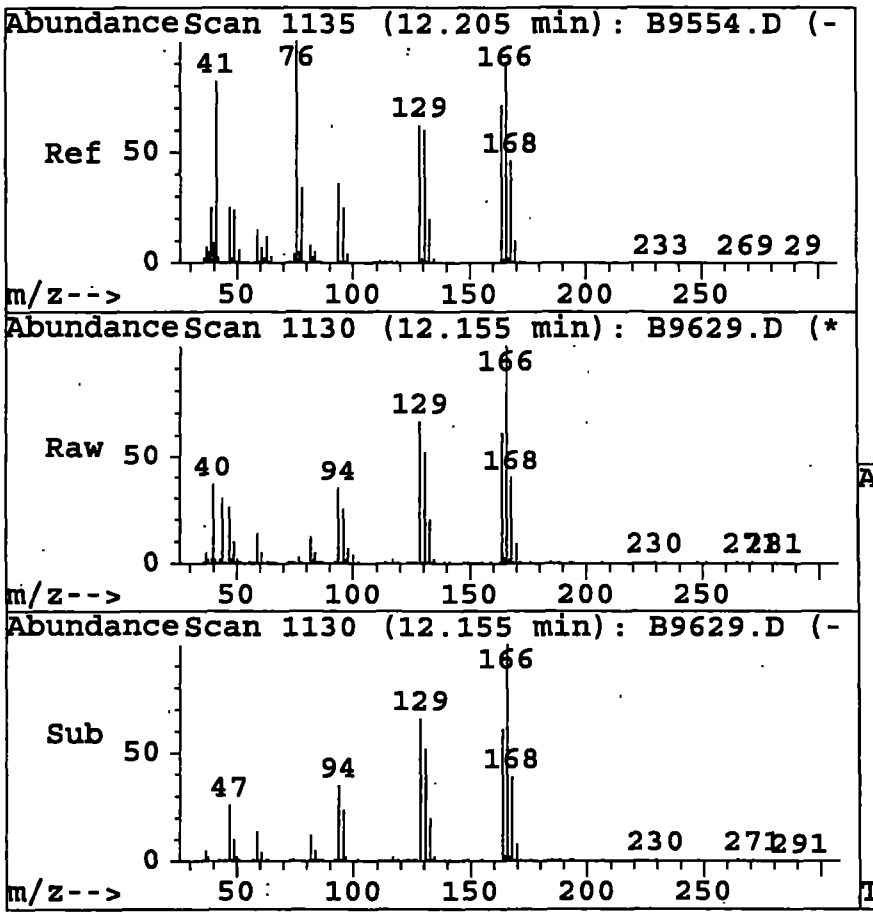



#26
2-Butanone
Concen: 2.03 ug/Kg
RT: 6.52 min Scan# 557
Delta R.T. -0.01 min
Lab File: B9629.D
Acq: 5 Feb 102 3:03 pm

Tgt Ion:43 Resp: 7929

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 72 | 15.3 | 14.5 | 24.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

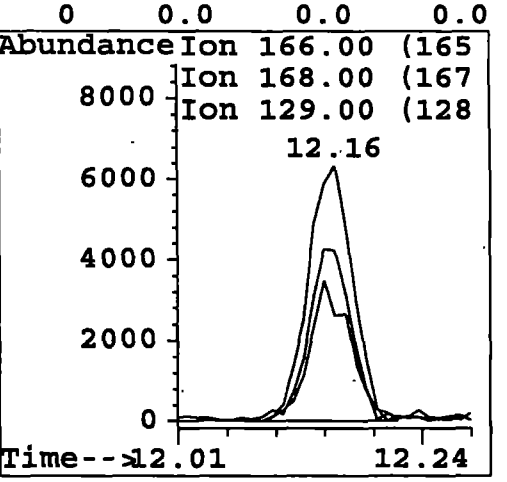





#60
Tetrachloroethene
Concen: 2.33 ug/Kg
RT: 12.16 min Scan# 1130
Delta R.T. -0.04 min
Lab File: B9629.D
Acq: 5 Feb 102 3:03 pm

Tgt Ion:166 Resp: 18441

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 166 | 100 | | |
| 168 | 41.2 | 37.8 | 56.7 |
| 129 | 66.7 | 57.6 | 86.3 |
| 0 | 0.0 | 0.0 | 0.0 |



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-18-CON-11

**Date Sampled :** 01/23/02 17:15 **Order #:** 526730 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457 **Percent Solid:** 78.7

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 0.90 | | | Dry Weight |
| ACETONE | 20 | 14 J | UG/KG |
| BENZENE | 5.0 | 5.7 U | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 5.7 U | UG/KG |
| BROMOFORM | 5.0 | 5.7 U | UG/KG |
| BROMOMETHANE | 5.0 | 5.7 U | UG/KG |
| 2-BUTANONE (MEK) | 10 | 11 U | UG/KG |
| CARBON DISULFIDE | 10 | 11 U | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 5.7 U | UG/KG |
| CHLOROBENZENE | 5.0 | 5.7 U | UG/KG |
| CHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| CHLOROFORM | 5.0 | 5.7 U | UG/KG |
| CHLOROMETHANE | 5.0 | 5.7 U | UG/KG |
| IBROMOCHLOROMETHANE | 5.0 | 5.7 U | UG/KG |
| 1,1-DICHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 5.7 U | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 5.7 U | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 5.7 U | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 5.7 U | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 5.7 U | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 5.7 U | UG/KG |
| ETHYLBENZENE | 5.0 | 5.7 U | UG/KG |
| 2-HEXANONE | 10 | 11 U | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 5.7 U | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 11 U | UG/KG |
| STYRENE | 5.0 | 5.7 U | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| TETRACHLOROETHENE | 5.0 | 5.7 U | UG/KG |
| TOLUENE | 5.0 | 5.7 U | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 5.7 U | UG/KG |
| TRICHLOROETHENE | 5.0 | 5.7 U | UG/KG |
| VINYL CHLORIDE | 5.0 | 5.7 U | UG/KG |
| O-XYLENE | 5.0 | 5.7 U | UG/KG |
| M+P-XYLENE | 5.0 | 5.7 U | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (42 - 149 %) | 97 | % |
| TOLUENE-D8 | (71 - 128 %) | 106 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 119 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9630.D Vial: 5
Acq On : 5 Feb 102 3:38 pm Operator: DROOT
Sample : 526730 0.90 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5 Multiplr: 1.00
Quant Time: Feb 5 16:06 19102

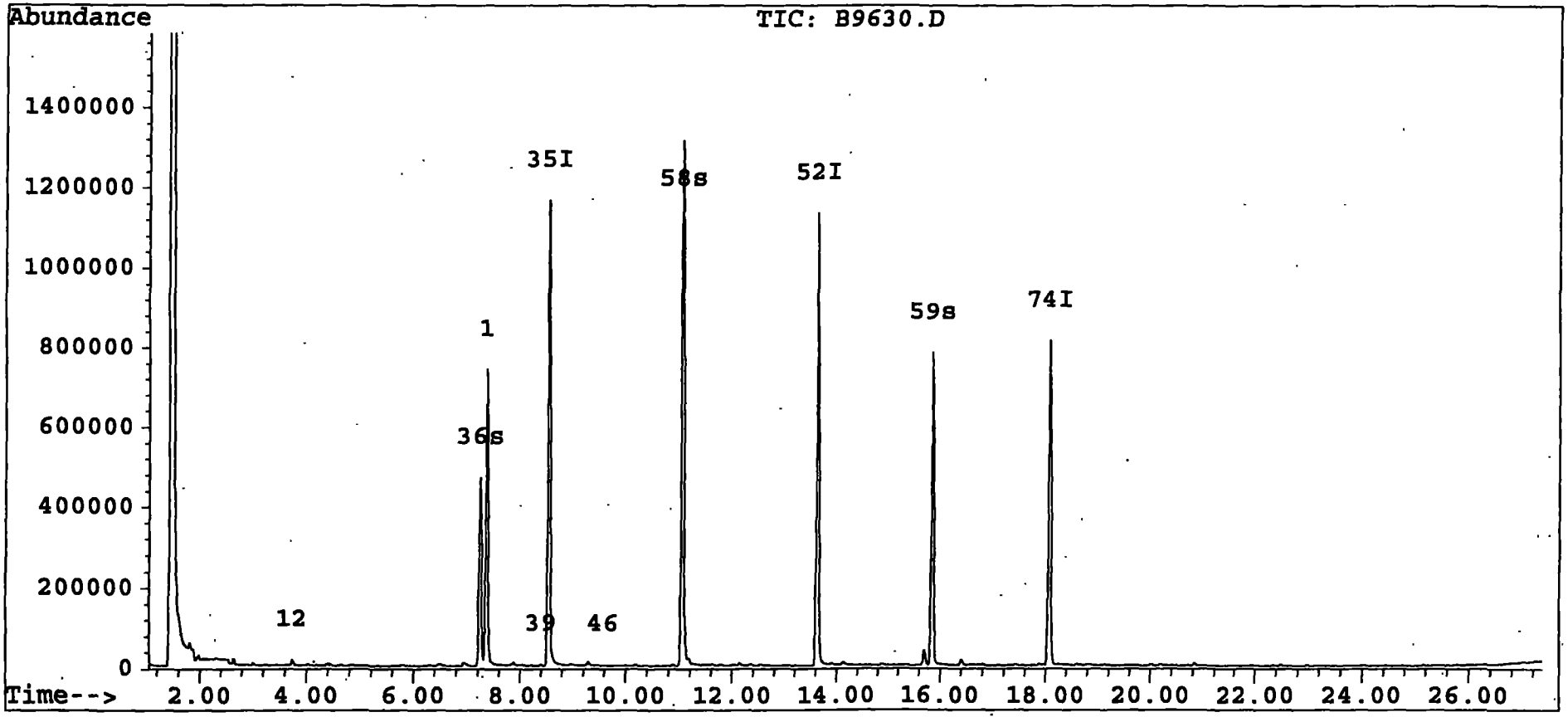
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

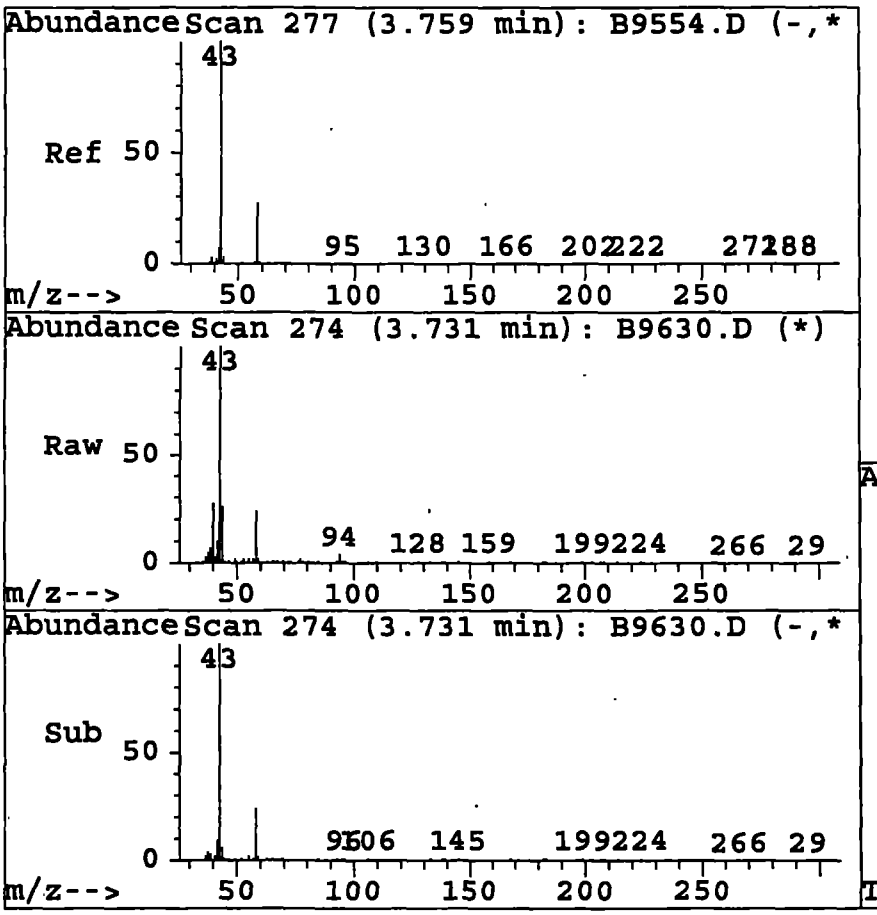
| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 770968 | 50.00 | ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1481771 | 50.00 | ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.63 | 117 | 1134544 | 50.00 | ug/Kg | -0.05 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 417860 | 50.00 | ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 421149 | 59.29 | ug/Kg | 118.59% |
| 58) surr3,Toluene-d8 | 11.05 | 98 | 1377765 | 53.07 | ug/Kg | 106.15% |
| 59) surr2,bfb | 15.85 | 95 | 501501 | 48.37 | ug/Kg | 96.74% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.73 | 43 | 23464 | 12.19 | ug/Kg | 92 |
| 39) Iso-Butyl Alcohol | 8.41 | 43 | 3449 | 5.15 | ug/Kg | 82 |
| 46) 1,4-Dioxane | 9.58 | 88 | 259 | 2.85 | ug/Kg# | 12 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9630. Vial: 5
Acq On : 5 Feb 102 3:38 pm Operator: DROOT
Sample : 526730 0.90 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TC5 Multiplr: 1.00
Quant Time: Feb 5 16:06 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

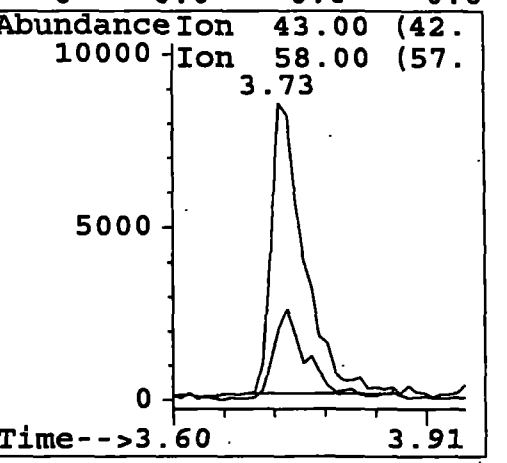





#12
Acetone
Concen: 12.19 ug/Kg
RT: 3.73 min Scan# 274
Delta R.T. -0.02 min
Lab File: B9630.D
Acq: 5 Feb 102 3:38 pm

Tgt Ion:43 Resp: 23464

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 24.2 | 22.8 | 34.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** RINSATE-S8

**Date Sampled :** 01/23/02 18:40 **Order #:** 526735 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 |

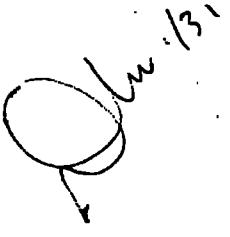
| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (87 - 111 %) | 96 | % |
| TOLUENE-D8 | (87 - 108 %) | 106 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 93 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9518.D  Vial: 2
Acq On : 31 Jan 102 2:33 pm  Operator: droot
Sample : 526735 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 15:00 19102

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

| Internal Standards | R.T. | QIon | Response | Conc | Units | | Dev(Min) |
|---|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 841354 | 50.00 | ppb | | -0.03 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1557794 | 50.00 | ppb | | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1222086 | 50.00 | ppb | | -0.03 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 455360 | 50.00 | ppb | | -0.03 |
| **System Monitoring Compounds** | | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.25 | 113 | 520734 | 46.35 | ppb | | 92.69% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1516214 | 52.95 | ppb | | 105.90% |
| 59) surr2,bfb | 15.86 | 95 | 562646 | 48.08 | ppb | | 96.17% |
| **Target Compounds** | | | | | | | Qvalue |
| 12) Acetone | 3.75 | 43 | 7359 | 2.04 | ppb | # | 88 |
| 13) Iodomethane | 3.80 | 127 | ~~196~~ | ~~4.37~~ | ~~ppb~~ | | ~~1~~ |
| 15) Acetonitrile | 4.14 | 41 | 178 | ~~0.44~~ | ~~ppb~~ | ~~#~~ | ~~1~~ |
| 24) 2-Chloro-1,3-butadiene | 5.64 | 53 | 285 | ~~1.20~~ | ~~PPB~~ | ~~#~~ | ~~44~~ |
| 28) cis-1,2-Dichloroethene | 6.46 | 96 | 3781 | 0.41 | ppb | # | 91 |
| 39) Iso-Butyl Alcohol | 8.31 | 43 | 200 | ~~0.55~~ | ~~ppb~~ | | ~~83~~ |
| 46) 1,4-Dioxane | 9.58 | 88 | 575 | ~~5.82~~ | ~~ppb~~ | ~~#~~ | ~~60~~ |
| 60) Tetrachloroethene | 12.15 | 166 | 257 | ~~4.29~~ | ~~ppb~~ | ~~#~~ | ~~81~~ |
| 72) Isopropylbenzene | 15.57 | 105 | 97 | ~~3.28~~ | ~~ppb~~ | ~~#~~ | ~~49~~ |
| 80) 1,3,5-Trimethylbenzene | 16.67 | 105 | 149 | ~~3.74~~ | ~~ppb~~ | | ~~95~~ |
| 92) Nitrobenzene | 20.78 | 77 | 33 | ~~8.74~~ | ~~ppb~~ | ~~#~~ | ~~27~~ |

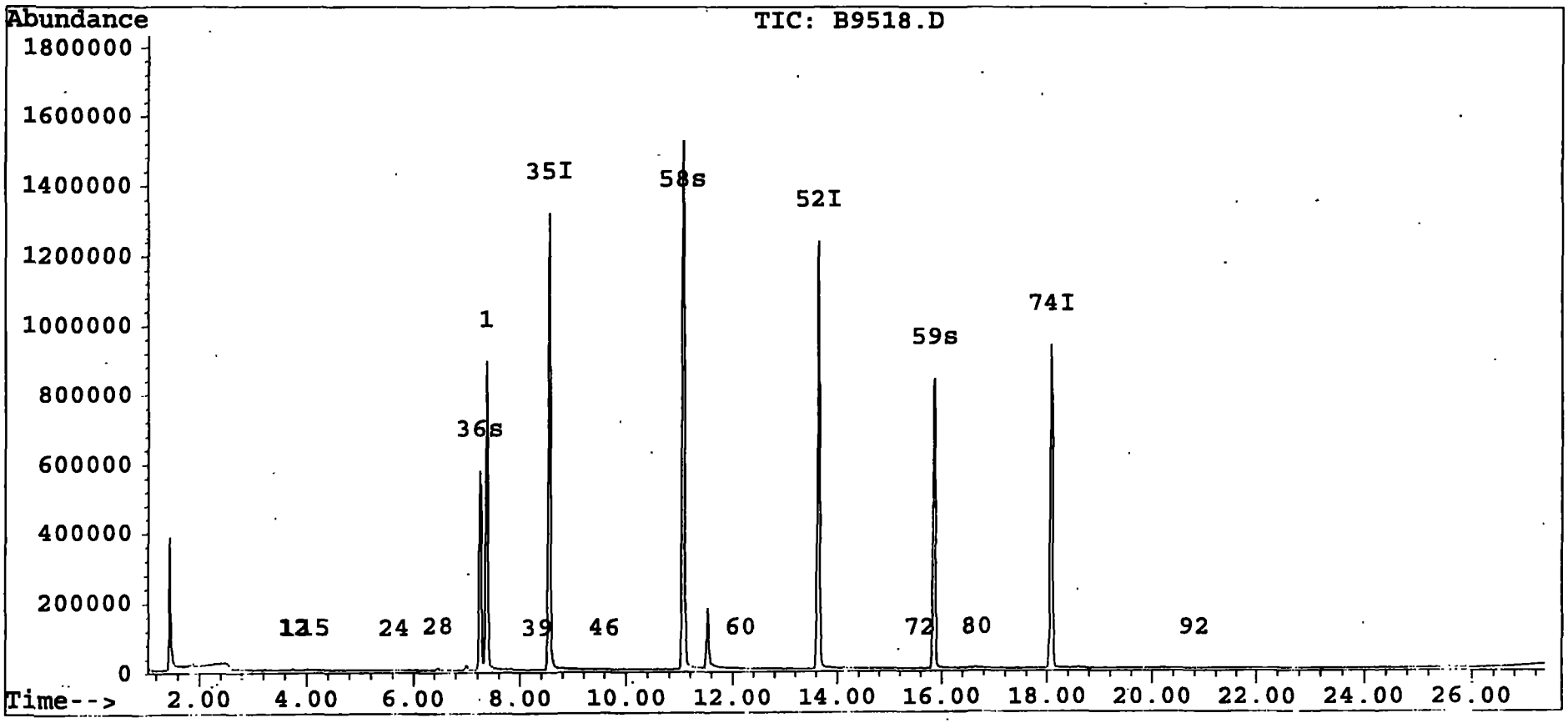


(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9518.D  Vial: 2
Acq On : 31 Jan 102 2:33 pm  Operator: droot
Sample : 526735 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 15:00 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: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SW BLANK

**Date Sampled :** 01/23/02 18:40 **Order #:** 526736 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 | 1.6 J | 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 %) | 105 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 97 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9519.D  Vial: 3
Acq On : 31 Jan 102 3:08 pm  Operator: droot
Sample : 526736 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 15:36 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 | 832871 | 50.00 | ppb | -0.03 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1548410 | 50.00 | ppb | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1202484 | 50.00 | ppb | -0.03 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 440579 | 50.00 | ppb | -0.03 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 533812 | 48.26 | ppb | 96.52% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1482727 | 52.52 | ppb | 105.05% |
| 59) surr2,bfb | 15.85 | 95 | 560902 | 48.96 | ppb | 97.92% |
| **Target Compounds** | | | | | | Qvalue |
| 5) Bromomethane | 2.43 | 94 | 3118 | ~~0.55~~ | ~~ppb~~ # | ~~9~~ |
| 12) Acetone | 3.75 | 43 | 5934 | 1.66 | ppb | 95< |
| 13) Iodomethane | 3.81 | 127 | ~~64~~ | ~~4.34~~ | ~~ppb~~ | ~~1~~ |
| 15) Acetonitrile | 4.16 | 41 | ~~537~~ | ~~1.34~~ | ~~ppb~~ # | ~~1~~ |
| 24) 2-Chloro-1,3-butadiene | 5.40 | 53 | ~~90~~ | ~~1.19~~ | ~~PPB~~ | ~~94~~ |
| 32) Chloroform | 7.00 | 83 | 21641 | 1.65 | ppb | 94 < J |
| 39) Iso-Butyl Alcohol | 8.55 | 43 | ~~1356~~ | ~~3.77~~ | ~~ppb~~ | ~~93~~ |
| 46) 1,4-Dioxane | 9.43 | 88 | ~~232~~ | ~~2.36~~ | ~~ppb~~ | ~~91~~ |
| 60) Tetrachloroethene | 12.17 | 166 | 54 | ~~4.26~~ | ~~ppb~~ # | ~~20~~ |
| 72) Isopropylbenzene | 15.57 | 105 | ~~78~~ | ~~3.28~~ | ~~ppb~~ # | ~~49~~ |
| 80) 1,3,5-Trimethylbenzene | 16.72 | 105 | 266 | ~~3.75~~ | ~~ppb~~ # | ~~68~~ |
| 92) Nitrobenzene | 20.91 | 77 | 314 | ~~9.01~~ | ~~ppb~~ | ~~96~~ |

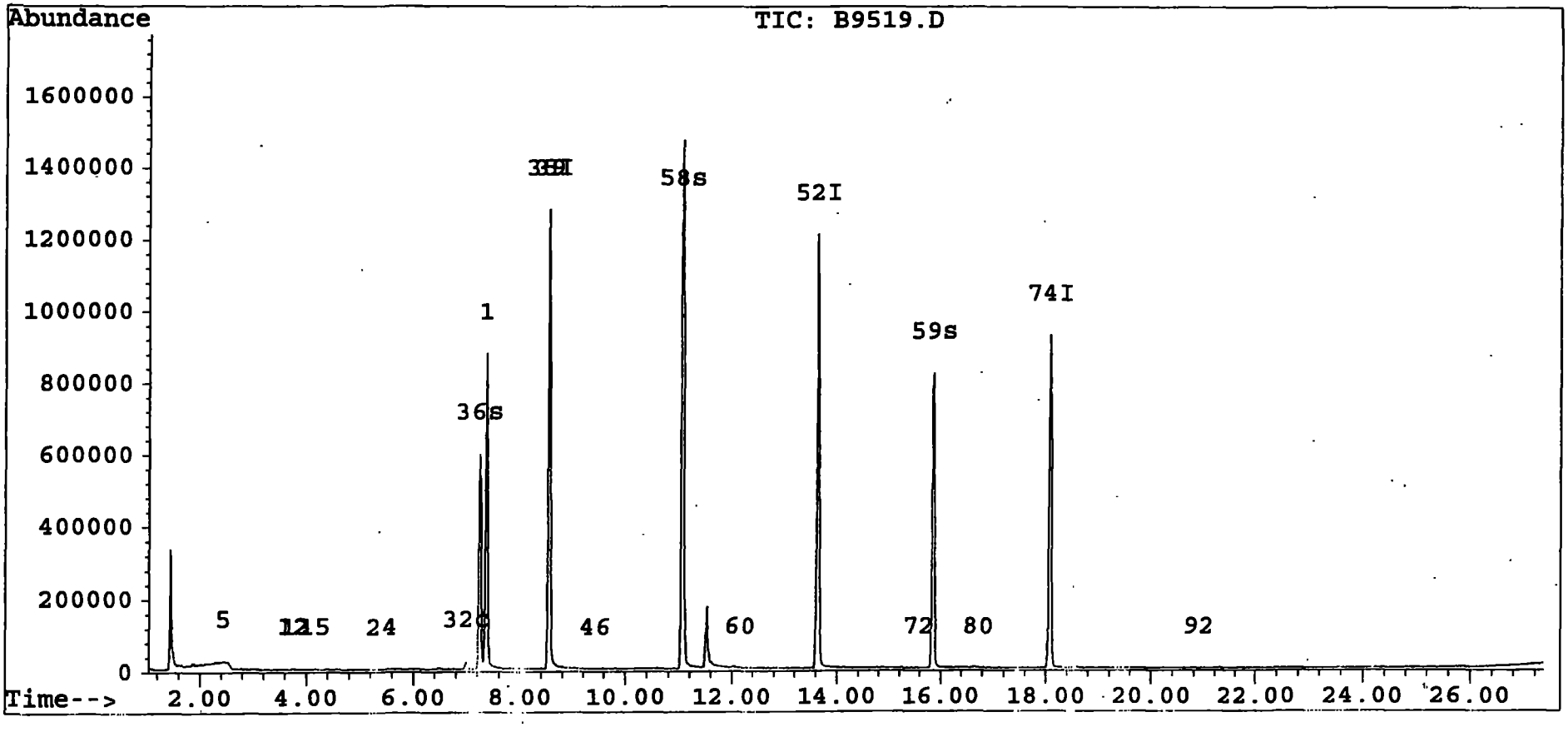
2/4

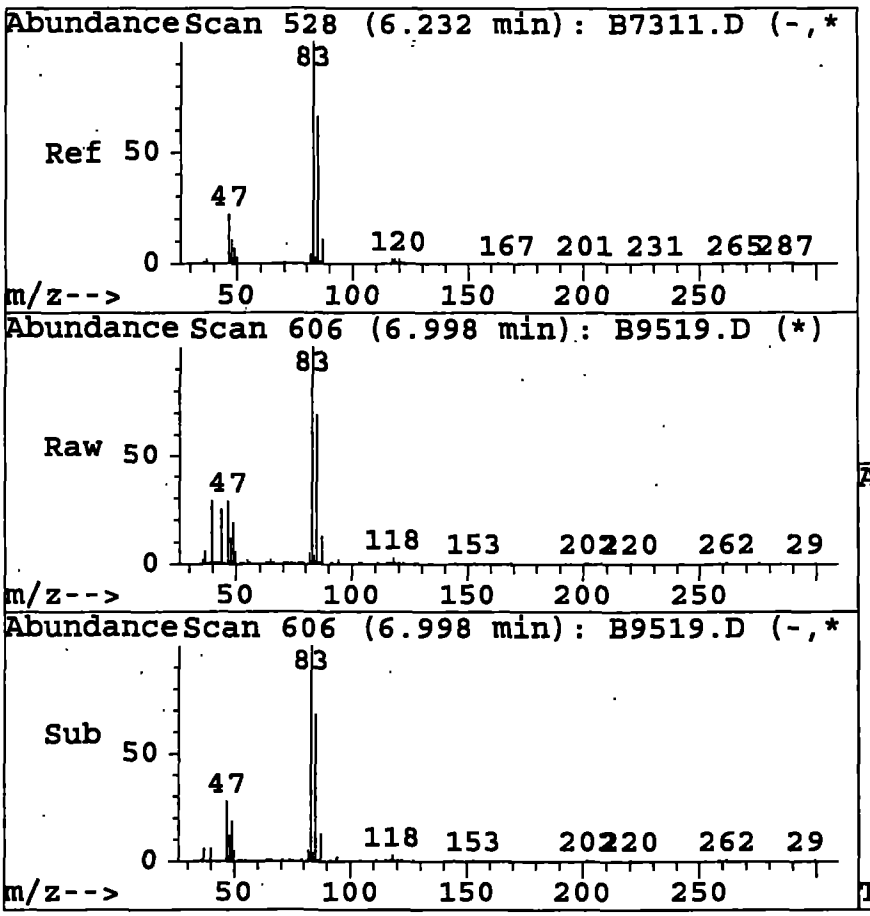
(#) = qualifier out of range (m) = manual integration
B9519.D EXP1217.M Thu Jan 31 15:36:26 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9519.D  Vial: 3
Acq On : 31 Jan 102 3:08 pm  Operator: droot
Sample : 526736 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 15:36 19102

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

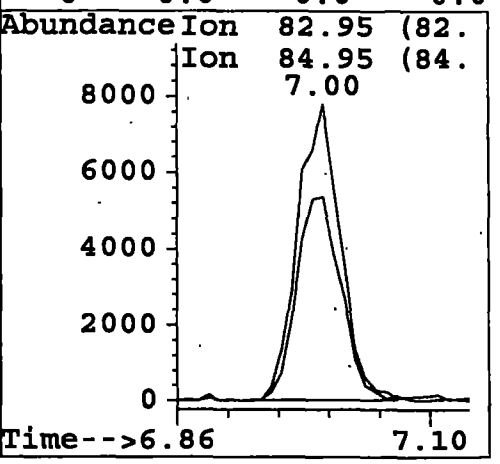





#32
Chloroform
Concen: 1.65 ppb
RT: 7.00 min Scan# 606
Delta R.T. -0.02 min
Lab File: B9519.D
Acq: 31 Jan 102 3:08 pm

Tgt Ion:82.95 Resp: 21641

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 83 | 100 | | |
| 85 | 68.8 | 51.0 | 76.5 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** GB-GGW-3

**Date Sampled :** 01/23/02 08:20 **Order #:** 526738 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 %) | 93 | % |
| TOLUENE-D8 | (87 - 108 %) | 106 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 97 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9520.D Vial: 4
Acq On : 31 Jan 102 3:44 pm Operator: droot
Sample : 526738 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 31 16:11 19102

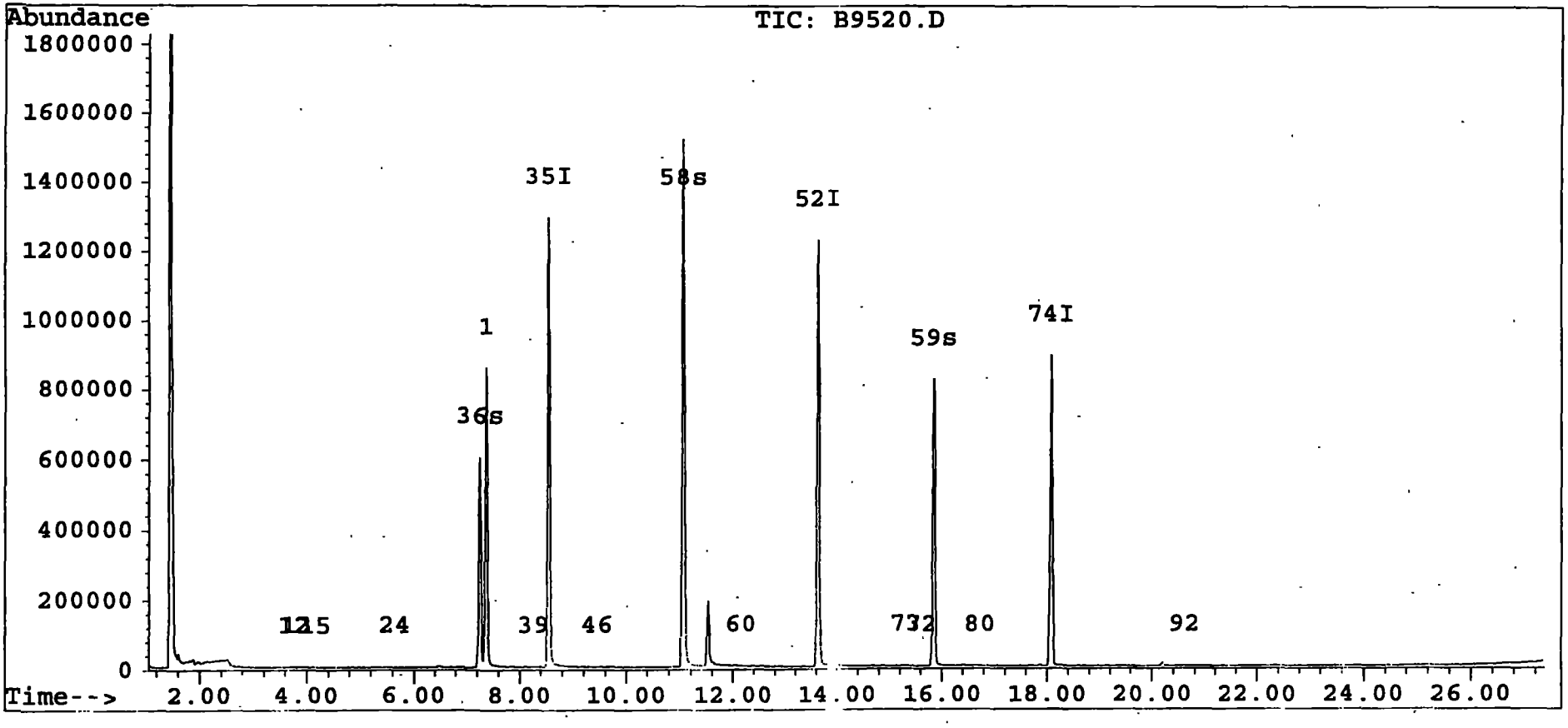
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 827793 | 50.00 | ppb | -0.03 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1547110 | 50.00 | ppb | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1206545 | 50.00 | ppb | -0.03 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 423090 | 50.00 | ppb | -0.03 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.25 | 113 | 534768 | 48.43 | ppb | 96.86% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1492610 | 52.75 | ppb | 105.50% |
| 59) surr2,bfb | 15.85 | 95 | 540381 | 46.27 | ppb | 92.54% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.77 | 43 | 3459 | 0.97 | ppb # | 85 |
| 13) Iodomethane | 3.82 | 127 | 175 | 4.37 | ppb | 1 |
| 15) Acetonitrile | 4.15 | 41 | 164 | 0.41 | ppb # | 1 |
| 24) 2-Chloro-1,3-butadiene | 5.66 | 53 | 293 | 1.21 | PPB | 93 |
| 39) Iso-Butyl Alcohol | 8.27 | 43 | 741 | 2.06 | ppb | 96 |
| 46) 1,4-Dioxane | 9.46 | 88 | 129 | 1.31 | ppb | 99 |
| 60) Tetrachloroethene | 12.16 | 166 | 82 | 4.26 | ppb # | 18 |
| 72) Isopropylbenzene | 15.61 | 105 | 172 | 3.29 | ppb # | 49 |
| 73) Cyclohexanone | 15.30 | 55 | 616 | 0.74 | ppb | 98 |
| 80) 1,3,5-Trimethylbenzene | 16.72 | 105 | 275 | 3.75 | ppb # | 85 |
| 92) Nitrobenzene | 20.61 | 77 | 585 | 9.29 | ppb | 83 |

(#) = qualifier out of range (m) = manual integration
B9520.D EXP1217.M Thu Jan 31 16:11:59 2002

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9520.D Vial: 4
Acq On : 31 Jan 102 3:44 pm Operator: droot
Sample : 526738 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 31 16:11 19102

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



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** GB-GGW-5

**Date Sampled :** 01/23/02 09:20 **Order #:** 526740 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 %) | 97 | % |
| TOLUENE-D8 | (87 - 108 %) | 104 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 99 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9521.D
Acq On : 31 Jan 102 4:19 pm
Sample : 526740 1.0
Misc : TTEM-KS R22-10457 8260B.TCLL
Quant Time: Jan 31 16:47 19102

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

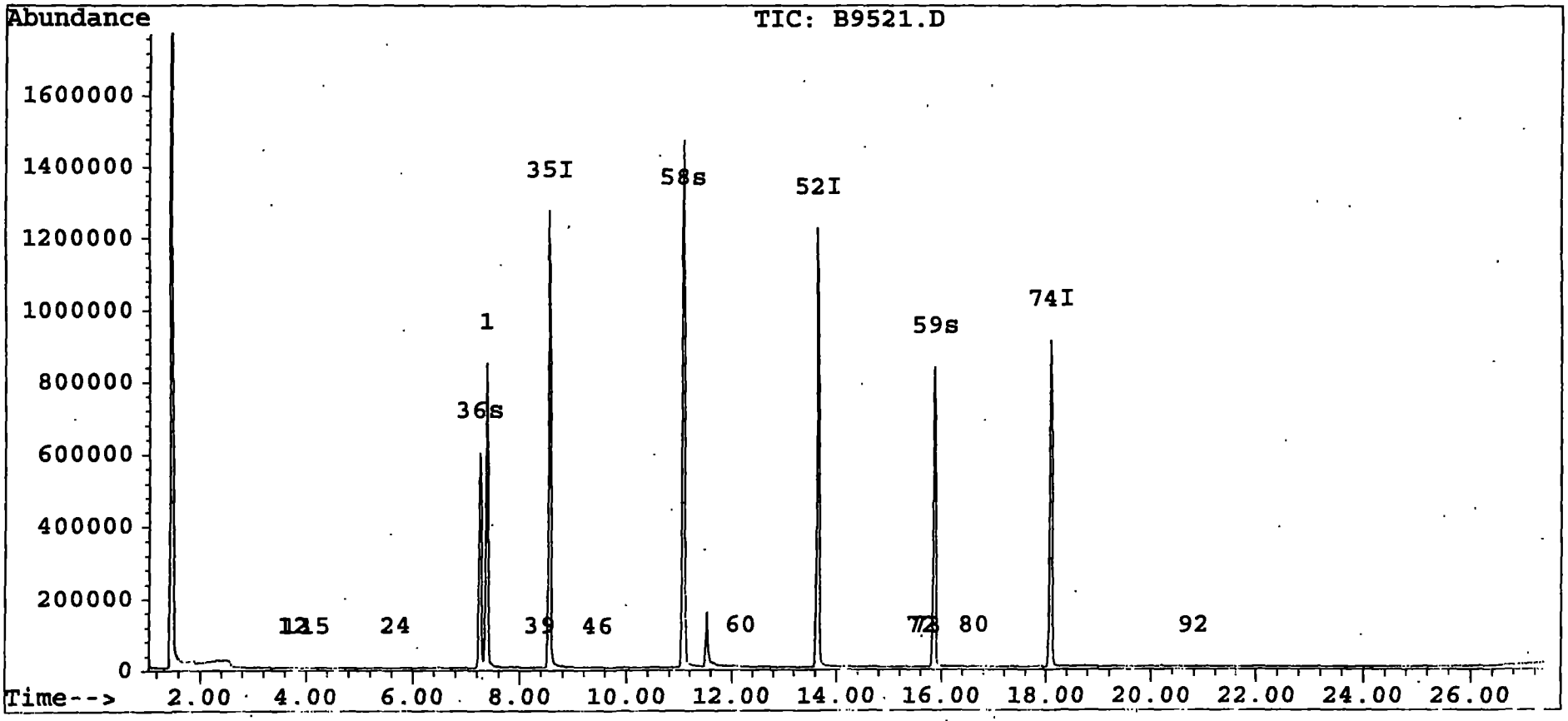
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 813953 | 50.00 | ppb | -0.03 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1505758 | 50.00 | ppb | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1186786 | 50.00 | ppb | -0.03 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 439127 | 50.00 | ppb | -0.03 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 528828 | 49.44 | ppb | 98.89% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1450557 | 51.92 | ppb | 103.84% |
| 59) surr2,bfb | 15.86 | 95 | 549049 | 48.41 | ppb | 96.81% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.75 | 43 | 1449 | 0.41 | ppb | # 65 |
| 13) Iodomethane | 3.84 | 127 | 83 | 4.35 | ppb | 1 |
| 15) Acetonitrile | 4.15 | 41 | 219 | 0.56 | ppb | # 1 |
| 24) 2-Chloro-1,3-butadiene | 5.68 | 53 | 357 | 1.21 | PPB | # 23 |
| 39) Iso-Butyl Alcohol | 8.39 | 43 | 1528 | 4.37 | ppb | # 53 |
| 46) 1,4-Dioxane | 9.46 | 88 | 376 | 3.94 | ppb | 99 |
| 60) Tetrachloroethene | 12.17 | 166 | 109 | 4.27 | ppb | # 1 |
| 72) Isopropylbenzene | 15.61 | 105 | 379 | 3.30 | ppb | # 49 |
| 73) Cyclohexanone | 15.71 | 55 | 419 | 0.51 | ppb | 85 |
| 80) 1,3,5-Trimethylbenzene | 16.61 | 105 | 129 | 3.74 | ppb | 90 |
| 92) Nitrobenzene | 20.80 | 77 | 537 | 9.22 | ppb | # 27 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9521 Vial: 5
Acq On : 31 Jan 102 4:19 pm Operator: droot
Sample : 526740 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 31 16:47 19102

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



**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** OSEDS-GGW-1

**Date Sampled :** 01/23/02 11:35 **Order #:** 526741 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 |
| ʜLOROMETHANE | 1.0 | 1.0 U | UG/L |
| ſBROMOCHLOROMETHANE | 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 %) | 96 | % |
| TOLUENE-D8 | (87 - 108 %) | 106 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 101 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9522.D  Vial: 6
Acq On : 31 Jan 102 4:55 pm  Operator: droot
Sample : 526741 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 17:23 19102

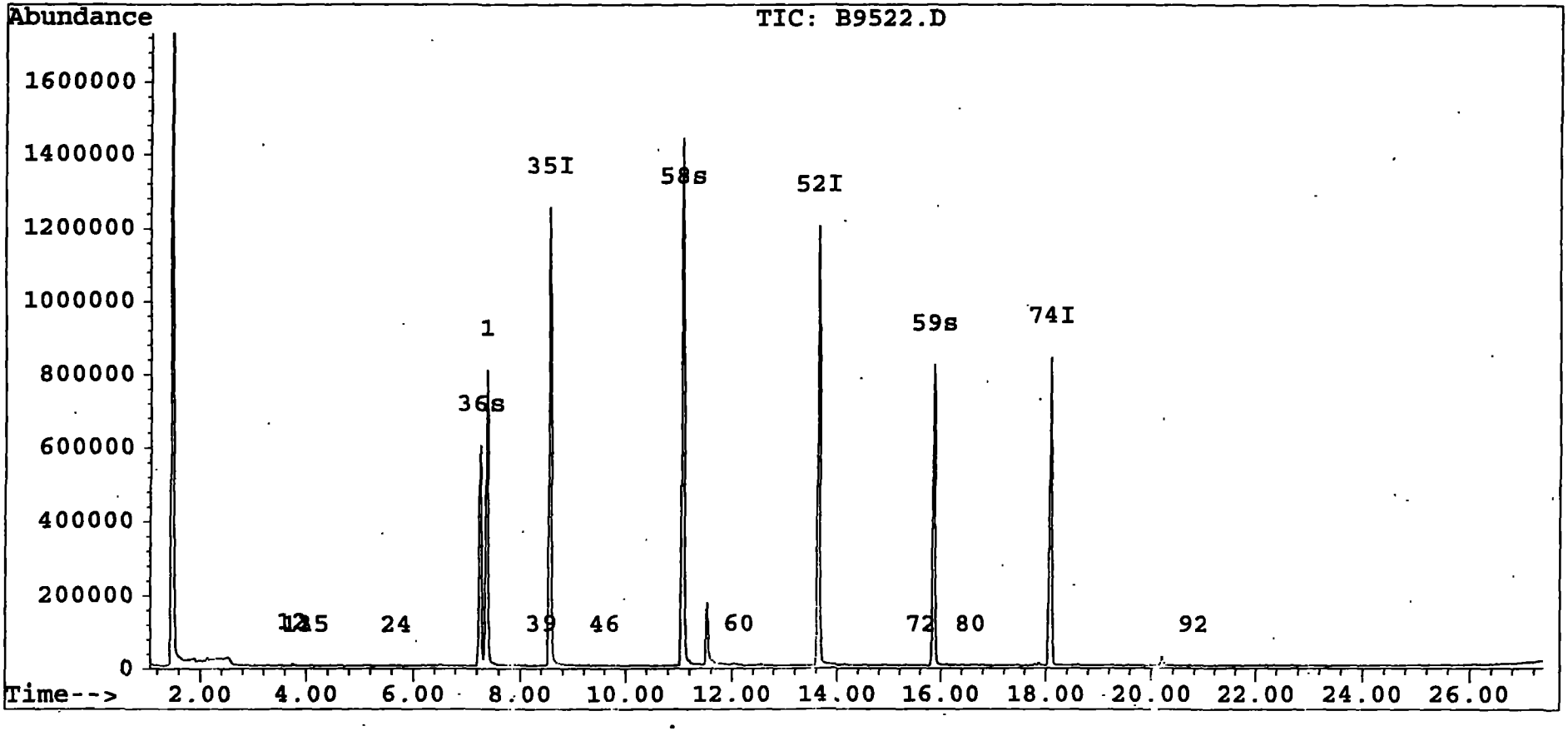
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.38 | 168 | 806059 | 50.00 | ppb | -0.02 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1516383 | 50.00 | ppb | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1176731 | 50.00 | ppb | -0.03 |
| 74) d4 - Dichlorobenzene | 18.09 | 152 | 410858 | 50.00 | ppb | -0.02 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.25 | 113 | 539304 | 50.26 | ppb | 100.51% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1463834 | 53.13 | ppb | 106.27% |
| 59) surr2,bfb | 15.85 | 95 | 539849 | 47.85 | ppb | 95.69% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.74 | 43 | 11211 | 3.24 | ppb | 96 |
| 13) Iodomethane | 3.85 | 127 | 30 | 4.34 | ppb | 1 |
| 15) Acetonitrile | 4.13 | 41 | 430 | 1.11 | ppb # | 1 |
| 24) 2-Chloro-1,3-butadiene | 5.68 | 53 | 355 | 1.21 | PPB # | 23 |
| 39) Iso-Butyl Alcohol | 8.40 | 43 | 1508 | 4.28 | ppb | 86 |
| 46) 1,4-Dioxane | 9.60 | 88 | 161 | 1.67 | ppb # | 51 |
| 60) Tetrachloroethene | 12.15 | 166 | 93 | 4.27 | ppb # | 1 |
| 72) Isopropylbenzene | 15.61 | 105 | 397 | 3.30 | ppb # | 78 |
| 80) 1,3,5-Trimethylbenzene | 16.55 | 105 | 1249 | 3.79 | ppb | 93 |
| 92) Nitrobenzene | 20.79 | 77 | 255 | 8.97 | ppb # | 27 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9522. Vial: 6
Acq On : 31 Jan 102 4:55 pm Operator: droot
Sample : 526741 1.0 Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL Multiplr: 1.00
Quant Time: Jan 31 17:23 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: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SWD-GGW-1

**Date Sampled :** 01/23/02 10:35 **Order #:** 526742 **Sample Matrix:** WATER
**Date Received:** 01/25/02 **Submission #:** R2210457 **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 |
| 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 %) | 98 | % |
| TOLUENE-D8 | (87 - 108 %) | 104 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 102 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9523.D  Vial: 7
Acq On : 31 Jan 102 5:31 pm  Operator: droot
Sample : 526742 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 17:59 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 | 7.38 | 168 | 809456 | 50.00 | ppb | | -0.02 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1519986 | 50.00 | ppb | | -0.03 |
| 52) d5 - Chlorobenzene | 13.64 | 117 | 1192081 | 50.00 | ppb | | -0.03 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 434099 | 50.00 | ppb | | -0.03 |
| **System Monitoring Compounds** | | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.25 | 113 | 544675 | 50.75 | ppb | | 101.50% |
| 58) surr3,Toluene-d8 | 11.06 | 98 | 1458645 | 52.00 | ppb | | 103.99% |
| 59) surr2,bfb | 15.85 | 95 | 556792 | 49.05 | ppb | | 98.10% |
| **Target Compounds** | | | | | | | Qvalue |
| 12) Acetone | 3.74 | 43 | 5188 | 1.49 | ppb | # | 84 |
| 13) Iodomethane | 3.85 | 127 | 317 | ~~4.40~~ | ~~ppb~~ | | ~~1~~ |
| 15) Acetonitrile | 4.16 | 41 | 575 | ~~1.47~~ | ~~ppb~~ | ~~#~~ | ~~1~~ |
| 34) 2-Chloro-1,3-butadiene | 5.66 | 53 | 288 | ~~1.21~~ | ~~PPB~~ | ~~#~~ | ~~61~~ |
| 39) Iso-Butyl Alcohol | 8.39 | 43 | 1495 | ~~4.24~~ | ~~ppb~~ | | ~~98~~ |
| 46) 1,4-Dioxane | 9.44 | 88 | 314 | ~~3.26~~ | ~~ppb~~ | | ~~84~~ |
| 60) Tetrachloroethene | 12.14 | 166 | 97 | ~~4.27~~ | ~~ppb~~ | ~~#~~ | ~~29~~ |
| 72) Isopropylbenzene | 15.58 | 105 | 332 | ~~3.29~~ | ~~ppb~~ | ~~#~~ | ~~49~~ |
| 80) 1,3,5-Trimethylbenzene | 16.74 | 105 | 335 | ~~3.75~~ | ~~ppb~~ | ~~#~~ | ~~49~~ |
| 92) Nitrobenzene | 20.76 | 77 | 279 | ~~8.98~~ | ~~ppb~~ | ~~#~~ | ~~27~~ |

12/27
2/3

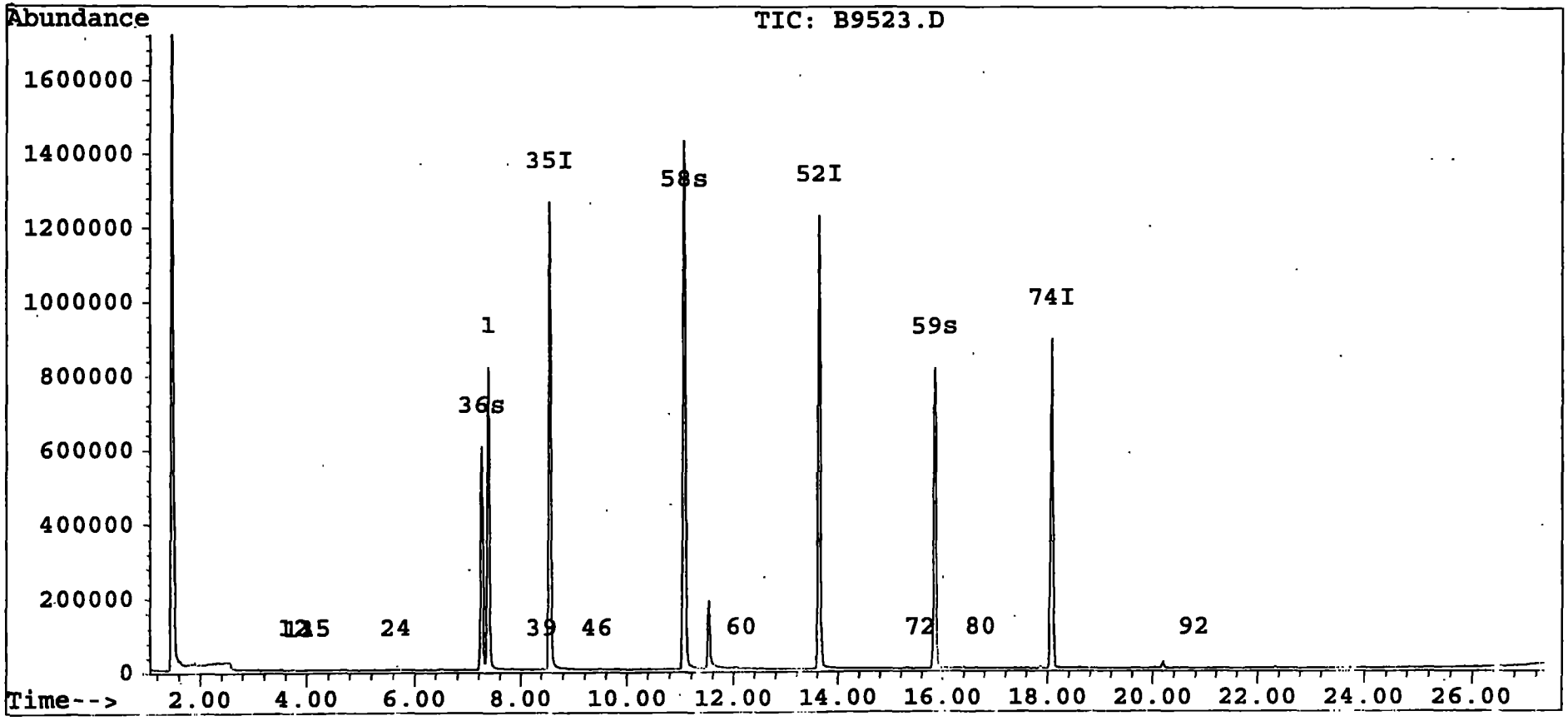
75

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9523.D  Vial: 7
Acq On : 31 Jan 102 5:31 pm  Operator: droot
Sample : 526742 1.0  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLL  Multiplr: 1.00
Quant Time: Jan 31 17:59 19102

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



# 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 | |
| | | Allyl Chloride | 0.232 | 0.233 | 0.210 | 0.204 | 0.251 | 0.252 | 0.230 | 8.00 | |
| | | 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 | |
| | | 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 | |

78

(#) = 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 | UL |
| ] | s | surr2,bfb | | | 0.417 | 0.483 | 0.411 | 0.403 | 0.420 | 8.87 | UL |
| 60) | | Tetrachloroethene | 0.207 | 0.233 | 0.192 | 0.196 | 0.266 | 0.277 | 0.234 | 15.45 | UL |
| 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 | UL |
| 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 | UL |
| 81) | | 2-Chlorotoluene | 1.440 | 1.761 | 1.527 | 1.478 | 1.938 | 1.951 | 1.707 | 12.98 | |
| 82) | | 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 | |

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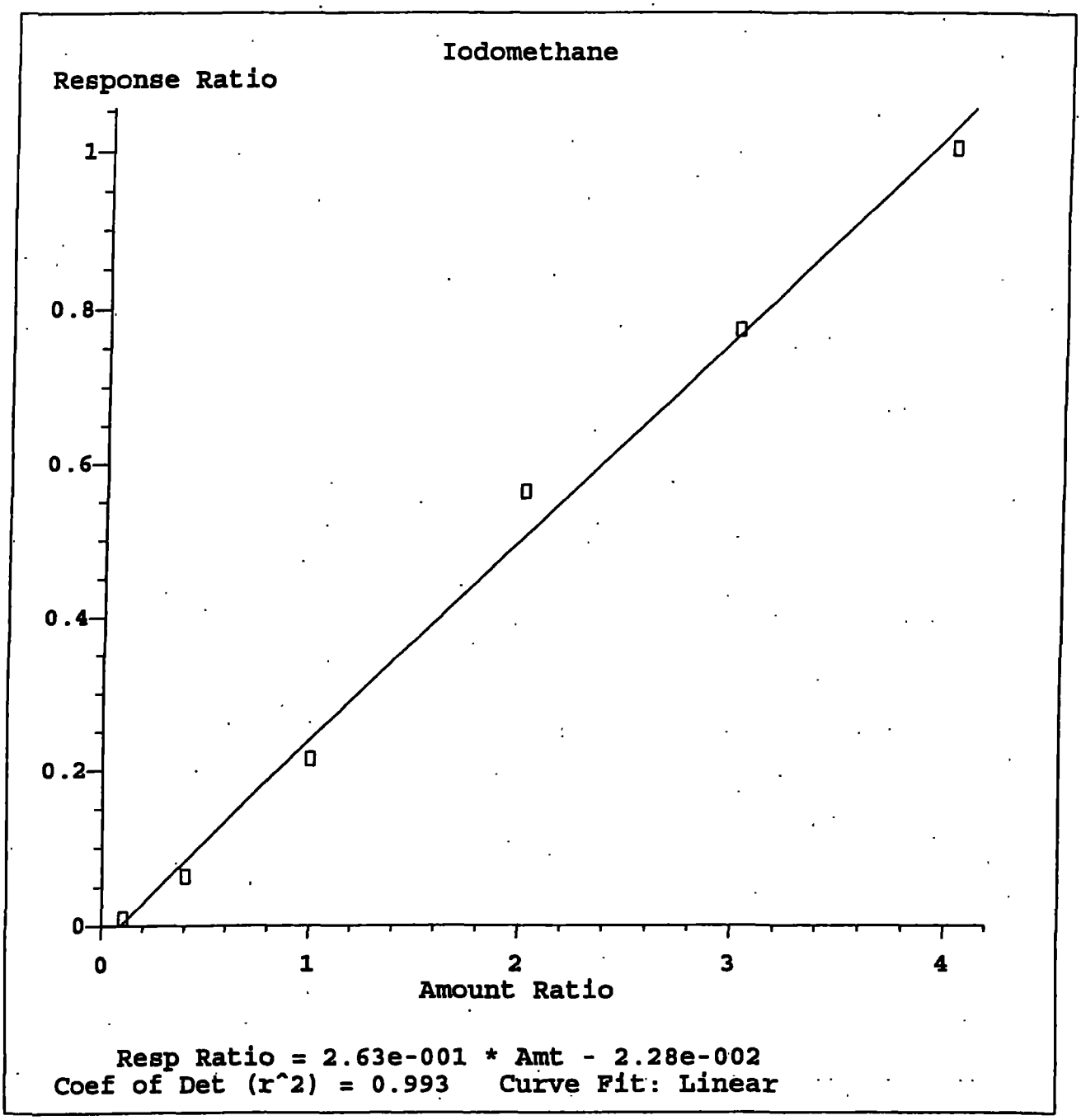
(#) = Out of Range ### Number of calibration levels exceeded format ###

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

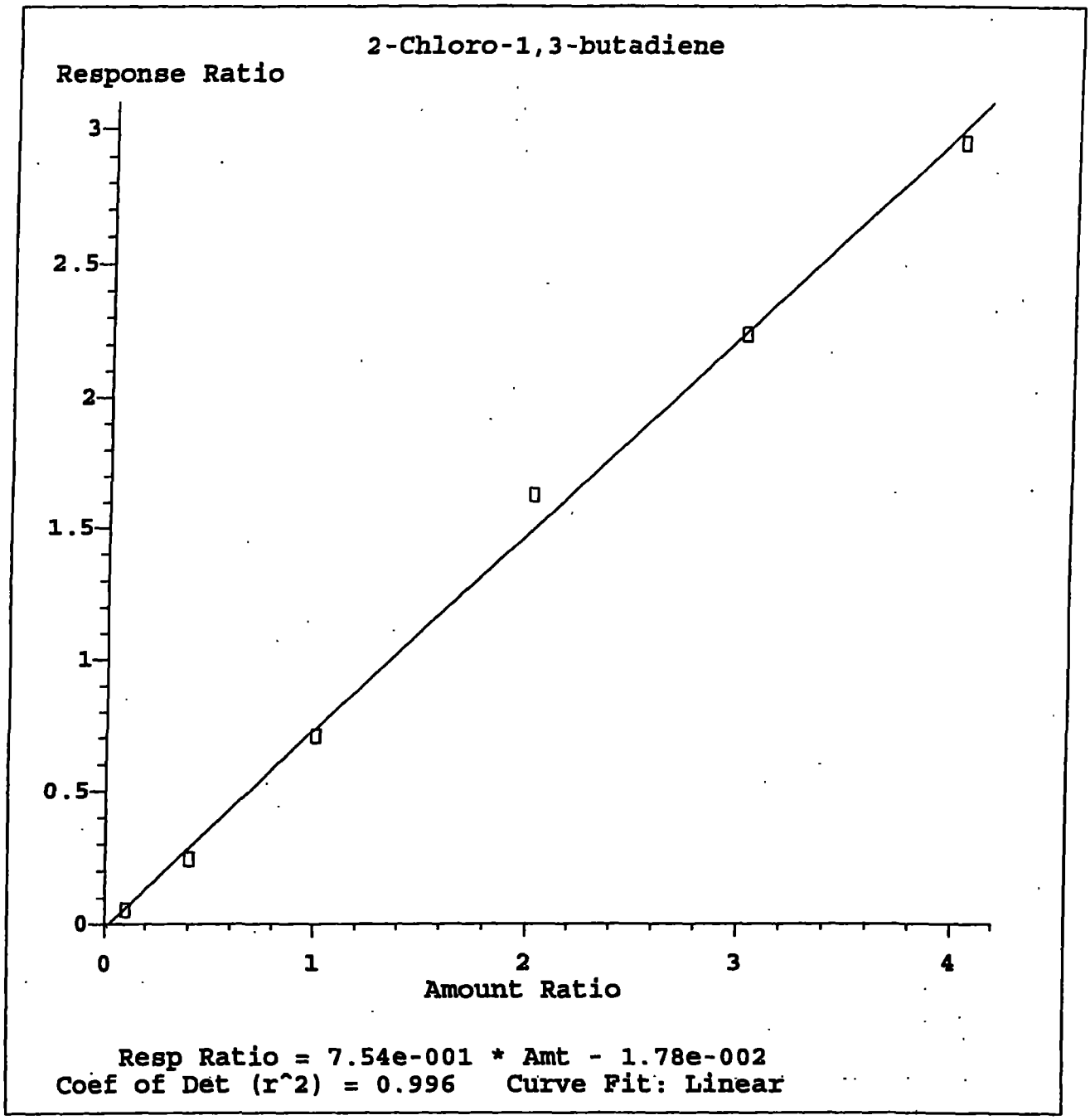
Calibration Files
1 =B8386.D 5 =B8387.D 20 =B8388.D
50 =B8389.D 100 =B8390.D 150 =B8391.D

| | 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 |
| 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 |

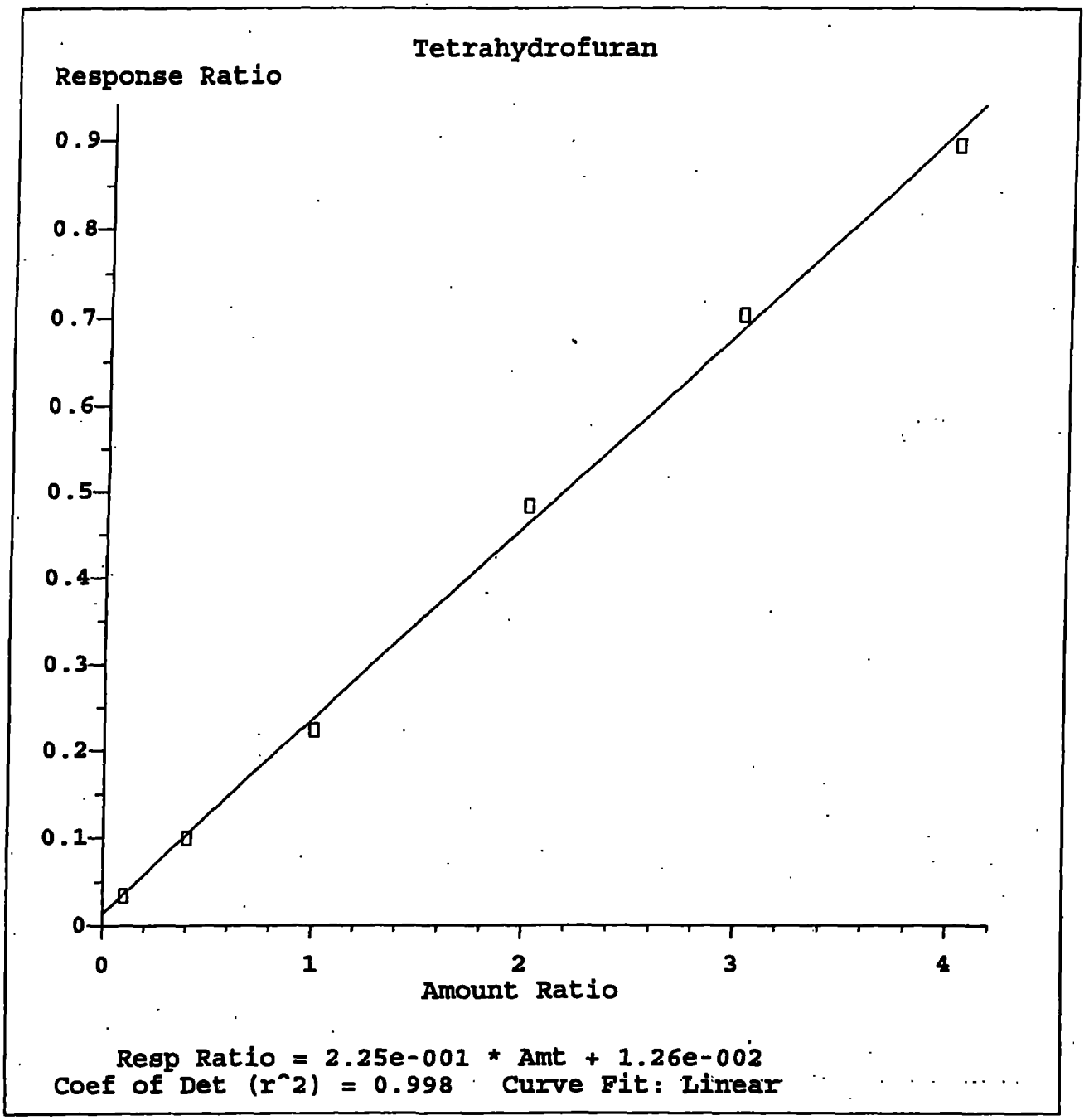
(#) = Out of Range ### Number of calibration levels exceeded format ###



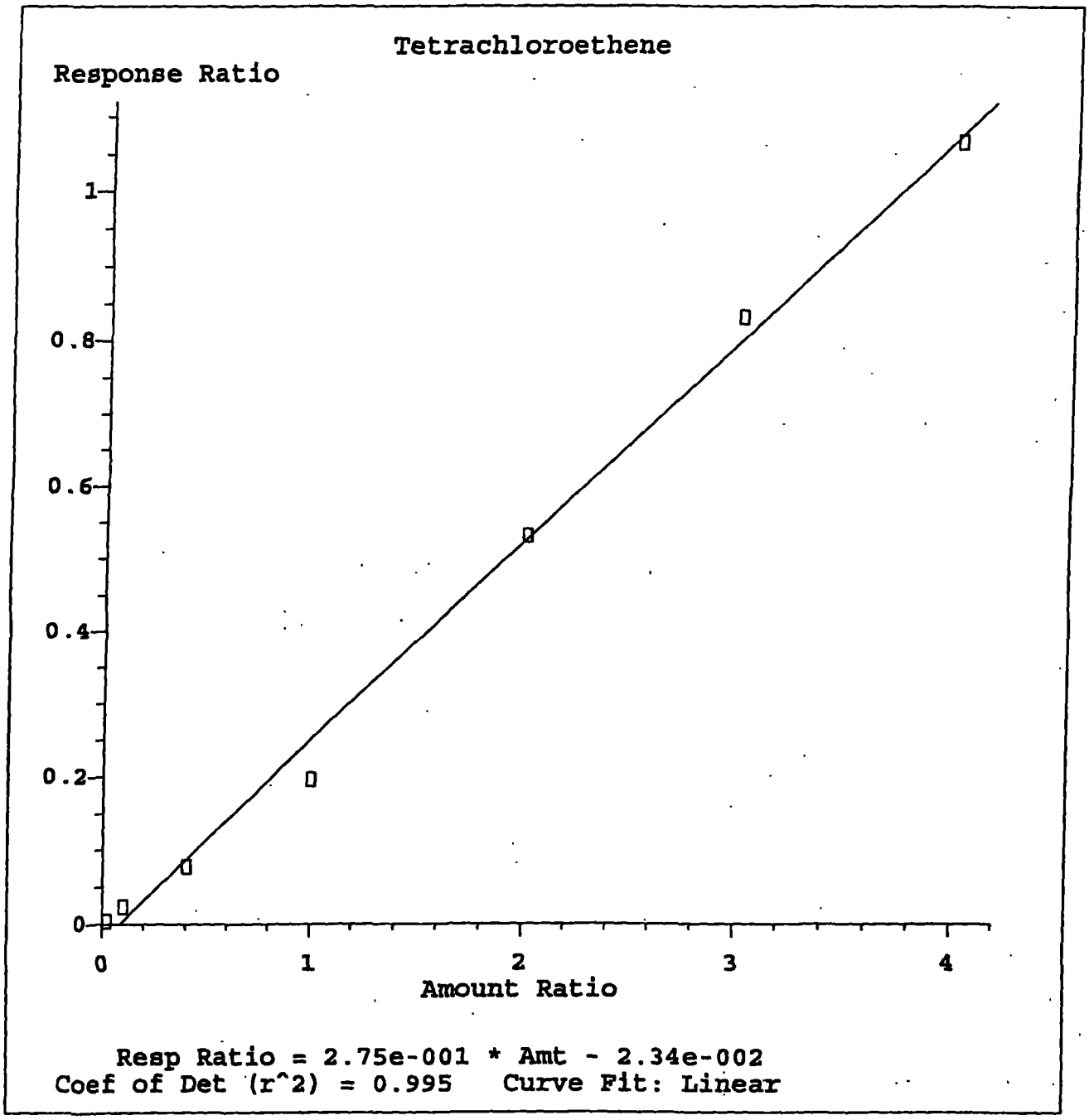

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:14:12 2001



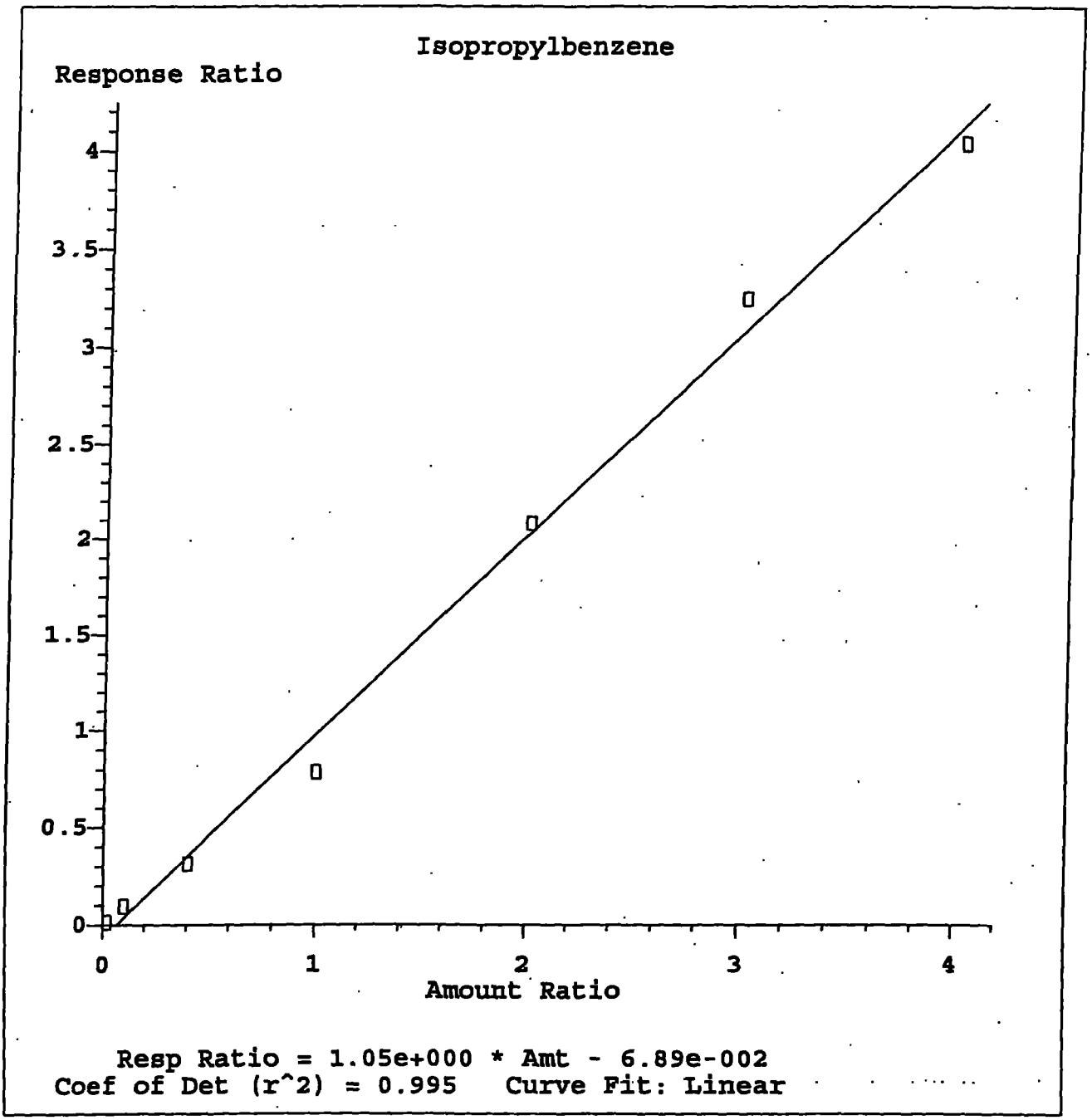

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:18:11 2001



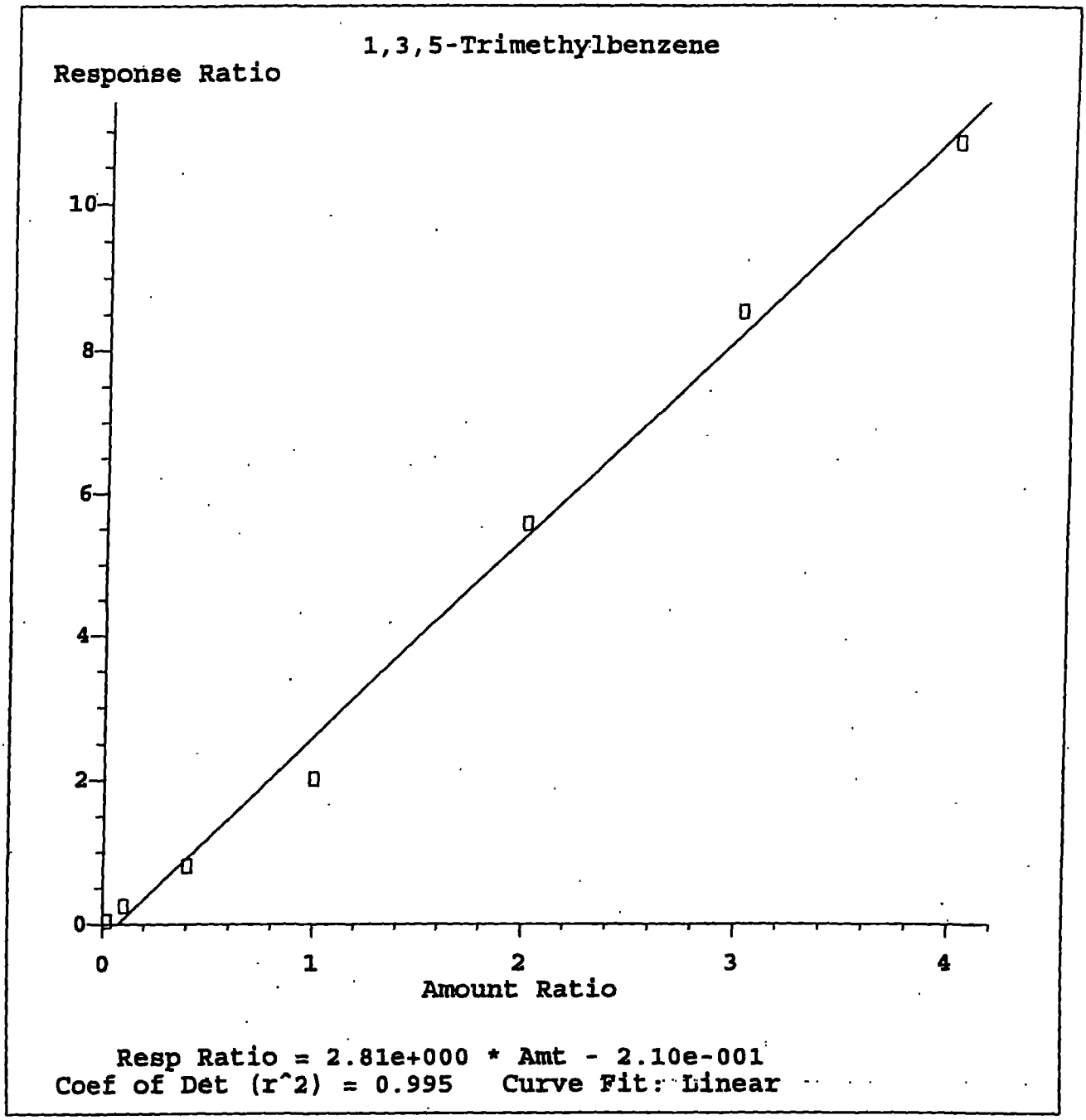

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:18:22 2001



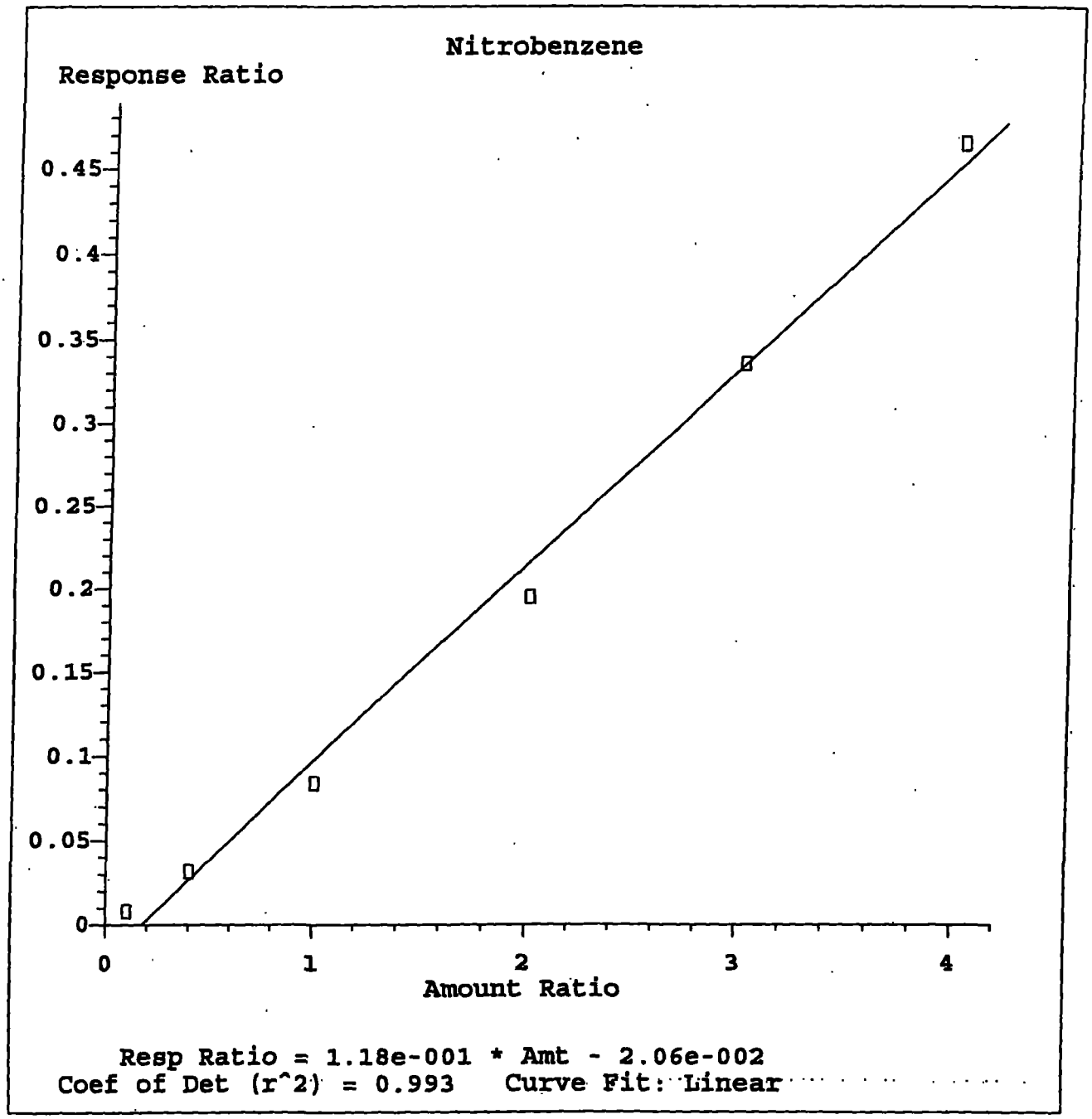

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:18:46 2001



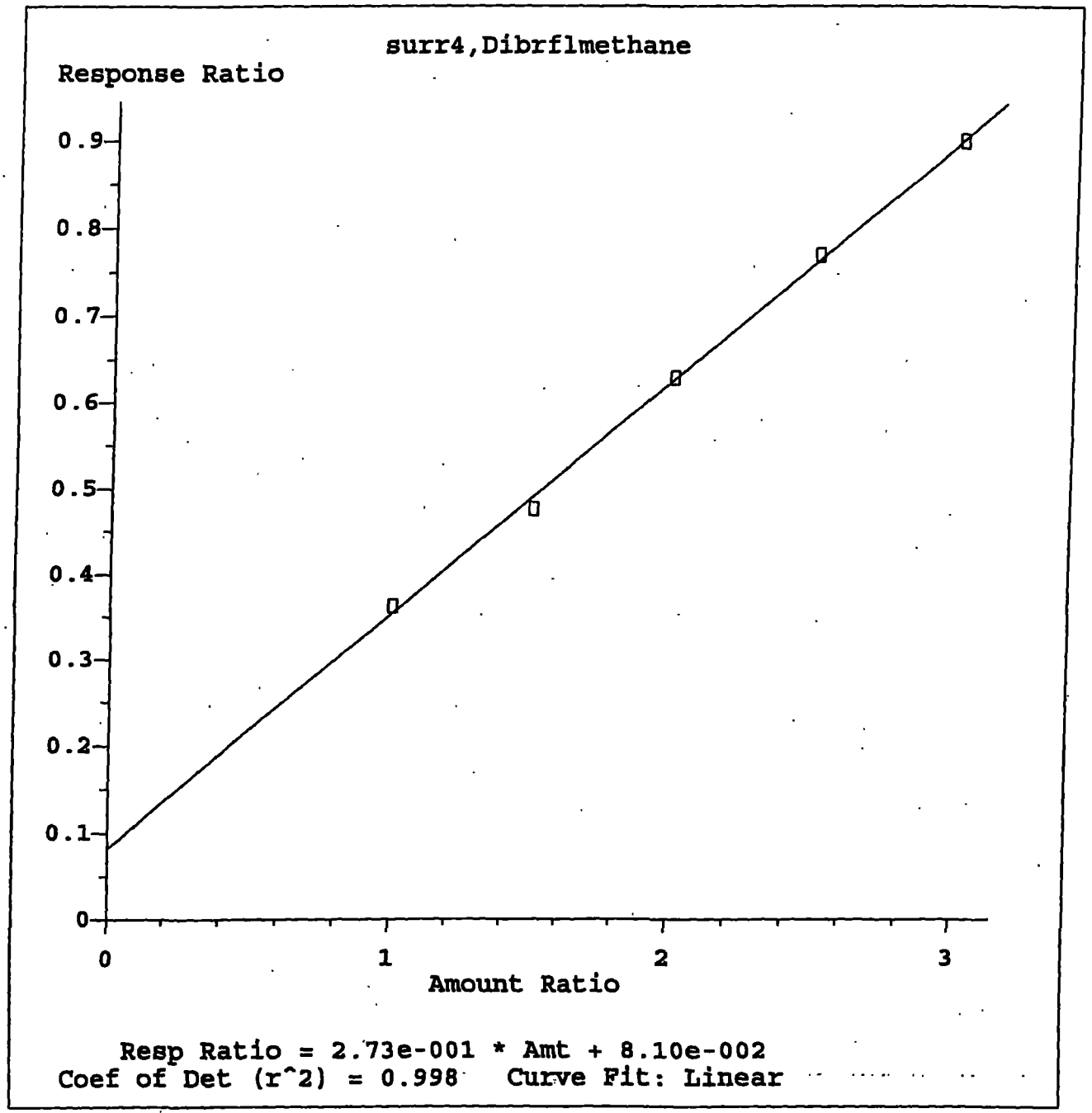

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:01 2001



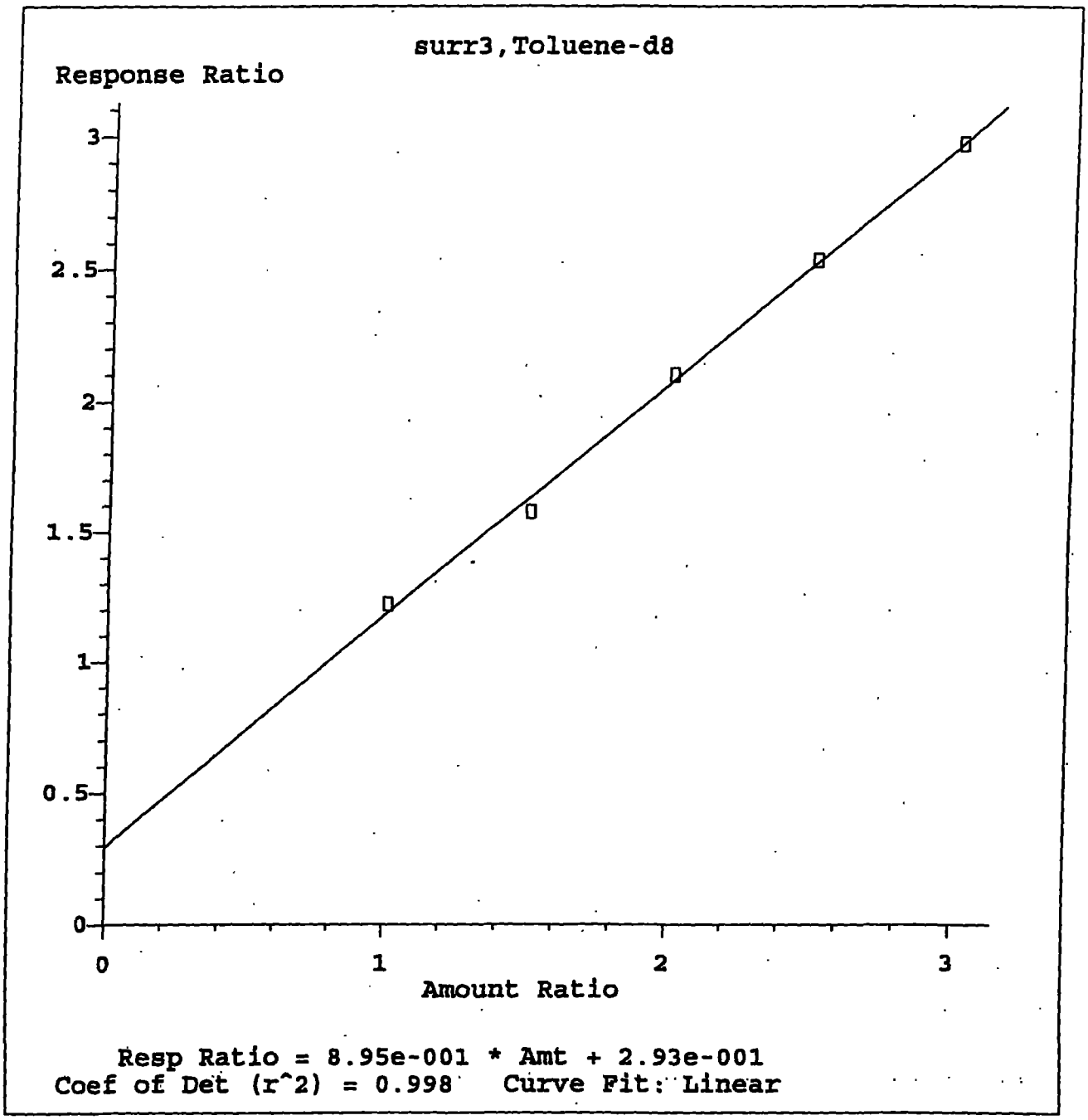

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:15 2001



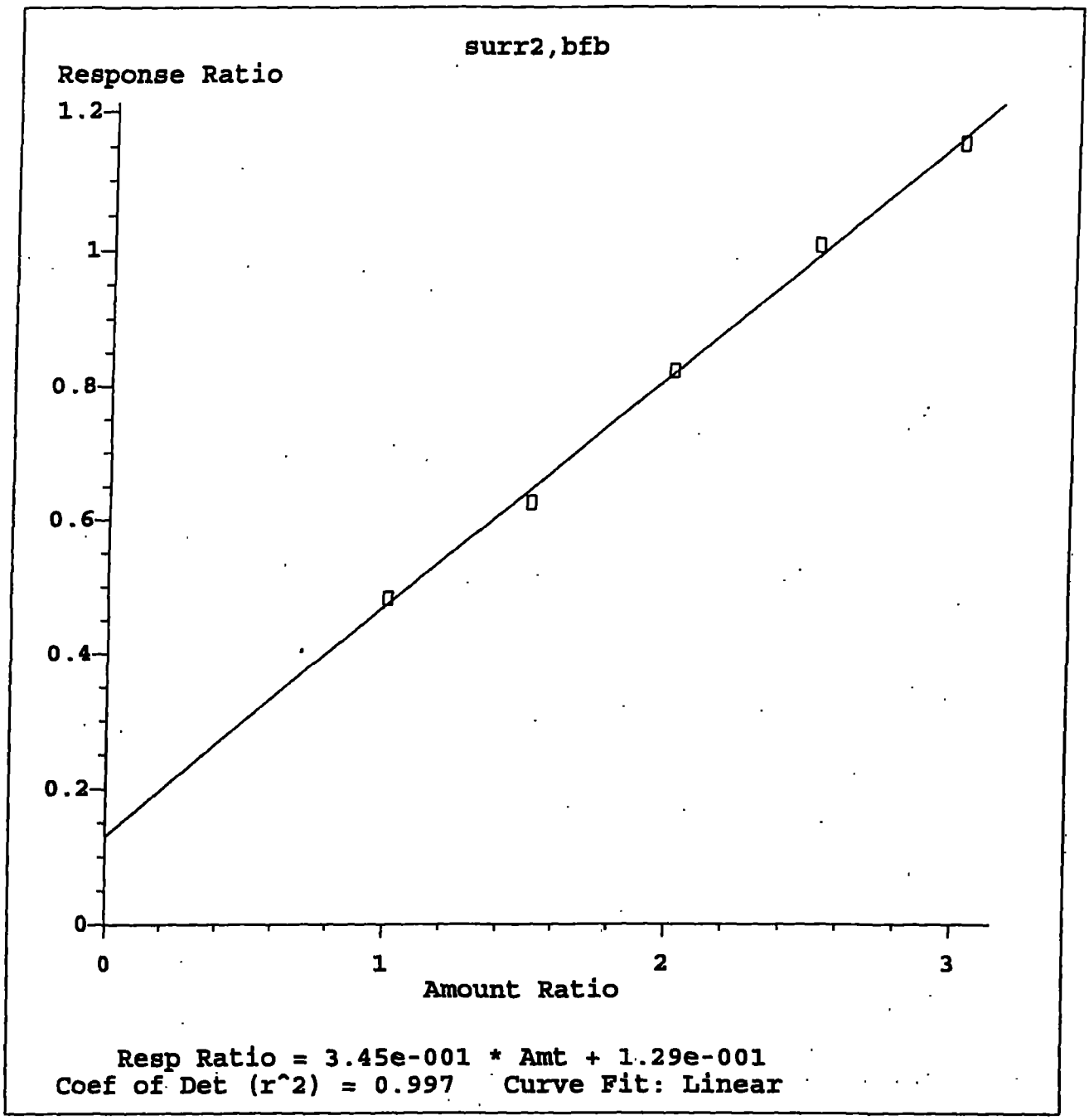

Method Name: J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Calibration Table Last Updated: Mon Dec 17 15:19:29 2001




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
cq 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 |
| ) Vinyl Chloride | 2.00 | 62 | 5814 | 0.96 | ppb | | 89 |
| ) 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~~ | ~~7.30~~ | ~~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 |
| .) 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



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Quantitation Report

a 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 |
| | 2-Chloroethylvinyl Ether | 10.37 | 63 | 6650 | 1.14 | ppb | # | 82 |
| | 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 |
| ) | 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

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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 |
|---|---|---|---|---|---|---|---|
| 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 |

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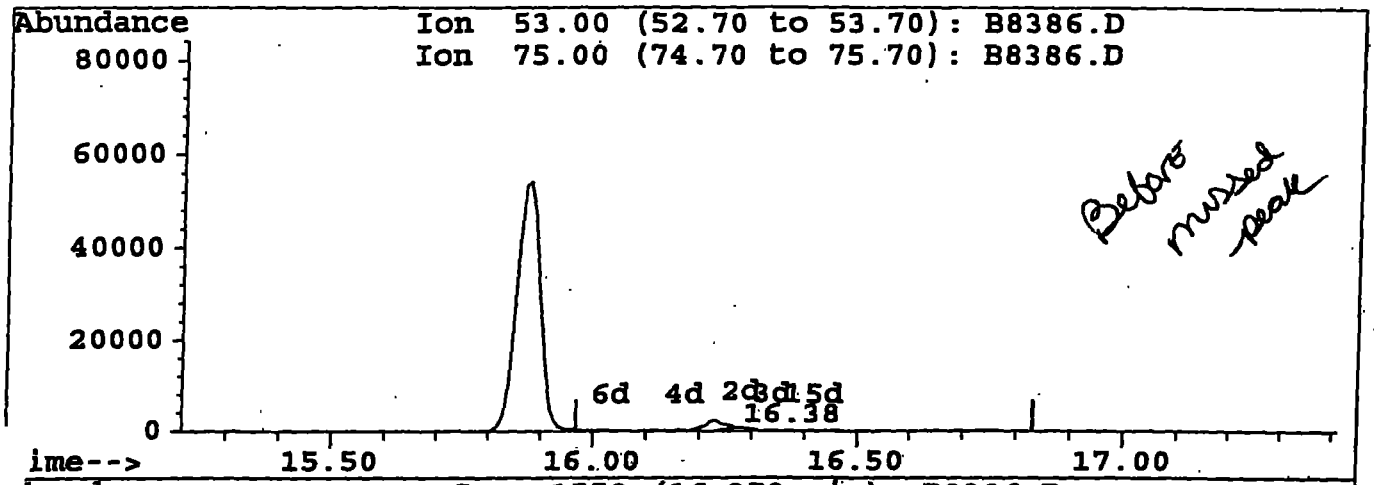
(#) = qualifier out of range (m) = manual integration

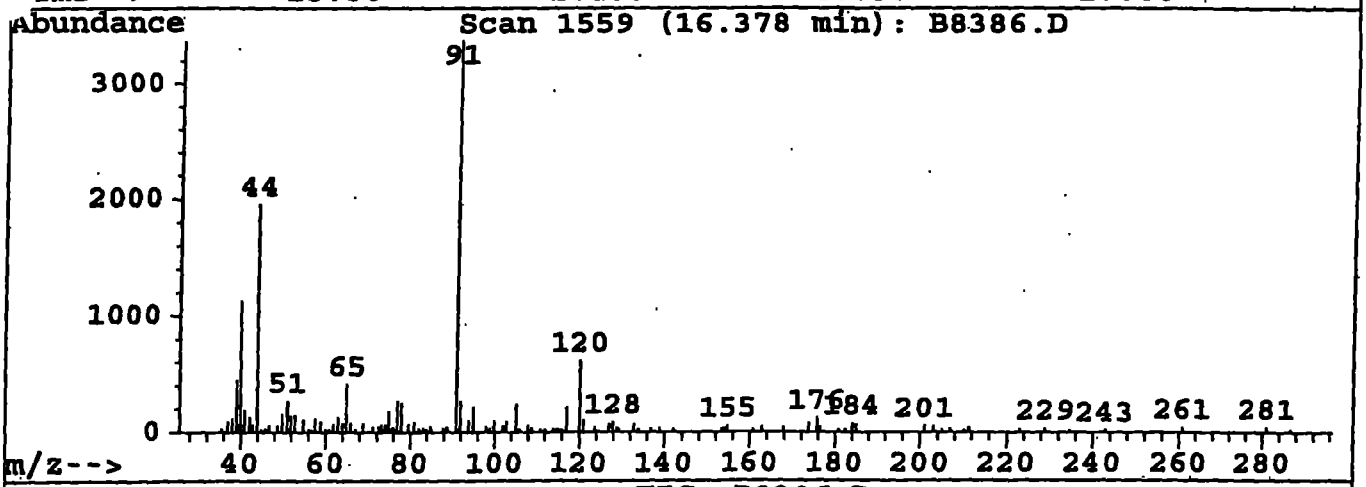
Quantitation Report

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




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 |

12/17

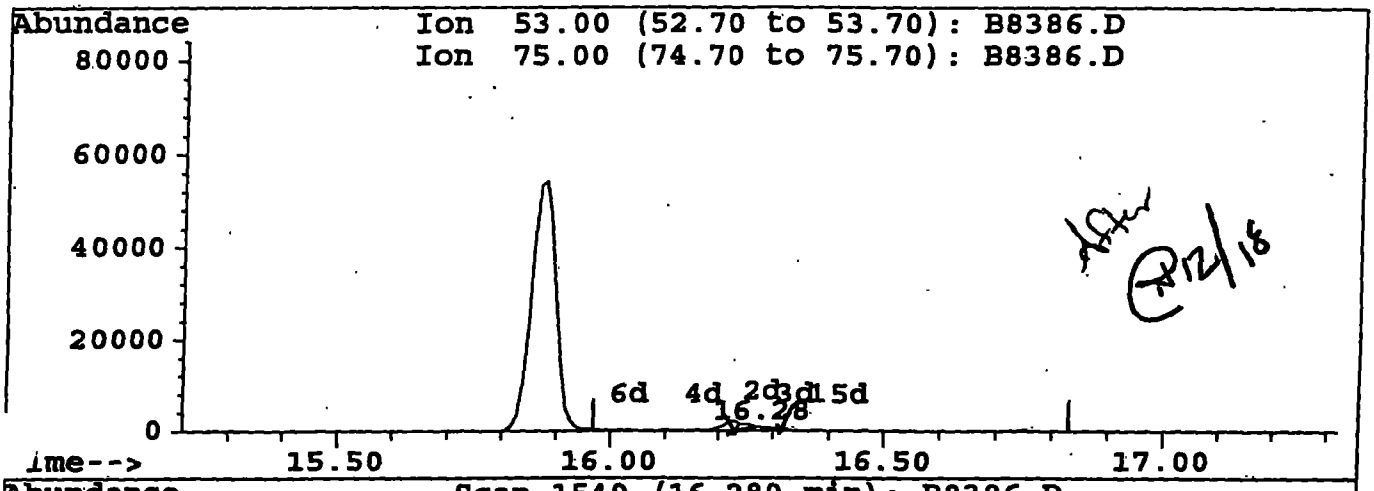


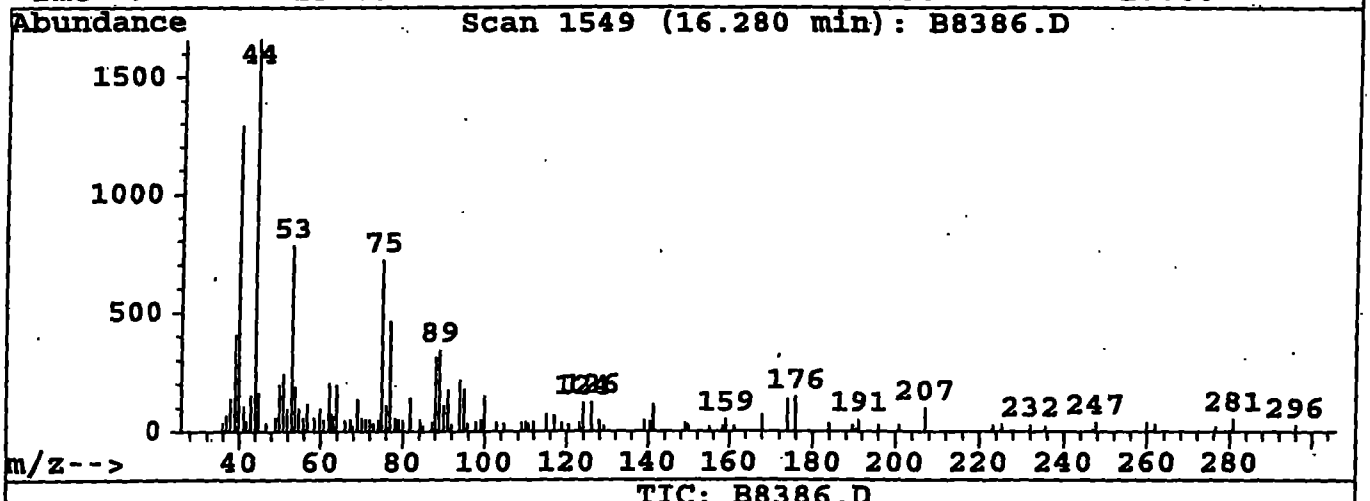
Mon Dec 17 11:34:41 2001

# 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



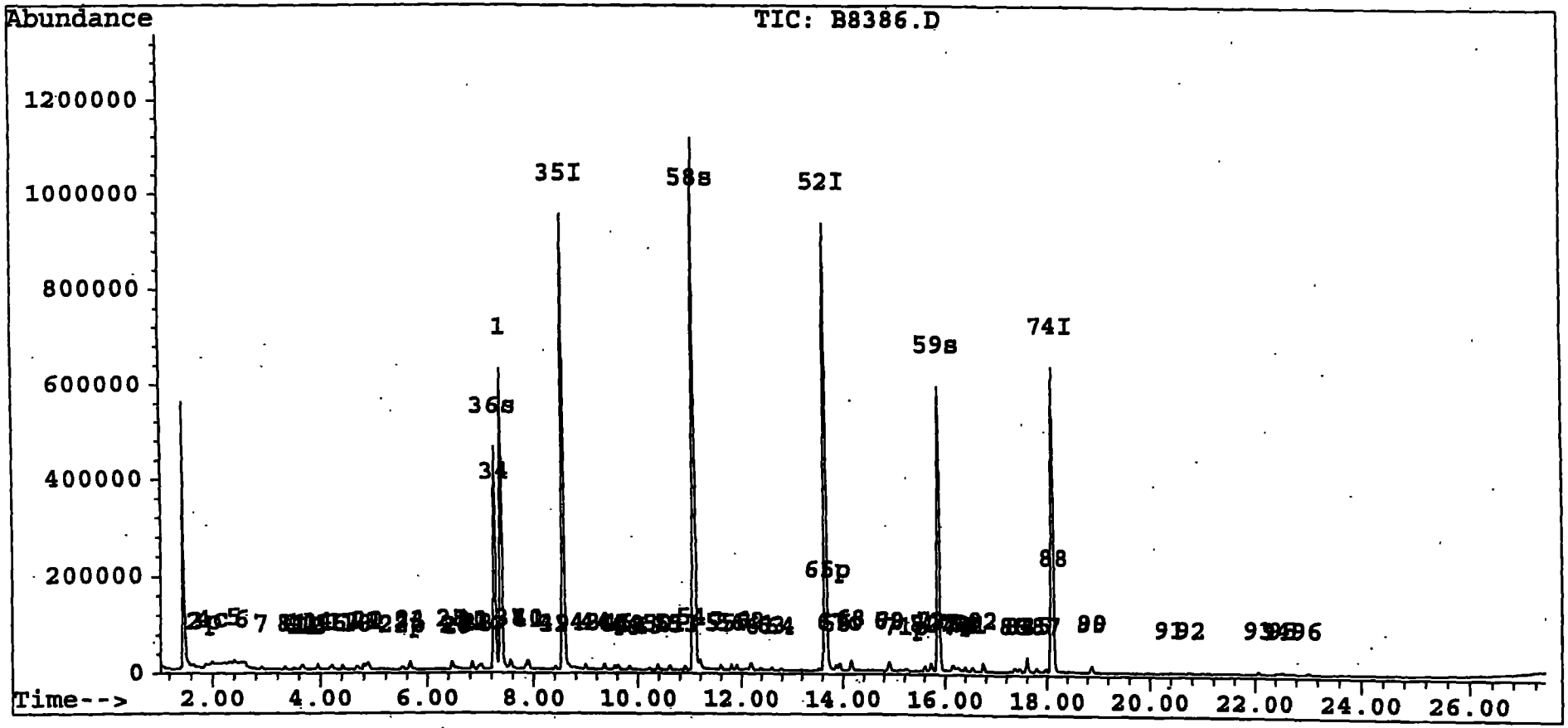

TIC: B8386.D

(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  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



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 |
| 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 |
| 31) 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 |

97

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

Quantitation Report

ta File : J:\ACQUDATA\MSVOA3\DATA\121701\B8387.D Vial: 5
q 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 |
| [illegible]) | 2-Chloroethylvinyl Ether | 10.38 | 63 | 28624 | 4.99 | ppb | | 100 |
| | 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 |
| ) | 1,3,5-Trimethylbenzene | 15.61 | 105 | 86647 | 5.23 | ppb | | 97 |
| .) | 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 |

98

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

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 |
|---|---|---|---|---|---|---|---|
| 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 |



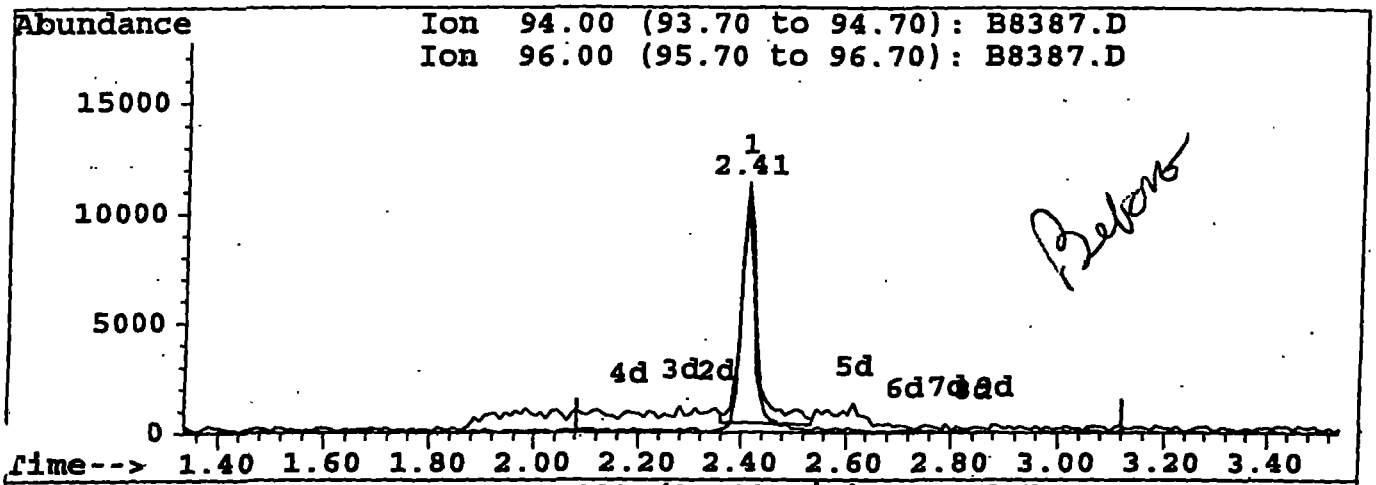
(#) = qualifier out of range (m) = manual integration

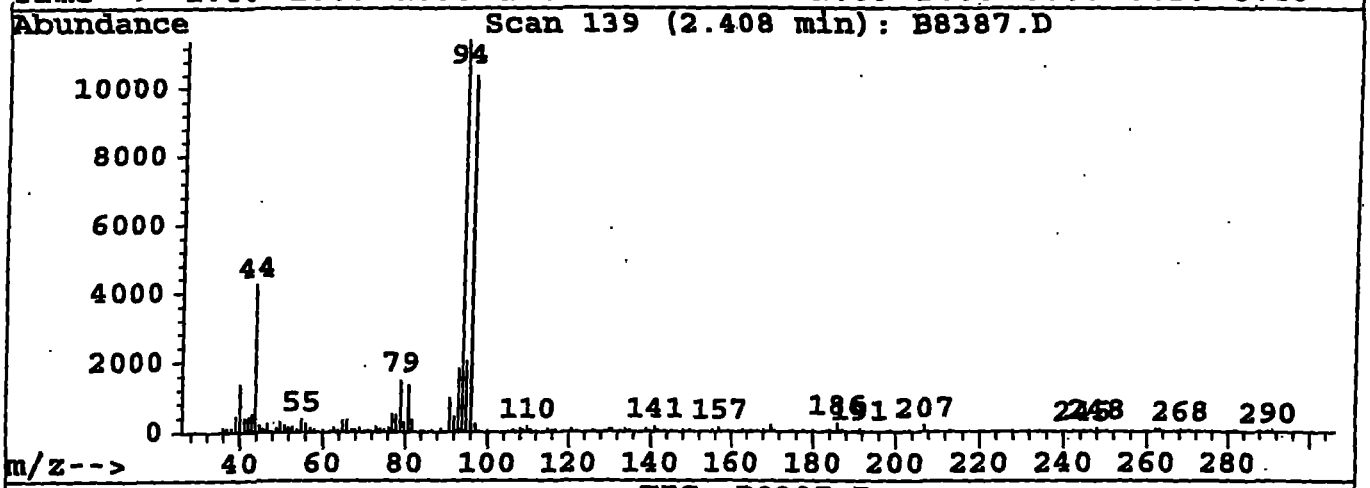
Quantitation Report

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 |



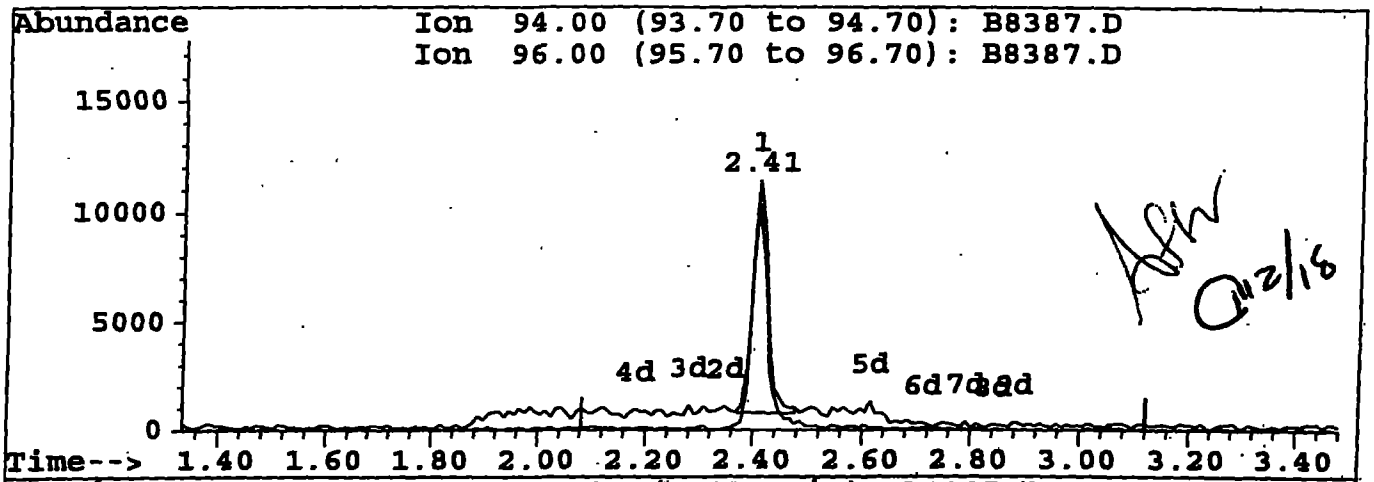
Mon Dec 17 15:27:50 2001

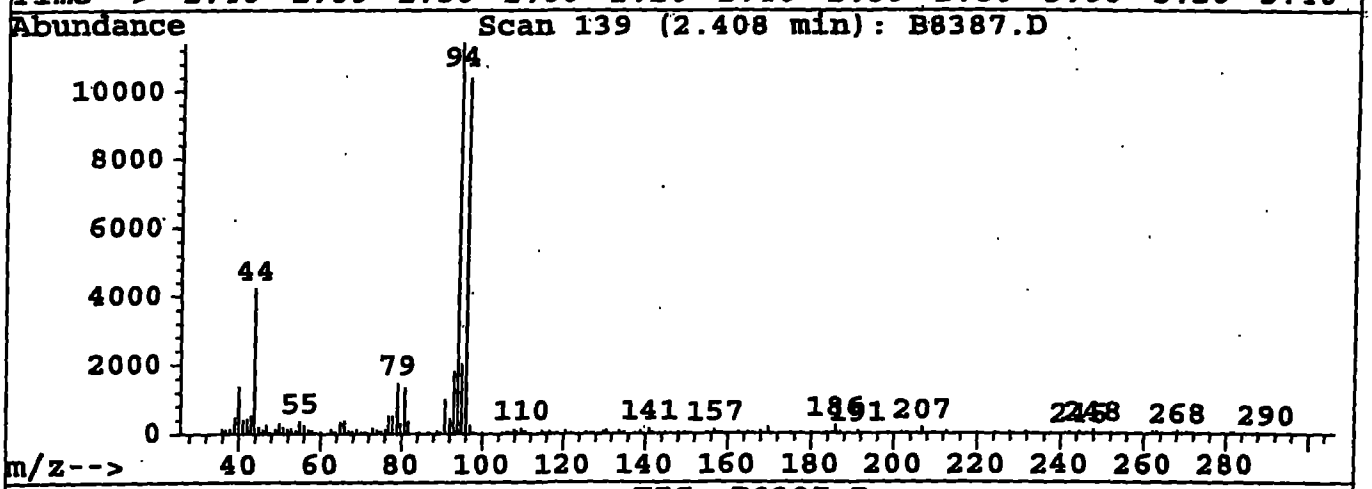
# Quantitation Report

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

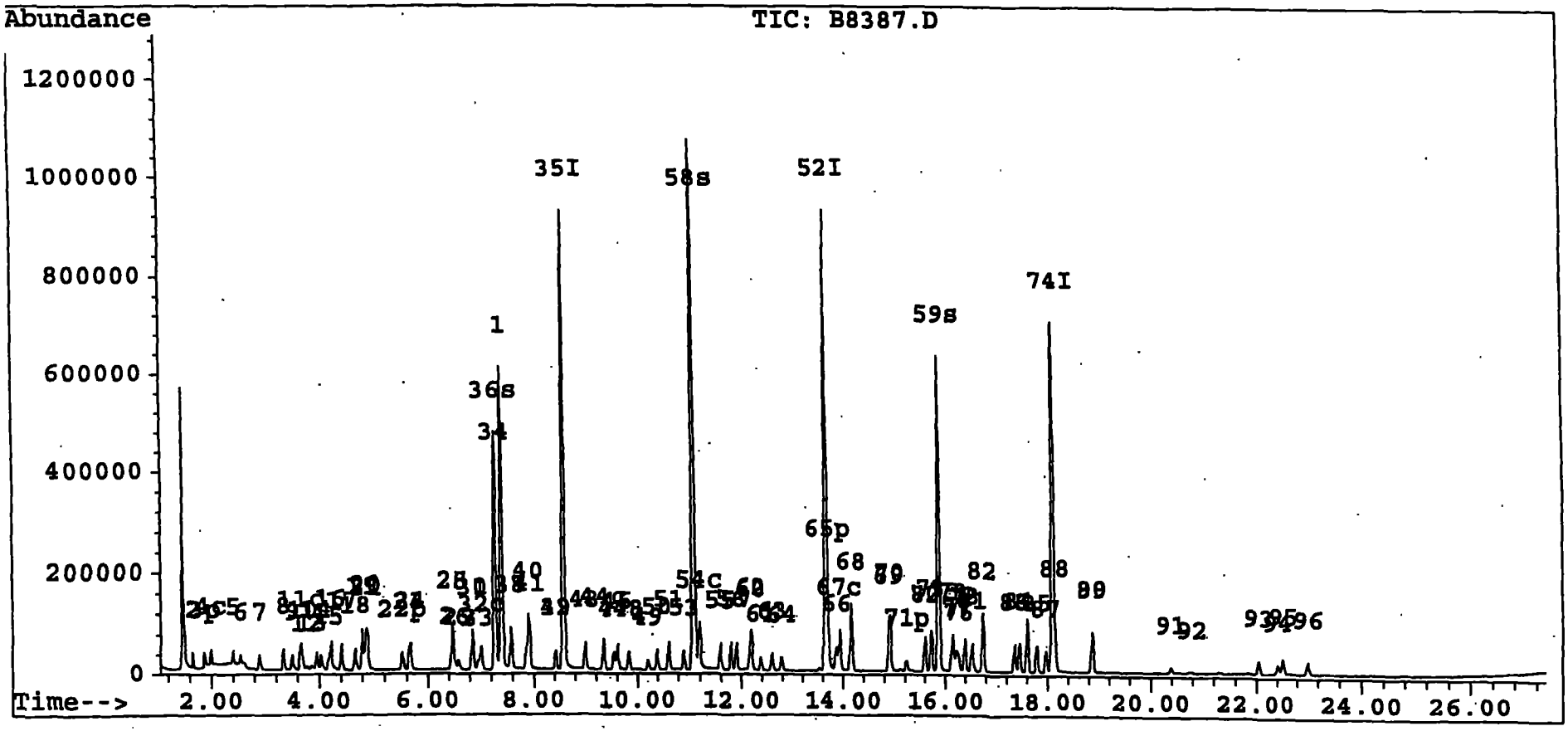
(5) Bromomethane
2.41min 7.11ppb m
response 20672

| 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 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

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






202

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

| 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 |
| Chloromethane | 1.88 | 50 | 130322 | 18.29 | ppb | | 98 |
| 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 |
| 31) 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 |
| [illegible] 2-Chloroethylvinyl Ether | 10.39 | 63 | 98797 | 17.82 | ppb | 92 |
| cis-1,3-Dichloropropene | 10.62 | 75 | 187501 | 19.47 | ppb | 95 |
| [illegible] 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 |
| [illegible]) 1,3,5-Trimethylbenzene | 15.61 | 105 | 280469 | 16.31 | ppb | 99 |
| [illegible]) 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 |

104

(#) = 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

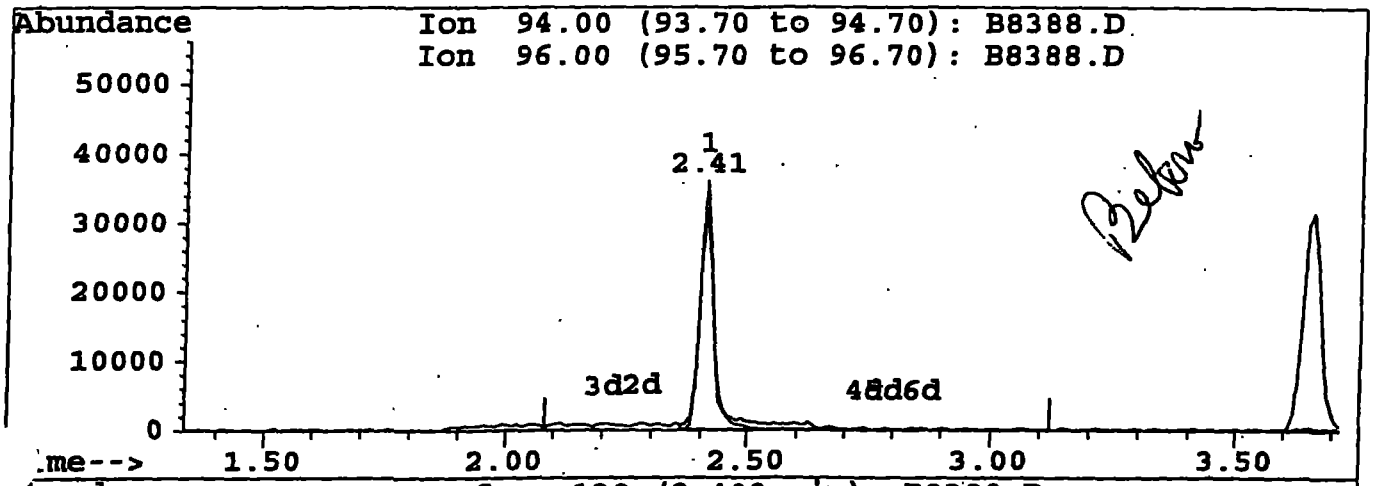
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 15:28:12 2001
Response via : Multiple Level Calibration

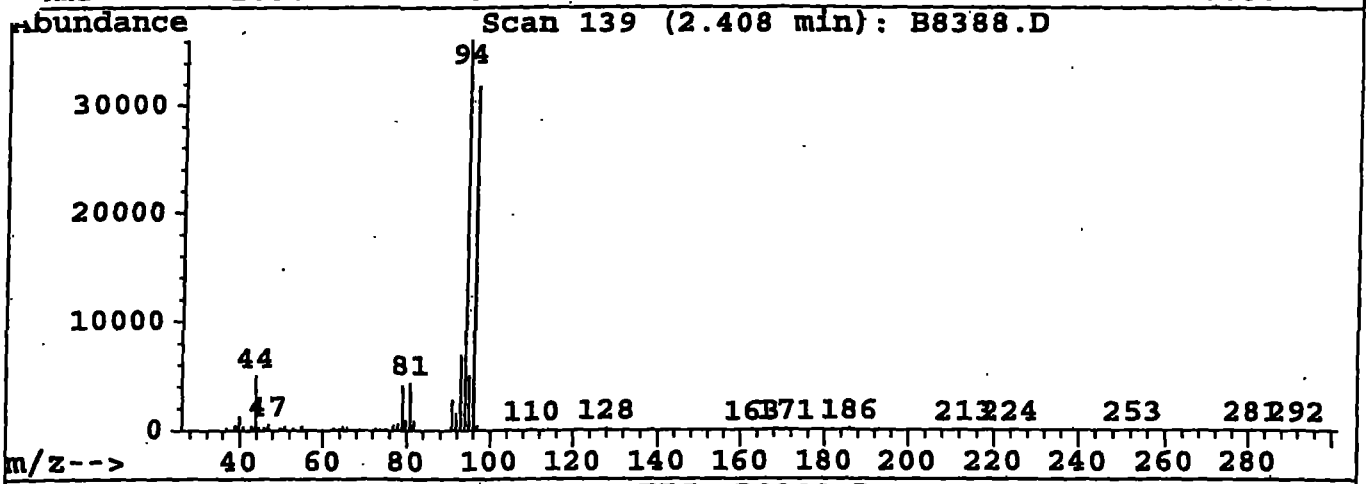
| Compound | R.T. | QIon | Response | Conc Unit | Qvalue |
|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 17.37 | 119 | 161372 | 16.31 ppb | 97 |
| 87) 1,3-Dclbenz | 17.98 | 146 | 116883 | 17.25 ppb | 98 |
| 88) 1,4-Dclbenz | 18.16 | 146 | 130389 | 17.27 ppb | 97 |
| 89) n-Butylbenzene | 18.89 | 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 |

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 12:43 19101

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 |



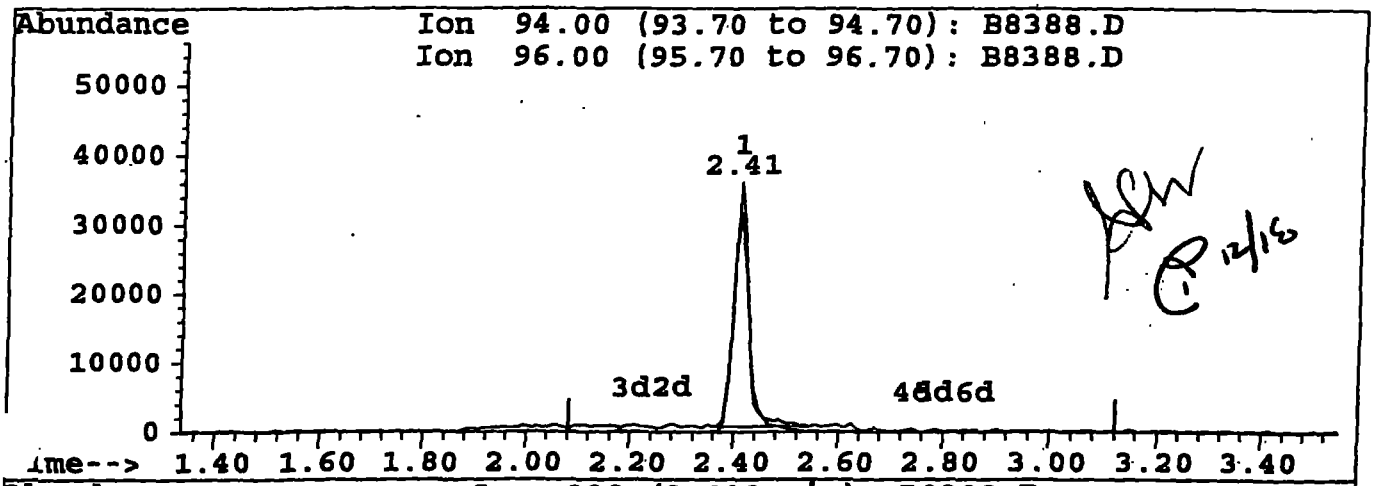
Mon Dec 17 15:36:12 2001

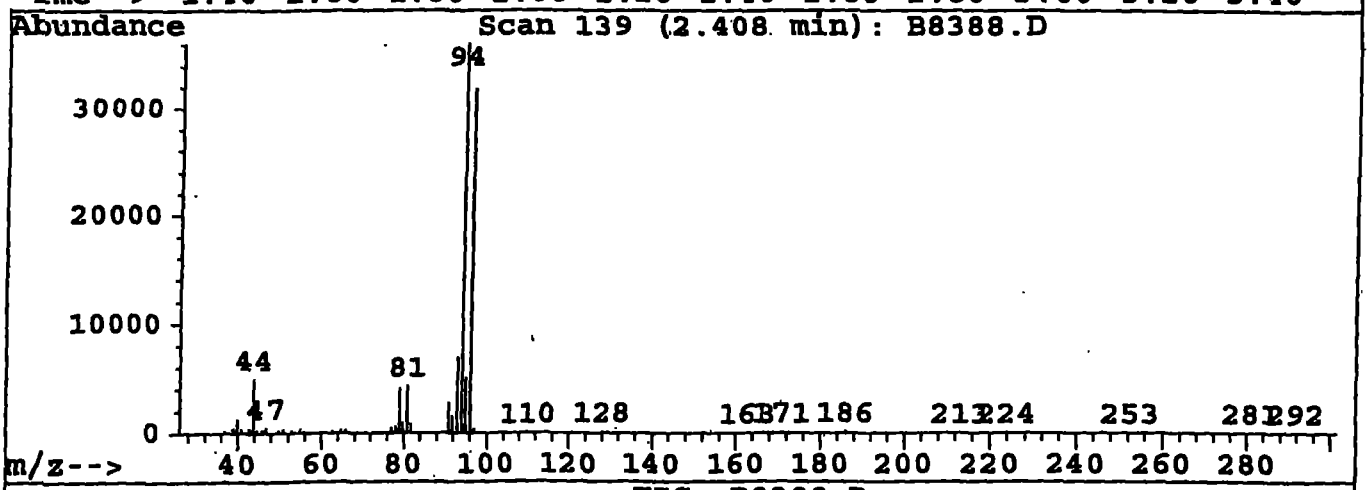
Quantitation Report

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 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

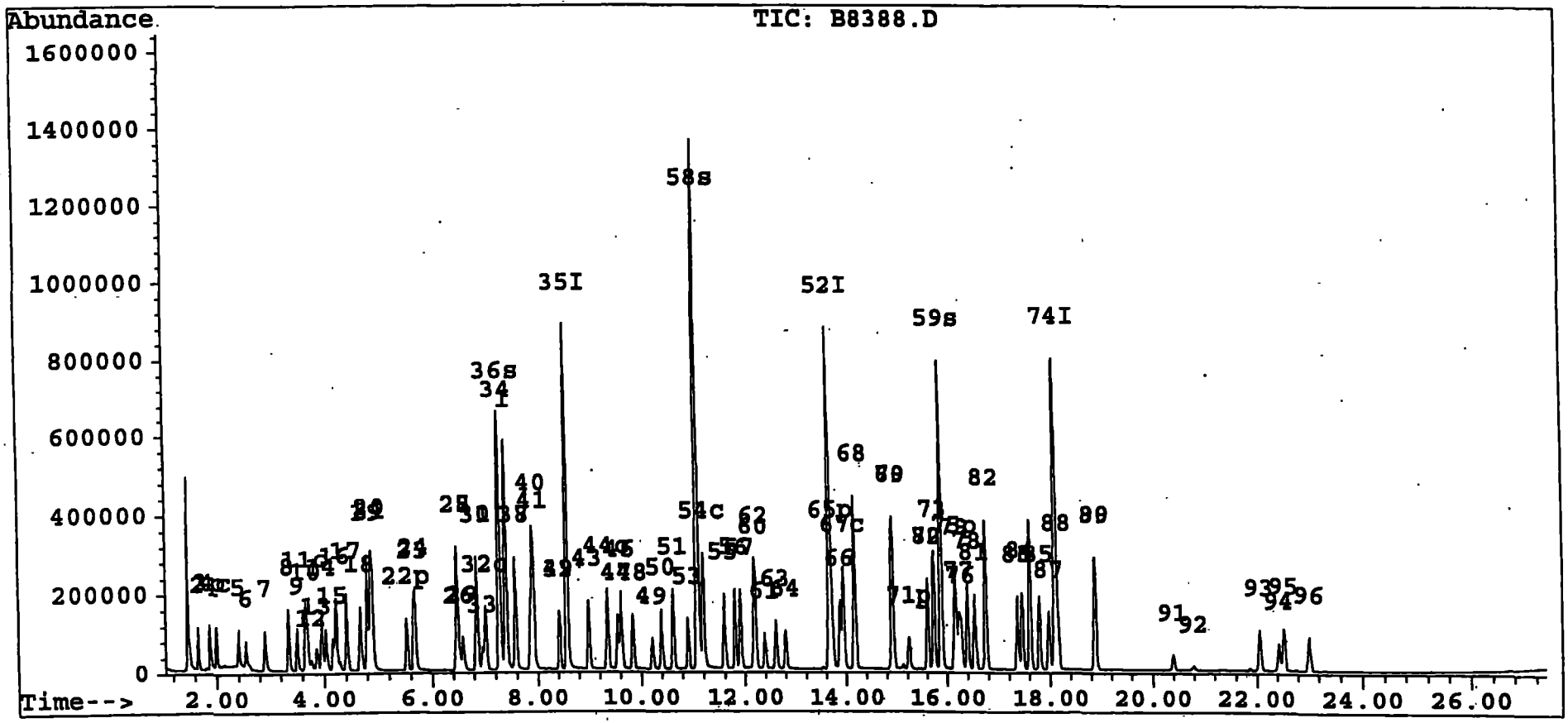
| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 96.00 | 90.30 | 87.91 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



Mon Dec 17 15:36:33 2001

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



# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D  Vial: 7
:q 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) |
|---|---|---|---|---|---|---|---|
| 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 |
| .0 | | FREON 113 | 0.142 | 0.118 | 17.1 | 100 | 0.00 |
| .1 | c | 1,1-Diclethene | 0.371 | 0.326 | 12.0 | 100 | 0.00 |
| .2 | | Acetone | 0.215 | 0.201 | 6.5 | 100 | 0.00 |
| .3 | | Iodomethane | 0.209 | 0.214 | -2.4 | 100 | 0.00 |
| .4 | | Carbon Disulfide | 1.431 | 1.448 | -1.2 | 100 | 0.00 |
| .5 | | Acetonitrile | 0.024 | 0.024 | -0.8 | 100 | 0.00 |
| .6 | | Allyl Chloride | 0.230 | 0.204 | 11.6 | 100 | 0.00 |
| .7 | | Methylene Chloride | 0.505 | 0.442 | 12.5 | 100 | 0.00 |
| .8 | | TBA | 0.059 | 0.056 | 4.8 | 100 | 0.00 |
| .9 | | Acrylonitrile | 0.263 | 0.254 | 3.4 | 100 | 0.00 |
| 0 | | Methyl-t-Butyl Ether | 1.432 | 1.318 | 8.0 | 100 | 0.00 |
| 1 | | trans-1,2-Dichloroethene | 0.460 | 0.404 | 12.1 | 100 | 0.00 |
| 2 | p | 1,1-Diclethane | 0.821 | 0.731 | 11.0 | 100 | 0.01 |
| 3 | | Vinyl Acetate | 1.103 | 1.089 | 1.3 | 100 | 0.00 |
| 4 | | 2-Chloro-1,3-butadiene | 0.688 | 0.705 | -2.4 | 100 | 0.01 |
| 5 | | 2,2-Dichloropropane | 0.580 | 0.503 | 13.2 | 100 | 0.00 |
| 6 | | 2-Butanone | 0.383 | 0.388 | -1.4 | 100 | 0.00 |
| 7 | | Ethyl Acetate | 0.000 | 0.000 | 0.0 | 100 | 0.00 |
| 8 | | cis-1,2-Dichloroethene | 0.548 | 0.477 | 13.0 | 100 | 0.00 |
| 9 | | Propionitrile | 0.099 | 0.093 | 6.0 | 100 | 0.00 |
| 0 | | Methacrylonitrile | 0.256 | 0.237 | 7.7 | 100 | 0.00 |
| 1 | | Bromochloromethane | 0.271 | 0.238 | 12.2 | 100 | 0.00 |
| 2 | c | Chloroform | 0.787 | 0.696 | 11.6 | 100 | 0.00 |
| 3 | | Tetrahydrofuran | 0.252 | 0.224 | 11.4 | 100 | 0.00 |
| 4 | | 1,1,1-Trichloroethane | 0.581 | 0.508 | 12.5 | 100 | 0.00 |
| 5 | I | 1,4 - Difluorobenzene | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 6 | s | surr4,Dibrflmethane | 0.321 | 0.363 | -13.1 | 100 | 0.00 |
| 3 | | Carbontetrachloride | 0.262 | 0.221 | 15.8 | 100 | 0.00 |
| 3 | | 1,1-Dichloropropene | 0.314 | 0.266 | 15.3 | 100 | 0.00 |
| 9 | | Iso-Butyl Alcohol | 0.012 | 0.010 | 18.1 | 100 | 0.00 |
| 0 | | 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
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) |
|---|---|---|---|---|---|---|---|
| 2 | | N-Heptane | 0.232 | 0.189 | 18.6 | 100 | 0.00 |
| 3 | | Trichloroethene | 0.240 | 0.210 | 12.6 | 100 | 0.00 |
| 4 | c | 1,2-Diclpropane | 0.295 | 0.263 | 10.7 | 100 | 0.00 |
| 5 | | Methyl Methacrylate | 0.213 | 0.200 | 5.8 | 100 | 0.00 |
| 5 | | 1,4-Dioxane | 0.003 | 0.003 | 6.0 | 100 | 0.00 |
| 7 | | Dibromomethane | 0.192 | 0.177 | 7.8 | 100 | 0.00 |
| 8 | | Bromodichloromethane | 0.328 | 0.293 | 10.5 | 100 | 0.01 |
| 9 | | 2-Nitropropane | 0.109 | 0.102 | 5.9 | 100 | 0.00 |
| 0 | | 2-Chloroethylvinyl Ether | 0.243 | 0.236 | 2.8 | 100 | 0.00 |
| 1 | | cis-1,3-Dichloropropene | 0.429 | 0.385 | 10.3 | 100 | 0.00 |
| 2 | | d5 - Chlorobenzene | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 3 | | 4-Methyl-2-Pentanone | 0.504 | 0.513 | -1.9 | 100 | 0.00 |
| 4 | c | Toluene | 1.048 | 0.916 | 12.6 | 100 | 0.00 |
| 5 | | trans-1,3-Dichloropropene | 0.472 | 0.439 | 7.1 | 100 | 0.00 |
| 5 | | Ethyl Methacrylate | 0.461 | 0.437 | 5.1 | 100 | 0.00 |
| 7 | | 1,1,2-Trichloroethane | 0.265 | 0.247 | 6.6 | 100 | 0.00 |
| 8 | s | surr3,Toluene-d8 | 1.066 | 1.220 | -14.4 | 100 | 0.00 |
| 9 | s | surr2,bfb | 0.420 | 0.483 | -15.0 | 100 | 0.00 |
| 0 | | Tetrachloroethene | 0.234 | 0.196 | 16.2 | 100 | 0.00 |
| 1 | | 2-Hexanone | 0.341 | 0.352 | -3.4 | 100 | 0.00 |
| 2 | | 1,3-Dichloropropane | 0.573 | 0.531 | 7.2 | 100 | 0.00 |
| 3 | | Dibromochloromethane | 0.318 | 0.293 | 7.8 | 100 | 0.01 |
| 4 | | 1,2-Dibromoethane | 0.342 | 0.318 | 7.2 | 100 | 0.01 |
| 5 | p | Chlorobenzene | 0.678 | 0.594 | 12.4 | 100 | 0.00 |
| 6 | | 1,1,1,2-Tetrachloroethane | 0.254 | 0.223 | 12.2 | 100 | 0.00 |
| 7 | c | Ethylbenzene | 1.061 | 0.918 | 13.4 | 100 | 0.00 |
| 8 | | (m+p)Xylene | 0.376 | 0.328 | 12.7 | 100 | 0.00 |
| 9 | | o-Xylene | 0.370 | 0.330 | 10.7 | 100 | 0.01 |
| 0 | | Styrene | 0.666 | 0.588 | 11.7 | 100 | 0.00 |
| 1 | p | Bromoform | 0.210 | 0.190 | 9.2 | 100 | 0.00 |
| 2 | | Isopropylbenzene | 0.907 | 0.784 | 13.5 | 100 | 0.00 |
| 3 | | Cyclohexanone | 0.035 | 0.033 | 4.7 | 100 | 0.00 |
| 4 | I | d4 - Dichlorobenzene | 1.000 | 1.000 | 0.0 | 100 | 0.00 |
| 5 | p | 1,1,2,2-Tetrachloroethane | 1.067 | 0.946 | 11.3 | 100 | 0.01 |
| 6 | | 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 |
| 8 | | n-Propylbenzene | 2.661 | 2.273 | 14.6 | 100 | 0.01 |
| 9 | | Bromobenzene | 0.668 | 0.563 | 15.7 | 100 | 0.01 |
| 0 | | 1,3,5-Trimethylbenzene | 2.423 | 2.015 | 16.8 | 100 | 0.00 |
| 1 | | 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) |
|---|---|---|---|---|---|
| 4-Chlorotoluene | 1.924 | 1.663 | 13.6 | 100 | 0.00 |
| tert-Butylbenzene | 1.384 | 1.157 | 16.4 | 100 | 0.00 |
| 1,2,4-Trimethylbenzene | 1.594 | 1.390 | 12.8 | 100 | 0.00 |
| sec-Butylbenzene | 1.994 | 1.703 | 14.6 | 100 | 0.00 |
| p-Isopropyltoluene | 1.384 | 1.157 | 16.4 | 100 | 0.00 |
| 1,3-Dclbenz | 0.927 | 0.797 | 14.1 | 100 | 0.01 |
| 1,4-Dclbenz | 1.029 | 0.884 | 14.1 | 100 | 0.00 |
| n-Butylbenzene | 1.332 | 1.160 | 12.9 | 100 | 0.00 |
| 1,2-Dclbenz | 0.987 | 0.849 | 14.0 | 100 | 0.00 |
| 1,2-Dibromo-3-chloropropane | 0.173 | 0.156 | 9.8 | 100 | 0.00 |
| Nitrobenzene | 0.095 | 0.084 | 11.7 | 100 | -0.02 |
| 1,2,4-Tcbenzene | 0.484 | 0.429 | 11.4 | 100 | 0.00 |
| Hexachlorobt | 0.187 | 0.160 | 14.6 | 100 | 0.00 |
| Naphthalen | 1.339 | 1.250 | 6.6 | 100 | 0.00 |
| 1,2,3-Tclbenzene | 0.444 | 0.405 | 8.8 | 100 | 0.01 |
| TOTAL XYLENE | 0.000 | 0.000 | 0.0 | 100 | 0.00 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D  Vial: 7
cq 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

| 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 77 |
| 3) Chloromethane | 1.88 | 50 | 307049 | 43.28 | ppb | 98 |
| ) Vinyl Chloride | 2.00 | 62 | 251547 | 41.75 | ppb | 98 |
| ) 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 |
| 1) 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

`ta File : J:\ACQUDATA\MSVOA3\DATA\121701\B8389.D  Vial: 7
q 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 |
| 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  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

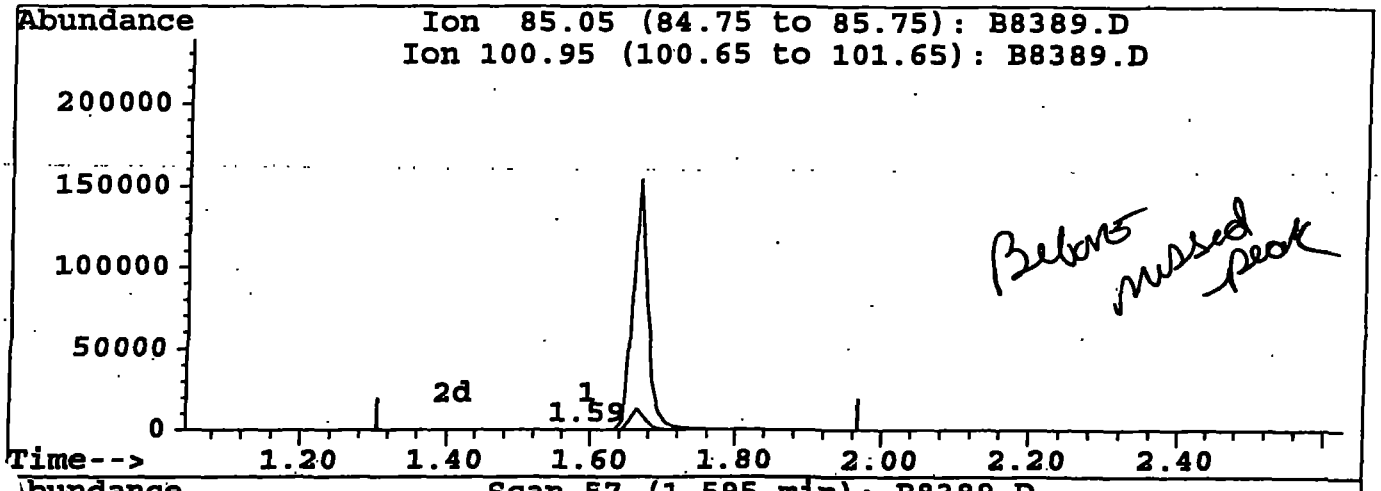
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:04:54 2001
Response via : Multiple Level Calibration

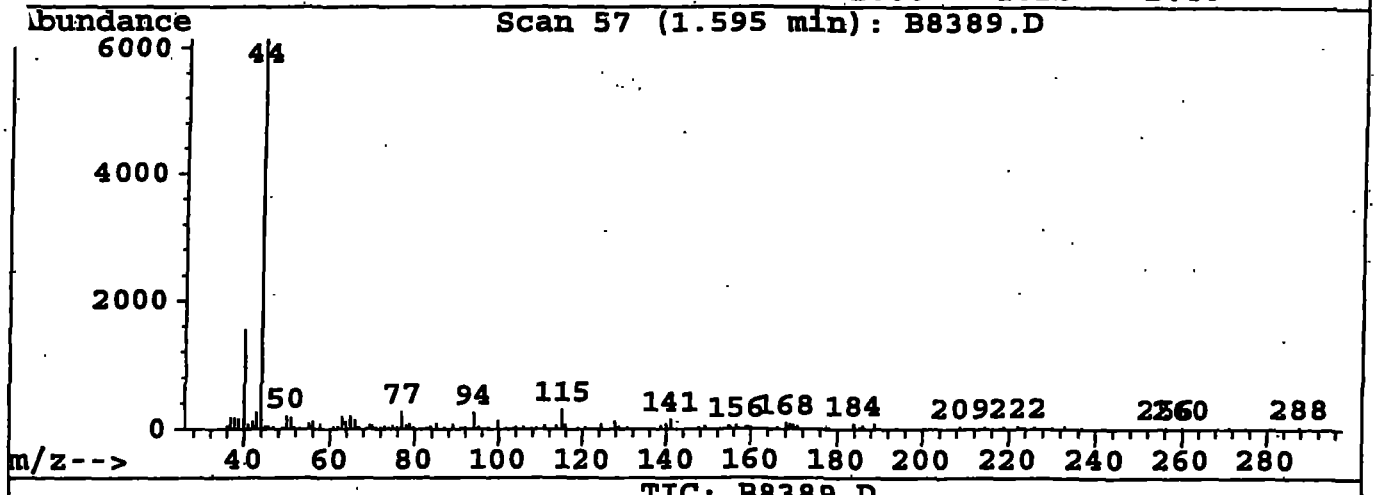
| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 17.36 | 119 | 401101 | 41.05 | ppb | 98 |
| 87) 1,3-Dclbenz | 17.98 | 146 | 276215 | 41.55 | ppb | 98 |
| 88) 1,4-Dclbenz | 18.16 | 146 | 306377 | 41.39 | ppb | 99 |
| 89) n-Butylbenzene | 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 |

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 13:20 19101

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

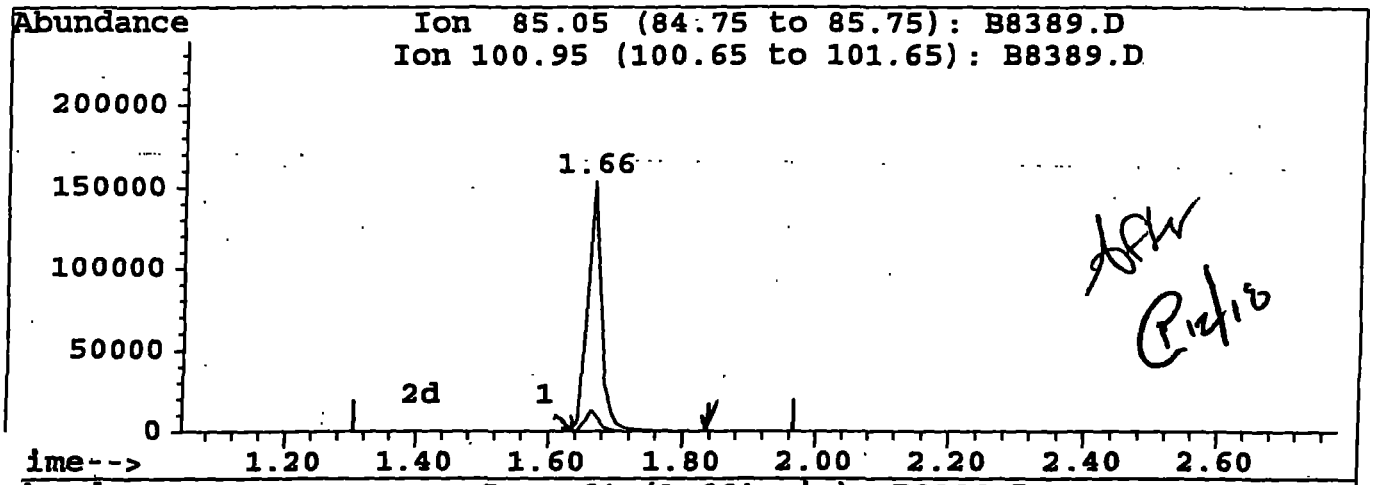
| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

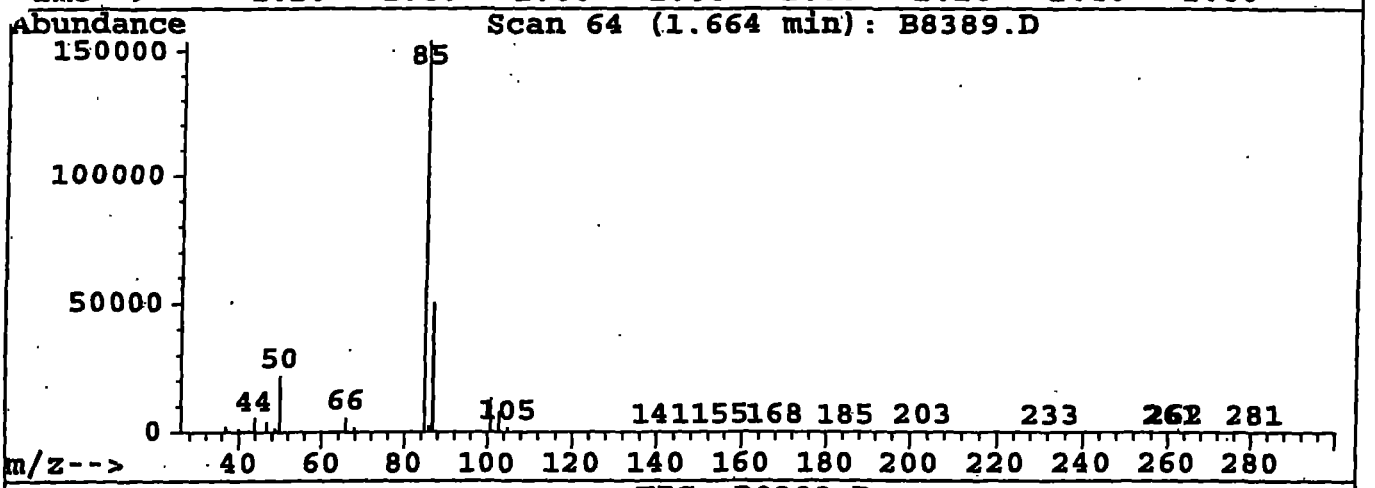
Quantitation Report

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

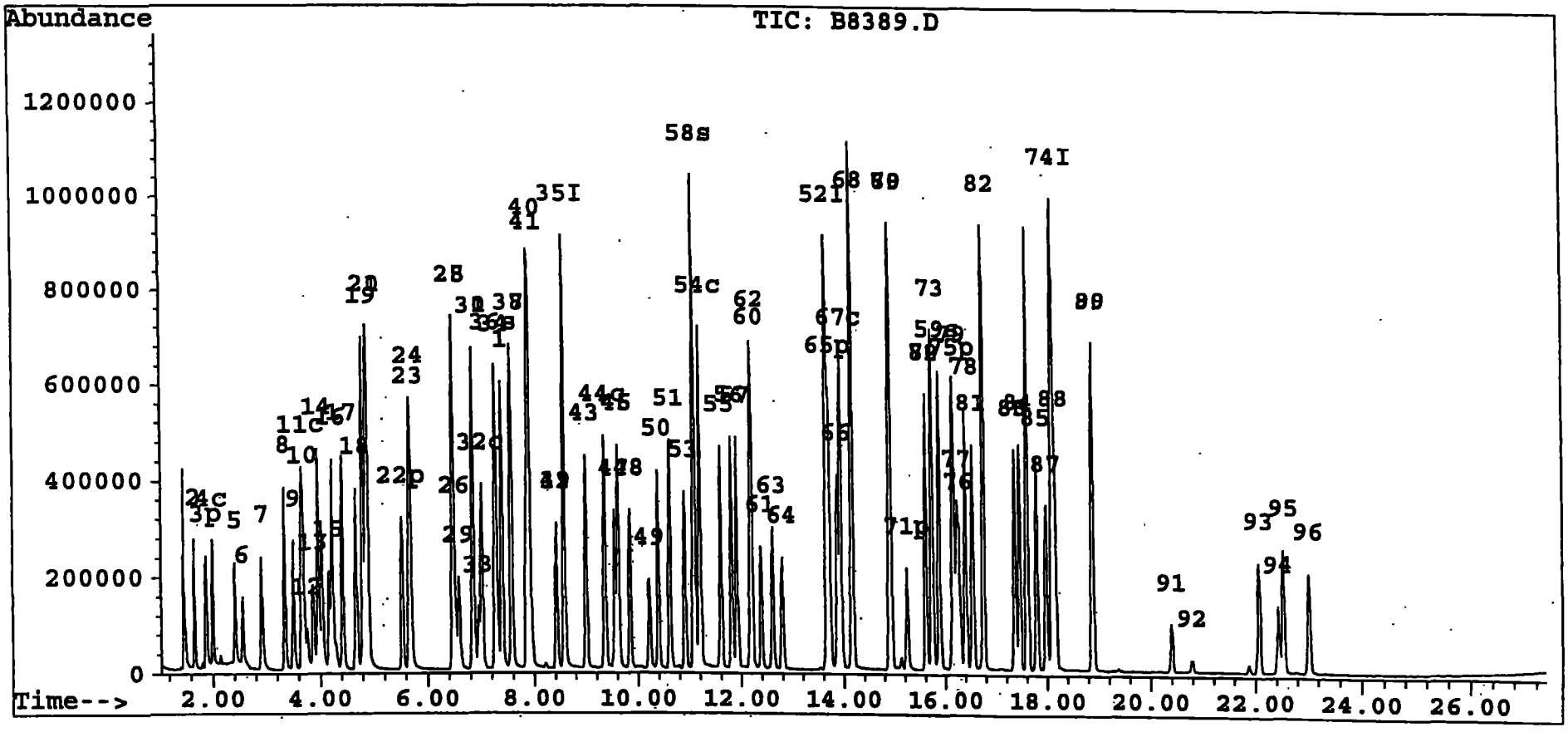
(2) Dichlorodifluoromethane
1.66min 42.78ppb m
response 221895

| 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 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



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 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 |
| 31) Methacrylonitrile | 6.85 | 67 | 323802 | 100.39 | ppb | 100 |
| 32) 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 |
| ) 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

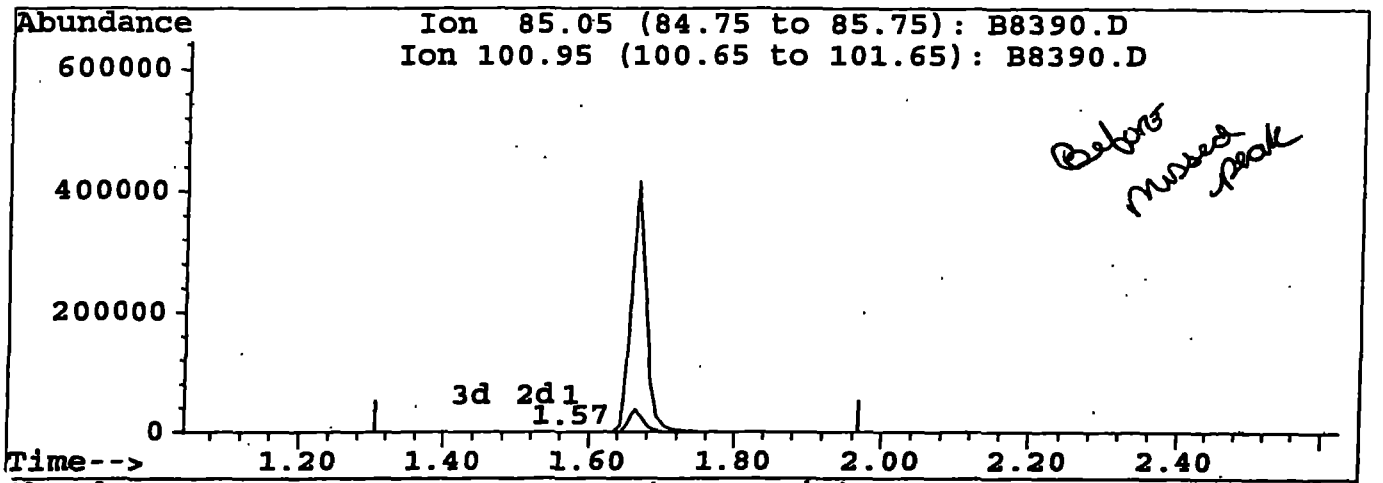
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 13:22:24 2001
Response via : Multiple Level Calibration

| 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 |

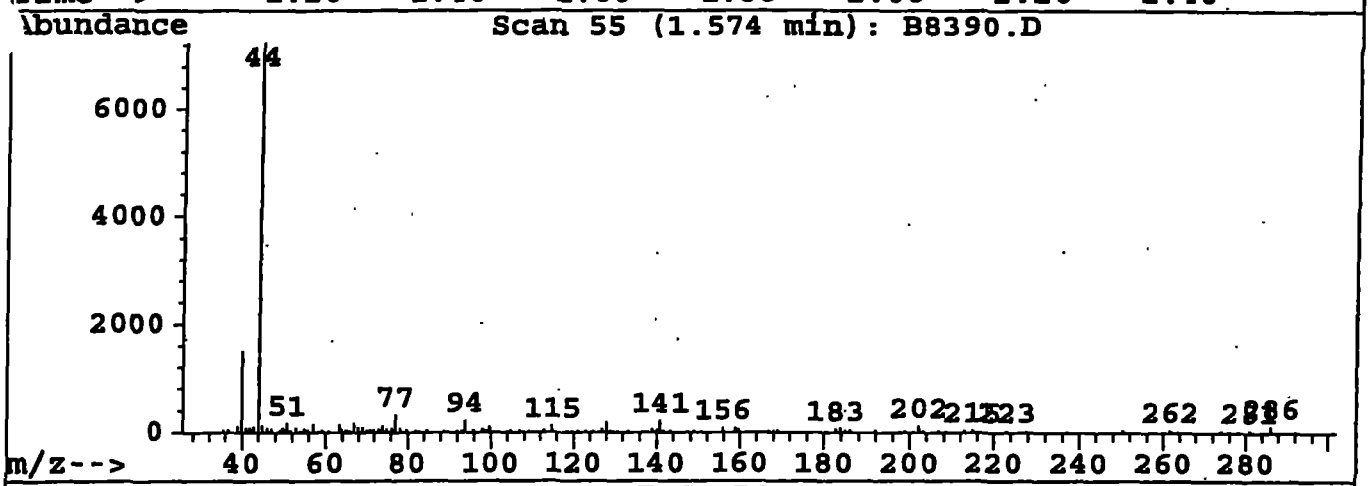
# Quantitation Report

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 mixed peak




TIC: B8390.D

(2) Dichlorodifluoromethane
1.57min 0.02ppb
response 102

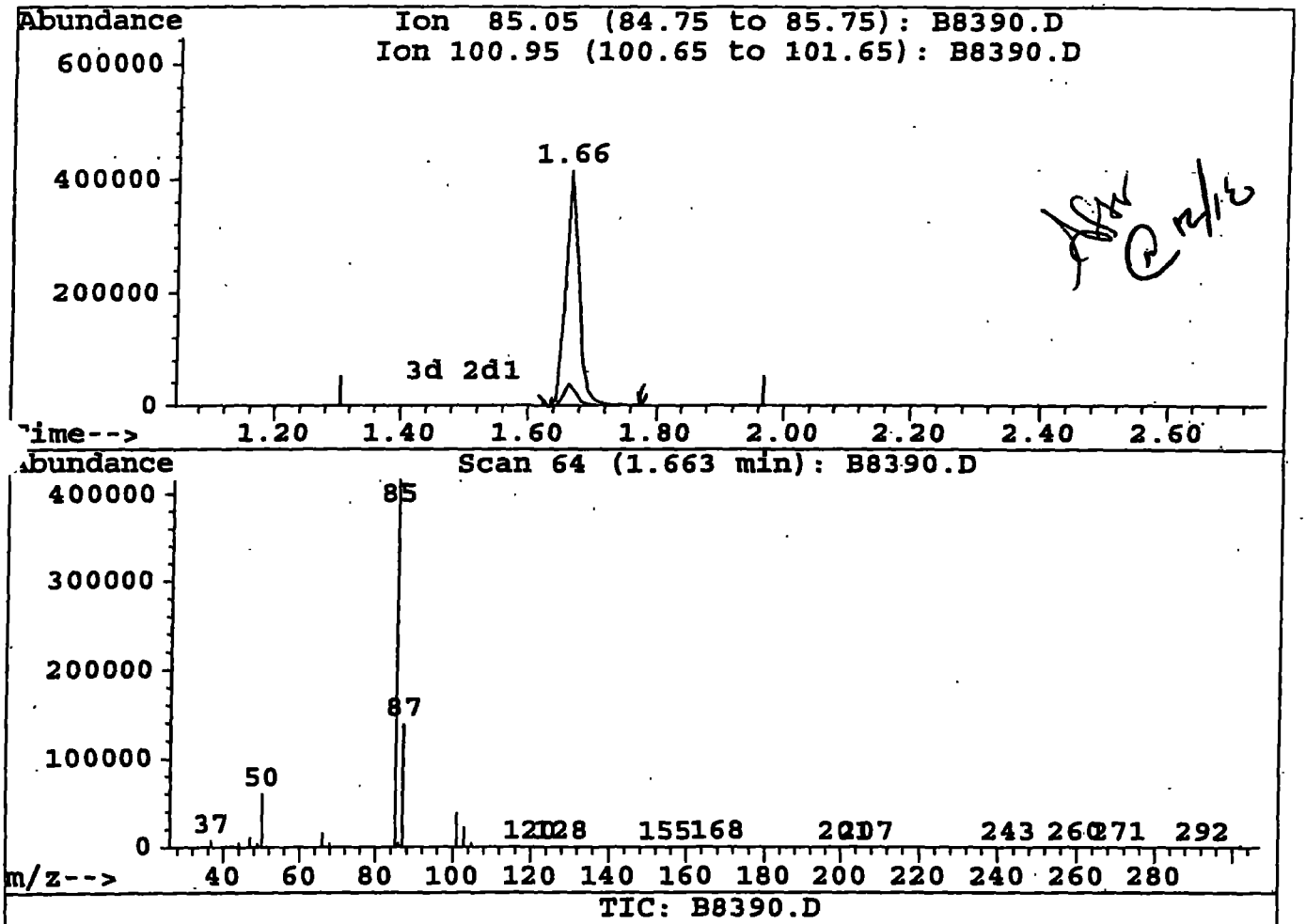
| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

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



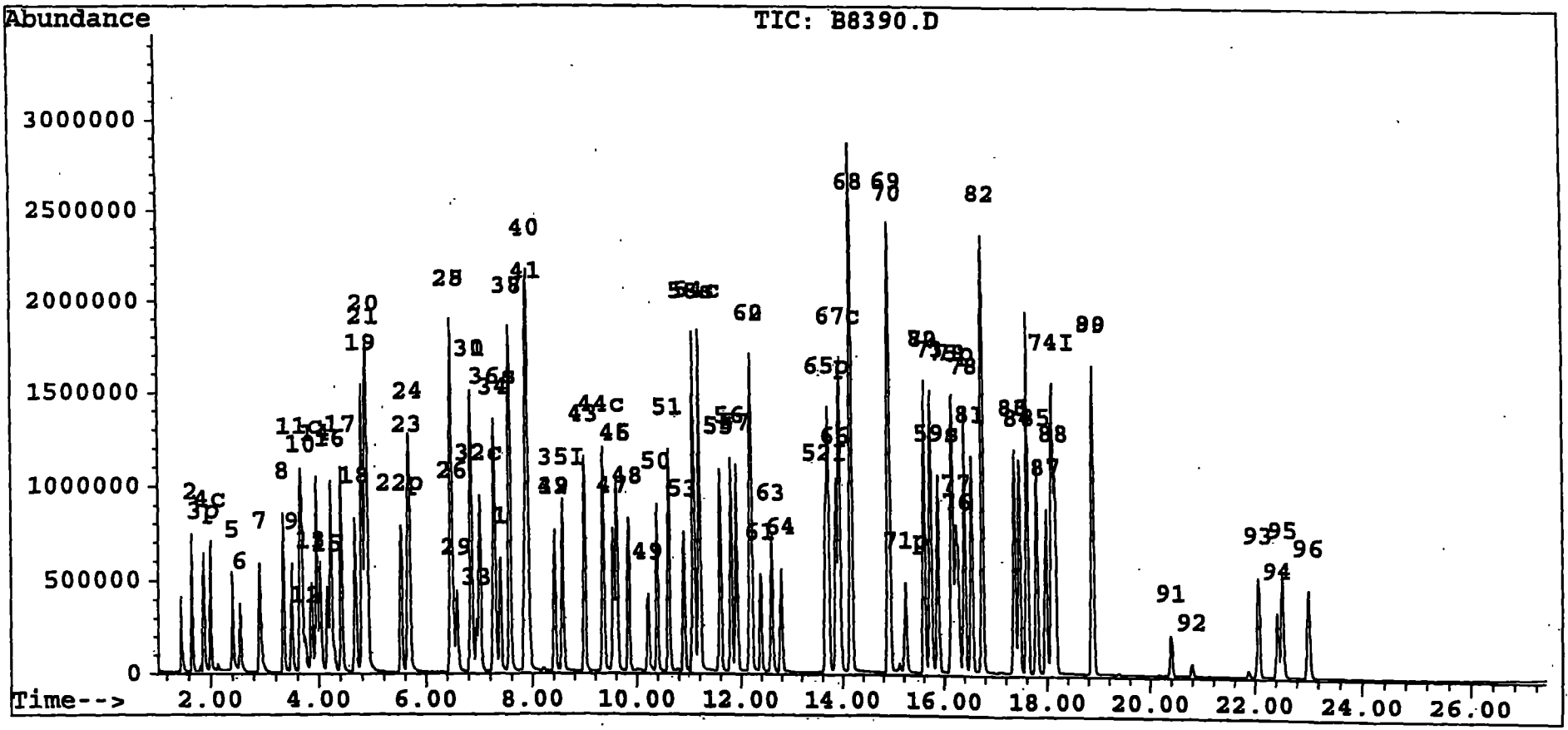

TIC: B8390.D

(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 |

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



# 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

| 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 |
| ) Vinyl Chloride | 2.00 | 62 | 1002731 | 168.80 | ppb | 100 |
| ) 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 |
| ) 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 |
| | cis-1,3-Dichloropropene | 10.63 | 75 | 1556272 | 158.56 | ppb | 98 |
| | 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 |
| | 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

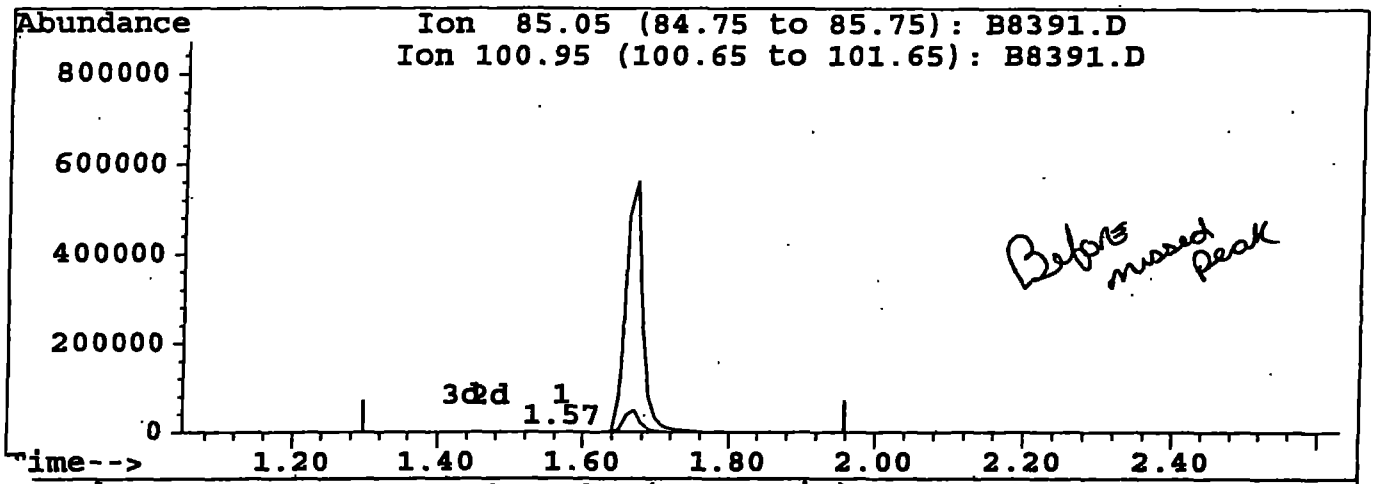
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Mon Dec 17 14:35:36 2001
Response via : Multiple Level Calibration

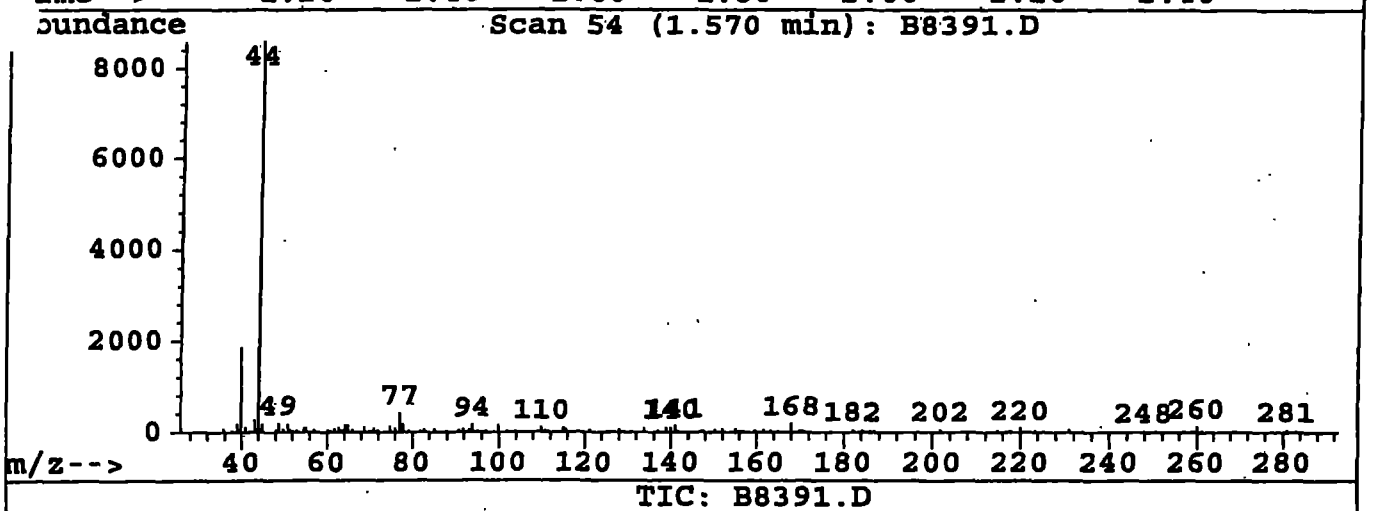
| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 17.38 | 119 | 1653616 | 172.96 | ppb | 100 |
| 87) 1,3-Dclbenz | 17.99 | 146 | 1064949 | 164.99 | ppb | 98 |
| 88) 1,4-Dclbenz | 18.17 | 146 | 1149842 | 160.74 | ppb | 98 |
| 89) n-Butylbenzene | 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 |

# 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 14:33 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
1.57min 0.03ppb
response 159

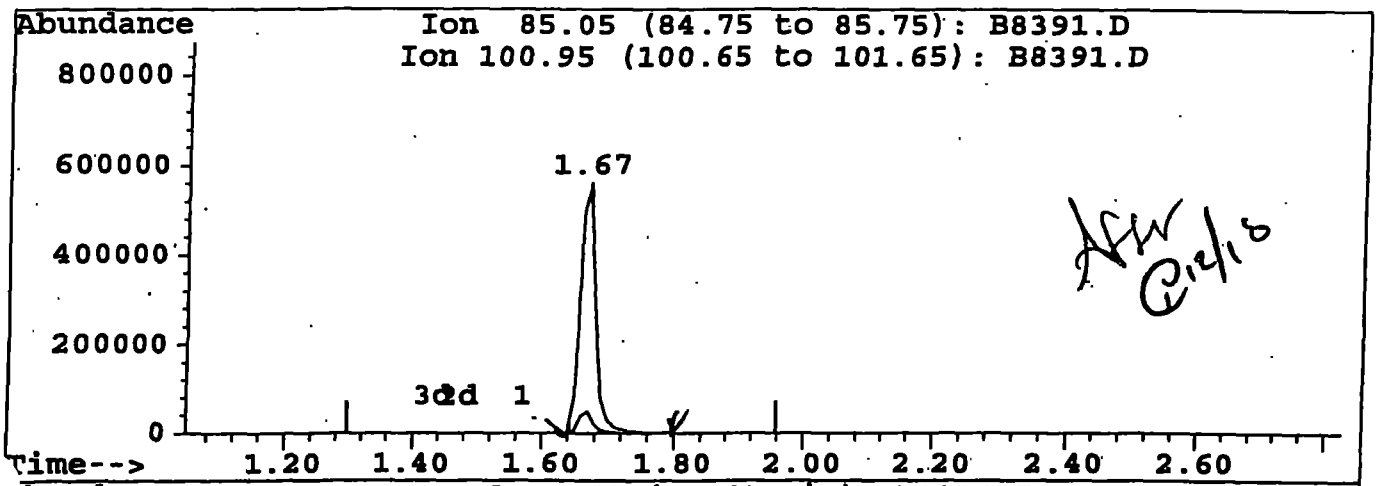
| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

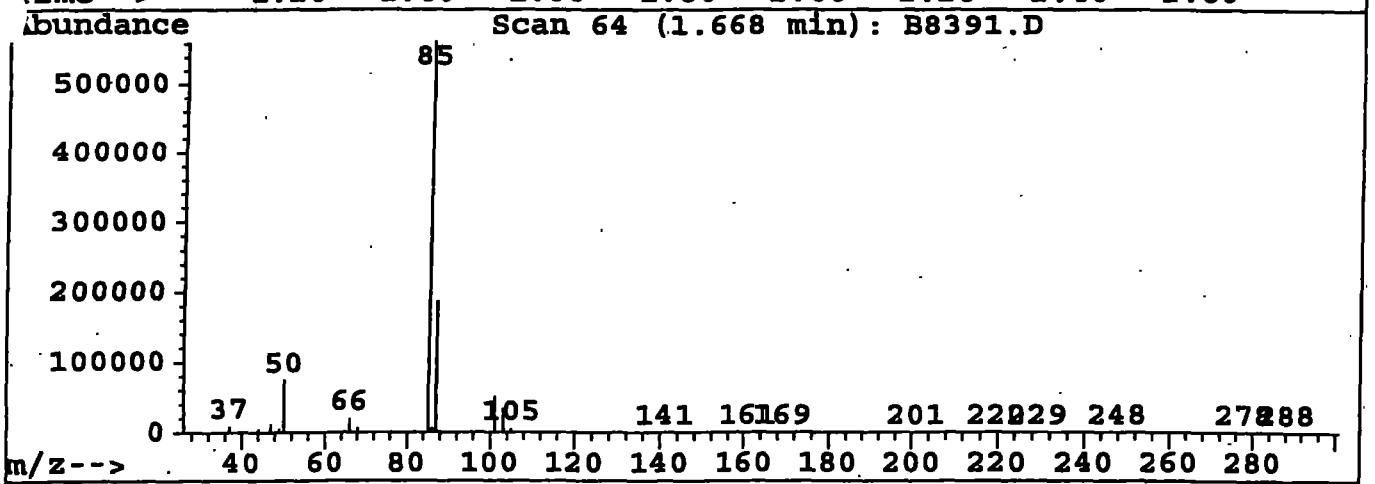
12/17

# 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

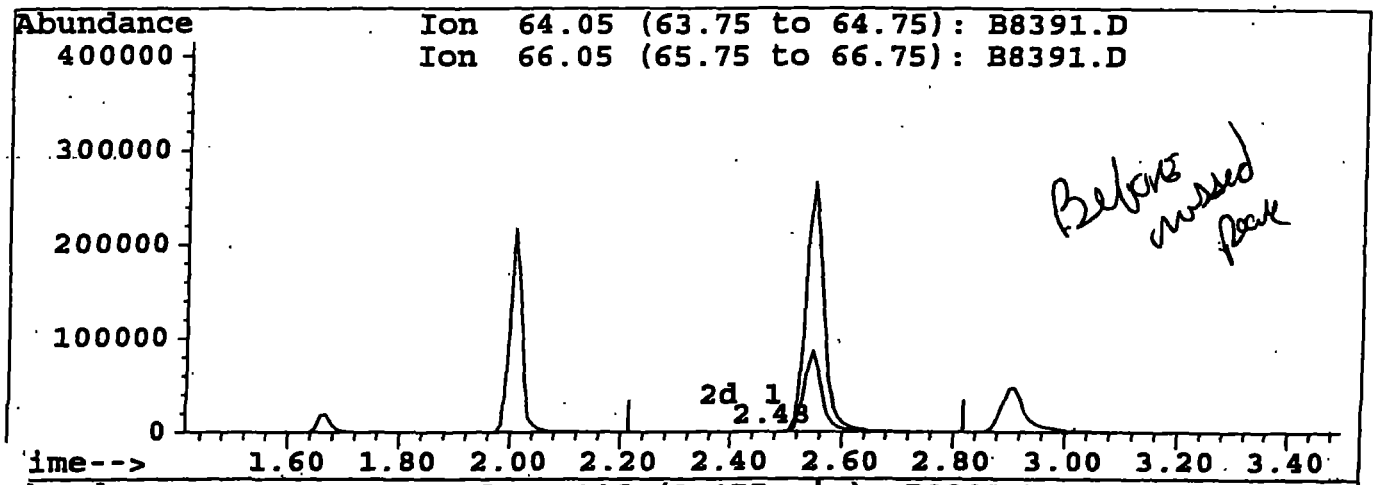
(2) Dichlorodifluoromethane
1.67min 173.98ppb m
response 900030

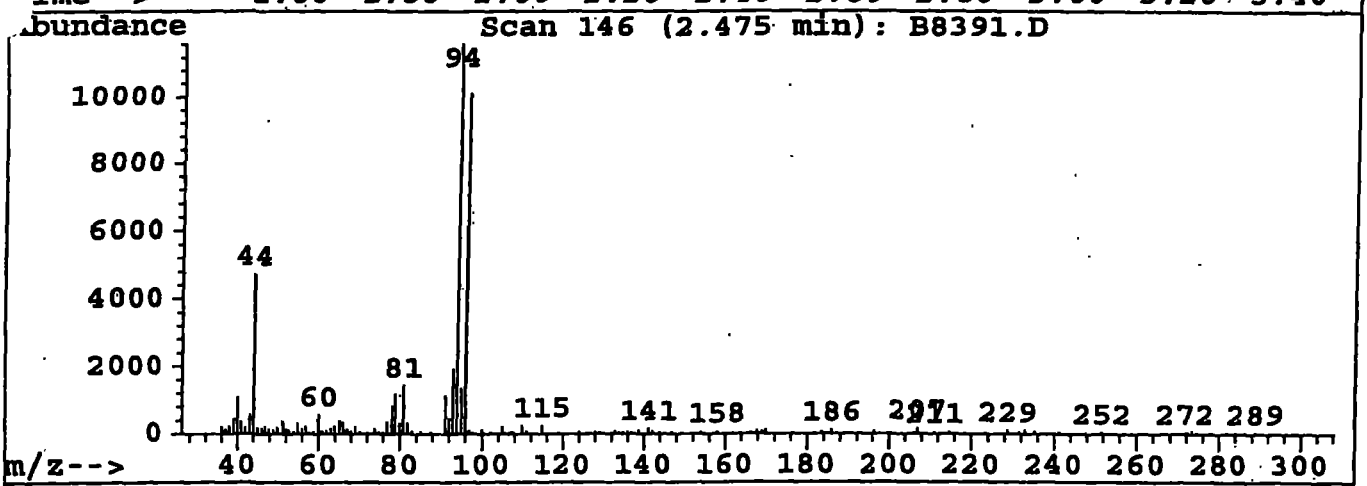
| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 8.81 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.D  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
2.48min 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 |

12/18/17



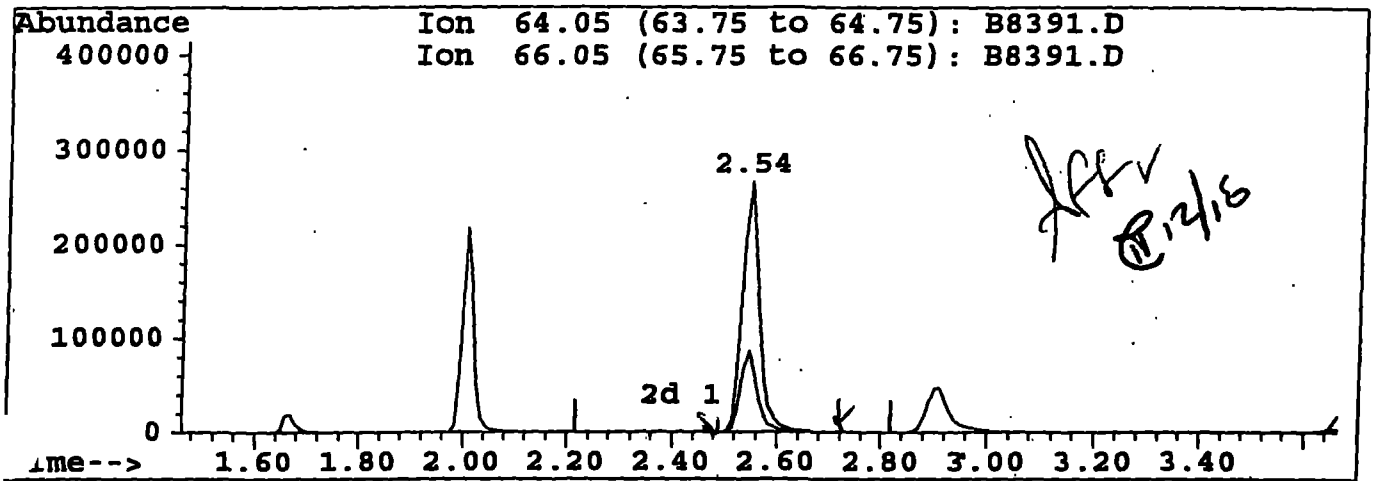
B8391.D EXP1217.M Mon Dec 17 14:35:14 2001

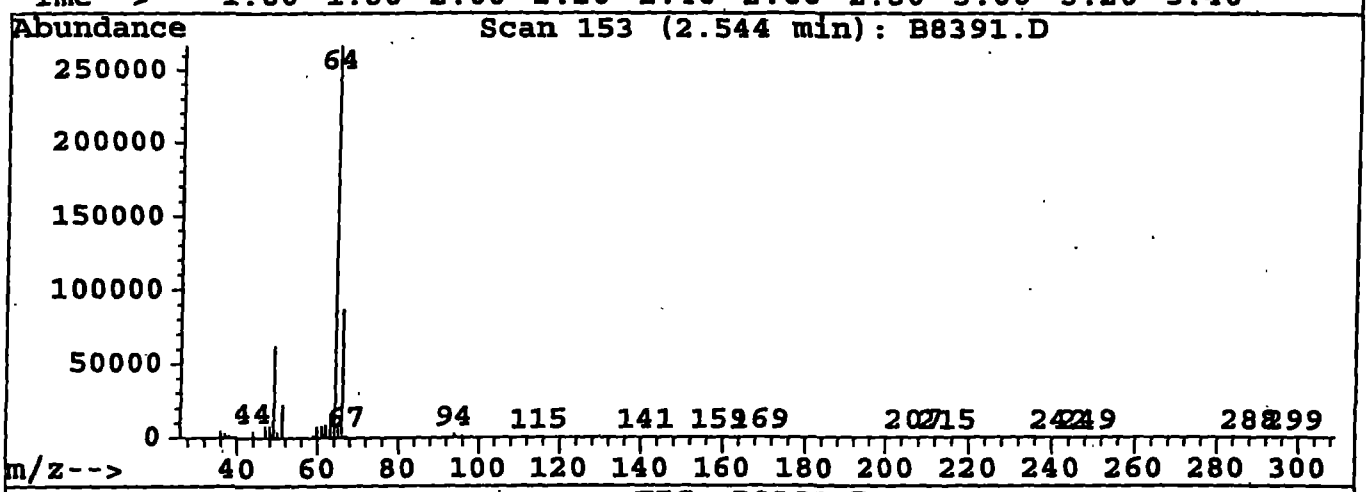
Quantitation Report

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

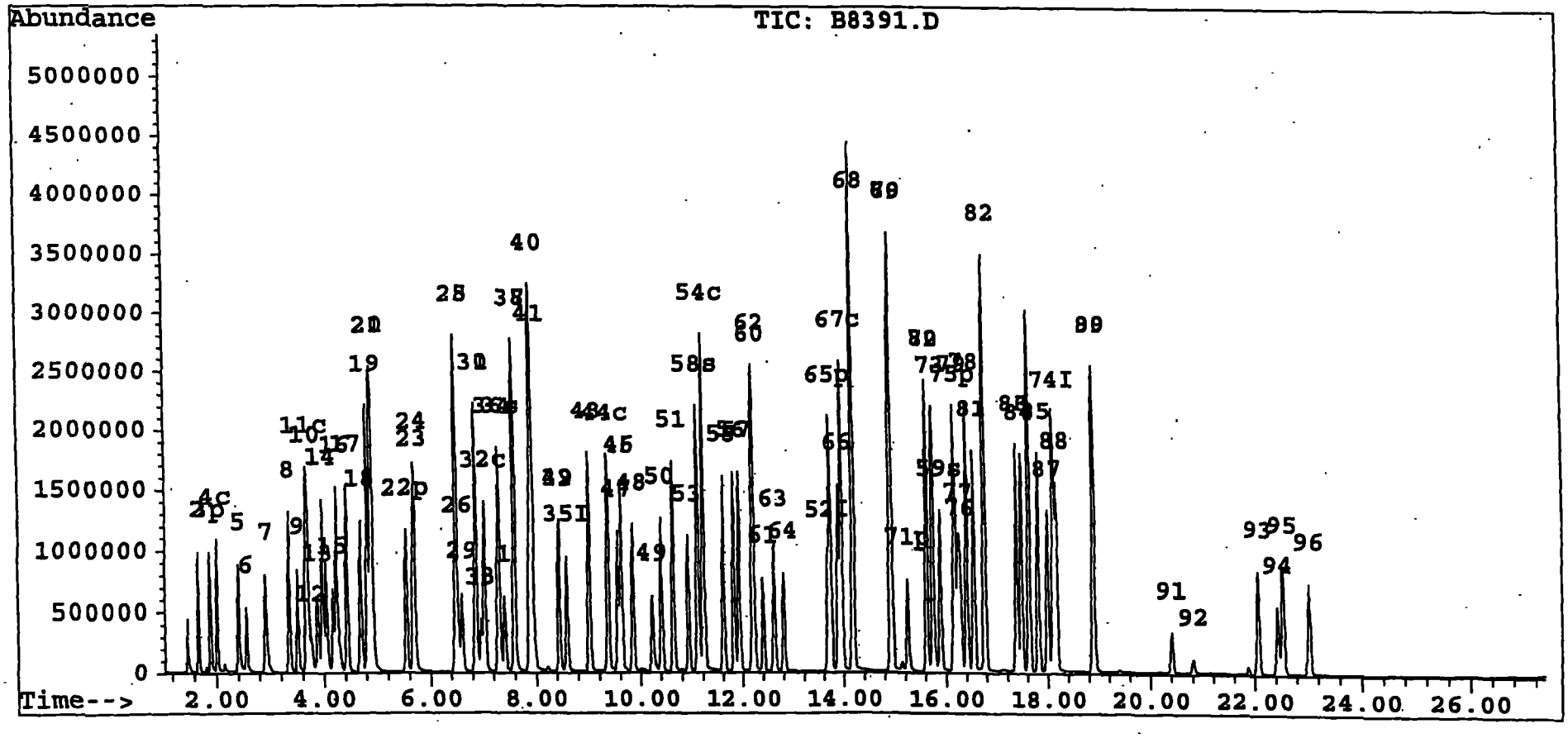
(6) Chloroethane
2.54min 162.12ppb m
response 594904

| 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 Fi. : J:\ACQUDATA\MSVOA3\DATA\121701\B8391.I
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



# 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 |
| ) Chloromethane | 1.87 | 50 | 1441463 | 197.62 | ppb | 99 |
| Vinyl Chloride | 2.00 | 62 | 1292059 | 205.36 | ppb | 99 |
| ) 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 |
| ) Methacrylonitrile | 6.85 | 67 | 643153 | 192.49 | ppb | 99 |
| ) 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



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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 |
| | cis-1,3-Dichloropropene | 10.63 | 75 | 2076473 | 203.12 | ppb | 98 |
| | 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 |
| | 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  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 |
|---|---|---|---|---|---|---|---|---|
| 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 | 1 |
| 95) | Naphthalen | 22.54 | 128 | 1772457 | 184.73 | ppb | | 98 |
| 96) | 1,2,3-Tclbenzene | 23.02 | 180 | 617009 | 194.57 | ppb | | 97 |

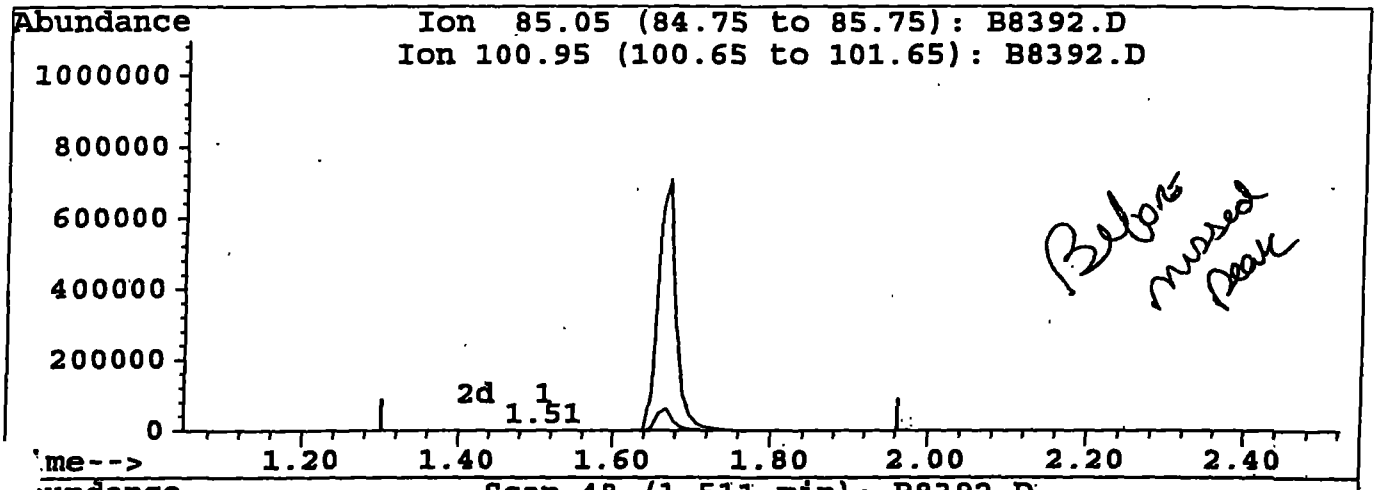
(#) = qualifier out of range (m) = manual integration

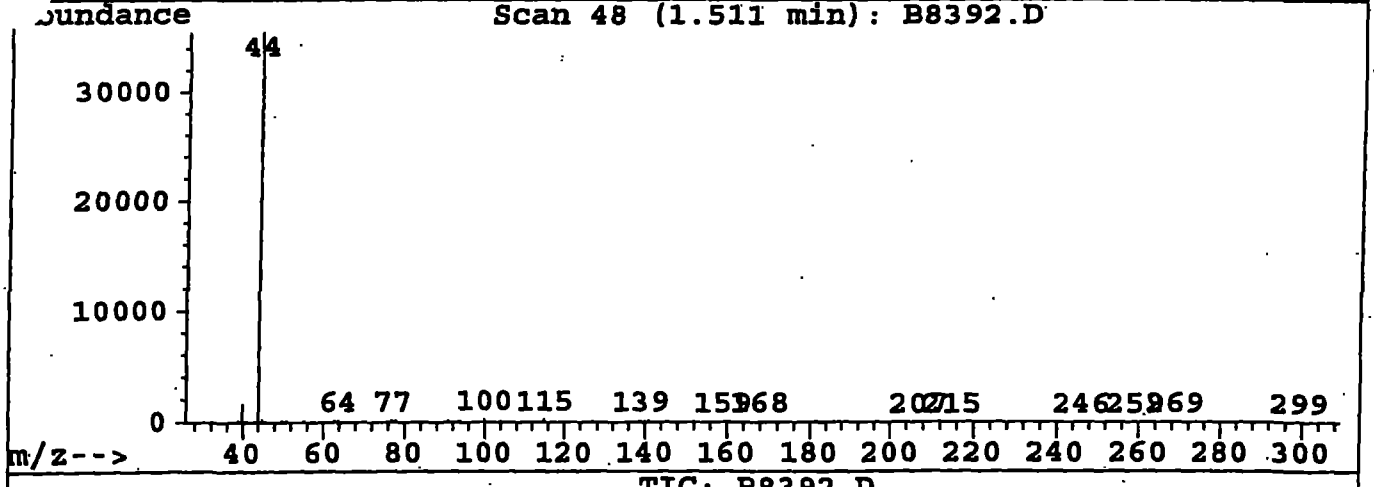
Quantitation Report

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 |

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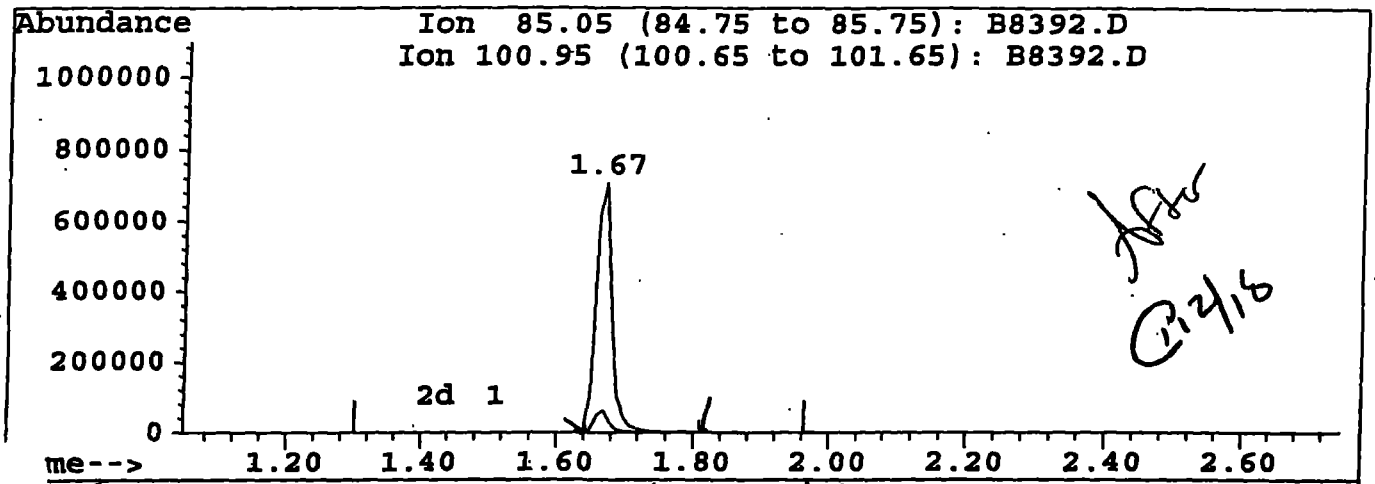
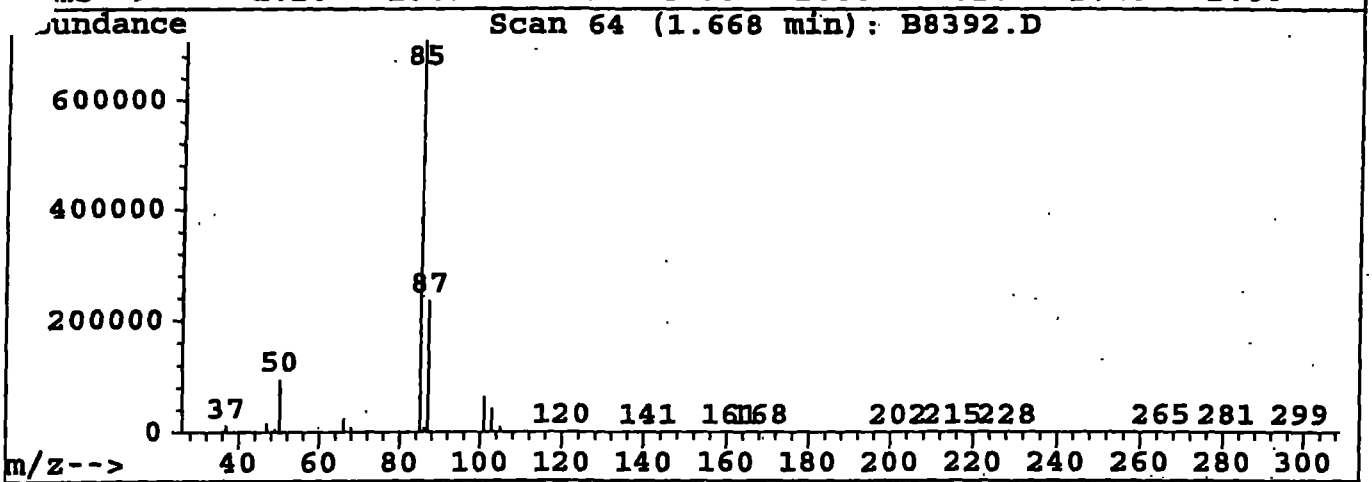
B8392.D EXP1217.M Mon Dec 17 15:12:38 2001

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 15:12 19101

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

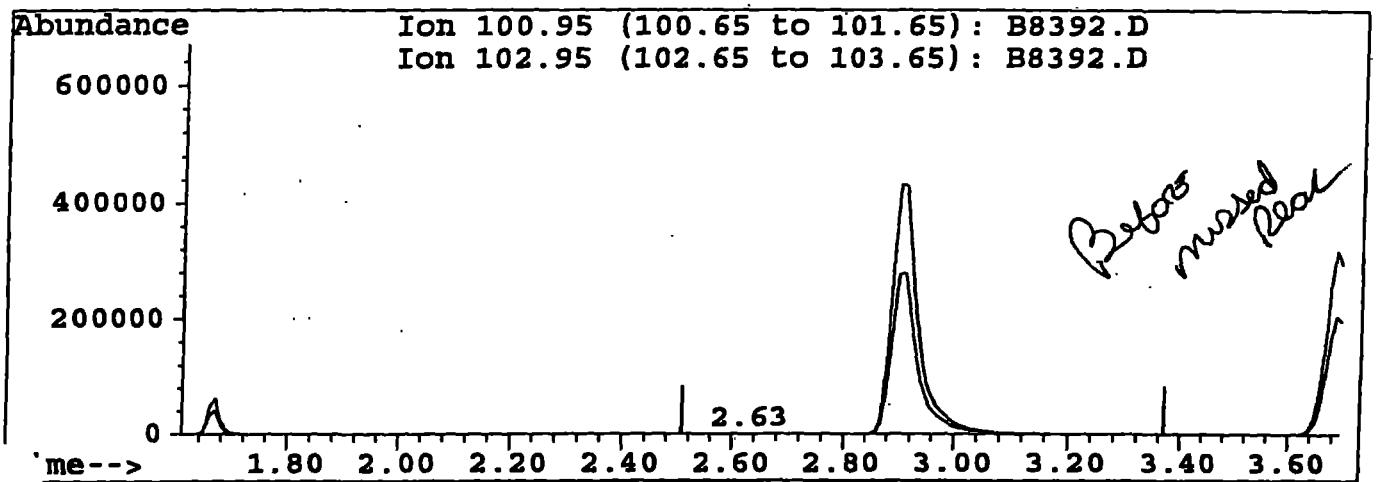
(2) Dichlorodifluoromethane
1.67min 205.77ppb m
response 1133491

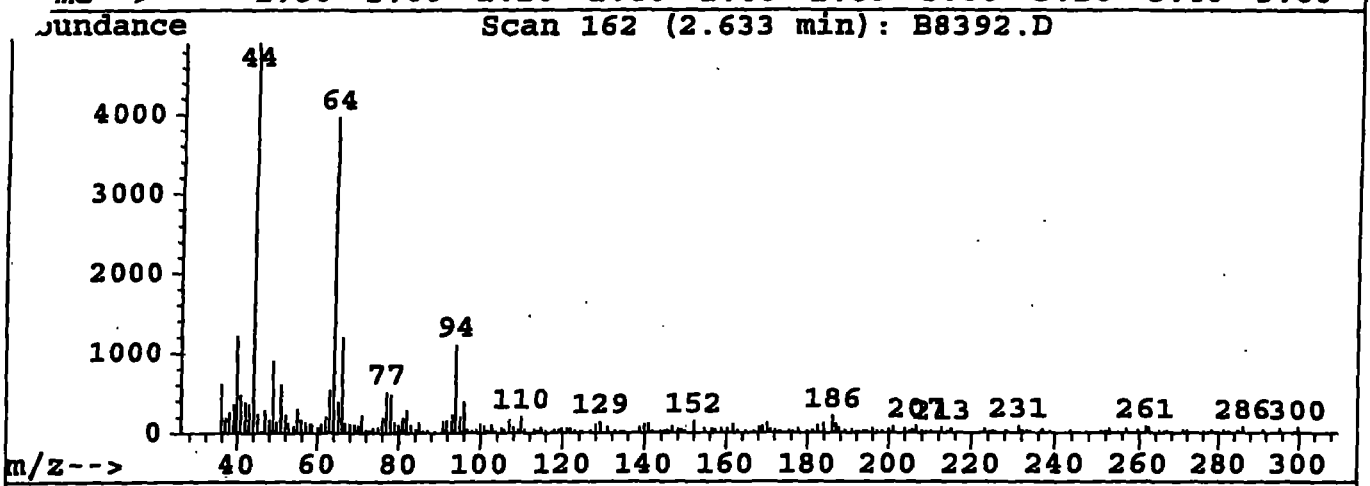
| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 8.82 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\121701\B8392.D  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 15:12 19101

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 |

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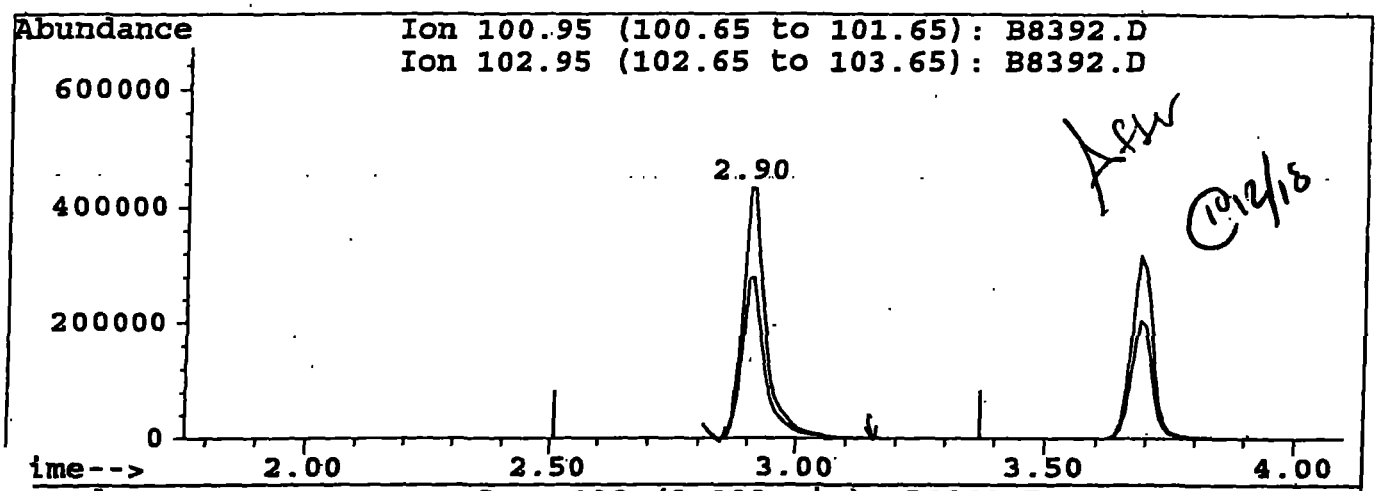
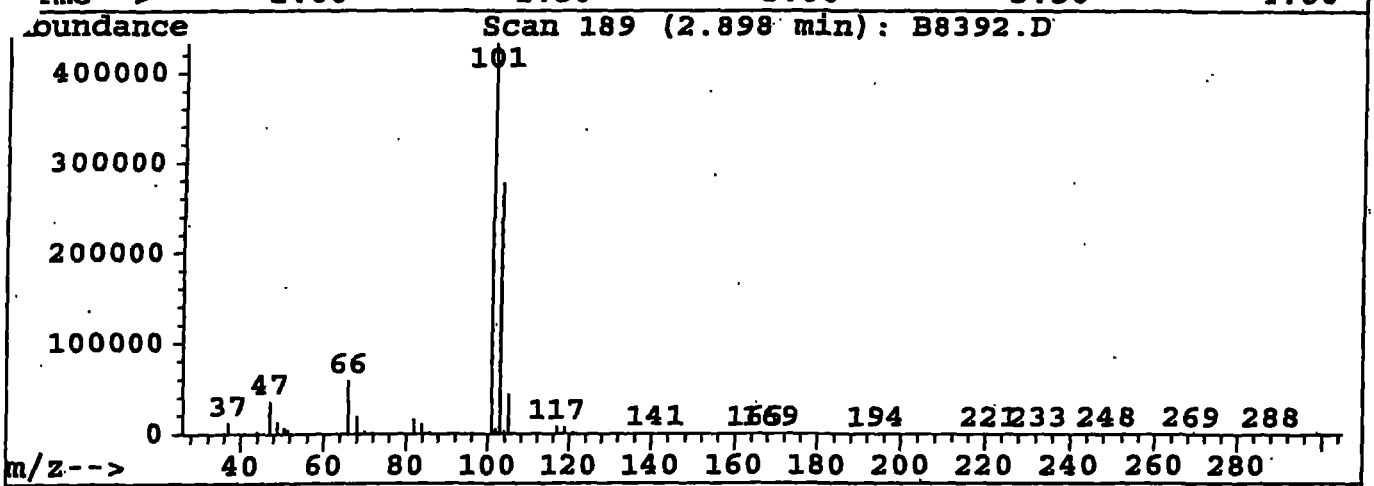
Quantitation Report

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




TIC: B8392.D

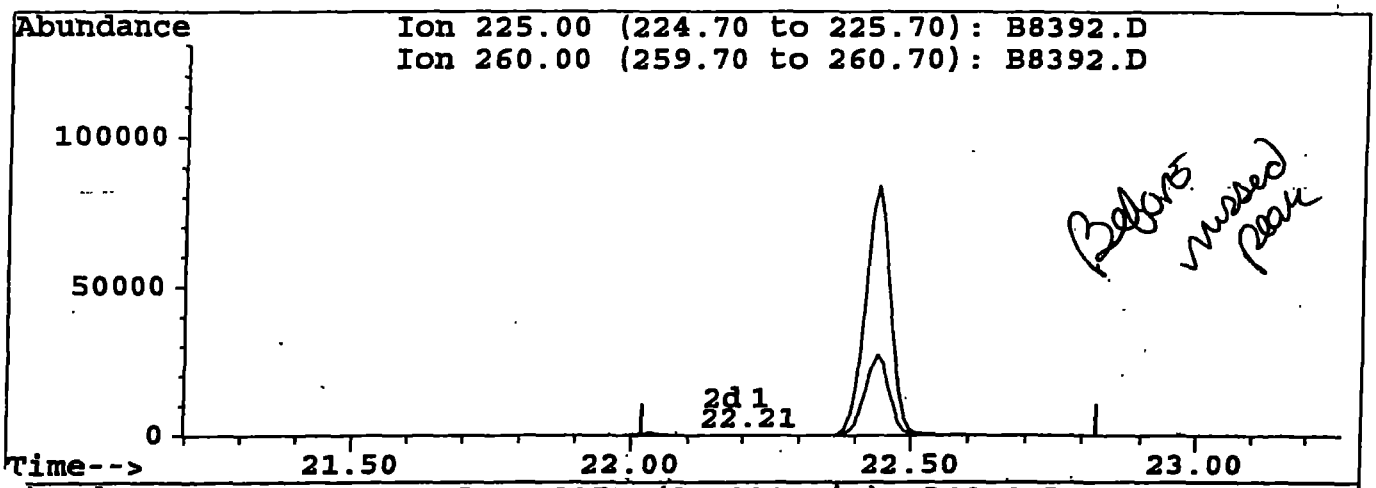
(7) Trichlorofluoromethane
2.90min 203.06ppb m
response 1409338

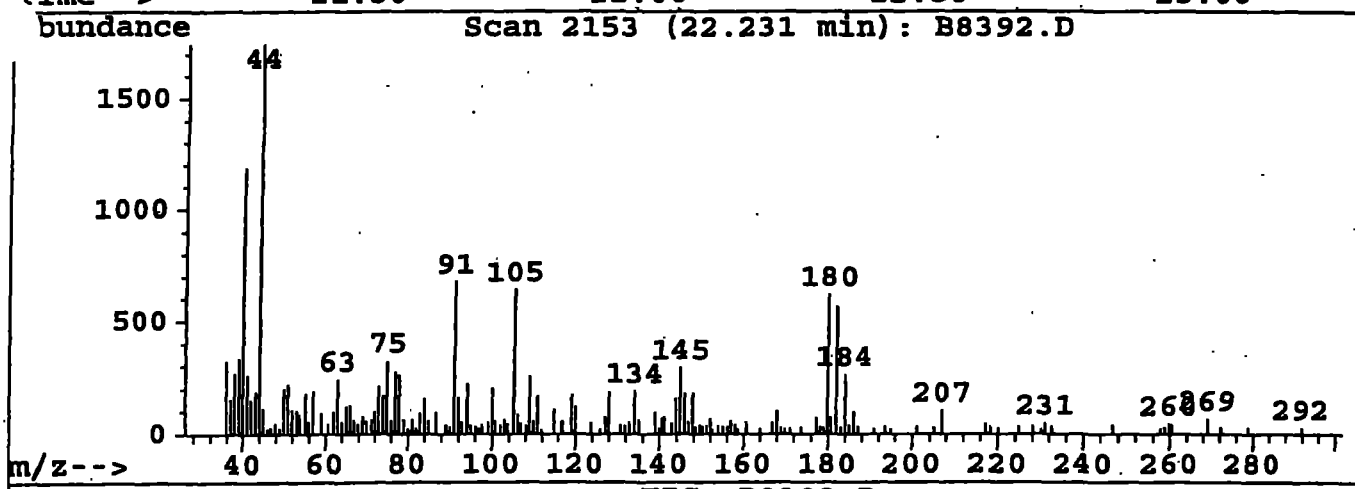
| Ion | Exp% | Act% |
|---|---|---|
| 100.95 | 100 | 100 |
| 102.95 | 65.90 | 63.98 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# 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




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 |

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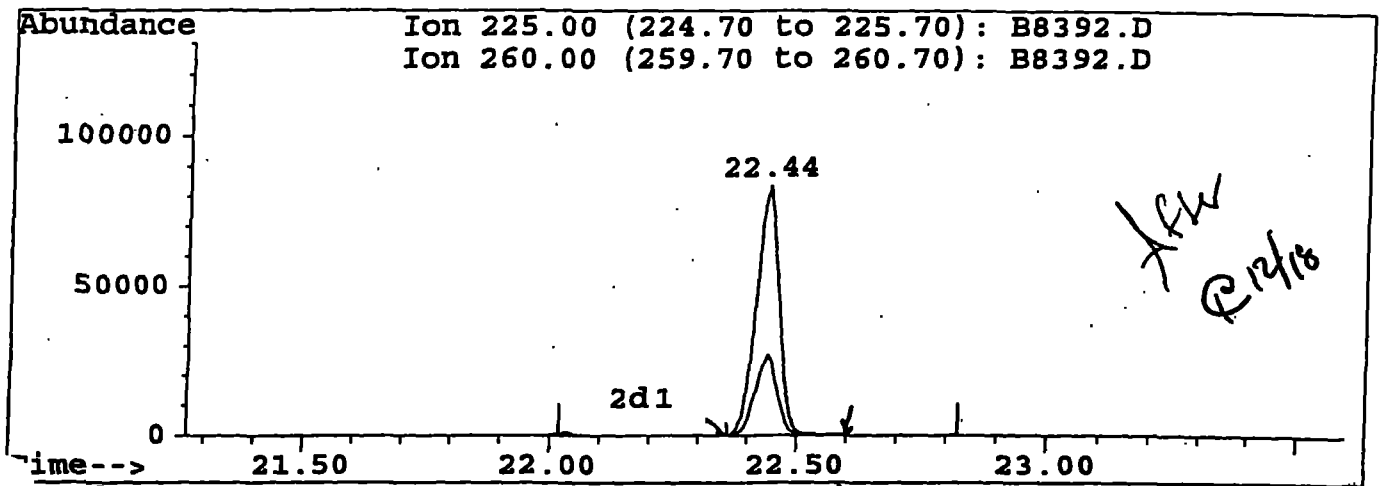
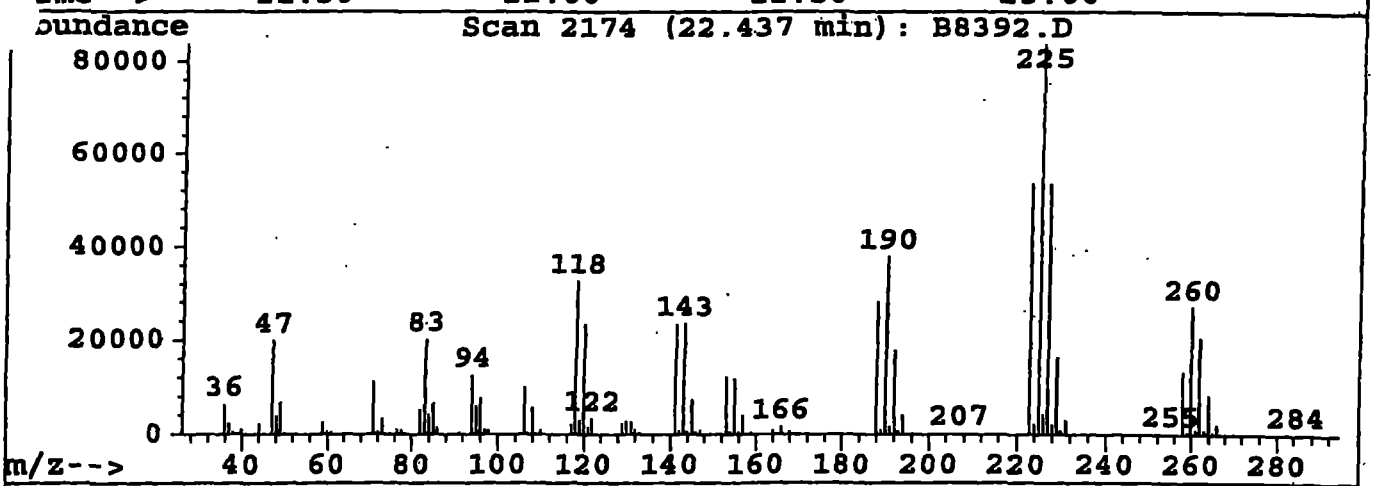
# Quantitation Report

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

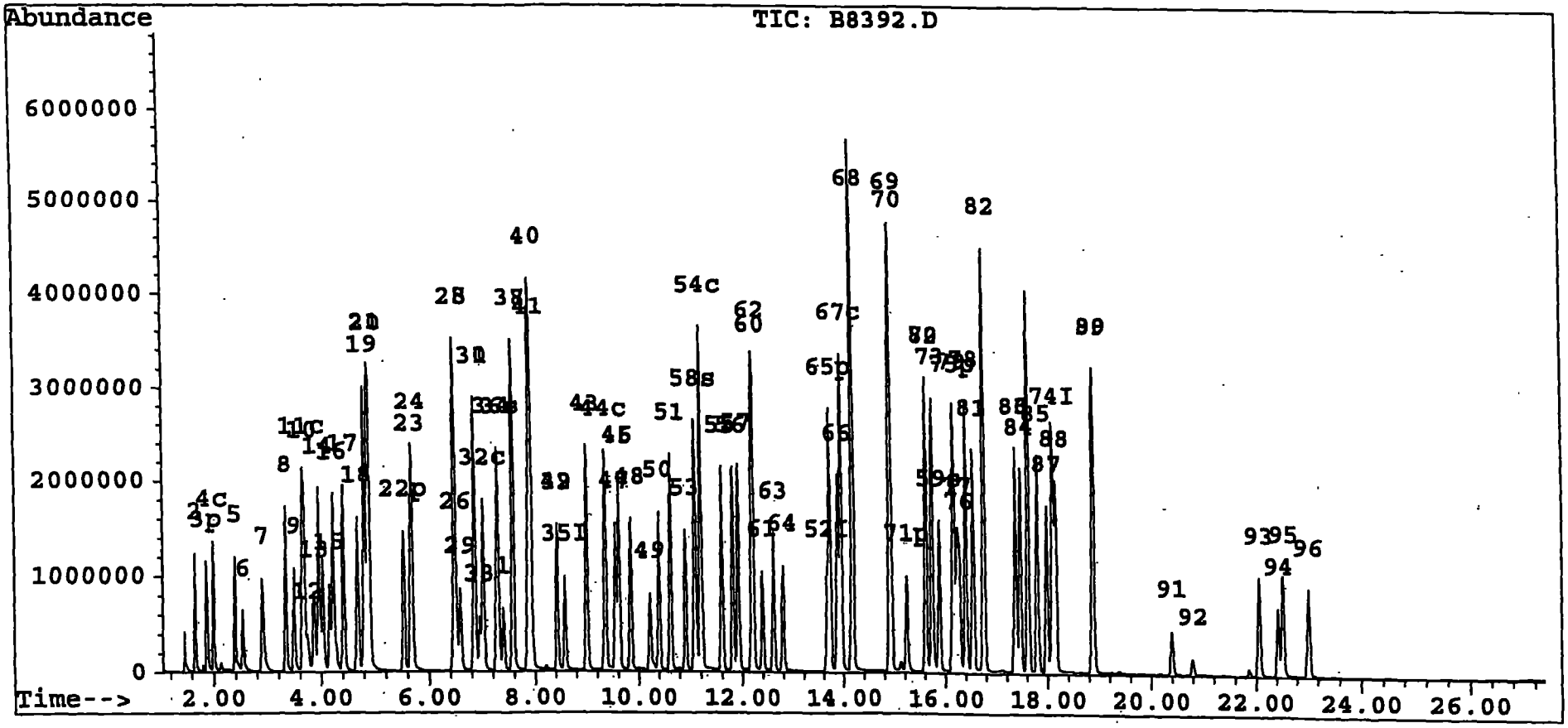
(94) Hexachlorobt
22.44min 203.03ppb m
response 267757

| 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 |

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

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

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# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D  Vial: 3
Acq On : 31 Jan 102 8:37 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 | 135 | -0.06 |
| 2 | | Dichlorodifluoromethane | 0.426 | 0.499 | -17.1 | 184 | -0.02 |
| 3 | p | Chloromethane | 0.564 | 0.682 | -20.9 | 182 | -0.03 |
| 4 | c | Vinyl Chloride | 0.485 | 0.527 | -8.8 | 171 | -0.03 |
| 5 | | Bromomethane | 0.338 | 0.343 | -1.4 | 164 | -0.03 |
| 6 | | Chloroethane | 0.303 | 0.316 | -4.1 | 170 | -0.04 |
| 7 | | Trichlorofluoromethane | 0.536 | 0.592 | -10.3 | 172 | -0.04 |
| 8 | | Diethyl Ether | 0.481 | 0.474 | 1.6 | 146 | -0.05 |
| 9 | | Acrolein | 0.108 | 0.067 | 38.0# | 83 | -0.05 |
| 0 | | FREON 113 | 0.142 | 0.138 | 2.7 | 158 | -0.05 |
| 1 | c | 1,1-Diclethene | 0.371 | 0.367 | 1.0 | 151 | -0.05 |
| 2 | | Acetone | 0.215 | 0.151 | 29.6# | 101 | -0.06 |
| 3 | | Iodomethane | 0.209 | 0.231 | -10.4 | 145 | -0.05 |
| 4 | | Carbon Disulfide | 1.431 | 1.233 | 13.8 | 115 | -0.05 |
| 5 | | Acetonitrile | 0.024 | 0.019 | 22.5 | 103 | -0.05 |
| 6 | | Allyl Chloride | 0.230 | 0.245 | -6.4 | 162 | -0.04 |
| 7 | | Methylene Chloride | 0.505 | 0.514 | -1.7 | 156 | -0.05 |
| 8 | | TBA | 0.059 | 0.042 | 29.0# | 100 | -0.06 |
| 9 | | Acrylonitrile | 0.263 | 0.234 | 11.0 | 124 | -0.06 |
| 0 | | Methyl-t-Butyl Ether | 1.432 | 1.384 | 3.4 | 141 | -0.05 |
| 1 | | trans-1,2-Dichloroethene | 0.460 | 0.472 | -2.7 | 157 | -0.05 |
| 2 | p | 1,1-Diclethane | 0.821 | 0.827 | -0.7 | 152 | -0.05 |
| 3 | | Vinyl Acetate | 1.103 | 1.069 | 3.1 | 132 | -0.06 |
| 4 | | 2-Chloro-1,3-butadiene | 0.688 | 0.605 | 12.0 | 116 | -0.05 |
| 5 | | 2,2-Dichloropropane | 0.580 | 0.623 | -7.4 | 166 | -0.05 |
| 6 | | 2-Butanone | 0.383 | 0.268 | 29.9# | 93 | -0.06 |
| 7 | | Ethyl Acetate | 0.000 | 0.000 | 0.0 | 132 | -0.06 |
| 8 | | cis-1,2-Dichloroethene | 0.548 | 0.560 | -2.2 | 158 | -0.06 |
| 9 | | Propionitrile | 0.099 | 0.083 | 16.0 | 120 | -0.06 |
| 0 | | Methacrylonitrile | 0.256 | 0.219 | 14.8 | 124 | -0.05 |
| 1 | | Bromochloromethane | 0.271 | 0.273 | -0.6 | 154 | -0.06 |
| 2 | c | Chloroform | 0.787 | 0.814 | -3.4 | 157 | -0.06 |
| 3 | | Tetrahydrofuran | 0.252 | 0.202 | 20.1 | 121 | -0.07 |
| 4 | | 1,1,1-Trichloroethane | 0.581 | 0.613 | -5.6 | 162 | -0.05 |
| 5 | I | 1,4 - Difluorobenzene | 1.000 | 1.000 | 0.0 | 138 | -0.06 |
| 6 | s | surr4,Dibrflmethane | 0.321 | 0.358 | -11.7 | 136 | -0.05 |
| 3 | | Carbontetrachloride | 0.262 | 0.246 | 6.3 | 153 | -0.06 |
| 3 | | 1,1-Dichloropropene | 0.314 | 0.309 | 1.4 | 160 | -0.06 |
| 39 | | Iso-Butyl Alcohol | 0.012 | 0.014 | -22.6 | 206# | -0.05 |
| 40 | | Benzene | 0.899 | 0.909 | -1.2 | 158 | -0.06 |
| 41 | | 1,2-Dichloroethane | 0.343 | 0.351 | -2.2 | 156 | -0.06 |

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D  Vial: 3
Acq On : 31 Jan 102 8:37 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 | 0.284 | -22.5 | 207# | -0.05 |
| 43 | | Trichloroethene | 0.240 | 0.232 | 3.4 | 152 | -0.05 |
| 44 | c | 1,2-Diclpropane | 0.295 | 0.289 | 2.1 | 151 | -0.06 |
| 45 | | Methyl Methacrylate | 0.213 | 0.183 | 14.0 | 126 | -0.06 |
| 46 | | 1,4-Dioxane | 0.003 | 0.002 | 34.0# | 97 | -0.06 |
| 47 | | Dibromomethane | 0.192 | 0.186 | 3.2 | 145 | -0.06 |
| 48 | | Bromodichloromethane | 0.328 | 0.338 | -3.1 | 158 | -0.06 |
| 49 | | 2-Nitropropane | 0.109 | 0.095 | 12.4 | 128 | -0.06 |
| 50 | | 2-Chloroethylvinyl Ether | 0.243 | 0.175 | 28.0# | 102 | -0.06 |
| 51 | | cis-1,3-Dichloropropene | 0.429 | 0.437 | -1.8 | 156 | -0.06 |
| 52 | I | d5 - Chlorobenzene | 1.000 | 1.000 | 0.0 | 136 | -0.07 |
| 5 | | 4-Methyl-2-Pentanone | 0.504 | 0.364 | 27.7# | 97 | -0.06 |
| 5 | | Toluene | 1.048 | 1.057 | -0.9 | 157 | -0.06 |
| 55 | | trans-1,3-Dichloropropene | 0.472 | 0.487 | -3.1 | 151 | -0.05 |
| 56 | | Ethyl Methacrylate | 0.461 | 0.408 | 11.4 | 127 | -0.06 |
| 57 | | 1,1,2-Trichloroethane | 0.265 | 0.265 | -0.1 | 146 | -0.05 |
| 58 | s | surr3,Toluene-d8 | 1.066 | 1.219 | -14.4 | 136 | -0.05 |
| 59 | s | surr2,bfb | 0.420 | 0.457 | -8.8 | 129 | -0.05 |
| 60 | | Tetrachloroethene | 0.234 | 0.230 | 1.5 | 160 | -0.05 |
| 61 | | 2-Hexanone | 0.341 | 0.238 | 30.2# | 92 | -0.06 |
| 62 | | 1,3-Dichloropropane | 0.573 | 0.581 | -1.5 | 149 | -0.06 |
| 63 | | Dibromochloromethane | 0.318 | 0.316 | 0.8 | 147 | -0.06 |
| 64 | | 1,2-Dibromoethane | 0.342 | 0.325 | 5.1 | 139 | -0.06 |
| 65 | p | Chlorobenzene | 0.678 | 0.683 | -0.7 | 157 | -0.06 |
| 66 | | 1,1,1,2-Tetrachloroethane | 0.254 | 0.249 | 2.2 | 152 | -0.06 |
| 67 | c | Ethylbenzene | 1.061 | 1.038 | 2.1 | 154 | -0.06 |
| 68 | | (m+p)Xylene | 0.376 | 0.369 | 2.0 | 153 | -0.06 |
| 69 | | o-Xylene | 0.370 | 0.368 | 0.3 | 152 | -0.06 |
| 70 | | Styrene | 0.666 | 0.666 | -0.1 | 154 | -0.06 |
| 71 | p | Bromoform | 0.210 | 0.193 | 8.0 | 138 | -0.07 |
| 72 | | Isopropylbenzene | 0.907 | 0.868 | 4.3 | 151 | -0.06 |
| 73 | | Cyclohexanone | 0.035 | 0.037 | -7.8 | 154 | -0.07 |
| 74 | I | d4 - Dichlorobenzene | 1.000 | 1.000 | 0.0 | 137 | -0.06 |
| 75 | p | 1,1,2,2-Tetrachloroethane | 1.067 | 0.928 | 13.0 | 135 | -0.06 |
| 76 | | Trans-1,4-Dichloro-2-butene | 0.326 | 0.269 | 17.4 | 124 | -0.06 |
| 7 | | 1,2,3-Trichloropropane | 0.326 | 0.266 | 18.3 | 127 | -0.07 |
| 7 | | n-Propylbenzene | 2.661 | 2.537 | 4.7 | 153 | -0.06 |
| 79 | | Bromobenzene | 0.668 | 0.630 | 5.7 | 154 | -0.05 |
| 80 | | 1,3,5-Trimethylbenzene | 2.423 | 1.596 | 34.1# | 109 | -0.07 |
| 81 | | 2-Chlorotoluene | 1.707 | 1.634 | 4.3 | 152 | -0.06 |

(#) = Out of Range

# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D  Vial: 3
Acq On : 31 Jan 102 8:37 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 | 1.852 | 3.7 | 153 | -0.06 |
| 83 | tert-Butylbenzene | 1.384 | 1.309 | 5.4 | 155 | -0.06 |
| 84 | 1,2,4-Trimethylbenzene | 1.594 | 1.633 | -2.4 | 161 | -0.06 |
| 85 | sec-Butylbenzene | 1.994 | 2.048 | -2.7 | 165 | -0.06 |
| 86 | p-Isopropyltoluene | 1.384 | 1.309 | 5.4 | 155 | -0.06 |
| 87 | 1,3-Dclbenz | 0.927 | 0.935 | -0.8 | 161 | -0.06 |
| 88 | 1,4-Dclbenz | 1.029 | 1.052 | -2.2 | 163 | -0.06 |
| 89 | n-Butylbenzene | 1.332 | 1.538 | -15.5 | 182 | -0.06 |
| 90 | 1,2-Dclbenz | 0.987 | 1.011 | -2.4 | 164 | -0.07 |
| 91 | 1,2-Dibromo-3-chloropropane | 0.173 | 0.129 | 25.6# | 113 | -0.07 |
| 92 | Nitrobenzene | 0.095 | 0.046 | 51.9# | 75 | -0.06 |
| 93 | 1,2,4-Tcbenzene | 0.484 | 0.515 | -6.2 | 165 | -0.07 |
| 9 | Hexachlorobt | 0.187 | 0.256 | -37.1# | 220# | -0.06 |
| 9 | Naphthalen | 1.339 | 1.231 | 8.0 | 135 | -0.07 |
| 96 | 1,2,3-Tclbenzene | 0.444 | 0.450 | -1.3 | 153 | -0.07 |
| 97 | TOTAL XYLENE | 0.000 | 0.000 | 0.0 | 71 | -0.02 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D  Vial: 3
Acq On : 31 Jan 102 8:37 am  Operator: droot
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Jan 31 9:05 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 | 817422 | 50.00 | ppb | -0.06 |
| 35) 1,4 - Difluorobenzene | 8.52 | 114 | 1553390 | 50.00 | ppb | -0.06 |
| 52) d5 - Chlorobenzene | 13.60 | 117 | 1214541 | 50.00 | ppb | -0.07 |
| 74) d4 - Dichlorobenzene | 18.05 | 152 | 476162 | 50.00 | ppb | -0.06 |
| **System Monitoring Compounds** | | | | | | **%Recovery** |
| 36) surr4,Dibrflmethane | 7.22 | 113 | 556301 | 50.71 | ppb | 101.42% |
| 58) surr3,Toluene-d8 | 11.03 | 98 | 1481064 | 51.76 | ppb | 103.53% |
| 59) surr2,bfb | 15.82 | 95 | 555024 | 47.59 | ppb | 95.18% |
| **Target Compounds** | | | | | | **Qvalue** |
| 2) Dichlorodifluoromethane | 1.64 | 85 | 407611 | 58.56 | ppb | 98 |
| 3) Chloromethane | 1.85 | 50 | 557812 | 60.47 | ppb | 98 |
| 4) Vinyl Chloride | 1.98 | 62 | 430902 | 54.39 | ppb | 98 |
| 5) Bromomethane | 2.38 | 94 | 280272 | 50.72 | ppb | 97 |
| 6) Chloroethane | 2.51 | 64 | 258172 | 52.06 | ppb | 97 |
| 7) Trichlorofluoromethane | 2.86 | 101 | 483580 | 55.15 | ppb | 99 |
| 8) Diethyl Ether | 3.30 | 59 | 387120 | 49.21 | ppb | 97 |
| 9) Acrolein | 3.46 | 56 | 273130 | 154.95 | ppb | 97 |
| 10) FREON 113 | 3.64 | 85 | 112905 | 48.67 | ppb | 95 |
| 11) 1,1-Diclethene | 3.61 | 96 | 300160 | 49.51 | ppb | 96 |
| 12) Acetone | 3.70 | 43 | 123505 | 35.22 | ppb | 99 |
| 13) Iodomethane | 3.82 | 127 | 188786 | 48.21 | ppb | 93 |
| 14) Carbon Disulfide | 3.92 | 76 | 1008180 | 43.11 | ppb | 99 |
| 15) Acetonitrile | 4.11 | 41 | 305392 | 775.26 | ppb | 98 |
| 16) Allyl Chloride | 4.18 | 76 | 200307 | 53.20 | ppb | 98 |
| 17) Methylene Chloride | 4.37 | 84 | 420089 | 50.84 | ppb | 97 |
| 18) TBA | 4.62 | 59 | 682156 | 709.90 | ppb | 99 |
| 19) Acrylonitrile | 4.74 | 53 | 955649 | 222.40 | ppb | 99 |
| 20) Methyl-t-Butyl Ether | 4.84 | 73 | 1130954 | 48.30 | ppb | 95 |
| 21) trans-1,2-Dichloroethene | 4.81 | 96 | 385843 | 51.34 | ppb | 97 |
| 22) 1,1-Diclethane | 5.48 | 63 | 675898 | 50.37 | ppb | 98 |
| 23) Vinyl Acetate | 5.60 | 43 | 873681 | 48.45 | ppb | 99 |
| 24) 2-Chloro-1,3-butadiene | 5.64 | 53 | 494949 | 41.35 | PPB | 100 |
| 25) 2,2-Dichloropropane | 6.42 | 77 | 508992 | 53.71 | ppb | 95 |
| 26) 2-Butanone | 6.47 | 43 | 219178 | 35.03 | ppb | 99 |
| 28) cis-1,2-Dichloroethene | 6.43 | 96 | 458040 | 51.08 | ppb | 92 |
| 29) Propionitrile | 6.53 | 54 | 340419 | 210.00 | ppb | 98 |
| 30) Methacrylonitrile | 6.79 | 67 | 178607 | 42.61 | ppb | 88 |
| 31) Bromochloromethane | 6.80 | 128 | 222910 | 50.28 | ppb | 91 |
| 32) Chloroform | 6.96 | 83 | 665436 | 51.71 | ppb | 99 |
| 33) Tetrahydrofuran | 6.89 | 42 | 164817 | 42.01 | ppb | 94 |
| 34) 1,1,1-Trichloroethane | 7.24 | 97 | 501116 | 52.79 | ppb | 98 |
| 37) Carbontetrachloride | 7.52 | 117 | 381615 | 46.84 | ppb | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D Vial: 3
Acq On : 31 Jan 102 8:37 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 31 9:05 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 | 480421 | 49.32 | ppb | | 96 |
| 39) | Iso-Butyl Alcohol | 8.38 | 43 | 442274 | 1226.48 | ppb | | 98 |
| 40) | Benzene | 7.85 | 78 | 1412471 | 50.59 | ppb | | 98 |
| 41) | 1,2-Dichloroethane | 7.87 | 62 | 544723 | 51.12 | ppb | | 100 |
| 42) | N-Heptane | 8.38 | 43 | 440993 | 61.23 | ppb | | 95 |
| 43) | Trichloroethene | 8.95 | 95 | 359996 | 48.31 | ppb | | 96 |
| 44) | 1,2-Diclpropane | 9.30 | 63 | 448434 | 48.96 | ppb | | 96 |
| 45) | Methyl Methacrylate | 9.56 | 69 | 283984 | 42.99 | ppb | | 95 |
| 46) | 1,4-Dioxane | 9.56 | 88 | 65042 | 660.11 | ppb | | 86 |
| 47) | Dibromomethane | 9.49 | 93 | 288945 | 48.42 | ppb | | 98 |
| 48) | Bromodichloromethane | 9.78 | 83 | 524951 | 51.54 | ppb | | 99 |
| 49) | 2-Nitropropane | 10.16 | 43 | 296212 | 87.56 | ppb | | 96 |
| 50) | 2-Chloroethylvinyl Ether | 10.34 | 63 | 271713 | 35.98 | ppb | | 100 |
| 51) | cis-1,3-Dichloropropene | 10.56 | 75 | 679262 | 50.91 | ppb | | 95 |
| 53) | 4-Methyl-2-Pentanone | 10.85 | 43 | 442428 | 36.17 | ppb | | 97 |
| 54) | Toluene | 11.14 | 91 | 1284116 | 50.45 | ppb | | 99 |
| 55) | trans-1,3-Dichloropropene | 11.55 | 75 | 591314 | 51.53 | ppb | | 99 |
| 56) | Ethyl Methacrylate | 11.75 | 69 | 495423 | 44.28 | ppb | | 97 |
| 57) | 1,1,2-Trichloroethane | 11.86 | 83 | 321773 | 50.06 | ppb | | 97 |
| 60) | Tetrachloroethene | 12.13 | 166 | 279813 | 46.13 | ppb | | 95 |
| 61) | 2-Hexanone | 12.33 | 43 | 289051 | 34.92 | ppb | | 95 |
| 62) | 1,3-Dichloropropane | 12.15 | 76 | 705771 | 50.75 | ppb | | 87 |
| 63) | Dibromochloromethane | 12.55 | 129 | 383213 | 49.60 | ppb | | 98 |
| 64) | 1,2-Dibromoethane | 12.74 | 107 | 394491 | 47.44 | ppb | | 97 |
| 65) | Chlorobenzene | 13.66 | 112 | 829227 | 50.34 | ppb | | 99 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.82 | 131 | 302095 | 48.89 | ppb | | 98 |
| 67) | Ethylbenzene | 13.89 | 91 | 1260937 | 48.94 | ppb | | 99 |
| 68) | (m+p)Xylene | 14.12 | 106 | 895901 | 97.97 | ppb | | 99 |
| 69) | o-Xylene | 14.84 | 106 | 447499 | 49.86 | ppb | | 98 |
| 70) | Styrene | 14.86 | 104 | 809100 | 50.03 | ppb | | 94 |
| 71) | Bromoform | 15.18 | 173 | 234413 | 46.02 | ppb | | 99 |
| 72) | Isopropylbenzene | 15.55 | 105 | 1054476 | 44.59 | ppb | | 98 |
| 73) | Cyclohexanone | 15.67 | 55 | 908499 | 1078.39 | ppb | | 97 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.11 | 83 | 441960 | 43.51 | ppb | | 99 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.22 | 53 | 128232 | 41.32 | ppb | | 93 |
| 77) | 1,2,3-Trichloropropane | 16.17 | 110 | 126735 | 40.86 | ppb | | 95 |
| 78) | n-Propylbenzene | 16.34 | 91 | 1208048 | 47.67 | ppb | | 100 |
| 79) | Bromobenzene | 16.09 | 156 | 300071 | 47.16 | ppb | | 99 |
| 80) | 1,3,5-Trimethylbenzene | 16.69 | 105 | 759921 | 32.15 | ppb | # | 52 |
| 81) | 2-Chlorotoluene | 16.48 | 91 | 778128 | 47.85 | ppb | | 97 |
| 82) | 4-Chlorotoluene | 16.69 | 91 | 881984 | 48.14 | ppb | | 98 |
| 83) | tert-Butylbenzene | 17.31 | 119 | 623274 | 47.30 | ppb | | 99 |
| 84) | 1,2,4-Trimethylbenzene | 17.40 | 105 | 777656 | 51.22 | ppb | | 98 |
| 85) | sec-Butylbenzene | 17.74 | 105 | 975102 | 51.36 | ppb | | 99 |

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

Quantitation Report

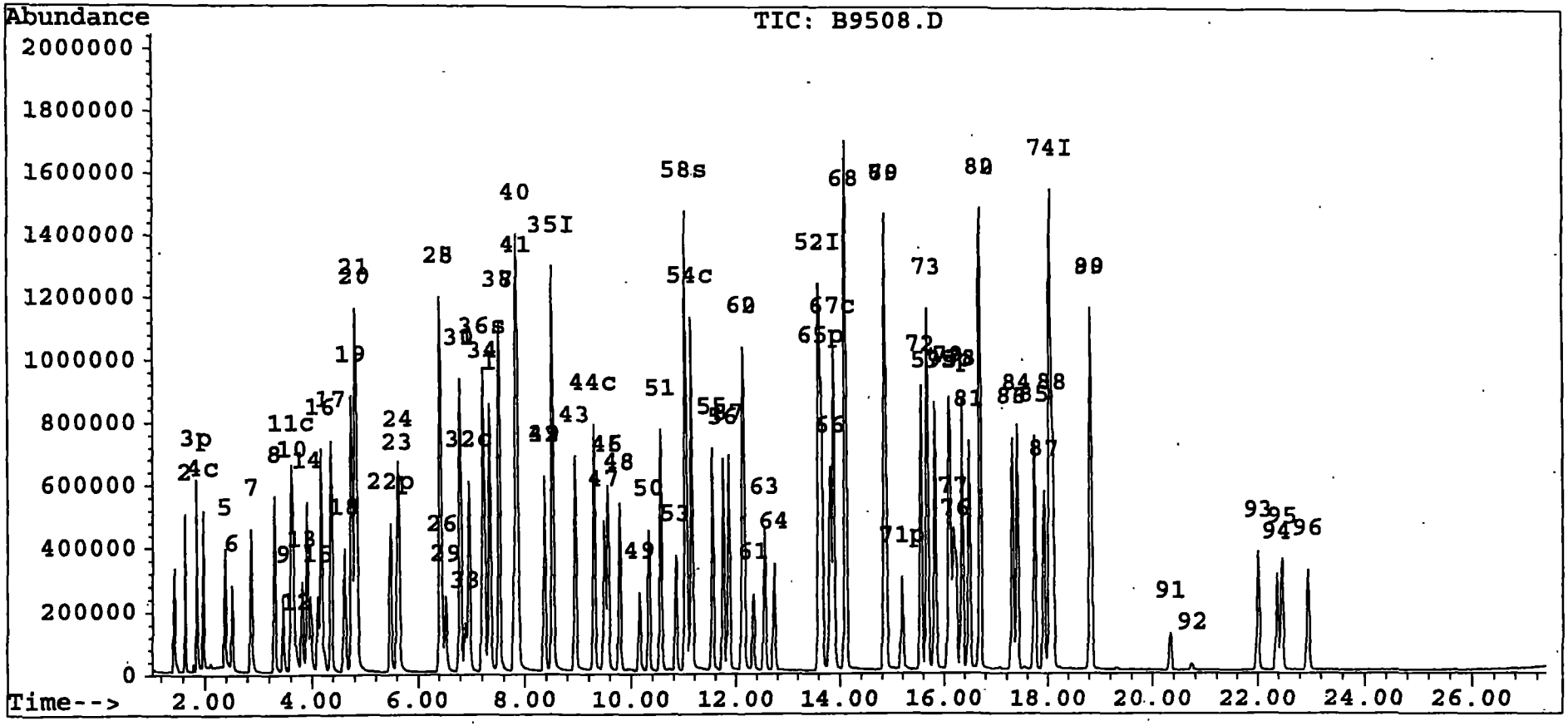
Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9508.D  Vial: 3
Acq On : 31 Jan 102 8:37 am  Operator: droot
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Jan 31 9:05 19102

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 | 623274 | 47.30 | ppb | 99 |
| 87) | 1,3-Dclbenz | 17.92 | 146 | 445100 | 50.40 | ppb | 98 |
| 88) | 1,4-Dclbenz | 18.10 | 146 | 500926 | 51.12 | ppb | 99 |
| 89) | n-Butylbenzene | 18.83 | 91 | 732447 | 57.73 | ppb | 99 |
| 90) | 1,2-Dclbenz | 18.81 | 146 | 481480 | 51.22 | ppb | 97 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.34 | 157 | 61197 | 37.20 | ppb | 98 |
| 92) | Nitrobenzene | 20.74 | 77 | 21703 | 27.96 | ppb | 89 |
| 93) | 1,2,4-Tcbenzene | 22.00 | 180 | 244996 | 53.10 | ppb | 99 |
| 94) | Hexachlorobt | 22.37 | 225 | 122035 | 68.53 | ppb | 98 |
| 95) | Naphthalen | 22.46 | 128 | 586171 | 45.98 | ppb | 96 |
| 96) | 1,2,3-Tclbenzene | 22.95 | 180 | 214151 | 50.64 | ppb | 99 |

Data Fi : J:\ACQUDATA\MSVOA3\DATA\013102\B9508. Vial: 3
Acq On : 31 Jan 102 8:37 am Operator: droot
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 31 9:05 19102

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



Response Factor Report 5971 - In

"ethod : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
itle : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Initial Calibration

Calibration Files
= 5 =B9559.D 20 =B9553.D
50 =B9554.D 100 =B9555.D 150 =B9556.D

| | | Compound | ~~5~~ 5 | ~~20~~ 20 | ~~50~~ 50 | ~~100~~ 100 | ~~150~~ 150 | ~~200~~ 200 R | Avg | %RSD | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | | Pentafluorobenzene | ISTD | | | | | | | | |
| 2) | | Dichlorodifluoromet | 0.619 | 0.639 | 0.726 | 0.728 | 0.610 | 0.629 | 0.659 | 8.20 | |
| 3) | p | Chloromethane | 1.163 | 1.149 | 1.174 | 1.129 | 0.936 | 0.970 | 1.087 | 9.68 | |
| 4) | c | Vinyl Chloride | 0.673 | 0.674 | 0.756 | 0.737 | 0.643 | 0.663 | 0.691 | 6.48 | |
| 5) | | Bromomethane | 0.277 | 0.364 | 0.396 | 0.391 | 0.381 | 0.389 | 0.366 | 12.34 | |
| 6) | | Chloroethane | 0.441 | 0.432 | 0.487 | 0.439 | 0.418 | 0.429 | 0.441 | 5.43 | |
| 7) | | Trichlorofluorometh | 0.639 | 0.742 | 0.822 | 0.775 | 0.722 | 0.764 | 0.744 | 8.30 | |
| 8) | | Diethyl Ether | 0.349 | 0.380 | 0.386 | 0.338 | 0.329 | 0.338 | 0.353 | 6.76 | |
| 9) | | Acrolein | 0.045 | 0.043 | 0.047 | 0.043 | 0.040 | 0.041 | 0.043 | 5.99 | |
| 10) | | FREON 113 | 0.115 | 0.133 | 0.153 | 0.134 | 0.130 | 0.134 | 0.133 | 9.10 | |
| 11) | c | 1,1-Diclethene | 0.344 | 0.371 | 0.441 | 0.410 | 0.418 | 0.444 | 0.405 | 9.79 | |
| 12) | | Acetone | | 0.137 | 0.138 | 0.124 | 0.113 | 0.112 | 0.125 | 9.95 | |
| 13) | | Iodomethane | 0.120 | 0.126 | 0.186 | 0.206 | 0.186 | 0.205 | 0.172 | 22.55 | LR |
| 14) | | Carbon Disulfide | 1.691 | 1.634 | 1.749 | 1.688 | 1.519 | 1.452 | 1.622 | 7.02 | |
| | | Acetonitrile | 0.012 | 0.011 | 0.012 | 0.013 | 0.011 | 0.012 | 0.012 | 5.32 | |
| | | Allyl Chloride | 0.232 | 0.249 | 0.270 | 0.249 | 0.244 | 0.257 | 0.250 | 5.06 | |
| 17) | | Methylene Chloride | 0.561 | 0.553 | 0.568 | 0.536 | 0.515 | 0.528 | 0.543 | 3.78 | |
| 18) | | TBA | 0.048 | 0.048 | 0.048 | 0.046 | 0.043 | 0.043 | 0.046 | 5.54 | |
| 19) | | Acrylonitrile | 0.147 | 0.164 | 0.165 | 0.155 | 0.141 | 0.144 | 0.153 | 6.70 | |
| 20) | | Methyl-t-Butyl Ethe | 1.113 | 1.211 | 1.234 | 1.101 | 1.062 | 1.104 | 1.138 | 6.01 | |
| 21) | | trans-1,2-Dichloroe | 0.407 | 0.404 | 0.458 | 0.408 | 0.423 | 0.452 | 0.425 | 5.61 | |
| 22) | p | 1,1-Diclethane | 0.742 | 0.822 | 0.886 | 0.823 | 0.799 | 0.851 | 0.820 | 5.96 | |
| 23) | | Vinyl Acetate | 0.933 | 1.033 | 1.084 | 0.964 | 0.885 | 0.905 | 0.967 | 7.99 | |
| 24) | | 2-Chloro-1,3-butadi | 0.915 | 0.929 | 0.962 | 0.863 | 0.770 | 0.729 | 0.861 | 10.82 | |
| 25) | | 2,2-Dichloropropane | 0.562 | 0.622 | 0.706 | 0.626 | 0.607 | 0.654 | 0.630 | 7.63 | |
| 26) | | 2-Butanone | 0.257 | 0.282 | 0.274 | 0.256 | 0.234 | 0.236 | 0.256 | 7.64 | |
| 27) | | Ethyl Acetate | | | | | | | 0.000 | -1.00 | |
| 28) | | cis-1,2-Dichloroeth | 0.501 | 0.505 | 0.564 | 0.511 | 0.521 | 0.549 | 0.525 | 4.90 | |
| 29) | | Propionitrile | 0.071 | 0.072 | 0.072 | 0.068 | 0.064 | 0.064 | 0.068 | 5.59 | |
| 30) | | Methacrylonitrile | 0.157 | 0.163 | 0.167 | 0.155 | 0.152 | 0.155 | 0.158 | 3.69 | |
| 31) | | Bromochloromethane | 0.272 | 0.262 | 0.275 | 0.257 | 0.254 | 0.261 | 0.264 | 3.09 | |
| 32) | c | Chloroform | 0.804 | 0.774 | 0.822 | 0.728 | 0.720 | 0.771 | 0.770 | 5.23 | |
| 33) | | Tetrahydrofuran | 0.227 | 0.193 | 0.175 | 0.159 | 0.146 | 0.154 | 0.176 | 17.23 | R |
| 34) | | 1,1,1-Trichloroetha | 0.593 | 0.680 | 0.767 | 0.672 | 0.656 | 0.705 | 0.679 | 8.43 | |
| 35) | I | 1,4 - Difluorobenzene | ISTD | | | | | | | | |
| 36) | s | surr4,Dibrflmethane | | 0.243 | 0.244 | 0.228 | 0.233 | 0.250 | 0.240 | 3.66 | |
| 37) | | Carbontetrachloride | 0.240 | 0.271 | 0.315 | 0.281 | 0.296 | 0.314 | 0.286 | 9.94 | |
| 38) | | 1,1-Dichloropropene | 0.396 | 0.412 | 0.466 | 0.426 | 0.426 | 0.436 | 0.427 | 5.55 | |
| ) | | Iso-Butyl Alcohol | 0.019 | 0.023 | 0.025 | 0.024 | 0.022 | 0.022 | 0.023 | 8.53 | |
| ) | | Benzene | 1.284 | 1.304 | 1.347 | 1.240 | 1.215 | 1.224 | 1.269 | 4.06 | |
| 41) | | 1,2-Dichloroethane | 0.285 | 0.302 | 0.296 | 0.268 | 0.266 | 0.270 | 0.281 | 5.51 | |
| 42) | | N-Heptane | 0.383 | 0.463 | 0.500 | 0.481 | 0.438 | 0.442 | 0.451 | 9.04 | |

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



149

Response Factor Report 5971 - In

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Initial Calibration

Calibration Files
5 =B9559.D 20 =B9553.D
50 =B9554.D 100 =B9555.D 150 =B9556.D

| | | Compound | 5 | 20 | 50 | 100 | 150 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 43) | | Trichloroethene | 0.315 | 0.328 | 0.345 | 0.323 | 0.326 | 0.329 | 0.328 | 2.98 |
| 44) | c | 1,2-Diclpropane | 0.365 | 0.363 | 0.380 | 0.345 | 0.343 | 0.352 | 0.358 | 3.86 |
| 45) | | Methyl Methacrylate | 0.202 | 0.201 | 0.198 | 0.195 | 0.189 | 0.188 | 0.195 | 2.96 |
| 46) | | 1,4-Dioxane | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 8.97 |
| 47) | | Dibromomethane | 0.170 | 0.168 | 0.167 | 0.153 | 0.158 | 0.162 | 0.163 | 4.11 |
| 48) | | Bromodichloromethan | 0.346 | 0.348 | 0.361 | 0.337 | 0.342 | 0.357 | 0.349 | 2.59 |
| 49) | | 2-Nitropropane | 0.082 | 0.082 | 0.086 | 0.081 | 0.081 | 0.081 | 0.082 | 2.15 |
| 50) | | 2-Chloroethylvinyl | 0.135 | 0.118 | 0.119 | 0.120 | 0.117 | 0.117 | 0.121 | 5.83 |
| 51) | | cis-1,3-Dichloropro | 0.513 | 0.513 | 0.531 | 0.508 | 0.501 | 0.511 | 0.513 | 1.90 |
| 52) | I | d5 - Chlorobenzene | ----------ISTD---------- | | | | | | | |
| 53) | | 4-Methyl-2-Pentanon | 0.497 | 0.481 | 0.500 | 0.456 | 0.433 | 0.427 | 0.466 | 6.84 |
| 54) | c | Toluene | 1.563 | 1.472 | 1.566 | 1.458 | 1.480 | 1.474 | 1.502 | 3.26 |
| 55) | | trans-1,3-Dichlorop | 0.603 | 0.602 | 0.605 | 0.566 | 0.562 | 0.564 | 0.584 | 3.73 |
| 56) | | Ethyl Methacrylate | 0.467 | 0.450 | 0.458 | 0.430 | 0.423 | 0.428 | 0.443 | 4.14 |
| | | 1,1,2-Trichloroetha | 0.340 | 0.318 | 0.324 | 0.289 | 0.294 | 0.294 | 0.310 | 6.59 |
| | s | surr3,Toluene-d8 | | 1.214 | 1.222 | 1.114 | 1.070 | 1.101 | 1.144 | 6.04 |
| 59) | s | surr2,bfb | | 0.480 | 0.479 | 0.476 | 0.418 | 0.432 | 0.457 | 6.43 |
| 60) | | Tetrachloroethene | 0.361 | 0.335 | 0.379 | 0.355 | 0.366 | 0.365 | 0.360 | 4.11 |
| 61) | | 2-Hexanone | 0.382 | 0.344 | 0.349 | 0.321 | 0.308 | 0.297 | 0.334 | 9.36 |
| 62) | | 1,3-Dichloropropane | 0.742 | 0.695 | 0.704 | 0.643 | 0.642 | 0.647 | 0.679 | 6.07 |
| 63) | | Dibromochloromethan | 0.394 | 0.385 | 0.386 | 0.376 | 0.381 | 0.391 | 0.385 | 1.71 |
| 64) | | 1,2-Dibromoethane | 0.438 | 0.390 | 0.392 | 0.375 | 0.372 | 0.369 | 0.389 | 6.57 |
| 65) | p | Chlorobenzene | 1.091 | 0.989 | 1.011 | 0.960 | 0.959 | 0.954 | 0.994 | 5.27 |
| 66) | | 1,1,1,2-Tetrachloro | 0.379 | 0.349 | 0.369 | 0.348 | 0.350 | 0.360 | 0.359 | 3.48 |
| 67) | c | Ethylbenzene | 1.646 | 1.593 | 1.693 | 1.600 | 1.555 | 1.556 | 1.607 | 3.35 |
| 68) | | (m+p)Xylene | 0.618 | 0.579 | 0.613 | 0.584 | 0.573 | 0.573 | 0.590 | 3.44 |
| 69) | | o-Xylene | 0.639 | 0.583 | 0.607 | 0.573 | 0.558 | 0.565 | 0.587 | 5.20 |
| 70) | | Styrene | 1.117 | 1.008 | 1.025 | 0.988 | 0.959 | 0.966 | 1.010 | 5.74 |
| 71) | p | Bromoform | 0.247 | 0.227 | 0.237 | 0.248 | 0.233 | 0.240 | 0.239 | 3.46 |
| 72) | | Isopropylbenzene | 1.562 | 1.525 | 1.598 | 1.548 | 1.447 | 1.471 | 1.525 | 3.72 |
| 73) | | Cyclohexanone | | | | | | | 0.000 | -1.00 |
| 74) | I | d4 - Dichlorobenzene | ----------ISTD---------- | | | | | | | |
| 75) | p | 1,1,2,2-Tetrachloro | 1.260 | 1.197 | 1.142 | 1.083 | 1.094 | 1.062 | 1.140 | 6.70 |
| 76) | | Trans-1,4-Dichloro- | 0.329 | 0.336 | 0.320 | 0.300 | 0.303 | 0.299 | 0.314 | 5.10 |
| 77) | | 1,2,3-Trichloroprop | 0.358 | 0.329 | 0.322 | 0.302 | 0.306 | 0.302 | 0.320 | 6.81 |
| 78) | | n-Propylbenzene | 4.425 | 4.386 | 4.540 | 4.367 | 4.354 | 4.215 | 4.381 | 2.41 |
| 79) | | Bromobenzene | 1.057 | 0.897 | 0.868 | 0.887 | 0.883 | 0.877 | 0.912 | 7.91 |
| 80) | | 1,3,5-Trimethylbenz | 2.849 | 2.681 | 2.759 | 2.663 | 2.663 | 2.607 | 2.704 | 3.20 |
| [illegible]) | | 2-Chlorotoluene | 2.818 | 2.641 | 2.670 | 2.529 | 2.549 | 2.480 | 2.615 | 4.68 |
| ) | | 4-Chlorotoluene | 3.101 | 2.976 | 2.884 | 2.831 | 2.796 | 2.750 | 2.890 | 4.49 |
| 83) | | tert-Butylbenzene | 2.530 | 2.416 | 2.581 | 2.423 | 2.410 | 2.402 | 2.460 | 3.08 |
| 84) | | 1,2,4-Trimethylbenz | 2.885 | 2.696 | 2.730 | 2.641 | 2.619 | 2.513 | 2.681 | 4.65 |

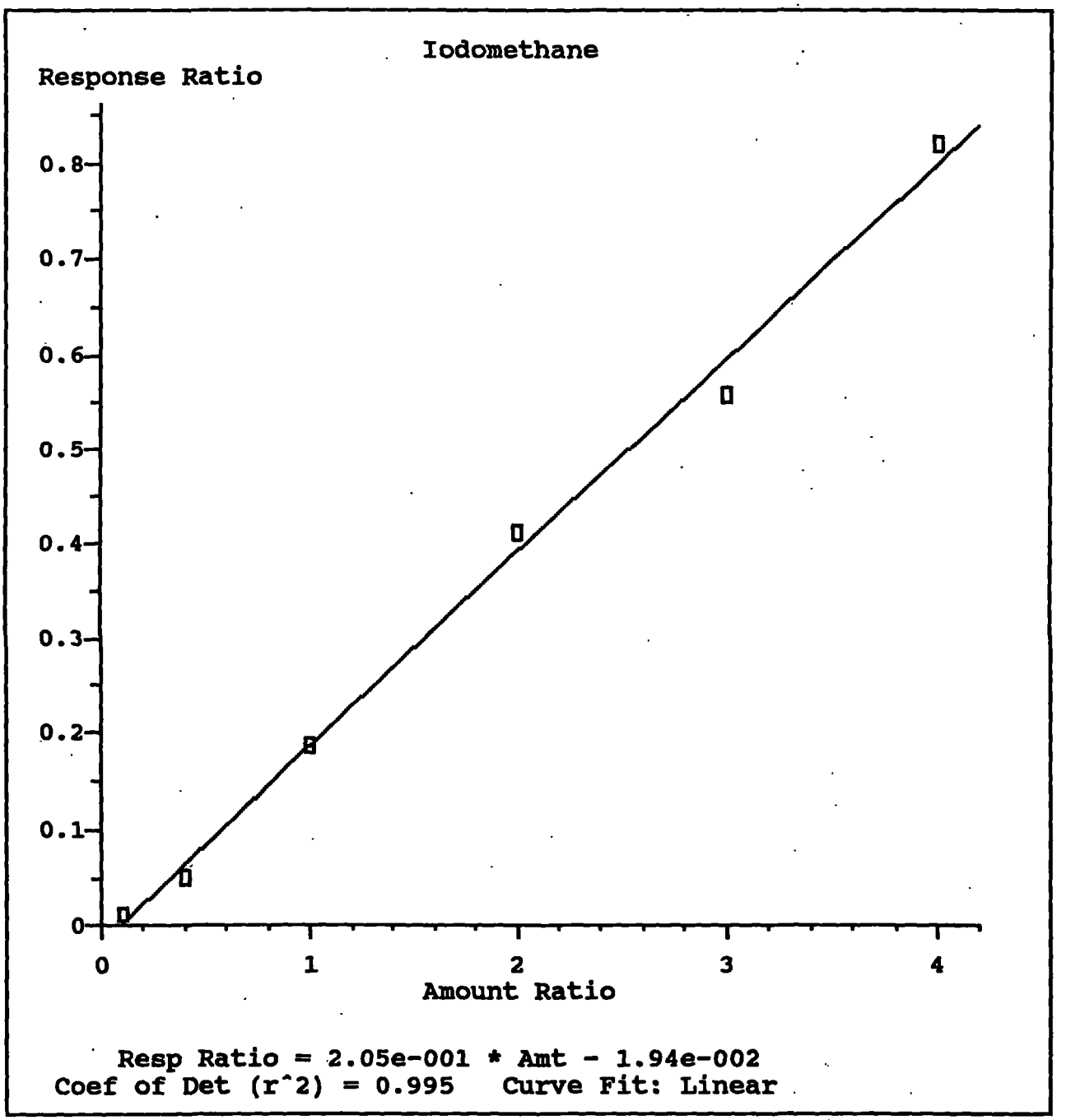
(#) = Out of Range ### Number of calibration levels exceeded format

Response Factor Report 5971 - In

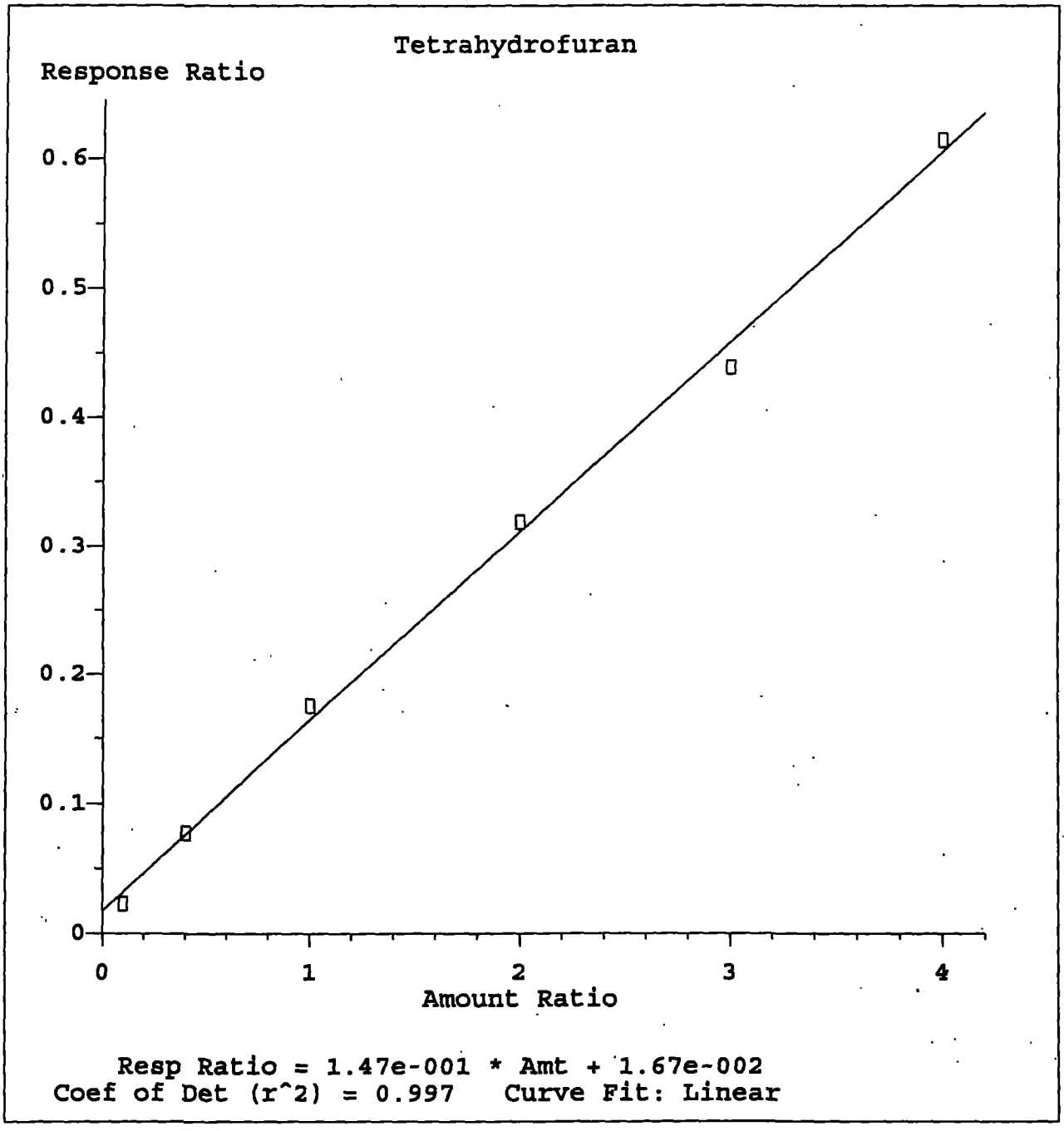
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
itle : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Initial Calibration

Calibration Files
= 5 =B9559.D 20 =B9553.D
50 =B9554.D 100 =B9555.D 150 =B9556.D

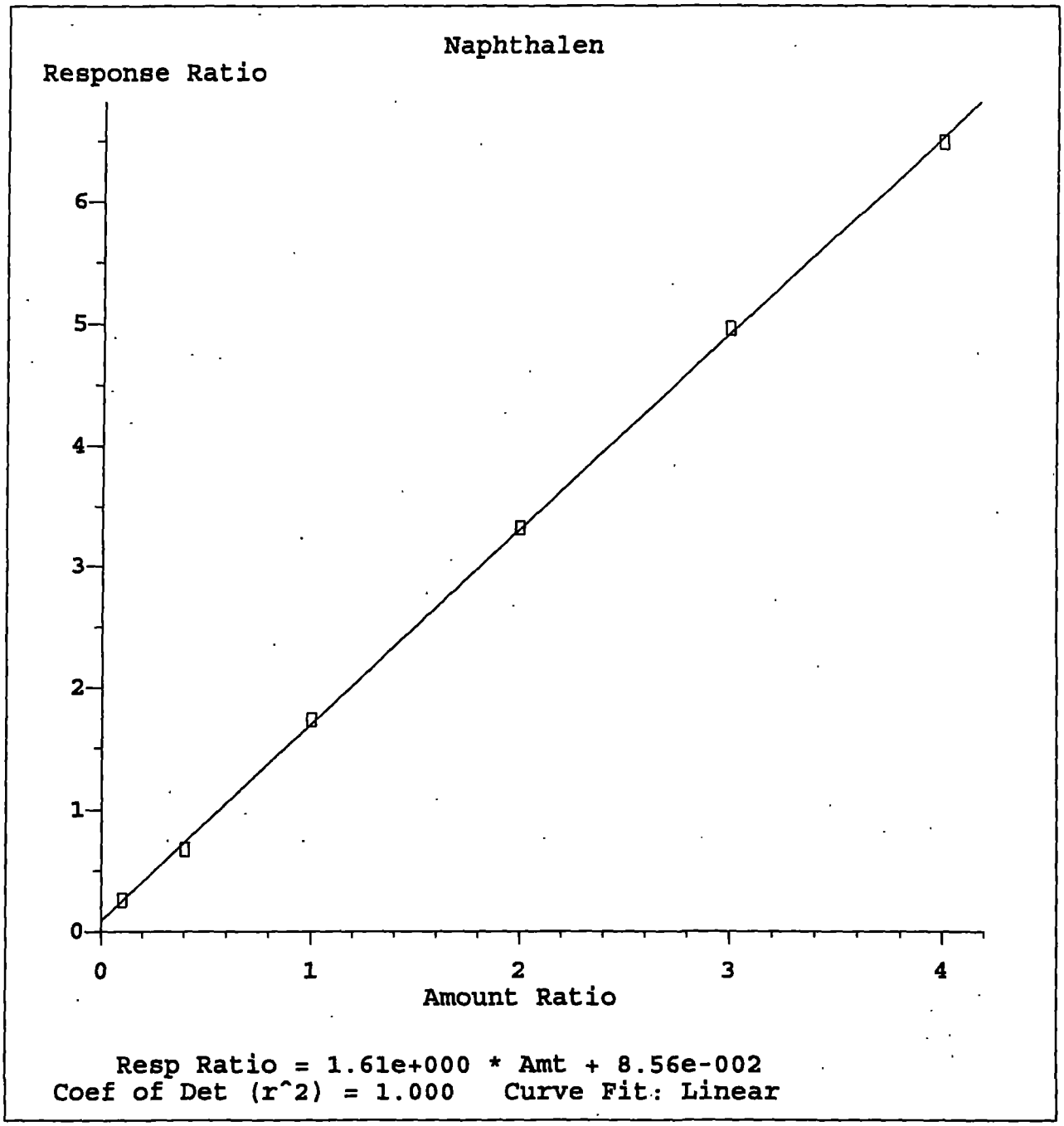
| | Compound | 5 | 20 | 50 | 100 | 150 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|
| 85) | sec-Butylbenzene | 3.919 | 3.893 | 4.162 | 3.891 | 3.841 | 3.795 | 3.917 | 3.27 |
| 86) | p-Isopropyltoluene | 2.530 | 2.416 | 2.581 | 2.423 | 2.974 | 2.937 | 2.644 | 9.46 |
| 87) | 1,3-Dclbenz | 1.608 | 1.357 | 1.433 | 1.392 | 1.356 | 1.342 | 1.415 | 7.08 |
| 88) | 1,4-Dclbenz | 1.765 | 1.497 | 1.528 | 1.471 | 1.443 | 1.449 | 1.525 | 7.96 |
| 89) | n-Butylbenzene | 2.791 | 2.880 | 3.052 | 2.902 | 2.832 | 2.724 | 2.863 | 3.92 |
| 90) | 1,2-Dclbenz | 1.623 | 1.365 | 1.435 | 1.357 | 1.342 | 1.323 | 1.408 | 7.97 |
| 91) | 1,2-Dibromo-3-chlor | 0.180 | 0.170 | 0.171 | 0.170 | 0.171 | 0.168 | 0.172 | 2.41 |
| 92) | Nitrobenzene | 0.076 | 0.062 | 0.060 | 0.072 | 0.082 | 0.083 | 0.073 | 13.72 |
| 93) | 1,2,4-Tcbenzene | 0.976 | 0.761 | 0.848 | 0.835 | 0.818 | 0.793 | 0.839 | 8.84 |
| 94) | Hexachlorobt | 0.509 | 0.467 | 0.526 | 0.483 | 0.477 | 0.473 | 0.489 | 4.77 |
| 95) | Naphthalen | 2.574 | 1.676 | 1.732 | 1.660 | 1.652 | 1.622 | 1.820 | 20.41 |
| 96) | 1,2,3-Tclbenzene | 0.870 | 0.730 | 0.744 | 0.708 | 0.704 | 0.695 | 0.742 | 8.80 |
| 97) | TOTAL XYLENE | | | | | | | 0.000 | -1.00 |




Method Name: J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Calibration Table Last Updated: Mon Feb 04 08:55:04 2002




Method Name: J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Calibration Table Last Updated: Fri Feb 01 16:45:13 2002




Method Name: J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Calibration Table Last Updated: Fri Feb 01 16:46:57 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D  Vial: 13
Acq On : 1 Feb 102 4:09 pm  Operator: TTRAVER
Sample : 5 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:35 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.40 | 168 | 710697 | 50.00 | ug/Kg | -0.01 |
| 35) 1,4 - Difluorobenzene | 8.58 | 114 | 1382240 | 50.00 | ug/Kg | -0.01 |
| 52) d5 - Chlorobenzene | 13.68 | 117 | 1085143 | 50.00 | ug/Kg | 0.00 |
| 74) d4 - Dichlorobenzene | 18.12 | 152 | 433141 | 50.00 | ug/Kg | -0.01 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.28 | 113 | 299952 | 45.27 | ug/Kg | 90.54% |
| 58) surr3,Toluene-d8 | 11.09 | 98 | 1278754 | 51.50 | ug/Kg | 103.01% |
| 59) surr2,bfb | 15.89 | 95 | 507982 | 51.22 | ug/Kg | 102.45% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.66 | 85 | 44025 | 4.46 | ug/Kg | 99 |
| 3) Chloromethane | 1.87 | 50 | 82682 | 5.16 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.00 | 62 | 47857 | 4.67 | ug/Kg | 99 |
| 5) Bromomethane | 2.41 | 94 | 19667 | 3.64 | ug/Kgm | 83 |
| 6) Chloroethane | 2.55 | 64 | 31343 | 4.89 | ug/Kg | 94 |
| 7) Trichlorofluoromethane | 2.90 | 101 | 45407 | 4.03 | ug/Kg | 95 |
| 8) Diethyl Ether | 3.35 | 59 | 24831 | 4.65 | ug/Kg | 94 |
| 9) Acrolein | 3.50 | 56 | 16022 | 22.98 | ug/Kg | 95 |
| 10) FREON 113 | 3.69 | 85 | 8143 | 3.79 | ug/Kg | 69 |
| 11) 1,1-Diclethene | 3.66 | 96 | 24468 | 3.99 | ug/Kg | 83 |
| 12) Acetone | 3.77 | 43 | 11730 | 6.61 | ug/Kg | 95 |
| 13) Iodomethane | 3.87 | 127 | 8545 | 3.41 | ug/Kg | 92 |
| 14) Carbon Disulfide | 3.96 | 76 | 120166 | 4.67 | ug/Kg | 99 |
| 15) Acetonitrile | 4.18 | 41 | 16876 | 50.87 | ug/Kg# | 78 |
| 16) Allyl Chloride | 4.23 | 76 | 16503 | 4.44 | ug/Kg | 91 |
| 17) Methylene Chloride | 4.42 | 84 | 39860 | 4.98 | ug/Kg | 94 |
| 18) TBA | 4.67 | 59 | 68810 | 100.80 | ug/Kg | 97 |
| 19) Acrylonitrile | 4.81 | 53 | 52337 | 22.57 | ug/Kg | 97 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 79112 | 4.60 | ug/Kg# | 94 |
| 21) trans-1,2-Dichloroethene | 4.87 | 96 | 28923 | 4.52 | ug/Kg | 96 |
| 22) 1,1-Diclethane | 5.54 | 63 | 52704 | 4.22 | ug/Kg | 98 |
| 23) Vinyl Acetate | 5.67 | 43 | 66282 | 4.20 | ug/Kg | 97 |
| 24) 2-Chloro-1,3-butadiene | 5.70 | 53 | 65052 | 4.75 | ug/Kg | 100 |
| 25) 2,2-Dichloropropane | 6.49 | 77 | 39971 | 4.12 | ug/Kg | 99 |
| 26) 2-Butanone | 6.53 | 43 | 18246 | 4.39 | ug/Kg | 95 |
| 28) cis-1,2-Dichloroethene | 6.50 | 96 | 35592 | 4.55 | ug/Kg | 98 |
| 29) Propionitrile | 6.59 | 54 | 25381 | 25.07 | ug/Kg | 91 |
| 30) Methacrylonitrile | 6.85 | 67 | 11179 | 4.80 | ug/Kg | 86 |
| 31) Bromochloromethane | 6.86 | 128 | 19323 | 4.98 | ug/Kg | 89 |
| 32) Chloroform | 7.03 | 83 | 57156 | 4.98 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.98 | 42 | 16148 | 5.80 | ug/Kg | 96 |
| 34) 1,1,1-Trichloroethane | 7.30 | 97 | 42160 | 4.07 | ug/Kg | 97 |
| 37) Carbontetrachloride | 7.59 | 117 | 33227 | 3.85 | ug/Kg | 90 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D Vial: 13
Acq On : 1 Feb 102 4:09 pm Operator: TTRAVER
Sample : 5 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 4 8:35 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.59 | 75 | 54742 | 4.42 | ug/Kg | 97 |
| 39) | Iso-Butyl Alcohol | 8.43 | 43 | 53416 | 78.63 | ug/Kg | 97 |
| 40) | Benzene | 7.91 | 78 | 177472 | 4.91 | ug/Kg | 100 |
| 41) | 1,2-Dichloroethane | 7.94 | 62 | 39440 | 4.83 | ug/Kg | 100 |
| 42) | N-Heptane | 8.43 | 43 | 52950 | 3.89 | ug/Kg | 96 |
| 43) | Trichloroethene | 9.01 | 95 | 43519 | 4.57 | ug/Kg | 88 |
| 44) | 1,2-Diclpropane | 9.37 | 63 | 50493 | 4.95 | ug/Kg | 98 |
| 45) | Methyl Methacrylate | 9.63 | 69 | 27873 | 5.05 | ug/Kg | 93 |
| 46) | 1,4-Dioxane | 9.63 | 88 | 9752 | 112.36 | ug/Kg | 82 |
| 47) | Dibromomethane | 9.56 | 93 | 23513 | 5.01 | ug/Kg | 98 |
| 48) | Bromodichloromethane | 9.85 | 83 | 47893 | 4.82 | ug/Kg | 97 |
| 49) | 2-Nitropropane | 10.23 | 43 | 22688 | 9.55 | ug/Kg# | 85 |
| 50) | 2-Chloroethylvinyl Ether | 10.40 | 63 | 18649 | 5.16 | ug/Kg | 95 |
| 51) | cis-1,3-Dichloropropene | 10.63 | 75 | 70882 | 4.87 | ug/Kg | 99 |
| 53) | 4-Methyl-2-Pentanone | 10.92 | 43 | 53887 | 4.78 | ug/Kg | 100 |
| 4) | Toluene | 11.21 | 91 | 169602 | 5.02 | ug/Kg | 97 |
| 55) | trans-1,3-Dichloropropene | 11.61 | 75 | 65456 | 5.06 | ug/Kg | 99 |
| 56) | Ethyl Methacrylate | 11.82 | 69 | 50683 | 5.14 | ug/Kg | 99 |
| 57) | 1,1,2-Trichloroethane | 11.92 | 83 | 36861 | 5.41 | ug/Kg | 90 |
| 60) | Tetrachloroethene | 12.18 | 166 | 39143 | 4.80 | ug/Kg# | 84 |
| 61) | 2-Hexanone | 12.40 | 43 | 41500 | 5.25 | ug/Kg | 96 |
| 62) | 1,3-Dichloropropane | 12.21 | 76 | 80467 | 5.35 | ug/Kg | 93 |
| 63) | Dibromochloromethane | 12.62 | 129 | 42796 | 5.04 | ug/Kg | 85 |
| 64) | 1,2-Dibromoethane | 12.80 | 107 | 47510 | 5.58 | ug/Kg | 95 |
| 65) | Chlorobenzene | 13.73 | 112 | 118401 | 5.38 | ug/Kg | 97 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.89 | 131 | 41115 | 5.15 | ug/Kg | 97 |
| 67) | Ethylbenzene | 13.96 | 91 | 178661 | 4.92 | ug/Kg | 99 |
| 68) | (m+p)Xylene | 14.17 | 106 | 134107 | 10.15 | ug/Kg | 98 |
| 69) | o-Xylene | 14.91 | 106 | 69342 | 5.37 | ug/Kg | 92 |
| 70) | Styrene | 14.93 | 104 | 121220 | 5.44 | ug/Kg | 98 |
| 71) | Bromoform | 15.26 | 173 | 26795 | 5.17 | ug/Kg | 98 |
| 72) | Isopropylbenzene | 15.62 | 105 | 169518 | 4.96 | ug/Kg | 98 |
| 73) | Cyclohexanone | 15.74 | 55 | 148850 | 112.98 | ug/Kg | 96 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.18 | 83 | 54593 | 5.44 | ug/Kg# | 96 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.29 | 53 | 14258 | 5.08 | ug/Kg | 90 |
| 77) | 1,2,3-Trichloropropane | 16.25 | 110 | 15522 | 5.51 | ug/Kg | 87 |
| 78) | n-Propylbenzene | 16.41 | 91 | 191663 | 4.80 | ug/Kg | 100 |
| 79) | Bromobenzene | 16.16 | 156 | 45799 | 5.79 | ug/Kg | 85 |
| 80) | 1,3,5-Trimethylbenzene | 16.76 | 105 | 123402 | 5.06 | ug/Kg# | 53 |
| 81) | 2-Chlorotoluene | 16.55 | 91 | 122058 | 5.19 | ug/Kg | 93 |
| 82) | 4-Chlorotoluene | 16.75 | 91 | 134327 | 5.18 | ug/Kg | 99 |
| 83) | tert-Butylbenzene | 17.37 | 119 | 109591 | 4.94 | ug/Kg | 96 |
| 84) | 1,2,4-Trimethylbenzene | 17.47 | 105 | 124945 | 5.20 | ug/Kg | 94 |
| 85) | sec-Butylbenzene | 17.81 | 105 | 169747 | 4.78 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D  Vial: 13
Acq On : 1 Feb 102 4:09 pm  Operator: TTRAVER
ample : 5 PPB  Inst : 5971 - In
isc :  Multiplr: 1.00
Quant Time: Feb 4 8:35 19102

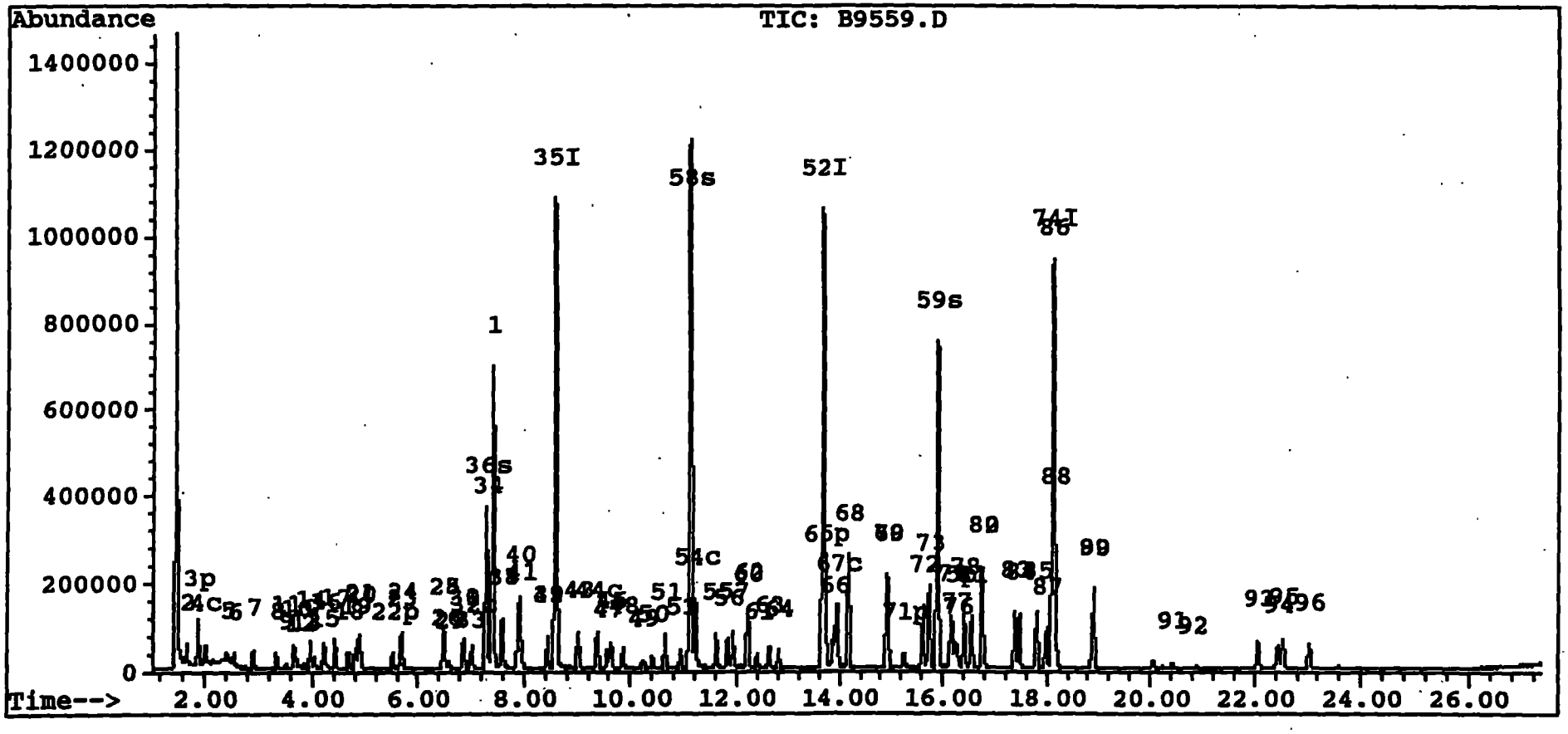
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 86) | p-Isopropyltoluene | 18.10 | 119 | 131947 | 5.94 | ug/Kgm | 97 |
| 87) | 1,3-Dclbenz | 17.99 | 146 | 69638 | 5.67 | ug/Kg | 99 |
| 88) | 1,4-Dclbenz | 18.16 | 146 | 76441 | 5.72 | ug/Kg | 97 |
| 89) | n-Butylbenzene | 18.90 | 91 | 120871 | 4.62 | ug/Kg | 97 |
| 90) | 1,2-Dclbenz | 18.89 | 146 | 70309 | 5.71 | ug/Kg | 93 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.40 | 157 | 7786 | 5.23 | ug/Kg | 93 |
| 92) | Nitrobenzene | 20.80 | 77 | 3311 | 5.19 | ug/Kg | 98 |
| 93) | 1,2,4-Tcbenzene | 22.07 | 180 | 42275 | 5.81 | ug/Kg | 87 |
| 94) | Hexachlorobt | 22.45 | 225 | 22052 | 5.05 | ug/Kg | 94 |
| 95) | Naphthalen | 22.53 | 128 | 111495 | 7.58 | ug/Kg# | 95 |
| 96) | 1,2,3-Tclbenzene | 23.03 | 180 | 37685 | 5.84 | ug/Kg | 98 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.  Vial: 13
Acq On : 1 Feb 102 4:09 pm  Operator: TTRAVER
Sample : 5 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:35 19102

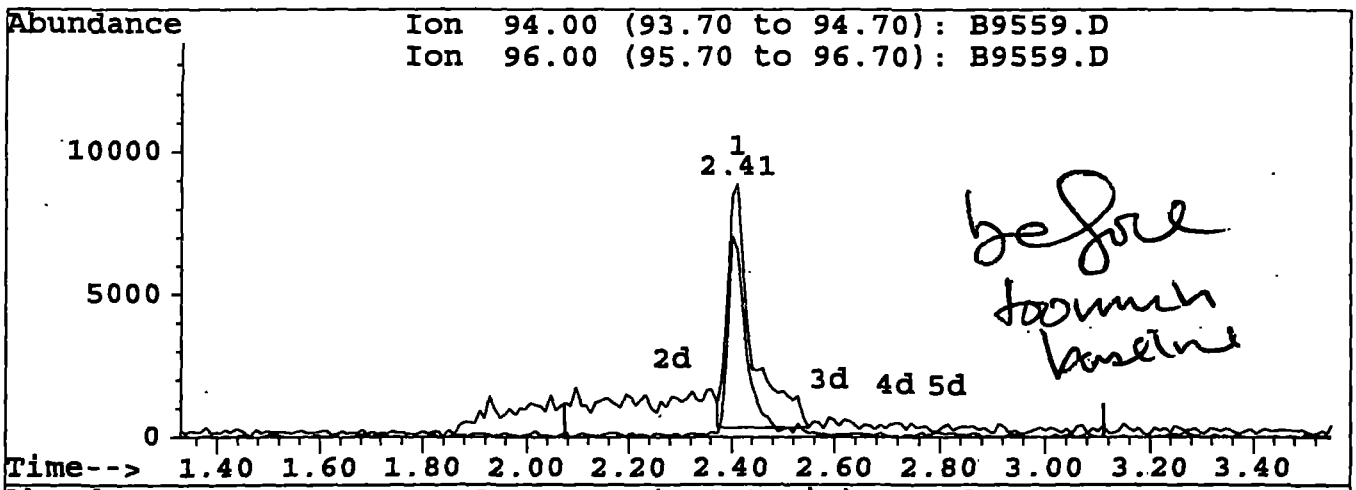
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration

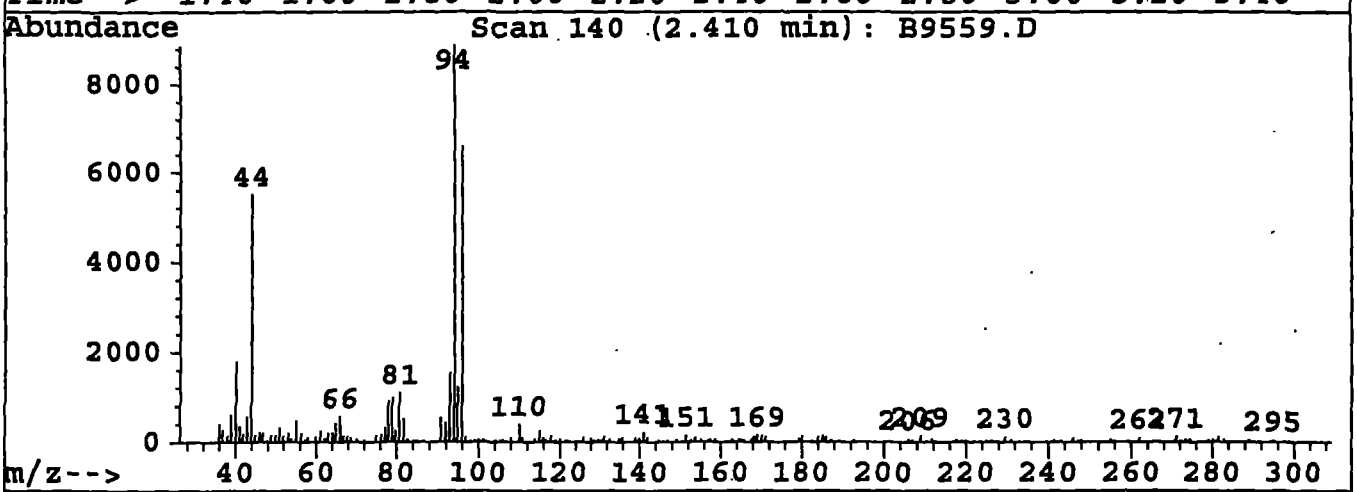


Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D  Vial: 13
Acq On : 1 Feb 102 4:09 pm  Operator: TTRAVER
Sample : 5 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 16:37 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 15:30:32 2002
Response via : Multiple Level Calibration




TIC: B9559.D

(5) Bromomethane
2.41min 5.19ug/Kg
response 27986

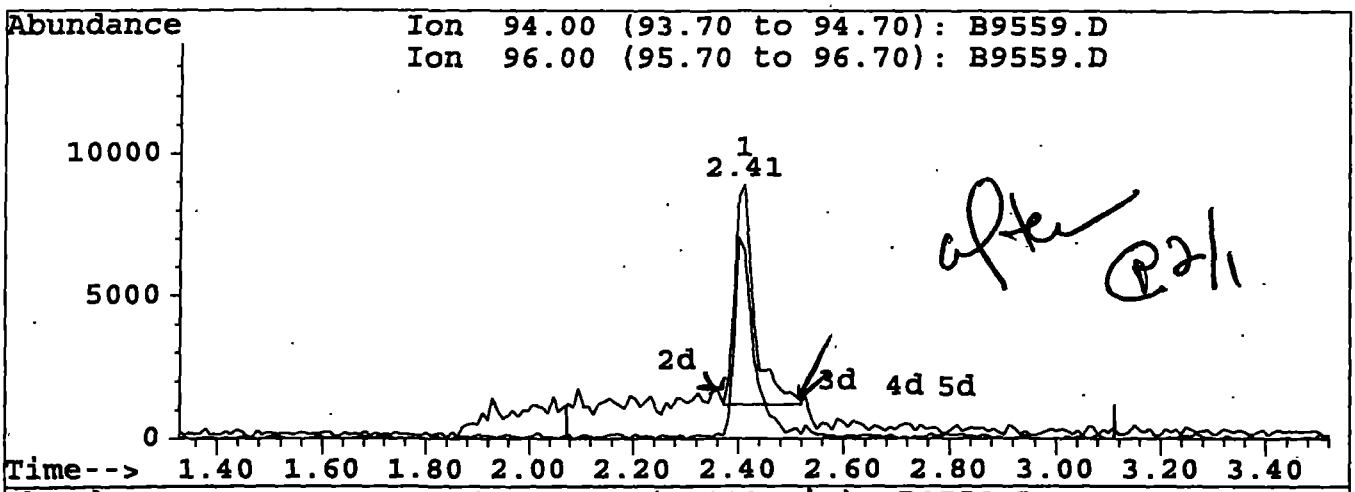
| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 96.00 | 90.30 | 74.16 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

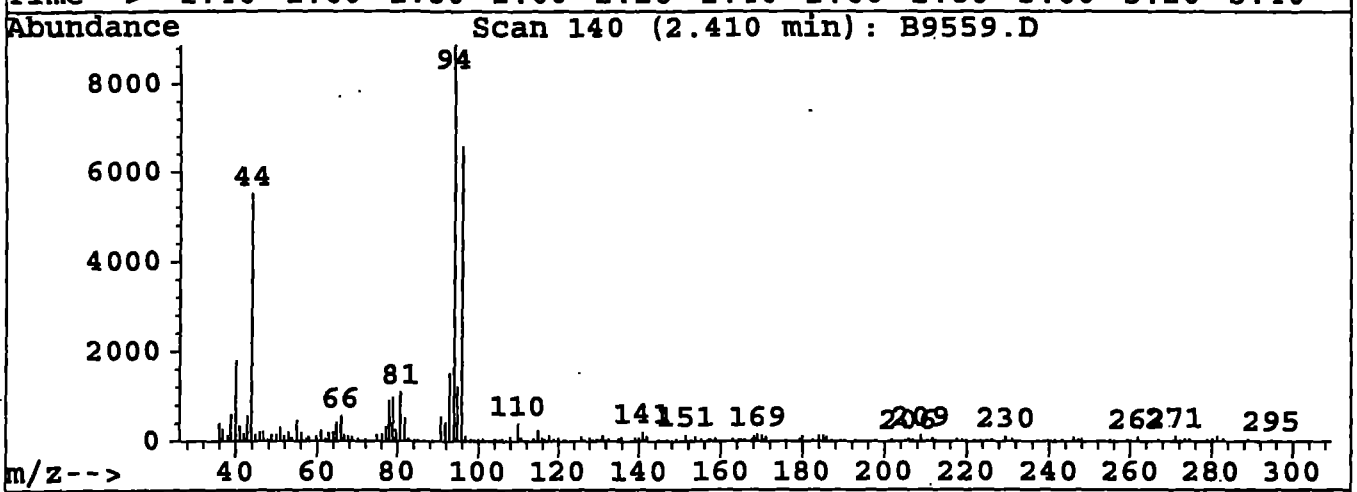
Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D
Acq On : 1 Feb 102 4:09 pm
Sample : 5 PPB
Misc :
Quant Time: Feb 1 16:40 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 15:30:32 2002
Response via : Multiple Level Calibration




after @2/1




TIC: B9559.D

(5) Bromomethane
2.41min 3.64ug/Kg m
response 19667

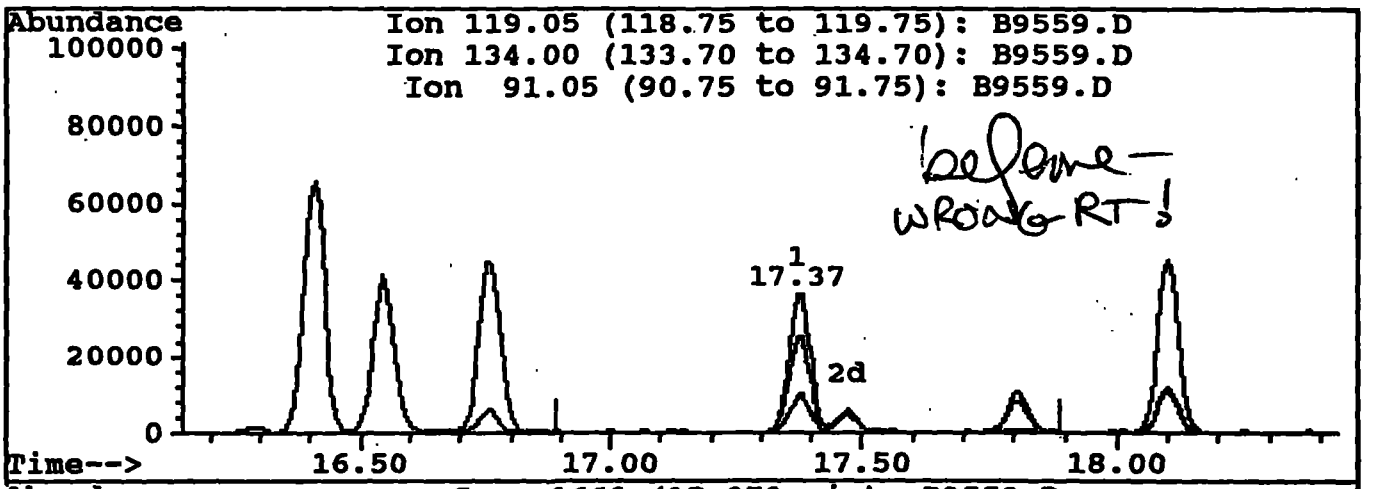
| Ion | Exp% | Act% |
|---|---|---|
| 94.00 | 100 | 100 |
| 96.00 | 90.30 | 74.16 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

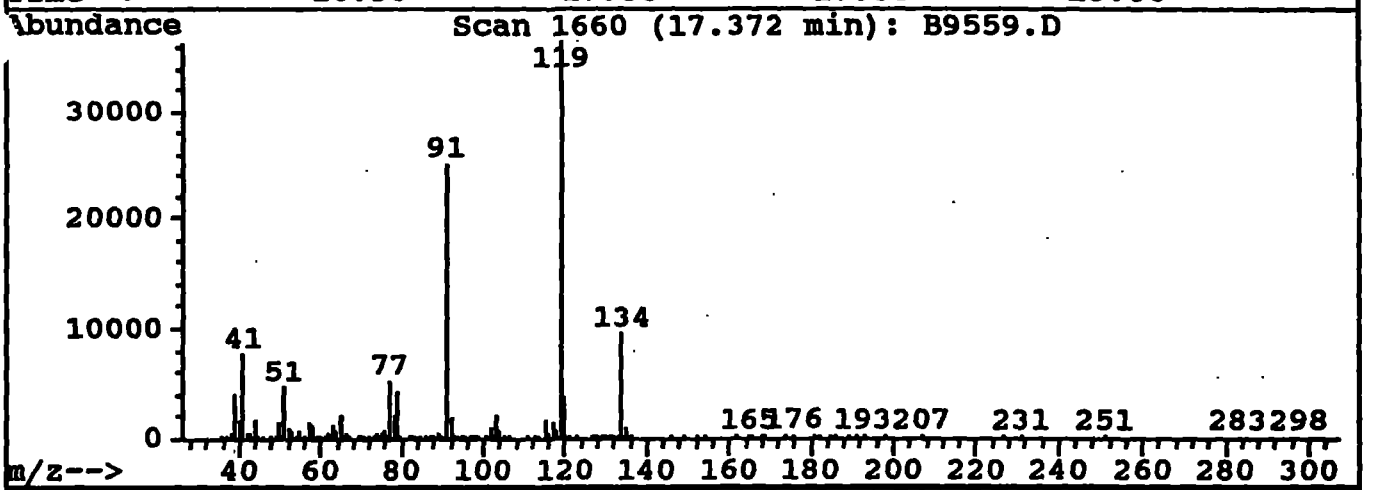
Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D
Acq On : 1 Feb 102 4:09 pm
Sample : 5 PPB
Misc :
Quant Time: Feb 1 16:40 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration




before — WRONG RT!




TIC: B9559.D

(86) p-Isopropyltoluene
17.37min 4.94ug/Kg
response 109591

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 25.91 |
| 91.05 | 65.80 | 68.85 |
| 0.00 | 0.00 | 0.00 |

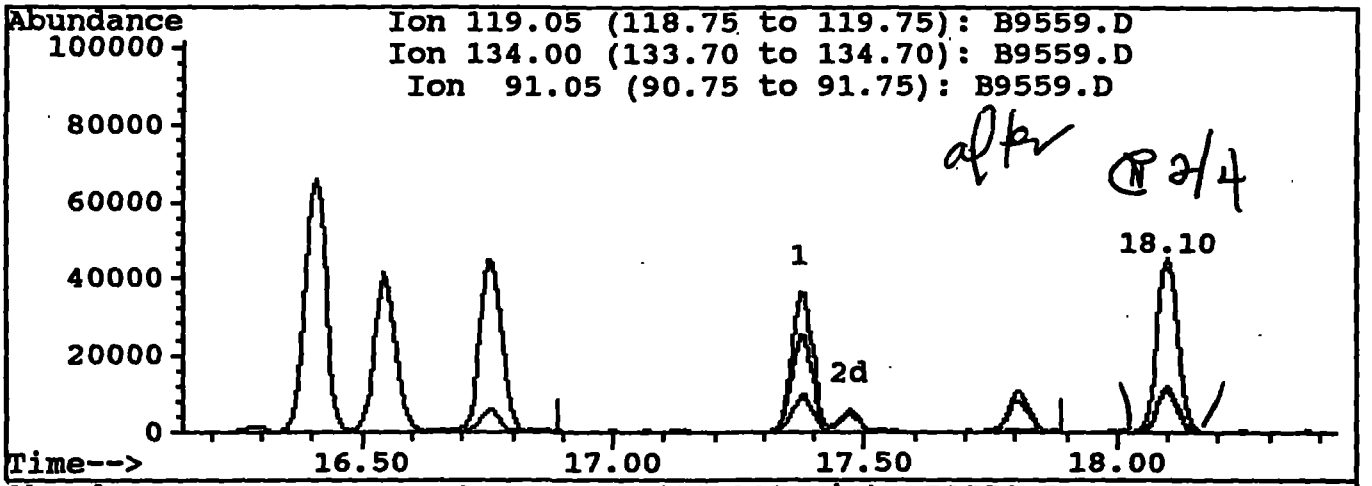


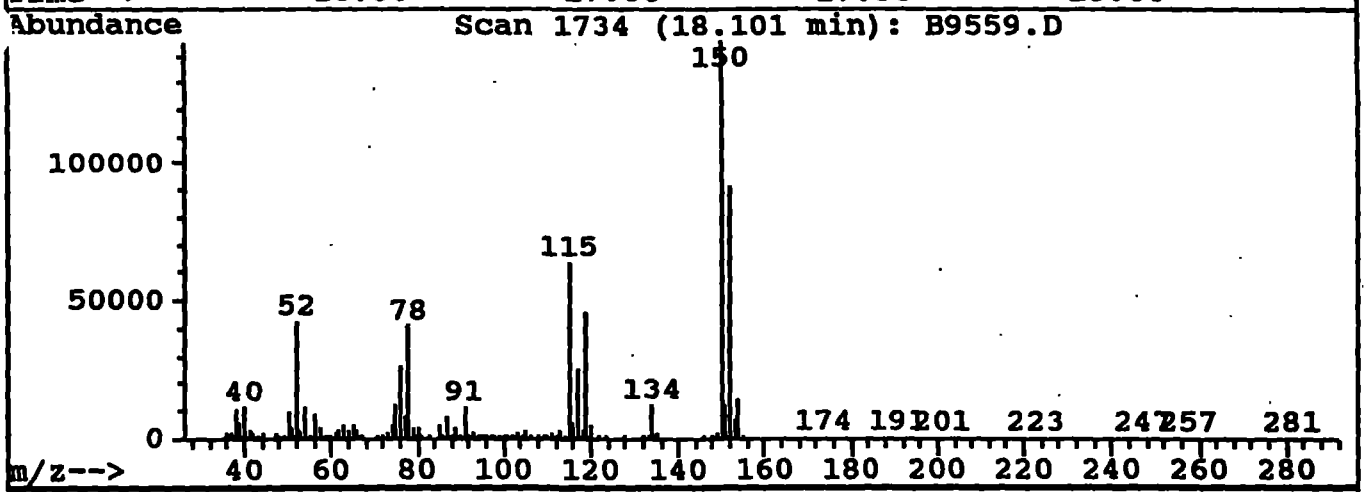
B9559.D SOL0201.M Mon Feb 04 08:35:40 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9559.D  Vial: 13
Acq On : 1 Feb 102 4:09 pm  Operator: TTRAVER
Sample : 5 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:35 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration




TIC: B9559.D

(86) p-Isopropyltoluene
18.10min 5.94ug/Kg m
response 131947

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.15 |
| 91.05 | 65.80 | 23.89 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.D  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:39 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.41 | 168 | 583814 | 50.00 | ug/Kg | 0.02 |
| 35) 1,4 - Difluorobenzene | 8.60 | 114 | 1167311 | 50.00 | ug/Kg | 0.02 |
| 52) d5 - Chlorobenzene | 13.69 | 117 | 921331 | 50.00 | ug/Kg | 0.02 |
| 74) d4 - Dichlorobenzene | 18.13 | 152 | 368843 | 50.00 | ug/Kg | 0.03 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.29 | 113 | 425874 | 51.94 | ug/Kg | 103.87% |
| 58) surr3,Toluene-d8 | 11.11 | 98 | 1677135 | 85.35 | ug/Kg | 170.69% |
| 59) surr2,bfb | 15.90 | 95 | 663130 | 85.66 | ug/Kg | 171.32% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.67 | 85 | 149218 | 30.02 | ug/Kg | 98 |
| 3) Chloromethane | 1.87 | 50 | 268295 | 40.72 | ug/Kg | 99 |
| 4) Vinyl Chloride | 2.01 | 62 | 157352 | 27.81 | ug/Kg | 100 |
| 5) Bromomethane | 2.40 | 94 | 85002 | 21.54 | ug/Kg | 98 |
| 6) Chloroethane | 2.55 | 64 | 100905 | 28.49 | ug/Kg | 96 |
| 7) Trichlorofluoromethane | 2.91 | 101 | 173170 | 27.65 | ug/Kg | 94 |
| 8) Diethyl Ether | 3.35 | 59 | 88811 | 15.81 | ug/Kg | 95 |
| 9) Acrolein | 3.52 | 56 | 50621 | 40.21 | ug/Kg | 90 |
| 10) FREON 113 | 3.70 | 85 | 31042 | 18.74 | ug/Kg | 88 |
| 11) 1,1-Diclethene | 3.66 | 96 | 86751 | 20.03 | ug/Kg | 95 |
| 12) Acetone | 3.76 | 43 | 31993 | 12.77 | ug/Kg | 92 |
| 13) Iodomethane | 3.88 | 127 | 29329 | 13.87 | ug/Kg | 87 |
| 14) Carbon Disulfide | 3.97 | 76 | 381554 | 22.84 | ug/Kg | 100 |
| 15) Acetonitrile | 4.19 | 41 | 51997 | 184.82 | ug/Kg | 91 |
| 16) Allyl Chloride | 4.25 | 76 | 58055 | 21.59 | ug/Kg | 99 |
| 17) Methylene Chloride | 4.43 | 84 | 129111 | 21.88 | ug/Kg | 96 |
| 18) TBA | 4.69 | 59 | 225867 | 329.11 | ug/Kg | 98 |
| 19) Acrylonitrile | 4.82 | 53 | 192071 | 62.58 | ug/Kg | 93 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 282736 | 16.91 | ug/Kg | 96 |
| 21) trans-1,2-Dichloroethene | 4.89 | 96 | 94327 | 17.57 | ug/Kg | 96 |
| 22) 1,1-Diclethane | 5.54 | 63 | 191961 | 20.03 | ug/Kg | 97 |
| 23) Vinyl Acetate | 5.67 | 43 | 241198 | 18.73 | ug/Kg | 100 |
| 24) 2-Chloro-1,3-butadiene | 5.70 | 53 | 216956 | 25.83 | ug/Kg | 95 |
| 25) 2,2-Dichloropropane | 6.49 | 77 | 145211 | 21.45 | ug/Kg | 93 |
| 26) 2-Butanone | 6.54 | 43 | 65863 | 14.74 | ug/Kg | 92 |
| 28) cis-1,2-Dichloroethene | 6.50 | 96 | 118003 | 18.43 | ug/Kg# | 82 |
| 29) Propionitrile | 6.61 | 54 | 83798 | 72.38 | ug/Kg | 94 |
| 30) Methacrylonitrile | 6.86 | 67 | 38157 | 12.75 | ug/Kg | 84 |
| 31) Bromochloromethane | 6.87 | 128 | 61225 | 19.34 | ug/Kg | 92 |
| 32) Chloroform | 7.04 | 83 | 180766 | 19.67 | ug/Kg | 100 |
| 33) Tetrahydrofuran | 6.97 | 42 | 45088 | 14.37 | ug/Kg | 97 |
| 34) 1,1,1-Trichloroethane | 7.32 | 97 | 158863 | 23.43 | ug/Kg | 96 |
| 37) Carbontetrachloride | 7.60 | 117 | 126411 | 20.65 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.D  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:39 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.59 | 75 | 192333 | 26.27 | ug/Kg | 94 |
| 39) | Iso-Butyl Alcohol | 8.45 | 43 | 215715 | 796.06 | ug/Kg | 99 |
| 40) | Benzene | 7.93 | 78 | 608731 | 29.01 | ug/Kg | 100 |
| 41) | 1,2-Dichloroethane | 7.95 | 62 | 140793 | 17.58 | ug/Kg | 99 |
| 42) | N-Heptane | 8.45 | 43 | 215986 | 39.91 | ug/Kg | 97 |
| 43) | Trichloroethene | 9.02 | 95 | 153187 | 27.35 | ug/Kg | 90 |
| 44) | 1,2-Diclpropane | 9.37 | 63 | 169560 | 24.64 | ug/Kg | 95 |
| 45) | Methyl Methacrylate | 9.64 | 69 | 93696 | 18.88 | ug/Kg | 97 |
| 46) | 1,4-Dioxane | 9.64 | 88 | 30291 | 409.10 | ug/Kg | 97 |
| 47) | Dibromomethane | 9.57 | 93 | 78485 | 17.50 | ug/Kg | 98 |
| 48) | Bromodichloromethane | 9.87 | 83 | 162608 | 21.24 | ug/Kg | 99 |
| 49) | 2-Nitropropane | 10.24 | 43 | 76122 | 29.94 | ug/Kg# | 82 |
| 50) | 2-Chloroethylvinyl Ether | 10.41 | 63 | 55066 | 9.70 | ug/Kg | 98 |
| 51) | cis-1,3-Dichloropropene | 10.64 | 75 | 239365 | 23.87 | ug/Kg | 91 |
| 3) | 4-Methyl-2-Pentanone | 10.93 | 43 | 177332 | 19.11 | ug/Kg | 93 |
| 4) | Toluene | 11.22 | 91 | 542440 | 28.09 | ug/Kg | 100 |
| 55) | trans-1,3-Dichloropropene | 11.62 | 75 | 222014 | 25.51 | ug/Kg | 97 |
| 56) | Ethyl Methacrylate | 11.82 | 69 | 165857 | 19.54 | ug/Kg | 99 |
| 57) | 1,1,2-Trichloroethane | 11.93 | 83 | 117038 | 24.00 | ug/Kg | 99 |
| 60) | Tetrachloroethene | 12.20 | 166 | 123357 | 28.59 | ug/Kg | 97 |
| 61) | 2-Hexanone | 12.41 | 43 | 126806 | 20.20 | ug/Kg | 97 |
| 62) | 1,3-Dichloropropane | 12.23 | 76 | 256046 | 24.27 | ug/Kg | 91 |
| 63) | Dibromochloromethane | 12.63 | 129 | 142048 | 24.24 | ug/Kg | 100 |
| 64) | 1,2-Dibromoethane | 12.82 | 107 | 143764 | 22.79 | ug/Kg | 97 |
| 65) | Chlorobenzene | 13.74 | 112 | 364391 | 29.16 | ug/Kg | 96 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.90 | 131 | 128789 | 27.48 | ug/Kg | 95 |
| 67) | Ethylbenzene | 13.96 | 91 | 587186 | 30.04 | ug/Kg | 99 |
| 68) | (m+p)Xylene | 14.19 | 106 | 426719 | 61.51 | ug/Kg | 94 |
| 69) | o-Xylene | 14.93 | 106 | 215031 | 31.58 | ug/Kg | 98 |
| 70) | Styrene | 14.95 | 104 | 371409 | 30.27 | ug/Kg | 96 |
| 71) | Bromoform | 15.27 | 173 | 83656 | 21.65 | ug/Kg | 99 |
| 72) | Isopropylbenzene | 15.63 | 105 | 561878 | 32.29 | ug/Kg | 97 |
| 73) | Cyclohexanone | 15.75 | 55 | 323527 | 506.24 | ug/Kg | 97 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.20 | 83 | 176571 | 22.44 | ug/Kg | 95 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.29 | 53 | 49524 | 20.60 | ug/Kg | 94 |
| 77) | 1,2,3-Trichloropropane | 16.25 | 110 | 48487 | 20.18 | ug/Kg | 92 |
| 78) | n-Propylbenzene | 16.42 | 91 | 647101 | 32.96 | ug/Kg | 99 |
| 79) | Bromobenzene | 16.18 | 156 | 132354 | 26.85 | ug/Kg | 97 |
| 80) | 1,3,5-Trimethylbenzene | 16.77 | 105 | 395564 | 22.83 | ug/Kg# | 52 |
| 81) | 2-Chlorotoluene | 16.56 | 91 | 389717 | 30.94 | ug/Kg | 98 |
| 82) | 4-Chlorotoluene | 16.77 | 91 | 439134 | 30.95 | ug/Kg | 95 |
| 83) | tert-Butylbenzene | 17.39 | 119 | 356431 | 34.92 | ug/Kg | 93 |
| 84) | 1,2,4-Trimethylbenzene | 17.48 | 105 | 397792 | 33.82 | ug/Kg | 100 |
| 85) | sec-Butylbenzene | 17.82 | 105 | 574385 | 39.06 | ug/Kg | 99 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.D  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:39 19102

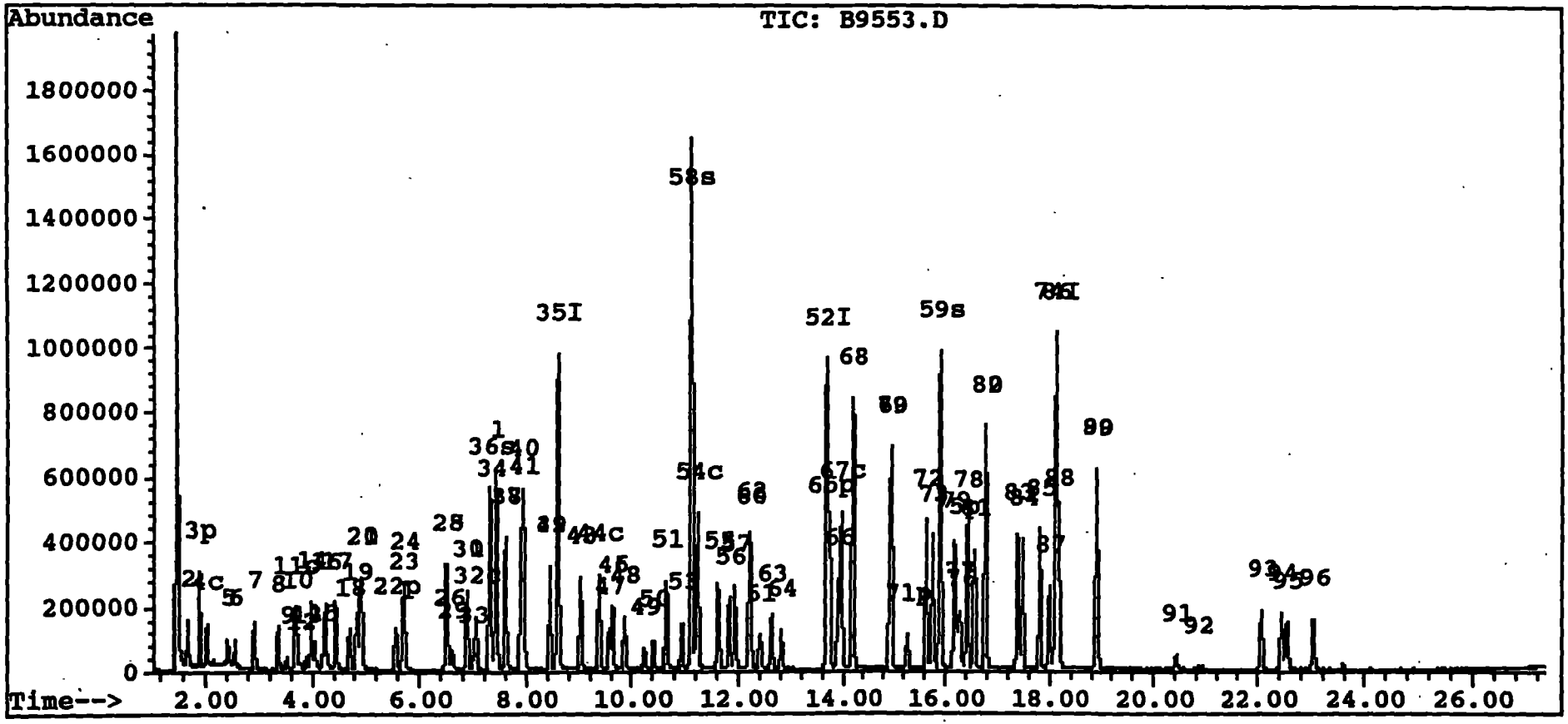
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 18.11 | 119 | 443320 | 43.43 | ug/Kgm | 95 |
| 87) 1,3-Dclbenz | 18.00 | 146 | 200227 | 29.27 | ug/Kg | 97 |
| 88) 1,4-Dclbenz | 18.17 | 146 | 220790 | 29.09 | ug/Kg | 98 |
| 89) n-Butylbenzene | 18.91 | 91 | 424912 | 43.23 | ug/Kg | 99 |
| 90) 1,2-Dclbenz | 18.89 | 146 | 201405 | 27.66 | ug/Kg | 96 |
| 91) 1,2-Dibromo-3-chloropropan | 20.43 | 157 | 25049 | 19.66 | ug/Kg | 92 |
| 92) Nitrobenzene | 20.82 | 77 | 9187 | 19.23 | ug/Kg | 97 |
| 93) 1,2,4-Tcbenzene | 22.08 | 180 | 112288 | 31.42 | ug/Kg | 98 |
| 94) Hexachlorobt | 22.46 | 225 | 68837 | 49.90 | ug/Kg | 97 |
| 95) Naphthalen | 22.55 | 128 | 247204 | 25.03 | ug/Kg | 98 |
| 96) 1,2,3-Tclbenzene | 23.04 | 180 | 107674 | 32.87 | ug/Kg | 89 |

(#) = qualifier out of range (m) = manual integration
B9553.D SOL0201.M Mon Feb 04 08:40:51 2002

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:39 19102

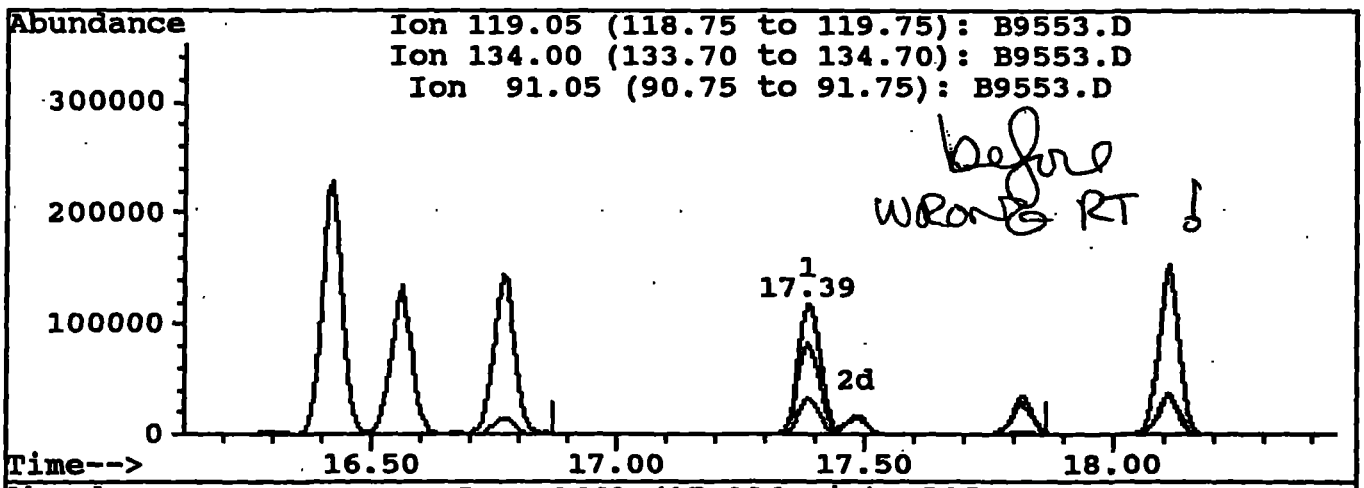
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

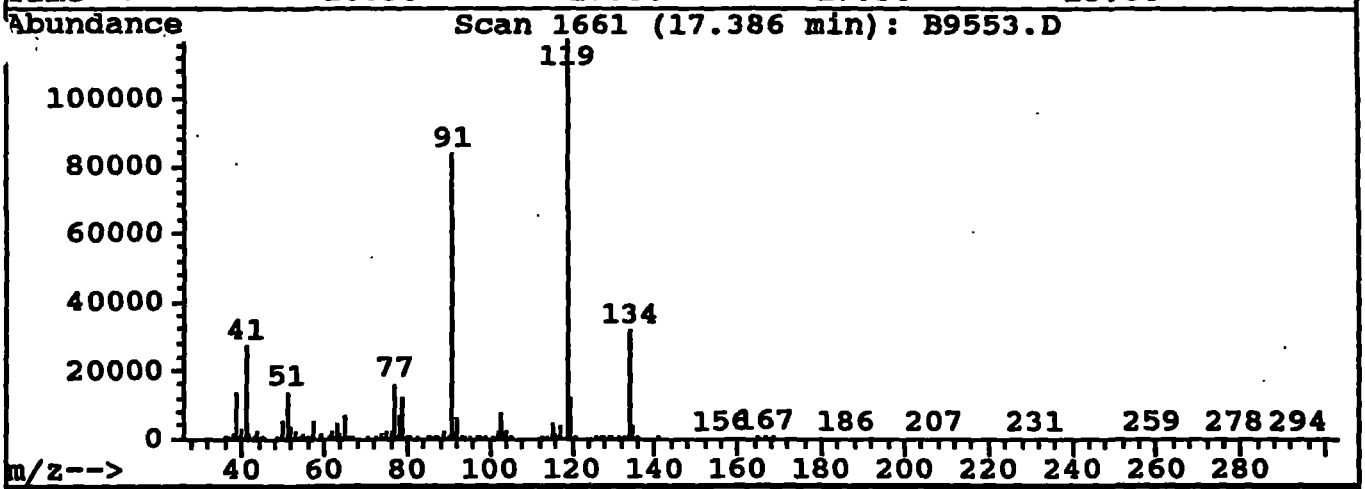


Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.D  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 12:46 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration




TIC: B9553.D

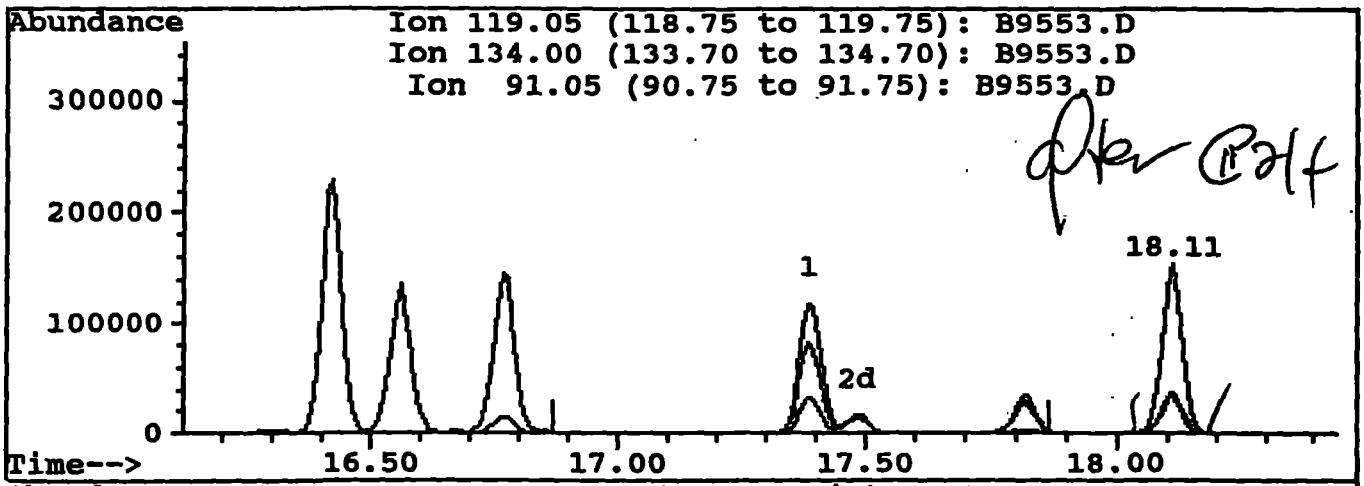
(86) p-Isopropyltoluene
17.39min 34.92ug/Kg
response 356431

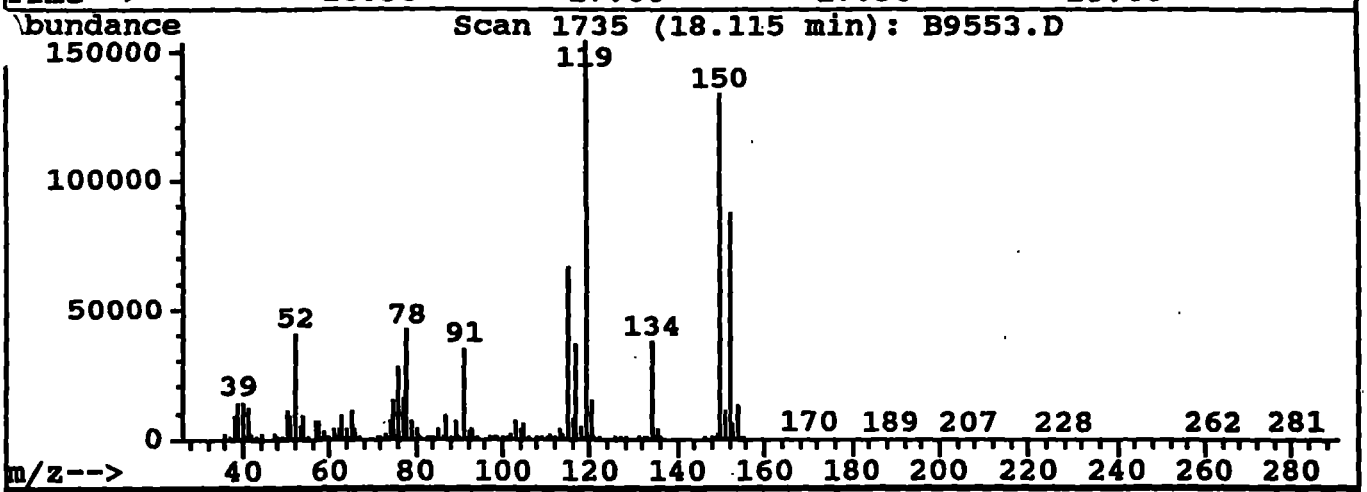
| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.73 |
| 91.05 | 65.80 | 71.08 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9553.D  Vial: 7
Acq On : 1 Feb 102 12:18 pm  Operator: TTRAVER
Sample : 20 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:39 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 18:41:55 2002
Response via : Multiple Level Calibration




TIC: B9553.D

(86) p-Isopropyltoluene
18.11min 43.43ug/Kg m
response 443320

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 24.18 |
| 91.05 | 65.80 | 22.41 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.D  Vial: 8
Acq On : 1 Feb 102 12:54 pm  Operator: TTRAVER
Sample : 50 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:42 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.41 | 168 | 572524 | 50.00 | ug/Kg | 0.01 |
| 35) 1,4 - Difluorobenzene | 8.59 | 114 | 1172328 | 50.00 | ug/Kg | 0.01 |
| 52) d5 - Chlorobenzene | 13.68 | 117 | 904626 | 50.00 | ug/Kg | 0.01 |
| 74) d4 - Dichlorobenzene | 18.13 | 152 | 373691 | 50.00 | ug/Kg | 0.02 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.29 | 113 | 285627 | 38.01 | ug/Kg | 76.02% |
| 58) surr3,Toluene-d8 | 11.10 | 98 | 1105025 | 57.30 | ug/Kg | 114.61% |
| 59) surr2,bfb | 15.90 | 95 | 433176 | 57.02 | ug/Kg | 114.05% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.66 | 85 | 415827 | 85.30 | ug/Kg | 97 |
| 3) Chloromethane | 1.88 | 50 | 672325 | 104.06 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.01 | 62 | 432928 | 78.02 | ug/Kg | 97 |
| 5) Bromomethane | 2.41 | 94 | 226599 | 58.55 | ug/Kg | 94 |
| 6) Chloroethane | 2.55 | 64 | 278902 | 80.30 | ug/Kg | 99 |
| 7) Trichlorofluoromethane | 2.91 | 101 | 470870 | 76.67 | ug/Kg | 98 |
| 8) Diethyl Ether | 3.35 | 59 | 220889 | 40.09 | ug/Kg | 95 |
| 9) Acrolein | 3.51 | 56 | 134154 | 108.67 | ug/Kg | 94 |
| 10) FREON 113 | 3.70 | 85 | 87380 | 53.78 | ug/Kg | 93 |
| 11) 1,1-Diclethene | 3.67 | 96 | 252717 | 59.51 | ug/Kg | 95 |
| 12) Acetone | 3.76 | 43 | 79065 | 32.19 | ug/Kg | 97 |
| 13) Iodomethane | 3.88 | 127 | 106633 | 44.52 | ug/Kg | 92 |
| 14) Carbon Disulfide | 3.97 | 76 | 1001140 | 61.12 | ug/Kg | 100 |
| 15) Acetonitrile | 4.18 | 41 | 142241 | 515.54 | ug/Kg | 98 |
| 16) Allyl Chloride | 4.24 | 76 | 154545 | 58.61 | ug/Kg | 98 |
| 17) Methylene Chloride | 4.43 | 84 | 325176 | 56.19 | ug/Kg | 99 |
| 18) TBA | 4.67 | 59 | 547581 | 813.61 | ug/Kg | 99 |
| 19) Acrylonitrile | 4.81 | 53 | 472522 | 157.00 | ug/Kg | 98 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 706646 | 43.09 | ug/Kg | 96 |
| 21) trans-1,2-Dichloroethene | 4.88 | 96 | 262091 | 49.79 | ug/Kg | 99 |
| 22) 1,1-Diclethane | 5.54 | 63 | 507421 | 53.99 | ug/Kg | 99 |
| 23) Vinyl Acetate | 5.67 | 43 | 620876 | 49.16 | ug/Kg | 100 |
| 24) 2-Chloro-1,3-butadiene | 5.70 | 53 | 550794 | 69.92 | ug/Kg | 99 |
| 25) 2,2-Dichloropropane | 6.49 | 77 | 404278 | 60.91 | ug/Kg | 98 |
| 26) 2-Butanone | 6.54 | 43 | 156973 | 35.82 | ug/Kg | 98 |
| 28) cis-1,2-Dichloroethene | 6.50 | 96 | 322986 | 51.43 | ug/Kg | 88 |
| 29) Propionitrile | 6.60 | 54 | 206373 | 181.77 | ug/Kg | 100 |
| 30) Methacrylonitrile | 6.86 | 67 | 95670 | 32.59 | ug/Kg | 87 |
| 31) Bromochloromethane | 6.88 | 128 | 157223 | 50.63 | ug/Kg | 95 |
| 32) Chloroform | 7.04 | 83 | 470360 | 52.19 | ug/Kg | 99 |
| 33) Tetrahydrofuran | 6.97 | 42 | 100232 | 34.69 | ug/Kg | 92 |
| 34) 1,1,1-Trichloroethane | 7.31 | 97 | 439200 | 66.06 | ug/Kg | 97 |
| 37) Carbontetrachloride | 7.60 | 117 | 369510 | 60.09 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.D  Vial: 8
Acq On : 1 Feb 102 12:54 pm  Operator: TTRAVER
Sample : 50 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:42 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.60 | 75 | 546626 | 74.35 | ug/Kg | 96 |
| 39) | Iso-Butyl Alcohol | 8.44 | 43 | 578877 | 2127.10 | ug/Kg | 100 |
| 40) | Benzene | 7.92 | 78 | 1579614 | 74.97 | ug/Kg | 99 |
| 41) | 1,2-Dichloroethane | 7.95 | 62 | 346442 | 43.08 | ug/Kg | 100 |
| 42) | N-Heptane | 8.44 | 43 | 585979 | 107.81 | ug/Kg | 97 |
| 43) | Trichloroethene | 9.02 | 95 | 403892 | 71.81 | ug/Kg | 94 |
| 44) | 1,2-Diclpropane | 9.37 | 63 | 444937 | 64.37 | ug/Kg | 99 |
| 45) | Methyl Methacrylate | 9.64 | 69 | 231553 | 46.45 | ug/Kg | 95 |
| 46) | 1,4-Dioxane | 9.64 | 88 | 68520 | 921.45 | ug/Kg | 93 |
| 47) | Dibromomethane | 9.57 | 93 | 195389 | 43.39 | ug/Kg | 98 |
| 48) | Bromodichloromethane | 9.86 | 83 | 423508 | 55.09 | ug/Kg | 98 |
| 49) | 2-Nitropropane | 10.24 | 43 | 201326 | 78.85 | ug/Kg | 97 |
| 50) | 2-Chloroethylvinyl Ether | 10.40 | 63 | 139204 | 24.42 | ug/Kg | 100 |
| 51) | cis-1,3-Dichloropropene | 10.64 | 75 | 622203 | 61.79 | ug/Kg | 97 |
| 53) | 4-Methyl-2-Pentanone | 10.93 | 43 | 452583 | 49.68 | ug/Kg | 93 |
| 54) | Toluene | 11.22 | 91 | 1416676 | 74.72 | ug/Kg | 99 |
| 55) | trans-1,3-Dichloropropene | 11.61 | 75 | 547342 | 64.04 | ug/Kg | 96 |
| 56) | Ethyl Methacrylate | 11.82 | 69 | 414701 | 49.77 | ug/Kg | 98 |
| 57) | 1,1,2-Trichloroethane | 11.93 | 83 | 292949 | 61.19 | ug/Kg | 97 |
| 60) | Tetrachloroethene | 12.20 | 166 | 342720 | 80.95 | ug/Kg | 95 |
| 61) | 2-Hexanone | 12.41 | 43 | 315720 | 51.21 | ug/Kg | 92 |
| 62) | 1,3-Dichloropropane | 12.22 | 76 | 637065 | 61.50 | ug/Kg | 88 |
| 63) | Dibromochloromethane | 12.63 | 129 | 348942 | 60.63 | ug/Kg | 99 |
| 64) | 1,2-Dibromoethane | 12.81 | 107 | 354775 | 57.28 | ug/Kg | 99 |
| 65) | Chlorobenzene | 13.74 | 112 | 914230 | 74.51 | ug/Kg | 96 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.90 | 131 | 334202 | 72.62 | ug/Kg | 97 |
| 67) | Ethylbenzene | 13.97 | 91 | 1531237 | 79.79 | ug/Kg | 97 |
| 68) | (m+p)Xylene | 14.19 | 106 | 1109500 | 162.89 | ug/Kg | 98 |
| 69) | o-Xylene | 14.92 | 106 | 548862 | 82.10 | ug/Kg | 98 |
| 70) | Styrene | 14.94 | 104 | 927614 | 77.00 | ug/Kg | 94 |
| 71) | Bromoform | 15.27 | 173 | 214667 | 56.58 | ug/Kg | 98 |
| 72) | Isopropylbenzene | 15.63 | 105 | 1445253 | 88.07 | ug/Kg | 100 |
| 73) | Cyclohexanone | 15.75 | 55 | 1025498 | 1634.30 | ug/Kg | 95 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.19 | 83 | 426765 | 53.53 | ug/Kg | 97 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.30 | 53 | 119604 | 49.10 | ug/Kg | 100 |
| 77) | 1,2,3-Trichloropropane | 16.26 | 110 | 120241 | 49.39 | ug/Kg | 99 |
| 78) | n-Propylbenzene | 16.42 | 91 | 1696511 | 85.30 | ug/Kg | 100 |
| 79) | Bromobenzene | 16.17 | 156 | 324225 | 64.92 | ug/Kg | 99 |
| 80) | 1,3,5-Trimethylbenzene | 16.77 | 105 | 1031076 | 56.95 | ug/Kg# | 53 |
| 81) | 2-Chlorotoluene | 16.56 | 91 | 997779 | 78.19 | ug/Kg | 99 |
| 82) | 4-Chlorotoluene | 16.77 | 91 | 1077716 | 74.96 | ug/Kg | 96 |
| 83) | tert-Butylbenzene | 17.39 | 119 | 964420 | 93.26 | ug/Kg | 97 |
| 84) | 1,2,4-Trimethylbenzene | 17.48 | 105 | 1020178 | 85.62 | ug/Kg | 96 |
| 85) | sec-Butylbenzene | 17.82 | 105 | 1555339 | 104.38 | ug/Kg | 99 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.D  Vial: 8
Acq On : 1 Feb 102 12:54 pm  Operator: TTRAVER
Sample : 50 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:42 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

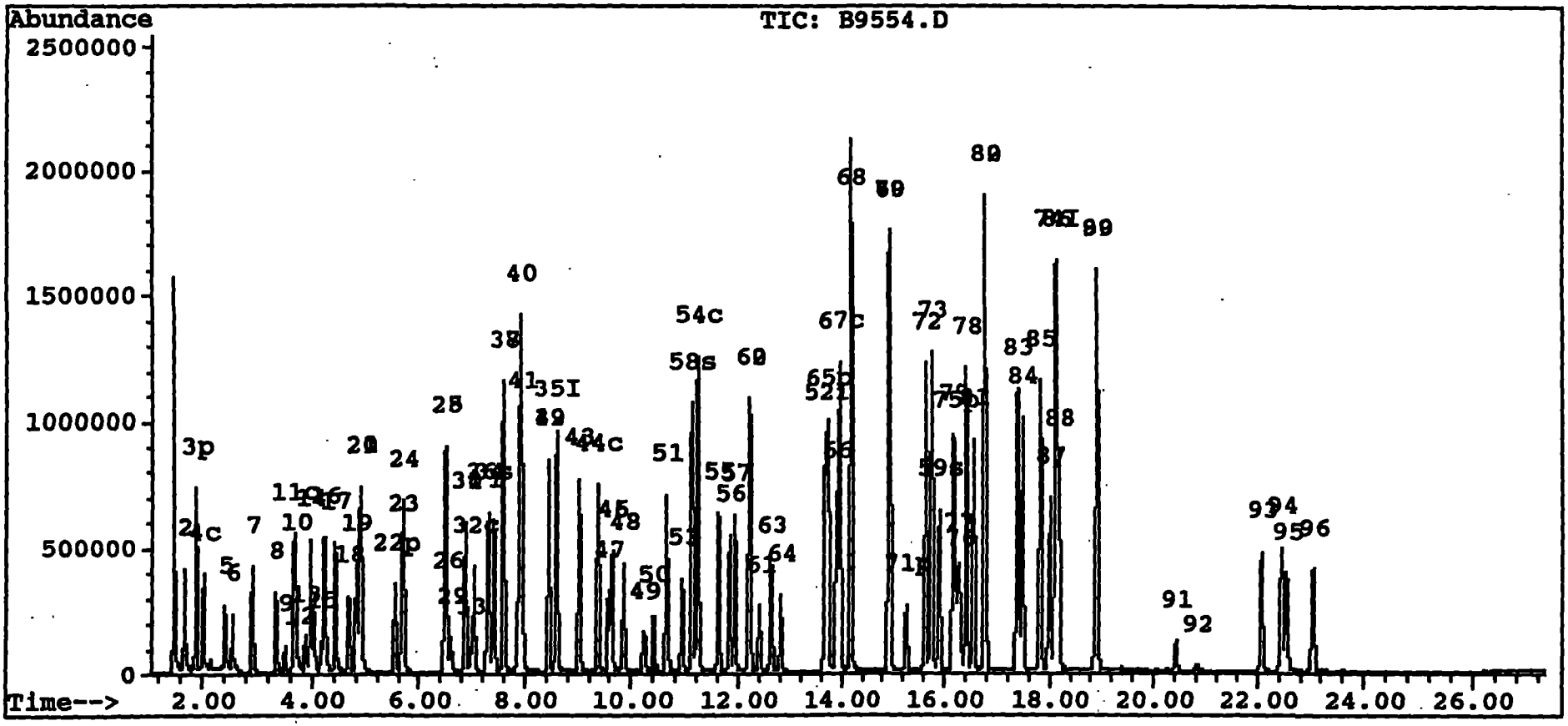
| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 18.11 | 119 | 1172358 | 113.37 | ug/Kg | 98 |
| 87) 1,3-Dclbenz | 18.00 | 146 | 535323 | 77.25 | ug/Kg | 99 |
| 88) 1,4-Dclbenz | 18.18 | 146 | 570833 | 74.22 | ug/Kg | 97 |
| 89) n-Butylbenzene | 18.91 | 91 | 1140599 | 114.55 | ug/Kg | 99 |
| 90) 1,2-Dclbenz | 18.90 | 146 | 536168 | 72.68 | ug/Kg | 98 |
| 91) 1,2-Dibromo-3-chloropropan | 20.42 | 157 | 63891 | 49.49 | ug/Kg | 93 |
| 92) Nitrobenzene | 20.82 | 77 | 22335 | 31.52 | ug/Kg | 89 |
| 93) 1,2,4-Tcbenzene | 22.08 | 180 | 316887 | 87.51 | ug/Kg | 100 |
| 94) Hexachlorobt | 22.45 | 225 | 196657 | 140.72 | ug/Kg | 99 |
| 95) Naphthalen | 22.55 | 128 | 647405 | 64.71 | ug/Kg | 98 |
| 96) 1,2,3-Tclbenzene | 23.04 | 180 | 278136 | 83.81 | ug/Kg | 100 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.I
Acq On : 1 Feb 102 12:54 pm
Sample : 50 PPB
Misc :
Quant Time: Feb 4 8:42 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

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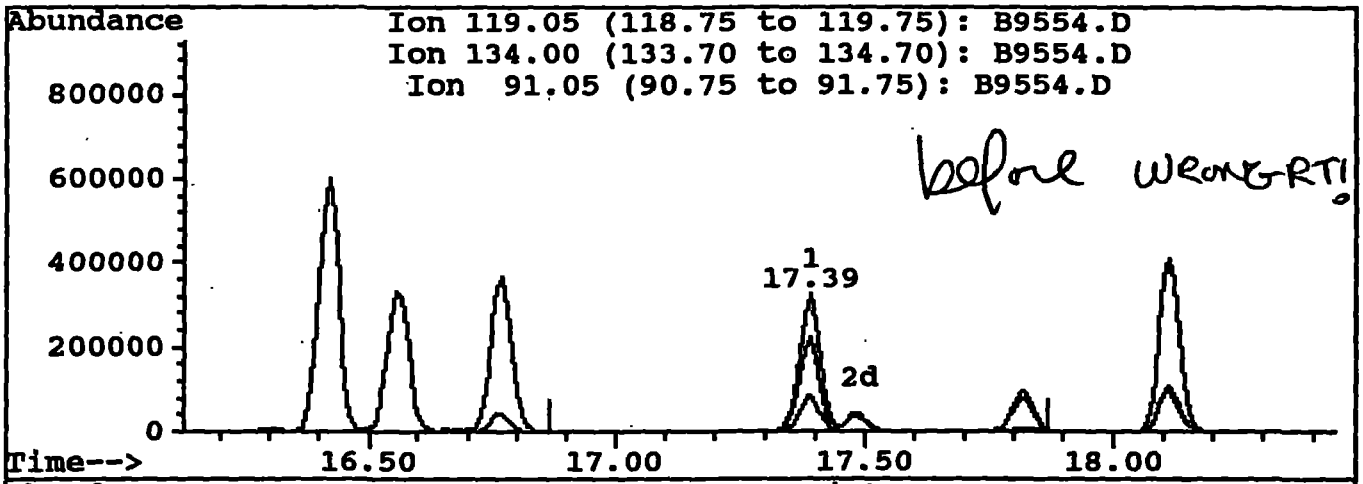
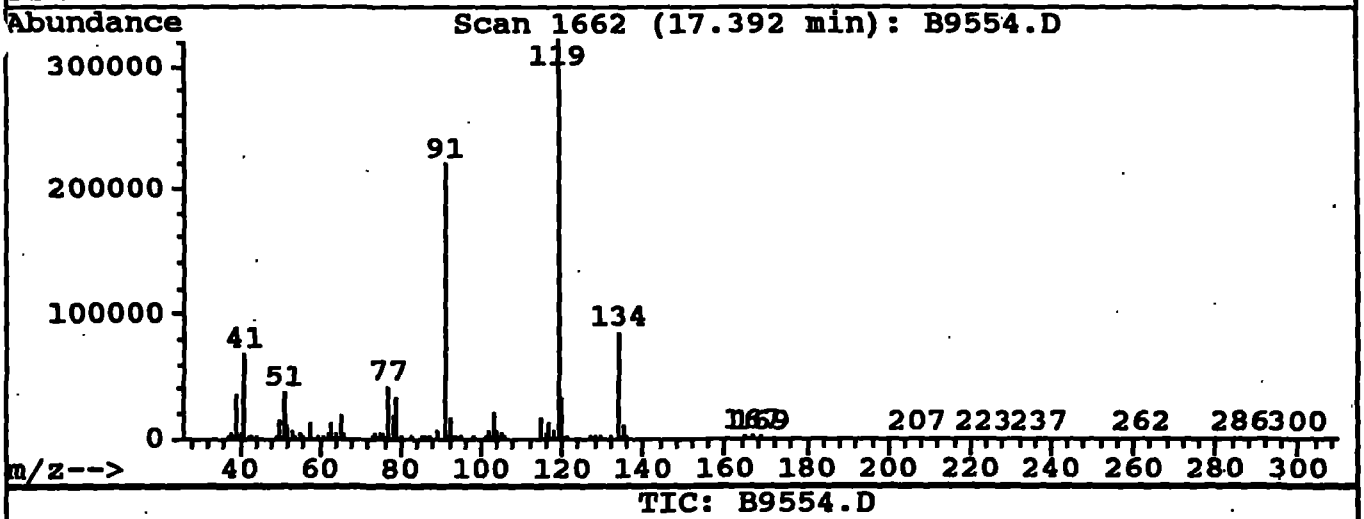
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.D  Vial: 8
Acq On : 1 Feb 102 12:54 pm  Operator: TTRAVER
Sample : 50 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 13:22 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration




TIC: B9554.D

(86) p-Isopropyltoluene
17.39min 93.26ug/Kg
response 964420

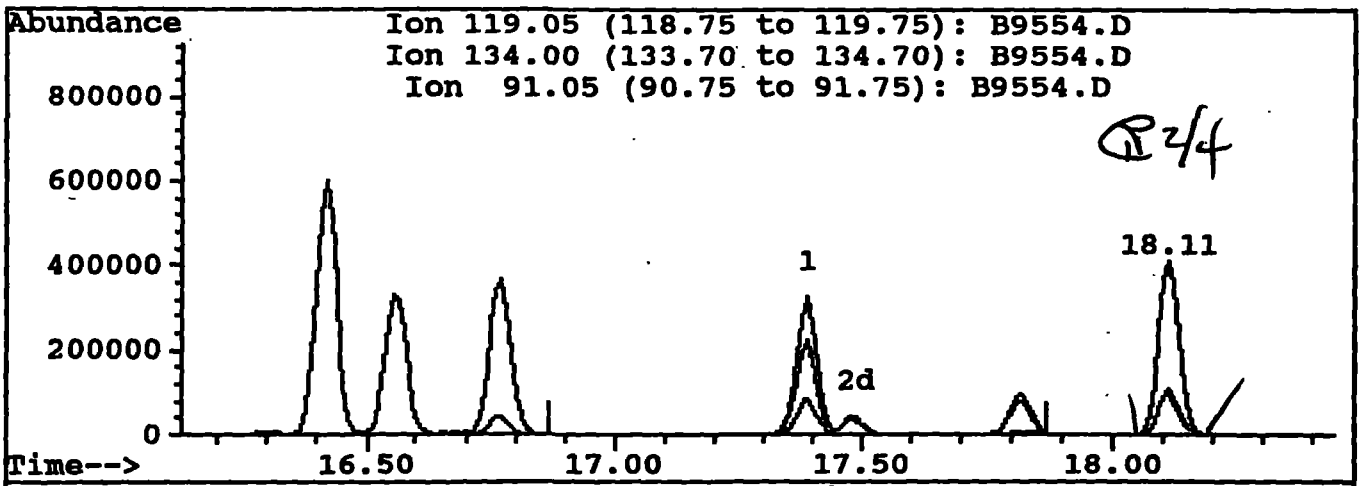
| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.34 |
| 91.05 | 65.80 | 68.33 |
| 0.00 | 0.00 | 0.00 |

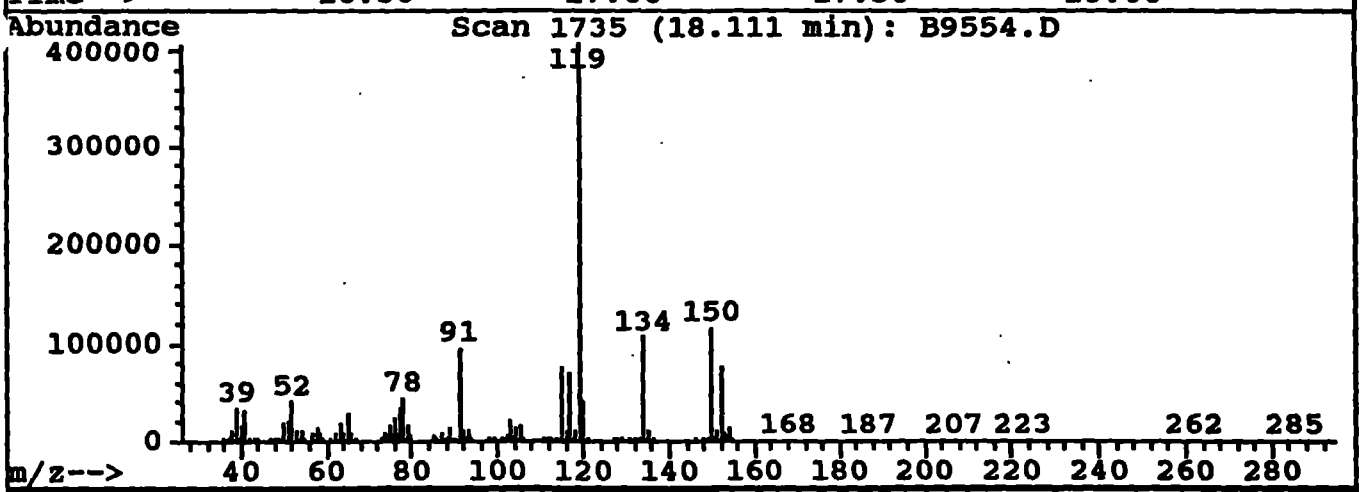
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9554.D  Vial: 8
Acq On : 1 Feb 102 12:54 pm  Operator: TTRAVER
Sample : 50 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:42 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:37:24 2002
Response via : Multiple Level Calibration

after




TIC: B9554.D

(86) p-Isopropyltoluene
18.11min 113.37ug/Kg m
response 1172358

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 25.88 |
| 91.05 | 65.80 | 23.14 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:45 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.41 | 168 | 598645 | 50.00 | ug/Kg | 0.00 |
| 35) 1,4 - Difluorobenzene | 8.59 | 114 | 1224233 | 50.00 | ug/Kg | 0.00 |
| 52) d5 - Chlorobenzene | 13.68 | 117 | 986755 | 50.00 | ug/Kg | 0.00 |
| 74) d4 - Dichlorobenzene | 18.13 | 152 | 419197 | 50.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.28 | 113 | 558727 | 80.97 | ug/Kg | 161.94% |
| 58) surr3,Toluene-d8 | 11.10 | 98 | 2199348 | 101.44 | ug/Kg | 202.88% |
| 59) surr2,bfb | 15.90 | 95 | 938614 | 110.21 | ug/Kg | 220.41% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.66 | 85 | 871869 | 120.90 | ug/Kgm | 77 |
| 3) Chloromethane | 1.87 | 50 | 1351544 | 122.35 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.01 | 62 | 881936 | 113.92 | ug/Kg | 98 |
| 5) Bromomethane | 2.41 | 94 | 467668 | 107.62 | ug/Kg | 96 |
| 6) Chloroethane | 2.55 | 64 | 525322 | 111.82 | ug/Kg | 99 |
| 7) Trichlorofluoromethane | 2.90 | 101 | 928412 | 109.20 | ug/Kg | 98 |
| 8) Diethyl Ether | 3.35 | 59 | 405098 | 73.60 | ug/Kg | 97 |
| 9) Acrolein | 3.50 | 56 | 257451 | 260.16 | ug/Kg | 91 |
| 10) FREON 113 | 3.70 | 85 | 160708 | 81.31 | ug/Kg | 92 |
| 11) 1,1-Diclethene | 3.66 | 96 | 490698 | 96.35 | ug/Kg | 91 |
| 12) Acetone | 3.76 | 43 | 148302 | 63.19 | ug/Kg | 99 |
| 13) Iodomethane | 3.87 | 127 | 246120 | 101.20 | ug/Kg | 98 |
| 14) Carbon Disulfide | 3.97 | 76 | 2021030 | 92.34 | ug/Kg | 100 |
| 15) Acetonitrile | 4.17 | 41 | 302708 | 849.92 | ug/Kg | 99 |
| 16) Allyl Chloride | 4.23 | 76 | 297776 | 96.06 | ug/Kg | 93 |
| 17) Methylene Chloride | 4.43 | 84 | 641697 | 95.45 | ug/Kg | 97 |
| 18) TBA | 4.68 | 59 | 1101493 | 1652.91 | ug/Kg | 99 |
| 19) Acrylonitrile | 4.81 | 53 | 926310 | 348.07 | ug/Kg | 99 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 1318604 | 78.04 | ug/Kg | 98 |
| 21) trans-1,2-Dichloroethene | 4.87 | 96 | 488497 | 82.85 | ug/Kg | 91 |
| 22) 1,1-Diclethane | 5.54 | 63 | 985534 | 90.28 | ug/Kg | 98 |
| 23) Vinyl Acetate | 5.67 | 43 | 1154284 | 83.66 | ug/Kg | 100 |
| 24) 2-Chloro-1,3-butadiene | 5.70 | 53 | 1033060 | 90.70 | ug/Kg | 96 |
| 25) 2,2-Dichloropropane | 6.49 | 77 | 749818 | 91.23 | ug/Kg | 96 |
| 26) 2-Butanone | 6.53 | 43 | 305972 | 70.79 | ug/Kg | 95 |
| 28) cis-1,2-Dichloroethene | 6.50 | 96 | 612080 | 88.25 | ug/Kg | 91 |
| 29) Propionitrile | 6.59 | 54 | 404922 | 380.99 | ug/Kg | 100 |
| 30) Methacrylonitrile | 6.86 | 67 | 185161 | 71.26 | ug/Kg | 99 |
| 31) Bromochloromethane | 6.87 | 128 | 307623 | 91.65 | ug/Kg | 93 |
| 32) Chloroform | 7.03 | 83 | 872151 | 85.50 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.96 | 42 | 190730 | 67.47 | ug/Kg | 93 |
| 34) 1,1,1-Trichloroethane | 7.31 | 97 | 804182 | 93.59 | ug/Kg | 98 |
| 37) Carbontetrachloride | 7.59 | 117 | 688830 | 90.58 | ug/Kg | 99 |

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

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Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D Vial: 9
Acq On : 1 Feb 102 1:30 pm Operator: TTRAVER
Sample : 100 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 4 8:45 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.59 | 75 | 1044237 | 104.67 | ug/Kg | 98 |
| 39) | Iso-Butyl Alcohol | 8.44 | 43 | 1186327 | 2517.90 | ug/Kg | 100 |
| 40) | Benzene | 7.92 | 78 | 3036949 | 104.72 | ug/Kg | 98 |
| 41) | 1,2-Dichloroethane | 7.94 | 62 | 655283 | 78.92 | ug/Kg | 99 |
| 42) | N-Heptane | 8.44 | 43 | 1178221 | 124.10 | ug/Kg | 98 |
| 43) | Trichloroethene | 9.02 | 95 | 791357 | 101.97 | ug/Kg | 97 |
| 44) | 1,2-Diclpropane | 9.37 | 63 | 844746 | 97.82 | ug/Kg | 98 |
| 45) | Methyl Methacrylate | 9.63 | 69 | 477834 | 91.74 | ug/Kg | 92 |
| 46) | 1,4-Dioxane | 9.63 | 88 | 149377 | 1882.77 | ug/Kg | 96 |
| 47) | Dibromomethane | 9.57 | 93 | 373400 | 79.71 | ug/Kg | 97 |
| 48) | Bromodichloromethane | 9.86 | 83 | 825055 | 93.17 | ug/Kg | 99 |
| 49) | 2-Nitropropane | 10.24 | 43 | 398771 | 163.12 | ug/Kg | 97 |
| 50) | 2-Chloroethylvinyl Ether | 10.40 | 63 | 293939 | 62.90 | ug/Kg | 97 |
| 51) | cis-1,3-Dichloropropene | 10.64 | 75 | 1244624 | 101.72 | ug/Kg | 97 |
| 54) | 4-Methyl-2-Pentanone | 10.93 | 43 | 900405 | 83.10 | ug/Kg | 97 |
| 54) | Toluene | 11.22 | 91 | 2877025 | 103.71 | ug/Kg | 99 |
| 55) | trans-1,3-Dichloropropene | 11.61 | 75 | 1116542 | 99.56 | ug/Kg | 97 |
| 56) | Ethyl Methacrylate | 11.82 | 69 | 849351 | 89.57 | ug/Kg | 100 |
| 57) | 1,1,2-Trichloroethane | 11.93 | 83 | 570374 | 94.17 | ug/Kg | 100 |
| 60) | Tetrachloroethene | 12.20 | 166 | 699781 | 107.47 | ug/Kg | 98 |
| 61) | 2-Hexanone | 12.40 | 43 | 634119 | 84.36 | ug/Kg | 96 |
| 62) | 1,3-Dichloropropane | 12.22 | 76 | 1268604 | 95.84 | ug/Kg | 92 |
| 63) | Dibromochloromethane | 12.63 | 129 | 741786 | 100.99 | ug/Kg | 98 |
| 64) | 1,2-Dibromoethane | 12.82 | 107 | 741052 | 97.15 | ug/Kg | 99 |
| 65) | Chlorobenzene | 13.73 | 112 | 1895506 | 106.02 | ug/Kg | 98 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.90 | 131 | 687485 | 105.10 | ug/Kg | 99 |
| 67) | Ethylbenzene | 13.96 | 91 | 3158410 | 107.51 | ug/Kg | 98 |
| 68) | (m+p)Xylene | 14.18 | 106 | 2303271 | 218.31 | ug/Kg | 96 |
| 69) | o-Xylene | 14.92 | 106 | 1129906 | 109.50 | ug/Kg | 100 |
| 70) | Styrene | 14.94 | 104 | 1949324 | 108.14 | ug/Kg | 96 |
| 71) | Bromoform | 15.26 | 173 | 490351 | 107.70 | ug/Kg | 99 |
| 72) | Isopropylbenzene | 15.63 | 105 | 3054509 | 114.34 | ug/Kg | 98 |
| 73) | Cyclohexanone | 15.75 | 55 | 2737308 | 2942.02 | ug/Kg | 99 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.19 | 83 | 908209 | 93.63 | ug/Kg | 98 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.30 | 53 | 251472 | 88.26 | ug/Kg | 92 |
| 77) | 1,2,3-Trichloropropane | 16.25 | 110 | 253071 | 89.79 | ug/Kg | 96 |
| 78) | n-Propylbenzene | 16.42 | 91 | 3660855 | 109.87 | ug/Kg | 98 |
| 79) | Bromobenzene | 16.17 | 156 | 743854 | 105.74 | ug/Kg | 95 |
| 80) | 1,3,5-Trimethylbenzene | 16.76 | 105 | 2232336 | 92.40 | ug/Kg# | 52 |
| 81) | 2-Chlorotoluene | 16.56 | 91 | 2120157 | 104.85 | ug/Kg | 100 |
| 82) | 4-Chlorotoluene | 16.76 | 91 | 2373872 | 106.55 | ug/Kg | 97 |
| 83) | tert-Butylbenzene | 17.38 | 119 | 2031785 | 113.36 | ug/Kg | 96 |
| 84) | 1,2,4-Trimethylbenzene | 17.48 | 105 | 2213785 | 112.76 | ug/Kg | 97 |
| 85) | sec-Butylbenzene | 17.82 | 105 | 3262237 | 117.62 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:45 19102

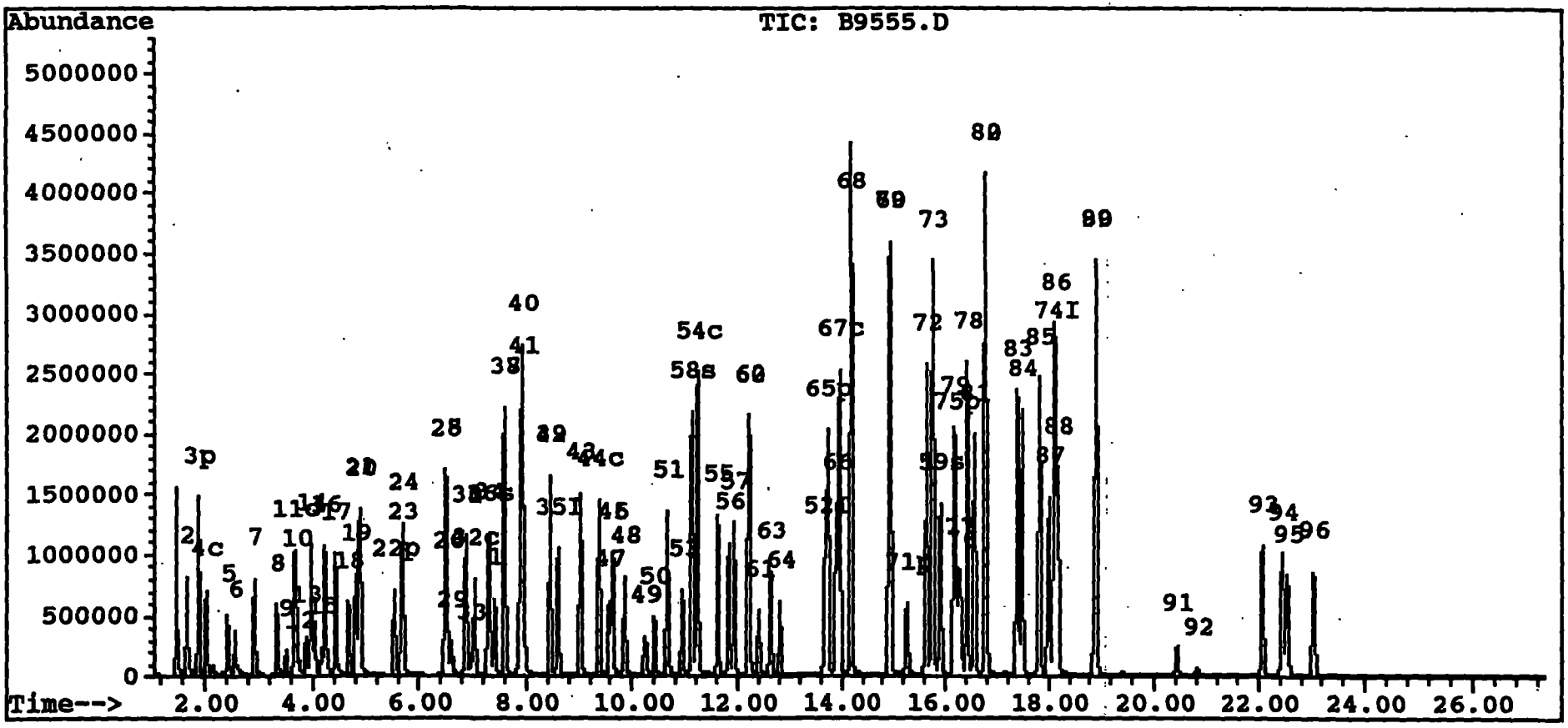
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 86) | p-Isopropyltoluene | 18.11 | 119 | 2542406 | 141.85 | ug/Kgm | 97 |
| 87) | 1,3-Dclbenz | 18.00 | 146 | 1166674 | 111.64 | ug/Kg | 99 |
| 88) | 1,4-Dclbenz | 18.17 | 146 | 1233099 | 107.44 | ug/Kg | 100 |
| 89) | n-Butylbenzene | 18.91 | 91 | 2432666 | 124.24 | ug/Kg | 100 |
| 90) | 1,2-Dclbenz | 18.89 | 146 | 1137764 | 105.61 | ug/Kg | 98 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.41 | 157 | 142540 | 95.38 | ug/Kg | 98 |
| 92) | Nitrobenzene | 20.82 | 77 | 60148 | 81.23 | ug/Kg | 94 |
| 93) | 1,2,4-Tcbenzene | 22.08 | 180 | 699975 | 120.91 | ug/Kg | 95 |
| 94) | Hexachlorobt | 22.45 | 225 | 405107 | 132.11 | ug/Kg | 98 |
| 95) | Naphthalen | 22.55 | 128 | 1391936 | 106.50 | ug/Kg | 98 |
| 96) | 1,2,3-Tclbenzene | 23.03 | 180 | 593524 | 112.50 | ug/Kg | 98 |

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D
Acq On : 1 Feb 102 1:30 pm
Sample : 100 PPB
Misc :
Quant Time: Feb 4 8:45 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration

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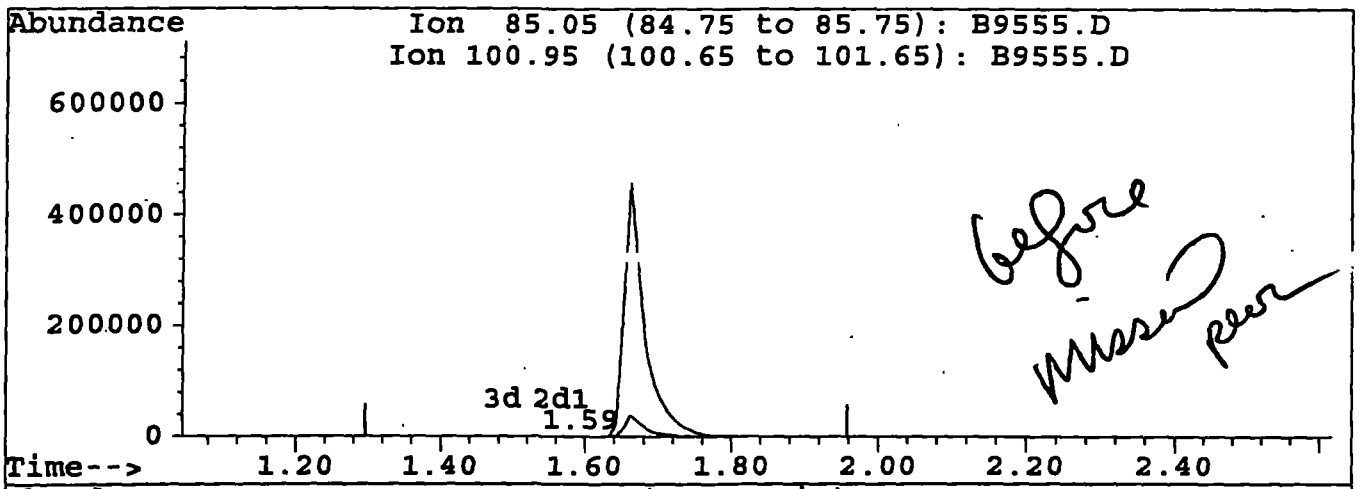
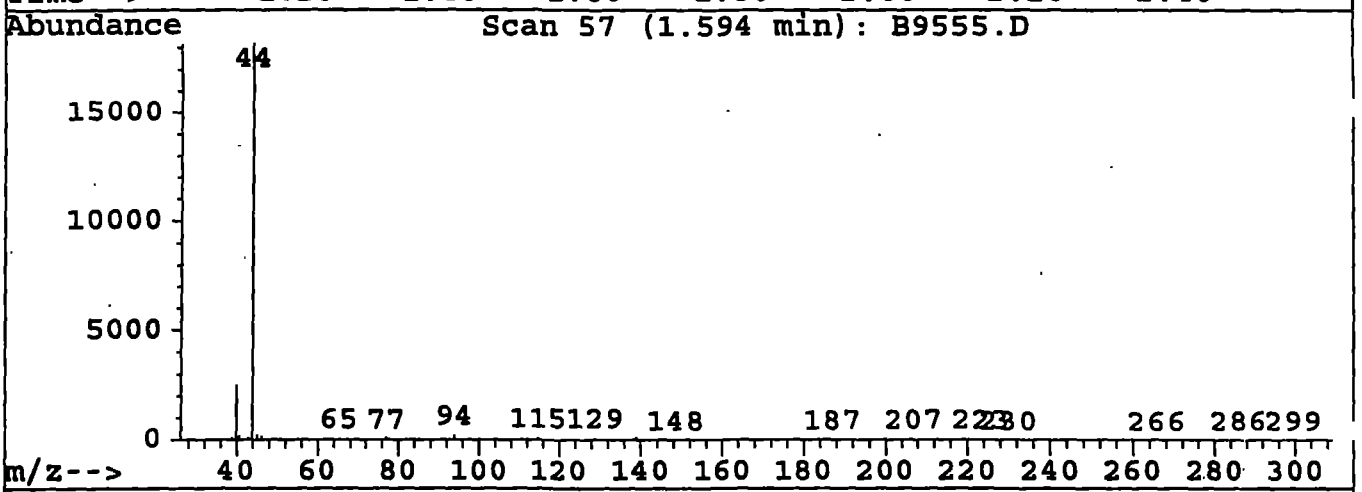
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 13:58 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 13:41:28 2002
Response via : Multiple Level Calibration




TIC: B9555.D

(2) Dichlorodifluoromethane
1.59min 0.01ug/Kg
response 103

| 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 |

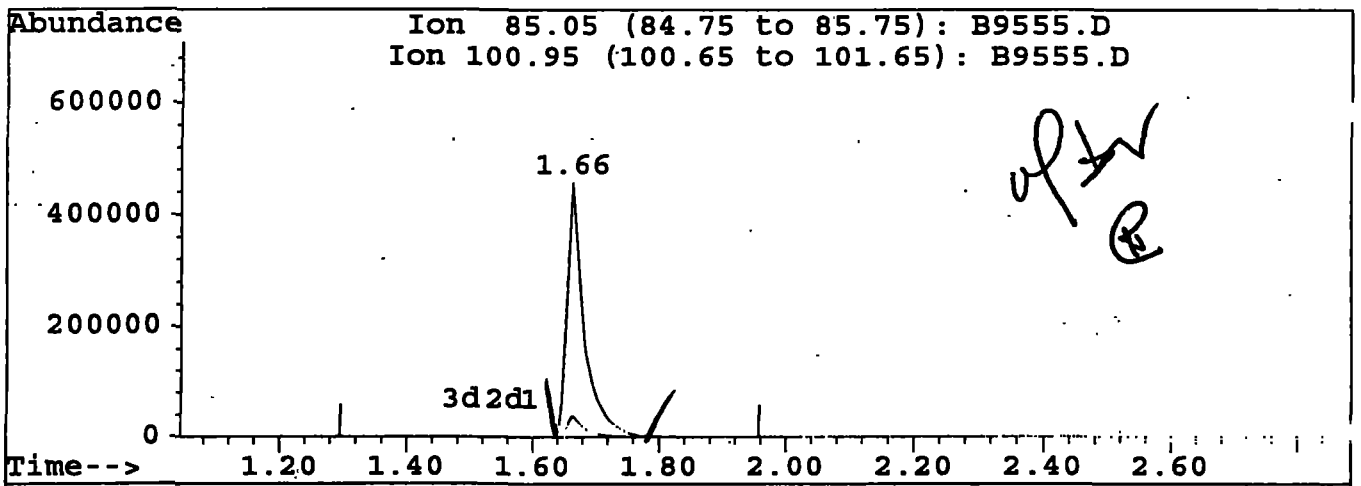


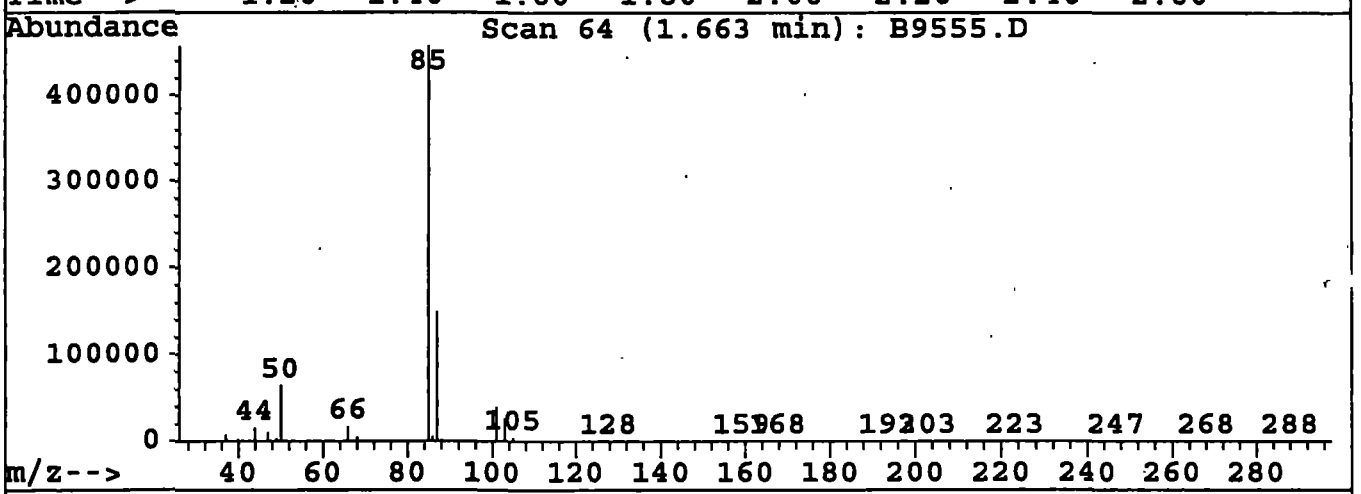
B9555.D SOL0201.M Fri Feb 01 13:59:48 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 14:00 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 13:41:28 2002
Response via : Multiple Level Calibration




TIC: B9555.D

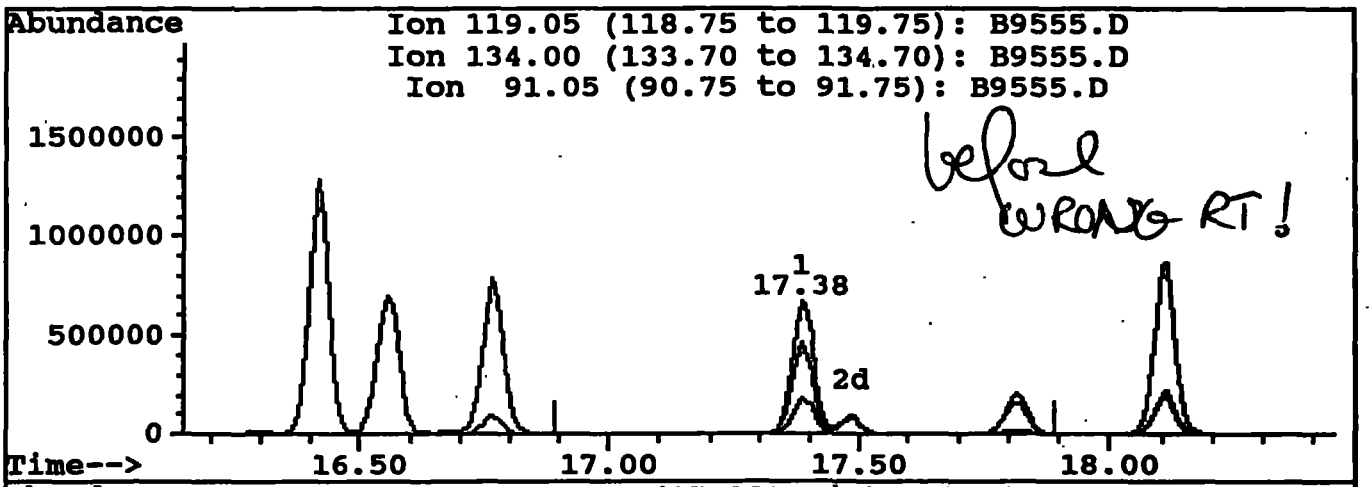
(2) Dichlorodifluoromethane
1.66min 120.90ug/Kg m
response 871869

| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 8.57 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

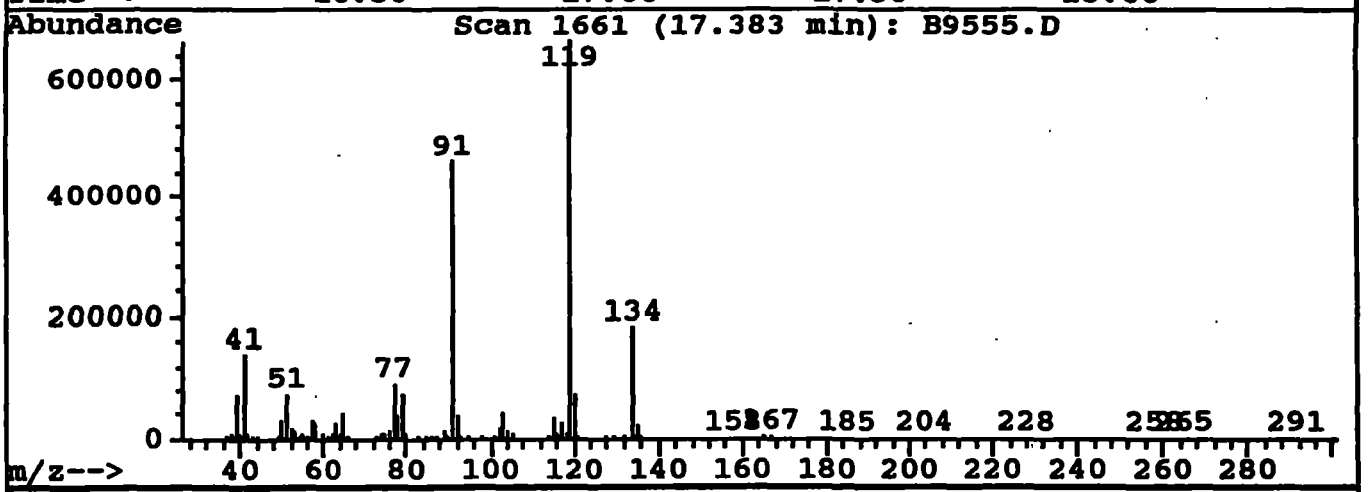
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 14:00 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:43:46 2002
Response via : Multiple Level Calibration




before WRONG RT!



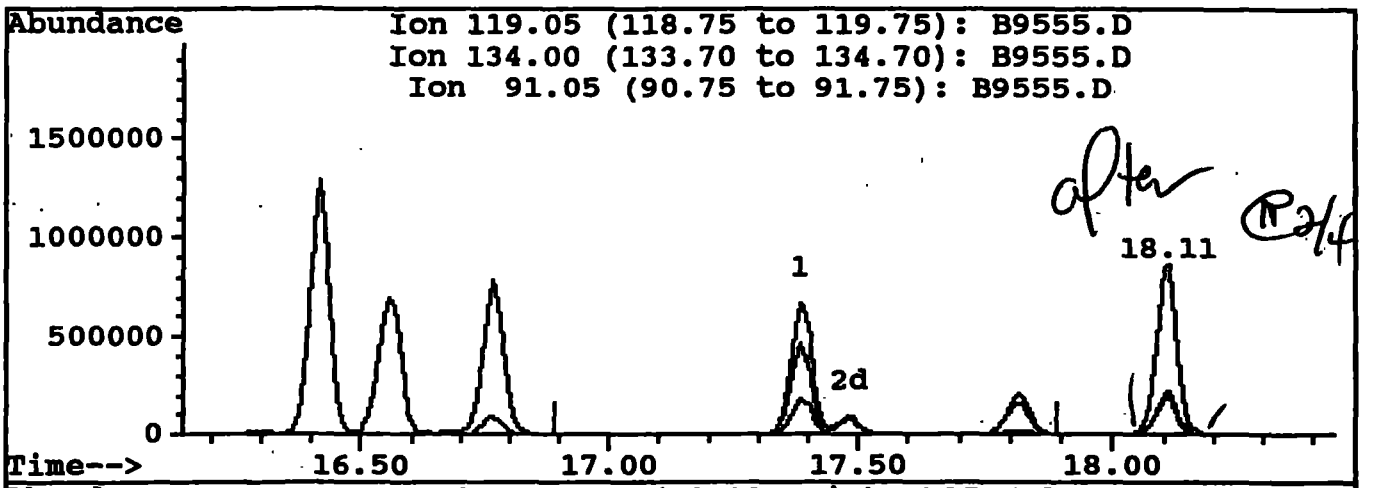

TIC: B9555.D

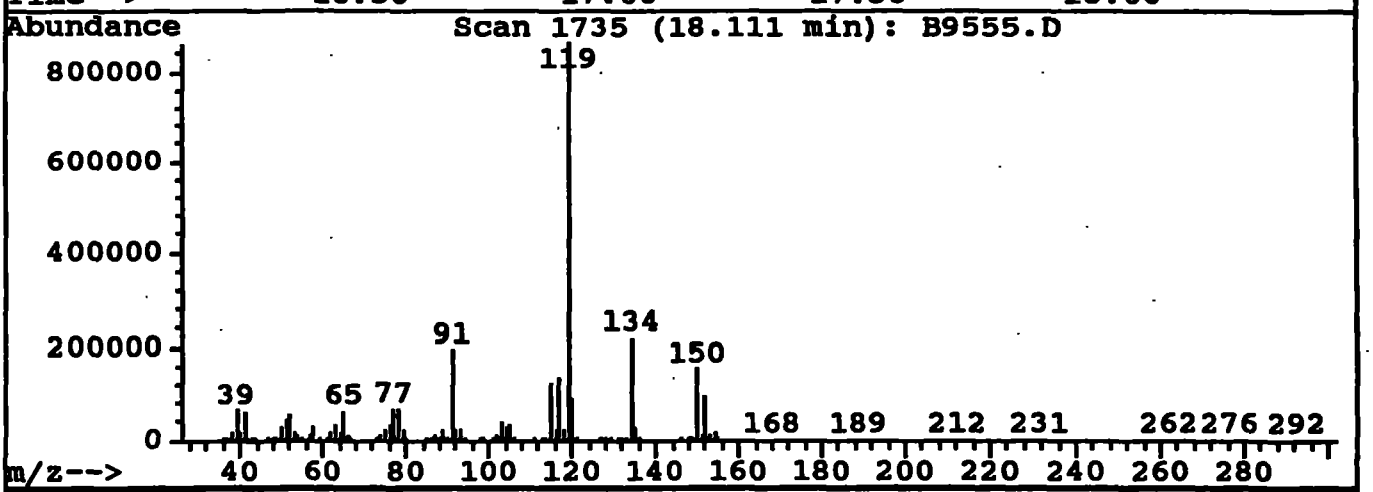
(86) p-Isopropyltoluene
17.38min 113.36ug/Kg
response 2031785

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 27.32 |
| 91.05 | 65.80 | 68.98 |
| 0.00 | 0.00 | 0.00 |

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9555.D  Vial: 9
Acq On : 1 Feb 102 1:30 pm  Operator: TTRAVER
Sample : 100 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:45 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:43:46 2002
Response via : Multiple Level Calibration




TIC: B9555.D

(86) p-Isopropyltoluene
18.11min 141.85ug/Kg m
response 2542406

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 25.14 |
| 91.05 | 65.80 | 22.32 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D  Vial: 10
Acq On : 1 Feb 102 2:05 pm  Operator: TTRAVER
Sample : 150 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:51 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.41 | 168 | 715193 | 50.00 | ug/Kg | 0.00 |
| 35) 1,4 - Difluorobenzene | 8.59 | 114 | 1368788 | 50.00 | ug/Kg | 0.00 |
| 52) d5 - Chlorobenzene | 13.69 | 117 | 1058851 | 50.00 | ug/Kg | 0.00 |
| 74) d4 - Dichlorobenzene | 18.13 | 152 | 409697 | 50.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.29 | 113 | 798306 | 110.24 | ug/Kg | 220.47% |
| 58) surr3,Toluene-d8 | 11.10 | 98 | 2831952 | 120.33 | ug/Kg | 240.66% |
| 59) surr2,bfb | 15.89 | 95 | 1107661 | 117.69 | ug/Kg | 235.37% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.66 | 85 | 1308790 | 142.25 | ug/Kgm | 0 |
| 3) Chloromethane | 1.88 | 50 | 2009074 | 139.40 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.00 | 62 | 1379675 | 142.05 | ug/Kg | 98 |
| 5) Bromomethane | 2.41 | 94 | 817389 | 155.23 | ug/Kg | 96 |
| 6) Chloroethane | 2.54 | 64 | 897663 | 151.92 | ug/Kg | 98 |
| 7) Trichlorofluoromethane | 2.91 | 101 | 1549191 | 146.63 | ug/Kg | 99 |
| 8) Diethyl Ether | 3.34 | 59 | 705900 | 114.74 | ug/Kg | 99 |
| 9) Acrolein | 3.51 | 56 | 427444 | 420.14 | ug/Kg | 98 |
| 10) FREON 113 | 3.70 | 85 | 279936 | 121.85 | ug/Kg | 100 |
| 11) 1,1-Diclethene | 3.67 | 96 | 895791 | 147.69 | ug/Kg | 97 |
| 12) Acetone | 3.76 | 43 | 242533 | 93.72 | ug/Kg | 98 |
| 13) Iodomethane | 3.87 | 127 | 399397 | 146.61 | ug/Kgm | 0 |
| 14) Carbon Disulfide | 3.97 | 76 | 3260003 | 124.76 | ug/Kg | 100 |
| 15) Acetonitrile | 4.17 | 41 | 480715 | 1223.09 | ug/Kg | 97 |
| 16) Allyl Chloride | 4.24 | 76 | 523229 | 141.47 | ug/Kg | 91 |
| 17) Methylene Chloride | 4.43 | 84 | 1104220 | 137.73 | ug/Kg | 97 |
| 18) TBA | 4.68 | 59 | 1840372 | 2410.77 | ug/Kg | 100 |
| 19) Acrylonitrile | 4.81 | 53 | 1516787 | 523.99 | ug/Kg | 99 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 2279659 | 119.15 | ug/Kg | 98 |
| 21) trans-1,2-Dichloroethene | 4.88 | 96 | 908650 | 134.31 | ug/Kg | 97 |
| 22) 1,1-Diclethane | 5.55 | 63 | 1713989 | 133.96 | ug/Kg | 100 |
| 23) Vinyl Acetate | 5.67 | 43 | 1899544 | 118.46 | ug/Kg | 99 |
| 24) 2-Chloro-1,3-butadiene | 5.69 | 53 | 1651491 | 120.31 | ug/Kg | 100 |
| 25) 2,2-Dichloropropane | 6.48 | 77 | 1302089 | 133.52 | ug/Kg | 96 |
| 26) 2-Butanone | 6.53 | 43 | 501586 | 103.26 | ug/Kg | 99 |
| 28) cis-1,2-Dichloroethene | 6.49 | 96 | 1117687 | 138.56 | ug/Kg | 95 |
| 29) Propionitrile | 6.60 | 54 | 689307 | 581.64 | ug/Kg | 98 |
| 30) Methacrylonitrile | 6.86 | 67 | 326048 | 114.75 | ug/Kg | 97 |
| 31) Bromochloromethane | 6.87 | 128 | 545203 | 138.21 | ug/Kg | 97 |
| 32) Chloroform | 7.03 | 83 | 1543990 | 129.84 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.96 | 42 | 313741 | 98.63 | ug/Kg | 97 |
| 34) 1,1,1-Trichloroethane | 7.31 | 97 | 1408222 | 136.88 | ug/Kg | 99 |
| 37) Carbontetrachloride | 7.59 | 117 | 1214017 | 143.66 | ug/Kg | 99 |

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

183

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D  Vial: 10
Acq On : 1 Feb 102 2:05 pm  Operator: TTRAVER
Sample : 150 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:51 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.59 | 75 | 1748059 | 151.87 | ug/Kg | 99 |
| 39) | Iso-Butyl Alcohol | 8.44 | 43 | 1806648 | 3104.95 | ug/Kg | 100 |
| 40) | Benzene | 7.92 | 78 | 4990777 | 148.79 | ug/Kg | 99 |
| 41) | 1,2-Dichloroethane | 7.95 | 62 | 1090446 | 123.52 | ug/Kg | 98 |
| 42) | N-Heptane | 8.44 | 43 | 1798008 | 153.61 | ug/Kg | 99 |
| 43) | Trichloroethene | 9.01 | 95 | 1338052 | 150.19 | ug/Kg | 97 |
| 44) | 1,2-Diclpropane | 9.38 | 63 | 1410517 | 144.44 | ug/Kg | 99 |
| 45) | Methyl Methacrylate | 9.63 | 69 | 777742 | 136.61 | ug/Kg | 100 |
| 46) | 1,4-Dioxane | 9.62 | 88 | 234797 | 2659.77 | ug/Kg | 90 |
| 47) | Dibromomethane | 9.56 | 93 | 649352 | 129.98 | ug/Kg | 97 |
| 48) | Bromodichloromethane | 9.86 | 83 | 1405488 | 143.43 | ug/Kg | 99 |
| 49) | 2-Nitropropane | 10.23 | 43 | 668885 | 257.87 | ug/Kg | 100 |
| 50) | 2-Chloroethylvinyl Ether | 10.41 | 63 | 478881 | 103.21 | ug/Kg | 96 |
| 51) | cis-1,3-Dichloropropene | 10.64 | 75 | 2058917 | 148.49 | ug/Kg | 96 |
| 53) | 4-Methyl-2-Pentanone | 10.92 | 43 | 1375905 | 120.43 | ug/Kg | 100 |
| 54) | Toluene | 11.22 | 91 | 4699936 | 152.81 | ug/Kg | 98 |
| 55) | trans-1,3-Dichloropropene | 11.61 | 75 | 1783849 | 146.45 | ug/Kg | 98 |
| 56) | Ethyl Methacrylate | 11.83 | 69 | 1342676 | 135.18 | ug/Kg | 100 |
| 57) | 1,1,2-Trichloroethane | 11.94 | 83 | 933067 | 143.36 | ug/Kg | 99 |
| 60) | Tetrachloroethene | 12.20 | 166 | 1163842 | 159.40 | ug/Kg | 96 |
| 61) | 2-Hexanone | 12.41 | 43 | 979013 | 123.12 | ug/Kg | 99 |
| 62) | 1,3-Dichloropropane | 12.22 | 76 | 2039339 | 142.77 | ug/Kg | 92 |
| 63) | Dibromochloromethane | 12.62 | 129 | 1209873 | 151.92 | ug/Kg | 99 |
| 64) | 1,2-Dibromoethane | 12.81 | 107 | 1181107 | 144.20 | ug/Kg | 99 |
| 65) | Chlorobenzene | 13.74 | 112 | 3045141 | 152.93 | ug/Kg | 97 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.89 | 131 | 1112753 | 153.49 | ug/Kg | 98 |
| 67) | Ethylbenzene | 13.96 | 91 | 4938804 | 150.11 | ug/Kg | 97 |
| 68) | (m+p)Xylene | 14.19 | 106 | 3638104 | 306.68 | ug/Kg | 99 |
| 69) | o-Xylene | 14.92 | 106 | 1772223 | 152.74 | ug/Kg | 100 |
| 70) | Styrene | 14.95 | 104 | 3044849 | 150.96 | ug/Kg | 99 |
| 71) | Bromoform | 15.26 | 173 | 738886 | 148.98 | ug/Kg | 99 |
| 72) | Isopropylbenzene | 15.63 | 105 | 4597348 | 150.98 | ug/Kg | 99 |
| 73) | Cyclohexanone | 15.75 | 55 | 3786692 | 3380.67 | ug/Kg | 99 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.19 | 83 | 1344506 | 142.84 | ug/Kg | 100 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.30 | 53 | 372483 | 136.92 | ug/Kg | 97 |
| 77) | 1,2,3-Trichloropropane | 16.26 | 110 | 376509 | 138.80 | ug/Kg | 100 |
| 78) | n-Propylbenzene | 16.41 | 91 | 5351671 | 155.81 | ug/Kg | 97 |
| 79) | Bromobenzene | 16.17 | 156 | 1085215 | 153.51 | ug/Kg | 97 |
| 80) | 1,3,5-Trimethylbenzene | 16.77 | 105 | 3273491 | 139.66 | ug/Kg# | 48 |
| 81) | 2-Chlorotoluene | 16.56 | 91 | 3133470 | 152.34 | ug/Kg | 100 |
| 82) | 4-Chlorotoluene | 16.77 | 91 | 3436226 | 151.35 | ug/Kg | 100 |
| 83) | tert-Butylbenzene | 17.39 | 119 | 2961539 | 158.37 | ug/Kg | 100 |
| 84) | 1,2,4-Trimethylbenzene | 17.48 | 105 | 3218983 | 157.94 | ug/Kg | 97 |
| 85) | sec-Butylbenzene | 17.81 | 105 | 4721124 | 160.92 | ug/Kg | 99 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D  Vial: 10
Acq On : 1 Feb 102 2:05 pm  Operator: TTRAVER
Sample : 150 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:51 19102

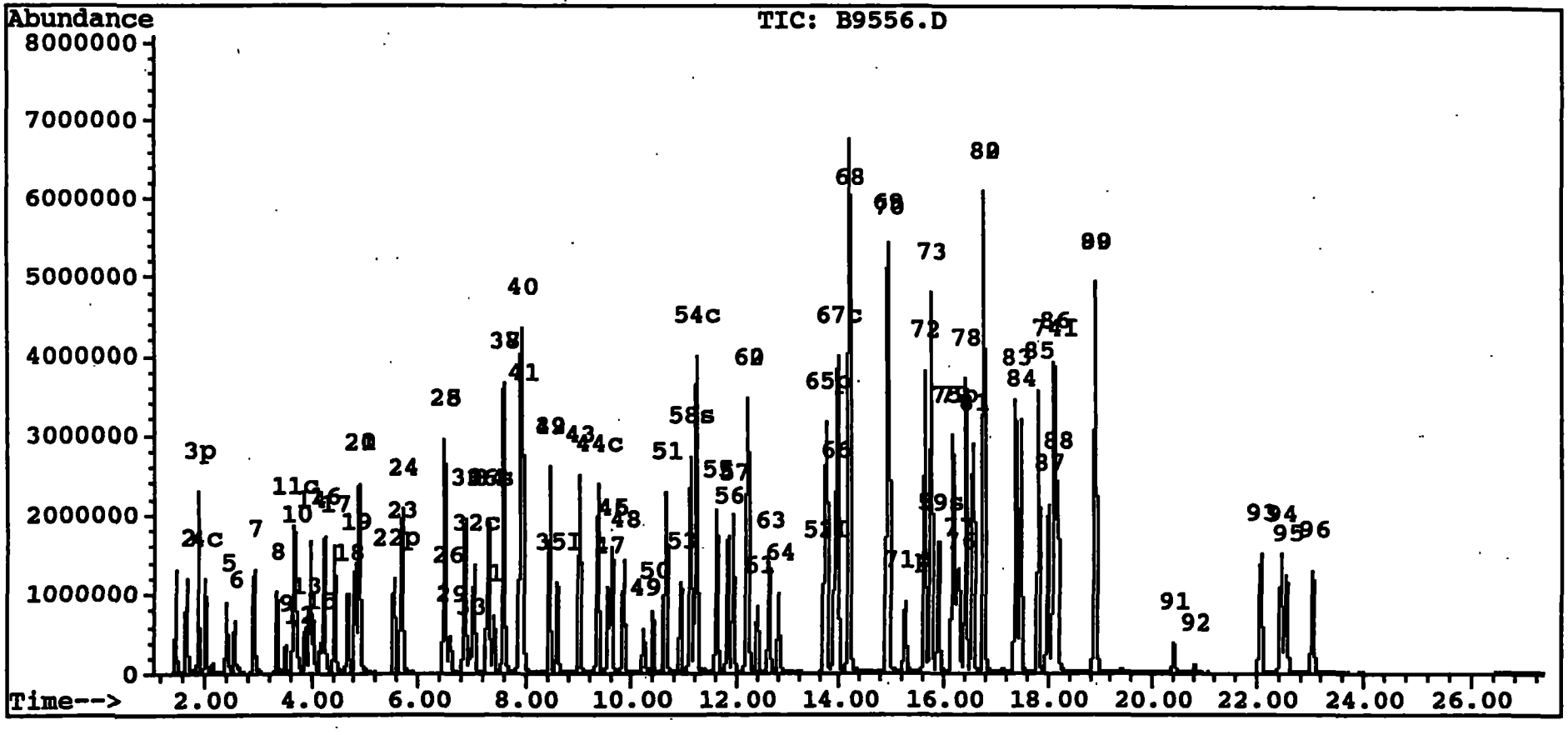
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration

| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 86) p-Isopropyltoluene | 18.11 | 119 | 3655705 | 195.50 | ug/Kgm | 100 |
| 87) 1,3-Dclbenz | 18.00 | 146 | 1666601 | 155.71 | ug/Kg | 99 |
| 88) 1,4-Dclbenz | 18.18 | 146 | 1773199 | 151.52 | ug/Kg | 97 |
| 89) n-Butylbenzene | 18.90 | 91 | 3481261 | 165.16 | ug/Kg | 99 |
| 90) 1,2-Dclbenz | 18.89 | 146 | 1649918 | 151.31 | ug/Kg | 99 |
| 91) 1,2-Dibromo-3-chloropropan | 20.42 | 157 | 209786 | 145.73 | ug/Kg | 95 |
| 92) Nitrobenzene | 20.81 | 77 | 101029 | 146.76 | ug/Kg | 99 |
| 93) 1,2,4-Tcbenzene | 22.08 | 180 | 1005575 | 165.30 | ug/Kg | 98 |
| 94) Hexachlorobt | 22.46 | 225 | 586302 | 173.16 | ug/Kg | 99 |
| 95) Naphthalen | 22.55 | 128 | 2030940 | 154.39 | ug/Kg | 97 |
| 96) 1,2,3-Tclbenzene | 23.04 | 180 | 865881 | 158.49 | ug/Kg | 99 |

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 4 8:51 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration

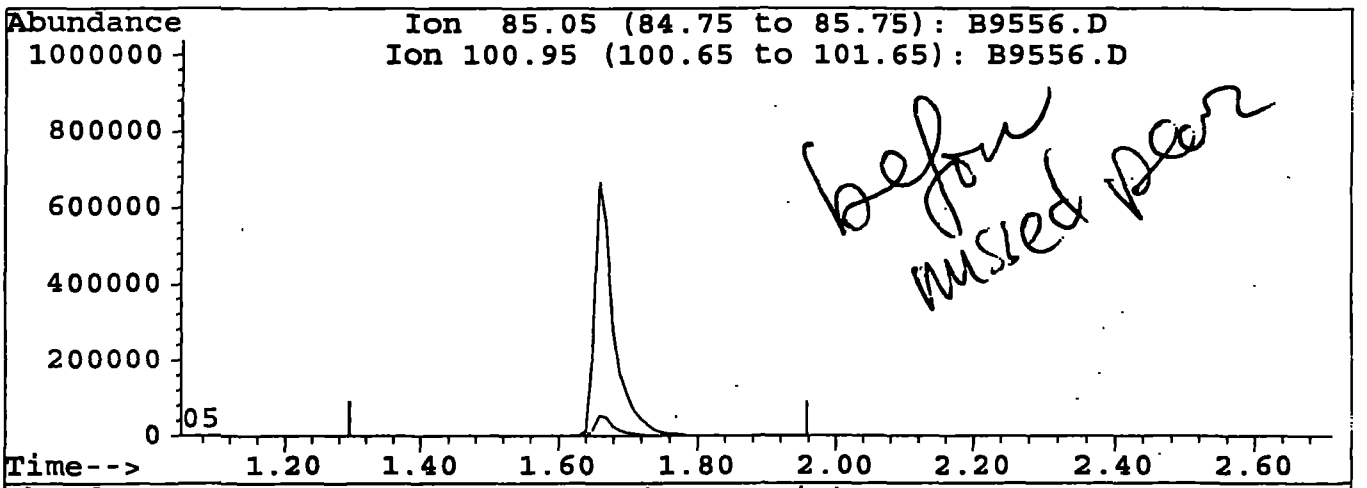


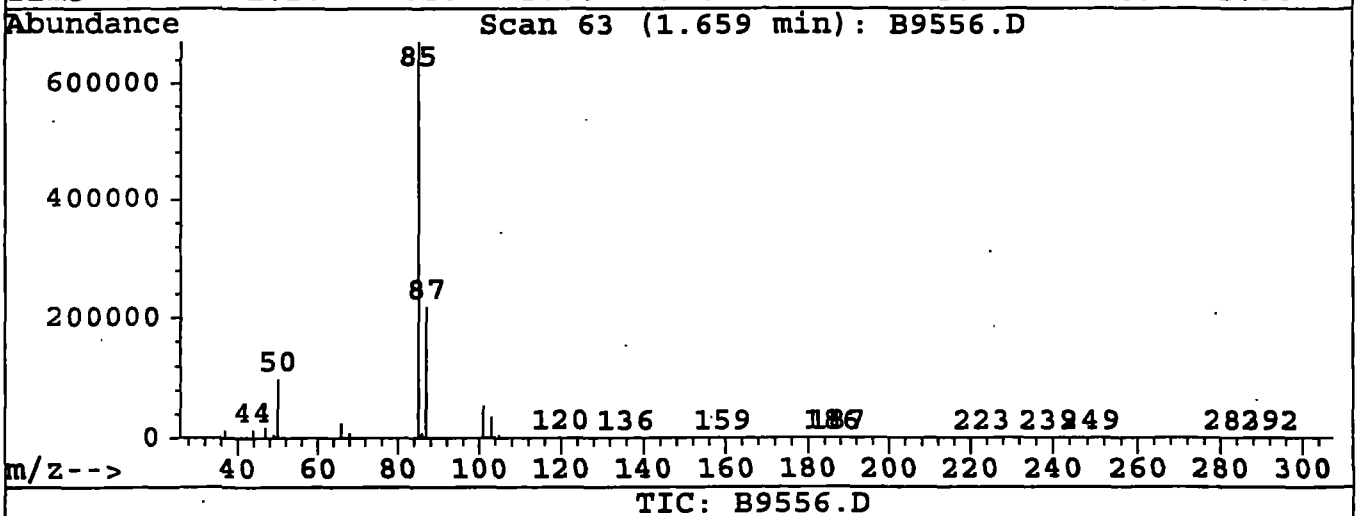
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 1 14:33 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:01:22 2002
Response via : Multiple Level Calibration




TIC: B9556.D

(2) Dichlorodifluoromethane
1.66min 0.00ug/Kg d
response 0

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



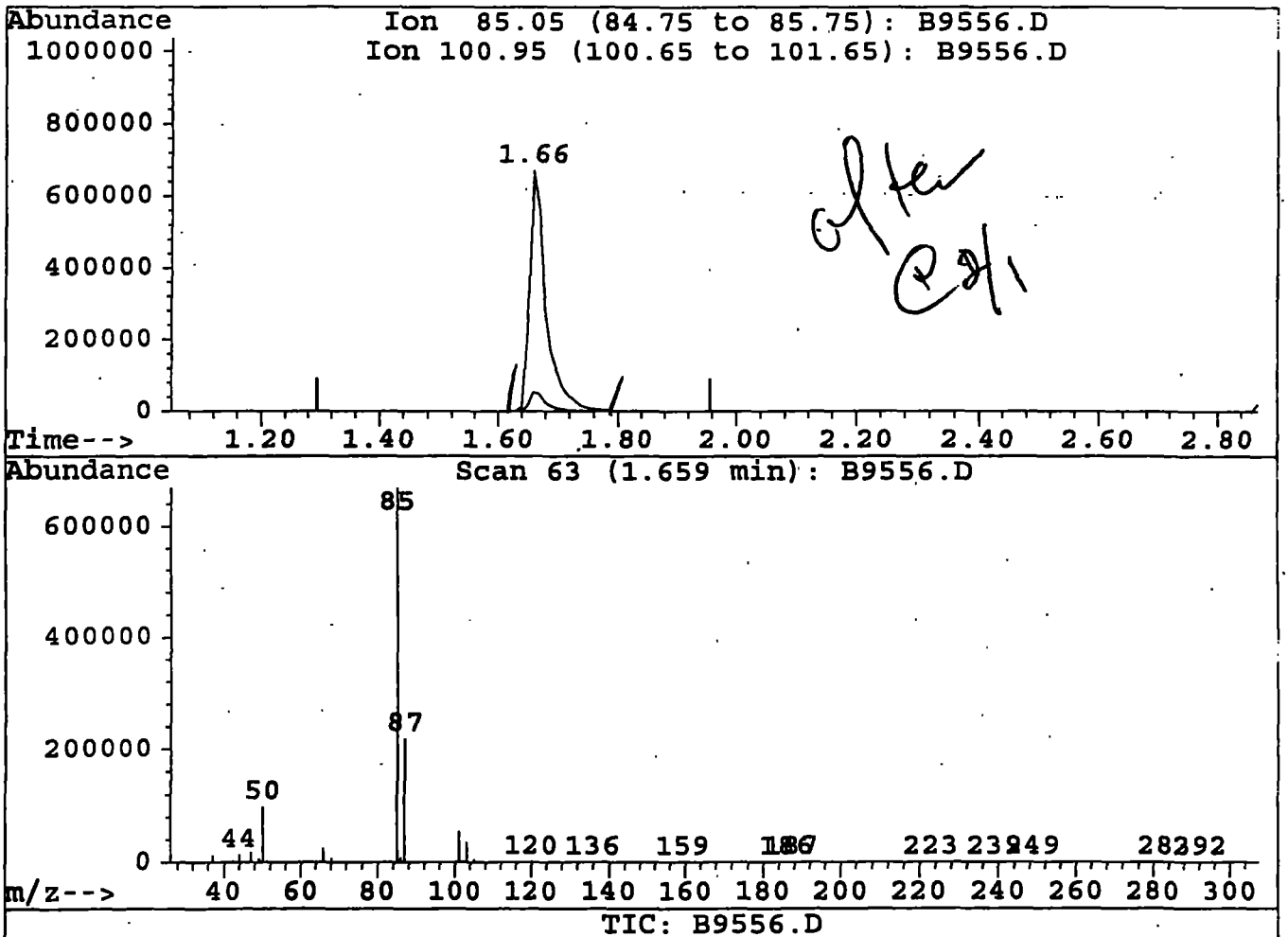
B9556.D SOL0201.M Fri Feb 01 14:41:28 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 1 14:41 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:01:22 2002
Response via : Multiple Level Calibration




TIC: B9556.D

(2) Dichlorodifluoromethane

1.66min 142.25ug/Kg m

response 1308790

| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 8.07 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

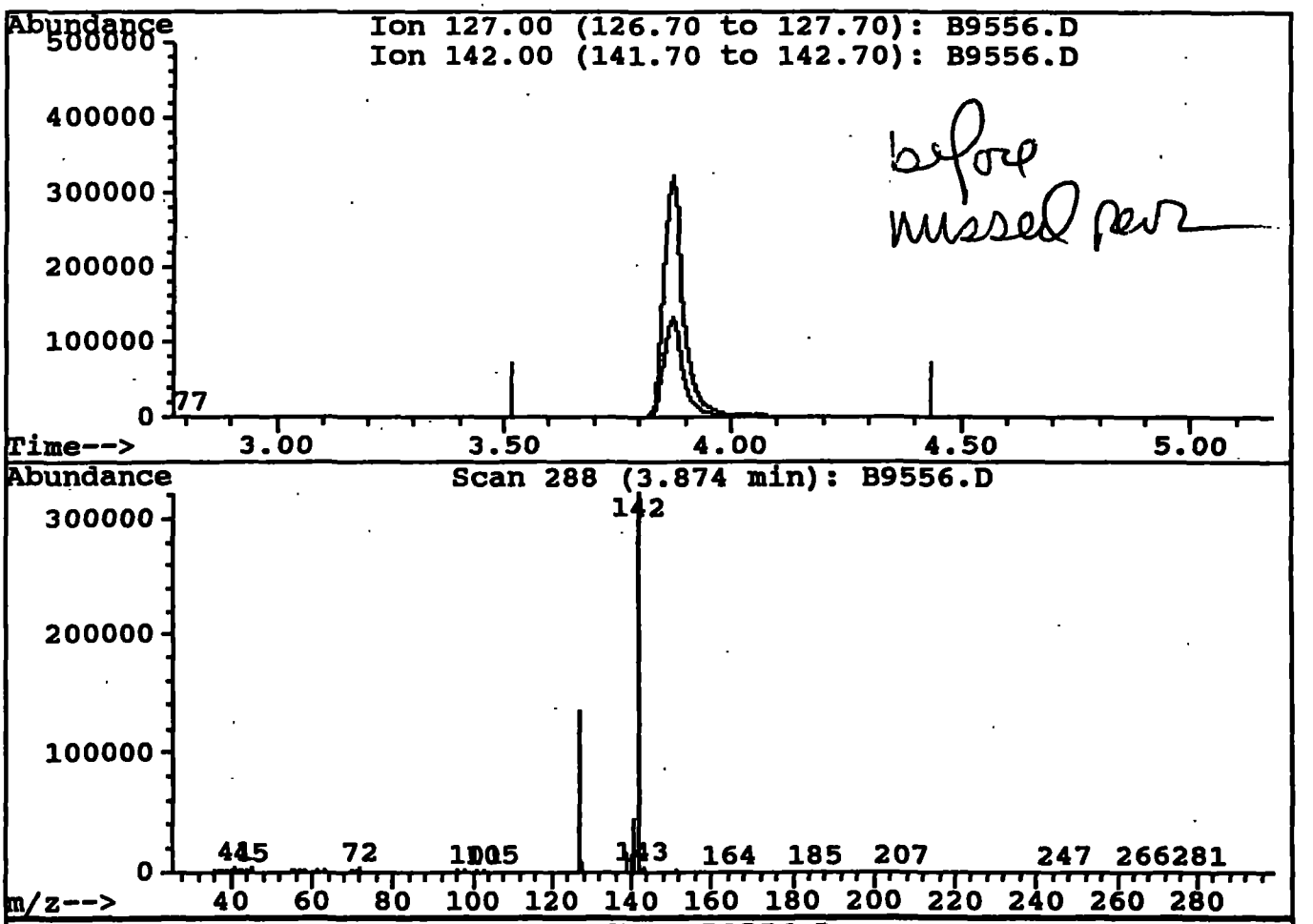


B9556.D SOL0201.M Fri Feb 01 14:42:47 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D  Vial: 10
Acq On : 1 Feb 102 2:05 pm  Operator: TTRAVER
Sample : 150 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:48 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration




before missed peak

TIC: B9556.D

(13) Iodomethane
3.88min 0.00ug/Kg d
response 0

| Ion | Exp% | Act% |
|---|---|---|
| 127.00 | 100 | 0.00 |
| 142.00 | 222.30 | 0.00 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



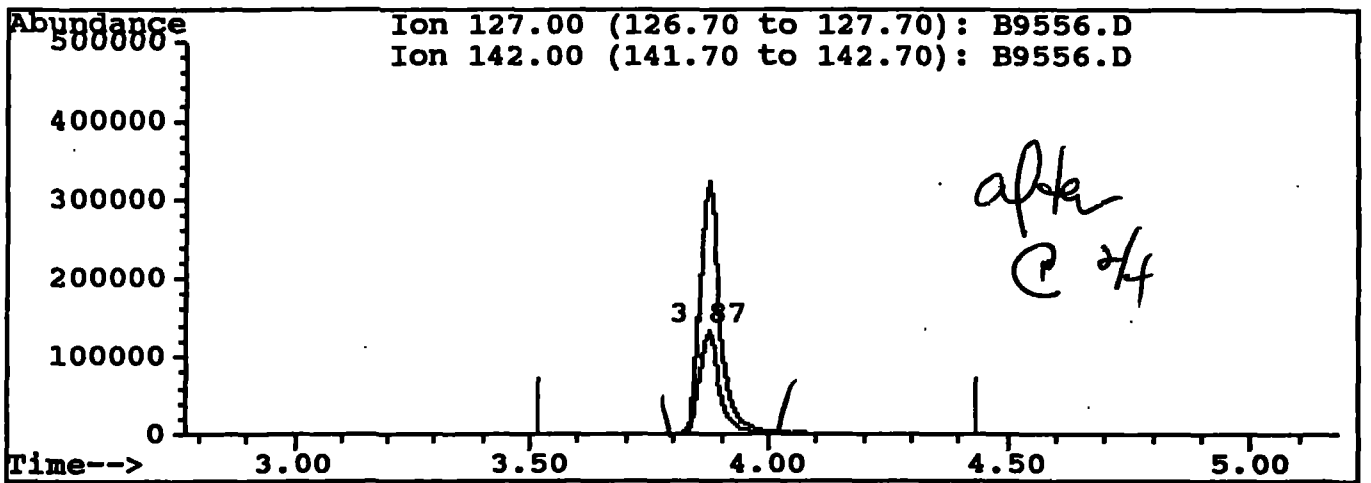
B9556.D SOL0201.M Mon Feb 04 08:51:46 2002

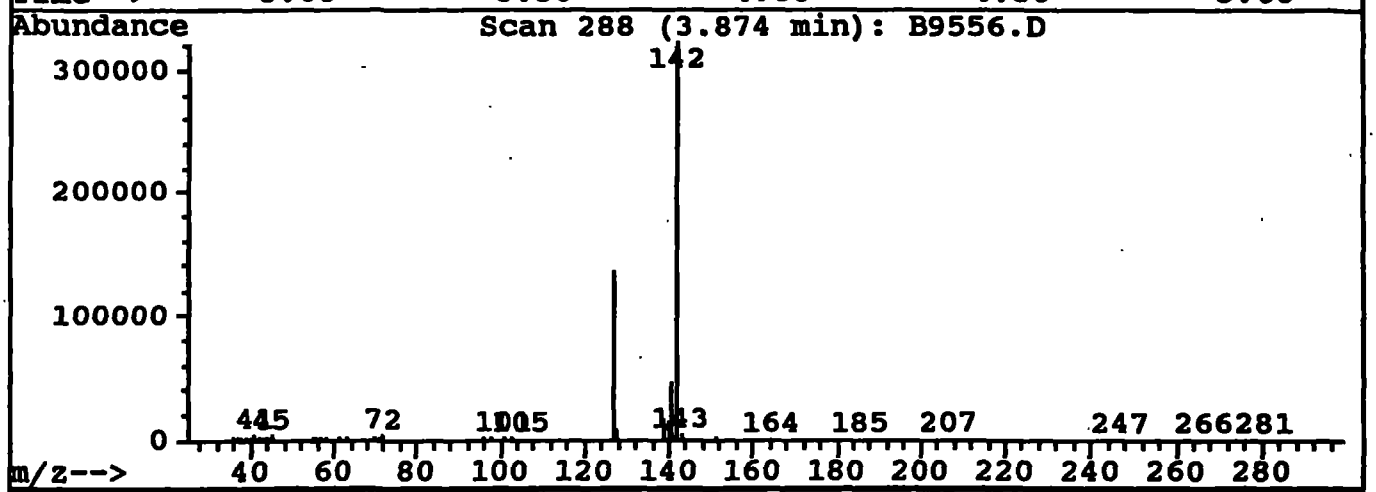
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 4 8:51 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration




TIC: B9556.D

(13) Iodomethane
3.87min 146.61ug/Kg m
response 399397

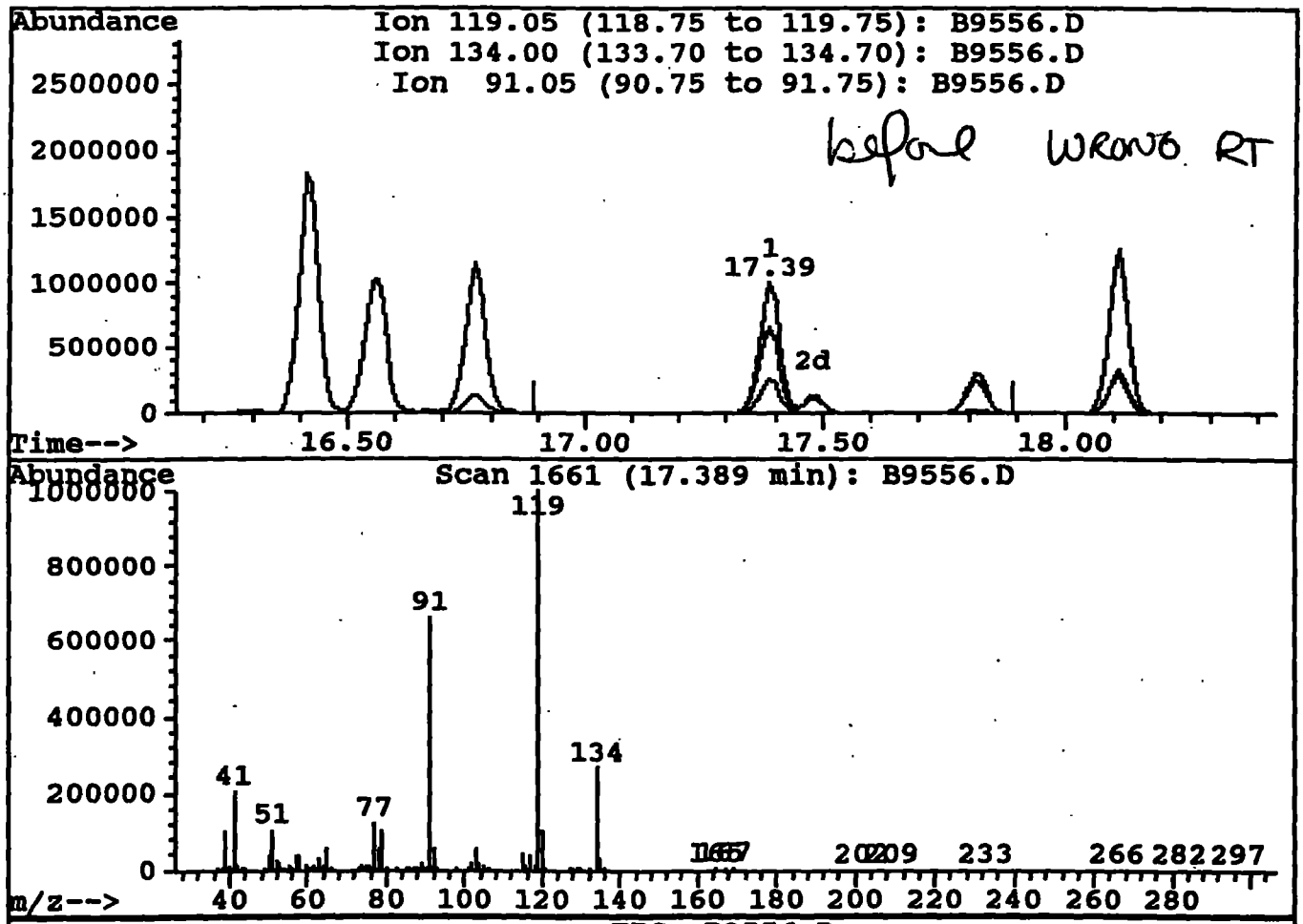
| Ion | Exp% | Act% |
|---|---|---|
| 127.00 | 100 | 100 |
| 142.00 | 222.30 | 241.64 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 1 14:41 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration




TIC: B9556.D

(86) p-Isopropyltoluene
17.39min 158.37ug/Kg
response 2961539

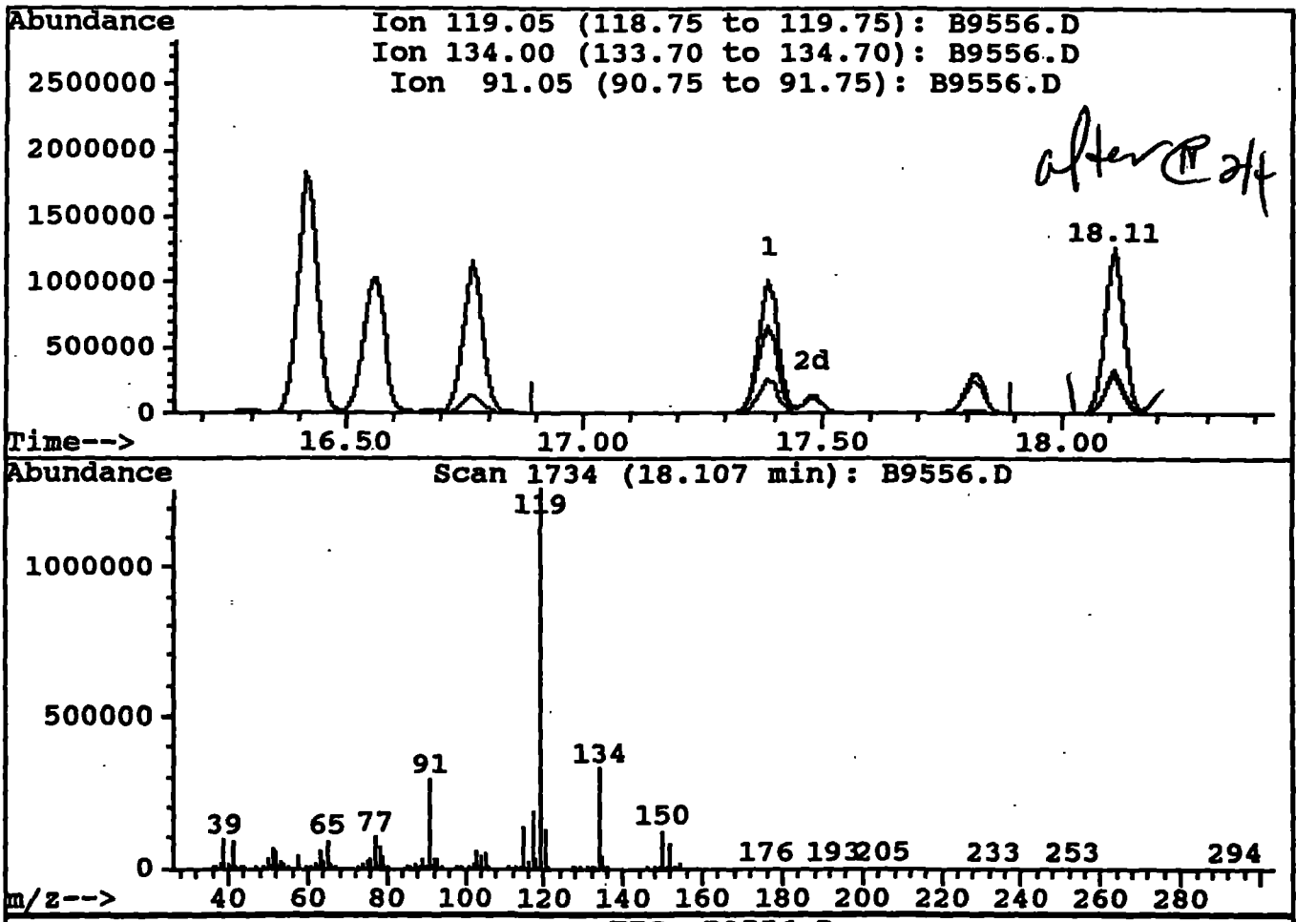
| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.48 |
| 91.05 | 65.80 | 65.95 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9556.D
Acq On : 1 Feb 102 2:05 pm
Sample : 150 PPB
Misc :
Quant Time: Feb 4 8:48 19102

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

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:46:15 2002
Response via : Multiple Level Calibration




TIC: B9556.D

(86) p-Isopropyltoluene
18.11min 195.50ug/Kg m
response 3655705

| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 25.82 |
| 91.05 | 65.80 | 22.94 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D  Vial: 11
Acq On : 1 Feb 102 2:41 pm  Operator: TTRAVER
Sample : 200 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:54 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.41 | 168 | 701479 | 50.00 | ug/Kg | 0.00 |
| 35) 1,4 - Difluorobenzene | 8.59 | 114 | 1363304 | 50.00 | ug/Kg | 0.00 |
| 52) d5 - Chlorobenzene | 13.68 | 117 | 1061755 | 50.00 | ug/Kg | 0.00 |
| 74) d4 - Dichlorobenzene | 18.13 | 152 | 420735 | 50.00 | ug/Kg | 0.00 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.28 | 113 | 1022423 | 158.16 | ug/Kg | 316.32% |
| 58) surr3,Toluene-d8 | 11.10 | 98 | 3506341 | 142.98 | ug/Kg | 285.96% |
| 59) surr2,bfb | 15.90 | 95 | 1375991 | 139.90 | ug/Kg | 279.80% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.66 | 85 | 1764316 | 177.93 | ug/Kgm | 77 |
| 3) Chloromethane | 1.87 | 50 | 2722898 | 167.54 | ug/Kg | 98 |
| 4) Vinyl Chloride | 2.01 | 62 | 1860674 | 181.01 | ug/Kg | 99 |
| 5) Bromomethane | 2.40 | 94 | 1090164 | 205.65 | ug/Kg | 96 |
| 6) Chloroethane | 2.55 | 64 | 1203434 | 188.43 | ug/Kgm | 1 |
| 7) Trichlorofluoromethane | 2.90 | 101 | 2143821 | 191.34 | ug/Kg | 99 |
| 8) Diethyl Ether | 3.35 | 59 | 947764 | 176.05 | ug/Kg | 100 |
| 9) Acrolein | 3.50 | 56 | 574138 | 807.67 | ug/Kg | 99 |
| 10) FREON 113 | 3.69 | 85 | 375387 | 172.89 | ug/Kg | 91 |
| 11) 1,1-Diclethene | 3.66 | 96 | 1246096 | 206.81 | ug/Kg | 98 |
| 12) Acetone | 3.75 | 43 | 315436 | 141.42 | ug/Kg | 99 |
| 13) Iodomethane | 3.87 | 127 | 576386 | 240.81 | ug/Kg | 91 |
| 14) Carbon Disulfide | 3.97 | 76 | 4073737 | 154.27 | ug/Kg | 98 |
| 15) Acetonitrile | 4.16 | 41 | 687037 | 1916.11 | ug/Kg | 97 |
| 16) Allyl Chloride | 4.23 | 76 | 720293 | 195.44 | ug/Kg | 96 |
| 17) Methylene Chloride | 4.43 | 84 | 1482500 | 185.16 | ug/Kg | 95 |
| 18) TBA | 4.68 | 59 | 2419375 | 3518.61 | ug/Kg | 98 |
| 19) Acrylonitrile | 4.81 | 53 | 2023631 | 864.13 | ug/Kg | 99 |
| 20) Methyl-t-Butyl Ether | 4.90 | 73 | 3097091 | 179.23 | ug/Kg | 98 |
| 21) trans-1,2-Dichloroethene | 4.87 | 96 | 1267181 | 200.76 | ug/Kg | 98 |
| 22) 1,1-Diclethane | 5.54 | 63 | 2387612 | 192.44 | ug/Kg | 100 |
| 23) Vinyl Acetate | 5.67 | 43 | 2538616 | 157.04 | ug/Kg | 98 |
| 24) 2-Chloro-1,3-butadiene | 5.70 | 53 | 2046897 | 144.57 | ug/Kg | 97 |
| 25) 2,2-Dichloropropane | 6.49 | 77 | 1834734 | 189.96 | ug/Kg | 95 |
| 26) 2-Butanone | 6.53 | 43 | 661102 | 155.27 | ug/Kg | 100 |
| 28) cis-1,2-Dichloroethene | 6.50 | 96 | 1541819 | 199.78 | ug/Kg | 95 |
| 29) Propionitrile | 6.60 | 54 | 894641 | 877.11 | ug/Kg | 98 |
| 30) Methacrylonitrile | 6.86 | 67 | 434078 | 186.70 | ug/Kg | 97 |
| 31) Bromochloromethane | 6.87 | 128 | 733650 | 189.97 | ug/Kg | 99 |
| 32) Chloroform | 7.03 | 83 | 2163508 | 189.46 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.96 | 42 | 430798 | 150.16 | ug/Kg | 96 |
| 34) 1,1,1-Trichloroethane | 7.31 | 97 | 1977677 | 192.14 | ug/Kg | 99 |
| 37) Carbontetrachloride | 7.59 | 117 | 1710066 | 201.34 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D Vial: 11
Acq On : 1 Feb 102 2:41 pm Operator: TTRAVER
Sample : 200 PPB Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 4 8:54 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.59 | 75 | 2375541 | 193.23 | ug/Kg | 98 |
| 39) | Iso-Butyl Alcohol | 8.45 | 43 | 2419037 | 3541.55 | ug/Kg | 100 |
| 40) | Benzene | 7.92 | 78 | 6676209 | 184.92 | ug/Kg | 99 |
| 41) | 1,2-Dichloroethane | 7.94 | 62 | 1470692 | 179.35 | ug/Kg | 97 |
| 42) | N-Heptane | 8.45 | 43 | 2408224 | 175.52 | ug/Kg | 99 |
| 43) | Trichloroethene | 9.02 | 95 | 1796800 | 189.68 | ug/Kg | 99 |
| 44) | 1,2-Diclpropane | 9.37 | 63 | 1920843 | 189.27 | ug/Kg | 99 |
| 45) | Methyl Methacrylate | 9.63 | 69 | 1023515 | 185.63 | ug/Kg | 100 |
| 46) | 1,4-Dioxane | 9.63 | 88 | 305430 | 3492.57 | ug/Kg | 91 |
| 47) | Dibromomethane | 9.57 | 93 | 884276 | 189.26 | ug/Kg | 96 |
| 48) | Bromodichloromethane | 9.85 | 83 | 1946072 | 198.08 | ug/Kg | 97 |
| 49) | 2-Nitropropane | 10.23 | 43 | 888384 | 375.32 | ug/Kg | 98 |
| 50) | 2-Chloroethylvinyl Ether | 10.40 | 63 | 635742 | 174.39 | ug/Kg | 100 |
| 51) | cis-1,3-Dichloropropene | 10.63 | 75 | 2784911 | 192.73 | ug/Kg | 97 |
| 53) | 4-Methyl-2-Pentanone | 10.92 | 43 | 1811624 | 158.40 | ug/Kg | 98 |
| 4) | Toluene | 11.22 | 91 | 6258793 | 187.33 | ug/Kg | 98 |
| 55) | trans-1,3-Dichloropropene | 11.62 | 75 | 2396464 | 187.13 | ug/Kg | 99 |
| 56) | Ethyl Methacrylate | 11.82 | 69 | 1815953 | 186.22 | ug/Kg | 100 |
| 57) | 1,1,2-Trichloroethane | 11.93 | 83 | 1249795 | 185.06 | ug/Kg | 98 |
| 60) | Tetrachloroethene | 12.20 | 166 | 1551727 | 193.20 | ug/Kg | 95 |
| 61) | 2-Hexanone | 12.40 | 43 | 1260830 | 157.18 | ug/Kg | 96 |
| 62) | 1,3-Dichloropropane | 12.23 | 76 | 2748084 | 184.44 | ug/Kg | 94 |
| 63) | Dibromochloromethane | 12.63 | 129 | 1658485 | 199.71 | ug/Kg | 99 |
| 64) | 1,2-Dibromoethane | 12.82 | 107 | 1566935 | 185.98 | ug/Kg | 97 |
| 65) | Chlorobenzene | 13.73 | 112 | 4052416 | 185.85 | ug/Kg | 97 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.90 | 131 | 1527126 | 194.80 | ug/Kg | 99 |
| 67) | Ethylbenzene | 13.96 | 91 | 6607800 | 183.39 | ug/Kg | 97 |
| 68) | (m+p)Xylene | 14.18 | 106 | 4871255 | 372.54 | ug/Kg | 96 |
| 69) | o-Xylene | 14.92 | 106 | 2398296 | 187.71 | ug/Kg | 98 |
| 70) | Styrene | 14.94 | 104 | 4101369 | 185.95 | ug/Kg | 99 |
| 71) | Bromoform | 15.26 | 173 | 1020212 | 201.35 | ug/Kg | 99 |
| 72) | Isopropylbenzene | 15.63 | 105 | 6249359 | 184.33 | ug/Kg | 97 |
| 73) | Cyclohexanone | 15.75 | 55 | 4517475 | 3419.56 | ug/Kg | 99 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.18 | 83 | 1787486 | 180.49 | ug/Kg | 99 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.30 | 53 | 502794 | 181.65 | ug/Kg | 92 |
| 77) | 1,2,3-Trichloropropane | 16.25 | 110 | 508969 | 183.49 | ug/Kg | 98 |
| 78) | n-Propylbenzene | 16.42 | 91 | 7093336 | 179.67 | ug/Kg | 97 |
| 79) | Bromobenzene | 16.16 | 156 | 1476142 | 190.72 | ug/Kg | 98 |
| 80) | 1,3,5-Trimethylbenzene | 16.76 | 105 | 4386806 | 182.66 | ug/Kg# | 47 |
| 81) | 2-Chlorotoluene | 16.56 | 91 | 4172953 | 179.64 | ug/Kg | 99 |
| 82) | 4-Chlorotoluene | 16.76 | 91 | 4627477 | 180.59 | ug/Kg | 99 |
| 83) | tert-Butylbenzene | 17.38 | 119 | 4041918 | 185.06 | ug/Kg | 99 |
| 84) | 1,2,4-Trimethylbenzene | 17.48 | 105 | 4229744 | 177.69 | ug/Kg | 96 |
| 85) | sec-Butylbenzene | 17.82 | 105 | 6386271 | 182.63 | ug/Kg | 97 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D  Vial: 11
Acq On : 1 Feb 102 2:41 pm  Operator: TTRAVER
Sample : 200 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 4 8:54 19102

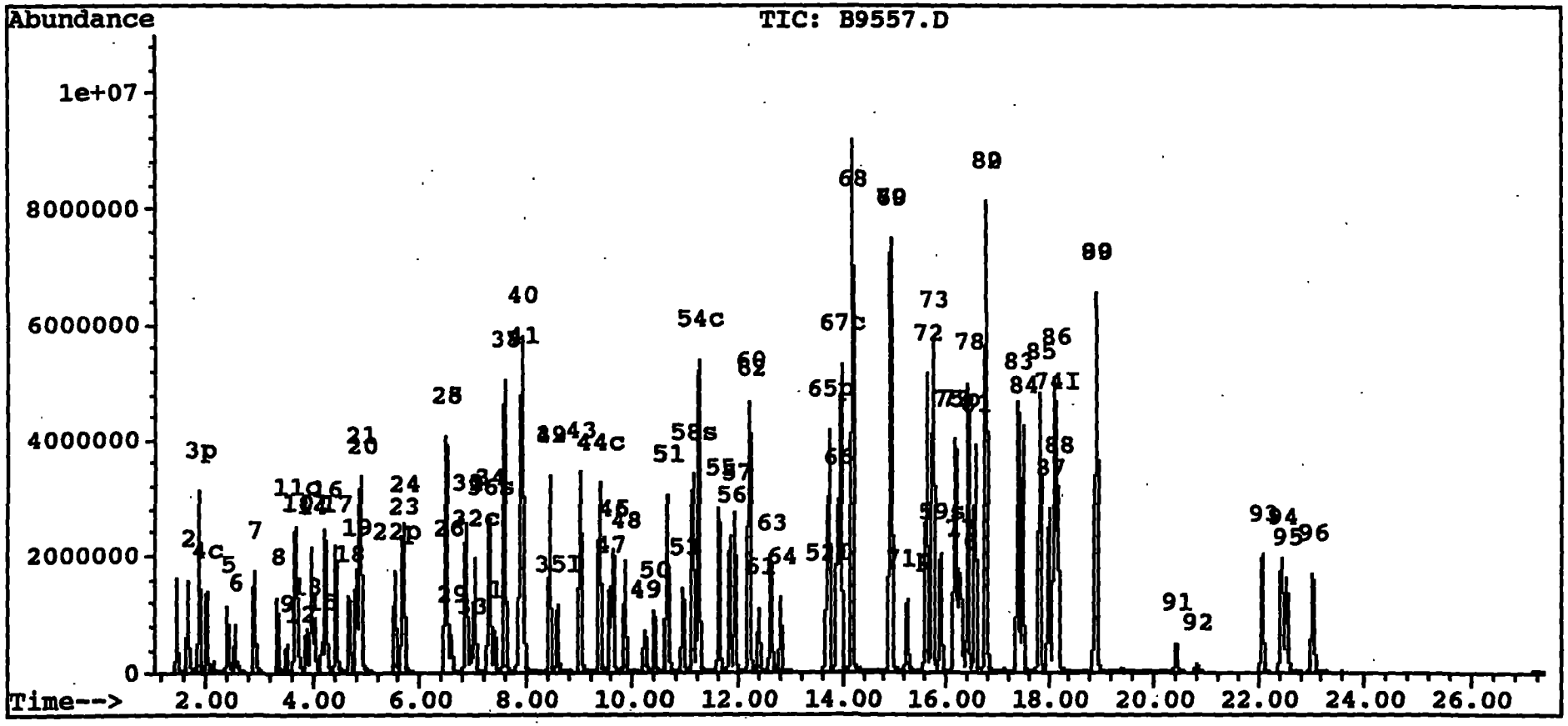
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 86) | p-Isopropyltoluene | 18.11 | 119 | 4942205 | 226.28 | ug/Kgm | 99 |
| 87) | 1,3-Dclbenz | 18.00 | 146 | 2258717 | 187.16 | ug/Kg | 98 |
| 88) | 1,4-Dclbenz | 18.17 | 146 | 2439379 | 185.62 | ug/Kgm | 0 |
| 89) | n-Butylbenzene | 18.91 | 91 | 4584448 | 176.74 | ug/Kg | 98 |
| 90) | 1,2-Dclbenz | 18.89 | 146 | 2227337 | 183.56 | ug/Kg | 98 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.42 | 157 | 283068 | 194.78 | ug/Kg | 97 |
| 92) | Nitrobenzene | 20.81 | 77 | 140425 | 233.01 | ug/Kg | 98 |
| 93) | 1,2,4-Tcbenzene | 22.08 | 180 | 1334554 | 186.57 | ug/Kg | 97 |
| 94) | Hexachlorobt | 22.45 | 225 | 796511 | 185.41 | ug/Kgm | 44 |
| 95) | Naphthalen | 22.54 | 128 | 2730447 | 189.56 | ug/Kg | 96 |
| 96) | 1,2,3-Tclbenzene | 23.03 | 180 | 1169715 | 184.31 | ug/Kg | 98 |

Data Fil : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.I
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 4 8:54 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:55:04 2002
Response via : Multiple Level Calibration

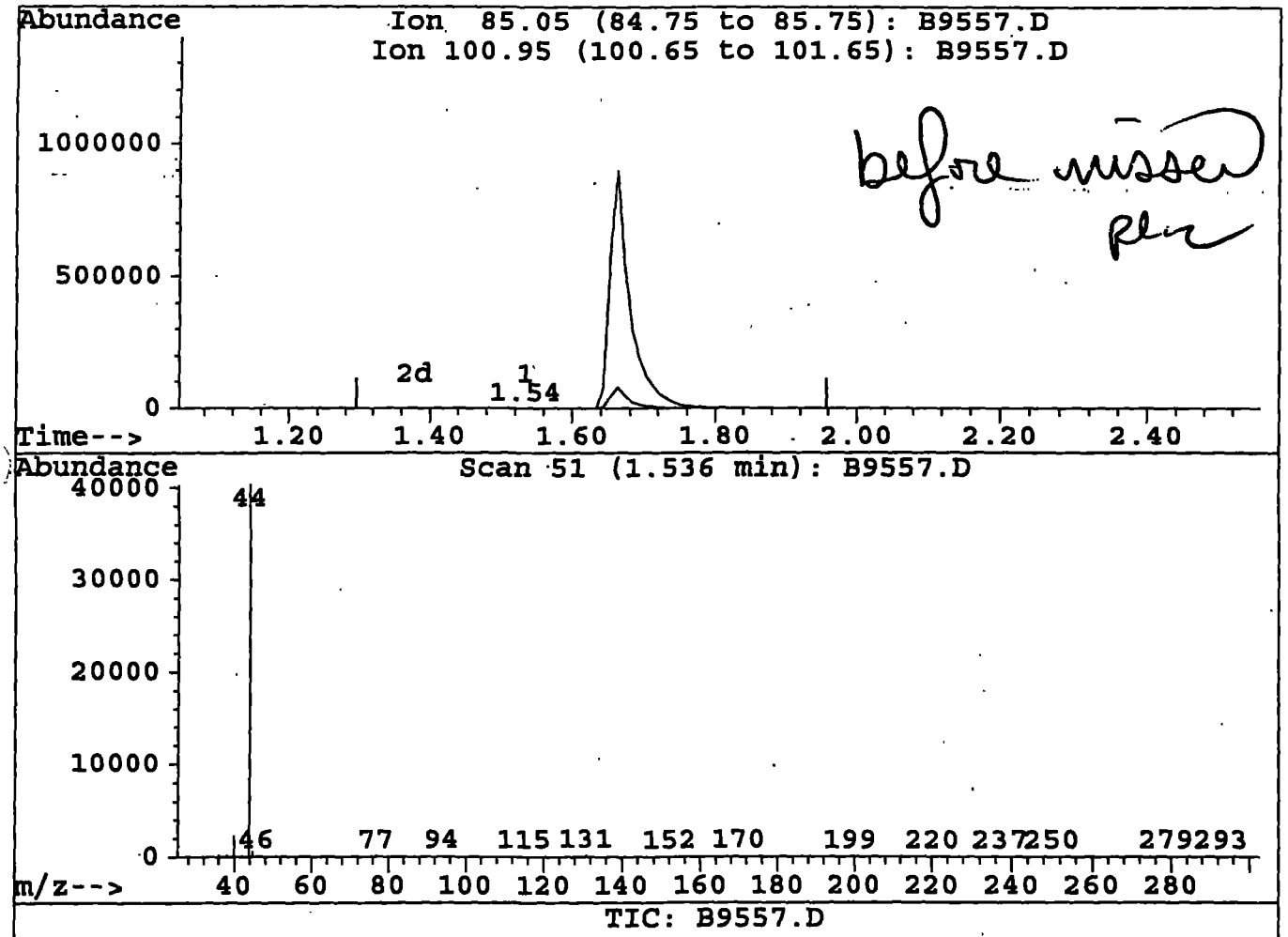


Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:09 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




before missed
RL

TIC: B9557.D

(2) Dichlorodifluoromethane

1.54min 0.01ug/Kg

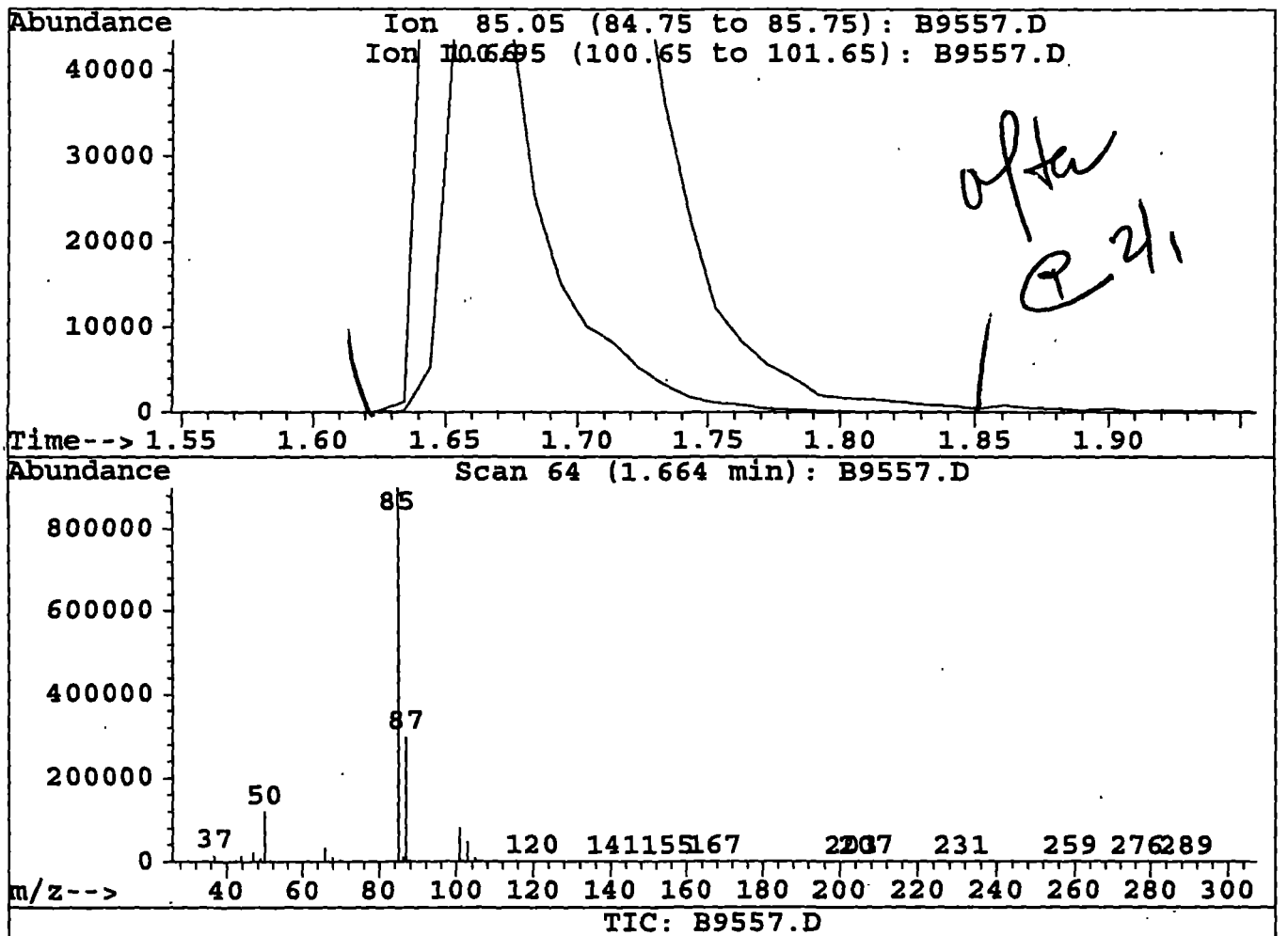
response 73

| 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 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D  Vial: 11
Acq On : 1 Feb 102 2:41 pm  Operator: TTRAVER
Sample : 200 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 15:11 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(2) Dichlorodifluoromethane
1.66min 177.93ug/Kg m
response 1764316

| Ion | Exp% | Act% |
|---|---|---|
| 85.05 | 100 | 100 |
| 100.95 | 8.10 | 8.93 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



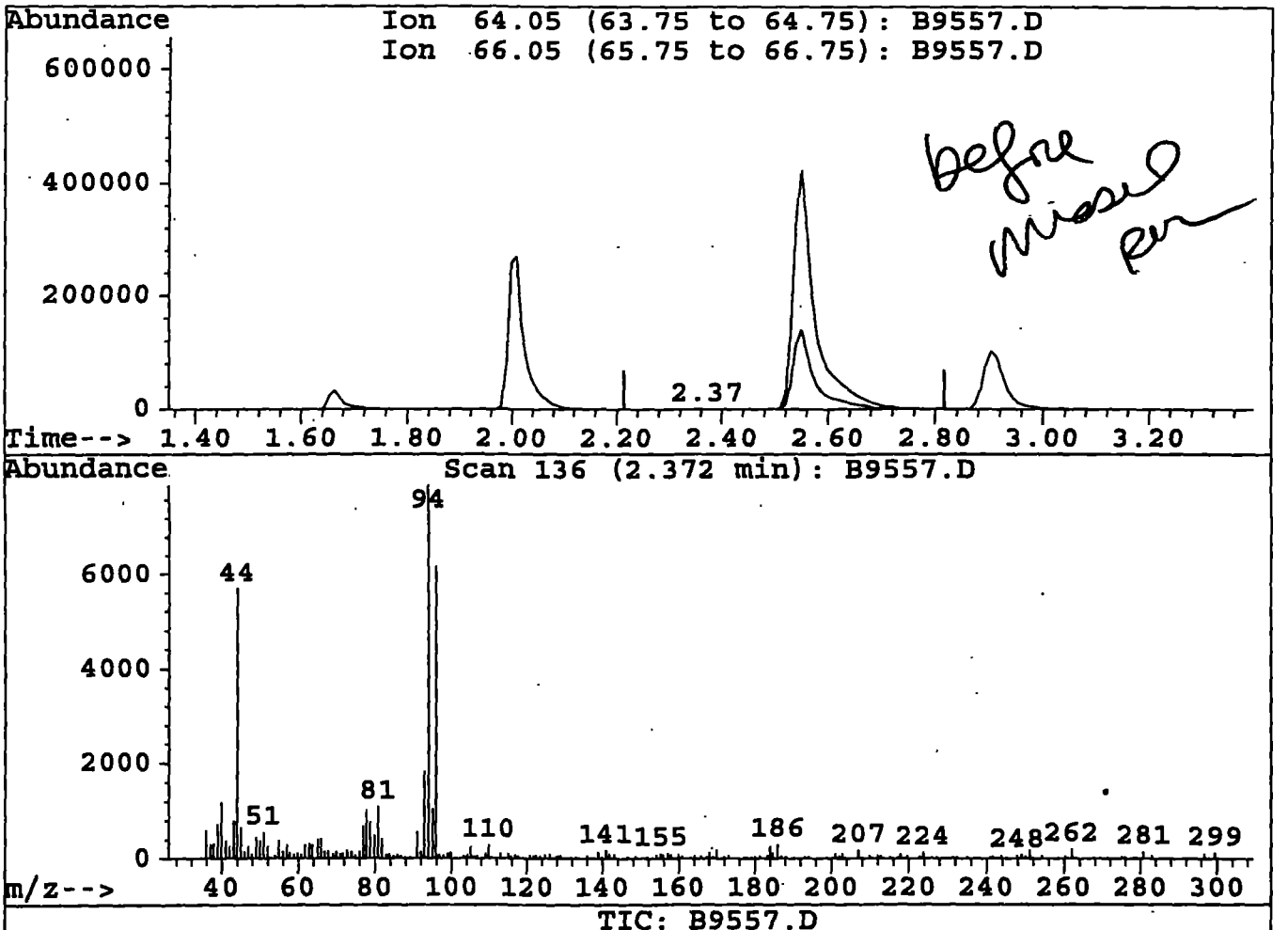
B9557.D SOL0201.M Fri Feb 01 15:11:37 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:11 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration







TIC: B9557.D

(6) Chloroethane
2.37min 0.04ug/Kg
response 248

| Ion | Exp% | Act% |
|---|---|---|
| 64.05 | 100 | 100 |
| 66.05 | 31.90 | 147.06# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |



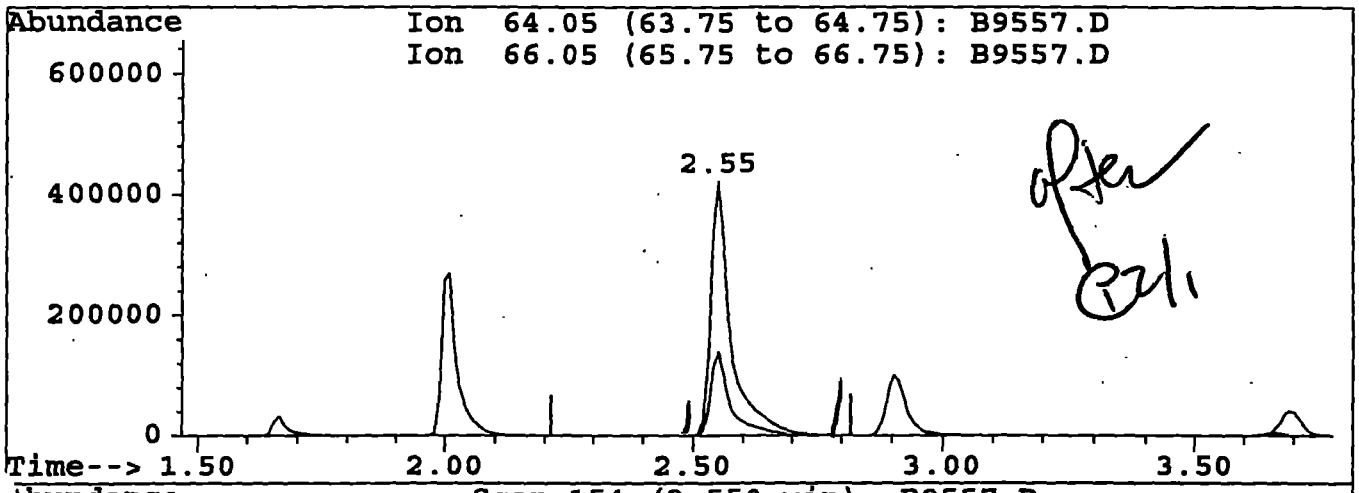
B9557.D SOL0201.M Fri Feb 01 15:11:49 2002

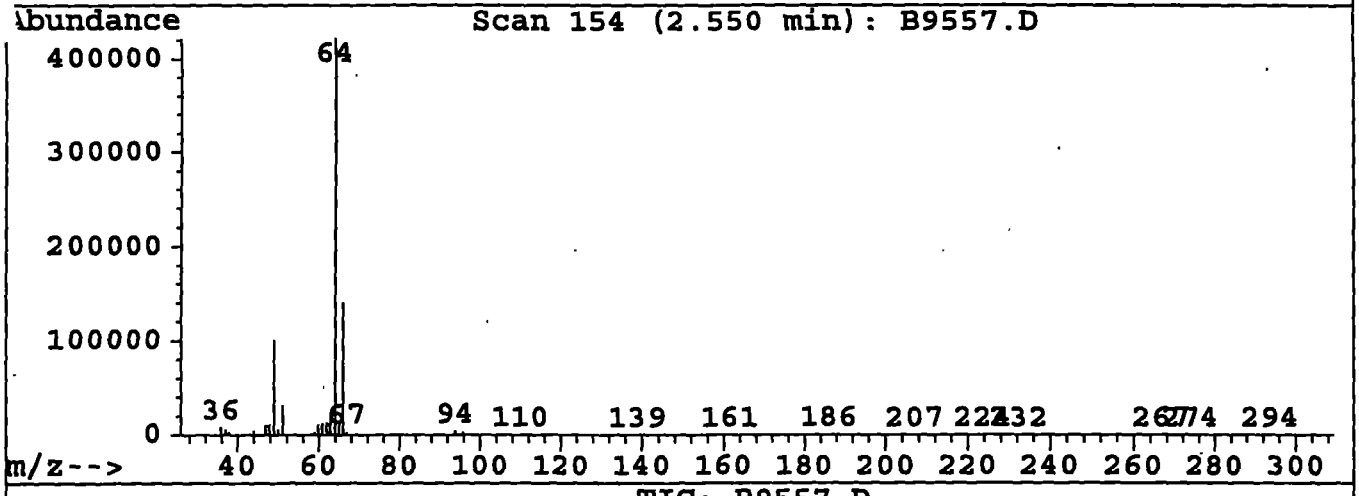
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:12 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(6) Chloroethane
2.55min 188.43ug/Kg m
response 1203434

| Ion | Exp% | Act% |
|---|---|---|
| 64.05 | 100 | 100 |
| 66.05 | 31.90 | 33.04 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

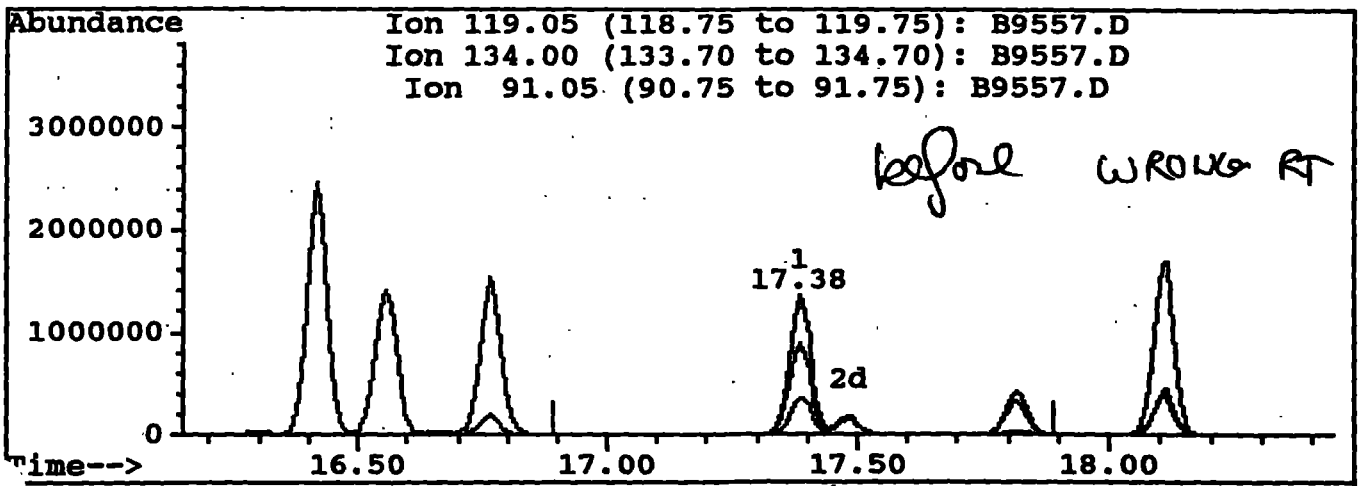
200

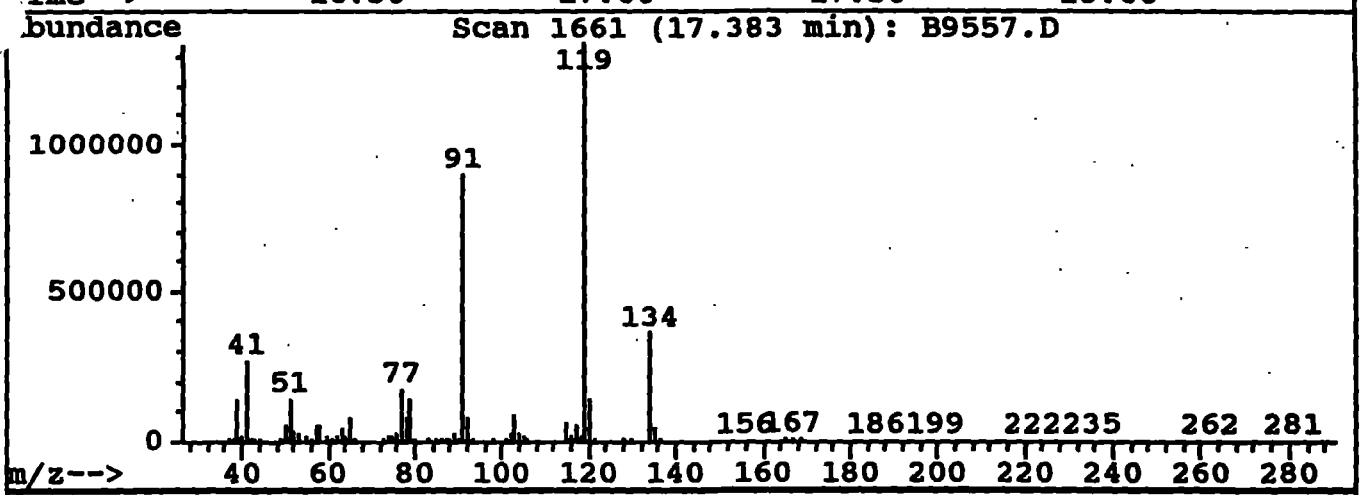
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:13 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(86) p-Isopropyltoluene
17.38min 185.06ug/Kg
response 4041918

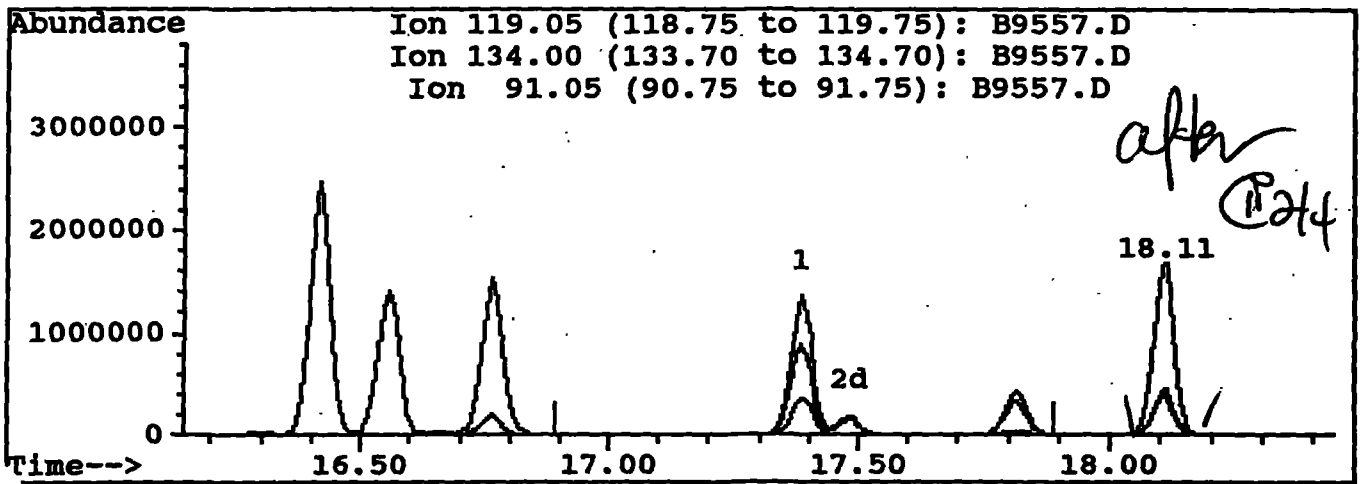
| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.64 |
| 91.05 | 65.80 | 66.73 |
| 0.00 | 0.00 | 0.00 |

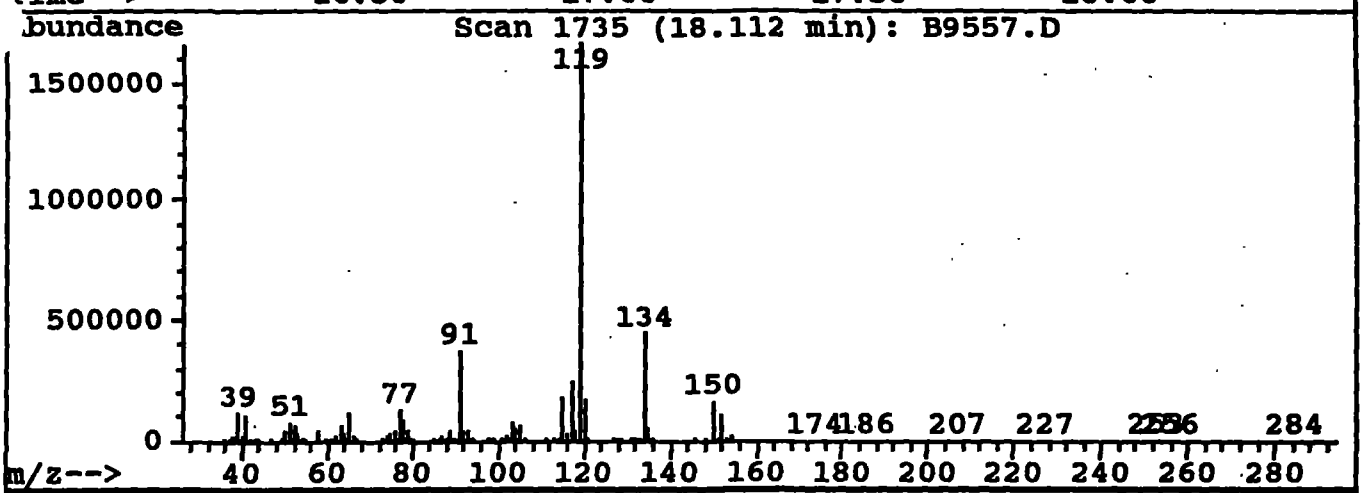
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 4 8:54 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 08:53:08 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(86) p-Isopropyltoluene
18.11min 226.28ug/Kg m
response 4942205

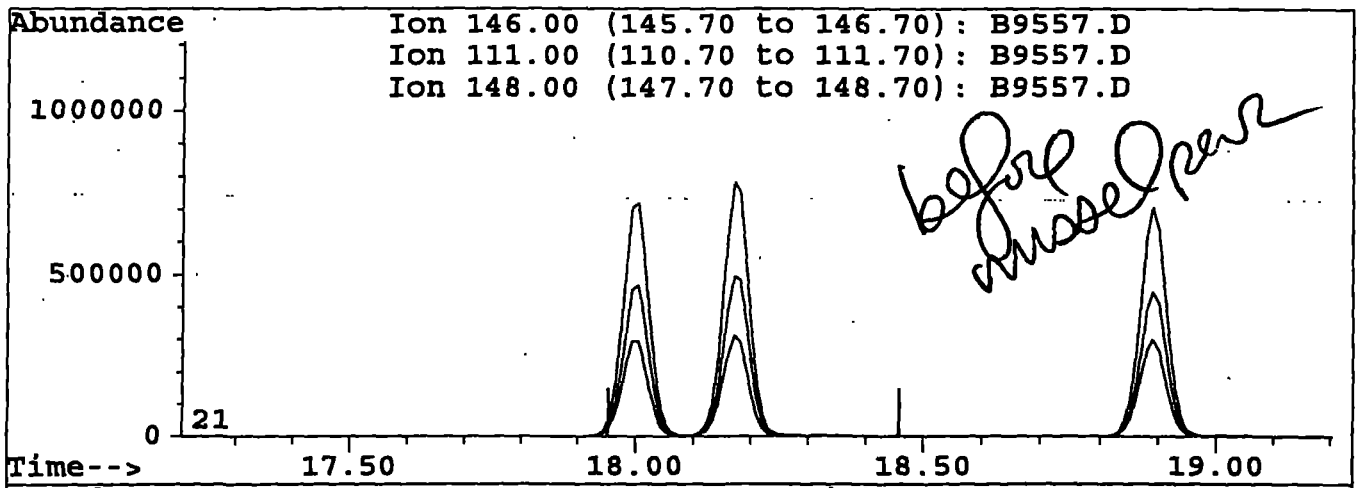
| Ion | Exp% | Act% |
|---|---|---|
| 119.05 | 100 | 100 |
| 134.00 | 26.30 | 26.53 |
| 91.05 | 65.80 | 22.24 |
| 0.00 | 0.00 | 0.00 |

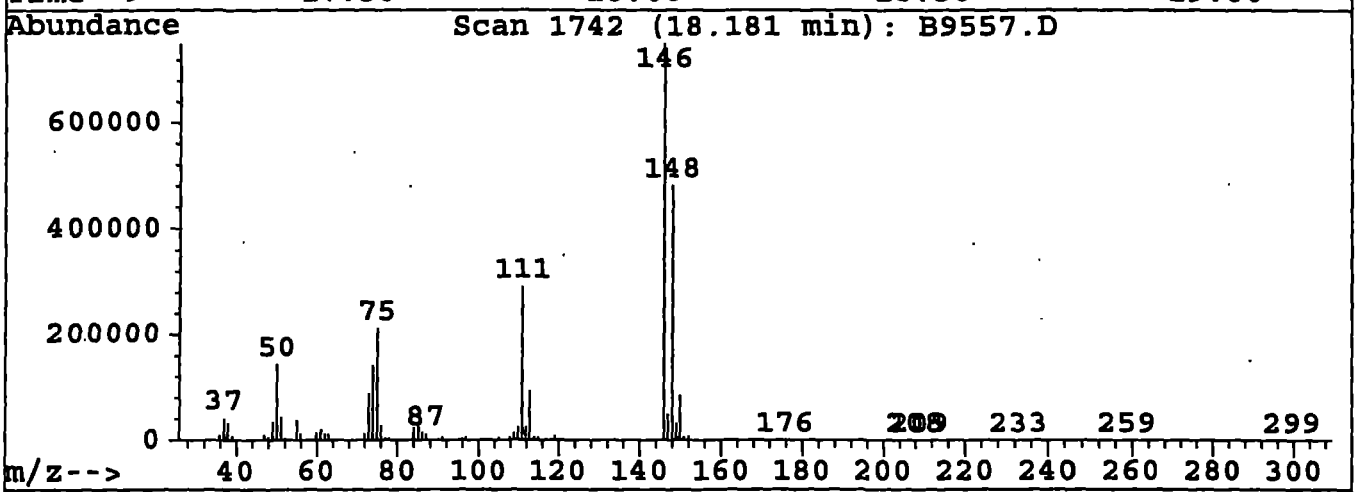
Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:12 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(88) 1,4-Dclbenz
18.18min 0.00ug/Kg d
response 0

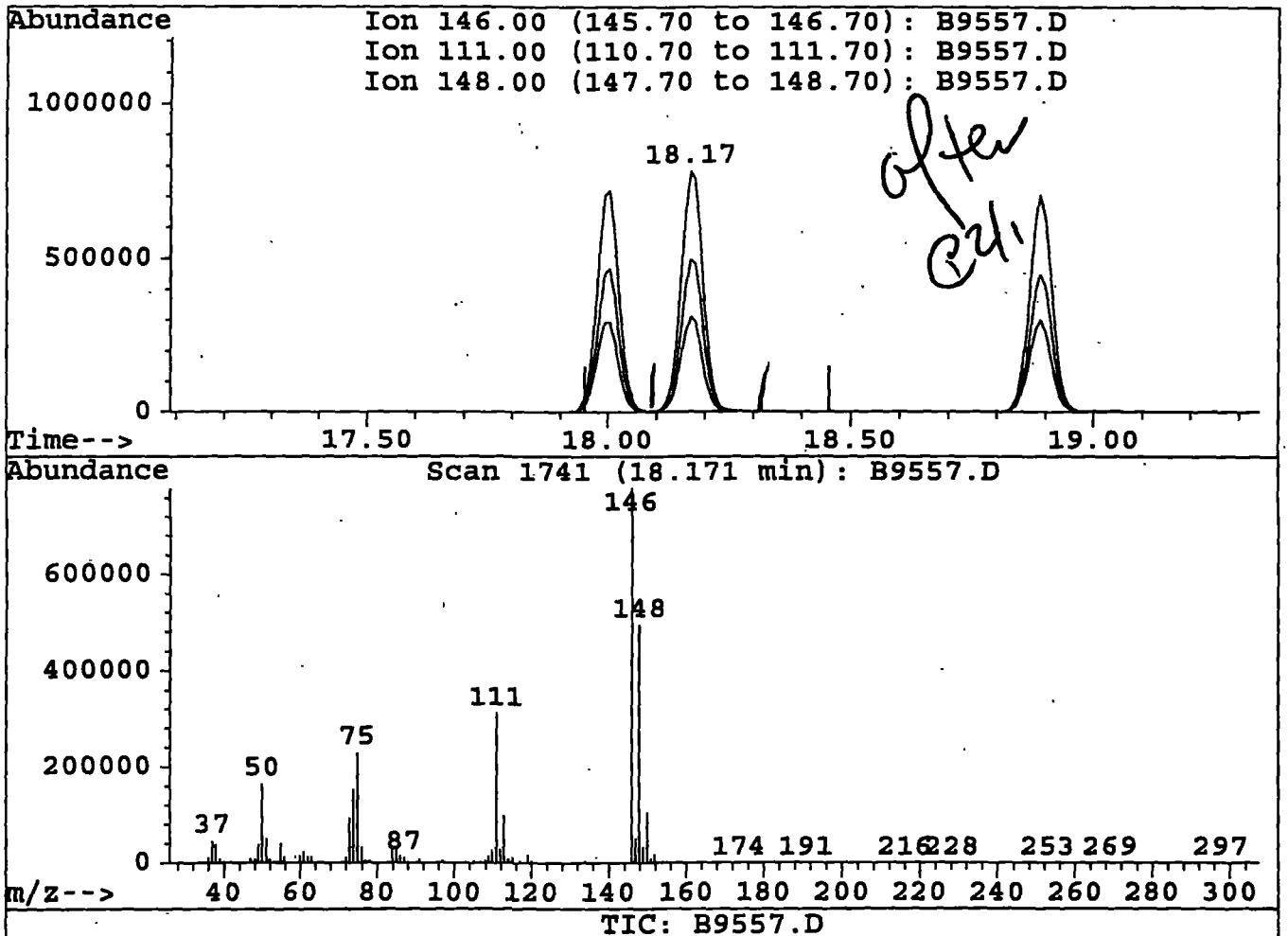
| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 0.00 |
| 111.00 | 40.30 | 0.00# |
| 148.00 | 62.20 | 0.00# |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D
Acq On : 1 Feb 102 2:41 pm
Sample : 200 PPB
Misc :
Quant Time: Feb 1 15:12 19102

Vial: 11
Operator: TTRAVER
Inst : 5971 - In
Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

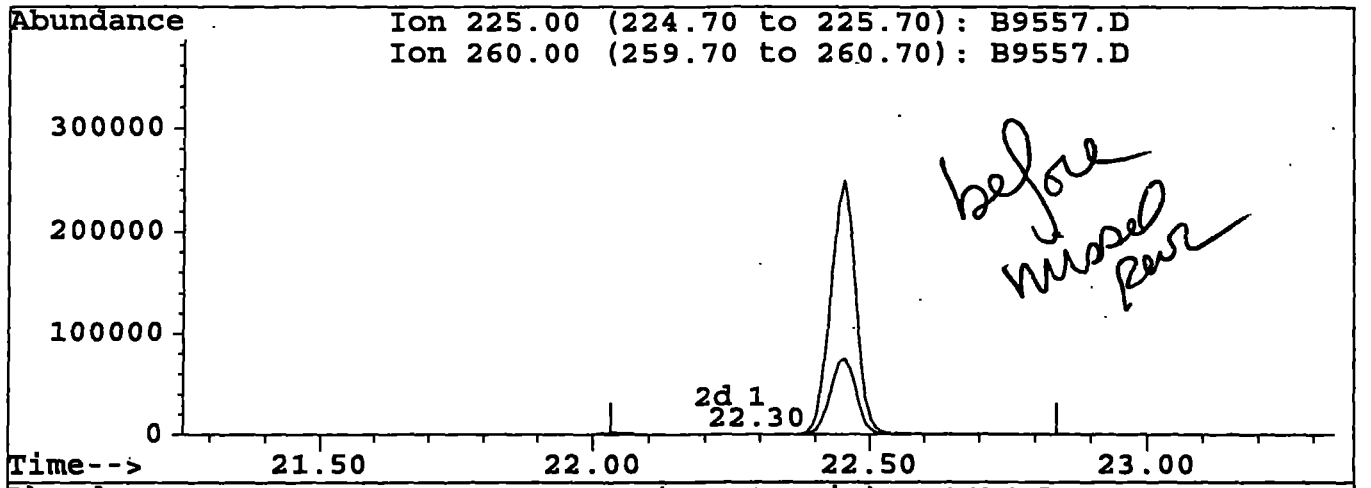
(88) 1,4-Dclbenz
18.17min 185.62ug/Kg m
response 2439379

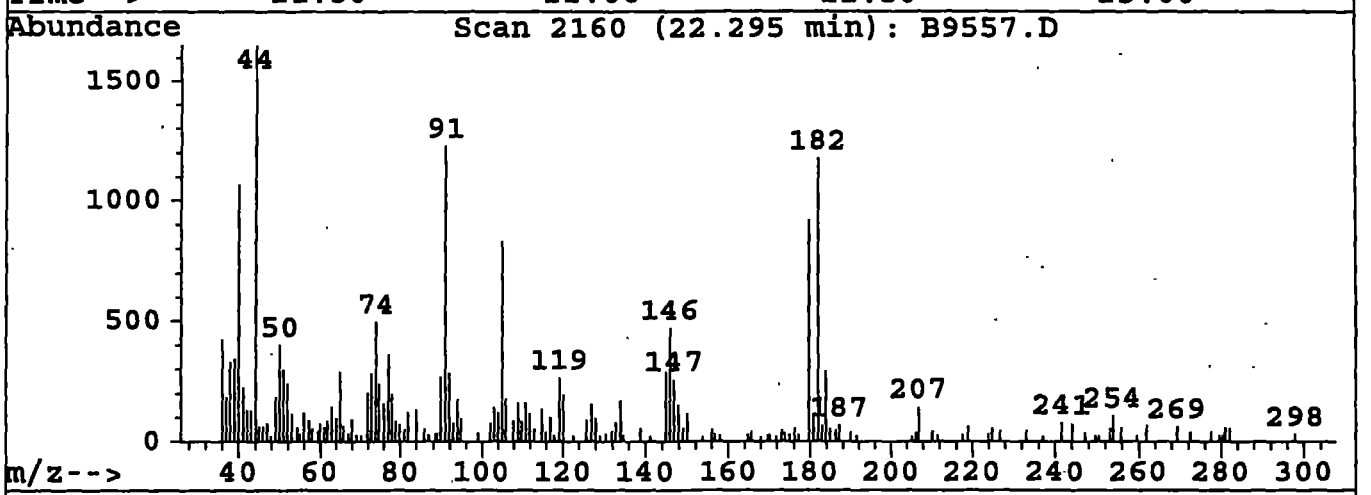
| Ion | Exp% | Act% |
|---|---|---|
| 146.00 | 100 | 100 |
| 111.00 | 40.30 | 39.89 |
| 148.00 | 62.20 | 63.27 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D  Vial: 11
Acq On : 1 Feb 102 2:41 pm  Operator: TTRAVER
Sample : 200 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 15:12 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

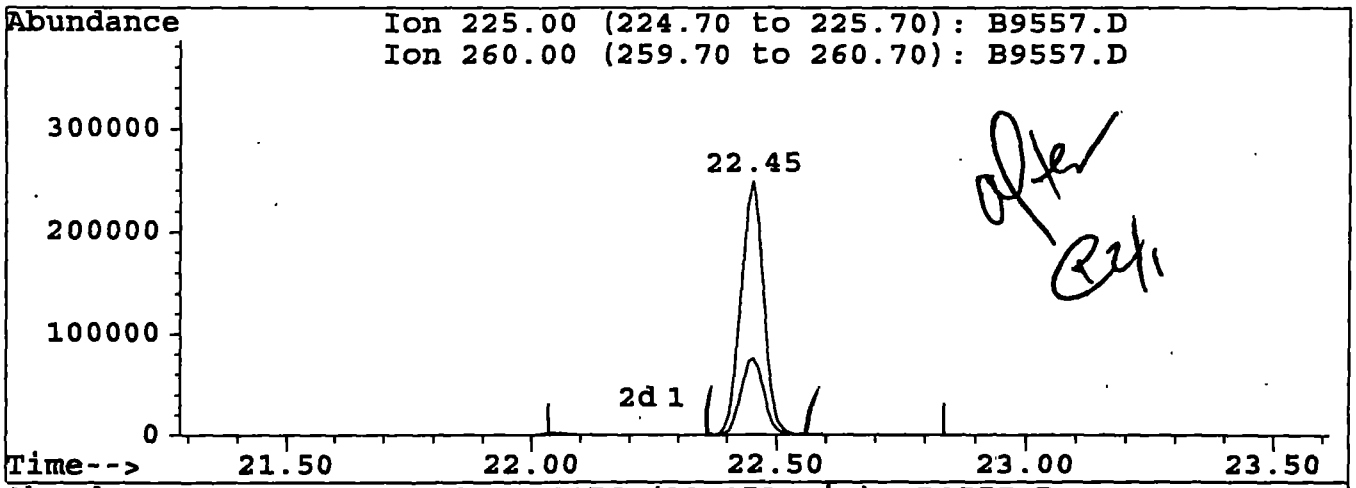
(94) Hexachlorobt
22.30min 0.02ug/Kg
response 90

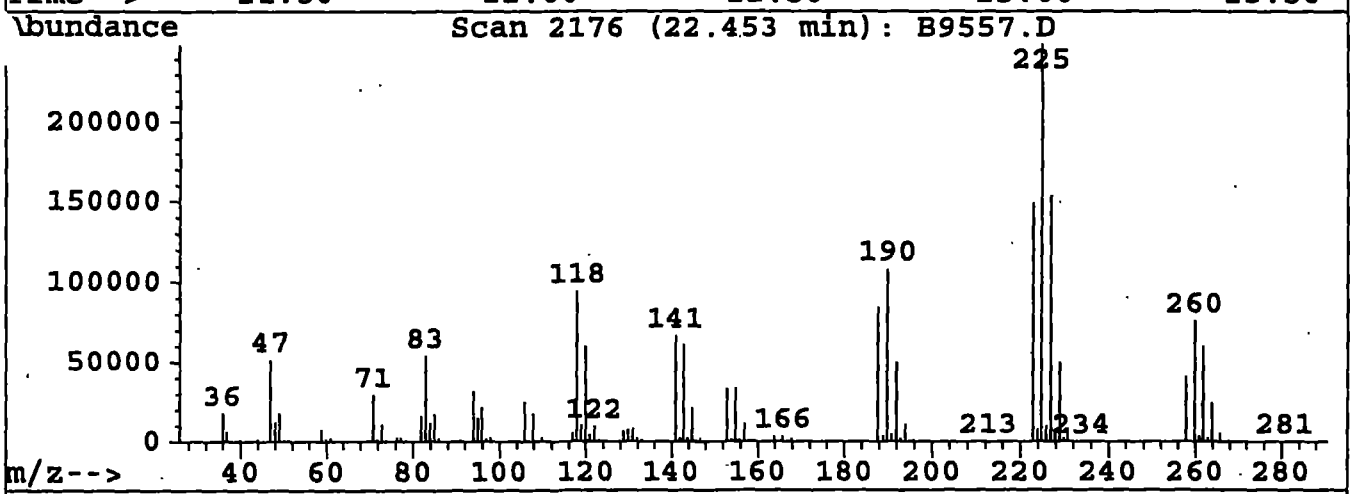
| Ion | Exp% | Act% |
|---|---|---|
| 225.00 | 100 | 100 |
| 260.00 | 30.60 | 0.00# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9557.D  Vial: 11
Acq On : 1 Feb 102 2:41 pm  Operator: TTRAVER
Sample : 200 PPB  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 1 15:13 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Fri Feb 01 14:44:01 2002
Response via : Multiple Level Calibration




TIC: B9557.D

(94) Hexachlorobt
22.45min 185.41ug/Kg m
response 796511

| Ion | Exp% | Act% |
|---|---|---|
| 225.00 | 100 | 100 |
| 260.00 | 30.60 | 30.38 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
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 | 139 | -0.07 |
| 2 | | Dichlorodifluoromethane | 0.659 | 0.678 | -3.0 | 130 | -0.02 |
| 3 | p | Chloromethane | 1.087 | 1.131 | -4.0 | 134 | -0.02 |
| 4 | c | Vinyl Chloride | 0.691 | 0.730 | -5.6 | 134 | -0.03 |
| 5 | | Bromomethane | 0.366 | 0.297 | 18.8 | 104 | -0.02 |
| 6 | | Chloroethane | 0.441 | 0.427 | 3.2 | 122 | -0.04 |
| 7 | | Trichlorofluoromethane | 0.744 | 0.839 | -12.7 | 141 | -0.04 |
| 8 | | Diethyl Ether | 0.353 | 0.412 | -16.5 | 148 | -0.05 |
| 9 | | Acrolein | 0.043 | 0.054 | -24.1 | 159 | -0.05 |
| 10 | | FREON 113 | 0.133 | 0.154 | -15.6 | 140 | -0.05 |
| 11 | c | 1,1-Diclethene | 0.405 | 0.484 | -19.5 | 152 | -0.05 |
| 12 | | Acetone | 0.125 | 0.172 | -38.0# | 173 | -0.05 |
| 1 | | Iodomethane | 0.172 | 0.140 | 18.2 | 105 | -0.05 |
| 1 | | Carbon Disulfide | 1.622 | 1.948 | -20.1 | 155 | -0.06 |
| 15 | | Acetonitrile | 0.012 | 0.014 | -15.4 | 154 | -0.05 |
| 16 | | Allyl Chloride | 0.250 | 0.282 | -12.7 | 145 | -0.06 |
| 17 | | Methylene Chloride | 0.543 | 0.611 | -12.5 | 149 | -0.06 |
| 18 | | TBA | 0.046 | 0.061 | -31.5# | 176 | -0.06 |
| 19 | | Acrylonitrile | 0.153 | 0.194 | -26.6# | 163 | -0.07 |
| 20 | | Methyl-t-Butyl Ether | 1.138 | 1.346 | -18.3 | 151 | -0.06 |
| 21 | | trans-1,2-Dichloroethene | 0.425 | 0.517 | -21.5 | 157 | -0.06 |
| 22 | p | 1,1-Diclethane | 0.820 | 0.975 | -18.9 | 153 | -0.06 |
| 23 | | Vinyl Acetate | 0.967 | 1.124 | -16.2 | 144 | -0.07 |
| 24 | | 2-Chloro-1,3-butadiene | 0.861 | 0.890 | -3.3 | 128 | -0.07 |
| 25 | | 2,2-Dichloropropane | 0.630 | 0.712 | -13.1 | 140 | -0.07 |
| 26 | | 2-Butanone | 0.256 | 0.326 | -27.3# | 165 | -0.06 |
| 27 | | Ethyl Acetate | 0.000 | 0.000 | 0.0 | 0# | -0.07 |
| 28 | | cis-1,2-Dichloroethene | 0.525 | 0.641 | -22.0 | 158 | -0.07 |
| 29 | | Propionitrile | 0.068 | 0.082 | -19.0 | 157 | -0.07 |
| 30 | | Methacrylonitrile | 0.158 | 0.196 | -24.1 | 163 | -0.07 |
| 31 | | Bromochloromethane | 0.264 | 0.320 | -21.6 | 162 | -0.07 |
| 32 | c | Chloroform | 0.770 | 0.883 | -14.7 | 149 | -0.07 |
| 33 | | Tetrahydrofuran | 0.176 | 0.201 | -14.5 | 159 | -0.06 |
| 34 | | 1,1,1-Trichloroethane | 0.679 | 0.734 | -8.1 | 133 | -0.07 |
| 35 | I | 1,4 - Difluorobenzene | 1.000 | 1.000 | 0.0 | 130 | -0.07 |
| 36 | s | surr4,Dibrflmethane | 0.240 | 0.258 | -7.5 | 138 | -0.07 |
| ?? | | Carbontetrachloride | 0.286 | 0.326 | -14.0 | 135 | -0.07 |
| | | 1,1-Dichloropropene | 0.427 | 0.456 | -6.8 | 127 | -0.07 |
| 39 | | Iso-Butyl Alcohol | 0.023 | 0.024 | -7.3 | 128 | -0.08 |
| 40 | | Benzene | 1.269 | 1.415 | -11.5 | 137 | -0.08 |
| 41 | | 1,2-Dichloroethane | 0.281 | 0.327 | -16.4 | 144 | -0.07 |

(#) = Out of Range

# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
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 | 0.451 | 0.484 | -7.4 | 126 | -0.08 |
| 43 | | Trichloroethene | 0.328 | 0.366 | -11.6 | 138 | -0.07 |
| 44 | c | 1,2-Diclpropane | 0.358 | 0.384 | -7.2 | 132 | -0.07 |
| 45 | | Methyl Methacrylate | 0.195 | 0.219 | -11.9 | 144 | -0.07 |
| 46 | | 1,4-Dioxane | 0.003 | 0.004 | -16.0 | 159 | -0.07 |
| 47 | | Dibromomethane | 0.163 | 0.201 | -23.3 | 157 | -0.08 |
| 48 | | Bromodichloromethane | 0.349 | 0.398 | -14.3 | 144 | -0.07 |
| 49 | | 2-Nitropropane | 0.082 | 0.084 | -2.5 | 128 | -0.07 |
| 50 | | 2-Chloroethylvinyl Ether | 0.121 | 0.204 | -68.5# | 223# | -0.07 |
| 51 | | cis-1,3-Dichloropropene | 0.513 | 0.564 | -10.0 | 138 | -0.07 |
| 52 | I | d5 - Chlorobenzene | 1.000 | 1.000 | 0.0 | 132 | -0.07 |
| 53 | | 4-Methyl-2-Pentanone | 0.466 | 0.503 | -7.9 | 133 | -0.07 |
| 54 | c | Toluene | 1.502 | 1.735 | -15.5 | 147 | -0.08 |
| 55 | | trans-1,3-Dichloropropene | 0.584 | 0.650 | -11.3 | 142 | -0.07 |
| 56 | | Ethyl Methacrylate | 0.443 | 0.447 | -1.1 | 129 | -0.07 |
| 57 | | 1,1,2-Trichloroethane | 0.310 | 0.347 | -12.1 | 142 | -0.07 |
| 58 | s | surr3,Toluene-d8 | 1.144 | 1.159 | -1.3 | 126 | -0.07 |
| 59 | s | surr2,bfb | 0.457 | 0.457 | -0.1 | 126 | -0.07 |
| 60 | | Tetrachloroethene | 0.360 | 0.446 | -23.8 | 156 | -0.07 |
| 61 | | 2-Hexanone | 0.334 | 0.306 | 8.3 | 116 | -0.07 |
| 62 | | 1,3-Dichloropropane | 0.679 | 0.764 | -12.6 | 144 | -0.08 |
| 63 | | Dibromochloromethane | 0.385 | 0.460 | -19.3 | 158 | -0.08 |
| 64 | | 1,2-Dibromoethane | 0.389 | 0.459 | -17.8 | 155 | -0.08 |
| 65 | p | Chlorobenzene | 0.994 | 1.150 | -15.7 | 151 | -0.07 |
| 66 | | 1,1,1,2-Tetrachloroethane | 0.359 | 0.418 | -16.2 | 150 | -0.08 |
| 67 | c | Ethylbenzene | 1.607 | 1.854 | -15.4 | 145 | -0.07 |
| 68 | | (m+p)Xylene | 0.590 | 0.692 | -17.3 | 150 | -0.07 |
| 69 | | o-Xylene | 0.587 | 0.667 | -13.5 | 146 | -0.08 |
| 70 | | Styrene | 1.010 | 1.157 | -14.5 | 149 | -0.07 |
| 71 | p | Bromoform | 0.239 | 0.293 | -22.6 | 163 | -0.07 |
| 72 | | Isopropylbenzene | 1.525 | 1.750 | -14.8 | 145 | -0.08 |
| 73 | | Cyclohexanone | 0.000 | 0.000 | 0.0 | 130 | -0.08 |
| 74 | I | d4 - Dichlorobenzene | 1.000 | 1.000 | 0.0 | 124 | -0.08 |
| 75 | p | 1,1,2,2-Tetrachloroethane | 1.140 | 1.385 | -21.5 | 150 | -0.07 |
| 76 | | Trans-1,4-Dichloro-2-butene | 0.314 | 0.358 | -13.8 | 139 | -0.08 |
| 77 | | 1,2,3-Trichloropropane | 0.320 | 0.397 | -24.1 | 153 | -0.07 |
| 78 | | n-Propylbenzene | 4.381 | 5.230 | -19.4 | 143 | -0.08 |
| 79 | | Bromobenzene | 0.912 | 1.107 | -21.4 | 158 | -0.07 |
| 80 | | 1,3,5-Trimethylbenzene | 2.704 | 3.210 | -18.7 | 144 | -0.07 |
| 81 | | 2-Chlorotoluene | 2.615 | 3.078 | -17.7 | 143 | -0.07 |

(#) = Out of Range

# Evaluate Continuing Calibration Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
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 | 2.890 | 3.370 | -16.6 | 145 | -0.07 |
| 83 | tert-Butylbenzene | 2.460 | 2.907 | -18.2 | 140 | -0.07 |
| 84 | 1,2,4-Trimethylbenzene | 2.681 | 3.152 | -17.6 | 143 | -0.08 |
| 85 | sec-Butylbenzene | 3.917 | 4.598 | -17.4 | 137 | -0.08 |
| 86 | p-Isopropyltoluene | 3.022 | 3.506 | -16.0 | 139 | -0.08 |
| 87 | 1,3-Dclbenz | 1.415 | 1.695 | -19.8 | 147 | -0.08 |
| 88 | 1,4-Dclbenz | 1.525 | 1.791 | -17.4 | 146 | -0.07 |
| 89 | n-Butylbenzene | 2.863 | 3.345 | -16.8 | 136 | -0.08 |
| 90 | 1,2-Dclbenz | 1.408 | 1.648 | -17.1 | 143 | -0.08 |
| 91 | 1,2-Dibromo-3-chloropropane | 0.172 | 0.220 | -28.1# | 160 | -0.07 |
| 92 | Nitrobenzene | 0.073 | 0.074 | -2.3 | 154 | -0.07 |
| 93 | 1,2,4-Tcbenzene | 0.839 | 0.995 | -18.7 | 146 | -0.08 |
| [illegible] | Hexachlorobt | 0.489 | 0.562 | -14.9 | 133 | -0.08 |
| [illegible] | Naphthalen | 1.820 | 1.914 | -5.2 | 137 | -0.07 |
| 96 | 1,2,3-Tclbenzene | 0.742 | 0.872 | -17.5 | 145 | -0.07 |
| 97 | TOTAL XYLENE | 0.000 | 0.000 | 0.0 | 0# | -0.01 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 10:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.34 | 168 | 794272 | 50.00 | ug/Kg | -0.07 |
| 35) 1,4 - Difluorobenzene | 8.52 | 114 | 1526428 | 50.00 | ug/Kg | -0.07 |
| 52) d5 - Chlorobenzene | 13.61 | 117 | 1198137 | 50.00 | ug/Kg | -0.07 |
| 74) d4 - Dichlorobenzene | 18.05 | 152 | 463728 | 50.00 | ug/Kg | -0.08 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.21 | 113 | 393337 | 53.76 | ug/Kg | 107.52% |
| 58) surr3,Toluene-d8 | 11.03 | 98 | 1388665 | 50.66 | ug/Kg | 101.31% |
| 59) surr2,bfb | 15.83 | 95 | 547906 | 50.04 | ug/Kg | 100.08% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.64 | 85 | 538561 | 51.48 | ug/Kg | 97 |
| 3) Chloromethane | 1.85 | 50 | 898345 | 52.02 | ug/Kg | 99 |
| 4) Vinyl Chloride | 1.98 | 62 | 579570 | 52.80 | ug/Kg | 98 |
| 5) Bromomethane | 2.38 | 94 | 236143 | 40.60 | ug/Kg | 96 |
| 6) Chloroethane | 2.51 | 64 | 338996 | 48.38 | ug/Kgm | 1 |
| 7) Trichlorofluoromethane | 2.86 | 101 | 666047 | 56.35 | ug/Kg | 99 |
| 8) Diethyl Ether | 3.30 | 59 | 327031 | 58.25 | ug/Kg | 96 |
| 9) Acrolein | 3.45 | 56 | 212727 | 310.13 | ug/Kg | 95 |
| 10) FREON 113 | 3.64 | 85 | 122223 | 57.81 | ug/Kg | 92 |
| 11) 1,1-Diclethene | 3.61 | 96 | 384307 | 59.77 | ug/Kg | 95 |
| 12) Acetone | 3.70 | 43 | 136891 | 69.00 | ug/Kg | 98 |
| 13) Iodomethane | 3.82 | 127 | 111499 | 38.91 | ug/Kg | 88 |
| 14) Carbon Disulfide | 3.91 | 76 | 1547576 | 60.06 | ug/Kg | 100 |
| 15) Acetonitrile | 4.11 | 41 | 218502 | 1154.02 | ug/Kg | 99 |
| 16) Allyl Chloride | 4.17 | 76 | 223885 | 56.37 | ug/Kg | 97 |
| 17) Methylene Chloride | 4.37 | 84 | 485421 | 56.23 | ug/Kg | 97 |
| 18) TBA | 4.62 | 59 | 963269 | 1315.41 | ug/Kg | 100 |
| 19) Acrylonitrile | 4.74 | 53 | 768609 | 316.51 | ug/Kg | 98 |
| 20) Methyl-t-Butyl Ether | 4.84 | 73 | 1068796 | 59.14 | ug/Kg | 99 |
| 21) trans-1,2-Dichloroethene | 4.81 | 96 | 410466 | 60.76 | ug/Kg | 96 |
| 22) 1,1-Diclethane | 5.48 | 63 | 774532 | 59.43 | ug/Kg | 97 |
| 23) Vinyl Acetate | 5.60 | 43 | 893004 | 58.11 | ug/Kg | 97 |
| 24) 2-Chloro-1,3-butadiene | 5.63 | 53 | 706982 | 51.67 | ug/Kg | 95 |
| 25) 2,2-Dichloropropane | 6.42 | 77 | 565648 | 56.56 | ug/Kg | 97 |
| 26) 2-Butanone | 6.47 | 43 | 259093 | 63.63 | ug/Kg | 98 |
| 28) cis-1,2-Dichloroethene | 6.43 | 96 | 509178 | 61.02 | ug/Kg | 97 |
| 29) Propionitrile | 6.53 | 54 | 323682 | 297.50 | ug/Kg | 99 |
| 30) Methacrylonitrile | 6.79 | 67 | 155942 | 62.06 | ug/Kg | 96 |
| 31) Bromochloromethane | 6.80 | 128 | 254554 | 60.81 | ug/Kg | 98 |
| 2) Chloroform | 6.96 | 83 | 701414 | 57.36 | ug/Kg | 97 |
| 33) Tetrahydrofuran | 6.90 | 42 | 159787 | 62.63 | ug/Kg | 100 |
| 34) 1,1,1-Trichloroethane | 7.24 | 97 | 582996 | 54.06 | ug/Kg | 98 |
| 37) Carbontetrachloride | 7.52 | 117 | 498043 | 57.01 | ug/Kg | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D Vial: 11
Acq On : 5 Feb 102 9:40 am Operator: DROOT
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 5 10:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.52 | 75 | 695986 | 53.39 | ug/Kg | 97 |
| 39) | Iso-Butyl Alcohol | 8.37 | 43 | 739553 | 1072.57 | ug/Kg | 99 |
| 40) | Benzene | 7.84 | 78 | 2160545 | 55.76 | ug/Kg | 99 |
| 41) | 1,2-Dichloroethane | 7.87 | 62 | 498928 | 58.19 | ug/Kg | 99 |
| 42) | N-Heptane | 8.37 | 43 | 739539 | 53.71 | ug/Kg | 98 |
| 43) | Trichloroethene | 8.95 | 95 | 558370 | 55.82 | ug/Kg | 95 |
| 44) | 1,2-Diclpropane | 9.30 | 63 | 585864 | 53.59 | ug/Kg | 98 |
| 45) | Methyl Methacrylate | 9.56 | 69 | 333758 | 55.97 | ug/Kg | 100 |
| 46) | 1,4-Dioxane | 9.56 | 88 | 108626 | 1160.05 | ug/Kg | 95 |
| 47) | Dibromomethane | 9.49 | 93 | 306670 | 61.65 | ug/Kg | 97 |
| 48) | Bromodichloromethane | 9.78 | 83 | 608095 | 57.13 | ug/Kg | 98 |
| 49) | 2-Nitropropane | 10.16 | 43 | 257607 | 102.53 | ug/Kg | 97 |
| 50) | 2-Chloroethylvinyl Ether | 10.34 | 63 | 310738 | 84.25 | ug/Kg | 100 |
| 51) | cis-1,3-Dichloropropene | 10.56 | 75 | 861147 | 55.01 | ug/Kg | 97 |
| 53) | 4-Methyl-2-Pentanone | 10.85 | 43 | 602100 | 53.96 | ug/Kg | 99 |
| 54) | Toluene | 11.14 | 91 | 2078856 | 57.76 | ug/Kg | 99 |
| 55) | trans-1,3-Dichloropropene | 11.55 | 75 | 778470 | 55.66 | ug/Kg | 99 |
| 56) | Ethyl Methacrylate | 11.75 | 69 | 535997 | 50.53 | ug/Kg | 100 |
| 57) | 1,1,2-Trichloroethane | 11.86 | 83 | 415860 | 56.04 | ug/Kg | 99 |
| 60) | Tetrachloroethene | 12.13 | 166 | 534050 | 61.89 | ug/Kg | 95 |
| 61) | 2-Hexanone | 12.33 | 43 | 366512 | 45.84 | ug/Kg | 99 |
| 62) | 1,3-Dichloropropane | 12.15 | 76 | 915358 | 56.28 | ug/Kg | 94 |
| 63) | Dibromochloromethane | 12.55 | 129 | 551173 | 59.67 | ug/Kg | 100 |
| 64) | 1,2-Dibromoethane | 12.74 | 107 | 549698 | 58.91 | ug/Kg | 99 |
| 65) | Chlorobenzene | 13.66 | 112 | 1377657 | 57.84 | ug/Kg | 95 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.82 | 131 | 500447 | 58.12 | ug/Kg | 97 |
| 67) | Ethylbenzene | 13.89 | 91 | 2221729 | 57.69 | ug/Kg | 98 |
| 68) | (m+p)Xylene | 14.12 | 106 | 1658921 | 117.34 | ug/Kg | 98 |
| 69) | o-Xylene | 14.84 | 106 | 799130 | 56.77 | ug/Kg | 99 |
| 70) | Styrene | 14.87 | 104 | 1386121 | 57.25 | ug/Kg | 98 |
| 71) | Bromoform | 15.19 | 173 | 350667 | 61.29 | ug/Kg | 98 |
| 72) | Isopropylbenzene | 15.55 | 105 | 2096944 | 57.38 | ug/Kg | 99 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.11 | 83 | 642062 | 60.74 | ug/Kg | 98 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.22 | 53 | 165907 | 56.89 | ug/Kg | 98 |
| 77) | 1,2,3-Trichloropropane | 16.18 | 110 | 184107 | 62.05 | ug/Kg | 95 |
| 78) | n-Propylbenzene | 16.34 | 91 | 2425313 | 59.69 | ug/Kg | 98 |
| 79) | Bromobenzene | 16.09 | 156 | 513164 | 60.70 | ug/Kg | 95 |
| 80) | 1,3,5-Trimethylbenzene | 16.69 | 105 | 1488679 | 59.37 | ug/Kg# | 49 |
| 81) | 2-Chlorotoluene | 16.49 | 91 | 1427265 | 58.86 | ug/Kg | 98 |
| 82) | 4-Chlorotoluene | 16.69 | 91 | 1562987 | 58.32 | ug/Kg | 99 |
| 83) | tert-Butylbenzene | 17.31 | 119 | 1348190 | 59.09 | ug/Kg | 100 |
| 84) | 1,2,4-Trimethylbenzene | 17.40 | 105 | 1461881 | 58.80 | ug/Kg | 97 |
| 85) | sec-Butylbenzene | 17.74 | 105 | 2132139 | 58.69 | ug/Kg | 99 |
| 86) | p-Isopropyltoluene | 18.03 | 119 | 1626035 | 58.02 | ug/Kg# | 60 |



(#) = qualifier out of range (m) = manual integration
B9620.D SOL0201.M Tue Feb 05 10:09:40 2002 Page 2

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 10:09 19102

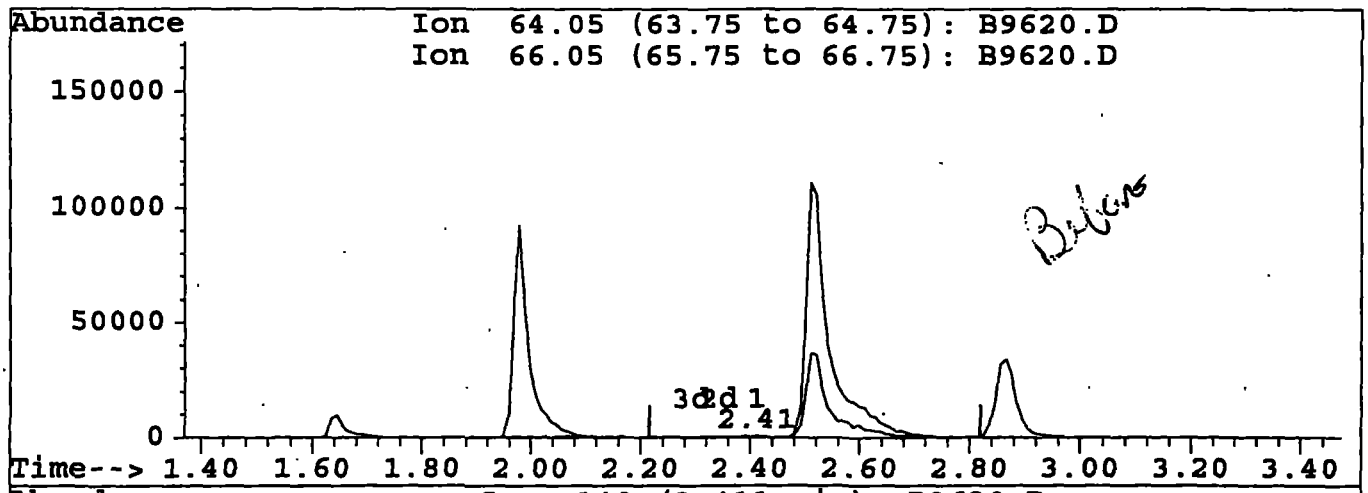
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

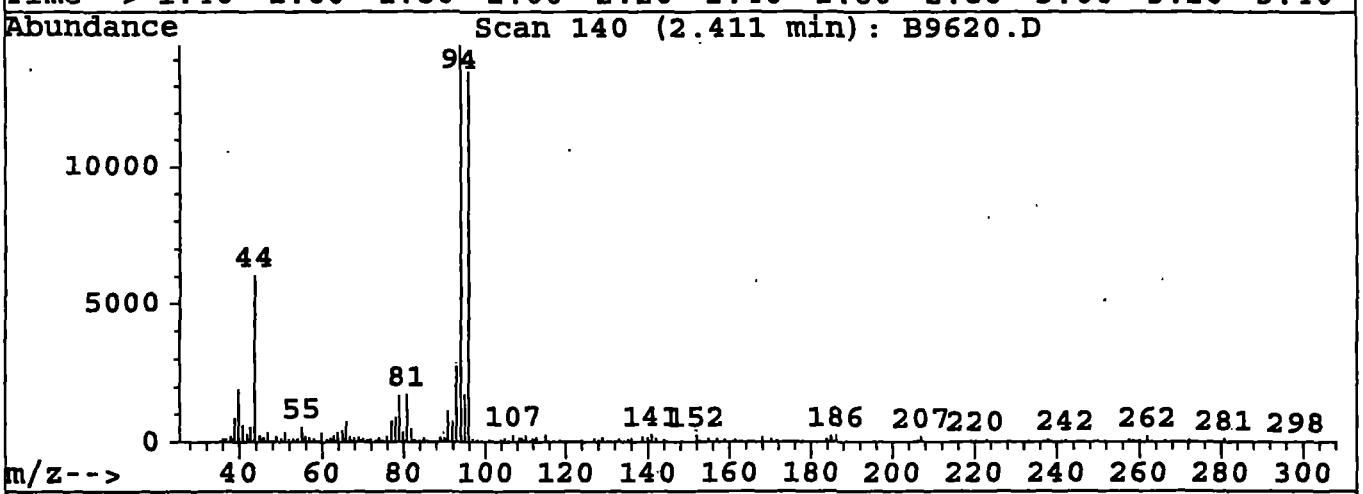
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 87) | 1,3-Dclbenz | 17.92 | 146 | 785959 | 59.91 | ug/Kg | 98 |
| 88) | 1,4-Dclbenz | 18.10 | 146 | 830667 | 58.72 | ug/Kg | 98 |
| 89) | n-Butylbenzene | 18.83 | 91 | 1551004 | 58.40 | ug/Kg | 100 |
| 90) | 1,2-Dclbenz | 18.81 | 146 | 764394 | 58.55 | ug/Kg | 99 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.35 | 157 | 101955 | 64.07 | ug/Kg | 96 |
| 92) | Nitrobenzene | 20.74 | 77 | 34468 | 51.16 | ug/Kg | 95 |
| 93) | 1,2,4-Tcbenzene | 22.00 | 180 | 461549 | 59.35 | ug/Kg | 93 |
| 94) | Hexachlorobt | 22.37 | 225 | 260734 | 57.46 | ug/Kg | 97 |
| 95) | Naphthalen | 22.47 | 128 | 887576 | 56.75 | ug/Kg | 98 |
| 96) | 1,2,3-Tclbenzene | 22.96 | 180 | 404406 | 58.77 | ug/Kg | 96 |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 10:08 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration




TIC: B9620.D

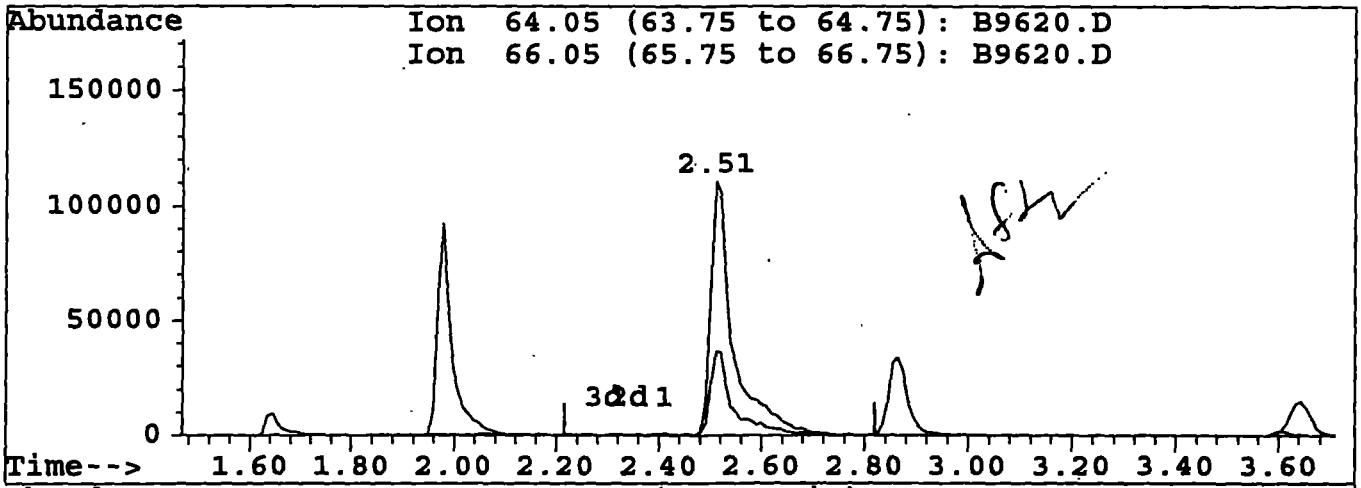
(6) Chloroethane
2.41min 0.10ug/Kg
response 672

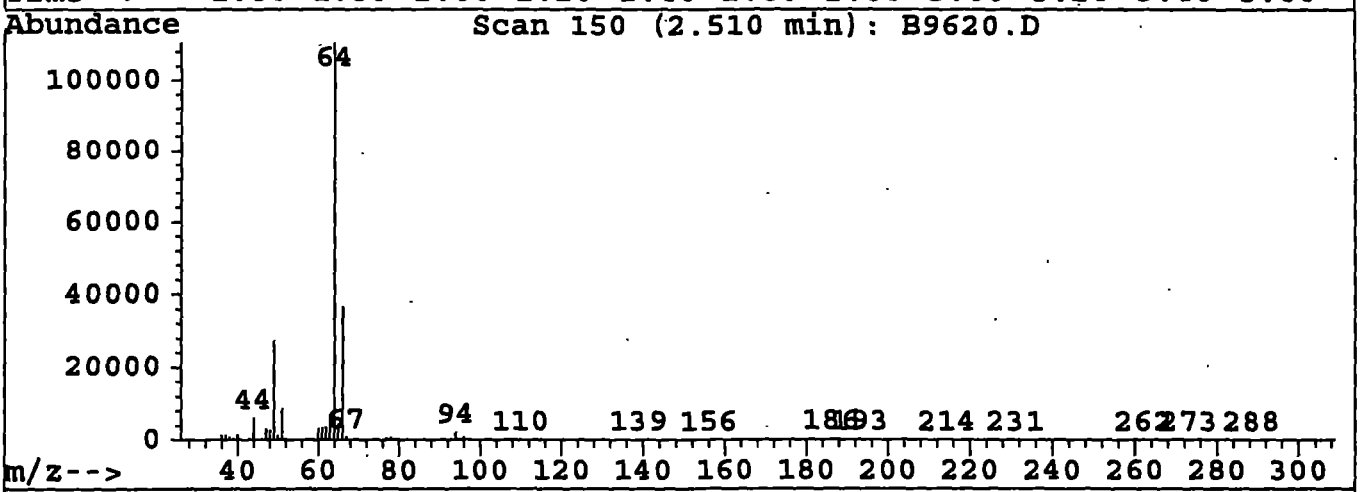
| Ion | Exp% | Act% |
|---|---|---|
| 64.05 | 100 | 100 |
| 66.05 | 31.90 | 200.56# |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9620.D  Vial: 11
Acq On : 5 Feb 102 9:40 am  Operator: DROOT
Sample : CCV  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 10:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration



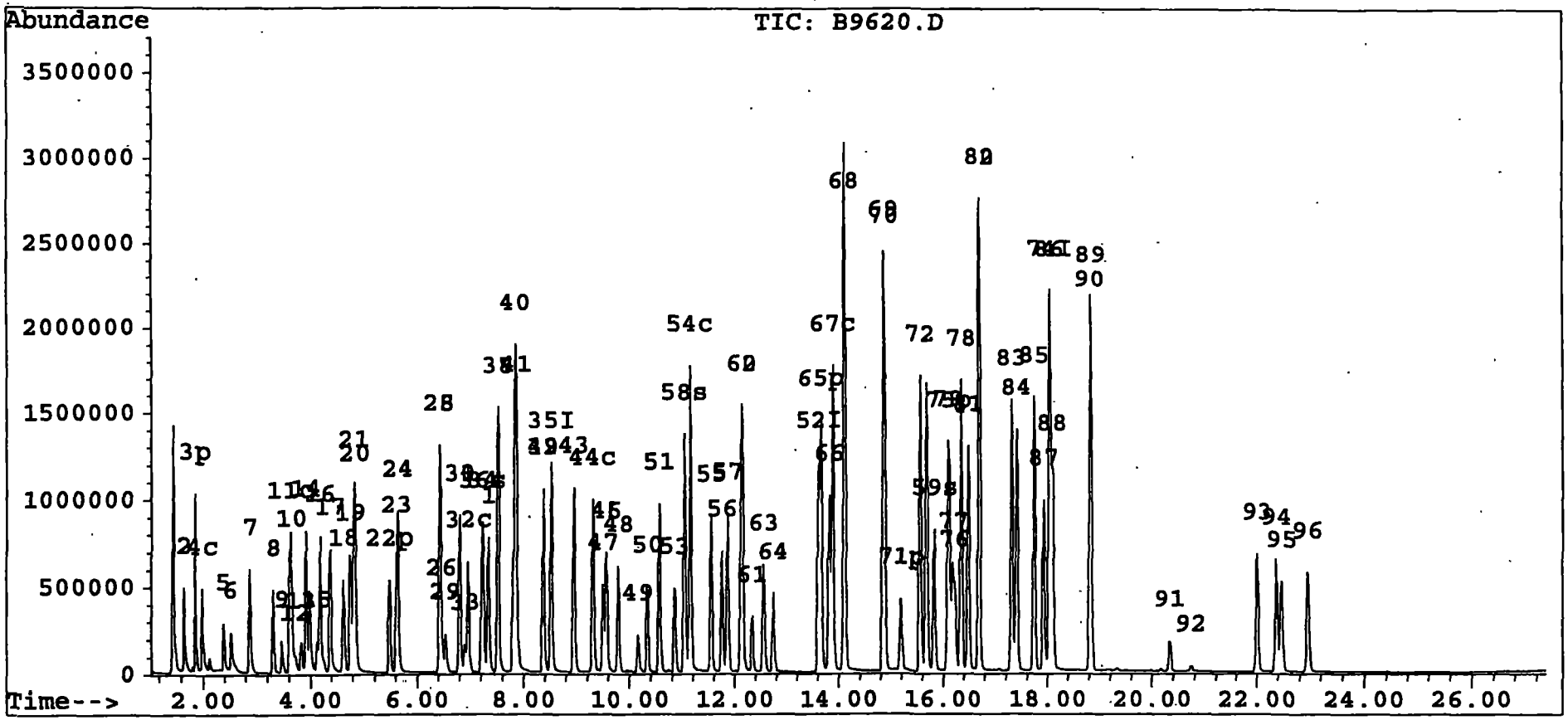

TIC: B9620.D

(6) Chloroethane
2.51min 48.38ug/Kg m
response 338996

| Ion | Exp% | Act% |
|---|---|---|
| 64.05 | 100 | 100 |
| 66.05 | 31.90 | 33.16 |
| 0.00 | 0.00 | 0.00 |
| 0.00 | 0.00 | 0.00 |

Data F. . : J:\ACQUDATA\MSVOA3\DATA\020502\B9620. Vial: 11
Acq On : 5 Feb 102 9:40 am Operator: DROOT
Sample : CCV Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 5 10:09 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration



# VOLATILE ORGANICS

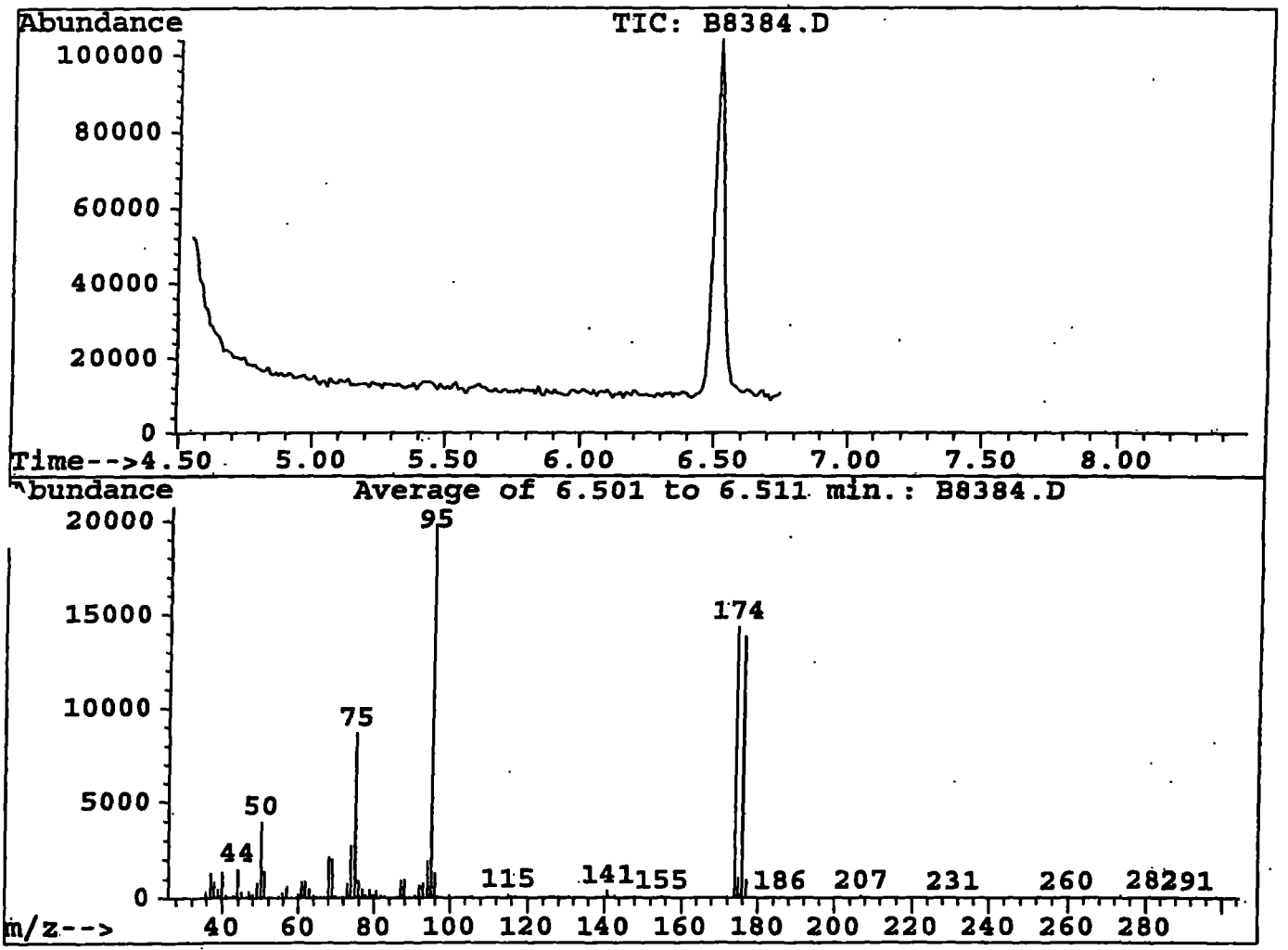
# RAW QC DATA

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

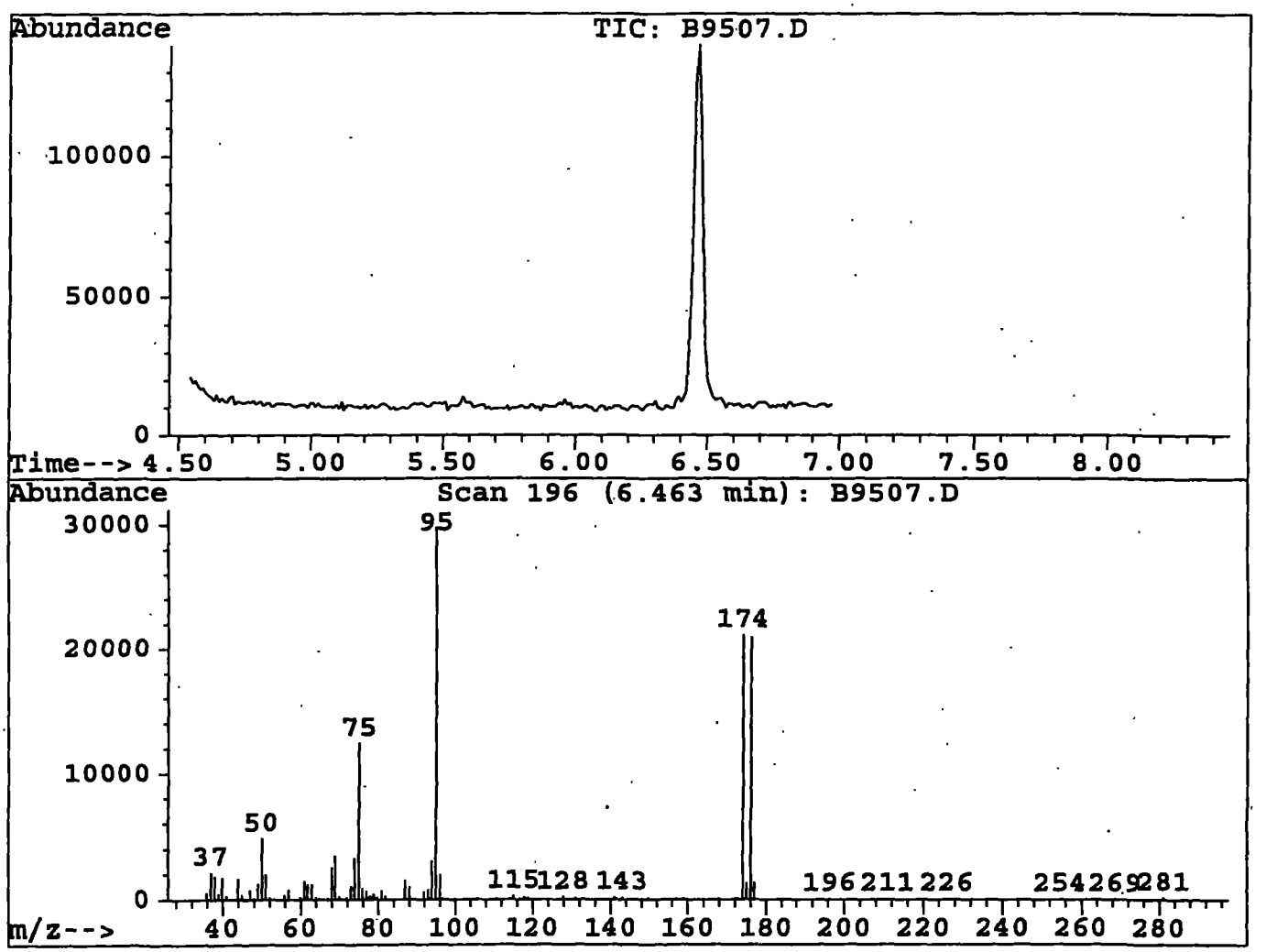
12/17

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9507.D
Acq On : 31 Jan 102 8:03 am
Sample : TUNE
Misc :

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

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




Peak Apex is scan: 196

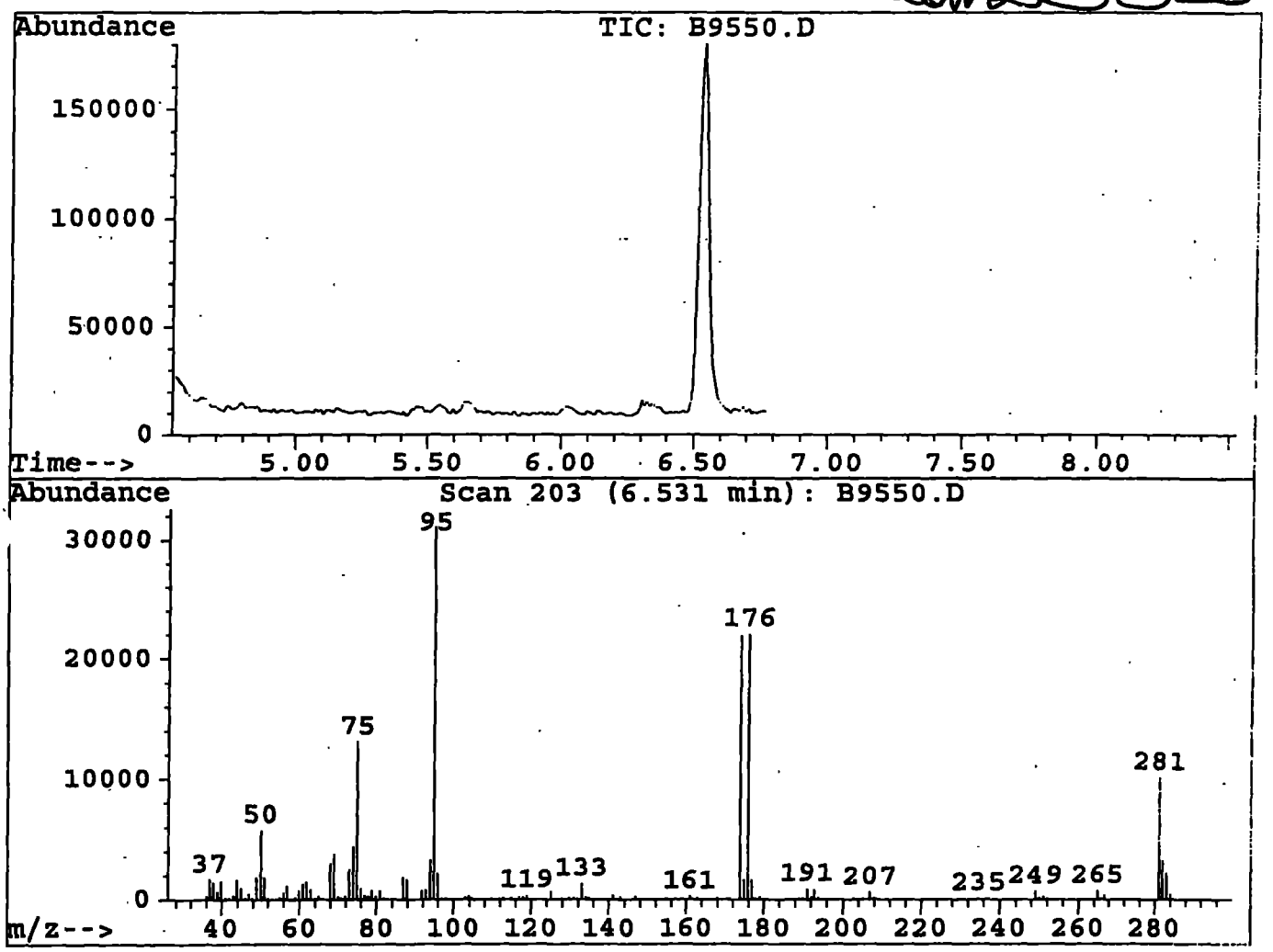
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 16.2 | 4835 | PASS |
| 75 | 95 | 30 | 60 | 41.7 | 12422 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 29768 | PASS |
| 96 | 95 | 5 | 9 | 6.6 | 1968 | PASS |
| 173 | 174 | 0 | 2 | 0.7 | 146 | PASS |
| 174 | 95 | 50 | 120 | 70.9 | 21120 | PASS |
| 175 | 174 | 5 | 9 | 6.2 | 1312 | PASS |
| 176 | 174 | 95 | 101 | 99.1 | 20920 | PASS |
| 177 | 176 | 5 | 9 | 6.5 | 1365 | PASS |

# BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\020102\B9550.D
Acq On : 1 Feb 102 10:22 am
Sample : TUNE CHECK
Misc : SOIL SIDE

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

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




Peak Apex is scan: 203

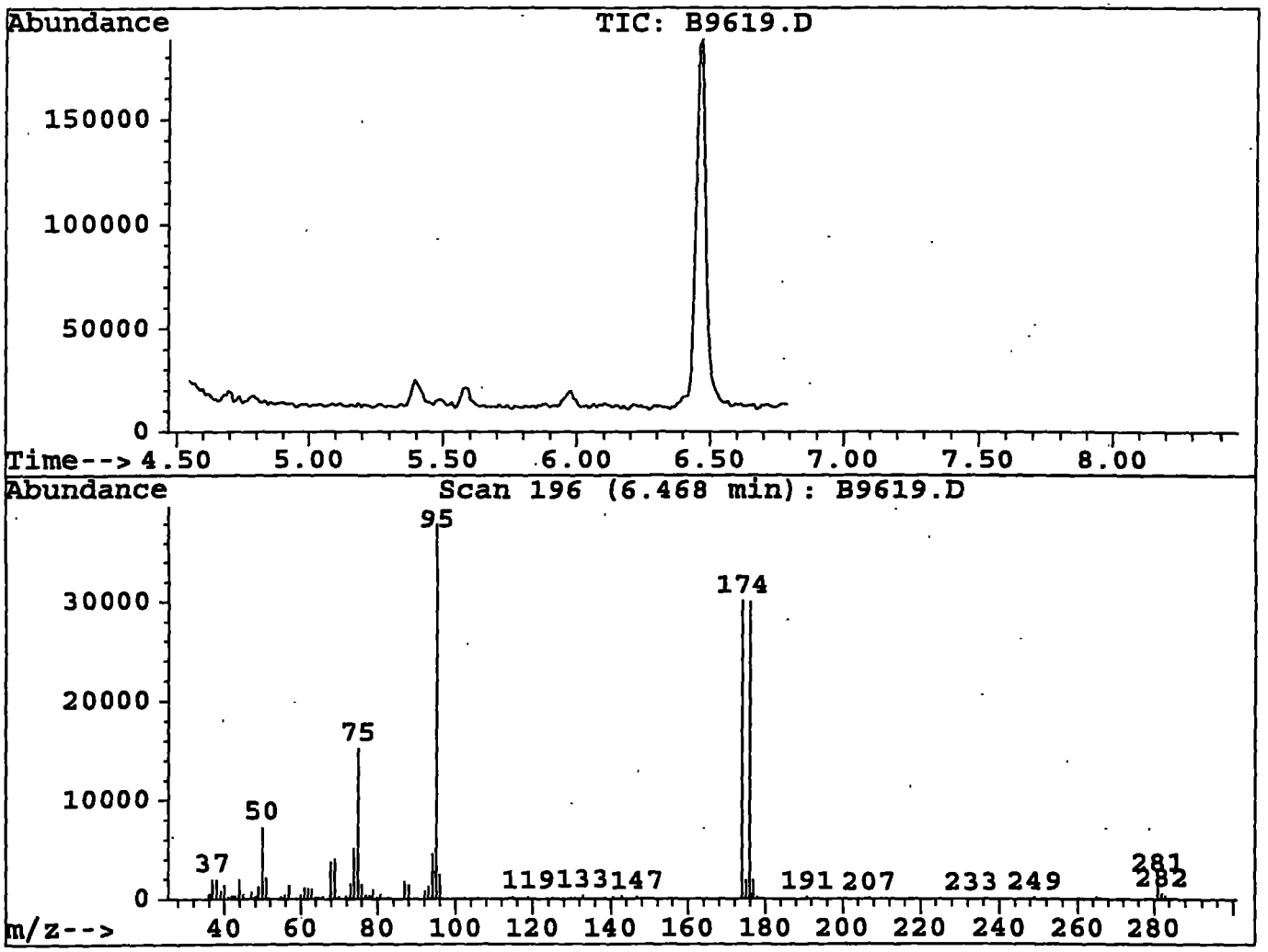
| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 18.5 | 5749 | PASS |
| 75 | 95 | 30 | 60 | 42.1 | 13106 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 31096 | PASS |
| 96 | 95 | 5 | 9 | 7.1 | 2196 | PASS |
| 173 | 174 | 0 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 70.6 | 21952 | PASS |
| 175 | 174 | 5 | 9 | 7.6 | 1664 | PASS |
| 176 | 174 | 95 | 101 | 100.5 | 22072 | PASS |
| 177 | 176 | 5 | 9 | 7.2 | 1597 | PASS |

BFB

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9619.D
Acq On : 5 Feb 102 9:04 am
Sample : TUNE
Misc :

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

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




Peak Apex is scan: 196

| Target Mass | Rel. to Mass | Lower Limit% | Upper Limit% | Rel. Abn% | Raw Abn | Result Pass/Fail |
|---|---|---|---|---|---|---|
| 50 | 95 | 15 | 40 | 19.1 | 7242 | PASS |
| 75 | 95 | 30 | 60 | 40.1 | 15220 | PASS |
| 95 | 95 | 100 | 100 | 100.0 | 37936 | PASS |
| 96 | 95 | 5 | 9 | 6.5 | 2457 | PASS |
| 173 | 174 | 0 | 2 | 0.0 | 0 | PASS |
| 174 | 95 | 50 | 120 | 79.3 | 30096 | PASS |
| 175 | 174 | 5 | 9 | 6.3 | 1909 | PASS |
| 176 | 174 | 95 | 101 | 99.6 | 29976 | PASS |
| 177 | 176 | 5 | 9 | 6.6 | 1986 | PASS |



B9619.D EXP1217.M Tue Feb 05 09:11:40 2002

**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

**Project Reference:**
**Client Sample ID :** METHOD BLANK

**Date Sampled :** **Order #:** 528706 **Sample Matrix:** WATER
**Date Received:** **Submission #:** **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| 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 |
| ı,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 %) | 96 | % |
| ŁOLUENE-D8 | (87 - 108 %) | 104 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 104 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9510.D  Vial: 5
Acq On : 31 Jan 102 9:49 am  Operator: droot
Sample : MET BLK 528706  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Jan 31 10:17 19102

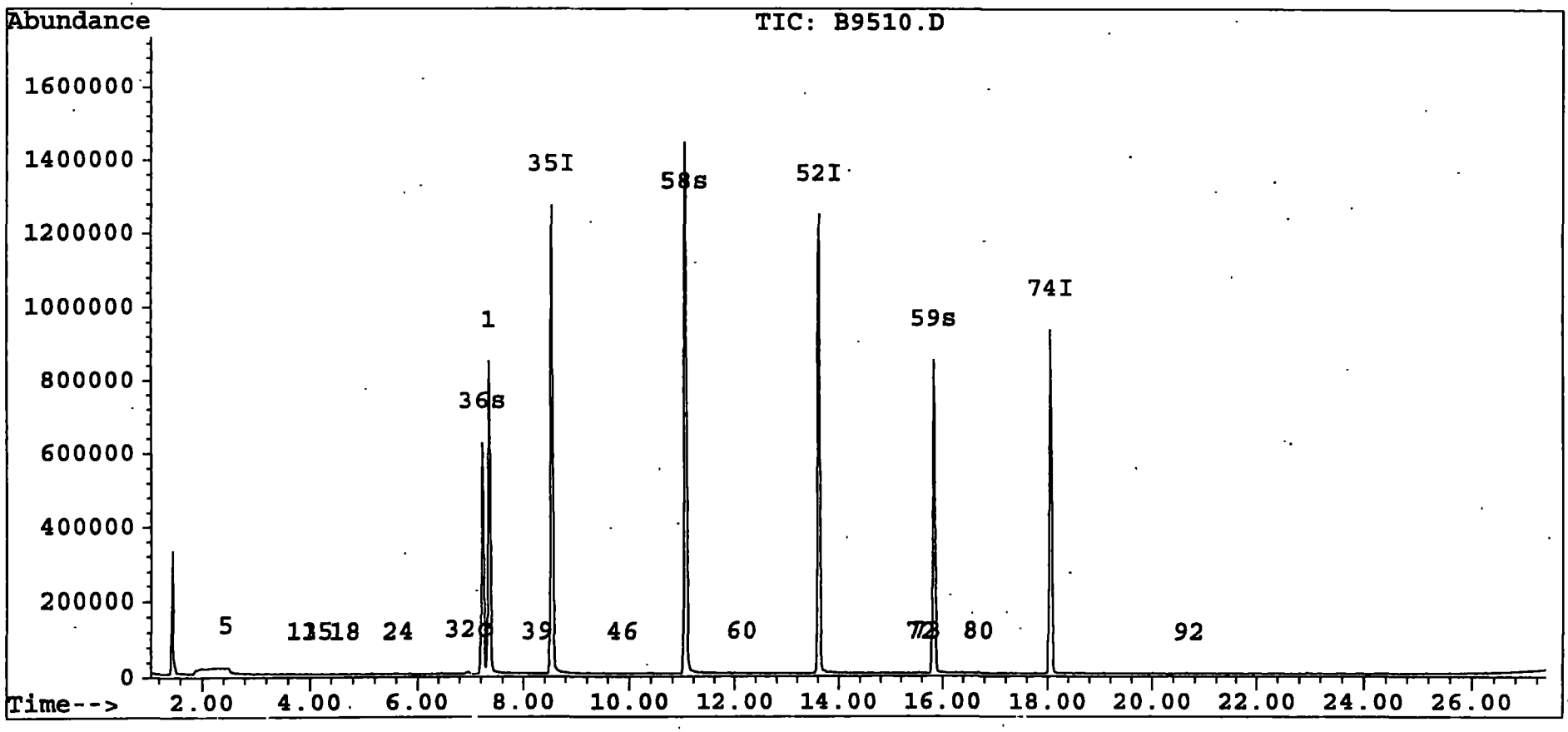
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.35 | 168 | 819875 | 50.00 | ppb | -0.05 |
| 35) 1,4 - Difluorobenzene | 8.53 | 114 | 1517133 | 50.00 | ppb | -0.05 |
| 52) d5 - Chlorobenzene | 13.61 | 117 | 1214806 | 50.00 | ppb | -0.06 |
| 74) d4 - Dichlorobenzene | 18.05 | 152 | 446925 | 50.00 | ppb | -0.06 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.23 | 113 | 553009 | 51.88 | ppb | 103.76% |
| 58) surr3,Toluene-d8 | 11.03 | 98 | 1482203 | 51.80 | ppb | 103.60% |
| 59) surr2,bfb | 15.83 | 95 | 557345 | 47.85 | ppb | 95.70% |
| **Target Compounds** | | | | | | Qvalue |
| 5) Bromomethane | 2.43 | 94 | 8509 | 1.54 | ppb | # 9 |
| 13) Iodomethane | 3.86 | 127 | 180 | 4.37 | ppb | 1 |
| 15) Acetonitrile | 4.13 | 41 | 191 | 0.48 | ppb | # 1 |
| 18) TBA | 4.65 | 59 | 470 | 0.49 | ppb | # 1 |
| 24) 2-Chloro-1,3-butadiene | 5.64 | 53 | 473 | 1.22 | PPB | 90 |
| 32) Chloroform | 6.98 | 83 | 5274 | 0.41 | ppb | 89 < |
| 39) Iso-Butyl Alcohol | 8.25 | 43 | 386 | 1.10 | ppb | 94 |
| 46) 1,4-Dioxane | 9.87 | 88 | 68 | 0.71 | ppb | 91 |
| 60) Tetrachloroethene | 12.14 | 166 | 260 | 4.29 | ppb | # 41 |
| 72) Isopropylbenzene | 15.57 | 105 | 869 | 3.31 | ppb | 93 |
| 73) Cyclohexanone | 15.67 | 55 | 882 | 1.05 | ppb | # 37 |
| 80) 1,3,5-Trimethylbenzene | 16.69 | 105 | 680 | 3.76 | ppb | 96 |
| 92) Nitrobenzene | 20.69 | 77 | 214 | 8.91 | ppb | # 53 |

(#) = qualifier out of range (m) = manual integration
B9510.D EXP1217.M Thu Jan 31 10:17:05 2002

Data 1 : J:\ACQUDATA\MSVOA3\DATA\013102\B9510 Vial: 5
Acq On : 31 Jan 102 9:49 am Operator: droot
Sample : MET BLK Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 31 10:17 19102

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

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COLUMBIA ANALYTICAL SERVICES

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

**Project Reference:**
**Client Sample ID :** METHOD BLANK

**Date Sampled :** **Order #:** 530675 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** **Submission #:** **Percent Solid:** 100

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 1.00 | | | Dry Weight |
| ACETONE | 20 | 9.2 J | UG/KG |
| BENZENE | 5.0 | 5.0 U | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 5.0 U | UG/KG |
| BROMOFORM | 5.0 | 5.0 U | UG/KG |
| BROMOMETHANE | 5.0 | 5.0 U | UG/KG |
| 2-BUTANONE (MEK) | 10 | 10 U | UG/KG |
| CARBON DISULFIDE | 10 | 10 U | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 5.0 U | UG/KG |
| CHLOROBENZENE | 5.0 | 5.0 U | UG/KG |
| CHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| CHLOROFORM | 5.0 | 5.0 U | UG/KG |
| CHLOROMETHANE | 5.0 | 5.0 U | UG/KG |
| BROMOCHLOROMETHANE | 5.0 | 5.0 U | UG/KG |
| ,1-DICHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 5.0 U | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 5.0 U | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 5.0 U | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 5.0 U | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 5.0 U | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 5.0 U | UG/KG |
| ETHYLBENZENE | 5.0 | 5.0 U | UG/KG |
| 2-HEXANONE | 10 | 1.6 J | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 5.0 U | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 10 U | UG/KG |
| STYRENE | 5.0 | 5.0 U | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| TETRACHLOROETHENE | 5.0 | 5.0 U | UG/KG |
| TOLUENE | 5.0 | 5.0 U | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 5.0 U | UG/KG |
| TRICHLOROETHENE | 5.0 | 5.0 U | UG/KG |
| VINYL CHLORIDE | 5.0 | 5.0 U | UG/KG |
| O-XYLENE | 5.0 | 5.0 U | UG/KG |
| M+P-XYLENE | 5.0 | 5.0 U | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| -BROMOFLUOROBENZENE | (42 - 149 %) | 102 | % |
| TOLUENE-D8 | (71 - 128 %) | 101 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 98 | % |

# Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9624.D
Acq On : 5 Feb 102 12:05 pm
Sample : MET BLK 530678
Misc :
Quant Time: Feb 5 12:32 19102

Vial: 15
Operator: DROOT
Inst : 5971 - In
Multiplr: 1.00

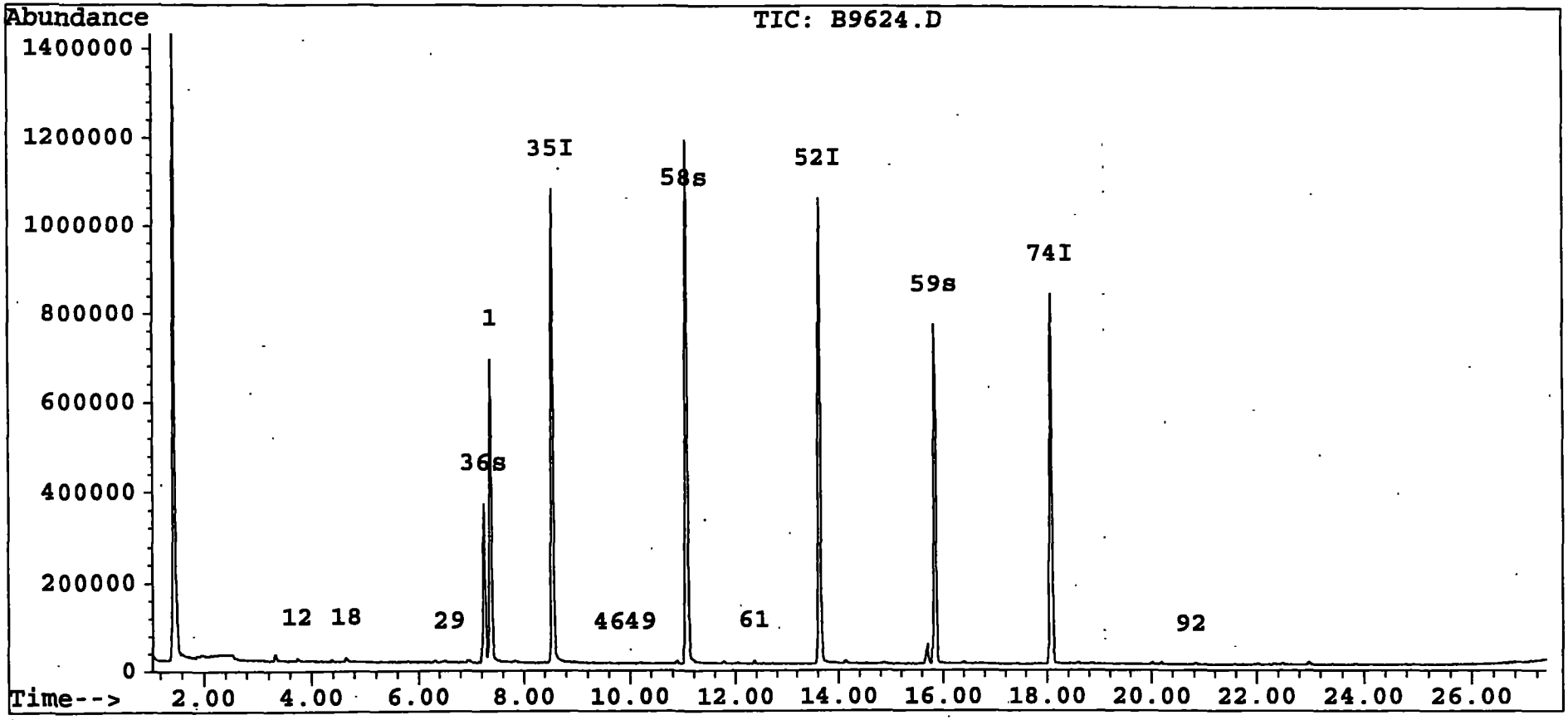
Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 712548 | 50.00 | ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1351999 | 50.00 | ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.63 | 117 | 1069304 | 50.00 | ug/Kg | -0.05 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 431844 | 50.00 | ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 318470 | 49.14 | ug/Kg | 98.28% |
| 58) surr3,Toluene-d8 | 11.05 | 98 | 1239154 | 50.65 | ug/Kg | 101.29% |
| 59) surr2,bfb | 15.84 | 95 | 496598 | 50.82 | ug/Kg | 101.63% |
| **Target Compounds** | | | | | | Qvalue |
| 12) Acetone | 3.74 | 43 | 16414 | 9.22 | ug/Kg | 98 |
| 18) TBA | 4.65 | 59 | 15434 | 23.49 | ug/Kg# | 92 |
| 29) Propionitrile | 6.58 | 54 | 2938 | 3.01 | ug/Kg# | 59 |
| 46) 1,4-Dioxane | 9.62 | 88 | 642 | 7.74 | ug/Kg | 89 |
| 49) 2-Nitropropane | 10.18 | 43 | 3432 | 1.54 | ug/Kg# | 63 |
| 61) 2-Hexanone | 12.36 | 43 | 11611 | 1.63 | ug/Kg# | 80 |
| 92) Nitrobenzene | 20.74 | 77 | 1096 | 1.75 | ug/Kg# | 44 |

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

Data F. e : J:\ACQUDATA\MSVOA3\DATA\020502\B9624 Vial: 15
Acq On : 5 Feb 102 12:05 pm Operator: DROOT
Sample : MET BLK Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Feb 5 12:32 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

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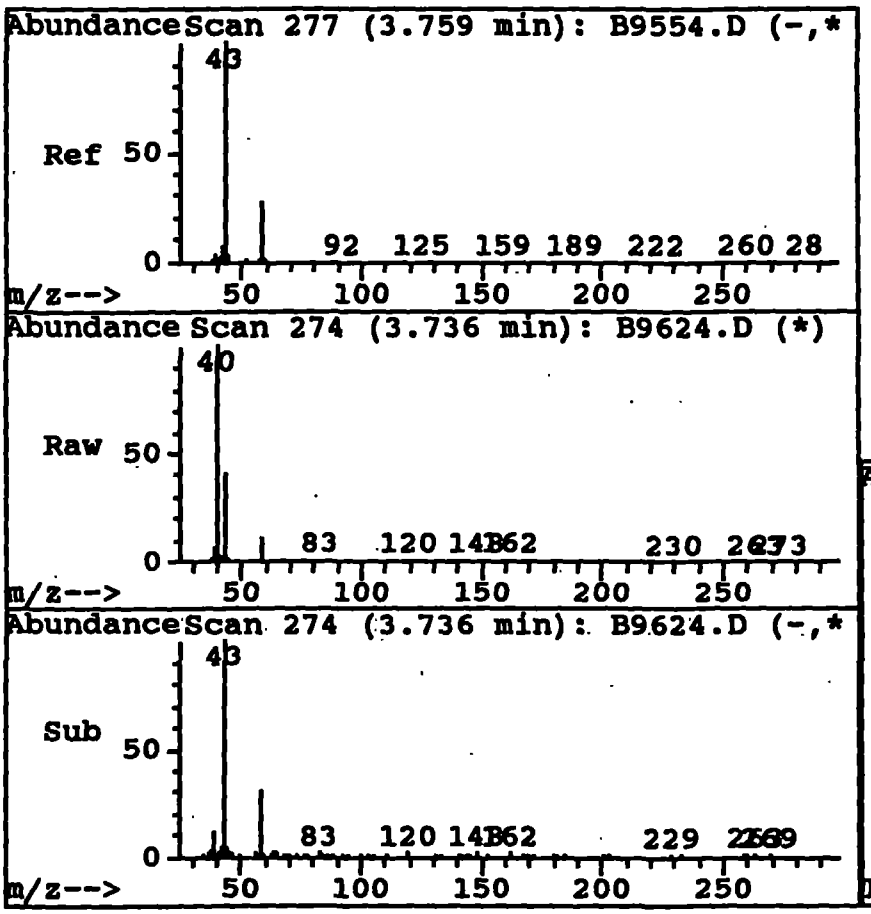
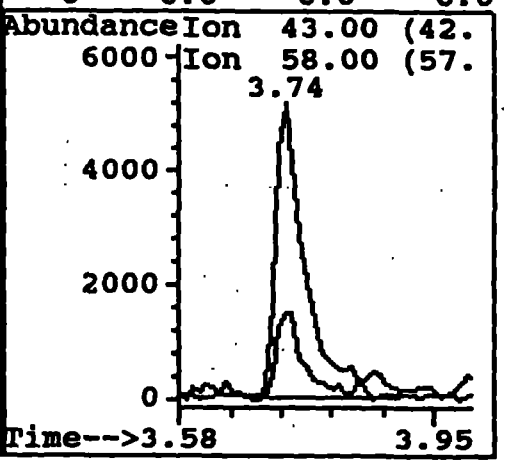
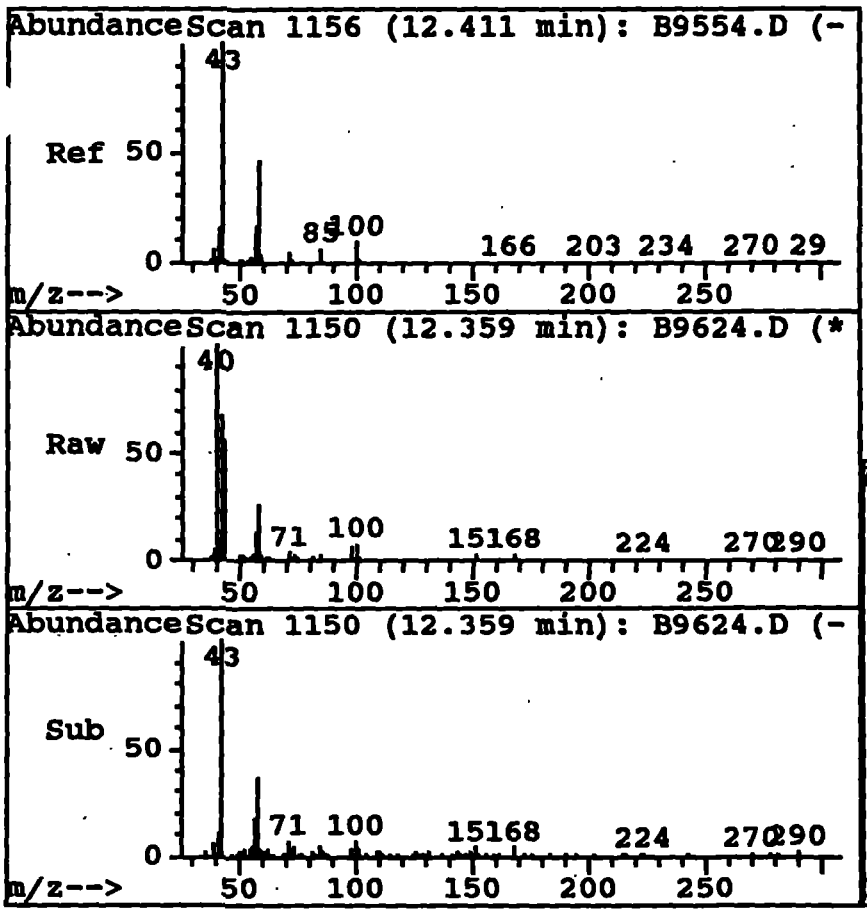



#12
Acetone
Concen: 9.22 ug/Kg
RT: 3.74 min Scan# 274
Delta R.T. -0.01 min
Lab File: B9624.D
Acq: 5 Feb 102 12:05 pm

Tgt Ion:43 Resp: 16414

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 29.2 | 22.8 | 34.1 |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |

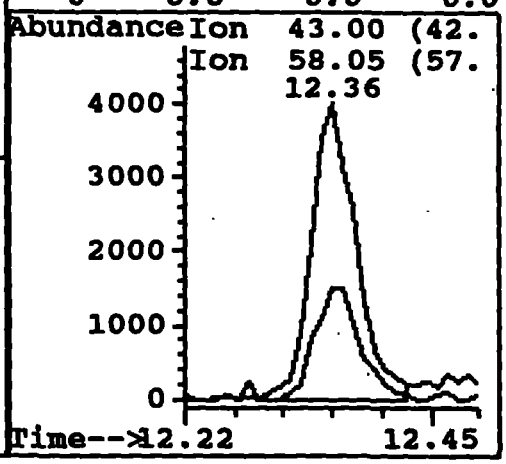





#61
2-Hexanone
Concen: 1.63 ug/Kg
RT: 12.36 min Scan# 1150
Delta R.T. -0.04 min
Lab File: B9624.D
Acq: 5 Feb 102 12:05 pm

Tgt Ion:43 Resp: 11611

| Ion | Ratio | Lower | Upper |
|---|---|---|---|
| 43 | 100 | | |
| 58 | 37.8 | 41.5 | 62.2# |
| 0 | 0.0 | 0.0 | 0.0 |
| 0 | 0.0 | 0.0 | 0.0 |



COLUMBIA ANALYTICAL SERVICES

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

**Project Reference:**
**Client Sample ID :** LABORATORY CONTROL SAMPLE

**Date Sampled :** **Order #:** 528708 **Sample Matrix:** WATER
**Date Received:** **Submission #:** **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| ANALYTICAL DILUTION: 1.00 | | | |
| ACETONE | 10 | 15 | UG/L |
| BENZENE | 1.0 | 21 | UG/L |
| BROMODICHLOROMETHANE | 1.0 | 22 | UG/L |
| BROMOFORM | 1.0 | 20 | UG/L |
| BROMOMETHANE | 1.0 | 20 | UG/L |
| 2-BUTANONE (MEK) | 5.0 | 15 | UG/L |
| CARBON DISULFIDE | 5.0 | 13 | UG/L |
| CARBON TETRACHLORIDE | 1.0 | 18 | UG/L |
| CHLOROBENZENE | 1.0 | 21 | UG/L |
| CHLOROETHANE | 1.0 | 23 | UG/L |
| CHLOROFORM | 1.0 | 22 | UG/L |
| LOROMETHANE | 1.0 | 24 | UG/L |
| DIBROMOCHLOROMETHANE | 1.0 | 21 | UG/L |
| 1,1-DICHLOROETHANE | 1.0 | 22 | UG/L |
| 1,2-DICHLOROETHANE | 1.0 | 22 | UG/L |
| 1,1-DICHLOROETHENE | 1.0 | 19 | UG/L |
| CIS-1,2-DICHLOROETHENE | 1.0 | 21 | UG/L |
| TRANS-1,2-DICHLOROETHENE | 1.0 | 20 | UG/L |
| 1,2-DICHLOROPROPANE | 1.0 | 20 | UG/L |
| CIS-1,3-DICHLOROPROPENE | 1.0 | 22 | UG/L |
| TRANS-1,3-DICHLOROPROPENE | 1.0 | 23 | UG/L |
| ETHYLBENZENE | 1.0 | 20 | UG/L |
| 2-HEXANONE | 5.0 | 14 | UG/L |
| METHYLENE CHLORIDE | 1.0 | 22 | UG/L |
| 4-METHYL-2-PENTANONE (MIBK) | 5.0 | 15 | UG/L |
| STYRENE | 1.0 | 22 | UG/L |
| 1,1,2,2-TETRACHLOROETHANE | 1.0 | 21 | UG/L |
| TETRACHLOROETHENE | 1.0 | 21 | UG/L |
| TOLUENE | 1.0 | 21 | UG/L |
| 1,1,1-TRICHLOROETHANE | 1.0 | 20 | UG/L |
| 1,1,2-TRICHLOROETHANE | 1.0 | 22 | UG/L |
| TRICHLOROETHENE | 1.0 | 20 | UG/L |
| VINYL CHLORIDE | 1.0 | 22 | 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 %) | 97 | % |
| TOLUENE-D8 | (87 - 108 %) | 104 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 101 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9512.D  Vial: 7
Acq On : 31 Jan 102 11:00 am  Operator: droot
Sample : LCS  Inst : 5971 - In
Misc : 528708  Multiplr: 1.00
Quant Time: Jan 31 11:28 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 | 821241 | 50.00 | ppb | -0.05 |
| 35) 1,4 - Difluorobenzene | 8.53 | 114 | 1540378 | 50.00 | ppb | -0.05 |
| 52) d5 - Chlorobenzene | 13.61 | 117 | 1206245 | 50.00 | ppb | -0.06 |
| 74) d4 - Dichlorobenzene | 18.06 | 152 | 442593 | 50.00 | ppb | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.23 | 113 | 550155 | 50.53 | ppb | 101.06% |
| 58) surr3,Toluene-d8 | 11.04 | 98 | 1480855 | 52.22 | ppb | 104.44% |
| 59) surr2,bfb | 15.83 | 95 | 559111 | 48.53 | ppb | 97.07% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.64 | 85 | 165050 | 23.60 | ppb | 99 |
| 3) Chloromethane | 1.85 | 50 | 227930 | 24.59 | ppb | 98 |
| 4) Vinyl Chloride | 1.98 | 62 | 171210 | 21.51 | ppb | 97 |
| 5) Bromomethane | 2.38 | 94 | 113805 | 20.50 | ppb | 95 |
| 6) Chloroethane | 2.52 | 64 | 115241 | 23.13 | ppb | 98 |
| 7) Trichlorofluoromethane | 2.87 | 101 | 194986 | 22.13 | ppb | 99 |
| 8) Diethyl Ether | 3.31 | 59 | 173110 | 21.90 | ppb | 93 |
| 9) Acrolein | 3.47 | 56 | 114288 | 64.54 | ppb | 95 |
| 10) FREON 113 | 3.65 | 85 | 51522 | 22.11 | ppb | 91 |
| 11) 1,1-Diclethene | 3.62 | 96 | 117800 | 19.34 | ppb | 98 |
| 12) Acetone | 3.72 | 43 | 53465 | 15.17 | ppb | 97 |
| 13) Iodomethane | 3.83 | 127 | 62461 | 18.78 | ppb | 96 |
| 14) Carbon Disulfide | 3.93 | 76 | 307785 | 13.10 | ppb | 100 |
| 15) Acetonitrile | 4.12 | 41 | 140195 | 354.24 | ppb | 96 |
| 16) Allyl Chloride | 4.18 | 76 | 83495 | 22.07 | ppb | 90 |
| 17) Methylene Chloride | 4.38 | 84 | 180509 | 21.75 | ppb | 98 |
| 18) TBA | 4.63 | 59 | 297720 | 308.39 | ppb | 97 |
| 19) Acrylonitrile | 4.76 | 53 | 420559 | 97.42 | ppb | 99 |
| 20) Methyl-t-Butyl Ether | 4.85 | 73 | 499007 | 21.21 | ppb | 96 |
| 21) trans-1,2-Dichloroethene | 4.82 | 96 | 155458 | 20.59 | ppb | 95 |
| 22) 1,1-Diclethane | 5.49 | 63 | 293382 | 21.76 | ppb | 100 |
| 23) Vinyl Acetate | 5.62 | 43 | 383342 | 21.16 | ppb | 99 |
| 24) 2-Chloro-1,3-butadiene | 5.65 | 53 | 171216 | 15.01 | PPB | 95 |
| 25) 2,2-Dichloropropane | 6.43 | 77 | 200536 | 21.06 | ppb | 99 |
| 26) 2-Butanone | 6.48 | 43 | 91927 | 14.62 | ppb | 99 |
| 28) cis-1,2-Dichloroethene | 6.44 | 96 | 188606 | 20.94 | ppb | 87 |
| 29) Propionitrile | 6.55 | 54 | 145246 | 89.18 | ppb | 98 |
| 30) Methacrylonitrile | 6.80 | 67 | 80538 | 19.13 | ppb | 94 |
| 31) Bromochloromethane | 6.81 | 128 | 96206 | 21.60 | ppb | 91 |
| 32) Chloroform | 6.97 | 83 | 278726 | 21.56 | ppb | 100 |
| 33) Tetrahydrofuran | 6.91 | 42 | 74466 | 17.36 | ppb | 94 |
| 34) 1,1,1-Trichloroethane | 7.25 | 97 | 193073 | 20.25 | ppb | 96 |
| 37) Carbontetrachloride | 7.53 | 117 | 147285 | 18.23 | ppb | 99 |

(#) = qualifier out of range (m) = manual integration
B9512.D EXP1217.M Thu Jan 31 11:28:16 2002

2/1/31

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9512.D Vial: 7
Acq On : 31 Jan 102 11:00 am Operator: droot
Sample : LCS Inst : 5971 - In
Misc : Multiplr: 1.00
Quant Time: Jan 31 11:28 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 | 184628 | 19.11 | ppb | | 96 |
| 39) | Iso-Butyl Alcohol | 8.39 | 43 | 178161 | 498.24 | ppb | | 99 |
| 40) | Benzene | 7.87 | 78 | 581599 | 21.01 | ppb | | 99 |
| 41) | 1,2-Dichloroethane | 7.88 | 62 | 237226 | 22.45 | ppb | | 99 |
| 42) | N-Heptane | 8.39 | 43 | 178161 | 24.95 | ppb | | 99 |
| 43) | Trichloroethene | 8.96 | 95 | 144226 | 19.52 | ppb | | 95 |
| 44) | 1,2-Diclpropane | 9.31 | 63 | 184039 | 20.26 | ppb | | 100 |
| 45) | Methyl Methacrylate | 9.57 | 69 | 133125 | 20.32 | ppb | | 91 |
| 46) | 1,4-Dioxane | 9.57 | 88 | 29045 | 297.27 | ppb | | 99 |
| 47) | Dibromomethane | 9.50 | 93 | 124274 | 21.00 | ppb | | 94 |
| 48) | Bromodichloromethane | 9.79 | 83 | 224739 | 22.25 | ppb | | 95 |
| 49) | 2-Nitropropane | 10.17 | 43 | 122675 | 36.57 | ppb | | 94 |
| 50) | 2-Chloroethylvinyl Ether | 10.35 | 63 | 112069 | 14.96 | ppb | | 96 |
| 51) | cis-1,3-Dichloropropene | 10.57 | 75 | 293037 | 22.15 | ppb | | 98 |
| 3) | 4-Methyl-2-Pentanone | 10.86 | 43 | 185998 | 15.31 | ppb | | 92 |
| 4) | Toluene | 11.15 | 91 | 529179 | 20.93 | ppb | | 99 |
| 55) | trans-1,3-Dichloropropene | 11.56 | 75 | 262492 | 23.03 | ppb | | 96 |
| 56) | Ethyl Methacrylate | 11.76 | 69 | 240516 | 21.65 | ppb | | 100 |
| 57) | 1,1,2-Trichloroethane | 11.86 | 83 | 142905 | 22.38 | ppb | | 94 |
| 60) | Tetrachloroethene | 12.14 | 166 | 112056 | 21.14 | ppb | | 92 |
| 61) | 2-Hexanone | 12.34 | 43 | 117233 | 14.26 | ppb | | 91 |
| 62) | 1,3-Dichloropropane | 12.16 | 76 | 294337 | 21.31 | ppb | | 84 |
| 63) | Dibromochloromethane | 12.56 | 129 | 163238 | 21.27 | ppb | | 99 |
| 64) | 1,2-Dibromoethane | 12.75 | 107 | 173384 | 20.99 | ppb | | 94 |
| 65) | Chlorobenzene | 13.67 | 112 | 350674 | 21.43 | ppb | | 98 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.83 | 131 | 131686 | 21.46 | ppb | | 97 |
| 67) | Ethylbenzene | 13.90 | 91 | 526364 | 20.57 | ppb | | 100 |
| 68) | (m+p)Xylene | 14.12 | 106 | 375712 | 41.37 | ppb | | 89 |
| 69) | o-Xylene | 14.85 | 106 | 186663 | 20.94 | ppb | | 93 |
| 70) | Styrene | 14.87 | 104 | 354487 | 22.07 | ppb | | 95 |
| 71) | Bromoform | 15.19 | 173 | 102028 | 20.17 | ppb | | 96 |
| 72) | Isopropylbenzene | 15.56 | 105 | 431914 | 20.32 | ppb | | 99 |
| 73) | Cyclohexanone | 15.68 | 55 | 376632 | 450.14 | ppb | | 100 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.12 | 83 | 199451 | 21.12 | ppb | | 97 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.22 | 53 | 58184 | 20.17 | ppb | | 100 |
| 77) | 1,2,3-Trichloropropane | 16.18 | 110 | 56435 | 19.57 | ppb | | 95 |
| 78) | n-Propylbenzene | 16.35 | 91 | 483944 | 20.55 | ppb | | 99 |
| 79) | Bromobenzene | 16.10 | 156 | 135196 | 22.86 | ppb | | 93 |
| 80) | 1,3,5-Trimethylbenzene | 16.69 | 105 | 305555 | 16.03 | ppb | # | 52 |
| 81) | 2-Chlorotoluene | 16.49 | 91 | 321281 | 21.26 | ppb | | 100 |
| 2) | 4-Chlorotoluene | 16.69 | 91 | 365561 | 21.47 | ppb | | 96 |
| 83) | tert-Butylbenzene | 17.31 | 119 | 247556 | 20.21 | ppb | | 97 |
| 84) | 1,2,4-Trimethylbenzene | 17.41 | 105 | 315322 | 22.34 | ppb | | 98 |
| 85) | sec-Butylbenzene | 17.75 | 105 | 361799 | 20.50 | ppb | | 100 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9512.D  Vial: 7
Acq On : 31 Jan 102 11:00 am  Operator: droot
Sample : LCS  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Jan 31 11:28 19102

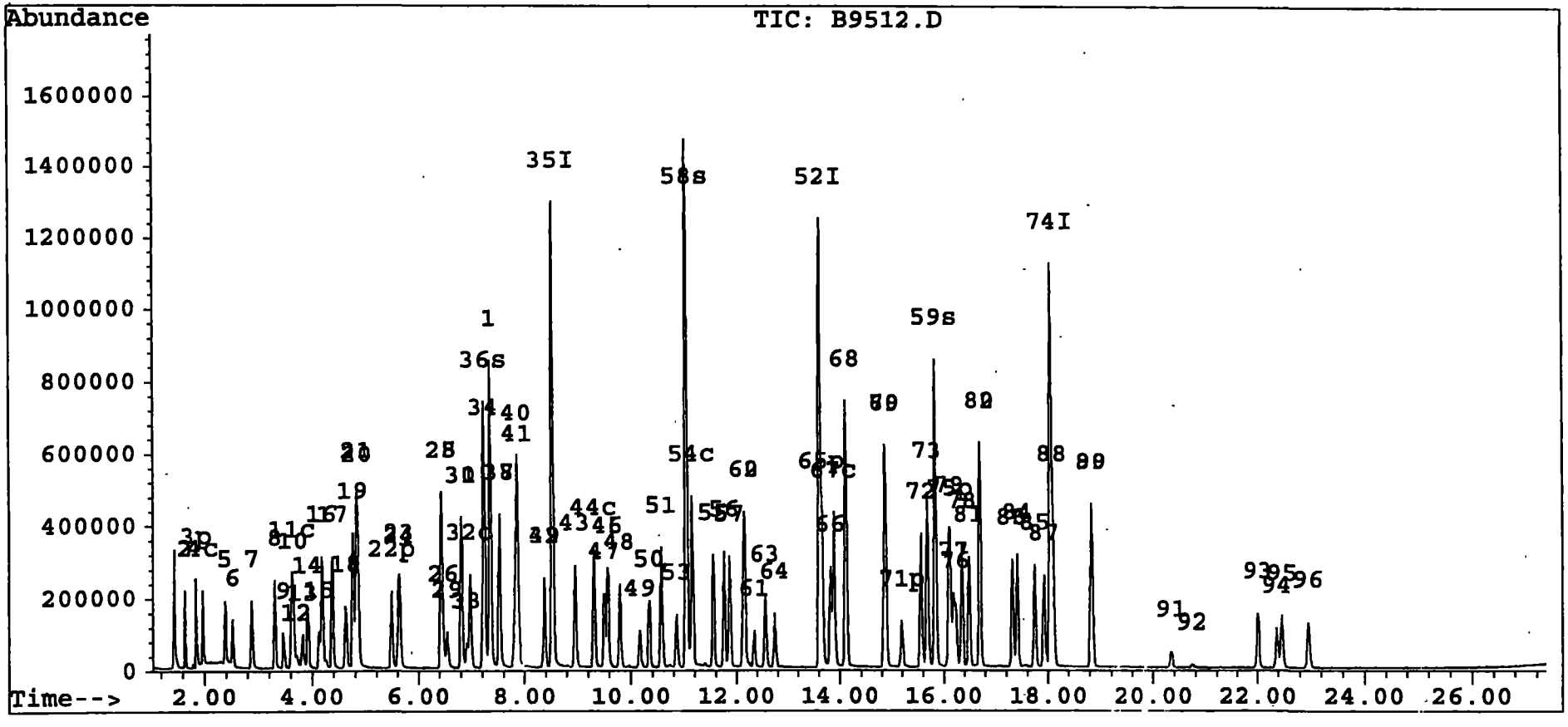
Method : J:\ACQUDATA\MSVOA3\METHODS\EXP1217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 86) | p-Isopropyltoluene | 17.31 | 119 | 247556 | 20.21 | ppb | | 97 |
| 87) | 1,3-Dclbenz | 17.92 | 146 | 197461 | 24.06 | ppb | | 100 |
| 88) | 1,4-Dclbenz | 18.10 | 146 | 206547 | 22.68 | ppb | | 99 |
| 89) | n-Butylbenzene | 18.84 | 91 | 260347 | 22.08 | ppb | | 98 |
| 90) | 1,2-Dclbenz | 18.82 | 146 | 201992 | 23.12 | ppb | | 98 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.35 | 157 | 23853 | 15.60 | ppb | | 92 |
| 92) | Nitrobenzene | 20.75 | 77 | 7516 | 15.88 | ppb | | 82 |
| 93) | 1,2,4-Tcbenzene | 22.01 | 180 | 96996 | 22.62 | ppb | | 98 |
| 94) | Hexachlorobt | 22.37 | 225 | 40780 | 24.64 | ppb | | 92 |
| 95) | Naphthalen | 22.47 | 128 | 227707 | 19.22 | ppb | # | 94 |
| 96) | 1,2,3-Tclbenzene | 22.96 | 180 | 82387 | 20.96 | ppb | | 97 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9512.D  Vial: 7
Acq On : 31 Jan 102 11:00 am  Operator: droot
Sample : LCS  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Jan 31 11:28 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: 02/26/02

**Project Reference:**
**Client Sample ID :** LABORATORY CONTROL SAMPLE

**Date Sampled :** **Order #:** 530676 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** **Submission #:** **Percent Solid:** 100

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 02/05/02 | | | |
| ANALYTICAL DILUTION: 1.00 | | | Dry Weight |
| ACETONE | 20 | 33 | UG/KG |
| BENZENE | 5.0 | 20 | UG/KG |
| BROMODICHLOROMETHANE | 5.0 | 21 | UG/KG |
| BROMOFORM | 5.0 | 21 | UG/KG |
| BROMOMETHANE | 5.0 | 11 | UG/KG |
| 2-BUTANONE (MEK) | 10 | 27 | UG/KG |
| CARBON DISULFIDE | 10 | 18 | UG/KG |
| CARBON TETRACHLORIDE | 5.0 | 20 | UG/KG |
| CHLOROBENZENE | 5.0 | 19 | UG/KG |
| CHLOROETHANE | 5.0 | 17 | UG/KG |
| CHLOROFORM | 5.0 | 20 | UG/KG |
| CHLOROMETHANE | 5.0 | 17 | UG/KG |
| DIBROMOCHLOROMETHANE | 5.0 | 20 | UG/KG |
| 1,1-DICHLOROETHANE | 5.0 | 20 | UG/KG |
| 1,2-DICHLOROETHANE | 5.0 | 21 | UG/KG |
| 1,1-DICHLOROETHENE | 5.0 | 19 | UG/KG |
| CIS-1,2-DICHLOROETHENE | 5.0 | 21 | UG/KG |
| TRANS-1,2-DICHLOROETHENE | 5.0 | 20 | UG/KG |
| 1,2-DICHLOROPROPANE | 5.0 | 19 | UG/KG |
| CIS-1,3-DICHLOROPROPENE | 5.0 | 20 | UG/KG |
| TRANS-1,3-DICHLOROPROPENE | 5.0 | 20 | UG/KG |
| ETHYLBENZENE | 5.0 | 19 | UG/KG |
| 2-HEXANONE | 10 | 19 | UG/KG |
| METHYLENE CHLORIDE | 5.0 | 19 | UG/KG |
| 4-METHYL-2-PENTANONE (MIBK) | 10 | 22 | UG/KG |
| STYRENE | 5.0 | 20 | UG/KG |
| 1,1,2,2-TETRACHLOROETHANE | 5.0 | 21 | UG/KG |
| TETRACHLOROETHENE | 5.0 | 21 | UG/KG |
| TOLUENE | 5.0 | 19 | UG/KG |
| 1,1,1-TRICHLOROETHANE | 5.0 | 19 | UG/KG |
| 1,1,2-TRICHLOROETHANE | 5.0 | 20 | UG/KG |
| TRICHLOROETHENE | 5.0 | 20 | UG/KG |
| VINYL CHLORIDE | 5.0 | 18 | UG/KG |
| O-XYLENE | 5.0 | 19 | UG/KG |
| M+P-XYLENE | 5.0 | 40 | UG/KG |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (42 - 149 %) | 101 | % |
| TOLUENE-D8 | (71 - 128 %) | 102 | % |
| DIBROMOFLUOROMETHANE | (70 - 127 %) | 110 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9626.D  Vial: 17
Acq On : 5 Feb 102 1:16 pm  Operator: DROOT
Sample : LCS 530676  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 13:44 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

5Y1612

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) Pentafluorobenzene | 7.37 | 168 | 755787 | 50.00 | ug/Kg | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.55 | 114 | 1411499 | 50.00 | ug/Kg | -0.04 |
| 52) d5 - Chlorobenzene | 13.63 | 117 | 1125263 | 50.00 | ug/Kg | -0.05 |
| 74) d4 - Dichlorobenzene | 18.08 | 152 | 448232 | 50.00 | ug/Kg | -0.05 |
| **System Monitoring Compounds** | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.24 | 113 | 371466 | 54.90 | ug/Kg | 109.81% |
| 58) surr3,Toluene-d8 | 11.05 | 98 | 1316796 | 51.14 | ug/Kg | 102.29% |
| 59) surr2,bfb | 15.85 | 95 | 519418 | 50.51 | ug/Kg | 101.02% |
| **Target Compounds** | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.65 | 85 | 172177 | 17.29 | ug/Kg | 99 |
| 3) Chloromethane | 1.86 | 50 | 279410 | 17.00 | ug/Kg | 100 |
| 4) Vinyl Chloride | 1.99 | 62 | 185350 | 17.74 | ug/Kg | 96 |
| 5) Bromomethane | 2.39 | 94 | 61859 | 11.18 | ug/Kg | 94 |
| 6) Chloroethane | 2.53 | 64 | 111717 | 16.76 | ug/Kg | 99 |
| 7) Trichlorofluoromethane | 2.88 | 101 | 207568 | 18.46 | ug/Kg | 100 |
| 8) Diethyl Ether | 3.32 | 59 | 118758 | 22.23 | ug/Kg | 98 |
| 9) Acrolein | 3.47 | 56 | 66181 | 101.40 | ug/Kg | 100 |
| 10) FREON 113 | 3.66 | 85 | 49781 | 24.74 | ug/Kg | 95 |
| 11) 1,1-Diclethene | 3.63 | 96 | 115136 | 18.82 | ug/Kg | 95 |
| 12) Acetone | 3.73 | 43 | 61945 | 32.81 | ug/Kg | 164% 97 |
| 13) Iodomethane | 3.84 | 127 | 26894 | 13.39 | ug/Kg | NT 85 |
| 14) Carbon Disulfide | 3.94 | 76 | 442337 | 18.04 | ug/Kg | 100 |
| 15) Acetonitrile | 4.14 | 41 | 94710 | 525.68 | ug/Kg | 95 |
| 16) Allyl Chloride | 4.20 | 76 | 78115 | 20.67 | ug/Kg | 91 |
| 17) Methylene Chloride | 4.39 | 84 | 159417 | 19.41 | ug/Kg | 90 |
| 18) TBA | 4.64 | 59 | 413893 | 593.98 | ug/Kg | 100 |
| 19) Acrylonitrile | 4.77 | 53 | 285775 | 123.67 | ug/Kg | 100 |
| 20) Methyl-t-Butyl Ether | 4.86 | 73 | 392674 | 22.84 | ug/Kg | 100 |
| 21) trans-1,2-Dichloroethene | 4.83 | 96 | 130225 | 20.26 | ug/Kg | 94 |
| 22) 1,1-Diclethane | 5.50 | 63 | 249518 | 20.12 | ug/Kg | 100 |
| 23) Vinyl Acetate | 5.63 | 43 | 290582 | 19.87 | ug/Kg | 98 |
| 24) 2-Chloro-1,3-butadiene | 5.66 | 53 | 261889 | 20.11 | ug/Kg | 98 |
| 25) 2,2-Dichloropropane | 6.45 | 77 | 185702 | 19.51 | ug/Kg | 97 |
| 26) 2-Butanone | 6.49 | 43 | 104089 | 26.87 | ug/Kg | 100 |
| 28) cis-1,2-Dichloroethene | 6.46 | 96 | 164704 | 20.74 | ug/Kg | 98 |
| 29) Propionitrile | 6.55 | 54 | 131013 | 126.55 | ug/Kg | 98 |
| 30) Methacrylonitrile | 6.81 | 67 | 64834 | 27.11 | ug/Kg | NT 99 |
| 31) Bromochloromethane | 6.83 | 128 | 80924 | 20.32 | ug/Kg | 92 |
| 32) Chloroform | 6.99 | 83 | 229286 | 19.70 | ug/Kg | 98 |
| 33) Tetrahydrofuran | 6.92 | 42 | 67449 | 24.62 | ug/Kg | 98 |
| 34) 1,1,1-Trichloroethane | 7.26 | 97 | 194921 | 18.99 | ug/Kg | 97 |
| 37) Carbontetrachloride | 7.55 | 117 | 164204 | 20.33 | ug/Kg | 100 |

(#) = qualifier out of range (m) = manual integration
B9626.D SOL0201.M Tue Feb 05 13:44:25 2002

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Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9626.D  Vial: 17
Acq On : 5 Feb 102 1:16 pm  Operator: DROOT
Sample : LCS  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 13:44 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.55 | 75 | 228798 | 18.98 | ug/Kg | 99 |
| 39) | Iso-Butyl Alcohol | 8.40 | 43 | 268702 | 421.43 | ug/Kg | 98 |
| 40) | Benzene | 7.87 | 78 | 707938 | 19.76 | ug/Kg | 97 |
| 41) | 1,2-Dichloroethane | 7.90 | 62 | 170238 | 21.47 | ug/Kg | 98 |
| 42) | N-Heptane | 8.40 | 43 | 268702 | 21.10 | ug/Kg | 98 |
| 43) | Trichloroethene | 8.97 | 95 | 183338 | 19.82 | ug/Kg | 98 |
| 44) | 1,2-Diclpropane | 9.32 | 63 | 196650 | 19.45 | ug/Kg | 98 |
| 45) | Methyl Methacrylate | 9.59 | 69 | 135200 | 24.52 | ug/Kg | 98 |
| 46) | 1,4-Dioxane | 9.59 | 88 | 40510 | 467.85 | ug/Kg | 93 |
| 47) | Dibromomethane | 9.52 | 93 | 98650 | 21.45 | ug/Kg | 95 |
| 48) | Bromodichloromethane | 9.81 | 83 | 211143 | 21.45 | ug/Kg | 98 |
| 49) | 2-Nitropropane | 10.19 | 43 | 93162 | 40.10 | ug/Kg | 99 |
| 50) | 2-Chloroethylvinyl Ether | 10.36 | 63 | 83635 | 24.52 | ug/Kg | 95 |
| 51) | cis-1,3-Dichloropropene | 10.59 | 75 | 295438 | 20.41 | ug/Kg | 99 |
| 53) | 4-Methyl-2-Pentanone | 10.88 | 43 | 230142 | 21.96 | ug/Kg | 100 |
| 54) | Toluene | 11.17 | 91 | 647007 | 19.14 | ug/Kg | 96 |
| 55) | trans-1,3-Dichloropropene | 11.56 | 75 | 261222 | 19.89 | ug/Kg | 100 |
| 56) | Ethyl Methacrylate | 11.78 | 69 | 233412 | 23.43 | ug/Kg | 99 |
| 57) | 1,1,2-Trichloroethane | 11.88 | 83 | 137523 | 19.73 | ug/Kg | 99 |
| 60) | Tetrachloroethene | 12.15 | 166 | 167680 | 20.69 | ug/Kg | 96 |
| 61) | 2-Hexanone | 12.36 | 43 | 140563 | 18.72 | ug/Kg | 96 |
| 62) | 1,3-Dichloropropane | 12.18 | 76 | 292464 | 19.15 | ug/Kg | 90 |
| 63) | Dibromochloromethane | 12.58 | 129 | 174842 | 20.15 | ug/Kg | 96 |
| 64) | 1,2-Dibromoethane | 12.77 | 107 | 179891 | 20.53 | ug/Kg | 100 |
| 65) | Chlorobenzene | 13.69 | 112 | 433351 | 19.37 | ug/Kg | 94 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.84 | 131 | 158769 | 19.63 | ug/Kg | 97 |
| 67) | Ethylbenzene | 13.92 | 91 | 700950 | 19.38 | ug/Kg | 98 |
| 68) | (m+p)Xylene | 14.13 | 106 | 527497 | 39.73 | ug/Kg | 99 |
| 69) | o-Xylene | 14.87 | 106 | 256087 | 19.37 | ug/Kg | 99 |
| 70) | Styrene | 14.89 | 104 | 450107 | 19.79 | ug/Kg | 99 |
| 71) | Bromoform | 15.22 | 173 | 114532 | 21.32 | ug/Kg | 98 |
| 72) | Isopropylbenzene | 15.58 | 105 | 643231 | 18.74 | ug/Kg | 100 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.14 | 83 | 211173 | 20.67 | ug/Kg | 96 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.25 | 53 | 54280 | 19.26 | ug/Kg | 92 |
| 77) | 1,2,3-Trichloropropane | 16.20 | 110 | 63692 | 22.21 | ug/Kg | 99 |
| 78) | n-Propylbenzene | 16.37 | 91 | 764552 | 19.47 | ug/Kg | 98 |
| 79) | Bromobenzene | 16.11 | 156 | 166341 | 20.36 | ug/Kg | 98 |
| 80) | 1,3,5-Trimethylbenzene | 16.71 | 105 | 482703 | 19.92 | ug/Kg# | 50 |
| 81) | 2-Chlorotoluene | 16.51 | 91 | 449763 | 19.19 | ug/Kg | 97 |
| 82) | 4-Chlorotoluene | 16.71 | 91 | 494618 | 19.09 | ug/Kg | 99 |
| 83) | tert-Butylbenzene | 17.33 | 119 | 426306 | 19.33 | ug/Kg | 97 |
| 84) | 1,2,4-Trimethylbenzene | 17.43 | 105 | 463572 | 19.29 | ug/Kg | 95 |
| 85) | sec-Butylbenzene | 17.77 | 105 | 667368 | 19.01 | ug/Kg | 99 |
| 86) | p-Isopropyltoluene | 18.06 | 119 | 525018 | 19.38 | ug/Kg# | 60 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9626.D  Vial: 17
Acq On : 5 Feb 102 1:16 pm  Operator: DROOT
Sample : LCS  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 13:44 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration

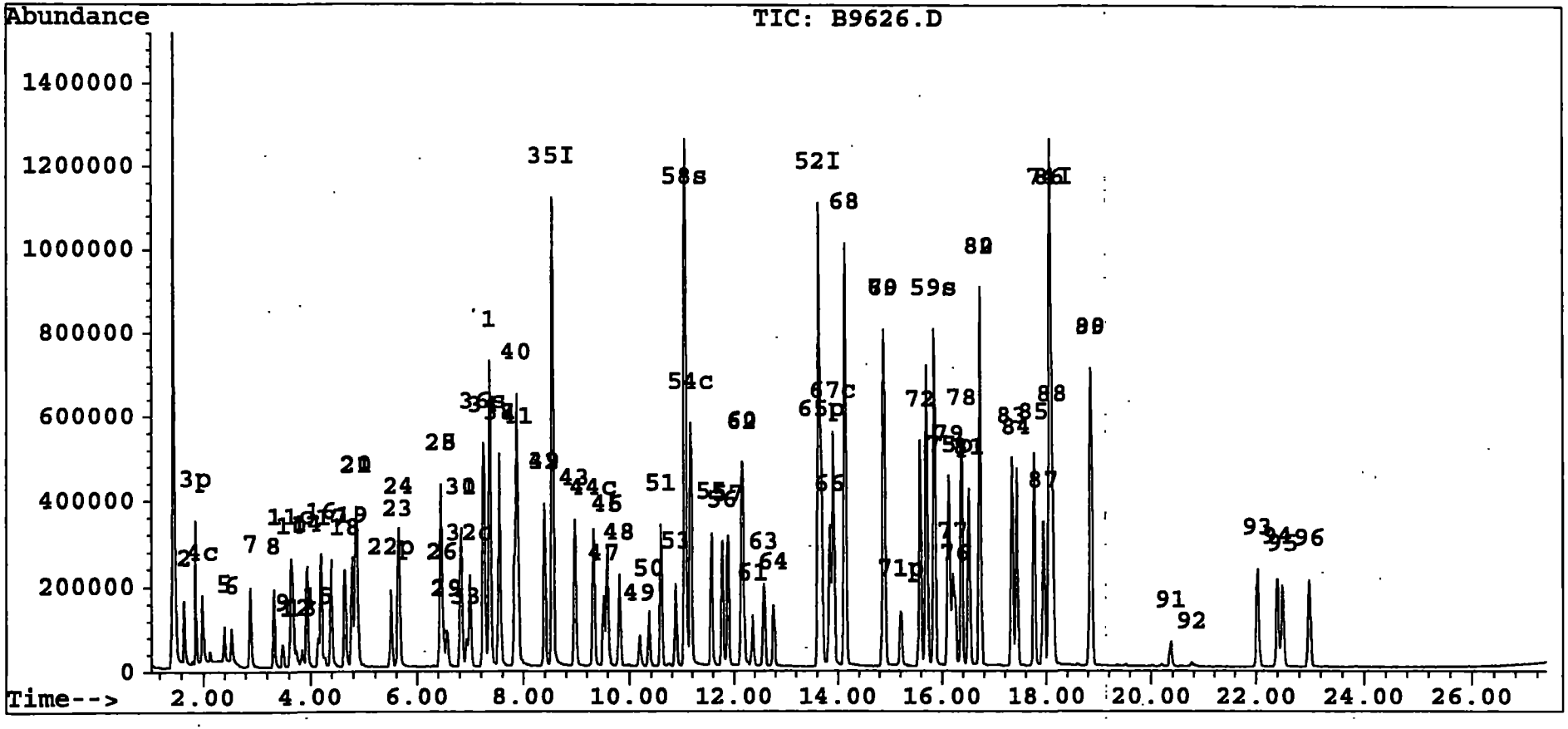
| | Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|---|
| 87) | 1,3-Dclbenz | 17.95 | 146 | 276961 | 21.84 | ug/Kg | 100 |
| 88) | 1,4-Dclbenz | 18.12 | 146 | 277486 | 20.29 | ug/Kg | 97 |
| 89) | n-Butylbenzene | 18.86 | 91 | 481967 | 18.78 | ug/Kg | 99 |
| 90) | 1,2-Dclbenz | 18.84 | 146 | 260735 | 20.66 | ug/Kg | 98 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.36 | 157 | 33961 | 22.08 | ug/Kg | 91 |
| 92) | Nitrobenzene | 20.76 | 77 | 10520 | 16.15 | ug/Kg | 98 |
| 93) | 1,2,4-Tcbenzene | 22.03 | 180 | 159678 | 21.24 | ug/Kg | 98 |
| 94) | Hexachlorobt | 22.40 | 225 | 84211 | 19.20 | ug/Kg | 97 |
| 95) | Naphthalen | 22.49 | 128 | 323010 | 19.71 | ug/Kg | 96 |
| 96) | 1,2,3-Tclbenzene | 22.98 | 180 | 142286 | 21.39 | ug/Kg | 96 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\020502\B9626.D  Vial: 17
Acq On : 5 Feb 102 1:16 pm  Operator: DROOT
Sample : LCS  Inst : 5971 - In
Misc :  Multiplr: 1.00
Quant Time: Feb 5 13:44 19102

Method : J:\ACQUDATA\MSVOA3\METHODS\SOL0201.M
Title : 8260voa
Last Update : Mon Feb 04 09:19:39 2002
Response via : Multiple Level Calibration



COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS
METHOD 8260B TCL
Reported: 02/26/02

**Project Reference:**
**Client Sample ID :** MATRIX SPIKE

**Date Sampled :** **Order #:** 528709 **Sample Matrix:** WATER
**Date Received:** **Submission #:** **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| ANALYTICAL DILUTION: 1.00 | | | |
| ACETONE | 10 | 45 | UG/L |
| BENZENE | 1.0 | 50 | UG/L |
| BROMODICHLOROMETHANE | 1.0 | 50 | UG/L |
| BROMOFORM | 1.0 | 44 | UG/L |
| BROMOMETHANE | 1.0 | 49 | UG/L |
| 2-BUTANONE (MEK) | 5.0 | 44 | UG/L |
| CARBON DISULFIDE | 5.0 | 50 | UG/L |
| CARBON TETRACHLORIDE | 1.0 | 52 | UG/L |
| CHLOROBENZENE | 1.0 | 49 | UG/L |
| CHLOROETHANE | 1.0 | 50 | UG/L |
| CHLOROFORM | 1.0 | 50 | UG/L |
| CHLOROMETHANE | 1.0 | 52 | UG/L |
| DIBROMOCHLOROMETHANE | 1.0 | 45 | UG/L |
| 1,1-DICHLOROETHANE | 1.0 | 51 | UG/L |
| 1,2-DICHLOROETHANE | 1.0 | 47 | UG/L |
| 1,1-DICHLOROETHENE | 1.0 | 48 | UG/L |
| CIS-1,2-DICHLOROETHENE | 1.0 | 48 | UG/L |
| TRANS-1,2-DICHLOROETHENE | 1.0 | 50 | UG/L |
| 1,2-DICHLOROPROPANE | 1.0 | 47 | UG/L |
| CIS-1,3-DICHLOROPROPENE | 1.0 | 47 | UG/L |
| TRANS-1,3-DICHLOROPROPENE | 1.0 | 48 | UG/L |
| ETHYLBENZENE | 1.0 | 53 | UG/L |
| 2-HEXANONE | 5.0 | 45 | UG/L |
| METHYLENE CHLORIDE | 1.0 | 46 | UG/L |
| 4-METHYL-2-PENTANONE (MIBK) | 5.0 | 45 | UG/L |
| STYRENE | 1.0 | 50 | UG/L |
| 1,1,2,2-TETRACHLOROETHANE | 1.0 | 44 | UG/L |
| TETRACHLOROETHENE | 1.0 | 47 | UG/L |
| TOLUENE | 1.0 | 51 | UG/L |
| 1,1,1-TRICHLOROETHANE | 1.0 | 52 | UG/L |
| 1,1,2-TRICHLOROETHANE | 1.0 | 45 | UG/L |
| TRICHLOROETHENE | 1.0 | 50 | UG/L |
| VINYL CHLORIDE | 1.0 | 53 | UG/L |
| O-XYLENE | 1.0 | 51 | UG/L |
| M+P-XYLENE | 1.0 | 110 | UG/L |

| SURROGATE RECOVERIES | QC LIMITS | | |
|---|---|---|---|
| 4-BROMOFLUOROBENZENE | (87 - 111 %) | 101 | % |
| TOLUENE-D8 | (87 - 108 %) | 105 | % |
| DIBROMOFLUOROMETHANE | (86 - 117 %) | 103 | % |

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9525.D  Vial: 9
Acq On : 31 Jan 102 6:44 pm  Operator: droot
Sample : 527735 1.0 MS 52870  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH  Multiplr: 1.00
Quant Time: Jan 31 19:12 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 | 796620 | 50.00 | ppb | | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.54 | 114 | 1482256 | 50.00 | ppb | | -0.04 |
| 52) d5 - Chlorobenzene | 13.62 | 117 | 1177425 | 50.00 | ppb | | -0.05 |
| 74) d4 - Dichlorobenzene | 18.06 | 152 | 456864 | 50.00 | ppb | | -0.05 |
| **System Monitoring Compounds** | | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.23 | 113 | 535603 | 51.30 | ppb | | 102.60% |
| 58) surr3,Toluene-d8 | 11.04 | 98 | 1451430 | 52.50 | ppb | | 105.01% |
| 59) surr2,bfb | 15.83 | 95 | 561575 | 50.48 | ppb | | 100.96% |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.65 | 85 | 392572 | 57.88 | ppb | | 100 |
| 3) Chloromethane | 1.87 | 50 | 468445 | 52.11 | ppb | | 98 |
| 4) Vinyl Chloride | 1.98 | 62 | 406721 | 52.68 | ppb | | 99 |
| 5) Bromomethane | 2.39 | 94 | 261889 | 48.63 | ppb | | 97 |
| 6) Chloroethane | 2.53 | 64 | 244228 | 50.54 | ppb | | 99 |
| 7) Trichlorofluoromethane | 2.88 | 101 | 474813 | 55.56 | ppb | | 99 |
| 8) Diethyl Ether | 3.31 | 59 | 363049 | 47.35 | ppb | | 96 |
| 9) Acrolein | 3.47 | 56 | 302403 | 176.04 | ppb | | 96 |
| 10) FREON 113 | 3.66 | 85 | 130079 | 57.54 | ppb | | 98 |
| 11) 1,1-Diclethene | 3.63 | 96 | 282924 | 47.88 | ppb | QV | 99 |
| 12) Acetone | 3.72 | 43 | 153741 | 44.98 | ppb | | 93 |
| 13) Iodomethane | 3.83 | 127 | 222055 | 57.29 | ppb | | 100 |
| 14) Carbon Disulfide | 3.93 | 76 | 1132403 | 49.68 | ppb | QV | 100 |
| 15) Acetonitrile | 4.13 | 41 | 357605 | 931.51 | ppb | | 97 |
| 16) Allyl Chloride | 4.20 | 76 | 189526 | 51.65 | ppb | | 95 |
| 17) Methylene Chloride | 4.39 | 84 | 367832 | 45.68 | ppb | | 95 |
| 18) TBA | 4.63 | 59 | 863753 | 922.35 | ppb | | 98 |
| 19) Acrylonitrile | 4.77 | 53 | 952622 | 227.48 | ppb | | 99 |
| 20) Methyl-t-Butyl Ether | 4.86 | 73 | 1066090 | 46.72 | ppb | | 97 |
| 21) trans-1,2-Dichloroethene | 4.83 | 96 | 370422 | 50.58 | ppb | | 99 |
| 22) 1,1-Diclethane | 5.50 | 63 | 671906 | 51.38 | ppb | | 98 |
| 23) Vinyl Acetate | 5.62 | 43 | 929560 | 52.89 | ppb | | 99 |
| 24) 2-Chloro-1,3-butadiene | 5.65 | 53 | 608183 | 51.83 | PPB | | 97 |
| 25) 2,2-Dichloropropane | 6.43 | 77 | 471756 | 51.08 | ppb | | 96 |
| 26) 2-Butanone | 6.48 | 43 | 267936 | 43.94 | ppb | | 100 |
| 28) cis-1,2-Dichloroethene | 6.44 | 96 | 424463 | 48.57 | ppb | | 96 |
| 29) Propionitrile | 6.54 | 54 | 348092 | 220.34 | ppb | | 96 |
| 30) Methacrylonitrile | 6.81 | 67 | 182219 | 44.61 | ppb | | 91 |
| 31) Bromochloromethane | 6.82 | 128 | 189855 | 43.94 | ppb | | 85 |
| 32) Chloroform | 6.97 | 83 | 627071 | 50.00 | ppb | | 99 |
| 33) Tetrahydrofuran | 6.91 | 42 | 165885 | 43.48 | ppb | | 94 |
| 34) 1,1,1-Trichloroethane | 7.25 | 97 | 483085 | 52.22 | ppb | | 99 |
| 37) Carbontetrachloride | 7.54 | 117 | 404305 | 52.00 | ppb | | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9525.D  Vial: 9
Acq On : 31 Jan 102 6:44 pm  Operator: droot
Sample : 527735 1.0 MS  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH  Multiplr: 1.00
Quant Time: Jan 31 19:12 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 | 7.54 | 75 | 463466 | 49.86 | ppb | | 97 |
| 39) | Iso-Butyl Alcohol | 8.38 | 43 | 336648 | 978.37 | ppb | | 100 |
| 40) | Benzene | 7.86 | 78 | 1346506 | 50.54 | ppb | | 98 |
| 41) | 1,2-Dichloroethane | 7.89 | 62 | 475613 | 46.78 | ppb | | 100 |
| 42) | N-Heptane | 8.38 | 43 | 336648 | 48.99 | ppb | | 97 |
| 43) | Trichloroethene | 8.95 | 95 | 359328 | 50.53 | ppb | | 93 |
| 44) | 1,2-Diclpropane | 9.32 | 63 | 409844 | 46.90 | ppb | | 95 |
| 45) | Methyl Methacrylate | 9.57 | 69 | 295352 | 46.86 | ppb | | 95 |
| 46) | 1,4-Dioxane | 9.57 | 88 | 78680 | 836.84 | ppb | | 99 |
| 47) | Dibromomethane | 9.50 | 93 | 257650 | 45.25 | ppb | | 99 |
| 48) | Bromodichloromethane | 9.80 | 83 | 481992 | 49.59 | ppb | | 97 |
| 49) | 2-Nitropropane | 10.17 | 43 | 280115 | 86.77 | ppb | | 98 |
| 51) | cis-1,3-Dichloropropene | 10.58 | 75 | 598347 | 47.00 | ppb | | 96 |
| 53) | 4-Methyl-2-Pentanone | 10.86 | 43 | 533166 | 44.97 | ppb | | 95 |
| 54) | Toluene | 11.16 | 91 | 1264900 | 51.26 | ppb | | 100 |
| 55) | trans-1,3-Dichloropropene | 11.55 | 75 | 533473 | 47.96 | ppb | | 98 |
| 56) | Ethyl Methacrylate | 11.76 | 69 | 510159 | 47.04 | ppb | | 99 |
| 57) | 1,1,2-Trichloroethane | 11.87 | 83 | 279344 | 44.83 | ppb | | 98 |
| 60) | Tetrachloroethene | 12.13 | 166 | 278788 | 47.29 | ppb | | 97 |
| 61) | 2-Hexanone | 12.34 | 43 | 359973 | 44.86 | ppb | | 96 |
| 62) | 1,3-Dichloropropane | 12.16 | 76 | 589895 | 43.75 | ppb | | 89 |
| 63) | Dibromochloromethane | 12.57 | 129 | 337612 | 45.07 | ppb | | 97 |
| 64) | 1,2-Dibromoethane | 12.75 | 107 | 370542 | 45.96 | ppb | | 99 |
| 65) | Chlorobenzene | 13.67 | 112 | 780033 | 48.84 | ppb | | 99 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.84 | 131 | 290487 | 48.50 | ppb | | 98 |
| 67) | Ethylbenzene | 13.89 | 91 | 1315504 | 52.67 | ppb | | 99 |
| 68) | (m+p)Xylene | 14.12 | 106 | 941695 | 106.22 | ppb | | 97 |
| 69) | o-Xylene | 14.85 | 106 | 447058 | 51.38 | ppb | | 94 |
| 70) | Styrene | 14.88 | 104 | 787169 | 50.20 | ppb | | 98 |
| 71) | Bromoform | 15.19 | 173 | 218127 | 44.17 | ppb | | 100 |
| 72) | Isopropylbenzene | 15.57 | 105 | 1104227 | 47.90 | ppb | | 99 |
| 73) | Cyclohexanone | 15.69 | 55 | 267527 | 327.57 | ppb | | 95 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.12 | 83 | 426311 | 43.74 | ppb | | 97 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.24 | 53 | 129207 | 43.39 | ppb | | 90 |
| 77) | 1,2,3-Trichloropropane | 16.19 | 110 | 127725 | 42.91 | ppb | | 97 |
| 78) | n-Propylbenzene | 16.35 | 91 | 1251795 | 51.48 | ppb | | 99 |
| 79) | Bromobenzene | 16.10 | 156 | 287013 | 47.01 | ppb | | 96 |
| 80) | 1,3,5-Trimethylbenzene | 16.70 | 105 | 754633 | 33.15 | ppb | # | 50 |
| 81) | 2-Chlorotoluene | 16.49 | 91 | 776883 | 49.80 | ppb | | 97 |
| 82) | 4-Chlorotoluene | 16.70 | 91 | 863368 | 49.12 | ppb | | 94 |
| 83) | tert-Butylbenzene | 17.32 | 119 | 622176 | 49.21 | ppb | | 96 |
| 84) | 1,2,4-Trimethylbenzene | 17.42 | 105 | 740444 | 50.83 | ppb | | 96 |
| 85) | sec-Butylbenzene | 17.75 | 105 | 906758 | 49.78 | ppb | | 100 |
| 86) | p-Isopropyltoluene | 17.32 | 119 | 622176 | 49.21 | ppb | | 97 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9525.D Vial: 9
Acq On : 31 Jan 102 6:44 pm Operator: droot
Sample : 527735 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 31 19:12 19102

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

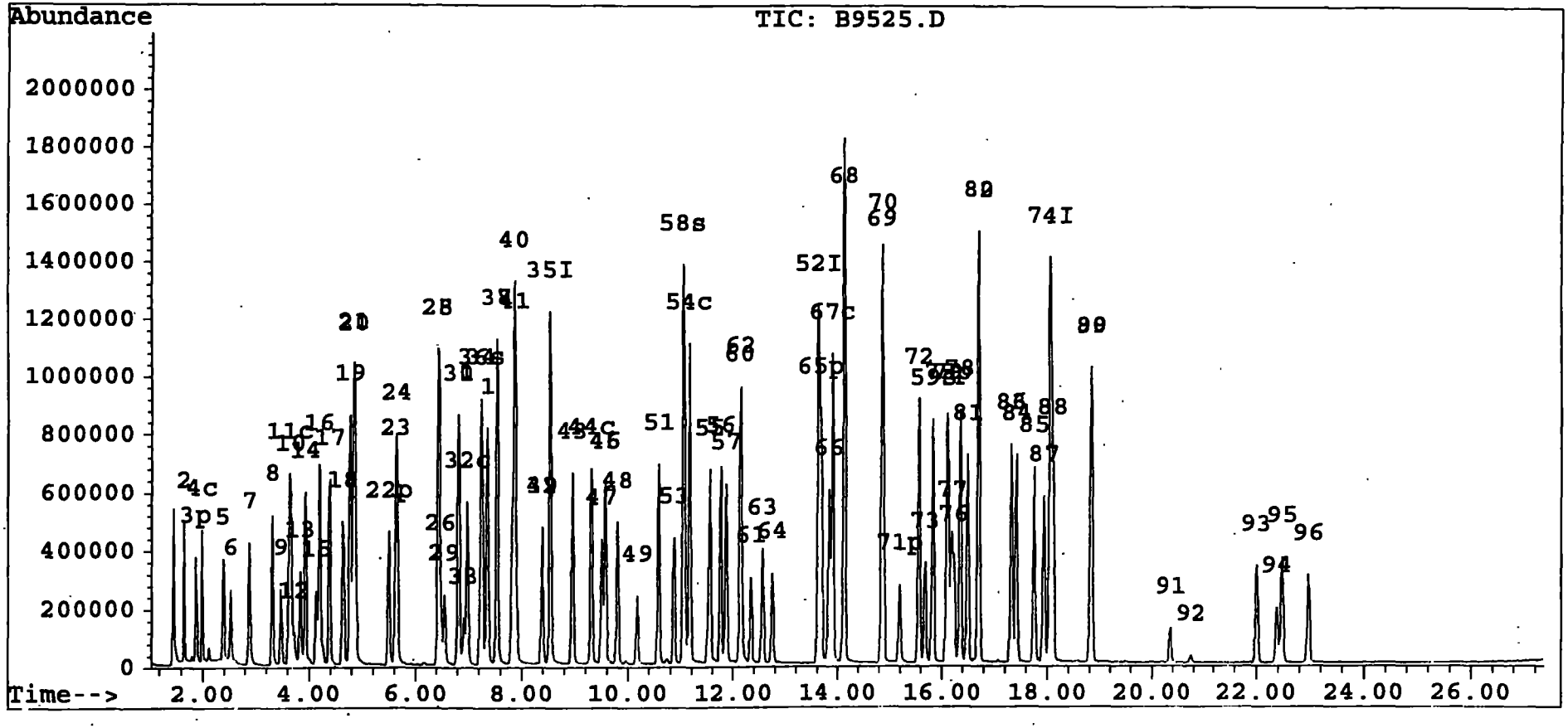
| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 87) | 1,3-Dclbenz | 17.93 | 146 | 443595 | 52.36 | ppb | | 98 |
| 88) | 1,4-Dclbenz | 18.11 | 146 | 454543 | 48.34 | ppb | | 98 |
| 89) | n-Butylbenzene | 18.85 | 91 | 611103 | 50.20 | ppb | | 97 |
| 90) | 1,2-Dclbenz | 18.83 | 146 | 441485 | 48.95 | ppb | | 98 |
| 91) | 1,2-Dibromo-3-chloropropan | 20.35 | 157 | 64837 | 41.08 | ppb | | 98 |
| 92) | Nitrobenzene | 20.75 | 77 | 26288 | 33.01 | ppb | | 98 |
| 93) | 1,2,4-Tcbenzene | 22.02 | 180 | 223999 | 50.60 | ppb | | 99 |
| 94) | Hexachlorobt | 22.39 | 225 | 77597 | 45.42 | ppb | | 94 |
| 95) | Naphthalen | 22.48 | 128 | 599260 | 48.99 | ppb | # | 95 |
| 96) | 1,2,3-Tclbenzene | 22.97 | 180 | 206020 | 50.78 | ppb | | 97 |

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

Quantit' on Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9525.D Vial: 9
Acq On : 31 Jan 102 6:44 pm Operator: droot
Sample : 527735 1.0 MS Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 31 19:12 19102

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

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**COLUMBIA ANALYTICAL SERVICES**

**VOLATILE ORGANICS**
METHOD 8260B TCL
Reported: 02/26/02

**Project Reference:**
**Client Sample ID :** MATRIX SPIKE DUPLICATE

**Date Sampled :** **Order #:** 528711 **Sample Matrix:** WATER
**Date Received:** **Submission #:** **Analytical Run** 74109

| ANALYTE | PQL | RESULT | UNITS |
|---|---|---|---|
| DATE ANALYZED : 01/31/02 | | | |
| ANALYTICAL DILUTION: 1.00 | | | |
| ACETONE | 10 | 47 | UG/L |
| BENZENE | 1.0 | 48 | UG/L |
| BROMODICHLOROMETHANE | 1.0 | 47 | UG/L |
| BROMOFORM | 1.0 | 44 | UG/L |
| BROMOMETHANE | 1.0 | 51 | UG/L |
| 2-BUTANONE (MEK) | 5.0 | 43 | UG/L |
| CARBON DISULFIDE | 5.0 | 48 | UG/L |
| CARBON TETRACHLORIDE | 1.0 | 49 | UG/L |
| CHLOROBENZENE | 1.0 | 48 | UG/L |
| CHLOROETHANE | 1.0 | 48 | UG/L |
| CHLOROFORM | 1.0 | 48 | UG/L |
| CHLOROMETHANE | 1.0 | 52 | UG/L |
| DIBROMOCHLOROMETHANE | 1.0 | 45 | UG/L |
| 1,1-DICHLOROETHANE | 1.0 | 50 | UG/L |
| 1,2-DICHLOROETHANE | 1.0 | 46 | UG/L |
| 1,1-DICHLOROETHENE | 1.0 | 47 | UG/L |
| CIS-1,2-DICHLOROETHENE | 1.0 | 46 | UG/L |
| TRANS-1,2-DICHLOROETHENE | 1.0 | 47 | UG/L |
| 1,2-DICHLOROPROPANE | 1.0 | 46 | UG/L |
| CIS-1,3-DICHLOROPROPENE | 1.0 | 45 | UG/L |
| TRANS-1,3-DICHLOROPROPENE | 1.0 | 48 | UG/L |
| ETHYLBENZENE | 1.0 | 52 | UG/L |
| 2-HEXANONE | 5.0 | 45 | UG/L |
| METHYLENE CHLORIDE | 1.0 | 44 | UG/L |
| 4-METHYL-2-PENTANONE (MIBK) | 5.0 | 45 | UG/L |
| STYRENE | 1.0 | 50 | UG/L |
| 1,1,2,2-TETRACHLOROETHANE | 1.0 | 43 | UG/L |
| TETRACHLOROETHENE | 1.0 | 46 | UG/L |
| TOLUENE | 1.0 | 50 | UG/L |
| 1,1,1-TRICHLOROETHANE | 1.0 | 50 | UG/L |
| 1,1,2-TRICHLOROETHANE | 1.0 | 45 | UG/L |
| TRICHLOROETHENE | 1.0 | 48 | UG/L |
| VINYL CHLORIDE | 1.0 | 53 | UG/L |
| O-XYLENE | 1.0 | 51 | UG/L |
| M+P-XYLENE | 1.0 | 100 | UG/L |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9526.D  Vial: 9
Acq On : 31 Jan 102 7:21 pm  Operator: droot
Sample : 527735 1.0 MSD 52871  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH  Multiplr: 1.00
Quant Time: Jan 31 19:48 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 | 785356 | 50.00 | ppb | | -0.04 |
| 35) 1,4 - Difluorobenzene | 8.54 | 114 | 1470584 | 50.00 | ppb | | -0.04 |
| 52) d5 - Chlorobenzene | 13.62 | 117 | 1146876 | 50.00 | ppb | | -0.05 |
| 74) d4 - Dichlorobenzene | 18.07 | 152 | 462085 | 50.00 | ppb | | -0.04 |
| **System Monitoring Compounds** | | | | | | | %Recovery |
| 36) surr4,Dibrflmethane | 7.23 | 113 | 521884 | 50.12 | ppb | | 100.23% |
| 58) surr3,Toluene-d8 | 11.04 | 98 | 1447091 | 54.13 | ppb | | 108.26% |
| 59) surr2,bfb | 15.83 | 95 | 555617 | 51.57 | ppb | | 103.14% |
| **Target Compounds** | | | | | | | Qvalue |
| 2) Dichlorodifluoromethane | 1.65 | 85 | 382915 | 57.26 | ppb | | 99 |
| 3) Chloromethane | 1.87 | 50 | 459992 | 51.90 | ppb | | 100 |
| 4) Vinyl Chloride | 1.98 | 62 | 400360 | 52.60 | ppb | | 98 |
| 5) Bromomethane | 2.39 | 94 | 272460 | 51.32 | ppb | | 98 |
| 6) Chloroethane | 2.53 | 64 | 227577 | 47.77 | ppb | | 95 |
| 7) Trichlorofluoromethane | 2.88 | 101 | 461942 | 54.83 | ppb | | 97 |
| 8) Diethyl Ether | 3.31 | 59 | 346181 | 45.80 | ppb | | 96 |
| 9) Acrolein | 3.47 | 56 | 296446 | 175.05 | ppb | | 100 |
| 10) FREON 113 | 3.66 | 85 | 127969 | 57.42 | ppb | | 98 |
| 11) 1,1-Diclethene | 3.63 | 96 | 271927 | 46.68 | ppb | 93 | 98 |
| 12) Acetone | 3.72 | 43 | 158715 | 47.10 | ppb | | 97 |
| 13) Iodomethane | 3.83 | 127 | 206187 | 54.21 | ppb | | 97 |
| 14) Carbon Disulfide | 3.92 | 76 | 1071188 | 47.67 | ppb | ok | 100 |
| 15) Acetonitrile | 4.13 | 41 | 312083 | 824.59 | ppb | | 99 |
| 16) Allyl Chloride | 4.19 | 76 | 184154 | 50.91 | ppb | | 90 |
| 17) Methylene Chloride | 4.39 | 84 | 351647 | 44.30 | ppb | | 98 |
| 18) TBA | 4.63 | 59 | 849431 | 920.07 | ppb | | 97 |
| 19) Acrylonitrile | 4.76 | 53 | 932457 | 225.86 | ppb | | 100 |
| 20) Methyl-t-Butyl Ether | 4.86 | 73 | 1038640 | 46.17 | ppb | | 98 |
| 21) trans-1,2-Dichloroethene | 4.83 | 96 | 342792 | 47.47 | ppb | | 97 |
| 22) 1,1-Diclethane | 5.49 | 63 | 640177 | 49.65 | ppb | | 98 |
| 23) Vinyl Acetate | 5.62 | 43 | 898460 | 51.86 | ppb | | 99 |
| 24) 2-Chloro-1,3-butadiene | 5.65 | 53 | 570236 | 49.35 | PPB | | 97 |
| 25) 2,2-Dichloropropane | 6.43 | 77 | 449517 | 49.37 | ppb | | 95 |
| 26) 2-Butanone | 6.47 | 43 | 256954 | 42.74 | ppb | | 98 |
| 28) cis-1,2-Dichloroethene | 6.44 | 96 | 396208 | 45.99 | ppb | | 95 |
| 29) Propionitrile | 6.54 | 54 | 349025 | 224.10 | ppb | | 100 |
| 30) Methacrylonitrile | 6.80 | 67 | 176843 | 43.92 | ppb | | 93 |
| 31) Bromochloromethane | 6.82 | 128 | 185042 | 43.44 | ppb | | 87 |
| 32) Chloroform | 6.97 | 83 | 594108 | 48.05 | ppb | | 99 |
| 33) Tetrahydrofuran | 6.91 | 42 | 166746 | 44.39 | ppb | | 94 |
| 34) 1,1,1-Trichloroethane | 7.25 | 97 | 453669 | 49.75 | ppb | | 99 |
| 37) Carbontetrachloride | 7.54 | 117 | 381501 | 49.46 | ppb | | 96 |

(#) = qualifier out of range (m) = manual integration
B9526.D EXP1217.M Thu Jan 31 19:48:51 2002

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9526.D Vial: 9
Acq On : 31 Jan 102 7:21 pm Operator: droot
Sample : 527735 1.0 MSD Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 31 19:48 19102

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

| | Compound | R.T. | QIon | Response | Conc | Unit | | Qvalue |
|---|---|---|---|---|---|---|---|---|
| 38) | 1,1-Dichloropropene | 7.54 | 75 | 437503 | 47.44 | ppb | | 98 |
| 39) | Iso-Butyl Alcohol | 8.38 | 43 | 304961 | 893.32 | ppb | | 99 |
| 40) | Benzene | 7.86 | 78 | 1263122 | 47.79 | ppb | | 98 |
| 41) | 1,2-Dichloroethane | 7.89 | 62 | 462990 | 45.90 | ppb | | 100 |
| 42) | N-Heptane | 8.38 | 43 | 304961 | 44.73 | ppb | | 97 |
| 43) | Trichloroethene | 8.95 | 95 | 336562 | 47.71 | ppb | | 96 |
| 44) | 1,2-Diclpropane | 9.31 | 63 | 394761 | 45.53 | ppb | | 99 |
| 45) | Methyl Methacrylate | 9.57 | 69 | 290745 | 46.49 | ppb | | 93 |
| 46) | 1,4-Dioxane | 9.56 | 88 | 83095 | 890.82 | ppb | | 97 |
| 47) | Dibromomethane | 9.50 | 93 | 257933 | 45.66 | ppb | | 95 |
| 48) | Bromodichloromethane | 9.80 | 83 | 455257 | 47.21 | ppb | | 97 |
| 49) | 2-Nitropropane | 10.17 | 43 | 283478 | 88.51 | ppb | | 97 |
| 51) | cis-1,3-Dichloropropene | 10.58 | 75 | 572992 | 45.36 | ppb | | 99 |
| 53) | 4-Methyl-2-Pentanone | 10.86 | 43 | 523270 | 45.31 | ppb | | 100 |
| 54) | Toluene | 11.16 | 91 | 1201664 | 49.99 | ppb | | 99 |
| 55) | trans-1,3-Dichloropropene | 11.55 | 75 | 521827 | 48.16 | ppb | | 98 |
| 56) | Ethyl Methacrylate | 11.76 | 69 | 510019 | 48.28 | ppb | | 95 |
| 57) | 1,1,2-Trichloroethane | 11.87 | 83 | 271790 | 44.78 | ppb | | 98 |
| 60) | Tetrachloroethene | 12.13 | 166 | 265741 | 46.37 | ppb | | 97 |
| 61) | 2-Hexanone | 12.35 | 43 | 350436 | 44.84 | ppb | | 94 |
| 62) | 1,3-Dichloropropane | 12.16 | 76 | 578915 | 44.08 | ppb | | 90 |
| 63) | Dibromochloromethane | 12.57 | 129 | 328026 | 44.96 | ppb | | 97 |
| 64) | 1,2-Dibromoethane | 12.74 | 107 | 364026 | 46.36 | ppb | | 99 |
| 65) | Chlorobenzene | 13.67 | 112 | 751912 | 48.34 | ppb | | 98 |
| 66) | 1,1,1,2-Tetrachloroethane | 13.84 | 131 | 283934 | 48.66 | ppb | | 99 |
| 67) | Ethylbenzene | 13.89 | 91 | 1256715 | 51.65 | ppb | | 99 |
| 68) | (m+p)Xylene | 14.12 | 106 | 885944 | 102.59 | ppb | | 95 |
| 69) | o-Xylene | 14.85 | 106 | 430663 | 50.81 | ppb | | 97 |
| 70) | Styrene | 14.88 | 104 | 764180 | 50.04 | ppb | | 97 |
| 71) | Bromoform | 15.19 | 173 | 213471 | 44.38 | ppb | | 98 |
| 72) | Isopropylbenzene | 15.57 | 105 | 1083604 | 48.23 | ppb | | 100 |
| 73) | Cyclohexanone | 15.69 | 55 | 267826 | 336.67 | ppb | | 94 |
| 75) | 1,1,2,2-Tetrachloroethane | 16.12 | 83 | 420754 | 42.68 | ppb | | 96 |
| 76) | Trans-1,4-Dichloro-2-buten | 16.24 | 53 | 127339 | 42.28 | ppb | | 90 |
| 77) | 1,2,3-Trichloropropane | 16.19 | 110 | 123397 | 40.99 | ppb | | 99 |
| 78) | n-Propylbenzene | 16.35 | 91 | 1199624 | 48.78 | ppb | | 99 |
| 79) | Bromobenzene | 16.10 | 156 | 282247 | 45.71 | ppb | | 99 |
| 80) | 1,3,5-Trimethylbenzene | 16.70 | 105 | 730933 | 31.90 | ppb | # | 55 |
| 81) | 2-Chlorotoluene | 16.49 | 91 | 754509 | 47.82 | ppb | | 99 |
| 82) | 4-Chlorotoluene | 16.70 | 91 | 834984 | 46.97 | ppb | | 95 |
| 83) | tert-Butylbenzene | 17.32 | 119 | 614966 | 48.09 | ppb | | 97 |
| 84) | 1,2,4-Trimethylbenzene | 17.41 | 105 | 716951 | 48.66 | ppb | | 100 |
| 85) | sec-Butylbenzene | 17.75 | 105 | 893711 | 48.51 | ppb | | 99 |
| 86) | p-Isopropyltoluene | 17.32 | 119 | 614966 | 48.09 | ppb | | 98 |

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

Quantitation Report

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9526.D  Vial: 9
Acq On : 31 Jan 102 7:21 pm  Operator: droot
Sample : 527735 1.0 MSD  Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH  Multiplr: 1.00
Quant Time: Jan 31 19:48 19102

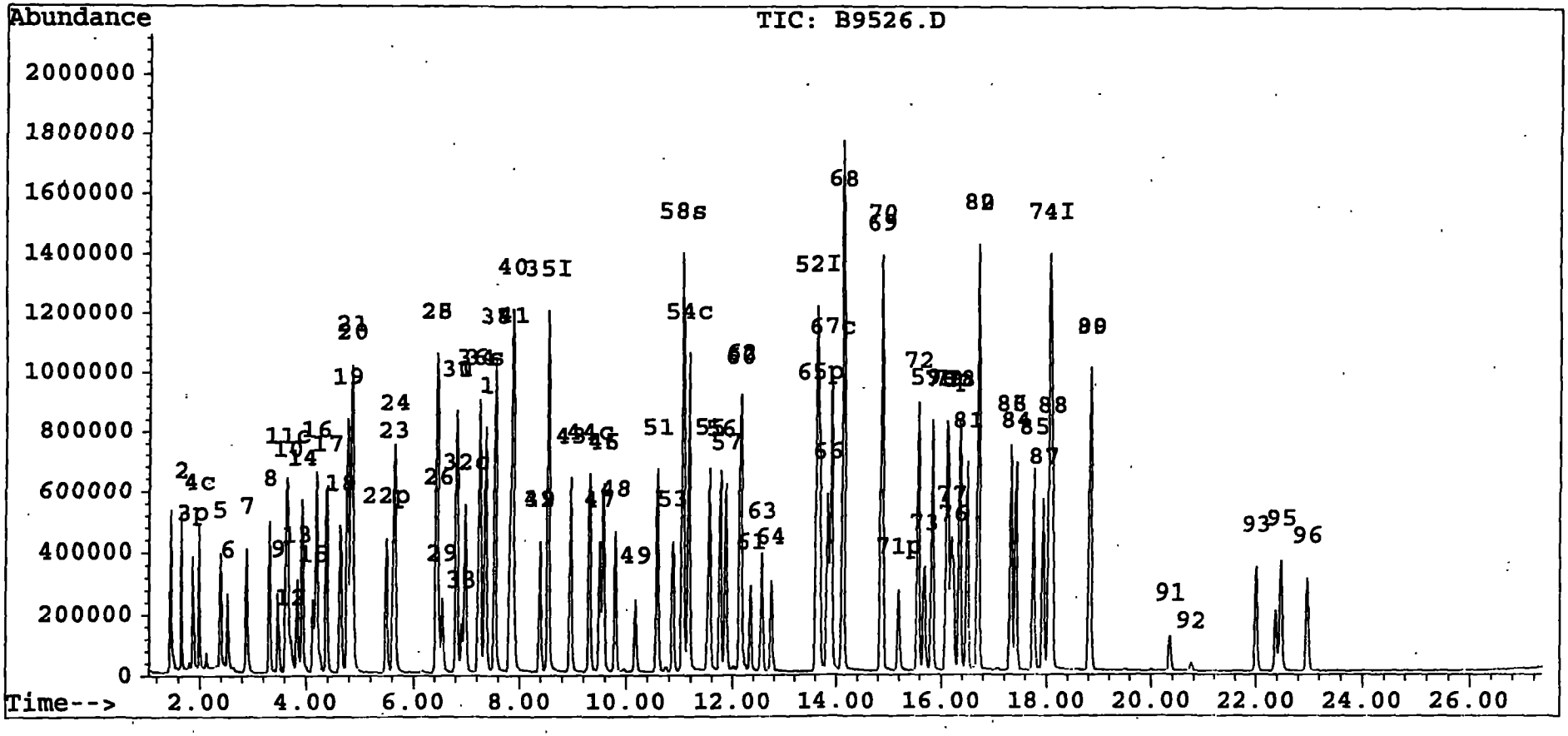
Method : J:\ACQUDATA\MSVOA3\METHODS\EXPi217.M
Title : 8260voa
Last Update : Fri Dec 21 08:54:03 2001
Response via : Multiple Level Calibration

| Compound | R.T. | QIon | Response | Conc | Unit | Qvalue |
|---|---|---|---|---|---|---|
| 87) 1,3-Dclbenz | 17.93 | 146 | 440350 | 51.39 | ppb | 98 |
| 88) 1,4-Dclbenz | 18.11 | 146 | 443113 | 46.59 | ppb | 98 |
| 89) n-Butylbenzene | 18.85 | 91 | 595118 | 48.33 | ppb | 98 |
| 90) 1,2-Dclbenz | 18.83 | 146 | 434746 | 47.66 | ppb | 98 |
| 91) 1,2-Dibromo-3-chloropropan | 20.35 | 157 | 64143 | 40.18 | ppb | 98 |
| 92) Nitrobenzene | 20.75 | 77 | 26173 | 32.63 | ppb | 91 |
| 93) 1,2,4-Tcbenzene | 22.01 | 180 | 227902 | 50.90 | ppb | 98 |
| 95) Naphthalen | 22.48 | 128 | 594836 | 48.08 | ppb | 98 |
| 96) 1,2,3-Tclbenzene | 22.97 | 180 | 205944 | 50.19 | ppb | 95 |

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

Data File : J:\ACQUDATA\MSVOA3\DATA\013102\B9526.D Vial: 9
Acq On : 31 Jan 102 7:21 pm Operator: droot
Sample : 527735 1.0 MSD Inst : 5971 - In
Misc : TTEM-KS R22-10457 8260B.TCLH Multiplr: 1.00
Quant Time: Jan 31 19:48 19102

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



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Tune (8:03 am) | | | B9507 | YT | | |
| 1 | CCU | | | B9508 | YC | | |
| 1 | Blk | | | B9509 | – | | |
| 2 | Met Blk | | | B9510 | Ym | | |
| 3 | LCS | | | B9511 | NL | | |
| 1 | LCS | | | B9512 | YQ | | |
| 2 | 527395 | 200.0 | XRX R22-10481 8260B.THR | B9513 | Y | not ab rep | pkg 1 |
| 3 | 399 | 200.0 | 10482 | B9514 | Y | | pkg 1 |
| 4 | 526074 | 300.0 | CRA4 R22-10412 8260B.TCH | B9515 | Y | | pkg 2+ |
| Front spec | 524753 | 100.0 | XRX R22-10313 8260B.MANU | B9516 | Y | + [illegible] | pkg 2 [illegible] |
| 1 | 526075 | 200.0 | CRA4 R22-10412 8260B.TCH | B9517 | Nr | 1/400 | pkg 2+ |
| 2 | 526735 | 1.0 | TTEM-KS R22-10457 8260B.TCH | B9518 | Y | | pkg 5 |
| 3 | 736 | 1.0 | | B9519 | Y | | |
| 4 | 738 | 1.0 | | B9520 | Y | | |
| 5 | 740 | 1.0 | | B9521 | Y | | |
| 6 | 741 | 1.0 | | B9522 | Y | | |
| 7 | 742 | 1.0 | | B9523 | Y | | |
| 8 | 526075 | 400.0 | CRA4 R22-10412 8260B.TCH | B9524 | Y | | pkg 2+ |
| 9 | 526735 ms | 1.0 | TTEM-KS R22-10457 8260B.TCH | B9525 | YQ | | pkg 5 |
| 9 | 735 msD | 1.0 | | B9526 | YQ | TBLOS 10 of 2 [illegible] | |
| 10 | Blk | | | B9527 | | | |
| 11 | Tune | | | B9528 | YT | | |
| 12 | Tune | | | B9529 | YT | | |
| 13 | CCU | | | B9530 | ~~YC~~ NC | | |
| 14 | CCU | | | B9531 | | ARCHON SPARED | |
| 15 | Blk | | | B9532 | | Possible low pressure | |
| 16 | Met Blk | | | B9533 | | | |
| 17 | LCS | | | B9534 | | | |
| 18 | 526967 | 1.0 | BLA2 R22-10464 8260B.TCH | B9535 | | | pkg 2 |
| 19 | 968 | 1.0 | | B9536 | | | |
| 20 | 969 | 1.0 | | B9537 | | | |
| 21 | 970 | 5.0 | | B9538 | | | |
| 22 | 971 | 1.0 | | B9539 | | | |
| 23 | 972 | 20.0 | | B9540 | | | |
| 24 | 973 | 10.0 | | B9541 | | | |
| 25 | 974 | 5.0 | | B9542 | | | |
| 26 | 975 | 10.0 | | B9543 | | | |
| 27 | 976 | 2.0 | | B9544 | | NOT Run | |
| 28 | 977 | 10.0 | | B9545 | | | |
| 29 | 978 | 5.0 | | B9546 | | | |

Swirr MSV6099A 5 ms → 5 ms – Comb for front Sparger
Swirr MSV6094A 8 ms → 50 ms Tune
1° Targ MSV6087A } 5 ms → 50 ms CCU
1° HSL MSV6087B
SS Targ MSV6088A } 2 ms → 50 ms LCS
SS HSL MSV6088B 4.25 ms → 43 ms 1200 ns/MSD

58

5035 Soils

Tunnian

2/5/02

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | Am Blk | | | B9617 | — | |
| 1 | Am Blk | | | B9618 | — | |
| 1 | Tuoc | 9:04am | | B9619 | YT | |
| 1 | CCO | | | B9620 | YC | |
| 1 | Blk | | | B9621 | — | |
| 2 | Met Blk | | | B9622 | — | [illegible] |
| 1 | Met Blk | | | B9623 | — | Charged [illegible] |
| 1 | Met Blk | | | B9624 | YM | [illegible] |
| 1 | LCS | | | B9625 | N | [illegible] |
| 1 | LCS | | | B9626 | YQ | [illegible] |
| 2 | 526725 | 0.79 | Tlem-KS R22-10487 82608-TL5 | B9627 | Y | |
| 3 | 726 | 0.68 | | B9628 | Y | |
| 4 | 729 | 0.86 | | B9629 | Y | |
| 5 | 730 | 0.90 | | B9630 | Y | |
| 6 | 527768 | 1.0 | Ecm R22-10511 82608-TL4 | B9631 | Y | |
| 7 | 526208 | 1.80 | Tlem-KS-10416 82608-TL5 | B9632 | Y | [illegible] |
| 8 | 210 | 0.85 | | B9633 | Y | 1st [illegible] |
| 9 | 211 | 1.44 | | B9634 | Y | [illegible] |
| 10 | 212 | 0.47 | | B9635 | Y | [illegible] |
| 11 | 527768 MS | 1.0 | Ecm R22-10511 82608-TL4 | B9636 | YQ | [illegible] |
| 12 | 768 MSD | 1.0 | | B9637 | YQ | [illegible] |

S 1°L MSW6095A Quad → 5 mile Tune

250

# METALS DATA

# METALS
## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Contract: R2210457 SDG No.: SG-5

L Code: Case No.: SAS No.:

SOW No.: SW846 CLP-M Client: Tetra Tech EM Inc.

| Sample No. | Lab Sample ID. |
|---|---|
| RINSATE-S8 | 526735 |
| SW BLANK | 526736 |
| GB-GGW-3 | 526738 |
| GB-GGW-5 | 526740 |
| OSEDS-GGW-1 | 526741 |
| SWD-GGW-1 | 526742 |

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: 2/28/02 Title: 2/28/02

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

GB-GGW-3

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Matrix (soil/water): WATER Lab Sample ID: 526738

Level (low/med): LOW Date Received: 01/25/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 50.2 | | | P |
| 7440-39-3 | Barium | 2560 | | | P |
| 7440-43-9 | Cadmium | 5.1 | | | P |
| 7440-47-3 | Chromium | 142 | | | P |
| 7439-92-1 | Lead | 82.9 | | E | P |
| 7439-96-5 | Manganese | 5240 | | | P |
| 7439-97-6 | Mercury | 0.06 | B | | CV |
| 7782-49-2 | Selenium | 7.6 | | | P |
| 7440-22-4 | Silver | 0.76 | U | | P |
| 7440-66-6 | Zinc | 445 | | | P |

or Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

# METALS
-1-
## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
GB-GGW-5

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Matrix (soil/water): WATER Lab Sample ID: 526740

Level (low/med): LOW Date Received: 01/25/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 13.6 | | | P |
| 7440-39-3 | Barium | 515 | | | P |
| 7440-43-9 | Cadmium | 2.3 | B | | P |
| 7440-47-3 | Chromium | 27.1 | | | P |
| 7439-92-1 | Lead | 23.3 | | E | P |
| 7439-96-5 | Manganese | 1340 | | | 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 | 82.6 | | | P |

or Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

OSEDS-GGW-1

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Matrix (soil/water): WATER Lab Sample ID: 526741

Level (low/med): LOW Date Received: 01/25/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 8.4 | B | | P |
| 7440-39-3 | Barium | 464 | | | P |
| 7440-43-9 | Cadmium | 2.1 | B | | P |
| 7440-47-3 | Chromium | 18.4 | | | P |
| 7439-92-1 | Lead | 9.3 | | E | P |
| 7439-96-5 | Manganese | 1570 | | | 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 | 71.4 | | | P |

Color Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

RINSATE-S8

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Matrix (soil/water): WATER Lab Sample ID: 526735

Level (low/med): LOW Date Received: 01/25/02

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 | 7.3 | U | | P |
| 7440-43-9 | Cadmium | 0.44 | U | | P |
| 7440-47-3 | Chromium | 1.2 | U | | P |
| 7439-92-1 | Lead | 0.82 | B | E | P |
| 7439-96-5 | Manganese | 1.3 | U | | P |
| 7439-97-6 | Mercury | 0.02 | U | | CV |
| 7782-49-2 | Selenium | 3.5 | U | | P |
| 7440-22-4 | Silver | 0.97 | B | | P |
| 7440-66-6 | Zinc | 11.3 | B | | P |

lor Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

# METALS
-1-
## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.: SW BLANK

Contract: R2210457

Lab Code: | Case No.: | SAS No.: | SDG NO.: SG-5

Matrix (soil/water): WATER | Lab Sample ID: 526736

Level (low/med): LOW | Date Received: 01/25/02

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 | 7.3 | U | | P |
| 7440-43-9 | Cadmium | 0.44 | U | | P |
| 7440-47-3 | Chromium | 1.2 | U | | P |
| 7439-92-1 | Lead | 0.82 | U | E | P |
| 7439-96-5 | Manganese | 1.3 | U | | P |
| 7439-97-6 | Mercury | 0.02 | U | | CV |
| 7782-49-2 | Selenium | 3.5 | U | | P |
| 7440-22-4 | Silver | 0.84 | B | | P |
| 7440-66-6 | Zinc | 4.4 | 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.

SWD-GGW-1

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Matrix (soil/water): WATER Lab Sample ID: 526742

Level (low/med): LOW Date Received: 01/25/02

Concentration Units (ug/L or mg/kg dry weight): µG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 31.6 | | | P |
| 7440-39-3 | Barium | 3840 | | | P |
| 7440-43-9 | Cadmium | 6.4 | | | P |
| 7440-47-3 | Chromium | 60.1 | | | P |
| 7439-92-1 | Lead | 59.4 | | E | P |
| 7439-96-5 | Manganese | 5070 | | | P |
| 7439-97-6 | Mercury | 0.04 | B | | CV |
| 7782-49-2 | Selenium | 5.4 | | | P |
| 7440-22-4 | Silver | 0.76 | U | | P |
| 7440-66-6 | Zinc | 221 | | | P |

or Before: BROWN Clarity Before: CLOUDY Texture:

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

257

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

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 | 1023.54 | 102.4 | 1000.0 | 1027.63 | 102.8 | 1029.71 | 103.0 | P |
| Barium | 10000.0 | 10452.82 | 104.5 | 10000.0 | 10452.77 | 104.5 | 10466.37 | 104.7 | P |
| Cadmium | 500.0 | 517.71 | 103.5 | 500.0 | 517.57 | 103.5 | 518.89 | 103.8 | P |
| Chromium | 500.0 | 513.91 | 102.8 | 500.0 | 515.14 | 103.0 | 516.02 | 103.2 | P |
| Lead | 500.0 | 513.88 | 102.8 | 500.0 | 514.98 | 103.0 | 516.47 | 103.3 | P |
| Manganese | 750.0 | 773.00 | 103.1 | 750.0 | 773.88 | 103.2 | 774.70 | 103.3 | P |
| Mercury | 3.0 | 3.03 | 101.0 | 3.0 | 3.06 | 102.0 | 2.99 | 99.7 | CV |
| Selenium | 500.0 | 502.22 | 100.4 | 500.0 | 505.44 | 101.1 | 503.47 | 100.7 | P |
| Silver | 500.0 | 505.77 | 101.2 | 500.0 | 506.95 | 101.4 | 509.06 | 101.8 | P |
| Zinc | 1000.0 | 1035.66 | 103.6 | 1000.0 | 1036.92 | 103.7 | 1038.44 | 103.8 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

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 | 1020.16 | 102.0 | 1036.16 | 103.6 | P |
| Barium | | | | 10000.0 | 10467.61 | 104.7 | 10556.14 | 105.6 | P |
| Cadmium | | | | 500.0 | 519.26 | 103.9 | 521.56 | 104.3 | P |
| Chromium | | | | 500.0 | 514.83 | 103.0 | 519.13 | 103.8 | P |
| Lead | | | | 500.0 | 517.01 | 103.4 | 518.63 | 103.7 | P |
| Manganese | | | | 750.0 | 769.49 | 102.6 | 776.89 | 103.6 | P |
| Mercury | | | | 3.0 | 3.00 | 100.0 | 2.98 | 99.3 | CV |
| Selenium | | | | 500.0 | 502.02 | 100.4 | 504.45 | 100.9 | P |
| Silver | | | | 500.0 | 507.59 | 101.5 | 509.03 | 101.8 | P |
| Zinc | | | | 1000.0 | 1037.07 | 103.7 | 1045.94 | 104.6 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

ntract: R2210457

b Code: Case No.: SAS No.: SDG NO.: SG-5

itial Calibration Source:

ntinuing 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 | 1043.45 | 104.3 | | | P |
| Barium | | | | 10000.0 | 10526.29 | 105.3 | | | P |
| Cadmium | | | | 500.0 | 520.51 | 104.1 | | | P |
| Chromium | | | | 500.0 | 520.88 | 104.2 | | | P |
| Lead | | | | 500.0 | 517.21 | 103.4 | | | P |
| Manganese | | | | 750.0 | 781.90 | 104.3 | | | P |
| Mercury | | | | 3.0 | 2.99 | 99.7 | 2.96 | 98.7 | CV |
| Selenium | | | | 500.0 | 507.11 | 101.4 | | | P |
| Silver | | | | 500.0 | 513.40 | 102.7 | | | P |
| Zinc | | | | 1000.0 | 1041.87 | 104.2 | | | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS
## -2B-
## CRDL STANDARD FOR AA AND ICP

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG No.: SG-5

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 | 19.39 | 96.9 | 21.38 | 106.9 |
| Barium | | | | | | | | |
| Cadmium | | | | 10.0 | 10.56 | 105.6 | 10.50 | 105.0 |
| Chromium | | | | 20.0 | 20.57 | 102.8 | 20.62 | 103.1 |
| Lead | | | | 6.0 | 7.00 | 116.7 | 6.26 | 104.3 |
| Manganese | | | | 30.0 | 32.00 | 106.7 | 32.28 | 107.6 |
| Mercury | 0.2 | 0.20 | 100.0 | | | | | |
| Selenium | | | | 10.0 | 13.46 | 134.6 | 11.44 | 114.4 |
| Silver | | | | 20.0 | 19.59 | 97.9 | 18.94 | 94.7 |
| Zinc | | | | 40.0 | 42.20 | 105.5 | 41.96 | 104.9 |

# METALS

-3-

## BLANKS

ontract: R2210457

ab Code: Case No.: SAS No.: SDG NO.: SG-5

reparation Blank Matrix (soil/water): WATER

reparation 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 | U | 0.02 | U | 0.016 | U | CV |
| Selenium | 3.5 | U | 3.5 | U | 3.5 | U | 3.7 | B | 3.460 | U | P |
| Silver | 0.8 | U | 0.9 | B | 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

ontract: R2210457

lab Code: Case No.: SAS No.: SDG NO.: SG-5

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 | | | | | P |
| Barium | | | 7.4 | U | 7.4 | U | | | | | P |
| Cadmium | | | 0.4 | U | 0.4 | U | | | | | P |
| Chromium | | | 1.2 | U | 1.2 | U | | | | | P |
| Lead | | | 0.8 | U | 0.8 | U | | | | | P |
| Manganese | | | 1.3 | U | 1.3 | U | | | | | P |
| Mercury | | | 0.02 | U | 0.02 | U | 0.02 | U | | | CV |
| Selenium | | | 3.5 | U | 3.5 | U | | | | | P |
| Silver | | | 0.8 | U | 0.9 | B | | | | | P |
| Zinc | | | 4.3 | U | 4.3 | U | | | | | P |

-4-

# ICP INTERFERENCE CHECK SAMPLE

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

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 | | | 2 | 1.8 | | 3 | 0.2 | |
| Barium | | 500 | -9 | 529.5 | 105.9 | -10 | 527.5 | 105.5 |
| Cadmium | | 1000 | 5 | 966.6 | 96.7 | 5 | 963.5 | 96.3 |
| Chromium | | 500 | 6 | 501.8 | 100.4 | 6 | 503.5 | 100.7 |
| Lead | | 1000 | -19 | 945.5 | 94.6 | -20 | 947.0 | 94.7 |
| Manganese | | 500 | 8 | 501.8 | 100.4 | 8 | 503.8 | 100.8 |
| Selenium | | | 6 | 5.1 | | 9 | 2.6 | |
| Silver | | 1000 | -11 | 1104.3 | 110.4 | -12 | 1108.8 | 110.9 |
| Zinc | | 1000 | 7 | 957.6 | 95.8 | 7 | 956.0 | 95.6 |

# METALS
## -7-
## LABORATORY CONTROL SAMPLE

Contract: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

Solid LCS Source:

Aqueous LCS Source: CPI

| Analyte | Aqueous (ug/L) True | Found | %R | Solid (mg/kg) True | Found | C | Limits | | %R |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 40.0 | 37.24 | 93.1 | | | | | | |
| Barium | 2000.0 | 2077.03 | 103.9 | | | | | | |
| Cadmium | 50.0 | 51.04 | 102.1 | | | | | | |
| Chromium | 200.0 | 198.89 | 99.4 | | | | | | |
| Lead | 500.0 | 514.72 | 102.9 | | | | | | |
| Manganese | 500.0 | 504.87 | 101.0 | | | | | | |
| Mercury | 1.0 | 1.00 | 100.0 | | | | | | |
| Selenium | 1010.0 | 943.35 | 93.4 | | | | | | |
| Silver | 50.0 | 49.34 | 98.7 | | | | | | |
| Zinc | 500.0 | 522.59 | 104.5 | | | | | | |

# METALS
-9-
## ICP SERIAL DILUTIONS

SAMPLE NO.

SWD-GGW-1L

ontract: R2210457

ab Code: Case No.: SAS No.: SDG NO.: SG-5

atrix (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 | 31.58 | | 23.56 | B | 25.4 | | P |
| Barium | 3842.54 | | 4010.48 | | 4.4 | | P |
| Cadmium | 6.41 | | 6.97 | B | 8.7 | | P |
| Chromium | 60.10 | | 63.72 | | 6.0 | | P |
| Lead | 59.40 | | 52.30 | | 12.0 | E | P |
| Manganese | 5073.49 | | 5384.98 | | 6.1 | | P |
| Selenium | 5.38 | | 20.84 | B | 287.4 | | P |
| Silver | 0.76 | U | 3.81 | U | | | P |
| Zinc | 221.47 | | 230.36 | | 4.0 | | P |

# METALS
## -10-
## INSTRUMENT DETECTION LIMITS (QUARTERLY)

ntract: R2210457

b Code: Case No.: SAS No.: SDG NO.: SG-5

P ID Number: Optima ICP 2 Date: 11/14/01

ame AA ID Number:

rnace 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 | | 20.0 | 4.3 | P |

Comments

# METALS

## -10-

## INSTRUMENT DETECTION LIMITS (QUARTERLY)

ontract: R2210457

ab Code: Case No.: SAS No.: SDG NO.: SG-5

CP ID Number: Date: 12/28/01

ame AA ID Number: PE FAA/CVAA

rnace 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: R2210457

Lab Code: Case No.: SAS No.: SDG NO.: SG-5

ID Number: Optima ICP 2 Date: 1/29/02

| 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 | -0.0142350 | 0.0000000 | 0.0000000 | 0.0321523 |
| 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

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## ICP LINEAR RANGES (QUARTERLY)

ontract: R2210457

ab Code: Case No.: SAS No.: SDG NO.: SG-5

CP 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

ntract: R2210457

ab Code: Case No.: SAS No.: SDG NO.: SG-5

ethod: P

| Sample No. | Preparation Date | Initial Volume | Volume (mL) |
|---|---|---|---|
| GB-GGW-3 | 02/01/02 | 50 | 50 |
| GB-GGW-5 | 02/01/02 | 50 | 50 |
| LCSW | 02/01/02 | 50 | 50 |
| OSEDS-GGW-1 | 02/01/02 | 50 | 50 |
| PBW | 02/01/02 | 50 | 50 |
| RINSATE-S8 | 02/01/02 | 50 | 50 |
| SW BLANK | 02/01/02 | 50 | 50 |
| SWD-GGW-1 | 02/01/02 | 50 | 50 |

# METALS
## -13-
## PREPARATION LOG

atract: R2210457

b Code: Case No.: SAS No.: SDG NO.: SG-5

thod: CV

| Sample No. | Preparation Date | Initial Volume | Volume (mL) |
|---|---|---|---|
| GB-GGW-3 | 02/13/02 | 100 | 100 |
| GB-GGW-5 | 02/13/02 | 100 | 100 |
| LCSW | 02/13/02 | 100 | 100 |
| OSEDS-GGW-1 | 02/13/02 | 100 | 100 |
| PBW | 02/13/02 | 100 | 100 |
| RINSATE-S8 | 02/13/02 | 100 | 100 |
| SW BLANK | 02/13/02 | 100 | 100 |
| SWD-GGW-1 | 02/13/02 | 100 | 100 |

# METALS

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## ANALYSIS RUN LOG

Contract: R2210457

Lab Code | Case No.: | SAS No.: | SDG No.: SG-5

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 2/11/02 | End Date: 2/11/02

| 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 | 10:27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calib Blank 1 | 1.00 | 10:29 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| Calib Std 1 | 1.00 | 10:35 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| HIGH CHECK | 1.00 | 10:40 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ICV1 | 1.00 | 10:45 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ICB1 | 1.00 | 10:50 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| CRDL1 | 1.00 | 10:55 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ICS-A1 | 1.00 | 11:01 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ICS-AB1 | 1.00 | 11:07 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| | 1.00 | 11:13 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| [illegible] | 1.00 | 11:18 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| PBW | 1.00 | 11:23 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| LCSW | 1.00 | 11:28 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ZZZZZZ | 1.00 | 11:33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 11:38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:43 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 12:09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV2 | 1.00 | 12:14 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| CCB2 | 1.00 | 12:19 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |
| ZZZZZZ | 1.00 | 12:24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 12:29 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 12:34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 12:40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 12:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 12:50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZ | 10.00 | 12:55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 10.00 | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV3 | 1.00 | 13:05 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form XIV

# METALS

## -14-

## ANALYSIS RUN LOG

ontract: R2210457

ab Code | Case No.: | SAS No.: | SDG No.: SG-5

nstrument ID Number: Optima ICP 2 | Method: P

tart Date: 2/11/02 | End Date: 2/11/02

| 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 |
| CCB3 | 1.00 | 13:10 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| ZZZZZZ | 1.00 | 13:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV4 | 1.00 | 13:33 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| CCB4 | 1.00 | 13:38 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| RINSATE-S8 | 1.00 | 13:43 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| SW BLANK | 1.00 | 13:48 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| GB-GGW-3 | 1.00 | 13:54 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| W-5 | 1.00 | 13:59 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| OSEDS-GGW-1 | 1.00 | 14:05 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| SWD-GGW-1 | 1.00 | 14:11 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| SWD-GGW-1L | 5.00 | 14:16 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| CRDL3 | 1.00 | 14:21 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| ICS-A3 | 1.00 | 14:27 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| ICS-AB3 | 1.00 | 14:33 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| CCV5 | 1.00 | 14:39 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | X | |
| CCB5 | 1.00 | 14:44 | | | | 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

ntract: R2210457

Lab Code | Case No.: | SAS No.: | SDG No.: SG-5

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 2/13/02 | End Date: 2/13/02

| 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 | 11:27 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 0.2ppb std | 1.00 | 11:29 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 0.5ppb std | 1.00 | 11:31 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1ppb std | 1.00 | 11:33 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 2ppb std | 1.00 | 11:34 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 5ppb std | 1.00 | 11:36 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 10ppb std | 1.00 | 11:38 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICV1 | 1.00 | 11:40 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICB1 | 1.00 | 11:42 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| C | 1.00 | 11:43 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV1 | 1.00 | 11:45 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB1 | 1.00 | 11:47 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:05 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV2 | 1.00 | 12:07 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB2 | 1.00 | 12:09 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZ | 1.00 | 12:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:23 | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

# METALS

-14-

## ANALYSIS RUN LOG

Contract: R2210457

Lab Code | Case No.: | SAS No.: | SDG No.: SG-5

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 2/13/02 | End Date: 2/13/02

| 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 | 12:25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:27 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV3 | 1.00 | 12:29 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| CCB3 | 1.00 | 12:31 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:34 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:36 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PBW | 1.00 | 12:38 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| LCSW | 1.00 | 12:40 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| ZZ | 1.00 | 12:41 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:45 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:47 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV4 | 1.00 | 12:50 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| CCB4 | 1.00 | 12:52 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:54 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:56 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:57 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 12:59 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:01 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:03 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:05 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RINSATE-88 | 1.00 | 13:06 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| SW BLANK | 1.00 | 13:08 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| GB-GGW-3 | 1.00 | 13:10 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| CCV5 | 1.00 | 13:12 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| CCB5 | 1.00 | 13:14 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| GB-GGW-5 | 1.00 | 13:15 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| EDS-GGW-1 | 1.00 | 13:17 | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:21 | | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14.

# METALS

## -14-

## ANALYSIS RUN LOG

Contract: R2210457

Lab Code | Case No.: | SAS No.: | SDG No.: SG-5

Instrument ID Number: PE FAA/CVAA | Method: CV

Start Date: 2/13/02 | End Date: 2/13/02

| 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 |
| SWD-GGW-1 | 1.00 | 13:22 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ZZZZZZ | 1.00 | 13:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV6 | 1.00 | 13:26 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB6 | 1.00 | 13:28 | | | | | | | | | | | | | | | | X | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

## letals Cover Page

Instrument: Optima 2

nalyst: SD

Date: 2/11/02

ata File: 2Feb11

Reviewed By: CK 2/11/02

ntered By: CK 2/13/02

Manager Approval: CK 2/13/02

| Starlims Run # | Analytes Used | Batch ID | Method Requested | Failed Analytes | Comments / Problems |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

CK 2/12/02

## Package Data:

| Client Sub. # | Type Of Package | Analytes Used | Failed Metals | Batch ID | Standards Attached | How Was Data Transferred To LIMS | Raw Data Copied |
|---|---|---|---|---|---|---|---|
| B-103166 | Pkg 5 / ASP | TAl wout K,Na | KNa | M2680004 | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |
| | Pkg 5 / ASP | | ↓ | ↓ | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |
| B-10405 | Pkg 5 / ASP | TAl wout K,Na | | | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |
| | Pkg 5 / ASP | | | | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |
| -10457 | Pkg 5 / ASP | AsPbSeAgBaCdCrMnZn | | ↓ | 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 |

.i' tion Summary
:l Method 6010B Date: 02/11/02 10:25:34 AM

| ement | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|

thod: Method 6010B IEC: 012902.iec MSF:
sults: 2feb11 Spectra Stored: Yes Method Stored: Yes
mple Info: 6010b User: User1 Date: 02/11/02 10:25:34 AM
thod Description: Optima 3000XL #2

an Data
: IS Init Seq. No.: 1 A/S Pos: 1
Data: Original Date: 02/11/02 10:27:08 AM

| ement | Mean Corr. Intensity | Std.Dev. | RSD |
|---|---|---|---|
| 371.030 | 4167870.7 | 13479.26 | 0.32% |

an Data
): Calib Blank 1 Seq. No.: 2 A/S Pos: 1
Data: Original Date: 02/11/02 10:28:43 AM

| lement | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| 371.030 | 4123222.3 | 22879.46 | 0.55% | 0.989 | mg/L |
| g 328.068 | -1741.7 | 43.45 | 2.50% | 0 | mg/L |
| l 308.215 | 4489.1 | 0.33 | 0.01% | 0 | mg/L |
| s 188.979 | -29.6 | 2.37 | 7.99% | 0 | mg/L |
| 249.773 | 1916.0 | 139.24 | 7.27% | 0 | mg/L |
| a 223.527 | 104.0 | 22.78 | 21.91% | 0 | mg/L |
| e .107 | -5482.7 | 30.29 | 0.55% | 0 | mg/L |
| a .887 | 2575.9 | 57.10 | 2.22% | 0 | mg/L |
| d 226.502 | -193.9 | 0.39 | 0.20% | 0 | mg/L |
| o 228.616 | -271.5 | 4.11 | 1.51% | 0 | mg/L |
| r 267.716 | -129.3 | 14.92 | 11.54% | 0 | mg/L |
| u 324.754 | 2312.7 | 13.51 | 0.58% | 0 | mg/L |
| e 238.863 | -577.5 | 3.46 | 0.60% | 0 | mg/L |
| 404.721 | -1409.6 | 36.59 | 2.60% | 0 | mg/L |
| g 279.079 | -849.6 | 37.92 | 4.46% | 0 | mg/L |
| n 257.610 | 226.0 | 29.95 | 13.25% | 0 | mg/L |
| o 202.030 | -4.3 | 5.09 | 117.50% | 0 | mg/L |
| a 330.237 | 1332.4 | 20.48 | 1.54% | 0 | mg/L |
| i 231.604 | -206.4 | 2.98 | 1.44% | 0 | mg/L |
| b 220.353 | 18.3 | 0.07 | 0.37% | 0 | mg/L |
| b 206.833 | 61.7 | 5.25 | 8.50% | 0 | mg/L |
| e 196.026 | -29.6 | 1.32 | 4.46% | 0 | mg/L |
| n 189.933 | 228.2 | 26.29 | 11.52% | 0 | mg/L |
| i 334.941 | -122.1 | 135.93 | 111.32% | 0 | mg/L |
| l 190.800 | -27.5 | 1.12 | 4.06% | 0 | mg/L |
| V 292.402 | 1387.0 | 37.01 | 2.67% | 0 | mg/L |
| n 206.191 | 27.0 | 8.38 | 31.00% | 0 | mg/L |

SJ 2/11/02

Mean Data
ID: Calib Std 1 Seq. No.: 3 A/S Pos: 2
Data: Original Date: 02/11/02 10:33:59 AM

| Element | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| Y 371.030 | 4096701.3 | 13304.33 | 0.32% | 0.983 | mg/L |
| Ag 328.068 | 183907.9 | 745.59 | 0.41% | 1.0000 | mg/L |
| Al 308.215 | 410812.1 | 2068.39 | 0.50% | 20.0000 | mg/L |
| As 188.979 | 4015.5 | 9.68 | 0.24% | 2.0000 | mg/L |
| F 9.773 | 419956.9 | 3371.98 | 0.80% | 5.0000 | mg/L |
| ) 3.527 | 2149955.7 | 43.65 | 0.00% | 20.0000 | mg/L |
| Be 313.107 | 3287533.4 | 1480.02 | 0.05% | 0.5000 | mg/L |
| Ca 315.887 | 8254437.3 | 1830.13 | 0.02% | 50.0000 | mg/L |
| Cd 226.502 | 112373.3 | 439.39 | 0.39% | 1.0000 | mg/L |
| Co 228.616 | 153016.1 | 661.70 | 0.43% | 5.0000 | mg/L |
| Cr 267.716 | 135513.1 | 593.58 | 0.44% | 1.0000 | mg/L |

| | | | | |
|---|---|---|---|---|
| 324.754 | 605884.4 | 3337.60 | 0.55% | 2.5000 mg/L |
| 2[illegible]63 | 260894.5 | 1185.05 | 0.45% | 10.0000 mg/L |
| 0 1 | 2678.8 | 28.31 | 1.06% | 50.0000 mg/L |
| 27[illegible].079 | 1250902.9 | 200.06 | 0.02% | 50.0000 mg/L |
| 257.610 | 754187.1 | 678.18 | 0.09% | 1.5000 mg/L |
| 202.030 | 80707.6 | 405.62 | 0.50% | 5.0000 mg/L |
| 330.237 | 39056.7 | 347.79 | 0.89% | 50.0000 mg/L |
| 231.604 | 167862.4 | 723.85 | 0.43% | 4.0000 mg/L |
| 220.353 | 5970.5 | 27.35 | 0.46% | 1.0000 mg/L |
| 206.833 | 24756.1 | 94.63 | 0.38% | 10.0000 mg/L |
| 196.026 | 3023.2 | 5.08 | 0.17% | 1.0000 mg/L |
| 189.933 | 103699.9 | 629.20 | 0.61% | 10.0000 mg/L |
| 334.941 | 2717347.1 | 152.43 | 0.01% | 5.0000 mg/L |
| 190.800 | 3560.8 | 13.65 | 0.38% | 2.0000 mg/L |
| [illegible]92.402 | 1215135.8 | 923.26 | 0.08% | 5.0000 mg/L |
| 206.191 | 167276.2 | 805.30 | 0.48% | 2.0000 mg/L |

libration Summary
thod: Method 6010B Date: 02/11/02 10:35:19 AM

| ement | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|
| 328.068 | 1 | Linear | -1741.7 | 185649.6 | 0.00000 | 1.000000 |
| 308.215 | 1 | Linear | 4489.1 | 20316.2 | 0.00000 | 1.000000 |
| 188.979 | 1 | Linear | -29.6 | 2022.6 | 0.00000 | 1.000000 |
| 249.773 | 1 | Linear | 1916.0 | 83608.2 | 0.00000 | 1.000000 |
| 233.527 | 1 | Linear | 104.0 | 107492.6 | 0.00000 | 1.000000 |
| 313.107 | 1 | Linear | -5482.7 | 6586032.2 | 0.00000 | 1.000000 |
| 315.887 | 1 | Linear | 2575.9 | 165037.2 | 0.00000 | 1.000000 |
| 226.502 | 1 | Linear | -193.9 | 112567.2 | 0.00000 | 1.000000 |
| 228.616 | 1 | Linear | -271.5 | 30657.5 | 0.00000 | 1.000000 |
| 267.716 | 1 | Linear | -129.3 | 135642.4 | 0.00000 | 1.000000 |
| [illegible].754 | 1 | Linear | 2312.7 | 241428.7 | 0.00000 | 1.000000 |
| 863 | 1 | Linear | -577.5 | 26147.2 | 0.00000 | 1.000000 |
| /21 | 1 | Linear | -1409.6 | 81.8 | 0.00000 | 1.000000 |
| 279.079 | 1 | Linear | -849.6 | 25035.0 | 0.00000 | 1.000000 |
| 257.610 | 1 | Linear | 226.0 | 502640.7 | 0.00000 | 1.000000 |
| 202.030 | 1 | Linear | -4.3 | 16142.4 | 0.00000 | 1.000000 |
| 330.237 | 1 | Linear | 1332.4 | 754.5 | 0.00000 | 1.000000 |
| 231.604 | 1 | Linear | -206.4 | 42017.2 | 0.00000 | 1.000000 |
| 220.353 | 1 | Linear | 18.3 | 5952.2 | 0.00000 | 1.000000 |
| 206.833 | 1 | Linear | 61.7 | 2469.4 | 0.00000 | 1.000000 |
| 196.026 | 1 | Linear | -29.6 | 3052.8 | 0.00000 | 1.000000 |
| 189.933 | 1 | Linear | 228.2 | 10347.2 | 0.00000 | 1.000000 |
| 334.941 | 1 | Linear | -122.1 | 543493.9 | 0.00000 | 1.000000 |
| 190.800 | 1 | Linear | -27.5 | 1794.2 | 0.00000 | 1.000000 |
| 292.402 | 1 | Linear | 1387.0 | 242749.8 | 0.00000 | 1.000000 |
| 206.191 | 1 | Linear | 27.0 | 83624.6 | 0.00000 | 1.000000 |

lean Data
D: HIGH CHECK Seq. No.: 4 Sample No.: 10 A/S Pos: 2
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 10:39:21 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4085105.0 | 0.980 | 0.0069 | mg/L | | | | 0.70% |
| Ag 328.068 | 184594.1 | 1.004 | 0.0083 | mg/L | | | | 0.83% |
| Al 308.215 | 412496.4 | 20.08 | 0.163 | mg/L | | | | 0.81% |
| As 188.979 | 4027.4 | 2.006 | 0.0209 | mg/L | | | | 1.04% |
| B 249.773 | 423131.4 | 5.038 | 0.0322 | mg/L | | | | 0.64% |
| Ba 233.527 | 2150726.3 | 20.01 | 0.016 | mg/L | | | | 0.08% |
| Be 313.107 | 3288919.5 | 0.5002 | 0.00084 | mg/L | | | | 0.17% |
| Ca 315.887 | 8255654.3 | 50.01 | 0.041 | mg/L | | | | 0.08% |
| Cd 226.502 | 113060.3 | 1.006 | 0.0078 | mg/L | | | | 0.78% |
| C[illegible]8.616 | 153604.0 | 5.019 | 0.0433 | mg/L | | | | 0.86% |
| C[illegible]7.716 | 136225.9 | 1.005 | 0.0096 | mg/L | | | | 0.95% |
| Cu [illegible]24.754 | 607951.2 | 2.509 | 0.0195 | mg/L | | | | 0.78% |
| Fe 238.863 | 262222.4 | 10.05 | 0.091 | mg/L | | | | 0.90% |
| K 404.721 | 2685.4 | 50.08 | 1.208 | mg/L | | | | 2.41% |
| Mg 279.079 | 1250947.0 | 50.00 | 0.012 | mg/L | | | | 0.02% |
| Mn 257.610 | 754880.9 | 1.501 | 0.0024 | mg/L | | | | 0.16% |

| | | | | | |
|---|---|---|---|---|---|
| )2 [illegible]9 | 81242.9 | 5.033 | 0.0333 | mg/L | 0.66% |
| 3( | 39213.5 | 50.21 | 0.428 | mg/L | 0.85% |
| 31.[illegible]4 | 168572.3 | 4.017 | 0.0326 | mg/L | 0.81% |
| 20.353 | 5974.3 | 1.001 | 0.0089 | mg/L | 0.89% |
| 06.833 | 24866.2 | 10.04 | 0.065 | mg/L | 0.65% |
| 96.026 | 3030.3 | 1.002 | 0.0062 | mg/L | 0.62% |
| 89.933 | 104292.8 | 10.06 | 0.087 | mg/L | 0.86% |
| 34.941 | 2720324.6 | 5.005 | 0.0079 | mg/L | 0.16% |
| 90.800 | 3563.6 | 2.002 | 0.0185 | mg/L | 0.93% |
| 92.402 | 1214669.9 | 4.998 | 0.0064 | mg/L | 0.13% |
| 06.191 | 168143.6 | 2.010 | 0.0173 | mg/L | 0.86% |

a Data ----------

ICV
ple Qty: 1.0000 g

Seq. No.: 5 Sample No.: 1 A/S Pos: 3
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 10:44:34 AM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 4135172.3 | 0.992 | 0.0037 | mg/L | | | | 0.37% |
| 328.068 | 92155.1 | 0.5058 | 0.00088 | mg/L | | | | 0.17% |
| 308.215 | 208615.2 | 10.05 | 0.004 | mg/L | | | | 0.04% |
| 188.979 | 2040.6 | 1.024 | 0.0012 | mg/L | | | | 0.12% |
| 49.773 | 213482.1 | 2.530 | 0.0126 | mg/L | | | | 0.50% |
| 233.527 | 1123704.2 | 10.45 | 0.002 | mg/L | | | | 0.02% |
| 313.107 | 1651186.4 | 0.2515 | 0.00018 | mg/L | | | | 0.07% |
| 315.887 | 4229100.0 | 25.61 | 0.002 | mg/L | | | | 0.01% |
| 226.502 | 58083.7 | 0.5177 | 0.00066 | mg/L | | | | 0.13% |
| 228.616 | 79079.0 | 2.588 | 0.0032 | mg/L | | | | 0.12% |
| 267.716 | 69579.0 | 0.5139 | 0.00028 | mg/L | | | | 0.06% |
| 324.754 | 308957.8 | 1.270 | 0.0010 | mg/L | | | | 0.08% |
| 238.863 | 134810.0 | 5.178 | 0.0000 | mg/L | | | | 0.00% |
| 404.721 | 483.3 | 23.15 | 0.391 | mg/L | | | | 1.69% |
| [illegible]79 | 632196.3 | 25.29 | 0.000 | mg/L | | | | 0.00% |
| [illegible]10 | 388765.3 | 0.7730 | 0.00033 | mg/L | | | | 0.04% |
| 202.030 | 40061.6 | 2.482 | 0.0007 | mg/L | | | | 0.03% |
| 330.237 | 19438.7 | 24.00 | 0.079 | mg/L | | | | 0.33% |
| 231.604 | 87847.8 | 2.096 | 0.0019 | mg/L | | | | 0.09% |
| 220.353 | 3077.0 | 0.5139 | 0.00046 | mg/L | | | | 0.09% |
| 206.833 | 12333.3 | 4.969 | 0.0032 | mg/L | | | | 0.06% |
| 196.026 | 1503.5 | 0.5022 | 0.00105 | mg/L | | | | 0.21% |
| 189.933 | 55073.0 | 5.300 | 0.0008 | mg/L | | | | 0.01% |
| 334.941 | 1350616.1 | 2.485 | 0.0021 | mg/L | | | | 0.08% |
| 190.800 | 1839.8 | 1.041 | 0.0022 | mg/L | | | | 0.21% |
| 292.402 | 613774.7 | 2.523 | 0.0004 | mg/L | | | | 0.01% |
| 206.191 | 86633.3 | 1.036 | 0.0002 | mg/L | | | | 0.02% |

ean Data ----------

D: ICB
ample Qty: 1.0000 g

Seq. No.: 6 Sample No.: 3 A/S Pos: 1
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 10:49:35 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4135701.6 | 0.992 | 0.0067 | mg/L | | | | 0.68% |
| g 328.068 | -1600.5 | 0.0008 | 0.00010 | mg/L | | | | 12.95% |
| l 308.215 | 4435.4 | -0.0026 | 0.00096 | mg/L | | | | 36.32% |
| s 188.979 | -31.7 | -0.0010 | 0.00060 | mg/L | | | | 57.38% |
| 249.773 | 2822.1 | 0.0108 | 0.00296 | mg/L | | | | 27.30% |
| a 233.527 | 203.3 | 0.0009 | 0.00069 | mg/L | | | | 74.63% |
| e 313.107 | -5233.3 | 0.0000 | 0.00003 | mg/L | | | | 75.30% |
| a 315.887 | 2881.5 | 0.0019 | 0.00210 | mg/L | | | | 113.47% |
| d 226.502 | -190.1 | 0.0000 | 0.00007 | mg/L | | | | 203.76% |
| o 228.616 | -257.9 | 0.0004 | 0.00011 | mg/L | | | | 23.73% |
| r 267.716 | -121.5 | 0.0001 | 0.00026 | mg/L | | | | 457.64% |
| [illegible]4.754 | 2737.0 | 0.0018 | 0.00045 | mg/L | | | | 25.53% |
| [illegible].863 | -575.9 | 0.0001 | 0.00094 | mg/L | | | | >999.9% |
| [illegible].721 | -1510.9 | -1.240 | 0.2762 | mg/L | | | | 22.28% |
| g 279.079 | -745.0 | 0.0042 | 0.00080 | mg/L | | | | 19.12% |
| n 257.610 | 198.2 | -0.0001 | 0.00006 | mg/L | | | | 107.81% |
| o 202.030 | 2.9 | 0.0005 | 0.00060 | mg/L | | | | 132.13% |
| a 330.237 | 1335.8 | 0.0046 | 0.04693 | mg/L | | | | >999.9% |
| i 231.604 | -198.5 | 0.0002 | 0.00016 | mg/L | | | | 85.88% |

| | | | | |
|---|---|---|---|---|
| 20 53 | 18.6 | 0.0000 | 0.00058 mg/L | >999.9% |
| 0 3 | 110.5 | 0.0198 | 0.00786 mg/L | 39.79% |
| exceeds upper limit for Sb 206.833 | | Action = Continue | | |
| 96.026 | -24.2 | 0.0018 | 0.00033 mg/L | 18.43% |
| 89.933 | 348.5 | 0.0116 | 0.00536 mg/L | 46.06% |
| 34.941 | 233.7 | 0.0007 | 0.00048 mg/L | 72.97% |
| 90.800 | -26.1 | 0.0008 | 0.00164 mg/L | 200.44% |
| 92.402 | 1483.1 | 0.0004 | 0.00051 mg/L | 129.28% |
| 06.191 | 40.7 | 0.0002 | 0.00016 mg/L | 97.34% |

n Data ----------
CRI
ple Qty: 1.0000 g
Seq. No.: 7 Sample No.: 5 A/S Pos: 6
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 10:54:39 AM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 4210964.8 | 1.010 | 0.0046 | mg/L | | | | 0.45% |
| 328.068 | 1894.8 | 0.0196 | 0.00024 | mg/L | | | | 1.20% |
| 308.215 | 4402.2 | -0.0043 | 0.00100 | mg/L | | | | 23.37% |
| 188.979 | 9.6 | 0.0194 | 0.00082 | mg/L | | | | 4.25% |
| 49.773 | 2012.8 | 0.0012 | 0.00090 | mg/L | | | | 77.43% |
| 233.527 | 77.8 | -0.0002 | 0.00006 | mg/L | | | | 24.01% |
| 313.107 | 60008.4 | 0.0099 | 0.00001 | mg/L | | | | 0.06% |
| 315.887 | 7038.4 | 0.0270 | 0.00128 | mg/L | | | | 4.72% |
| 226.502 | 994.6 | 0.0106 | 0.00006 | mg/L | | | | 0.56% |
| 228.616 | 3131.6 | 0.1110 | 0.00064 | mg/L | | | | 0.58% |
| 267.716 | 2660.8 | 0.0206 | 0.00035 | mg/L | | | | 1.70% |
| 324.754 | 14404.2 | 0.0501 | 0.00021 | mg/L | | | | 0.43% |
| 238.863 | -545.3 | 0.0012 | 0.00174 | mg/L | | | | 141.45% |
| 404.721 | -1504.1 | -1.155 | 0.0386 | mg/L | | | | 3.34% |
| 279.079 | -840.4 | 0.0004 | 0.00018 | mg/L | | | | 48.27% |
| 257.610 | 16309.7 | 0.0320 | 0.00008 | mg/L | | | | 0.25% |
| 030 | -15.7 | -0.0007 | 0.00013 | mg/L | | | | 18.22% |
| 237 | 1292.7 | -0.0526 | 0.01565 | mg/L | | | | 29.76% |
| 231.604 | 3461.3 | 0.0873 | 0.00037 | mg/L | | | | 0.43% |
| 220.353 | 60.0 | 0.0070 | 0.00024 | mg/L | | | | 3.38% |
| 206.833 | 364.4 | 0.1226 | 0.00110 | mg/L | | | | 0.89% |
| 196.026 | 11.5 | 0.0135 | 0.00375 | mg/L | | | | 27.88% |
| 189.933 | 207.0 | -0.0021 | 0.00156 | mg/L | | | | 76.29% |
| 334.941 | -338.9 | -0.0004 | 0.00005 | mg/L | | | | 12.29% |
| 190.800 | 12.5 | 0.0223 | 0.00105 | mg/L | | | | 4.69% |
| 292.402 | 25999.6 | 0.1014 | 0.00016 | mg/L | | | | 0.16% |
| 206.191 | 3555.7 | 0.0422 | 0.00025 | mg/L | | | | 0.58% |

ean Data ----------
D: ICSA
ample Qty: 1.0000 g
Seq. No.: 8 Sample No.: 6 A/S Pos: 7
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:00:16 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3850056.3 | 0.924 | 0.0067 | mg/L | | | | 0.72% |
| Ag 328.068 | -3789.7 | -0.0110 | 0.00011 | mg/L | | | | 1.03% |
| Al 308.215 | 10029638.4 | 493.5 | 1.52 | mg/L | | | | 0.31% |
| As 188.979 | -95.8 | 0.0018 | 0.00030 | mg/L | | | | 16.69% |
| B 249.773 | 13774.1 | 0.1418 | 0.00082 | mg/L | | | | 0.58% |
| Ba 233.527 | -875.0 | -0.0091 | 0.00015 | mg/L | | | | 1.65% |
| Be 313.107 | -6262.6 | -0.0001 | 0.00002 | mg/L | | | | 13.45% |
| Ca 315.887 | 75647968.3 | 458.4 | 1.39 | mg/L | | | | 0.30% |
| Cd 226.502 | 1566.7 | 0.0047 | 0.00010 | mg/L | | | | 2.16% |
| Co 228.616 | -291.1 | -0.0006 | 0.00038 | mg/L | | | | 59.40% |
| Cr 267.716 | 689.8 | 0.0060 | 0.00007 | mg/L | | | | 1.13% |
| Cu 324.754 | -379.9 | 0.0001 | 0.00020 | mg/L | | | | 134.77% |
| Fe 238.863 | 4826531.0 | 184.6 | 0.39 | mg/L | | | | 0.21% |
| K 4.721 | -3124.8 | 4.119 | 0.5993 | mg/L | | | | 14.55% |
| Mg 9.079 | 12427753.4 | 496.4 | 1.18 | mg/L | | | | 0.24% |
| Mn 257.610 | -3690.5 | 0.0081 | 0.00002 | mg/L | | | | 0.29% |
| Mo 202.030 | 20.6 | 0.0015 | 0.00007 | mg/L | | | | 4.77% |
| Na 330.237 | 1136.5 | -0.1034 | 0.00585 | mg/L | | | | 5.65% |
| Ni 231.604 | -210.0 | -0.0001 | 0.00030 | mg/L | | | | 350.09% |
| Pb 220.353 | -311.7 | -0.0189 | 0.00061 | mg/L | | | | 3.21% |
| Sb 206.833 | 52.8 | -0.0036 | 0.00260 | mg/L | | | | 72.30% |

| | | | | | |
|---|---|---|---|---|---|
| 196.026 | 16.2 | 0.0061 | 0.00015 | mg/L | 2.46% |
| ) 33 | 16752.4 | -0.3077 | 0.00941 | mg/L | 3.06% |
| : 41 | -3547.2 | -0.0063 | 0.00068 | mg/L | 10.84% |
| 190.800 | -62.6 | -0.0196 | 0.00079 | mg/L | 4.04% |
| 92.402 | 10010.6 | 0.0355 | 0.00059 | mg/L | 1.65% |
| 206.191 | 1696.6 | 0.0065 | 0.00013 | mg/L | 1.98% |

an Data ----------

: ICSAB Seq. No.: 9 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: 02/11/02 11:06:23 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3776221.5 | 0.906 | 0.0035 | mg/L | | | | 0.38% |
| 328.068 | 203277.3 | 1.104 | 0.0068 | mg/L | | | | 0.61% |
| 308.215 | 10240168.1 | 503.8 | 1.54 | mg/L | | | | 0.31% |
| 188.979 | -97.0 | 0.0018 | 0.00040 | mg/L | | | | 22.80% |
| 249.773 | 14031.7 | 0.1449 | 0.00064 | mg/L | | | | 0.44% |
| 233.527 | 57021.5 | 0.5295 | 0.00244 | mg/L | | | | 0.46% |
| 313.107 | 3273664.4 | 0.4979 | 0.00109 | mg/L | | | | 0.22% |
| 315.887 | 77218929.2 | 467.9 | 1.60 | mg/L | | | | 0.34% |
| 226.502 | 109866.2 | 0.9666 | 0.00754 | mg/L | | | | 0.78% |
| 228.616 | 13875.2 | 0.4614 | 0.00023 | mg/L | | | | 0.05% |
| 267.716 | 67935.6 | 0.5018 | 0.00276 | mg/L | | | | 0.55% |
| 324.754 | 130526.4 | 0.5426 | 0.00542 | mg/L | | | | 1.00% |
| 238.863 | 4908331.0 | 187.7 | 0.44 | mg/L | | | | 0.23% |
| 404.721 | -3227.1 | 3.293 | 0.0912 | mg/L | | | | 2.77% |
| 279.079 | 12686312.1 | 506.8 | 1.68 | mg/L | | | | 0.33% |
| 257.610 | 244305.5 | 0.5018 | 0.00263 | mg/L | | | | 0.52% |
| 202.030 | 20.1 | 0.0015 | 0.00013 | mg/L | | | | 8.68% |
| 330.237 | 1430.9 | 0.2873 | 0.06094 | mg/L | | | | 21.21% |
| 231.604 | 39529.2 | 0.9457 | 0.00474 | mg/L | | | | 0.50% |
| .353 | 5424.3 | 0.9455 | 0.00049 | mg/L | | | | 0.05% |
| 833 | 43.0 | -0.0076 | 0.00319 | mg/L | | | | 42.10% |
| .026 | 13.9 | 0.0051 | 0.00108 | mg/L | | | | 21.07% |
| 189.933 | 17030.2 | -0.3205 | 0.00235 | mg/L | | | | 0.73% |
| 334.941 | -3764.7 | -0.0067 | 0.00000 | mg/L | | | | 0.04% |
| 190.800 | -74.4 | -0.0261 | 0.00099 | mg/L | | | | 3.80% |
| 292.402 | 131257.3 | 0.5350 | 0.00302 | mg/L | | | | 0.56% |
| 206.191 | 81252.5 | 0.9576 | 0.00775 | mg/L | | | | 0.81% |

ean Data ----------

D: CCV Seq. No.: 10 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: 02/11/02 11:12:01 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4105803.2 | 0.985 | 0.0023 | mg/L | | | | 0.23% |
| g 328.068 | 92373.9 | 0.5070 | 0.00018 | mg/L | | | | 0.03% |
| l 308.215 | 210054.3 | 10.12 | 0.051 | mg/L | | | | 0.50% |
| s 188.979 | 2048.9 | 1.028 | 0.0065 | mg/L | | | | 0.63% |
| 3 249.773 | 211136.2 | 2.502 | 0.0136 | mg/L | | | | 0.54% |
| Ba 233.527 | 1123699.6 | 10.45 | 0.004 | mg/L | | | | 0.04% |
| Be 313.107 | 1651074.5 | 0.2515 | 0.00006 | mg/L | | | | 0.02% |
| Ca 315.887 | 4240507.3 | 25.68 | 0.029 | mg/L | | | | 0.11% |
| Cd 226.502 | 58066.9 | 0.5176 | 0.00087 | mg/L | | | | 0.17% |
| Co 228.616 | 79198.5 | 2.592 | 0.0024 | mg/L | | | | 0.09% |
| Cr 267.716 | 69746.0 | 0.5151 | 0.00086 | mg/L | | | | 0.17% |
| Cu 324.754 | 309160.7 | 1.271 | 0.0009 | mg/L | | | | 0.07% |
| Fe 238.863 | 135811.2 | 5.216 | 0.0188 | mg/L | | | | 0.36% |
| K 404.721 | 418.1 | 22.35 | 0.689 | mg/L | | | | 3.08% |
| *QC exceeds lower limit for K 404.721 | | Recovery = 89.41% | | Action = Continue | | | | |
| Mg 279.079 | 634300.8 | 25.37 | 0.022 | mg/L | | | | 0.09% |
| Mn 257.610 | 389207.7 | 0.7739 | 0.00049 | mg/L | | | | 0.06% |
| M 2.030 | 39967.1 | 2.476 | 0.0077 | mg/L | | | | 0.31% |
| N 0.237 | 19349.2 | 23.88 | 0.070 | mg/L | | | | 0.29% |
| Ni 231.604 | 87936.7 | 2.098 | 0.0014 | mg/L | | | | 0.07% |
| Pb 220.353 | 3083.6 | 0.5150 | 0.00321 | mg/L | | | | 0.62% |
| Sb 206.833 | 12326.9 | 4.967 | 0.0450 | mg/L | | | | 0.91% |
| Se 196.026 | 1513.4 | 0.5054 | 0.00518 | mg/L | | | | 1.03% |
| Sn 189.933 | 54662.7 | 5.261 | 0.0341 | mg/L | | | | 0.65% |

282A

| | | | | | |
|---|---|---|---|---|---|
| 334.941 | 1350482.0 | 2.485 | 0.0009 | mg/L | 0.04% |
| 19[illegible]900 | 1840.9 | 1.041 | 0.0047 | mg/L | 0.45% |
| 9 ? | 614242.6 | 2.525 | 0.0008 | mg/L | 0.03% |
| 2[illegible]91 | 86739.3 | 1.037 | 0.0019 | mg/L | 0.18% |

n Data ----------

CCB
mple Qty: 1.0000 g

Seq. No.: 11 Sample No.: 4
Prep. Vol.: 1.0 L
Data: Original

A/S Pos: 1
Dilution: 1.0: 1.0
Date: 02/11/02 11:17:02 AM

| ement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4124148.6 | 0.990 | 0.0023 | mg/L | | | | 0.23% |
| 328.068 | -1579.2 | 0.0009 | 0.00032 | mg/L | | | | 36.65% |
| 308.215 | 4483.4 | -0.0003 | 0.00388 | mg/L | | | | >999.9% |
| 188.979 | -27.3 | 0.0011 | 0.00252 | mg/L | | | | 227.63% |
| 249.773 | 2206.9 | 0.0035 | 0.00231 | mg/L | | | | 66.36% |
| 233.527 | 191.0 | 0.0008 | 0.00069 | mg/L | | | | 84.80% |
| 313.107 | -5215.6 | 0.0000 | 0.00001 | mg/L | | | | 35.35% |
| 315.887 | 3216.1 | 0.0039 | 0.00263 | mg/L | | | | 67.88% |
| 226.502 | -194.0 | 0.0000 | 0.00000 | mg/L | | | | 53.06% |
| 228.616 | -259.1 | 0.0004 | 0.00020 | mg/L | | | | 48.61% |
| 267.716 | -101.2 | 0.0002 | 0.00027 | mg/L | | | | 129.89% |
| 324.754 | 2607.7 | 0.0012 | 0.00051 | mg/L | | | | 41.97% |
| 238.863 | -493.4 | 0.0032 | 0.00129 | mg/L | | | | 40.12% |
| 404.721 | -1553.0 | -1.753 | 0.9241 | mg/L | | | | 52.70% |
| 279.079 | -699.5 | 0.0060 | 0.00285 | mg/L | | | | 47.53% |
| 257.610 | 88.1 | -0.0003 | 0.00005 | mg/L | | | | 19.70% |
| 202.030 | -1.7 | 0.0002 | 0.00038 | mg/L | | | | 227.51% |
| 330.237 | 1319.7 | -0.0168 | 0.07270 | mg/L | | | | 432.37% |
| 231.604 | -196.0 | 0.0002 | 0.00005 | mg/L | | | | 18.64% |
| 220.353 | 20.1 | 0.0003 | 0.00081 | mg/L | | | | 272.35% |
| 206.833 | 94.2 | 0.0132 | 0.00425 | mg/L | | | | 32.29% |
| QC exceeds upper limit for Sb 206.833 | | Action = Continue | | | | | | |
| 026 | -27.8 | 0.0006 | 0.00123 | mg/L | | | | 210.32% |
| ,933 | 251.3 | 0.0022 | 0.00375 | mg/L | | | | 168.50% |
| 334.941 | -38.3 | 0.0002 | 0.00038 | mg/L | | | | 244.45% |
| 190.800 | -26.9 | 0.0004 | 0.00074 | mg/L | | | | 200.54% |
| 292.402 | 1494.0 | 0.0004 | 0.00025 | mg/L | | | | 57.76% |
| 206.191 | 36.4 | 0.0001 | 0.00007 | mg/L | | | | 64.13% |

ean Data ----------

D: PBW-M2680004
ample Qty: 1.0000 mL

Seq. No.: 12 Sample No.: 1
Prep. Vol.: 50.0 mL
Data: Original

A/S Pos: 9
Dilution: 1.0: 1.0
Date: 02/11/02 11:22:03 AM

| lement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4267772.0 | 1.024 | 0.0006 | mg/L | | | | 0.06% |
| g 328.068 | -1639.1 | 0.0006 | 0.00001 | mg/L | | | | 1.86% |
| l 308.215 | 4406.2 | -0.0041 | 0.00241 | mg/L | | | | 59.14% |
| s 188.979 | -30.9 | -0.0006 | 0.00069 | mg/L | | | | 109.09% |
| 249.773 | 3177.3 | 0.0151 | 0.00053 | mg/L | | | | 3.53% |
| Ba 233.527 | 80.7 | -0.0002 | 0.00007 | mg/L | | | | 32.68% |
| Be 313.107 | -5302.5 | 0.0000 | 0.00001 | mg/L | | | | 35.39% |
| Ca 315.887 | 1778.1 | -0.0048 | 0.00173 | mg/L | | | | 35.87% |
| Cd 226.502 | -185.6 | 0.0001 | 0.00006 | mg/L | | | | 84.62% |
| Co 228.616 | -259.5 | 0.0004 | 0.00005 | mg/L | | | | 11.59% |
| Cr 267.716 | -75.0 | 0.0004 | 0.00020 | mg/L | | | | 48.91% |
| Cu 324.754 | 2551.9 | 0.0010 | 0.00011 | mg/L | | | | 10.65% |
| Fe 238.863 | -218.9 | 0.0137 | 0.00053 | mg/L | | | | 3.85% |
| K 404.721 | -1493.0 | -1.021 | 0.2500 | mg/L | | | | 24.50% |
| Mg 279.079 | -674.4 | 0.0070 | 0.00188 | mg/L | | | | 26.91% |
| Mn 257.610 | -47.8 | -0.0005 | 0.00001 | mg/L | | | | 2.43% |
| Mo 202.030 | -14.1 | -0.0006 | 0.00025 | mg/L | | | | 41.55% |
| Na 330.237 | 1503.2 | 0.2264 | 0.06176 | mg/L | | | | 27.28% |
| N 31.604 | -197.4 | 0.0002 | 0.00024 | mg/L | | | | 113.30% |
| 0.353 | 21.9 | 0.0006 | 0.00001 | mg/L | | | | 1.48% |
| Sb 206.833 | 54.7 | -0.0028 | 0.00098 | mg/L | | | | 34.50% |
| Se 196.026 | -19.1 | 0.0035 | 0.00104 | mg/L | | | | 30.15% |
| Sn 189.933 | 134.7 | -0.0090 | 0.00073 | mg/L | | | | 8.09% |
| Ti 334.941 | -300.1 | -0.0003 | 0.00014 | mg/L | | | | 42.84% |
| Tl 190.800 | -28.0 | -0.0003 | 0.00168 | mg/L | | | | 660.83% |

| | | | | | |
|---|---|---|---|---|---|
| :92.402 | 1343.4 | -0.0002 | 0.00021 | mg/L | 117.68% |
| 2 91 | 368.1 | 0.0041 | 0.00003 | mg/L | 0.71% |

n Data
: LCSW-M2680004 Seq. No.: 13 Sample No.: 2 A/S Pos: 10
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:27:09 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4233628.7 | 1.016 | 0.0029 | mg/L | | | | 0.28% |
| 328.068 | 7418.2 | 0.0493 | 0.00059 | mg/L | | | | 1.20% |
| 308.215 | 43836.7 | 1.937 | 0.0076 | mg/L | | | | 0.39% |
| 188.979 | 45.7 | 0.0372 | 0.00239 | mg/L | | | | 6.41% |
| 249.773 | 80929.1 | 0.9450 | 0.00176 | mg/L | | | | 0.19% |
| 233.527 | 223368.8 | 2.077 | 0.0123 | mg/L | | | | 0.59% |
| 313.107 | 313356.2 | 0.0484 | 0.00004 | mg/L | | | | 0.08% |
| 315.887 | 333062.1 | 2.002 | 0.0101 | mg/L | | | | 0.50% |
| 226.502 | 5551.4 | 0.0510 | 0.00022 | mg/L | | | | 0.44% |
| 228.616 | 15903.8 | 0.5276 | 0.00150 | mg/L | | | | 0.28% |
| 267.716 | 26848.2 | 0.1989 | 0.00086 | mg/L | | | | 0.43% |
| 324.754 | 64349.6 | 0.2570 | 0.00173 | mg/L | | | | 0.67% |
| 238.863 | 25994.3 | 1.016 | 0.0054 | mg/L | | | | 0.53% |
| 404.721 | 85.7 | 18.29 | 0.881 | mg/L | | | | 4.82% |
| 279.079 | 48320.0 | 1.964 | 0.0132 | mg/L | | | | 0.67% |
| 257.610 | 253993.5 | 0.5049 | 0.00074 | mg/L | | | | 0.15% |
| 202.030 | 7684.6 | 0.4763 | 0.00292 | mg/L | | | | 0.61% |
| 330.237 | 14898.8 | 17.98 | 0.097 | mg/L | | | | 0.54% |
| 231.604 | 21702.5 | 0.5214 | 0.00289 | mg/L | | | | 0.55% |
| 220.353 | 3082.0 | 0.5147 | 0.00349 | mg/L | | | | 0.68% |
| 206.833 | 1242.1 | 0.4780 | 0.00652 | mg/L | | | | 1.36% |
| 196.026 | 2850.2 | 0.9434 | 0.00375 | mg/L | | | | 0.40% |
| 189.933 | 796.9 | 0.0550 | 0.00020 | mg/L | | | | 0.37% |
| 334.941 | 266706.3 | 0.4910 | 0.00062 | mg/L | | | | 0.13% |
| 800 | 3584.0 | 2.013 | 0.0151 | mg/L | | | | 0.75% |
| 402 | 119539.1 | 0.4867 | 0.00189 | mg/L | | | | 0.39% |
| 206.191 | 43728.1 | 0.5226 | 0.00266 | mg/L | | | | 0.51% |

ean Data
D: 525553 Seq. No.: 14 Sample No.: 3 A/S Pos: 11
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:32:18 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4193910.5 | 1.006 | 0.0065 | mg/L | | | | 0.65% |
| g 328.068 | 56221.8 | 0.3122 | 0.00202 | mg/L | | | | 0.65% |
| l 308.215 | 15227.0 | 0.5285 | 0.01039 | mg/L | | | | 1.97% |
| s 188.979 | -41.8 | -0.0061 | 0.00013 | mg/L | | | | 2.20% |
| 249.773 | 11897.7 | 0.1194 | 0.00010 | mg/L | | | | 0.09% |
| a 233.527 | 16295.2 | 0.1506 | 0.00080 | mg/L | | | | 0.53% |
| e 313.107 | -5198.1 | 0.0000 | 0.00001 | mg/L | | | | 17.17% |
| a 315.887 | 14017543.8 | 84.92 | 0.087 | mg/L | | | | 0.10% |
| d 226.502 | 98.8 | 0.0026 | 0.00001 | mg/L | | | | 0.40% |
| o 228.616 | -78.8 | 0.0063 | 0.00015 | mg/L | | | | 2.40% |
| r 267.716 | 13098.6 | 0.0975 | 0.00071 | mg/L | | | | 0.73% |
| u 324.754 | 128977.3 | 0.5246 | 0.00424 | mg/L | | | | 0.81% |
| Fe 238.863 | 700298.6 | 26.81 | 0.194 | mg/L | | | | 0.72% |
| K 404.721 | -1356.0 | 4.299 | 0.4078 | mg/L | | | | 9.49% |
| Mg 279.079 | 474526.6 | 18.99 | 0.141 | mg/L | | | | 0.74% |
| Mn 257.610 | 78423.5 | 0.1556 | 0.00102 | mg/L | | | | 0.66% |
| Mo 202.030 | -6.1 | -0.0001 | 0.00002 | mg/L | | | | 17.77% |
| Na 330.237 | 148015.0 | 194.4 LR | 2.05 | mg/L | | | | 1.05% |
| Ni 231.604 | 5734.3 | 0.1414 | 0.00071 | mg/L | | | | 0.50% |
| Pb 220.353 | 899.9 | 0.1481 | 0.00047 | mg/L | | | | 0.32% |
| Sb 206.833 | 42.7 | -0.0077 | 0.00231 | mg/L | | | | 29.96% |
| S 6.026 | -17.8 | 0.0039 | 0.00019 | mg/L | | | | 4.82% |
| S 9.933 | 8603.5 | 0.8094 | 0.00655 | mg/L | | | | 0.81% |
| Ti 334.941 | 10466.5 | 0.0195 | 0.00018 | mg/L | | | | 0.91% |
| Tl 190.800 | -28.5 | -0.0005 | 0.00053 | mg/L | | | | 96.01% |
| V 292.402 | 3068.2 | 0.0069 | 0.00003 | mg/L | | | | 0.50% |
| Zn 206.191 | 27847.8 | 0.3327 | 0.00196 | mg/L | | | | 0.59% |

Data

Seq. No.: 15 Sample No.: 4 A/S Pos: 12
y: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:37:24 AM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 4261733.2 | 1.023 | 0.0001 | mg/L | | | | 0.01% |
| 328.068 | 10066.4 | 0.0636 | 0.00012 | mg/L | | | | 0.20% |
| 308.215 | 6611.1 | 0.1045 | 0.00289 | mg/L | | | | 2.77% |
| 188.979 | -32.9 | -0.0017 | 0.00256 | mg/L | | | | 154.79% |
| 49.773 | 3611.4 | 0.0203 | 0.00028 | mg/L | | | | 1.39% |
| 233.527 | 3394.1 | 0.0306 | 0.00010 | mg/L | | | | 0.31% |
| 313.107 | -5310.2 | 0.0000 | 0.00000 | mg/L | | | | 12.85% |
| 315.887 | 2892948.4 | 17.51 | 0.014 | mg/L | | | | 0.08% |
| 226.502 | -135.3 | 0.0005 | 0.00003 | mg/L | | | | 6.33% |
| 228.616 | -223.7 | 0.0016 | 0.00006 | mg/L | | | | 3.95% |
| 267.716 | 2558.5 | 0.0198 | 0.00029 | mg/L | | | | 1.48% |
| 324.754 | 27845.3 | 0.1058 | 0.00015 | mg/L | | | | 0.14% |
| 238.863 | 144796.8 | 5.560 | 0.0322 | mg/L | | | | 0.58% |
| 404.721 | -1486.4 | -0.9390 | 0.25607 | mg/L | | | | 27.27% |
| 279.079 | 97663.8 | 3.935 | 0.0213 | mg/L | | | | 0.54% |
| 257.610 | 15944.3 | 0.0313 | 0.00013 | mg/L | | | | 0.41% |
| 202.030 | -14.9 | -0.0007 | 0.00013 | mg/L | | | | 19.67% |
| 330.237 | 26979.1 | 33.99 | 0.245 | mg/L | | | | 0.72% |
| 231.604 | 1044.0 | 0.0298 | 0.00010 | mg/L | | | | 0.32% |
| 220.353 | 207.0 | 0.0317 | 0.00078 | mg/L | | | | 2.47% |
| 206.833 | 46.6 | -0.0061 | 0.00031 | mg/L | | | | 5.06% |
| 196.026 | -27.3 | 0.0008 | 0.00067 | mg/L | | | | 85.67% |
| 189.933 | 2072.1 | 0.1782 | 0.00008 | mg/L | | | | 0.04% |
| 334.941 | 1638.6 | 0.0032 | 0.00005 | mg/L | | | | 1.57% |
| 190.800 | -28.1 | -0.0003 | 0.00004 | mg/L | | | | 12.82% |
| 292.402 | 1581.9 | 0.0008 | 0.00005 | mg/L | | | | 6.03% |
| 206.191 | 5910.6 | 0.0704 | 0.00013 | mg/L | | | | 0.19% |

ata

): 525900 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: 02/11/02 11:42:30 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4193665.5 | 1.006 | 0.0080 | mg/L | | | | 0.80% |
| g 328.068 | -1461.7 | 0.0015 | 0.00015 | mg/L | | | | 9.94% |
| l 308.215 | 4825.4 | 0.0166 | 0.00155 | mg/L | | | | 9.37% |
| s 188.979 | -30.8 | -0.0006 | 0.00177 | mg/L | | | | 284.37% |
| 249.773 | 3999.2 | 0.0249 | 0.00016 | mg/L | | | | 0.64% |
| a 233.527 | 2144.2 | 0.0190 | 0.00026 | mg/L | | | | 1.36% |
| e 313.107 | -5368.5 | 0.0000 | 0.00001 | mg/L | | | | 31.08% |
| a 315.887 | 9800079.5 | 59.37 | 0.070 | mg/L | | | | 0.12% |
| d 226.502 | -179.5 | 0.0001 | 0.00005 | mg/L | | | | 39.31% |
| o 228.616 | -270.0 | 0.0000 | 0.00027 | mg/L | | | | 570.30% |
| r 267.716 | -32.7 | 0.0007 | 0.00020 | mg/L | | | | 28.16% |
| u 324.754 | 4924.1 | 0.0108 | 0.00020 | mg/L | | | | 1.85% |
| e 238.863 | 2825.0 | 0.1301 | 0.00076 | mg/L | | | | 0.58% |
| 404.721 | -991.9 | 5.108 | 0.5486 | mg/L | | | | 10.74% |
| g 279.079 | 76961.5 | 3.108 | 0.0504 | mg/L | | | | 1.62% |
| n 257.610 | 2092.5 | 0.0037 | 0.00003 | mg/L | | | | 0.79% |
| o 202.030 | -17.6 | -0.0008 | 0.00008 | mg/L | | | | 9.54% |
| a 330.237 | 6693.2 | 7.105 | 0.0436 | mg/L | | | | 0.61% |
| i 231.604 | -190.2 | 0.0004 | 0.00010 | mg/L | | | | 26.48% |
| Pb 220.353 | 30.3 | 0.0020 | 0.00052 | mg/L | | | | 25.81% |
| Sb 206.833 | 41.7 | -0.0081 | 0.00027 | mg/L | | | | 3.31% |
| Se 196.026 | -26.2 | 0.0011 | 0.00155 | mg/L | | | | 138.86% |
| Sn 189.933 | 1018.7 | 0.0764 | 0.00088 | mg/L | | | | 1.15% |
| Ti 334.941 | -60.3 | 0.0001 | 0.00000 | mg/L | | | | 0.80% |
| T 0.800 | -26.0 | 0.0008 | 0.00104 | mg/L | | | | 123.16% |
| V .402 | 1323.6 | -0.0003 | 0.00006 | mg/L | | | | 22.30% |
| Zn 206.191 | 100674.9 | 1.204 | 0.0160 | mg/L | | | | 1.33% |

Mean Data

ID: 525901 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: 02/11/02 11:47:36 AM

| me... | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4043759.4 | 0.970 | 0.0051 | mg/L | | | | 0.53% |
| 328.068 | -1666.7 | 0.0004 | 0.00009 | mg/L | | | | 21.46% |
| 308.215 | 4839.1 | 0.0172 | 0.00198 | mg/L | | | | 11.48% |
| 188.979 | -32.9 | -0.0017 | 0.00039 | mg/L | | | | 23.72% |
| 249.773 | 3653.1 | 0.0208 | 0.00023 | mg/L | | | | 1.12% |
| 233.527 | 2386.6 | 0.0212 | 0.00009 | mg/L | | | | 0.43% |
| 313.107 | -5608.1 | 0.0000 | 0.00001 | mg/L | | | | 72.79% |
| 315.887 | 6515792.1 | 39.47 | 0.033 | mg/L | | | | 0.08% |
| 226.502 | -191.9 | 0.0000 | 0.00001 | mg/L | | | | 42.37% |
| 228.616 | -272.4 | 0.0000 | 0.00011 | mg/L | | | | 377.60% |
| 267.716 | -102.7 | 0.0002 | 0.00010 | mg/L | | | | 53.43% |
| 324.754 | 4228.1 | 0.0079 | 0.00003 | mg/L | | | | 0.39% |
| 238.863 | -134.2 | 0.0170 | 0.00026 | mg/L | | | | 1.54% |
| 404.721 | -1073.4 | 4.112 | 1.6901 | mg/L | | | | 41.10% |
| 279.079 | 50300.0 | 2.043 | 0.0451 | mg/L | | | | 2.21% |
| 257.610 | -198.5 | -0.0008 | 0.00001 | mg/L | | | | 1.00% |
| 202.030 | -2.3 | 0.0001 | 0.00015 | mg/L | | | | 122.64% |
| 330.237 | 47026.3 | 60.56 LR | 1.244 | mg/L | | | | 2.05% |
| 231.604 | -192.0 | 0.0003 | 0.00004 | mg/L | | | | 12.62% |
| 220.353 | 32.3 | 0.0023 | 0.00013 | mg/L | | | | 5.58% |
| 206.833 | 40.4 | -0.0086 | 0.00010 | mg/L | | | | 1.13% |
| 196.026 | -26.7 | 0.0010 | 0.00186 | mg/L | | | | 192.07% |
| 189.933 | 637.5 | 0.0396 | 0.00038 | mg/L | | | | 0.97% |
| 334.941 | -664.1 | -0.0010 | 0.00003 | mg/L | | | | 3.35% |
| 190.800 | -28.0 | -0.0003 | 0.00172 | mg/L | | | | 613.25% |
| 292.402 | 1355.6 | -0.0001 | 0.00002 | mg/L | | | | 15.53% |
| 206.191 | 4052.4 | 0.0481 | 0.00028 | mg/L | | | | 0.58% |

an Data

): 525901D Seq. No.: 18 Sample No.: 7 A/S Pos: 15
Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:52:42 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4206511.3 | 1.009 | 0.0067 | mg/L | | | | 0.67% |
| g 328.068 | -1835.7 | -0.0005 | 0.00003 | mg/L | | | | 5.53% |
| l 308.215 | 4654.1 | 0.0081 | 0.00039 | mg/L | | | | 4.75% |
| s 188.979 | -29.8 | -0.0001 | 0.00098 | mg/L | | | | 814.80% |
| 249.773 | 3016.4 | 0.0132 | 0.00049 | mg/L | | | | 3.74% |
| a 233.527 | 2397.0 | 0.0213 | 0.00026 | mg/L | | | | 1.21% |
| e 313.107 | -5405.2 | 0.0000 | 0.00000 | mg/L | | | | 26.05% |
| a 315.887 | 6583742.9 | 39.88 | 0.059 | mg/L | | | | 0.15% |
| d 226.502 | -185.6 | 0.0001 | 0.00005 | mg/L | | | | 73.62% |
| o 228.616 | -257.5 | 0.0005 | 0.00001 | mg/L | | | | 2.28% |
| r 267.716 | -110.5 | 0.0001 | 0.00001 | mg/L | | | | 10.29% |
| u 324.754 | 3555.3 | 0.0051 | 0.00000 | mg/L | | | | 0.08% |
| e 238.863 | -88.8 | 0.0187 | 0.00024 | mg/L | | | | 1.31% |
| 404.721 | -1041.9 | 4.496 | 0.4119 | mg/L | | | | 9.16% |
| g 279.079 | 50565.4 | 2.054 | 0.0177 | mg/L | | | | 0.86% |
| n 257.610 | 28.7 | -0.0004 | 0.00002 | mg/L | | | | 3.97% |
| o 202.030 | -0.8 | 0.0002 | 0.00006 | mg/L | | | | 29.45% |
| a 330.237 | 47349.3 | 60.99 | 0.483 | mg/L | | | | 0.79% |
| i 231.604 | -179.9 | 0.0006 | 0.00020 | mg/L | | | | 32.37% |
| b 220.353 | 26.9 | 0.0014 | 0.00073 | mg/L | | | | 50.50% |
| b 206.833 | 39.8 | -0.0089 | 0.00164 | mg/L | | | | 18.44% |
| e 196.026 | -29.4 | 0.0001 | 0.00063 | mg/L | | | | 869.07% |
| n 189.933 | 656.3 | 0.0414 | 0.00078 | mg/L | | | | 1.89% |
| i 334.941 | -618.3 | -0.0009 | 0.00006 | mg/L | | | | 6.26% |
| l 190.800 | -26.9 | 0.0003 | 0.00084 | mg/L | | | | 242.70% |
| 292.402 | 1344.1 | -0.0002 | 0.00014 | mg/L | | | | 79.84% |
| n 206.191 | 4204.8 | 0.0500 | 0.00050 | mg/L | | | | 1.00% |

ata

D: 525901S Seq. No.: 19 Sample No.: 8 A/S Pos: 16
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 11:57:51 AM

| Mean Corr. | Mean | Calib | Mean | Sample |
|---|---|---|---|---|

| lement | Intensity | Conc. | Std.Dev. | Units | Conc. | Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4157233.9 | 0.997 | 0.0083 | mg/L | | | | 0.83% |
| g 328.068 | 7268.4 | 0.0485 | 0.00116 | mg/L | | | | 2.38% |
| l [illegible]8.215 | 44658.8 | 1.977 | 0.0366 | mg/L | | | | 1.85% |
| [illegible].979 | 43.5 | 0.0361 | 0.00094 | mg/L | | | | 2.59% |
| [illegible].773 | 84237.9 | 0.9846 | 0.01399 | mg/L | | | | 1.42% |
| a 233.527 | 221605.3 | 2.061 | 0.0331 | mg/L | | | | 1.60% |
| e 313.107 | 316841.5 | 0.0489 | 0.00002 | mg/L | | | | 0.03% |
| a 315.887 | 6782815.7 | 41.08 | 0.017 | mg/L | | | | 0.04% |
| d 226.502 | 5412.8 | 0.0498 | 0.00022 | mg/L | | | | 0.44% |
| o 228.616 | 15702.3 | 0.5210 | 0.00754 | mg/L | | | | 1.45% |
| r 267.716 | 27028.2 | 0.2002 | 0.00342 | mg/L | | | | 1.71% |
| u 324.754 | 65614.5 | 0.2622 | 0.00479 | mg/L | | | | 1.83% |
| e 238.863 | 26558.3 | 1.038 | 0.0183 | mg/L | | | | 1.76% |
| 404.721 | 672.0 | 25.46 | 0.038 | mg/L | | | | 0.15% |
| g 279.079 | 98416.6 | 3.965 | 0.0641 | mg/L | | | | 1.62% |
| n 257.610 | 255643.4 | 0.5082 | 0.00847 | mg/L | | | | 1.67% |
| o 202.030 | 7814.4 | 0.4844 | 0.00257 | mg/L | | | | 0.53% |
| a 330.237 | 62741.4 | 81.39 | 1.242 | mg/L | | | | 1.53% |
| i 231.604 | 21405.8 | 0.5144 | 0.00805 | mg/L | | | | 1.56% |
| b 220.353 | 3008.3 | 0.5023 | 0.00289 | mg/L | | | | 0.57% |
| b 206.833 | 1254.7 | 0.4831 | 0.00186 | mg/L | | | | 0.38% |
| e 196.026 | 2824.4 | 0.9349 | 0.00579 | mg/L | | | | 0.62% |
| n 189.933 | 1338.4 | 0.1073 | 0.00063 | mg/L | | | | 0.59% |
| i 334.941 | 264257.3 | 0.4864 | 0.00093 | mg/L | | | | 0.19% |
| l 190.800 | 3478.1 | 1.954 | 0.0102 | mg/L | | | | 0.52% |
| 292.402 | 121765.2 | 0.4959 | 0.00914 | mg/L | | | | 1.84% |
| n 206.191 | 46587.9 | 0.5568 | 0.00943 | mg/L | | | | 1.69% |

lean Data ----------

D: 525901A 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: 02/11/02 12:03:03 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| .030 | 4089127.3 | 0.981 | 0.0073 | mg/L | | | | 0.74% |
| 8.068 | 7436.6 | 0.0494 | 0.00035 | mg/L | | | | 0.71% |
| l 308.215 | 45514.2 | 2.019 | 0.0058 | mg/L | | | | 0.29% |
| s 188.979 | 45.6 | 0.0372 | 0.00143 | mg/L | | | | 3.84% |
| 249.773 | 90302.0 | 1.057 | 0.0006 | mg/L | | | | 0.05% |
| Ba 233.527 | 223044.6 | 2.074 | 0.0054 | mg/L | | | | 0.26% |
| Be 313.107 | 320128.0 | 0.0494 | 0.00002 | mg/L | | | | 0.03% |
| Ca 315.887 | 6735482.8 | 40.80 | 0.015 | mg/L | | | | 0.04% |
| Cd 226.502 | 5378.2 | 0.0495 | 0.00019 | mg/L | | | | 0.38% |
| Co 228.616 | 15847.9 | 0.5258 | 0.00219 | mg/L | | | | 0.42% |
| Cr 267.716 | 27172.2 | 0.2013 | 0.00019 | mg/L | | | | 0.09% |
| Cu 324.754 | 66974.2 | 0.2678 | 0.00118 | mg/L | | | | 0.44% |
| Fe 238.863 | 26795.2 | 1.047 | 0.0016 | mg/L | | | | 0.16% |
| K 404.721 | 625.9 | 24.89 | 1.550 | mg/L | | | | 6.23% |
| Mg 279.079 | 97933.9 | 3.946 | 0.0092 | mg/L | | | | 0.23% |
| Mn 257.610 | 255089.3 | 0.5070 | 0.00070 | mg/L | | | | 0.14% |
| Mo 202.030 | 7732.1 | 0.4793 | 0.00164 | mg/L | | | | 0.34% |
| Na 330.237 | 62295.3 | 80.80 | 0.300 | mg/L | | | | 0.37% |
| Ni 231.604 | 21600.0 | 0.5190 | 0.00005 | mg/L | | | | 0.01% |
| Pb 220.353 | 2999.1 | 0.5008 | 0.00192 | mg/L | | | | 0.38% |
| Sb 206.833 | 1250.9 | 0.4816 | 0.00316 | mg/L | | | | 0.66% |
| Se 196.026 | 3081.4 | 1.019 | 0.0002 | mg/L | | | | 0.02% |
| Sn 189.933 | 1299.7 | 0.1036 | 0.00006 | mg/L | | | | 0.06% |
| Ti 334.941 | 267739.1 | 0.4929 | 0.00034 | mg/L | | | | 0.07% |
| Tl 190.800 | 3483.0 | 1.957 | 0.0062 | mg/L | | | | 0.32% |
| V 292.402 | 122476.9 | 0.4988 | 0.00179 | mg/L | | | | 0.36% |
| Zn 206.191 | 47146.4 | 0.5635 | 0.00138 | mg/L | | | | 0.25% |

Mean Data ----------

ID: 525901L 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: 02/11/02 12:08:12 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4264556.4 | 1.023 | 0.0016 | mg/L | | | | 0.16% |
| Ag 328.068 | -1676.3 | 0.0004 | 0.00034 | mg/L | | | | 96.60% |

| | | | | | |
|---|---|---|---|---|---|
| Al 308.215 | 4382.5 | -0.0052 | 0.00171 | mg/L | 32.55% |
| As 188.979 | -30.9 | -0.0006 | 0.00006 | mg/L | 8.93% |
| B 249.773 | 1879.5 | -0.0004 | 0.00104 | mg/L | 238.59% |
| Ba 233.527 | 522.2 | 0.0039 | 0.00003 | mg/L | 0.88% |
| Be 313.107 | -5304.9 | 0.0000 | 0.00001 | mg/L | 51.52% |
| Ca 315.887 | 1270360.7 | 7.682 | 0.0096 | mg/L | 0.13% |
| Cd 226.502 | -189.3 | 0.0000 | 0.00002 | mg/L | 41.15% |
| Co 228.616 | -261.1 | 0.0003 | 0.00011 | mg/L | 32.71% |
| Cr 267.716 | -151.8 | -0.0002 | 0.00002 | mg/L | 14.31% |
| Cu 324.754 | 2695.4 | 0.0016 | 0.00002 | mg/L | 1.00% |
| Fe 238.863 | -633.9 | -0.0022 | 0.00013 | mg/L | 5.91% |
| K 404.721 | -1391.7 | 0.2186 | 0.46148 | mg/L | 211.07% |
| Mg 279.079 | 9054.0 | 0.3956 | 0.00310 | mg/L | 0.78% |
| Mn 257.610 | -364.2 | -0.0012 | 0.00002 | mg/L | 1.77% |
| Mo 202.030 | -10.2 | -0.0004 | 0.00015 | mg/L | 41.26% |
| Na 330.237 | 9182.2 | 10.40 | 0.103 | mg/L | 0.99% |
| Ni 231.604 | -195.8 | 0.0003 | 0.00000 | mg/L | 0.52% |
| Pb 220.353 | 23.0 | 0.0008 | 0.00022 | mg/L | 28.23% |
| Sb 206.833 | 45.7 | -0.0065 | 0.00150 | mg/L | 23.10% |
| Se 196.026 | -26.4 | 0.0010 | 0.00070 | mg/L | 66.49% |
| Sn 189.933 | 137.4 | -0.0088 | 0.00041 | mg/L | 4.73% |
| Ti 334.941 | -511.7 | -0.0007 | 0.00003 | mg/L | 3.77% |
| Tl 190.800 | -23.3 | 0.0024 | 0.00000 | mg/L | 0.15% |
| V 292.402 | 1336.5 | -0.0002 | 0.00023 | mg/L | 112.17% |
| Zn 206.191 | 823.6 | 0.0095 | 0.00001 | mg/L | 0.09% |

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: 02/11/02 12:13:26 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4126685.0 | 0.990 | 0.0047 | mg/L | | | | 0.47% |
| Ag 328.068 | 92764.6 | 0.5091 | 0.00064 | mg/L | | | | 0.13% |
| Al 308.215 | 210063.4 | 10.12 | 0.033 | mg/L | | | | 0.33% |
| As 188.979 | 2053.1 | 1.030 | 0.0066 | mg/L | | | | 0.64% |
| B 249.773 | 210114.3 | 2.490 | 0.0163 | mg/L | | | | 0.65% |
| Ba 233.527 | 1125160.6 | 10.47 | 0.012 | mg/L | | | | 0.11% |
| Be 313.107 | 1663569.4 | 0.2534 | 0.00026 | mg/L | | | | 0.10% |
| Ca 315.887 | 4196887.3 | 25.41 | 0.014 | mg/L | | | | 0.06% |
| Cd 226.502 | 58216.1 | 0.5189 | 0.00129 | mg/L | | | | 0.25% |
| Co 228.616 | 79614.2 | 2.606 | 0.0056 | mg/L | | | | 0.21% |
| Cr 267.716 | 69865.6 | 0.5160 | 0.00118 | mg/L | | | | 0.23% |
| Cu 324.754 | 311080.4 | 1.279 | 0.0025 | mg/L | | | | 0.20% |
| Fe 238.863 | 135101.1 | 5.189 | 0.0102 | mg/L | | | | 0.20% |
| K 404.721 | 465.8 | 22.94 | 0.402 | mg/L | | | | 1.75% |
| Mg 279.079 | 631803.4 | 25.27 | 0.064 | mg/L | | | | 0.25% |
| Mn 257.610 | 389621.0 | 0.7747 | 0.00174 | mg/L | | | | 0.22% |
| Mo 202.030 | 40137.0 | 2.487 | 0.0068 | mg/L | | | | 0.27% |
| Na 330.237 | 19590.8 | 24.20 | 0.125 | mg/L | | | | 0.52% |
| Ni 231.604 | 88196.0 | 2.104 | 0.0056 | mg/L | | | | 0.27% |
| Pb 220.353 | 3092.4 | 0.5165 | 0.00324 | mg/L | | | | 0.63% |
| Sb 206.833 | 12341.4 | 4.973 | 0.0482 | mg/L | | | | 0.97% |
| Se 196.026 | 1507.4 | 0.5035 | 0.00192 | mg/L | | | | 0.38% |
| Sn 189.933 | 55850.2 | 5.376 | 0.0309 | mg/L | | | | 0.58% |
| Ti 334.941 | 1353381.1 | 2.490 | 0.0027 | mg/L | | | | 0.11% |
| Tl 190.800 | 1849.0 | 1.046 | 0.0076 | mg/L | | | | 0.73% |
| V 292.402 | 615388.9 | 2.529 | 0.0003 | mg/L | | | | 0.01% |
| Zn 206.191 | 86866.2 | 1.038 | 0.0035 | mg/L | | | | 0.34% |

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: 02/11/02 12:18:31 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4115141.3 | 0.987 | 0.0028 | mg/L | | | | 0.28% |
| Ag 328.068 | -1760.4 | -0.0001 | 0.00006 | mg/L | | | | 58.23% |
| Al 308.215 | 4409.1 | -0.0039 | 0.00041 | mg/L | | | | 10.49% |
| As 188.979 | -24.5 | 0.0025 | 0.00086 | mg/L | | | | 34.27% |
| B 249.773 | 1979.6 | 0.0008 | 0.00218 | mg/L | | | | 285.95% |

| | | | | |
|---|---|---|---|---|
| a 233.527 | 208.8 | 0.0010 | 0.00064 mg/L | 65.48% |
| e 313.107 | -5203.5 | 0.0000 | 0.00001 mg/L | 33.41% |
| a [illegible].887 | 3081.2 | 0.0031 | 0.00233 mg/L | 76.10% |
| d 502 | -189.6 | 0.0000 | 0.00000 mg/L | 8.42% |
| o .616 | -255.3 | 0.0005 | 0.00019 mg/L | 36.71% |
| r 267.716 | -177.4 | -0.0004 | 0.00030 mg/L | 83.59% |
| u 324.754 | 2495.5 | 0.0008 | 0.00017 mg/L | 22.46% |
| e 238.863 | -592.6 | -0.0006 | 0.00076 mg/L | 130.75% |
| 404.721 | -1487.9 | -0.9575 | 0.70926 mg/L | 74.07% |
| g 279.079 | -786.0 | 0.0025 | 0.00012 mg/L | 4.76% |
| n 257.610 | 18.2 | -0.0004 | 0.00005 mg/L | 11.01% |
| o 202.030 | 0.6 | 0.0003 | 0.00044 mg/L | 145.52% |
| a 330.237 | 1370.5 | 0.0505 | 0.07354 mg/L | 145.52% |
| i 231.604 | -191.2 | 0.0004 | 0.00028 mg/L | 76.49% |
| b 220.353 | 19.3 | 0.0002 | 0.00040 mg/L | 245.42% |
| b 206.833 | 95.6 | 0.0137 | 0.00647 mg/L | 47.15% |
| QC exceeds upper limit for Sb 206.833 | | | Action = Continue | |
| e 196.026 | -23.0 | 0.0022 | 0.00082 mg/L | 37.58% |
| n 189.933 | 239.5 | 0.0011 | 0.00446 mg/L | 410.70% |
| i 334.941 | 23.0 | 0.0003 | 0.00056 mg/L | 211.05% |
| l 190.800 | -25.7 | 0.0010 | 0.00026 mg/L | 25.42% |
| 292.402 | 1454.4 | 0.0003 | 0.00018 mg/L | 64.76% |
| n 206.191 | 32.7 | 0.0001 | 0.00012 mg/L | 178.55% |

Mean Data ----------

ID: 526033 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: 02/11/02 12:23:36 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4131448.9 | 0.991 | 0.0057 | mg/L | | | | 0.58% |
| Ag 328.068 | -1593.2 | 0.0008 | 0.00026 | mg/L | | | | 32.98% |
| Al 308.215 | 4827.3 | 0.0166 | 0.00313 | mg/L | | | | 18.78% |
| As 188.979 | -30.8 | -0.0006 | 0.00003 | mg/L | | | | 4.32% |
| B .773 | 3472.5 | 0.0186 | 0.00078 | mg/L | | | | 4.18% |
| 3.527 | 2390.8 | 0.0213 | 0.00010 | mg/L | | | | 0.48% |
| Be 313.107 | -5518.2 | 0.0000 | 0.00000 | mg/L | | | | 87.86% |
| Ca 315.887 | 6481386.9 | 39.26 | 0.009 | mg/L | | | | 0.02% |
| Cd 226.502 | -185.0 | 0.0001 | 0.00003 | mg/L | | | | 41.53% |
| Co 228.616 | -264.9 | 0.0002 | 0.00034 | mg/L | | | | 158.34% |
| Cr 267.716 | -62.0 | 0.0005 | 0.00008 | mg/L | | | | 16.34% |
| Cu 324.754 | 3681.5 | 0.0057 | 0.00043 | mg/L | | | | 7.54% |
| Fe 238.863 | 24.0 | 0.0230 | 0.00076 | mg/L | | | | 3.32% |
| K 404.721 | -1137.0 | 3.334 | 0.2910 | mg/L | | | | 8.73% |
| Mg 279.079 | 49606.8 | 2.015 | 0.0043 | mg/L | | | | 0.21% |
| Mn 257.610 | -156.9 | -0.0008 | 0.00001 | mg/L | | | | 1.21% |
| Mo 202.030 | 1.0 | 0.0003 | 0.00009 | mg/L | | | | 28.68% |
| Na 330.237 | 46279.9 | 59.57 | 0.177 | mg/L | | | | 0.30% |
| Ni 231.604 | -198.4 | 0.0002 | 0.00021 | mg/L | | | | 107.53% |
| Pb 220.353 | 27.0 | 0.0015 | 0.00057 | mg/L | | | | 39.05% |
| Sb 206.833 | 53.0 | -0.0035 | 0.00008 | mg/L | | | | 2.36% |
| Se 196.026 | -27.4 | 0.0007 | 0.00142 | mg/L | | | | 196.32% |
| Sn 189.933 | 644.5 | 0.0402 | 0.00073 | mg/L | | | | 1.81% |
| Ti 334.941 | -515.3 | -0.0007 | 0.00011 | mg/L | | | | 14.76% |
| Tl 190.800 | -26.8 | 0.0004 | 0.00068 | mg/L | | | | 170.87% |
| V 292.402 | 1337.9 | -0.0002 | 0.00007 | mg/L | | | | 35.48% |
| Zn 206.191 | 4421.8 | 0.0526 | 0.00052 | mg/L | | | | 0.98% |

Mean Data ----------

ID: 526735 1/10 Seq. No.: 25 Sample No.: 12 A/S Pos: 20

Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0

Data: Original Date: 02/11/02 12:28:43 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4250067.5 | 1.020 | 0.0028 | mg/L | | | | 0.27% |
| 328.068 | -1680.5 | 0.0003 | 0.00020 | mg/L | | | | 59.99% |
| 108.215 | 4416.7 | -0.0036 | 0.00046 | mg/L | | | | 12.85% |
| 188.979 | -26.4 | 0.0016 | 0.00190 | mg/L | | | | 120.94% |
| B 249.773 | 1388.1 | -0.0063 | 0.00004 | mg/L | | | | 0.69% |
| Ba 233.527 | 43.3 | -0.0006 | 0.00007 | mg/L | | | | 12.11% |
| Be 313.107 | -5399.0 | 0.0000 | 0.00001 | mg/L | | | | 53.63% |

| | | | | | |
|---|---|---|---|---|---|
| a 315.887 | 3127.4 | 0.0033 | 0.00392 mg/L | | 117.24% |
| d 226.502 | -188.5 | 0.0000 | 0.00006 mg/L | | 128.02% |
| o .616 | -256.2 | 0.0005 | 0.00021 mg/L | | 41.79% |
| r .716 | -117.5 | 0.0001 | 0.00009 mg/L | | 108.64% |
| u 324.754 | 2323.6 | 0.0000 | 0.00005 mg/L | | 121.41% |
| e 238.863 | -590.3 | -0.0005 | 0.00033 mg/L | | 66.93% |
| 404.721 | -1471.5 | -0.7570 | 1.41050 mg/L | | 186.32% |
| lg 279.079 | -695.3 | 0.0062 | 0.00040 mg/L | | 6.57% |
| ln 257.610 | -390.9 | -0.0012 | 0.00001 mg/L | | 0.48% |
| lo 202.030 | -17.8 | -0.0008 | 0.00021 mg/L | | 24.54% |
| la 330.237 | 1233.4 | -0.1312 | 0.07333 mg/L | | 55.90% |
| li 231.604 | -92.0 | 0.0027 | 0.00004 mg/L | | 1.54% |
| pb 220.353 | 18.6 | 0.0001 | 0.00020 mg/L | | 389.88% |
| sb 206.833 | 42.0 | -0.0080 | 0.00135 mg/L | | 16.87% |
| se 196.026 | -24.8 | 0.0016 | 0.00034 mg/L | | 21.72% |
| sn 189.933 | 50.7 | -0.0172 | 0.00039 mg/L | | 2.26% |
| ti 334.941 | -469.0 | -0.0006 | 0.00010 mg/L | | 16.43% |
| tl 190.800 | -28.6 | -0.0006 | 0.00069 mg/L | | 118.96% |
| / 292.402 | 1302.9 | -0.0003 | 0.00003 mg/L | | 7.74% |
| zn 206.191 | 116.8 | 0.0011 | 0.00007 mg/L | | 6.48% |

Mean Data ----------

ID: 526736 1/10 Seq. No.: 26 Sample No.: 13 A/S Pos: 21
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:33:49 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4209979.6 | 1.010 | 0.0061 | mg/L | | | | 0.61% |
| Ag 328.068 | -1716.3 | 0.0001 | 0.00003 | mg/L | | | | 19.58% |
| Al 308.215 | 4424.2 | -0.0032 | 0.00475 | mg/L | | | | 148.88% |
| As 188.979 | -30.5 | -0.0004 | 0.00010 | mg/L | | | | 22.40% |
| B 249.773 | 1314.5 | -0.0072 | 0.00019 | mg/L | | | | 2.60% |
| Ba 233.527 | 46.0 | -0.0005 | 0.00005 | mg/L | | | | 9.52% |
| Be 313.107 | -5475.9 | 0.0000 | 0.00000 | mg/L | | | | 198.27% |
| 15.887 | 783.7 | -0.0109 | 0.00003 | mg/L | | | | 0.29% |
| c 26.502 | -197.8 | 0.0000 | 0.00001 | mg/L | | | | 19.77% |
| Co 228.616 | -263.2 | 0.0003 | 0.00013 | mg/L | | | | 49.25% |
| Cr 267.716 | -123.2 | 0.0000 | 0.00059 | mg/L | | | | >999.9% |
| Cu 324.754 | 2248.8 | -0.0003 | 0.00022 | mg/L | | | | 83.50% |
| Fe 238.863 | -734.8 | -0.0060 | 0.00050 | mg/L | | | | 8.24% |
| K 404.721 | -1500.6 | -1.113 | 0.3678 | mg/L | | | | 33.04% |
| Mg 279.079 | -808.5 | 0.0016 | 0.00313 | mg/L | | | | 190.73% |
| Mn 257.610 | -425.4 | -0.0013 | 0.00000 | mg/L | | | | 0.24% |
| Mo 202.030 | -19.1 | -0.0009 | 0.00014 | mg/L | | | | 15.75% |
| Na 330.237 | 1185.7 | -0.1944 | 0.01839 | mg/L | | | | 9.46% |
| Ni 231.604 | -196.4 | 0.0002 | 0.00006 | mg/L | | | | 25.71% |
| Pb 220.353 | 19.0 | 0.0001 | 0.00119 | mg/L | | | | 982.46% |
| Sb 206.833 | 39.9 | -0.0089 | 0.00196 | mg/L | | | | 22.10% |
| Se 196.026 | -23.4 | 0.0021 | 0.00096 | mg/L | | | | 46.96% |
| Sn 189.933 | 40.9 | -0.0181 | 0.00036 | mg/L | | | | 2.01% |
| Ti 334.941 | -515.7 | -0.0007 | 0.00005 | mg/L | | | | 7.25% |
| Tl 190.800 | -25.5 | 0.0011 | 0.00026 | mg/L | | | | 23.20% |
| V 292.402 | 1365.0 | -0.0001 | 0.00029 | mg/L | | | | 318.72% |
| Zn 206.191 | 66.1 | 0.0005 | 0.00011 | mg/L | | | | 23.74% |

Mean Data ----------

ID: 526738 1/10 Seq. No.: 27 Sample No.: 14 A/S Pos: 22
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:39:00 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4278107.5 | 1.026 | 0.0024 | mg/L | | | | 0.24% |
| Ag 328.068 | -1963.0 | -0.0012 | 0.00014 | mg/L | | | | 11.59% |
| Al 308.215 | 342687.8 | 16.65 | 0.186 | mg/L | | | | 1.12% |
| As 188.979 | -21.2 | 0.0041 | 0.00129 | mg/L | | | | 31.21% |
| 249.773 | 6035.6 | 0.0493 | 0.00089 | mg/L | | | | 1.81% |
| 233.527 | 30561.8 | 0.2833 | 0.00268 | mg/L | | | | 0.94% |
| Be 313.107 | -5888.3 | -0.0001 | 0.00001 | mg/L | | | | 13.46% |
| Ca 315.887 | 9141548.4 | 55.38 | 0.048 | mg/L | | | | 0.09% |
| Cd 226.502 | -41.7 | 0.0014 | 0.00005 | mg/L | | | | 3.39% |
| Co 228.616 | -34.5 | 0.0077 | 0.00004 | mg/L | | | | 0.49% |

| | | | | | |
|---|---|---|---|---|---|
| r 267.716 | 1967.5 | 0.0155 | 0.00007 mg/L | | 0.44% |
| u 324.754 | 4821.4 | 0.0104 | 0.00031 mg/L | | 2.95% |
| e 863 | 376897.8 | 14.44 | 0.147 mg/L | | 1.02% |
| /21 | -1336.9 | 0.8891 | 0.43118 mg/L | | 48.50% |
| g 279.079 | 231875.6 | 9.296 | 0.0908 mg/L | | 0.98% |
| n 257.610 | 295389.5 | 0.5872 | 0.00540 mg/L | | 0.92% |
| o 202.030 | 4.8 | 0.0006 | 0.00003 mg/L | | 5.00% |
| a 330.237 | 14043.8 | 16.85 | 0.133 mg/L | | 0.79% |
| i 231.604 | 191.4 | 0.0095 | 0.00004 mg/L | | 0.44% |
| b 220.353 | 67.0 | 0.0082 | 0.00007 mg/L | | 0.82% |
| b 206.833 | 34.4 | -0.0111 | 0.00148 mg/L | | 13.38% |
| e 196.026 | -24.2 | 0.0018 | 0.00031 mg/L | | 17.07% |
| n 189.933 | 2926.4 | 0.2608 | 0.00021 mg/L | | 0.08% |
| i 334.941 | 326961.8 | 0.6018 | 0.00684 mg/L | | 1.14% |
| l 190.800 | -41.2 | -0.0076 | 0.00031 mg/L | | 4.04% |
| 292.402 | 10162.5 | 0.0362 | 0.00014 mg/L | | 0.38% |
| n 206.191 | 4244.2 | 0.0504 | 0.00000 mg/L | | 0.01% |

lean Data

D: 526740 1/10 Seq. No.: 28 Sample No.: 15 A/S Pos: 23
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:44:11 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4306641.4 | 1.033 | 0.0018 | mg/L | | | | 0.17% |
| g 328.068 | -1836.3 | -0.0005 | 0.00035 | mg/L | | | | 68.11% |
| l 308.215 | 55198.5 | 2.496 | 0.0018 | mg/L | | | | 0.07% |
| s 188.979 | -26.5 | 0.0015 | 0.00153 | mg/L | | | | 98.62% |
| 249.773 | 4180.9 | 0.0271 | 0.00029 | mg/L | | | | 1.09% |
| a 233.527 | 5644.3 | 0.0515 | 0.00009 | mg/L | | | | 0.18% |
| e 313.107 | -5672.5 | 0.0000 | 0.00001 | mg/L | | | | 23.82% |
| a 315.887 | 2832384.3 | 17.15 | 0.014 | mg/L | | | | 0.08% |
| d 226.502 | -166.7 | 0.0002 | 0.00002 | mg/L | | | | 7.74% |
| 28.616 | -216.2 | 0.0018 | 0.00009 | mg/L | | | | 4.92% |
| 7.716 | 249.5 | 0.0028 | 0.00032 | mg/L | | | | 11.63% |
| 24.754 | 2624.0 | 0.0013 | 0.00006 | mg/L | | | | 4.28% |
| Fe 238.863 | 58141.8 | 2.246 | 0.0048 | mg/L | | | | 0.21% |
| K 404.721 | -1270.9 | 1.696 | 0.6482 | mg/L | | | | 38.21% |
| Mg 279.079 | 83390.0 | 3.365 | 0.0062 | mg/L | | | | 0.18% |
| Mn 257.610 | 68473.2 | 0.1358 | 0.00007 | mg/L | | | | 0.05% |
| Mo 202.030 | -6.9 | -0.0002 | 0.00002 | mg/L | | | | 15.83% |
| Na 330.237 | 13621.9 | 16.29 | 0.155 | mg/L | | | | 0.95% |
| Ni 231.604 | -127.4 | 0.0019 | 0.00016 | mg/L | | | | 8.57% |
| Pb 220.353 | 32.6 | 0.0024 | 0.00005 | mg/L | | | | 2.03% |
| Sb 206.833 | 35.4 | -0.0107 | 0.00114 | mg/L | | | | 10.71% |
| Se 196.026 | -24.3 | 0.0017 | 0.00355 | mg/L | | | | 204.32% |
| Sn 189.933 | 1176.0 | 0.0916 | 0.00077 | mg/L | | | | 0.84% |
| Ti 334.941 | 56540.9 | 0.1043 | 0.00008 | mg/L | | | | 0.08% |
| Tl 190.800 | -26.7 | 0.0004 | 0.00029 | mg/L | | | | 63.67% |
| V 292.402 | 3205.4 | 0.0075 | 0.00008 | mg/L | | | | 1.09% |
| Zn 206.191 | 742.5 | 0.0086 | 0.00011 | mg/L | | | | 1.30% |

Mean Data

ID: 526741 1/10 Seq. No.: 29 Sample No.: 16 A/S Pos: 24
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:49:17 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4316924.0 | 1.036 | 0.0013 | mg/L | | | | 0.12% |
| Ag 328.068 | -1828.1 | -0.0005 | 0.00002 | mg/L | | | | 4.07% |
| Al 308.215 | 44878.1 | 1.988 | 0.0115 | mg/L | | | | 0.58% |
| As 188.979 | -26.6 | 0.0015 | 0.00029 | mg/L | | | | 19.19% |
| B 249.773 | 2344.5 | 0.0051 | 0.00015 | mg/L | | | | 2.95% |
| Ba 233.527 | 5017.2 | 0.0457 | 0.00004 | mg/L | | | | 0.09% |
| e 313.107 | -5495.6 | 0.0000 | 0.00000 | mg/L | | | | 83.83% |
| 315.887 | 2548777.6 | 15.43 | 0.003 | mg/L | | | | 0.02% |
| 226.502 | -163.6 | 0.0003 | 0.00005 | mg/L | | | | 16.84% |
| Co 228.616 | -231.9 | 0.0013 | 0.00011 | mg/L | | | | 8.18% |
| Cr 267.716 | 83.9 | 0.0016 | 0.00020 | mg/L | | | | 12.95% |
| Cu 324.754 | 2402.8 | 0.0004 | 0.00010 | mg/L | | | | 27.28% |
| Fe 238.863 | 43799.2 | 1.697 | 0.0011 | mg/L | | | | 0.07% |

| | | | | | |
|---|---|---|---|---|---|
| 4 721 | -1311.1 | 1.204 | 1.4089 | mg/L | 117.00% |
| 079 | 67665.5 | 2.737 | 0.0017 | mg/L | 0.06% |
| 257.610 | 78789.1 | 0.1563 | 0.00020 | mg/L | 0.13% |
| 202.030 | -7.6 | -0.0002 | 0.00004 | mg/L | 17.89% |
| 330.237 | 9034.0 | 10.21 | 0.064 | mg/L | 0.62% |
| 231.604 | -146.8 | 0.0014 | 0.00019 | mg/L | 13.56% |
| 220.353 | 29.3 | 0.0019 | 0.00023 | mg/L | 12.15% |
| 206.833 | 38.6 | -0.0093 | 0.00088 | mg/L | 9.40% |
| 196.026 | -26.9 | 0.0009 | 0.00118 | mg/L | 132.79% |
| 189.933 | 977.2 | 0.0724 | 0.00043 | mg/L | 0.60% |
| 334.941 | 41887.3 | 0.0773 | 0.00009 | mg/L | 0.11% |
| 190.800 | -31.3 | -0.0021 | 0.00008 | mg/L | 3.79% |
| 292.402 | 2676.0 | 0.0053 | 0.00003 | mg/L | 0.55% |
| 206.191 | 648.1 | 0.0074 | 0.00002 | mg/L | 0.26% |

Mean Data

ID: 526742 1/10 Seq. No.: 30 Sample No.: 17 A/S Pos: 25
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:54:20 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4309236.7 | 1.034 | 0.0072 | mg/L | | | | 0.69% |
| Ag 328.068 | -1924.2 | -0.0010 | 0.00036 | mg/L | | | | 36.77% |
| Al 308.215 | 166042.3 | 7.952 | 0.0641 | mg/L | | | | 0.81% |
| As 188.979 | -23.3 | 0.0031 | 0.00322 | mg/L | | | | 102.80% |
| B 249.773 | 2889.8 | 0.0116 | 0.00010 | mg/L | | | | 0.86% |
| Ba 233.527 | 43770.2 | 0.4062 | 0.00366 | mg/L | | | | 0.90% |
| Be 313.107 | -6076.3 | -0.0001 | 0.00000 | mg/L | | | | 4.47% |
| Ca 315.887 | 6525318.2 | 39.52 | 0.004 | mg/L | | | | 0.01% |
| Cd 226.502 | -122.7 | 0.0006 | 0.00004 | mg/L | | | | 5.77% |
| Co 228.616 | -83.5 | 0.0061 | 0.00002 | mg/L | | | | 0.31% |
| Cr 267.716 | 731.4 | 0.0063 | 0.00004 | mg/L | | | | 0.59% |
| 324.754 | 3394.3 | 0.0045 | 0.00011 | mg/L | | | | 2.49% |
| 238.863 | 174298.4 | 6.688 | 0.0504 | mg/L | | | | 0.75% |
| K 404.721 | -1427.5 | -0.2189 | 1.02829 | mg/L | | | | 469.81% |
| Mg 279.079 | 125793.1 | 5.059 | 0.0398 | mg/L | | | | 0.79% |
| Mn 257.610 | 274598.2 | 0.5459 | 0.00030 | mg/L | | | | 0.05% |
| Mo 202.030 | -8.7 | -0.0003 | 0.00009 | mg/L | | | | 34.44% |
| Na 330.237 | 10641.5 | 12.34 | 0.156 | mg/L | | | | 1.26% |
| Ni 231.604 | -36.6 | 0.0040 | 0.00003 | mg/L | | | | 0.69% |
| Pb 220.353 | 57.0 | 0.0065 | 0.00014 | mg/L | | | | 2.14% |
| Sb 206.833 | 35.4 | -0.0107 | 0.00001 | mg/L | | | | 0.06% |
| Se 196.026 | -33.0 | -0.0011 | 0.00037 | mg/L | | | | 34.08% |
| Sn 189.933 | 1678.4 | 0.1402 | 0.00124 | mg/L | | | | 0.88% |
| Ti 334.941 | 170672.2 | 0.3143 | 0.00232 | mg/L | | | | 0.74% |
| Tl 190.800 | -39.7 | -0.0068 | 0.00084 | mg/L | | | | 12.43% |
| V 292.402 | 6128.4 | 0.0195 | 0.00013 | mg/L | | | | 0.68% |
| Zn 206.191 | 1995.9 | 0.0235 | 0.00001 | mg/L | | | | 0.06% |

Mean Data

ID: 526742L 1/10 Seq. No.: 31 Sample No.: 18 A/S Pos: 26
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 10.0
Data: Original Date: 02/11/02 12:59:23 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4340319.8 | 1.041 | 0.0043 | mg/L | | | | 0.41% |
| Ag 328.068 | -1798.2 | -0.0003 | 0.00006 | mg/L | | | | 20.27% |
| Al 308.215 | 36638.1 | 1.582 | 0.0006 | mg/L | | | | 0.04% |
| As 188.979 | -25.4 | 0.0021 | 0.00073 | mg/L | | | | 35.44% |
| B 249.773 | 1361.2 | -0.0066 | 0.00005 | mg/L | | | | 0.74% |
| Ba 233.527 | 8932.2 | 0.0821 | 0.00012 | mg/L | | | | 0.15% |
| Be 313.107 | -5546.4 | 0.0000 | 0.00001 | mg/L | | | | 94.05% |
| Ca 315.887 | 1327450.9 | 8.028 | 0.0005 | mg/L | | | | 0.01% |
| 226.502 | -177.2 | 0.0001 | 0.00011 | mg/L | | | | 75.56% |
| 228.616 | -218.9 | 0.0017 | 0.00016 | mg/L | | | | 9.19% |
| Cr 267.716 | -12.3 | 0.0009 | 0.00033 | mg/L | | | | 37.78% |
| Cu 324.754 | 2271.8 | -0.0002 | 0.00013 | mg/L | | | | 74.57% |
| Fe 238.863 | 35359.1 | 1.374 | 0.0039 | mg/L | | | | 0.28% |
| K 404.721 | -1550.6 | -1.724 | 0.9477 | mg/L | | | | 54.97% |
| Mg 279.079 | 25240.0 | 1.042 | 0.0010 | mg/L | | | | 0.09% |
| Mn 257.610 | 56023.2 | 0.1110 | 0.00022 | mg/L | | | | 0.19% |

| | | | | |
|---|---|---|---|---|
| 02.030 | -15.6 | -0.0007 | 0.00016 mg/L | 22.82% |
| 3[illegible] | 2951.6 | 2.146 | 0.0290 mg/L | 1.35% |
| 3[illegible] | -160.9 | 0.0011 | 0.00025 mg/L | 23.02% |
| 20.353 | 24.9 | 0.0011 | 0.00009 mg/L | 8.06% |
| 06.833 | 33.5 | -0.0114 | 0.00013 mg/L | 1.11% |
| 96.026 | -25.9 | 0.0012 | 0.00045 mg/L | 36.93% |
| 89.933 | 386.1 | 0.0153 | 0.00039 mg/L | 2.53% |
| 34.941 | 34206.1 | 0.0632 | 0.00015 mg/L | 0.24% |
| 90.800 | -30.8 | -0.0018 | 0.00064 mg/L | 34.89% |
| 92.402 | 2244.3 | 0.0035 | 0.00028 mg/L | 7.95% |
| 06.191 | 441.5 | 0.0050 | 0.00010 mg/L | 2.08% |

n Data ----------

CCV
ple Qty: 1.0000 g

Seq. No.: 32 Sample No.: 2 A/S Pos: 3
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:04:36 PM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 4144830.2 | 0.994 | 0.0107 | mg/L | | | | 1.07% |
| 328.068 | 92492.8 | 0.5076 | 0.00672 | mg/L | | | | 1.32% |
| 308.215 | 209994.4 | 10.12 | 0.141 | mg/L | | | | 1.40% |
| 188.979 | 2033.8 | 1.020 | 0.0148 | mg/L | | | | 1.45% |
| 49.773 | 209335.7 | 2.481 | 0.0259 | mg/L | | | | 1.05% |
| 233.527 | 1125294.1 | 10.47 | 0.011 | mg/L | | | | 0.11% |
| 313.107 | 1662711.6 | 0.2533 | 0.00022 | mg/L | | | | 0.09% |
| 315.887 | 4198878.6 | 25.43 | 0.013 | mg/L | | | | 0.05% |
| 226.502 | 58258.0 | 0.5193 | 0.00695 | mg/L | | | | 1.34% |
| 228.616 | 79048.3 | 2.587 | 0.0380 | mg/L | | | | 1.47% |
| 267.716 | 69703.4 | 0.5148 | 0.00864 | mg/L | | | | 1.68% |
| 324.754 | 310613.7 | 1.277 | 0.0122 | mg/L | | | | 0.95% |
| 238.863 | 134852.7 | 5.180 | 0.0816 | mg/L | | | | 1.58% |
| 404.721 | 420.4 | 22.38 | 0.981 | mg/L | | | | 4.38% |
| C [illegible]eds lower limit for K 404.721 | | Recovery = 89.52% | | Action = Continue | | | | |
| [illegible]79 | 631353.4 | 25.25 | 0.416 | mg/L | | | | 1.65% |
| 2[illegible].610 | 387004.0 | 0.7695 | 0.01239 | mg/L | | | | 1.61% |
| 202.030 | 40087.1 | 2.484 | 0.0329 | mg/L | | | | 1.33% |
| 330.237 | 19534.9 | 24.13 | 0.317 | mg/L | | | | 1.31% |
| 231.604 | 88129.8 | 2.102 | 0.0317 | mg/L | | | | 1.51% |
| [illegible] 220.353 | 3095.7 | 0.5170 | 0.00655 | mg/L | | | | 1.27% |
| [illegible] 206.833 | 12274.7 | 4.946 | 0.0488 | mg/L | | | | 0.99% |
| [illegible] 196.026 | 1502.9 | 0.5020 | 0.00315 | mg/L | | | | 0.63% |
| [illegible] 189.933 | 55718.6 | 5.363 | 0.0780 | mg/L | | | | 1.45% |
| [illegible] 334.941 | 1349392.3 | 2.483 | 0.0030 | mg/L | | | | 0.12% |
| [illegible] 190.800 | 1851.6 | 1.047 | 0.0128 | mg/L | | | | 1.22% |
| 292.402 | 613988.1 | 2.524 | 0.0032 | mg/L | | | | 0.13% |
| [illegible] 206.191 | 86752.0 | 1.037 | 0.0151 | mg/L | | | | 1.46% |

ean Data ----------

D: CCB
ample Qty: 1.0000 g

Seq. No.: 33 Sample No.: 4 A/S Pos: 1
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:09:42 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| [illegible] 371.030 | 4217537.0 | 1.012 | 0.0069 | mg/L | | | | 0.68% |
| [illegible]g 328.068 | -1744.1 | 0.0000 | 0.00023 | mg/L | | | | >999.9% |
| [illegible]l 308.215 | 4369.1 | -0.0059 | 0.00267 | mg/L | | | | 45.21% |
| [illegible]s 188.979 | -26.7 | 0.0014 | 0.00162 | mg/L | | | | 114.70% |
| [illegible] 249.773 | 1770.7 | -0.0017 | 0.00158 | mg/L | | | | 90.84% |
| Ba 233.527 | 191.5 | 0.0008 | 0.00055 | mg/L | | | | 68.11% |
| Be 313.107 | -5072.1 | 0.0001 | 0.00004 | mg/L | | | | 63.35% |
| Ca 315.887 | 4337.8 | 0.0107 | 0.00192 | mg/L | | | | 18.01% |
| Cd 226.502 | -193.7 | 0.0000 | 0.00004 | mg/L | | | | >999.9% |
| Co 228.616 | -250.8 | 0.0007 | 0.00043 | mg/L | | | | 64.32% |
| Cr [illegible]67.716 | -160.2 | -0.0002 | 0.00017 | mg/L | | | | 75.65% |
| C [illegible].754 | 2306.2 | 0.0000 | 0.00008 | mg/L | | | | 297.50% |
| Fe [illegible].863 | -609.2 | -0.0012 | 0.00098 | mg/L | | | | 80.27% |
| K 404.721 | -1398.6 | 0.1348 | 1.09935 | mg/L | | | | 815.70% |
| Mg 279.079 | -772.2 | 0.0031 | 0.00311 | mg/L | | | | 100.63% |
| Mn 257.610 | -35.6 | -0.0005 | 0.00005 | mg/L | | | | 9.89% |
| Mo 202.030 | -2.5 | 0.0001 | 0.00043 | mg/L | | | | 389.80% |
| Na 330.237 | 1412.4 | 0.1061 | 0.05216 | mg/L | | | | 49.16% |

| | | | | |
|---|---|---|---|---|
| 31 [illegible]4 | -207.1 | 0.0000 | 0.00033 mg/L | >999.9% |
| 2( | 19.2 | 0.0002 | 0.00061 mg/L | 387.87% |
| 06.[illegible]3 | 87.2 | 0.0103 | 0.00566 mg/L | 54.94% |
| exceeds upper limit for Sb 206.833 | | Action = Continue | | |
| 96.026 | -18.3 | 0.0037 | 0.00012 mg/L | 3.28% |
| 89.933 | 232.2 | 0.0004 | 0.00316 mg/L | 820.24% |
| 34.941 | -11.1 | 0.0002 | 0.00041 mg/L | 202.67% |
| 90.800 | -26.3 | 0.0007 | 0.00114 mg/L | 168.36% |
| 92.402 | 1451.8 | 0.0003 | 0.00008 mg/L | 31.59% |
| 06.191 | 40.0 | 0.0002 | 0.00013 mg/L | 83.15% |

a Data ----------

CRI
ple Qty: 1.0000 g

Seq. No.: 34 Sample No.: 5 A/S Pos: 6
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:14:46 PM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 3849892.8 | 0.924 | 0.0001 | mg/L | | | | 0.01% |
| 328.068 | 1715.9 | 0.0186 | 0.00033 | mg/L | | | | 1.77% |
| 308.215 | 5031.9 | 0.0267 | 0.00355 | mg/L | | | | 13.30% |
| 188.979 | 14.5 | 0.0218 | 0.00049 | mg/L | | | | 2.26% |
| 49.773 | 22319.2 | 0.2440 | 0.03768 | mg/L | | | | 15.44% |
| 233.527 | 34.7 | -0.0006 | 0.00001 | mg/L | | | | 1.93% |
| 313.107 | 61379.0 | 0.0102 | 0.00000 | mg/L | | | | 0.05% |
| 315.887 | 2946.5 | 0.0022 | 0.00024 | mg/L | | | | 10.78% |
| 226.502 | 1005.5 | 0.0107 | 0.00005 | mg/L | | | | 0.50% |
| 228.616 | 3210.3 | 0.1136 | 0.00113 | mg/L | | | | 0.99% |
| 267.716 | 2656.5 | 0.0205 | 0.00020 | mg/L | | | | 0.96% |
| 324.754 | 14792.9 | 0.0517 | 0.00015 | mg/L | | | | 0.28% |
| 238.863 | -942.1 | -0.0139 | 0.00054 | mg/L | | | | 3.86% |
| 404.721 | -1829.7 | -5.138 | 0.4375 | mg/L | | | | 8.52% |
| 279.079 | -1001.2 | -0.0061 | 0.00323 | mg/L | | | | 53.27% |
| [illegible]510 | 16137.5 | 0.0317 | 0.00007 | mg/L | | | | 0.23% |
| [illegible]030 | -7.4 | -0.0002 | 0.00008 | mg/L | | | | 39.58% |
| 330.237 | 1763.5 | 0.5714 | 0.01164 | mg/L | | | | 2.04% |
| 231.604 | 3632.1 | 0.0914 | 0.00081 | mg/L | | | | 0.89% |
| 220.353 | 58.7 | 0.0068 | 0.00078 | mg/L | | | | 11.52% |
| 206.833 | 371.2 | 0.1253 | 0.00062 | mg/L | | | | 0.49% |
| 196.026 | 2.1 | 0.0104 | 0.00137 | mg/L | | | | 13.14% |
| 189.933 | 202.6 | -0.0025 | 0.00304 | mg/L | | | | 122.87% |
| 334.941 | -578.2 | -0.0008 | 0.00000 | mg/L | | | | 0.02% |
| 190.800 | 11.9 | 0.0220 | 0.00053 | mg/L | | | | 2.43% |
| 292.402 | 26878.7 | 0.1050 | 0.00011 | mg/L | | | | 0.11% |
| 206.191 | 3822.4 | 0.0454 | 0.00033 | mg/L | | | | 0.72% |

ean Data ----------

D: ICSA
ample Qty: 1.0000 g

Seq. No.: 35 Sample No.: 6 A/S Pos: 7
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:20:23 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3547409.5 | 0.851 | 0.0004 | mg/L | | | | 0.05% |
| g 328.068 | -4134.7 | -0.0129 | 0.00022 | mg/L | | | | 1.69% |
| l 308.215 | 10399850.1 | 511.7 | 4.21 | mg/L | | | | 0.82% |
| s 188.979 | -94.7 | 0.0044 | 0.00292 | mg/L | | | | 66.82% |
| 249.773 | 56549.3 | 0.6534 | 0.00364 | mg/L | | | | 0.56% |
| a 233.527 | -944.7 | -0.0098 | 0.00005 | mg/L | | | | 0.53% |
| e 313.107 | -6943.1 | -0.0002 | 0.00002 | mg/L | | | | 7.30% |
| a 315.887 | 80243437.3 | 486.2 | 2.48 | mg/L | | | | 0.51% |
| d 226.502 | 1598.9 | 0.0044 | 0.00011 | mg/L | | | | 2.58% |
| o 228.616 | -332.4 | -0.0020 | 0.00017 | mg/L | | | | 8.69% |
| r 267.716 | 693.1 | 0.0061 | 0.00006 | mg/L | | | | 1.02% |
| u 324.754 | -620.0 | -0.0002 | 0.00035 | mg/L | | | | 197.95% |
| [illegible]8.863 | 5113217.3 | 195.6 | 0.42 | mg/L | | | | 0.21% |
| [illegible].721 | -3496.3 | 1.066 | 0.0718 | mg/L | | | | 6.73% |
| g [illegible]79.079 | 13384068.1 | 534.6 | 2.03 | mg/L | | | | 0.38% |
| n 257.610 | -4512.2 | 0.0075 | 0.00000 | mg/L | | | | 0.01% |
| o 202.030 | 29.7 | 0.0021 | 0.00011 | mg/L | | | | 5.40% |
| a 330.237 | 1410.8 | 0.2687 | 0.07338 | mg/L | | | | 27.31% |
| i 231.604 | -215.8 | -0.0002 | 0.00043 | mg/L | | | | 194.57% |
| b 220.353 | -346.2 | -0.0234 | 0.00228 | mg/L | | | | 9.74% |

| | | | | |
|---|---|---|---|---|
| )6 | 43.0 | -0.0076 | 0.00285 mg/L | 37.60% |
| 3( | 16.2 | 0.0051 | 0.00352 mg/L | 68.89% |
| 39.[illegible]3 | 18415.8 | -0.2935 | 0.00781 mg/L | 2.66% |
| 34.941 | -4108.6 | -0.0073 | 0.00010 mg/L | 1.41% |
| 90.800 | -67.2 | -0.0221 | 0.00038 mg/L | 1.73% |
| 2.402 | 10639.9 | 0.0381 | 0.00052 mg/L | 1.36% |
| 06.191 | 1861.8 | 0.0075 | 0.00025 mg/L | 3.35% |

. Data ----------

ICSAB Seq. No.: 36 Sample No.: 7 A/S Pos: 8
ıle Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:26:30 PM

| nent | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 3677667.0 | 0.882 | 0.0069 | mg/L | | | | 0.79% |
| 328.068 | 205768.6 | 1.118 | 0.0043 | mg/L | | | | 0.38% |
| 308.215 | 10383919.6 | 510.9 | 2.62 | mg/L | | | | 0.51% |
| 188.979 | -108.2 | -0.0030 | 0.00384 | mg/L | | | | 129.62% |
| 49.773 | 47193.2 | 0.5415 | 0.03249 | mg/L | | | | 6.00% |
| 233.527 | 58268.3 | 0.5411 | 0.00196 | mg/L | | | | 0.36% |
| 313.107 | 3320886.9 | 0.5051 | 0.00014 | mg/L | | | | 0.03% |
| 315.887 | 79044277.3 | 478.9 | 2.67 | mg/L | | | | 0.56% |
| 226.502 | 113554.6 | 0.9991 | 0.00300 | mg/L | | | | 0.30% |
| 228.616 | 14169.4 | 0.4710 | 0.00469 | mg/L | | | | 1.00% |
| 267.716 | 69514.4 | 0.5134 | 0.00212 | mg/L | | | | 0.41% |
| 324.754 | 133091.1 | 0.5534 | 0.00201 | mg/L | | | | 0.36% |
| 238.863 | 5017996.6 | 191.9 | 0.16 | mg/L | | | | 0.08% |
| 104.721 | -3235.6 | 3.759 | 0.1022 | mg/L | | | | 2.72% |
| 279.079 | 13060400.9 | 521.7 | 2.81 | mg/L | | | | 0.54% |
| 257.610 | 248648.9 | 0.5108 | 0.00315 | mg/L | | | | 0.62% |
| 202.030 | 24.1 | 0.0018 | 0.00004 | mg/L | | | | 2.36% |
| 330.237 | 1563.2 | 0.4654 | 0.06224 | mg/L | | | | 13.38% |
| [illegible]04 | 40658.0 | 0.9726 | 0.00539 | mg/L | | | | 0.55% |
| [illegible]53 | 5582.9 | 0.9727 | 0.00947 | mg/L | | | | 0.97% |
| 206.833 | 40.6 | -0.0086 | 0.00115 | mg/L | | | | 13.41% |
| 196.026 | 18.9 | 0.0064 | 0.00270 | mg/L | | | | 42.31% |
| 189.933 | 17680.1 | -0.3150 | 0.00243 | mg/L | | | | 0.77% |
| 334.941 | -3939.9 | -0.0070 | 0.00002 | mg/L | | | | 0.24% |
| 190.800 | -77.0 | -0.0276 | 0.00058 | mg/L | | | | 2.09% |
| 292.402 | 133721.9 | 0.5451 | 0.00231 | mg/L | | | | 0.42% |
| 206.191 | 84517.0 | 0.9962 | 0.00404 | mg/L | | | | 0.41% |

ean Data ----------

D: CCV Seq. No.: 37 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: 02/11/02 1:32:13 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4100521.2 | 0.984 | 0.0049 | mg/L | | | | 0.50% |
| g 328.068 | 92758.8 | 0.5090 | 0.00521 | mg/L | | | | 1.02% |
| l 308.215 | 212630.8 | 10.25 | 0.134 | mg/L | | | | 1.31% |
| s 188.979 | 2066.1 | 1.036 | 0.0006 | mg/L | | | | 0.06% |
| 249.773 | 233490.7 | 2.770 | 0.0318 | mg/L | | | | 1.15% |
| QC exceeds upper limit for B 249.773 | | Recovery = 110.79% | | Action = Continue | | | | |
| Ba 233.527 | 1134811.1 | 10.56 | 0.011 | mg/L | | | | 0.11% |
| Be 313.107 | 1672393.9 | 0.2548 | 0.00019 | mg/L | | | | 0.07% |
| Ca 315.887 | 4255883.8 | 25.77 | 0.057 | mg/L | | | | 0.22% |
| Cd 226.502 | 58516.4 | 0.5216 | 0.00492 | mg/L | | | | 0.94% |
| Co 228.616 | 79758.1 | 2.610 | 0.0298 | mg/L | | | | 1.14% |
| Cr 267.716 | 70286.6 | 0.5191 | 0.00554 | mg/L | | | | 1.07% |
| Cu 324.754 | 310481.1 | 1.276 | 0.0117 | mg/L | | | | 0.92% |
| Fe 238.863 | 136350.4 | 5.237 | 0.0675 | mg/L | | | | 1.29% |
| K 404.721 | 434.2 | 22.55 | 0.917 | mg/L | | | | 4.06% |
| M[illegible]9.079 | 639802.9 | 25.59 | 0.307 | mg/L | | | | 1.20% |
| M[illegible]7.610 | 390720.6 | 0.7769 | 0.00801 | mg/L | | | | 1.03% |
| Mo [illegible]02.030 | 40203.9 | 2.491 | 0.0139 | mg/L | | | | 0.56% |
| Na 330.237 | 19630.0 | 24.25 | 0.226 | mg/L | | | | 0.93% |
| Ni 231.604 | 88560.1 | 2.113 | 0.0194 | mg/L | | | | 0.92% |
| Pb 220.353 | 3105.3 | 0.5186 | 0.00023 | mg/L | | | | 0.04% |
| Sb 206.833 | 12352.0 | 4.977 | 0.0185 | mg/L | | | | 0.37% |
| Se 196.026 | 1510.3 | 0.5044 | 0.00183 | mg/L | | | | 0.36% |

| | | | | |
|---|---|---|---|---|
| 39 [illegible] | 56158.0 | 5.405 | 0.0444 mg/L | 0.82% |
| 3[illegible] | 1366886.6 | 2.515 | 0.0036 mg/L | 0.14% |
| 90.[illegible]0 | 1842.6 | 1.042 | 0.0027 mg/L | 0.25% |
| 2.402 | 621918.3 | 2.556 | 0.0047 mg/L | 0.18% |
| 06.191 | 87493.4 | 1.046 | 0.0113 mg/L | 1.08% |

Data ----------

CCB Seq. No.: 38 Sample No.: 4 A/S Pos: 1
:le Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:37:18 PM

| ıent | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 4243364.8 | 1.018 | 0.0025 | mg/L | | | | 0.25% |
| 328.068 | -1698.0 | 0.0002 | 0.00046 | mg/L | | | | 194.37% |
| 308.215 | 4345.3 | -0.0071 | 0.00017 | mg/L | | | | 2.40% |
| 188.979 | -28.7 | 0.0004 | 0.00013 | mg/L | | | | 30.31% |
| 49.773 | 24492.1 | 0.2700 | 0.01995 | mg/L | | | | 7.39% |
| exceeds upper limit for B 249.773 | | Action = Continue | | | | | | |
| 233.527 | 186.9 | 0.0008 | 0.00067 | mg/L | | | | 86.50% |
| 313.107 | -5071.0 | 0.0001 | 0.00002 | mg/L | | | | 27.16% |
| 315.887 | 4491.1 | 0.0116 | 0.00242 | mg/L | | | | 20.85% |
| 226.502 | -184.3 | 0.0001 | 0.00002 | mg/L | | | | 26.72% |
| 228.616 | -253.6 | 0.0006 | 0.00008 | mg/L | | | | 14.21% |
| 267.716 | -82.7 | 0.0003 | 0.00022 | mg/L | | | | 64.96% |
| 324.754 | 2427.7 | 0.0005 | 0.00035 | mg/L | | | | 73.34% |
| 238.863 | -449.4 | 0.0049 | 0.00087 | mg/L | | | | 17.83% |
| 104.721 | -1504.9 | -1.165 | 1.4075 | mg/L | | | | 120.79% |
| 279.079 | -719.4 | 0.0052 | 0.00220 | mg/L | | | | 42.23% |
| 257.610 | 39.2 | -0.0004 | 0.00007 | mg/L | | | | 20.01% |
| 202.030 | 0.3 | 0.0003 | 0.00039 | mg/L | | | | 136.90% |
| 330.237 | 1368.6 | 0.0481 | 0.06686 | mg/L | | | | 139.06% |
| 231.604 | -191.1 | 0.0004 | 0.00002 | mg/L | | | | 5.38% |
| [illegible]53 | 20.9 | 0.0004 | 0.00049 | mg/L | | | | 112.88% |
| [illegible]33 | 87.6 | 0.0105 | 0.00644 | mg/L | | | | 61.39% |
| C exceeds upper limit for Sb 206.833 | | Action = Continue | | | | | | |
| 196.026 | -25.2 | 0.0014 | 0.00395 | mg/L | | | | 275.63% |
| 189.933 | 325.3 | 0.0094 | 0.00331 | mg/L | | | | 35.33% |
| 334.941 | -27.7 | 0.0002 | 0.00024 | mg/L | | | | 137.11% |
| 190.800 | -25.4 | 0.0012 | 0.00004 | mg/L | | | | 3.22% |
| 292.402 | 1437.1 | 0.0002 | 0.00039 | mg/L | | | | 186.97% |
| 206.191 | 32.2 | 0.0001 | 0.00005 | mg/L | | | | 77.64% |

:an Data ----------

): 526735 Seq. No.: 39 Sample No.: 19 A/S Pos: 27
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:42:20 PM

| lement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4232929.0 | 1.016 | 0.0016 | mg/L | | | | 0.16% |
| g 328.068 | -1561.3 | 0.0010 | 0.00004 | mg/L | | | | 3.77% |
| l 308.215 | 4827.2 | 0.0166 | 0.00116 | mg/L | | | | 6.94% |
| s 188.979 | -31.1 | -0.0008 | 0.00098 | mg/L | | | | 129.29% |
| 249.773 | 17348.1 | 0.1846 | 0.01289 | mg/L | | | | 6.98% |
| la 233.527 | 140.4 | 0.0003 | 0.00004 | mg/L | | | | 10.73% |
| le 313.107 | -5265.0 | 0.0000 | 0.00000 | mg/L | | | | 1.82% |
| :a 315.887 | 37278.3 | 0.2103 | 0.00012 | mg/L | | | | 0.06% |
| :d 226.502 | -193.3 | 0.0000 | 0.00000 | mg/L | | | | 61.81% |
| :o 228.616 | -264.8 | 0.0002 | 0.00039 | mg/L | | | | 177.99% |
| :r 267.716 | -45.5 | 0.0006 | 0.00001 | mg/L | | | | 2.01% |
| :u 324.754 | 2712.7 | 0.0017 | 0.00004 | mg/L | | | | 2.39% |
| Fe 238.863 | 606.5 | 0.0453 | 0.00052 | mg/L | | | | 1.14% |
| K 404.721 | -1424.3 | -0.1797 | 0.87862 | mg/L | | | | 488.85% |
| Mg 279.079 | 608.2 | 0.0582 | 0.00200 | mg/L | | | | 3.44% |
| Mr [illegible]7.610 | 147.1 | -0.0002 | 0.00001 | mg/L | | | | 7.62% |
| [illegible] [illegible].030 | -12.5 | -0.0005 | 0.00009 | mg/L | | | | 18.26% |
| Na [illegible]0.237 | 1692.5 | 0.4773 | 0.08082 | mg/L | | | | 16.93% |
| Ni 231.604 | -185.4 | 0.0005 | 0.00015 | mg/L | | | | 30.72% |
| Pb 220.353 | 23.2 | 0.0008 | 0.00017 | mg/L | | | | 20.41% |
| Sb 206.833 | 53.0 | -0.0035 | 0.00201 | mg/L | | | | 57.04% |
| Se 196.026 | -25.2 | 0.0014 | 0.00167 | mg/L | | | | 115.49% |
| Sn 189.933 | 272.9 | 0.0043 | 0.00035 | mg/L | | | | 8.18% |

| | | | | | |
|---|---|---|---|---|---|
| 4 | 190.3 | 0.0006 | 0.00006 | mg/L | 10.17% |
| 0 | -30.1 | -0.0014 | 0.00091 | mg/L | 64.21% |
| [illegible] | 1292.6 | -0.0004 | 0.00017 | mg/L | 44.35% |
| 6.191 | 974.2 | 0.0113 | 0.00002 | mg/L | 0.15% |

Data ----------

526736 Seq. No.: 40 Sample No.: 20 A/S Pos: 28
le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:47:22 PM

| ent | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 1.030 | 4263001.3 | 1.023 | 0.0061 | mg/L | | | | 0.60% |
| 28.068 | -1585.4 | 0.0008 | 0.00001 | mg/L | | | | 0.98% |
| 08.215 | 4432.8 | -0.0028 | 0.00336 | mg/L | | | | 121.05% |
| 88.979 | -33.3 | -0.0018 | 0.00199 | mg/L | | | | 107.62% |
| 9.773 | 11165.2 | 0.1106 | 0.00776 | mg/L | | | | 7.02% |
| 33.527 | 71.1 | -0.0003 | 0.00009 | mg/L | | | | 28.67% |
| 13.107 | -5282.5 | 0.0000 | 0.00001 | mg/L | | | | 22.34% |
| 15.887 | 2268.8 | -0.0019 | 0.00050 | mg/L | | | | 26.62% |
| 26.502 | -184.2 | 0.0001 | 0.00001 | mg/L | | | | 6.54% |
| 28.616 | -259.3 | 0.0004 | 0.00012 | mg/L | | | | 30.18% |
| 67.716 | -68.7 | 0.0004 | 0.00012 | mg/L | | | | 27.12% |
| 24.754 | 2491.7 | 0.0007 | 0.00011 | mg/L | | | | 15.09% |
| 38.863 | -216.0 | 0.0138 | 0.00092 | mg/L | | | | 6.65% |
| 04.721 | -1433.1 | -0.2871 | 0.58544 | mg/L | | | | 203.91% |
| 79.079 | -678.4 | 0.0068 | 0.00214 | mg/L | | | | 31.27% |
| 57.610 | -163.5 | -0.0008 | 0.00001 | mg/L | | | | 1.39% |
| 02.030 | -16.8 | -0.0008 | 0.00007 | mg/L | | | | 8.75% |
| 30.237 | 1474.2 | 0.1880 | 0.00192 | mg/L | | | | 1.02% |
| 31.604 | -179.8 | 0.0006 | 0.00006 | mg/L | | | | 9.14% |
| 20.353 | 20.8 | 0.0004 | 0.00020 | mg/L | | | | 49.06% |
| 06.833 | 43.5 | -0.0074 | 0.00208 | mg/L | | | | 28.21% |
| ] 26 | -24.8 | 0.0016 | 0.00127 | mg/L | | | | 80.67% |
| 1 33 | 233.7 | 0.0005 | 0.00047 | mg/L | | | | 88.46% |
| 34.941 | -302.9 | -0.0003 | 0.00004 | mg/L | | | | 10.62% |
| 90.800 | -26.7 | 0.0005 | 0.00018 | mg/L | | | | 38.48% |
| 92.402 | 1307.7 | -0.0003 | 0.00009 | mg/L | | | | 26.75% |
| 06.191 | 395.6 | 0.0044 | 0.00007 | mg/L | | | | 1.66% |

an Data ----------

: 526738 Seq. No.: 41 Sample No.: 21 A/S Pos: 29
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:52:51 PM

| ement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4331937.1 | 1.039 | 0.0007 | mg/L | | | | 0.07% |
| 328.068 | -3585.9 | -0.0099 | 0.00018 | mg/L | | | | 1.82% |
| 308.215 | 3245751.1 | 159.5 | 0.27 | mg/L | | | | 0.17% |
| 188.979 | 23.5 | 0.0502 | 0.00236 | mg/L | | | | 4.70% |
| 249.773 | 53435.5 | 0.6162 | 0.00285 | mg/L | | | | 0.46% |
| a 233.527 | 274943.1 | 2.557 | 0.0201 | mg/L | | | | 0.79% |
| e 313.107 | -9987.9 | -0.0007 | 0.00002 | mg/L | | | | 2.66% |
| a 315.887 | 78730881.5 | 477.0 | 3.44 | mg/L | | | | 0.72% |
| d 226.502 | 1234.8 | 0.0051 | 0.00004 | mg/L | | | | 0.69% |
| o 228.616 | 1637.8 | 0.0623 | 0.00035 | mg/L | | | | 0.56% |
| r 267.716 | 19158.7 | 0.1422 | 0.00084 | mg/L | | | | 0.59% |
| u 324.754 | 28816.3 | 0.1098 | 0.00096 | mg/L | | | | 0.87% |
| e 238.863 | 3350974.1 | 128.2 | 0.15 | mg/L | | | | 0.12% |
| 404.721 | 1813.3 | 56.84 | 0.006 | mg/L | | | | 0.01% |
| g 279.079 | 2137373.6 | 85.41 | 0.139 | mg/L | | | | 0.16% |
| n 257.610 | 2626843.2 | 5.237 | 0.0012 | mg/L | | | | 0.02% |
| o 202.030 | 170.1 | 0.0108 | 0.00012 | mg/L | | | | 1.12% |
| a 330.237 | 155508.9 | 203.8 | 2.12 | mg/L | | | | 1.04% |
| ] 1.604 | 3244.8 | 0.0821 | 0.00014 | mg/L | | | | 0.17% |
| ] .353 | 434.6 | 0.0829 | 0.00006 | mg/L | | | | 0.07% |
| b 06.833 | 22.9 | -0.0157 | 0.00059 | mg/L | | | | 3.75% |
| e 196.026 | -6.3 | 0.0076 | 0.00146 | mg/L | | | | 19.10% |
| n 189.933 | 10938.1 | 1.035 | 0.0009 | mg/L | | | | 0.08% |
| i 334.941 | 3063575.4 | 5.637 | 0.0005 | mg/L | | | | 0.01% |
| l 190.800 | -152.7 | -0.0698 | 0.00351 | mg/L | | | | 5.03% |
| 292.402 | 85196.7 | 0.3453 | 0.00256 | mg/L | | | | 0.74% |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| )6 191 | 37206.0 | 0.4446 | 0.00438 | mg/L | | | | | 0.99% |

L

526740 Seq. No.: 42 Sample No.: 22 A/S Pos: 30
le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 1:58:32 PM

| ent | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 1.030 | 4202885.8 | 1.008 | 0.0014 | mg/L | | | | 0.14% |
| 28.068 | -2185.6 | -0.0024 | 0.00009 | mg/L | | | | 3.91% |
| 08.215 | 528563.9 | 25.80 | 0.069 | mg/L | | | | 0.27% |
| 88.979 | -2.0 | 0.0136 | 0.00083 | mg/L | | | | 6.08% |
| 9.773 | 37559.7 | 0.4263 | 0.00056 | mg/L | | | | 0.13% |
| 33.527 | 55452.0 | 0.5149 | 0.00105 | mg/L | | | | 0.20% |
| 13.107 | -8067.5 | -0.0004 | 0.00001 | mg/L | | | | 2.58% |
| 15.887 | 27834778.7 | 168.6 | 0.44 | mg/L | | | | 0.26% |
| 26.502 | 62.2 | 0.0023 | 0.00002 | mg/L | | | | 1.02% |
| 28.616 | 86.9 | 0.0117 | 0.00010 | mg/L | | | | 0.88% |
| 67.716 | 3551.3 | 0.0271 | 0.00009 | mg/L | | | | 0.31% |
| 24.754 | 7274.3 | 0.0206 | 0.00022 | mg/L | | | | 1.09% |
| 38.863 | 572596.6 | 21.92 | 0.040 | mg/L | | | | 0.18% |
| 04.721 | 467.4 | 25.93 | 0.326 | mg/L | | | | 1.26% |
| 79.079 | 839484.6 | 33.57 | 0.038 | mg/L | | | | 0.11% |
| 57.610 | 675439.4 | 1.343 | 0.0012 | mg/L | | | | 0.09% |
| 02.030 | 84.1 | 0.0055 | 0.00007 | mg/L | | | | 1.30% |
| 30.237 | 154251.2 | 202.7 | 0.74 | mg/L | | | | 0.36% |
| 31.604 | 454.0 | 0.0157 | 0.00001 | mg/L | | | | 0.09% |
| 20.353 | 156.8 | 0.0233 | 0.00007 | mg/L | | | | 0.31% |
| 06.833 | 36.1 | -0.0104 | 0.00145 | mg/L | | | | 13.94% |
| 96.026 | -4.5 | 0.0082 | 0.00036 | mg/L | | | | 4.39% |
| 89.933 | 7745.2 | 0.7265 | 0.00104 | mg/L | | | | 0.14% |
| 34.941 | 582568.8 | 1.072 | 0.0015 | mg/L | | | | 0.14% |
| 00 | -60.7 | -0.0185 | 0.00193 | mg/L | | | | 10.40% |
| 2 | 21087.5 | 0.0812 | 0.00013 | mg/L | | | | 0.16% |
| 206.191 | 6932.5 | 0.0826 | 0.00003 | mg/L | | | | 0.04% |

an Data

: 526741 Seq. No.: 43 Sample No.: 23 A/S Pos: 31
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 2:04:08 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4227464.4 | 1.014 | 0.0046 | mg/L | | | | 0.45% |
| g 328.068 | -2027.5 | -0.0015 | 0.00015 | mg/L | | | | 9.65% |
| l 308.215 | 426252.9 | 20.76 | 0.009 | mg/L | | | | 0.04% |
| s 188.979 | -12.7 | 0.0084 | 0.00198 | mg/L | | | | 23.64% |
| 249.773 | 17805.4 | 0.1900 | 0.00161 | mg/L | | | | 0.85% |
| a 233.527 | 49939.3 | 0.4636 | 0.00034 | mg/L | | | | 0.07% |
| e 313.107 | -7022.2 | -0.0002 | 0.00002 | mg/L | | | | 6.68% |
| a 315.887 | 25008345.4 | 151.5 | 1.53 | mg/L | | | | 1.01% |
| d 226.502 | 43.6 | 0.0021 | 0.00001 | mg/L | | | | 0.27% |
| o 228.616 | 3.0 | 0.0090 | 0.00006 | mg/L | | | | 0.65% |
| r 267.716 | 2372.9 | 0.0184 | 0.00040 | mg/L | | | | 2.19% |
| u 324.754 | 6250.1 | 0.0163 | 0.00049 | mg/L | | | | 2.99% |
| e 238.863 | 446250.4 | 17.09 | 0.013 | mg/L | | | | 0.07% |
| 404.721 | -58.3 | 18.85 | 0.106 | mg/L | | | | 0.56% |
| g 279.079 | 689146.4 | 27.56 | 0.005 | mg/L | | | | 0.02% |
| n 257.610 | 787243.6 | 1.566 | 0.0011 | mg/L | | | | 0.07% |
| o 202.030 | 91.7 | 0.0059 | 0.00002 | mg/L | | | | 0.25% |
| a 330.237 | 96672.3 | 126.4 | 0.51 | mg/L | | | | 0.40% |
| i 231.604 | 396.2 | 0.0143 | 0.00012 | mg/L | | | | 0.87% |
| b 220.353 | 73.4 | 0.0093 | 0.00069 | mg/L | | | | 7.44% |
| b 206.833 | 37.7 | -0.0097 | 0.00122 | mg/L | | | | 12.53% |
| 6.026 | -25.1 | 0.0015 | 0.00110 | mg/L | | | | 74.60% |
| ).933 | 6807.7 | 0.6359 | 0.00453 | mg/L | | | | 0.71% |
| i 4.941 | 438268.9 | 0.8066 | 0.00034 | mg/L | | | | 0.04% |
| l 190.800 | -64.9 | -0.0208 | 0.00256 | mg/L | | | | 12.29% |
| 292.402 | 15732.4 | 0.0591 | 0.00005 | mg/L | | | | 0.08% |
| n 206.191 | 5999.3 | 0.0714 | 0.00056 | mg/L | | | | 0.78% |

lean Data

52[illegible]2 Seq. No.: 44 Sample No.: 24 A/S Pos: 32
1[illegible]: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 2:09:52 PM

| ent | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 1.030 | 4313792.4 | 1.035 | 0.0017 | mg/L | | | | 0.16% |
| 28.068 | -2811.3 | -0.0058 | 0.00025 | mg/L | | | | 4.42% |
| 08.215 | 1626205.8 | 79.82 | 0.147 | mg/L | | | | 0.18% |
| 88.979 | 10.2 | 0.0316 | 0.00006 | mg/L | | | | 0.20% |
| 49.773 | 21937.6 | 0.2395 | 0.00207 | mg/L | | | | 0.87% |
| 33.527 | 413148.1 | 3.843 | 0.0060 | mg/L | | | | 0.16% |
| 313.107 | -12356.3 | -0.0010 | 0.00001 | mg/L | | | | 0.77% |
| 315.887 | 59180549.4 | 358.6 | 2.42 | mg/L | | | | 0.68% |
| 226.502 | 527.4 | 0.0064 | 0.00005 | mg/L | | | | 0.81% |
| 228.616 | 1335.5 | 0.0524 | 0.00026 | mg/L | | | | 0.50% |
| 267.716 | 8022.4 | 0.0601 | 0.00017 | mg/L | | | | 0.28% |
| 324.754 | 16386.6 | 0.0583 | 0.00001 | mg/L | | | | 0.02% |
| 238.863 | 1664296.4 | 63.67 | 0.070 | mg/L | | | | 0.11% |
| 04.721 | 271.2 | 29.21 | 0.167 | mg/L | | | | 0.57% |
| 279.079 | 1212659.1 | 48.47 | 0.054 | mg/L | | | | 0.11% |
| 257.610 | 2550370.8 | 5.073 | 0.0099 | mg/L | | | | 0.20% |
| 202.030 | 71.8 | 0.0047 | 0.00020 | mg/L | | | | 4.24% |
| 330.237 | 117315.0 | 153.7 | 0.39 | mg/L | | | | 0.25% |
| 231.604 | 1429.6 | 0.0389 | 0.00014 | mg/L | | | | 0.36% |
| 220.353 | 333.4 | 0.0594 | 0.00088 | mg/L | | | | 1.47% |
| 206.833 | 28.4 | -0.0135 | 0.00105 | mg/L | | | | 7.77% |
| 196.026 | -13.2 | 0.0054 | 0.00014 | mg/L | | | | 2.65% |
| 189.933 | 9037.5 | 0.8514 | 0.00286 | mg/L | | | | 0.34% |
| 334.941 | 1691632.6 | 3.113 | 0.0064 | mg/L | | | | 0.20% |
| 190.800 | -146.4 | -0.0662 | 0.00031 | mg/L | | | | 0.47% |
| 292.402 | 49659.5 | 0.1989 | 0.00009 | mg/L | | | | 0.04% |
| 206.191 | 18547.2 | 0.2215 | 0.00067 | mg/L | | | | 0.30% |

a. ta
: 526742L Seq. No.: 45 Sample No.: 25 A/S Pos: 33
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 2:15:21 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4471390.3 | 1.073 | 0.0042 | mg/L | | | | 0.39% |
| g 328.068 | -1932.5 | -0.0010 | 0.00021 | mg/L | | | | 20.36% |
| l 308.215 | 330708.2 | 16.06 | 0.020 | mg/L | | | | 0.12% |
| s 188.979 | -20.1 | 0.0047 | 0.00053 | mg/L | | | | 11.28% |
| 249.773 | 6010.8 | 0.0490 | 0.00002 | mg/L | | | | 0.03% |
| a 233.527 | 86323.4 | 0.8021 | 0.00147 | mg/L | | | | 0.18% |
| e 313.107 | -6797.2 | -0.0002 | 0.00002 | mg/L | | | | 9.28% |
| a 315.887 | 12820864.6 | 77.67 | 0.045 | mg/L | | | | 0.06% |
| d 226.502 | -37.1 | 0.0014 | 0.00001 | mg/L | | | | 0.79% |
| o 228.616 | 89.0 | 0.0118 | 0.00022 | mg/L | | | | 1.88% |
| r 267.716 | 1599.3 | 0.0127 | 0.00049 | mg/L | | | | 3.86% |
| u 324.754 | 4822.7 | 0.0104 | 0.00009 | mg/L | | | | 0.88% |
| e 238.863 | 349354.6 | 13.38 | 0.026 | mg/L | | | | 0.20% |
| 404.721 | -1205.2 | 2.500 | 0.7203 | mg/L | | | | 28.82% |
| g 279.079 | 251536.6 | 10.08 | 0.026 | mg/L | | | | 0.26% |
| n 257.610 | 541568.0 | 1.077 | 0.0004 | mg/L | | | | 0.03% |
| o 202.030 | 4.2 | 0.0005 | 0.00006 | mg/L | | | | 11.64% |
| Na 330.237 | 21158.2 | 26.28 | 0.051 | mg/L | | | | 0.19% |
| Ni 231.604 | 149.4 | 0.0085 | 0.00012 | mg/L | | | | 1.38% |
| Pb 220.353 | 80.6 | 0.0105 | 0.00051 | mg/L | | | | 4.87% |
| Sb 206.833 | 33.7 | -0.0113 | 0.00078 | mg/L | | | | 6.86% |
| Se 196.026 | -16.9 | 0.0042 | 0.00448 | mg/L | | | | 107.45% |
| Sn 189.933 | 3090.5 | 0.2766 | 0.00093 | mg/L | | | | 0.34% |
| Ti 334.941 | 345340.9 | 0.6356 | 0.00022 | mg/L | | | | 0.03% |
| T[illegible] 90.800 | -49.3 | -0.0121 | 0.00019 | mg/L | | | | 1.57% |
| V .402 | 10962.6 | 0.0394 | 0.00006 | mg/L | | | | 0.15% |
| Zn 206.191 | 3879.8 | 0.0461 | 0.00030 | mg/L | | | | 0.65% |

Mean Data
ID: CRI Seq. No.: 46 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: 02/11/02 2:20:30 PM

| ...ent | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 1.030 | 4380260.9 | 1.051 | 0.0013 | mg/L | | | | 0.13% |
| 28.068 | 1774.5 | 0.0189 | 0.00060 | mg/L | | | | 3.15% |
| 08.215 | 4280.0 | -0.0103 | 0.00073 | mg/L | | | | 7.13% |
| 88.979 | 13.7 | 0.0214 | 0.00091 | mg/L | | | | 4.25% |
| 9.773 | 2057.2 | 0.0017 | 0.00044 | mg/L | | | | 26.11% |
| 33.527 | 80.1 | -0.0002 | 0.00013 | mg/L | | | | 60.18% |
| 13.107 | 60234.2 | 0.0100 | 0.00007 | mg/L | | | | 0.73% |
| 15.887 | 6119.8 | 0.0215 | 0.00766 | mg/L | | | | 35.69% |
| 26.502 | 987.9 | 0.0105 | 0.00001 | mg/L | | | | 0.06% |
| 28.616 | 3163.8 | 0.1121 | 0.00033 | mg/L | | | | 0.30% |
| 67.716 | 2667.9 | 0.0206 | 0.00001 | mg/L | | | | 0.05% |
| 24.754 | 14101.7 | 0.0488 | 0.00002 | mg/L | | | | 0.03% |
| 38.863 | -447.0 | 0.0050 | 0.00138 | mg/L | | | | 27.60% |
| 04.721 | -1425.4 | -0.1932 | 0.37335 | mg/L | | | | 193.25% |
| 79.079 | -694.6 | 0.0062 | 0.00102 | mg/L | | | | 16.46% |
| 57.610 | 16453.4 | 0.0323 | 0.00015 | mg/L | | | | 0.45% |
| 02.030 | -16.3 | -0.0007 | 0.00004 | mg/L | | | | 5.96% |
| 30.237 | 1396.8 | 0.0854 | 0.04767 | mg/L | | | | 55.82% |
| 31.604 | 3469.4 | 0.0875 | 0.00021 | mg/L | | | | 0.24% |
| 20.353 | 55.6 | 0.0063 | 0.00061 | mg/L | | | | 9.67% |
| 06.833 | 342.6 | 0.1137 | 0.00161 | mg/L | | | | 1.41% |
| 96.026 | 5.3 | 0.0114 | 0.00010 | mg/L | | | | 0.89% |
| 89.933 | 132.9 | -0.0092 | 0.00018 | mg/L | | | | 1.90% |
| 34.941 | -60.1 | 0.0001 | 0.00030 | mg/L | | | | 267.21% |
| 90.800 | 11.1 | 0.0215 | 0.00025 | mg/L | | | | 1.16% |
| 92.402 | 25899.5 | 0.1010 | 0.00075 | mg/L | | | | 0.74% |
| 06.191 | 3535.9 | 0.0420 | 0.00021 | mg/L | | | | 0.50% |

an Data
: ICSA Seq. No.: 47 Sample No.: 6 A/S Pos: 7
...ty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/11/02 2:26:07 PM

| ...ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3831186.9 | 0.919 | 0.0050 | mg/L | | | | 0.55% |
| 328.068 | -3903.0 | -0.0116 | 0.00058 | mg/L | | | | 5.02% |
| 308.215 | 10360818.3 | 509.8 | 2.72 | mg/L | | | | 0.53% |
| 188.979 | -94.0 | 0.0034 | 0.00080 | mg/L | | | | 23.59% |
| 249.773 | 14581.9 | 0.1515 | 0.00221 | mg/L | | | | 1.46% |
| 233.527 | -919.3 | -0.0095 | 0.00028 | mg/L | | | | 2.96% |
| 313.107 | -6299.0 | -0.0001 | 0.00001 | mg/L | | | | 8.78% |
| 315.887 | 77855547.9 | 471.7 | 2.36 | mg/L | | | | 0.50% |
| 226.502 | 1640.8 | 0.0052 | 0.00023 | mg/L | | | | 4.54% |
| 228.616 | -285.3 | -0.0005 | 0.00013 | mg/L | | | | 29.46% |
| 267.716 | 675.7 | 0.0059 | 0.00005 | mg/L | | | | 0.80% |
| 324.754 | -653.9 | -0.0007 | 0.00022 | mg/L | | | | 29.07% |
| 238.863 | 4929497.2 | 188.6 | 0.12 | mg/L | | | | 0.06% |
| 404.721 | -3124.9 | 4.653 | 0.6952 | mg/L | | | | 14.94% |
| 279.079 | 12831058.0 | 512.6 | 2.40 | mg/L | | | | 0.47% |
| 257.610 | -3729.4 | 0.0084 | 0.00002 | mg/L | | | | 0.22% |
| 202.030 | 20.0 | 0.0015 | 0.00002 | mg/L | | | | 1.30% |
| 330.237 | 1199.6 | -0.0208 | 0.05158 | mg/L | | | | 248.45% |
| 231.604 | -202.9 | 0.0001 | 0.00013 | mg/L | | | | 151.20% |
| 220.353 | -324.5 | -0.0198 | 0.00135 | mg/L | | | | 6.79% |
| 206.833 | 27.7 | -0.0138 | 0.00142 | mg/L | | | | 10.29% |
| 196.026 | 27.4 | 0.0095 | 0.00082 | mg/L | | | | 8.66% |
| 189.933 | 16834.2 | -0.3616 | 0.00175 | mg/L | | | | 0.48% |
| 334.941 | -3836.5 | -0.0068 | 0.00014 | mg/L | | | | 2.02% |
| 190.800 | -63.8 | -0.0202 | 0.00141 | mg/L | | | | 7.00% |
| 292.402 | 10191.6 | 0.0363 | 0.00048 | mg/L | | | | 1.32% |
| 206.191 | 1760.7 | 0.0068 | 0.00011 | mg/L | | | | 1.62% |

...ata
...CSAB Seq. No.: 48 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: 02/11/02 2:32:14 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 71.030 | 3852596.0 | 0.924 | 0.0006 | mg/L | 0.07% |
| 3[illegible]8 | 204114.7 | 1.109 | 0.0036 | mg/L | 0.32% |
| 3[illegible].5 | 10310688.8 | 507.3 | 0.19 | mg/L | 0.04% |
| 188.979 | -100.8 | 0.0002 | 0.00304 | mg/L | >999.9% |
| 49.773 | 14619.7 | 0.1519 | 0.00070 | mg/L | 0.46% |
| 233.527 | 56803.0 | 0.5275 | 0.00247 | mg/L | 0.47% |
| 313.107 | 3285865.1 | 0.4997 | 0.00043 | mg/L | 0.09% |
| 315.887 | 77460825.6 | 469.3 | 0.17 | mg/L | 0.04% |
| 226.502 | 109518.8 | 0.9635 | 0.00635 | mg/L | 0.66% |
| 228.616 | 14045.1 | 0.4670 | 0.00050 | mg/L | 0.11% |
| 267.716 | 68172.2 | 0.5035 | 0.00097 | mg/L | 0.19% |
| 324.754 | 130784.2 | 0.5437 | 0.00323 | mg/L | 0.59% |
| 238.863 | 4947701.8 | 189.2 | 0.28 | mg/L | 0.15% |
| 404.721 | -3138.1 | 4.586 | 0.7594 | mg/L | 16.56% |
| 279.079 | 12767745.2 | 510.0 | 0.53 | mg/L | 0.10% |
| 257.610 | 245236.1 | 0.5038 | 0.00107 | mg/L | 0.21% |
| 202.030 | 17.6 | 0.0014 | 0.00006 | mg/L | 4.65% |
| 330.237 | 1477.9 | 0.3536 | 0.02452 | mg/L | 6.94% |
| 231.604 | 39538.9 | 0.9459 | 0.00455 | mg/L | 0.48% |
| 220.353 | 5431.6 | 0.9470 | 0.00250 | mg/L | 0.26% |
| 206.833 | 35.1 | -0.0108 | 0.00060 | mg/L | 5.60% |
| 196.026 | 6.4 | 0.0026 | 0.00265 | mg/L | 100.53% |
| 189.933 | 16747.1 | -0.3603 | 0.00104 | mg/L | 0.29% |
| 334.941 | -3820.4 | -0.0068 | 0.00003 | mg/L | 0.49% |
| 190.800 | -71.4 | -0.0244 | 0.00120 | mg/L | 4.92% |
| 292.402 | 131402.6 | 0.5356 | 0.00156 | mg/L | 0.29% |
| 206.191 | 81130.2 | 0.9560 | 0.00601 | mg/L | 0.63% |

ean Data

D: CCV — Seq. No.: 49 — 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: 02/11/02 2:37:58 PM

| | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| [illegible]3.[illegible]030 | 4222985.0 | 1.013 | 0.0023 | mg/L | | | | 0.23% |
| g 328.068 | 93570.1 | 0.5134 | 0.00103 | mg/L | | | | 0.20% |
| l 308.215 | 213348.2 | 10.28 | 0.069 | mg/L | | | | 0.67% |
| s 188.979 | 2080.9 | 1.043 | 0.0013 | mg/L | | | | 0.12% |
| 249.773 | 210739.8 | 2.498 | 0.0109 | mg/L | | | | 0.44% |
| a 233.527 | 1131601.6 | 10.53 | 0.004 | mg/L | | | | 0.03% |
| e 313.107 | 1672713.3 | 0.2548 | 0.00005 | mg/L | | | | 0.02% |
| a 315.887 | 4239719.3 | 25.67 | 0.045 | mg/L | | | | 0.17% |
| d 226.502 | 58398.5 | 0.5205 | 0.00020 | mg/L | | | | 0.04% |
| o 228.616 | 80261.0 | 2.627 | 0.0066 | mg/L | | | | 0.25% |
| r 267.716 | 70524.0 | 0.5209 | 0.00100 | mg/L | | | | 0.19% |
| u 324.754 | 313287.4 | 1.288 | 0.0007 | mg/L | | | | 0.06% |
| Fe 238.863 | 136796.4 | 5.254 | 0.0354 | mg/L | | | | 0.67% |
| K 404.721 | 515.1 | 23.54 | 0.210 | mg/L | | | | 0.89% |
| Mg 279.079 | 638486.6 | 25.54 | 0.121 | mg/L | | | | 0.48% |
| Mn 257.610 | 393240.6 | 0.7819 | 0.00289 | mg/L | | | | 0.37% |
| Mo 202.030 | 40156.3 | 2.488 | 0.0014 | mg/L | | | | 0.06% |
| Na 330.237 | 19697.7 | 24.34 | 0.034 | mg/L | | | | 0.14% |
| Ni 231.604 | 88644.3 | 2.115 | 0.0050 | mg/L | | | | 0.24% |
| Pb 220.353 | 3096.8 | 0.5172 | 0.00101 | mg/L | | | | 0.20% |
| Sb 206.833 | 12441.2 | 5.013 | 0.0217 | mg/L | | | | 0.43% |
| Se 196.026 | 1518.5 | 0.5071 | 0.00129 | mg/L | | | | 0.25% |
| Sn 189.933 | 55580.7 | 5.350 | 0.0061 | mg/L | | | | 0.11% |
| Ti 334.941 | 1372822.4 | 2.526 | 0.0036 | mg/L | | | | 0.14% |
| Tl 190.800 | 1843.3 | 1.043 | 0.0001 | mg/L | | | | 0.01% |
| V 292.402 | 622732.9 | 2.560 | 0.0038 | mg/L | | | | 0.15% |
| Zn 206.191 | 87153.0 | 1.042 | 0.0002 | mg/L | | | | 0.02% |

Mean Data

ID: CCB — Seq. No.: 50 — 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: 02/11/02 2:43:03 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4406327.3 | 1.057 | 0.0041 | mg/L | | | | 0.38% |
| Ag 328.068 | -1572.9 | 0.0009 | 0.00008 | mg/L | | | | 9.29% |
| Al 308.215 | 4231.4 | -0.0127 | 0.00415 | mg/L | | | | 32.68% |

| | | | | |
|---|---|---|---|---|
| 188.979 | -29.4 | 0.0001 | 0.00367 mg/L | >999.9% |
| 2/ '3 | 3473.0 | 0.0186 | 0.00463 mg/L | 24.86% |
| 2 527 | 191.5 | 0.0008 | 0.00061 mg/L | 74.60% |
| 313.107 | -4957.8 | 0.0001 | 0.00003 mg/L | 31.44% |
| 315.887 | 4616.3 | 0.0124 | 0.00136 mg/L | 11.01% |
| 226.502 | -179.7 | 0.0001 | 0.00001 mg/L | 10.53% |
| 228.616 | -244.8 | 0.0009 | 0.00023 mg/L | 26.12% |
| 267.716 | -115.2 | 0.0001 | 0.00000 mg/L | 2.28% |
| 324.754 | 2298.5 | -0.0001 | 0.00017 mg/L | 293.97% |
| 238.863 | -432.7 | 0.0055 | 0.00135 mg/L | 24.32% |
| 404.721 | -1324.8 | 1.037 | 0.7697 mg/L | 74.23% |
| 279.079 | -644.3 | 0.0082 | 0.00719 mg/L | 87.67% |
| 257.610 | 32.3 | -0.0004 | 0.00007 mg/L | 18.92% |
| 202.030 | 1.7 | 0.0004 | 0.00042 mg/L | 112.92% |
| 330.237 | 1289.0 | -0.0575 | 0.04225 mg/L | 73.48% |
| 231.604 | -186.2 | 0.0005 | 0.00008 mg/L | 17.08% |
| 220.353 | 14.5 | -0.0006 | 0.00086 mg/L | 132.95% |
| 206.833 | 87.6 | 0.0105 | 0.00558 mg/L | 53.20% |
| QC exceeds upper limit for Sb 206.833 | | | Action = Continue | |
| 196.026 | -23.4 | 0.0020 | 0.00029 mg/L | 14.47% |
| 189.933 | 267.8 | 0.0038 | 0.00297 mg/L | 77.61% |
| 334.941 | 34.8 | 0.0003 | 0.00045 mg/L | 156.38% |
| 190.800 | -24.8 | 0.0015 | 0.00099 mg/L | 64.38% |
| 292.402 | 1346.0 | -0.0002 | 0.00005 mg/L | 27.99% |
| 206.191 | 45.3 | 0.0002 | 0.00015 mg/L | 69.51% |

## etals Cover Page

Instrument: FIMS

alyst: DCB Date: 2/13/02

ıta File: Feb-13w Reviewed By: DCB

ıtered By: DCB Manager Approval: CK 2/13/02

| tarlims Run # | Analytes Used | Batch ID | Method Requested | Failed Analytes | Comments / Problems |
|---|---|---|---|---|---|
| 4498 ✓ | Hg | M2480135A | 7470 | | R-10375 + R-10616 |
| | | | | | RL = 0.2ppb |
| | | | | | |
| 4499 ✓ | Hg | M2480135B | 7470 | | R-10644 RL = 0.2ppb |
| | | | 245.1 | | |
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## 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-10283 | Pkg 5 / ASP | Hg | | M2480135A | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |
| R-10457 | Pkg 5 / ASP | Hg | | M2480135B | 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 |

Perkin-Elmer AAWinLab: 02/13/2002, 11:26:09 AM

Method Name: Hg_CLP
Method Description: Method 245.1A FIMS
Element: Hg

Date: 02/13/2002
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: ROUTINE.SIF Results Data Set Name: Feb-13W

Element: Hg Seq. No.: 2 AS Loc.: 1 Date: 02/13/2002
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 | 11:27:05 | No |
| 2 | | | 0.0006 | 0.0037 | 0.0006 | 11:27:34 | No |
| Mean: | | | 0.0005 | | | | |
| SD : | | | 0.0001 | | | | |
| %RSD: | | | 24.8636 | | | | |

Auto-zero performed.

Element: Hg Seq. No.: 3 AS Loc.: 8 Date: 02/13/2002
Sample ID: 0.2ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0029 | 0.0161 | 0.0034 | 11:28:54 | No |
| 2 | | | 0.0027 | 0.0141 | 0.0031 | 11:29:23 | No |
| Mean: | | | 0.0028 | | | | |
| SD : | | | 0.0002 | | | | |
| %RSD: | | | 5.5672 | | | | |

[Hg] Standard number 1 applied. [0.2000]
Correlation Coefficient: 1.00000 Slope: 0.01387

Element: Hg Seq. No.: 4 AS Loc.: 2 Date: 02/13/2002
Sample ID: 0.5ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0073 | 0.0365 | 0.0077 | 11:30:44 | No |
| 2 | | | 0.0071 | 0.0358 | 0.0076 | 11:31:13 | No |
| Mean: | | | 0.0072 | | | | |
| SD : | | | 0.0001 | | | | |
| %RSD: | | | 1.7858 | | | | |

[Hg] Standard number 2 applied. [0.5000]
Correlation Coefficient: 0.99958 Slope: 0.01428

Element: Hg Seq. No.: 5 AS Loc.: 3 Date: 02/13/2002
Sample ID: 1ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0146 | 0.0722 | 0.0150 | 11:32:31 | No |
| 2 | | | 0.0140 | 0.0689 | 0.0145 | 11:33:00 | No |
| Mean: | | | 0.0143 | | | | |
| SD : | | | 0.0004 | | | | |
| %RSD: | | | 2.7032 | | | | |

[Hg] Standard number 3 applied. [1.000]

Correlation Coefficient: 0.99994 Slope: 0.01429

Element: Hg Seq. No.: 6 AS Loc.: 4 Date: 02/13/2002
Sample ID: 2ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0292 | 0.1434 | 0.0297 | 11:34:20 | No |
| 2 | | | 0.0286 | 0.1417 | 0.0291 | 11:34:50 | No |
| Mean: | | | 0.0289 | | | | |
| SD : | | | 0.0004 | | | | |
| %RSD: | | | 1.4320 | | | | |

[Hg] Standard number 4 applied. [2.000]
Correlation Coefficient: 0.99995 Slope: 0.01442

Element: Hg Seq. No.: 7 AS Loc.: 5 Date: 02/13/2002
Sample ID: 5ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0717 | 0.3491 | 0.0721 | 11:36:10 | No |
| 2 | | | 0.0712 | 0.3435 | 0.0716 | 11:36:39 | No |
| Mean: | | | 0.0714 | | | | |
| SD : | | | 0.0004 | | | | |
| %RSD: | | | 0.4982 | | | | |

[Hg] Standard number 5 applied. [5.000]
Correlation Coefficient: 0.99998 Slope: 0.01431

Element: Hg Seq. No.: 8 AS Loc.: 6 Date: 02/13/2002
Sample ID: 10ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.1420 | 0.6892 | 0.1425 | 11:38:00 | No |
| 2 | | | 0.1400 | 0.6789 | 0.1405 | 11:38:30 | No |
| Mean: | | | 0.1410 | | | | |
| SD : | | | 0.0014 | | | | |
| %RSD: | | | 1.0099 | | | | |

[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99996 Slope: 0.01415

Calibration data for Hg

| Standard ID | Mean Signal (Pk Height) | Entered Concentration (µg/L) | Calculated Concentration (µg/L) | Standard Deviation | %RSD |
|---|---|---|---|---|---|
| Calib Blank | 0.0005 | ---- | ---- | ---- | ---- |
| 0.2ppb std | 0.0028 | 0.2000 | 0.1962 | 0.00015 | 5.6 |
| 0.5ppb std | 0.0072 | 0.5000 | 0.5070 | 0.00013 | 1.8 |
| 1ppb std | 0.0143 | 1.0000 | 1.010 | 0.00039 | 2.7 |
| 2ppb std | 0.0289 | 2.0000 | 2.044 | 0.00041 | 1.4 |
| 5ppb std | 0.0714 | 5.0000 | 5.047 | 0.00036 | 0.5 |
| 10ppb std | 0.1410 | 10.0000 | 9.966 | 0.00142 | 1.0 |
| Calib Blank | 0.0005 | ---- | ---- | ---- | ---- |

Correlation Coefficient: 0.99996 Slope: 0.01415 ----

Element: Hg Seq. No.: 9 AS Loc.: 7 Date: 02/13/2002
Sample ID: ICV

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.061 | 3.061 | 0.0433 | 0.2106 | 0.0438 | 11:39:51 | No |
| 2 | 2.994 | 2.994 | 0.0424 | 0.2071 | 0.0428 | 11:40:20 | No |
| Mean: | 3.028 | 3.028 | 0.0428 | | | | |
| SD : | 0.04698 | 0.04698 | 0.0007 | | | | |
| %RSD: | 1.6 | 1.6 | 1.5518 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 10 AS Loc.: 1 Date: 02/13/2002
Sample ID: ICB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0102 | -0.0102 | -0.0001 | 0.0024 | 0.0003 | 11:41:39 | No |
| 2 | 0.0006 | 0.0006 | 0.0000 | 0.0024 | 0.0005 | 11:42:08 | No |
| Mean: | -0.0048 | -0.0048 | -0.0001 | | | | |
| SD : | 0.00763 | 0.00763 | 0.0001 | | | | |
| %RSD: | 158.5 | 158.5 | 158.5184 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 02/13/2002
Sample ID: CRII

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.2026 | 0.2026 | 0.0029 | 0.0164 | 0.0033 | 11:43:28 | No |
| 2 | 0.2013 | 0.2013 | 0.0028 | 0.0165 | 0.0033 | 11:43:57 | No |
| Mean: | 0.2019 | 0.2019 | 0.0029 | | | | |
| SD : | 0.00093 | 0.00093 | 0.0000 | | | | |
| %RSD: | 0.5 | 0.5 | 0.4611 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 12 AS Loc.: 7 Date: 02/13/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.114 | 3.114 | 0.0441 | 0.2123 | 0.0445 | 11:45:19 | No |
| 2 | 3.003 | 3.003 | 0.0425 | 0.2074 | 0.0430 | 11:45:48 | No |
| Mean: | 3.059 | 3.059 | 0.0433 | | | | |
| SD : | 0.07871 | 0.07871 | 0.0011 | | | | |
| %RSD: | 2.6 | 2.6 | 2.5734 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 13 AS Loc.: 1 Date: 02/13/2002
Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0061 | -0.0061 | -0.0001 | 0.0017 | 0.0004 | 11:47:06 | No |
| 2 | -0.0069 | -0.0069 | -0.0001 | 0.0015 | 0.0004 | 11:47:35 | No |
| Mean: | -0.0065 | -0.0065 | -0.0001 | | | | |
| SD : | 0.00060 | 0.00060 | 0.0000 | | | | |
| %RSD: | 9.2 | 9.2 | 9.1531 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 14 2/13/02 AS Loc.: 9 Date: 02/13/2002
Sample ID: PBW-M2480135A S30776 DCN

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0078 | -0.0078 | -0.0001 | 0.0015 | 0.0004 | 11:48:52 | No |
| 2 | -0.0093 | -0.0093 | -0.0001 | 0.0014 | 0.0004 | 11:49:21 | No |
| Mean: | -0.0085 | -0.0085 | -0.0001 | | | | |
| SD : | 0.00108 | 0.00108 | 0.0000 | | | | |
| %RSD: | 12.7 | 12.7 | 12.6663 | | | | |

Element: Hg Seq. No.: 15 2/13/02 DCB AS Loc.: 10 Date: 02/13/2002
Sample ID: LCSW-M2480135A ≤ 30777

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.9895 | 0.9895 | 0.0140 | 0.0699 | 0.0145 | 11:50:38 | No |
| 2 | 0.9874 | 0.9874 | 0.0140 | 0.0688 | 0.0145 | 11:51:08 | No |
| Mean: | 0.9884 | 0.9884 | 0.0140 | | | | |
| SD : | 0.00151 | 0.00151 | 0.0000 | | | | |
| %RSD: | 0.2 | 0.2 | 0.1523 | | | | |

Element: Hg Seq. No.: 16 AS Loc.: 11 Date: 02/13/2002
Sample ID: 524258

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0042 | -0.0042 | -0.0001 | 0.0018 | 0.0004 | 11:52:25 | No |
| 2 | -0.0057 | -0.0057 | -0.0001 | 0.0015 | 0.0004 | 11:52:55 | No |
| Mean: | -0.0050 | -0.0050 | -0.0001 | | | | |
| SD : | 0.00109 | 0.00109 | 0.0000 | | | | |
| %RSD: | 22.0 | 22.0 | 21.9583 | | | | |

Element: Hg Seq. No.: 17 AS Loc.: 12 Date: 02/13/2002
Sample ID: 528969

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0098 | -0.0098 | -0.0001 | 0.0012 | 0.0003 | 11:54:14 | No |
| 2 | -0.0098 | -0.0098 | -0.0001 | 0.0014 | 0.0003 | 11:54:43 | No |
| Mean: | -0.0098 | -0.0098 | -0.0001 | | | | |
| SD : | 0.00001 | 0.00001 | 0.0000 | | | | |
| %RSD: | | | | | | | |

Element: Hg Seq. No.: 18 AS Loc.: 13 Date: 02/13/2002
Sample ID: 528970

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0102 | -0.0102 | -0.0001 | 0.0013 | 0.0003 | 11:56:02 | No |
| 2 | -0.0130 | -0.0130 | -0.0002 | 0.0008 | 0.0003 | 11:56:32 | No |
| Mean: | -0.0116 | -0.0116 | -0.0002 | | | | |
| SD : | 0.00201 | 0.00201 | 0.0000 | | | | |
| %RSD: | 17.3 | 17.3 | 17.2578 | | | | |

Element: Hg Seq. No.: 19 AS Loc.: 14 Date: 02/13/2002
Sample ID: 528971

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0047 | -0.0047 | -0.0001 | 0.0018 | 0.0004 | 11:57:53 | No |
| 2 | -0.0040 | -0.0040 | -0.0001 | 0.0014 | 0.0004 | 11:58:22 | No |
| Mean: | -0.0043 | -0.0043 | -0.0001 | | | | |
| SD : | 0.00053 | 0.00053 | 0.0000 | | | | |

%RSD: 12.1 12.1 12.1438

---

Element: Hg Seq. No.: 20 AS Loc.: 15 Date: 02/13/2002
Sample ID: 528972

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0016 | 0.0016 | 0.0000 | 0.0018 | 0.0005 | 11:59:44 | No |
| 2 | -0.0082 | -0.0082 | -0.0001 | 0.0014 | 0.0004 | 12:00:14 | No |
| Mean: | -0.0033 | -0.0033 | 0.0000 | | | | |
| SD : | 0.00691 | 0.00691 | 0.0001 | | | | |
| %RSD: | 209.9 | 209.9 | 209.8536 | | | | |

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Element: Hg Seq. No.: 21 2/13/02 AS Loc.: 16 Date: 02/13/2002
Sample ID: 528972D S30774 DCS

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0084 | -0.0084 | -0.0001 | 0.0016 | 0.0004 | 12:01:36 | No |
| 2 | -0.0092 | -0.0092 | -0.0001 | 0.0012 | 0.0004 | 12:02:05 | No |
| Mean: | -0.0088 | -0.0088 | -0.0001 | | | | |
| SD : | 0.00054 | 0.00054 | 0.0000 | | | | |
| %RSD: | 6.2 | 6.2 | 6.1982 | | | | |

---

Element: Hg Seq. No.: 22 2/13/02 AS Loc.: 17 Date: 02/13/2002
Sample ID: 528972S S30775 DCS

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 1.014 | 1.014 | 0.0143 | 0.0717 | 0.0148 | 12:03:24 | No |
| 2 | 0.9906 | 0.9906 | 0.0140 | 0.0695 | 0.0145 | 12:03:53 | No |
| Mean: | 1.002 | 1.002 | 0.0142 | | | | |
| SD : | 0.01654 | 0.01654 | 0.0002 | | | | |
| %RSD: | 1.6 | 1.6 | 1.6498 | | | | |

---

Element: Hg Seq. No.: 23 AS Loc.: 18 Date: 02/13/2002
Sample ID: 528973

| 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 | 0.0004 | 12:05:09 | No |
| 2 | -0.0102 | -0.0102 | -0.0001 | 0.0011 | 0.0003 | 12:05:38 | No |
| Mean: | -0.0080 | -0.0080 | -0.0001 | | | | |
| SD : | 0.00302 | 0.00302 | 0.0000 | | | | |
| %RSD: | 37.7 | 37.7 | 37.7200 | | | | |

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Element: Hg Seq. No.: 24 AS Loc.: 7 Date: 02/13/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.003 | 3.003 | 0.0425 | 0.2094 | 0.0430 | 12:07:00 | No |
| 2 | 2.979 | 2.979 | 0.0421 | 0.2067 | 0.0426 | 12:07:29 | No |
| Mean: | 2.991 | 2.991 | 0.0423 | | | | |
| SD : | 0.01689 | 0.01689 | 0.0002 | | | | |
| %RSD: | 0.6 | 0.6 | 0.5646 | | | | |

QC value within specified limits.

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Element: Hg Seq. No.: 25 AS Loc.: 1 Date: 02/13/2002

Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0102 | -0.0102 | -0.0001 | 0.0014 | 0.0003 | 12:08:49 | No |
| 2 | -0.0132 | -0.0132 | -0.0002 | 0.0008 | 0.0003 | 12:09:19 | No |
| Mean: | -0.0117 | -0.0117 | -0.0002 | | | | |
| SD : | 0.00210 | 0.00210 | 0.0000 | | | | |
| %RSD: | 17.9 | 17.9 | 17.8698 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 26 AS Loc.: 19 Date: 02/13/2002
Sample ID: 528974

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0120 | -0.0120 | -0.0002 | 0.0013 | 0.0003 | 12:10:35 | No |
| 2 | -0.0104 | -0.0104 | -0.0001 | 0.0014 | 0.0003 | 12:11:04 | No |
| Mean: | -0.0112 | -0.0112 | -0.0002 | | | | |
| SD : | 0.00109 | 0.00109 | 0.0000 | | | | |
| %RSD: | 9.8 | 9.8 | 9.7664 | | | | |

Element: Hg Seq. No.: 27 AS Loc.: 20 Date: 02/13/2002
Sample ID: 528976

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0037 | -0.0037 | -0.0001 | 0.0018 | 0.0004 | 12:12:21 | No |
| 2 | -0.0042 | -0.0042 | -0.0001 | 0.0016 | 0.0004 | 12:12:51 | No |
| Mean: | -0.0039 | -0.0039 | -0.0001 | | | | |
| SD : | 0.00035 | 0.00035 | 0.0000 | | | | |
| %RSD: | 8.8 | 8.8 | 8.8010 | | | | |

Element: Hg Seq. No.: 28 AS Loc.: 21 Date: 02/13/2002
Sample ID: 528977

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0028 | -0.0028 | 0.0000 | 0.0019 | 0.0004 | 12:14:08 | No |
| 2 | -0.0069 | -0.0069 | -0.0001 | 0.0014 | 0.0004 | 12:14:37 | No |
| Mean: | -0.0049 | -0.0049 | -0.0001 | | | | |
| SD : | 0.00288 | 0.00288 | 0.0000 | | | | |
| %RSD: | 59.2 | 59.2 | 59.1656 | | | | |

Element: Hg Seq. No.: 29 AS Loc.: 22 Date: 02/13/2002
Sample ID: 528978

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0072 | -0.0072 | -0.0001 | 0.0018 | 0.0004 | 12:15:54 | No |
| 2 | -0.0059 | -0.0059 | -0.0001 | 0.0020 | 0.0004 | 12:16:23 | No |
| Mean: | -0.0065 | -0.0065 | -0.0001 | | | | |
| SD : | 0.00095 | 0.00095 | 0.0000 | | | | |
| %RSD: | 14.5 | 14.5 | 14.5432 | | | | |

Element: Hg Seq. No.: 30 AS Loc.: 23 Date: 02/13/2002
Sample ID: 528979

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | -0.0009 | -0.0009 | 0.0000 | 0.0023 | 0.0005 | 12:17:42 | No |
| 2 | -0.0030 | -0.0030 | 0.0000 | 0.0019 | 0.0004 | 12:18:11 | No |
| Mean: | -0.0019 | -0.0019 | 0.0000 | | | | |
| SD : | 0.00150 | 0.00150 | 0.0000 | | | | |
| %RSD: | 78.1 | 78.1 | 78.0898 | | | | |

Element: Hg Seq. No.: 31 AS Loc.: 24 Date: 02/13/2002
Sample ID: 528981

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0070 | -0.0070 | -0.0001 | 0.0012 | 0.0004 | 12:19:30 | No |
| 2 | -0.0058 | -0.0058 | -0.0001 | 0.0016 | 0.0004 | 12:19:59 | No |
| Mean: | -0.0064 | -0.0064 | -0.0001 | | | | |
| SD : | 0.00082 | 0.00082 | 0.0000 | | | | |
| %RSD: | 12.7 | 12.7 | 12.7426 | | | | |

Element: Hg Seq. No.: 32 AS Loc.: 25 Date: 02/13/2002
Sample ID: 529731

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0141 | -0.0141 | -0.0002 | 0.0005 | 0.0003 | 12:21:18 | No |
| 2 | -0.0075 | -0.0075 | -0.0001 | 0.0018 | 0.0004 | 12:21:47 | No |
| Mean: | -0.0108 | -0.0108 | -0.0002 | | | | |
| SD : | 0.00466 | 0.00466 | 0.0001 | | | | |
| %RSD: | 43.2 | 43.2 | 43.2228 | | | | |

Element: Hg Seq. No.: 33 AS Loc.: 26 Date: 02/13/2002
Sample ID: 529732

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0101 | -0.0101 | -0.0001 | 0.0015 | 0.0003 | 12:23:06 | No |
| 2 | -0.0106 | -0.0106 | -0.0002 | 0.0014 | 0.0003 | 12:23:35 | No |
| Mean: | -0.0103 | -0.0103 | -0.0001 | | | | |
| SD : | 0.00039 | 0.00039 | 0.0000 | | | | |
| %RSD: | 3.8 | 3.8 | 3.7862 | | | | |

Element: Hg Seq. No.: 34 AS Loc.: 27 Date: 02/13/2002
Sample ID: 529733

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0058 | -0.0058 | -0.0001 | 0.0017 | 0.0004 | 12:24:55 | No |
| 2 | -0.0010 | -0.0010 | 0.0000 | 0.0023 | 0.0005 | 12:25:24 | No |
| Mean: | -0.0034 | -0.0034 | 0.0000 | | | | |
| SD : | 0.00341 | 0.00341 | 0.0000 | | | | |
| %RSD: | 101.0 | 101.0 | 100.9554 | | | | |

Element: Hg Seq. No.: 35 AS Loc.: 28 Date: 02/13/2002
Sample ID: 529736

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0085 | -0.0085 | -0.0001 | 0.0018 | 0.0004 | 12:26:45 | No |
| 2 | -0.0147 | -0.0147 | -0.0002 | 0.0013 | 0.0003 | 12:27:15 | No |
| Mean: | -0.0116 | -0.0116 | -0.0002 | | | | |
| SD : | 0.00441 | 0.00441 | 0.0001 | | | | |
| %RSD: | 38.0 | 38.0 | 38.0474 | | | | |

Element: Hg  Seq. No.: 36  AS Loc.: 7  Date: 02/13/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.041 | 3.041 | 0.0430 | 0.2132 | 0.0435 | 12:28:47 | No |
| 2 | 2.968 | 2.968 | 0.0420 | 0.2086 | 0.0425 | 12:29:17 | No |
| Mean: | 3.005 | 3.005 | 0.0425 | | | | |
| SD : | 0.05118 | 0.05118 | 0.0007 | | | | |
| %RSD: | 1.7 | 1.7 | 1.7036 | | | | |

QC value within specified limits.

Element: Hg  Seq. No.: 37  AS Loc.: 1  Date: 02/13/2002
Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0012 | 0.0012 | 0.0000 | 0.0018 | 0.0005 | 12:30:36 | No |
| 2 | -0.0087 | -0.0087 | -0.0001 | 0.0017 | 0.0004 | 12:31:06 | No |
| Mean: | -0.0037 | -0.0037 | -0.0001 | | | | |
| SD : | 0.00700 | 0.00700 | 0.0001 | | | | |
| %RSD: | 187.3 | 187.3 | 187.2871 | | | | |

QC value within specified limits.

Element: Hg  Seq. No.: 38  AS Loc.: 29  Date: 02/13/2002
Sample ID: 529737

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0096 | -0.0096 | -0.0001 | 0.0013 | 0.0003 | 12:32:24 | No |
| 2 | -0.0138 | -0.0138 | -0.0002 | 0.0006 | 0.0003 | 12:32:53 | No |
| Mean: | -0.0117 | -0.0117 | -0.0002 | | | | |
| SD : | 0.00291 | 0.00291 | 0.0000 | | | | |
| %RSD: | 24.9 | 24.9 | 24.8943 | | | | |

Element: Hg  Seq. No.: 39  AS Loc.: 30  Date: 02/13/2002
Sample ID: 529837

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0572 | 0.0572 | 0.0008 | 0.0070 | 0.0013 | 12:34:14 | No |
| 2 | 0.0487 | 0.0487 | 0.0007 | 0.0057 | 0.0012 | 12:34:44 | No |
| Mean: | 0.0529 | 0.0529 | 0.0007 | | | | |
| SD : | 0.00598 | 0.00598 | 0.0001 | | | | |
| %RSD: | 11.3 | 11.3 | 11.2926 | | | | |

Element: Hg  Seq. No.: 40  AS Loc.: 31  Date: 02/13/2002
Sample ID: 529838

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0018 | 0.0018 | 0.0000 | 0.0025 | 0.0005 | 12:36:05 | No |
| 2 | 0.0009 | 0.0009 | 0.0000 | 0.0024 | 0.0005 | 12:36:34 | No |
| Mean: | 0.0014 | 0.0014 | 0.0000 | | | | |
| SD : | 0.00065 | 0.00065 | 0.0000 | | | | |
| %RSD: | 46.7 | 46.7 | 46.7431 | | | | |

Element: Hg  Seq. No.: 41 2/13/02 DCS  AS Loc.: 32  Date: 02/13/2002
Sample ID: PBW-M2480135B 530780

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0094 | -0.0094 | -0.0001 | 0.0013 | 0.0003 | 12:37:53 | No |
| 2 | -0.0116 | -0.0116 | -0.0002 | 0.0013 | 0.0003 | 12:38:22 | No |
| Mean: | -0.0105 | -0.0105 | -0.0001 | | | | |
| SD : | 0.00154 | 0.00154 | 0.0000 | | | | |
| %RSD: | 14.7 | 14.7 | 14.6972 | | | | |

Element: Hg Seq. No.: 42 2/13/02 DCS AS Loc.: 33 Date: 02/13/2002
Sample ID: LCSW-M2480135B S30781

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 1.002 | 1.002 | 0.0142 | 0.0714 | 0.0147 | 12:39:37 | No |
| 2 | 0.9982 | 0.9982 | 0.0141 | 0.0708 | 0.0146 | 12:40:06 | No |
| Mean: | 1.000 | 1.000 | 0.0141 | | | | |
| SD : | 0.00272 | 0.00272 | 0.0000 | | | | |
| %RSD: | 0.3 | 0.3 | 0.2722 | | | | |

Element: Hg Seq. No.: 43 AS Loc.: 34 Date: 02/13/2002
Sample ID: 525478

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0024 | 0.0024 | 0.0000 | 0.0023 | 0.0005 | 12:41:21 | No |
| 2 | -0.0012 | -0.0012 | 0.0000 | 0.0019 | 0.0005 | 12:41:50 | No |
| Mean: | 0.0006 | 0.0006 | 0.0000 | | | | |
| SD : | 0.00253 | 0.00253 | 0.0000 | | | | |
| %RSD: | 418.2 | 418.2 | 418.1603 | | | | |

Element: Hg Seq. No.: 44 AS Loc.: 35 Date: 02/13/2002
Sample ID: 528749

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0080 | 0.0080 | 0.0001 | 0.0027 | 0.0006 | 12:43:07 | No |
| 2 | 0.0077 | 0.0077 | 0.0001 | 0.0027 | 0.0006 | 12:43:36 | No |
| Mean: | 0.0079 | 0.0079 | 0.0001 | | | | |
| SD : | 0.00017 | 0.00017 | 0.0000 | | | | |
| %RSD: | 2.1 | 2.1 | 2.1042 | | | | |

Element: Hg Seq. No.: 45 AS Loc.: 36 Date: 02/13/2002
Sample ID: 528765

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.1969 | 0.1969 | 0.0028 | 0.0161 | 0.0033 | 12:44:53 | No |
| 2 | 0.1954 | 0.1954 | 0.0028 | 0.0159 | 0.0032 | 12:45:22 | No |
| Mean: | 0.1962 | 0.1962 | 0.0028 | | | | |
| SD : | 0.00110 | 0.00110 | 0.0000 | | | | |
| %RSD: | 0.6 | 0.6 | 0.5618 | | | | |

Element: Hg Seq. No.: 46 AS Loc.: 37 Date: 02/13/2002
Sample ID: 530118

| 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 | 0.0004 | 12:46:39 | No |
| 2 | -0.0058 | -0.0058 | -0.0001 | 0.0018 | 0.0004 | 12:47:08 | No |
| Mean: | -0.0066 | -0.0066 | -0.0001 | | | | |
| SD : | 0.00110 | 0.00110 | 0.0000 | | | | |

%RSD: 16.7 16.7 16.6648

Element: Hg Seq. No.: 47 AS Loc.: 38 Date: 02/13/2002
Sample ID: 530119

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0035 | -0.0035 | 0.0000 | 0.0019 | 0.0004 | 12:48:25 | No |
| 2 | -0.0033 | -0.0033 | 0.0000 | 0.0019 | 0.0004 | 12:48:54 | No |
| Mean: | -0.0034 | -0.0034 | 0.0000 | | | | |
| SD : | 0.00014 | 0.00014 | 0.0000 | | | | |
| %RSD: | 4.3 | 4.3 | 4.2740 | | | | |

Element: Hg Seq. No.: 48 AS Loc.: 7 Date: 02/13/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 2.985 | 2.985 | 0.0422 | 0.2108 | 0.0427 | 12:50:13 | No |
| 2 | 2.970 | 2.970 | 0.0420 | 0.2070 | 0.0425 | 12:50:42 | No |
| Mean: | 2.978 | 2.978 | 0.0421 | | | | |
| SD : | 0.01061 | 0.01061 | 0.0002 | | | | |
| %RSD: | 0.4 | 0.4 | 0.3562 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 49 AS Loc.: 1 Date: 02/13/2002
Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0060 | -0.0060 | -0.0001 | 0.0017 | 0.0004 | 12:52:01 | No |
| 2 | -0.0077 | -0.0077 | -0.0001 | 0.0014 | 0.0004 | 12:52:30 | No |
| Mean: | -0.0068 | -0.0068 | -0.0001 | | | | |
| SD : | 0.00121 | 0.00121 | 0.0000 | | | | |
| %RSD: | 17.8 | 17.8 | 17.8120 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 50 AS Loc.: 39 Date: 02/13/2002
Sample ID: 530120

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0077 | -0.0077 | -0.0001 | 0.0018 | 0.0004 | 12:53:47 | No |
| 2 | -0.0081 | -0.0081 | -0.0001 | 0.0017 | 0.0004 | 12:54:16 | No |
| Mean: | -0.0079 | -0.0079 | -0.0001 | | | | |
| SD : | 0.00029 | 0.00029 | 0.0000 | | | | |
| %RSD: | 3.6 | 3.6 | 3.6094 | | | | |

Element: Hg Seq. No.: 51 AS Loc.: 40 Date: 02/13/2002
Sample ID: 530125

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0054 | -0.0054 | -0.0001 | 0.0021 | 0.0004 | 12:55:34 | No |
| 2 | -0.0085 | -0.0085 | -0.0001 | 0.0017 | 0.0004 | 12:56:03 | No |
| Mean: | -0.0070 | -0.0070 | -0.0001 | | | | |
| SD : | 0.00213 | 0.00213 | 0.0000 | | | | |
| %RSD: | 30.7 | 30.7 | 30.6524 | | | | |

Perkin-Elmer AAWinLab: 02/13/2002, 12:56:26 AM

Element: Hg  Seq. No.: 52  AS Loc.: 41  Date: 02/13/2002
Sample ID: 530134

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0059 | -0.0059 | -0.0001 | 0.0020 | 0.0004 | 12:57:22 | No |
| 2 | -0.0094 | -0.0094 | -0.0001 | 0.0014 | 0.0003 | 12:57:51 | No |
| Mean: | -0.0076 | -0.0076 | -0.0001 | | | | |
| SD : | 0.00250 | 0.00250 | 0.0000 | | | | |
| %RSD: | 32.7 | 32.7 | 32.6760 | | | | |

Element: Hg  Seq. No.: 53  AS Loc.: 42  Date: 02/13/2002
Sample ID: 530136

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0111 | -0.0111 | -0.0002 | 0.0014 | 0.0003 | 12:59:10 | No |
| 2 | -0.0077 | -0.0077 | -0.0001 | 0.0017 | 0.0004 | 12:59:39 | No |
| Mean: | -0.0094 | -0.0094 | -0.0001 | | | | |
| SD : | 0.00244 | 0.00244 | 0.0000 | | | | |
| %RSD: | 25.9 | 25.9 | 25.8673 | | | | |

Element: Hg  Seq. No.: 54 2/13/02 DCS  AS Loc.: 43  Date: 02/13/2002
Sample ID: 530136D 530778

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0104 | -0.0104 | -0.0001 | 0.0016 | 0.0003 | 01:00:59 | No |
| 2 | -0.0105 | -0.0105 | -0.0001 | 0.0016 | 0.0003 | 01:01:28 | No |
| Mean: | -0.0104 | -0.0104 | -0.0001 | | | | |
| SD : | 0.00004 | 0.00004 | 0.0000 | | | | |
| %RSD: | 0.4 | 0.4 | 0.3871 | | | | |

Element: Hg  Seq. No.: 55 2/13/02 DCS  AS Loc.: 44  Date: 02/13/2002
Sample ID: 530136S 530779

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.8493 | 0.8493 | 0.0120 | 0.0641 | 0.0125 | 01:02:48 | No |
| 2 | 0.8549 | 0.8549 | 0.0121 | 0.0631 | 0.0126 | 01:03:17 | No |
| Mean: | 0.8521 | 0.8521 | 0.0121 | | | | |
| SD : | 0.00395 | 0.00395 | 0.0001 | | | | |
| %RSD: | 0.5 | 0.5 | 0.4639 | | | | |

Element: Hg  Seq. No.: 56  AS Loc.: 45  Date: 02/13/2002
Sample ID: 530137

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0066 | -0.0066 | -0.0001 | 0.0022 | 0.0004 | 01:04:38 | No |
| 2 | -0.0076 | -0.0076 | -0.0001 | 0.0020 | 0.0004 | 01:05:08 | No |
| Mean: | -0.0071 | -0.0071 | -0.0001 | | | | |
| SD : | 0.00071 | 0.00071 | 0.0000 | | | | |
| %RSD: | 10.0 | 10.0 | 9.9943 | | | | |

Element: Hg  Seq. No.: 57  AS Loc.: 46  Date: 02/13/2002
Sample ID: 526735

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | -0.0059 | -0.0059 | -0.0001 | 0.0015 | 0.0004 | 01:06:29 | No |
| 2 | -0.0050 | -0.0050 | -0.0001 | 0.0017 | 0.0004 | 01:06:58 | No |
| Mean: | -0.0055 | -0.0055 | -0.0001 | | | | |
| SD : | 0.00066 | 0.00066 | 0.0000 | | | | |
| %RSD: | 12.1 | 12.1 | 12.0618 | | | | |

Element: Hg Seq. No.: 58 AS Loc.: 47 Date: 02/13/2002
Sample ID: 526736

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0060 | -0.0060 | -0.0001 | 0.0017 | 0.0004 | 01:08:19 | No |
| 2 | -0.0063 | -0.0063 | -0.0001 | 0.0017 | 0.0004 | 01:08:49 | No |
| Mean: | -0.0062 | -0.0062 | -0.0001 | | | | |
| SD : | 0.00026 | 0.00026 | 0.0000 | | | | |
| %RSD: | 4.2 | 4.2 | 4.1982 | | | | |

Element: Hg Seq. No.: 59 AS Loc.: 48 Date: 02/13/2002
Sample ID: 526738

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0628 | 0.0628 | 0.0009 | 0.0070 | 0.0014 | 01:10:08 | No |
| 2 | 0.0588 | 0.0588 | 0.0008 | 0.0065 | 0.0013 | 01:10:37 | No |
| Mean: | 0.0608 | 0.0608 | 0.0009 | | | | |
| SD : | 0.00286 | 0.00286 | 0.0000 | | | | |
| %RSD: | 4.7 | 4.7 | 4.7063 | | | | |

Element: Hg Seq. No.: 60 AS Loc.: 7 Date: 02/13/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 2.992 | 2.992 | 0.0423 | 0.2100 | 0.0428 | 01:11:55 | No |
| 2 | 2.978 | 2.978 | 0.0421 | 0.2106 | 0.0426 | 01:12:24 | No |
| Mean: | 2.985 | 2.985 | 0.0422 | | | | |
| SD : | 0.01004 | 0.01004 | 0.0001 | | | | |
| %RSD: | 0.3 | 0.3 | 0.3363 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 61 AS Loc.: 1 Date: 02/13/2002
Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0083 | -0.0083 | -0.0001 | 0.0017 | 0.0004 | 01:13:42 | No |
| 2 | -0.0063 | -0.0063 | -0.0001 | 0.0019 | 0.0004 | 01:14:12 | No |
| Mean: | -0.0073 | -0.0073 | -0.0001 | | | | |
| SD : | 0.00144 | 0.00144 | 0.0000 | | | | |
| %RSD: | 19.7 | 19.7 | 19.6747 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 62 AS Loc.: 49 Date: 02/13/2002
Sample ID: 526740

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0085 | 0.0085 | 0.0001 | 0.0030 | 0.0006 | 01:15:28 | No |
| 2 | 0.0101 | 0.0101 | 0.0001 | 0.0033 | 0.0006 | 01:15:58 | No |
| Mean: | 0.0093 | 0.0093 | 0.0001 | | | | |

| | | | |
|---|---|---|---|
| SD : | 0.00116 | 0.00116 | 0.0000 |
| %RSD: | 12.4 | 12.4 | 12.4322 |

Element: Hg Seq. No.: 63 AS Loc.: 50 Date: 02/13/2002
Sample ID: 526741

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0073 | 0.0073 | 0.0001 | 0.0029 | 0.0006 | 01:17:13 | No |
| 2 | 0.0052 | 0.0052 | 0.0001 | 0.0026 | 0.0006 | 01:17:42 | No |
| Mean: | 0.0063 | 0.0063 | 0.0001 | | | | |
| SD : | 0.00144 | 0.00144 | 0.0000 | | | | |
| %RSD: | 23.1 | 23.1 | 23.0899 | | | | |

Element: Hg Seq. No.: 64 AS Loc.: 51 Date: 02/13/2002
Sample ID: 526741D

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0075 | 0.0075 | 0.0001 | 0.0028 | 0.0006 | 01:18:57 | No |
| 2 | 0.0083 | 0.0083 | 0.0001 | 0.0029 | 0.0006 | 01:19:27 | No |
| Mean: | 0.0079 | 0.0079 | 0.0001 | | | | |
| SD : | 0.00051 | 0.00051 | 0.0000 | | | | |
| %RSD: | 6.5 | 6.5 | 6.5173 | | | | |

Element: Hg Seq. No.: 65 AS Loc.: 52 Date: 02/13/2002
Sample ID: 526741S

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.9795 | 0.9795 | 0.0139 | 0.0714 | 0.0143 | 01:20:43 | No |
| 2 | 0.9811 | 0.9811 | 0.0139 | 0.0710 | 0.0144 | 01:21:12 | No |
| Mean: | 0.9803 | 0.9803 | 0.0139 | | | | |
| SD : | 0.00111 | 0.00111 | 0.0000 | | | | |
| %RSD: | 0.1 | 0.1 | 0.1132 | | | | |

Element: Hg Seq. No.: 66 AS Loc.: 53 Date: 02/13/2002
Sample ID: 526742

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0376 | 0.0376 | 0.0005 | 0.0050 | 0.0010 | 01:22:29 | No |
| 2 | 0.0389 | 0.0389 | 0.0006 | 0.0053 | 0.0010 | 01:22:58 | No |
| Mean: | 0.0382 | 0.0382 | 0.0005 | | | | |
| SD : | 0.00096 | 0.00096 | 0.0000 | | | | |
| %RSD: | 2.5 | 2.5 | 2.5045 | | | | |

Element: Hg Seq. No.: 67 AS Loc.: 54 Date: 02/13/2002
Sample ID: 528767

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0029 | 0.0029 | 0.0000 | 0.0025 | 0.0005 | 01:24:15 | No |
| 2 | 0.0021 | 0.0021 | 0.0000 | 0.0024 | 0.0005 | 01:24:44 | No |
| Mean: | 0.0025 | 0.0025 | 0.0000 | | | | |
| SD : | 0.00055 | 0.00055 | 0.0000 | | | | |
| %RSD: | 21.7 | 21.7 | 21.7184 | | | | |

Element: Hg Seq. No.: 68 AS Loc.: 7 Date: 02/13/2002

Perkin-Elmer AAWinLab: 02/13/2002, 01:25:07 PM

Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 2.971 | 2.971 | 0.0420 | 0.2118 | 0.0425 | 01:26:04 | No |
| 2 | 2.952 | 2.952 | 0.0418 | 0.2110 | 0.0422 | 01:26:34 | No |
| Mean: | 2.962 | 2.962 | 0.0419 | | | | |
| SD : | 0.01400 | 0.01400 | 0.0002 | | | | |
| %RSD: | 0.5 | 0.5 | 0.4727 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 69 AS Loc.: 1 Date: 02/13/2002

Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0081 | -0.0081 | -0.0001 | 0.0016 | 0.0004 | 01:27:53 | No |
| 2 | -0.0076 | -0.0076 | -0.0001 | 0.0017 | 0.0004 | 01:28:22 | No |
| Mean: | -0.0078 | -0.0078 | -0.0001 | | | | |
| SD : | 0.00037 | 0.00037 | 0.0000 | | | | |
| %RSD: | 4.7 | 4.7 | 4.7020 | | | | |

QC value within specified limits.

CAS-R ster ICP Water Digestion Log

Analyst: JM Date: 2/1/08 Spk Witness: SD

Batch ID: M268 04

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 | |
| 2 | LCSW | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | +0.5ml spk A,B to 0.5ml Se |
| 3 | R10366 525553 | <2 | | | B-CLR | | | |
| 4 | R10405 525900 | ↓ | | | C-CLR | | | |
| 5 | 901 | | | | ↓ | ↓ | | |
| 6 | 901 D | | | | | | | |
| 7 | ↓ 901 S | | | | | | | +0.5ml spk A,B to 5ml Se |
| 8 | 526033 | | | | | | ↓ | |
| 9 | R10467 526735 | <2 | | | | | 28Si,28Pb,25Mg,Ag,Ba,Cd,Cr,Mo,Zn | |
| 10 | 736 | | | | ↓ | ↓ | | |
| 11 | 738 | | | | B-CDY | Y-CLR | | |
| 12 | 740 | | | | ↓ | ↓ | | |
| 13 | 741 | | | | | | | |
| 14 | ↓ 742 | | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | JM 2/1/08 | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |

Spiking Standards / Reagent Lot #:

Spike A,B: M1780032D,E Spike #4: —

TCLP Spk: — TCLP Ba: —

Se Std: M1780029Q Sn Std: —

HNO3: M1780031I HCL: M1780031J

Color / Clarity Key:

Color: C = Colorless ; Y = Yellow ; B = Brown

BL = Black ; G = Grey

Clarity: CDY = Cloudy ; CLR = Clear ; OP = Opaque

04

Comments: _____

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## Columbia Analytical Services

For: Hg | EPA Method: (1470) / 7471 / (245.1) / 245.5 | Analyst: DCA

Bath Temp: In 95 / Out 95 | Report: (Routine) / ASP / (Pkg.5) | Date Prepped: 2/13/02

Time In: 905 | File Name: Feb-13W | Date Analyzed: 2/13/02

Time Out: 1105

| | Client / Submission # | Sample Number | Initial Wgt/Volume (g/ml) | Final Volume (ml) | | Client / Submission # | Sample Number | Initial Wgt/Volume (g/ml) | Final Volume (ml) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | PBW A | 100 | 100 | 31 | R-10644 | 510120 | 100 | 100 |
| 2 | | LCSW A | | | 32 | | 125 | | |
| 3 | R-10283 | 524158 | | | 33 | | 134 | | |
| 4 | R-10575 | 528969 | | | 34 | | 136 | | |
| 5 | | 970 | | | 35 | | 136Dup | | |
| 6 | | 971 | | | 36 | | 136SPK | | |
| 7 | | 972 | | | 37 | | 137 | | |
| 8 | | 972Dup | | | 38 | R-10457 | 526735 | | |
| 9 | | 972SPK | | | 39 | | 736 | | |
| 10 | | 973 | | | 40 | | 738 | | |
| 11 | | 974 | | | 41 | | 740 | | |
| 12 | | 976 | | | 42 | | 741 | | |
| 13 | | 977 | | | 43 | | 741Dup | | |
| 14 | | 978 | | | 44 | | 741SPK | | |
| 15 | | 979 | | | 45 | | 742 | | |
| | | 981 | | | 46 | R-10566 | 528767 | | |
| 17 | R-10616 | 529731 | | | 47 | | | | |
| 18 | | 732 | | | 48 | | | | |
| 19 | | 733 | | | 49 | | | | |
| 20 | | 736 | | | | | ICB | 100ml DI Water | 100 |
| 21 | | 737 | | | | | Std 0 | 100ml DI Water | 100 |
| 22 | R-633 | 529837 | | | | | Std 0.2* | 0.20ml of 0.1ppm | 100 |
| 23 | | 529838 | | | | | Std 0.5* | 0.50ml of 0.1ppm | 100 |
| 24 | | PBW B | | | | | Std 1.0* | 1.00ml of 0.1ppm | 100 |
| 25 | | LCSW B | | | | | Std 2.0* | 2.00ml of 0.1ppm | 100 |
| 26 | R-10342 | 525478 | | | | | Std 5.0* | 5.00ml of 0.1ppm | 100 |
| 27 | R-10562 | 528749 | | | | | Std 10.0* | 10.0ml of 0.1ppm | 100 |
| 28 | R-10565 | 528765 | | | | | ICV/CCV** | 3.00ml of 0.1ppm | 100 |
| 29 | R-10644 | 530118 | | | | | LCSW/MS** | 1.00ml of 0.1ppm | 100 |
| 30 | | 530119 | | | | | CRDL* | 0.20ml of 0.1ppm | 100 |

**Lot # of Reagents Used:**

HNO3: M178003IE | H2SO4: M178002GK | HCL: M178003IJ | K2S2O8: M178003I5 | KMnO4: M178003OP

SnCl2: M178003IQ | NaCl: M178003OK | NH2OH-HCL: M178003OE | LCSS CAS Lot#: —

LCSS ERA Lot#: —

*Source Standard: (Vendor/Lot #) M178003ON | **ICV Standard: (Vendor/Lot #) M178002GF

*(10ppm stock Lot#: M2650178A) | **(10ppm stock Lot#: M2650218A)

*(0.1ppm working std Lot#: M2650178D) | **(0.1ppm working std Lot#: M2650218B)

**Comments/Problems:** _____

**Batch Name:** M2480135A | M2480135B

## A 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d 1 | CA | M17800 31W | 5000 | 2.00 | 200 | 50.0 | 2%HNO3 | SJ 2/10/02 | A | M17800311 | M17800315 | M18 |
| | MG | | 5000 | | | 50.0 | 5%HCl | SJ 2/11/02 | B | 1 | 1 | 1 |
| | K | | 5000 | | | 50.0 | | | C | | | |
| | NA | | 5000 | | | 50.0 | | | D | | | |
| td 2 | AG | M17800 31M | 100 | 2.00 | | 1.00 | | | E | | | |
| | CR | | 100 | | | 1.00 | | | F | | | |
| | MN | | 150 | | | 1.50 | | | G | | | |
| | NI | | 400 | | | 4.00 | | | H | | | |
| | ZN | | 200 | | | 2.00 | | | I | | | |
| Std 3 | AL | M17800 32K | 2000 | 2.00 | | 20.0 | | | J | | | |
| | 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 | | | |
| l Std 4 | AS | M17800 32J | 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 | | | |
| ingle | SB | M17800 32P | 1000 | 2.00 | | 10.0 | | | V | | | |
| ments | SN | ~~32J~~ 32F | 1000 | 2.00 | | 10.0 | | | W | | | |
| | B | 28E | 1000 | 1.00 | | 5.00 | | | X | | | |
| | MO | 25N | 1000 | 1.00 | | 5.00 | | | Y | | | |
| | TI | 29H | 1000 | 1.00 | | 5.00 | | | Z | | | |

TIMA 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| l Std 1 | CA | M1780031F | 5000 | 1.00 | 200 | 25.0 | 2%HNO3 | SD 2/10/02 | A | M1780031I | M1780031J | M18/M10 |
| | MG | | 5000 | | | 25.0 | 5%HCl | SD 2/11/02 | B | " | " | M18/M10 |
| | K | | 5000 | | | 25.0 | | | C | | | |
| | NA | | 5000 | | | 25.0 | | | D | | | |
| al Std 2 | AG | M1780029Y | 100 | 1.00 | | 0.500 | | | E | | | |
| | CR | | 100 | | | 0.500 | | | F | | | |
| | MN | | 150 | | | 0.750 | | | G | | | |
| | NI | | 400 | | | 2.00 | | | H | | | |
| | ZN | | 200 | | | 1.00 | | | I | | | |
| al 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 | | | |
| Cal Std 4 | AS | M1780031C | 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 | M1800 30H | 1000 | 1.00 | | 5.00 | | | V | | | |
| Elements | 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 | | | |

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## OPTIMA CRI STANDARD

| ient | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DL TD | M17800260 | Multi | 0.500 | 500 | Multi | 5% HCL 2%HNO3 | SD 11/26/01 | A | M1780028N | M1780030A | 5/26/02 | M10 |
| G | | 20 | | | 0.0200 | | SD 12/4/01 | B | " | " | 6/4/02 | M10 |
| AS | | 20 | | | 0.0200 | | SD 12/12/01 | C | M1780039E | M1780030A | 6/12/02 | M10 |
| BE | | 10 | | | 0.0100 | | SD 12/19/01 | D | " | M1780031J | 6/19/02 | M10 |
| CD | | 10 | | | 0.0100 | | SD 1/2/02 | E | " | " | 7/2/02 | M10 |
| CR | | 20 | | | 0.0200 | | SD 1/9/02 | F | " | " | 7/9/02 | M10 |
| CO | | 100 | | | 0.100 | | SD 1/16/02 | G | M17800311 | " | 7/16/02 | M10 |
| CU | | 50 | | | 0.0500 | | SD 1/24/02 | H | " | " | 7/24/02 | M10 |
| MN | | 30 | | | 0.0300 | | SD 2/4/02 | I | " | " | 8/4/02 | M10 |
| NI | | 80 | | | 0.0800 | | SD 2/10/02 | J | " | " | 8/10/02 | M10 |
| 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 | | | | |

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ICSA / ICSAB STA[illegible] D

ICSA

| Element | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible]t. A Sol'n | M17800321 | 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 | M17800311 | | 7/28/02 | – |
| CA | | 5000 | | | 500 | | SD 2/10/02 | C | | | 8/10/02 | – |
| FE | | 2000 | | | 200 | | | D | | | | |
| MG | | 5000 | | | 500 | | | E | | | | |

ICSAB

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Int. A Sol'n | M1780031E | Multi | 100 | 1000 | Multi | | SD 12/26/01 | AA | M1780029E | M1780031J | 6/26/02 | [illegible] |
| AL | | 5000 | | | 500 | | SD 1/11/02 | BB | | | 7/11/02 | – |
| CA | | 5000 | | | 500 | | SD 1/28/02 | CC | M17800311 | | 7/28/02 | – |
| FE | | 2000 | | | 200 | | | DD | | | | |
| MG | | 5000 | | | 500 | | | EE | | | | |
| Int. 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 | | | | |

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## OPTIMA INTERNAL STANDARD

| ient | 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 | — |
| :s | M17800090 | 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 | - |
| | | | | | | | SD 2/4/02 | G | 〃 | 〃 | 8/4/02 | - |
| | | | | | | | | H | | | | |
| | | | | | | | | I | | | | |
| | | | | | | | | J | | | | |
| | | | | | | | | K | | | | |
| | | | | | | | | L | | | | |
| | | | | | | | | M | | | | |
| | | | | | | | | N | | | | |
| | | | | | | | | O | | | | |
| | | | | | | | | P | | | | |
| | | | | | | | | Q | | | | |
| | | | | | | | | R | | | | |
| | | | | | | | | S | | | | |

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## 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 | M1780030N | 1000 | 1.00 | 100 | 10.0 | 0.5% HNO3 | DCB 2/10/02 | A | 2/16/02 | M1780031E | 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 2/10/02 | B | M1780031E | M4 |
| | | | | | | | DCB 2/12/02 | C | M1780031E | M4 |
| | | | | | | | DCB 2/13/02 | D | M1780031E | M4 |
| | | | | | | | | E | | |
| | | | | | | | | 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 2/10/02 | I | M1780031E | — |
| 0.500 | | | 0.500 | | 0.500 | | DCB 2/12/02 | J | M1780031E | — |
| 1.00 | | | 1.00 | | 1.00 | | DCB 2/13/02 | K | M1780031E | — |
| 2.00 | | | 2.00 | | 2.00 | | | L | | |
| 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 | M17800265 | 1000 | 1.00 | 100 | 10.0 | 0.5% HNO3 | DCB 2/10/02 | A | 2/16/02 | M17800315 | 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 2/10/02 | B | M17800215 | M4 |
| | | | | | | | DCB 2/12/02 | C | M17800315 | M4 |
| | | | | | | | DCB 2/13/02 | D | M17800315 | M4 |
| | | | | | | | | E | | |
| | | | | | | | | 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 2/10/02 | I | M17800315 | — |
| LCSW / MS | | | 1.00 | | 1.00 | | DCB 2/12/02 | J | M17800215 | — |
| | | | | | | | DCB 2/13/02 | K | M17800315 | — |
| | | | | | | | | L | | |
| | | | | | | | | M | | |
| | | | | | | | | N | | |
| | | | | | | | | O | | |

# WET CHEM DATA

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-5-CON-14

**Date Sampled :** 01/23/02 15:25 **Order #:** 526725 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 77.3 | % | 01/29/02 | 10:50 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-6-CON-12

**Date Sampled :** 01/23/02 16:35 **Order #:** 526726 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 82.8 | % | 01/29/02 | 10:50 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/26/02

Tetra Tech EM Inc.
**Project Reference:** AGROMAC-LOCKWOOD G9011.E01.0005.10
**Client Sample ID :** SG-12-CON-12

**Date Sampled :** 01/23/02 13:50 **Order #:** 526729 **Sample Matrix:** SOIL/SEDIMENT
**Date Received:** 01/25/02 **Submission #:** R2210457

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 80.2 | % | 01/29/02 | 10:50 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/26/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD G9011.E01.0005.10
Client Sample ID : SG-18-CON-11

Date Sampled : 01/23/02 17:15 Order #: 526730 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/25/02 Submission #: R2210457

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 78.7 | % | 01/29/02 | 10:50 | 1.0 |

COLUMBIA ANALYTICAL SERVICES

Reported: 02/26/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD G9011.E01.0005.10
Client Sample ID : SMWB-WW

Date Sampled : 01/19/02 15:45 Order #: 526743 Sample Matrix: WATER
Date Received: 01/25/02 Submission #: R2210457

| ANALYTE | METHOD | PQL | RESULT | UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PH | 9040/9 | 1.00 | 9.14 | | 01/29/02 | 07:40 | NA |

2 copies: 10457
10459

A

: 73916
t: CENT SOL. 160.0 PERCENT SOLIDS
ed: ../30/02 16:20

| SUBMISSION | ORDER # | MATRIX | REPORTED RESULT | DILUTION | PQL | % RECOVERY | % RSD | DATE ANALYZED | QC | PKG # |
|---|---|---|---|---|---|---|---|---|---|---|
| | 527525 | SOIL/SEDIM | 1.00 | 1.0 | 1.0 | | 194.9 | 01/29/2002 | | |
| 9912010457 | 526725 | SOIL/SEDIM | 77.3 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| | 527526 | SOIL/SEDIM | 76.7 | 1.0 | 1.0 | | 0.77 | 01/29/2002 | | |
| 9912010457 | 526726 | SOIL/SEDIM | 82.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010457 | 526729 | SOIL/SEDIM | 80.2 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010457 | 526730 | SOIL/SEDIM | 78.7 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526757 | SOIL/SEDIM | 81.9 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526760 | SOIL/SEDIM | ~~91.3~~ 90.8 BB 2/1/02 Transcription error | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526763 | SOIL/SEDIM | 98.2 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526765 | SOIL/SEDIM | 98.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526769 | SOIL/SEDIM | 84.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| | 527527 | SOIL/SEDIM | 84.4 | 1.0 | 1.0 | | 0.05 | 01/29/2002 | | |
| 9912010459 | 526771 | SOIL/SEDIM | 87.2 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526773 | SOIL/SEDIM | 84.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526774 | SOIL/SEDIM | 85.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526775 | SOIL/SEDIM | 81.0 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526776 | SOIL/SEDIM | 89.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526777 | SOIL/SEDIM | 87.1 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526778 | SOIL/SEDIM | 84.3 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 12010459 | 526779 | SOIL/SEDIM | 84.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 12010459 | 526780 | SOIL/SEDIM | 89.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526781 | SOIL/SEDIM | 89.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526782 | SOIL/SEDIM | 89.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526783 | SOIL/SEDIM | ~~86.0~~ 87.3 BB 2/1/02 Transcription error | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526784 | SOIL/SEDIM | 85.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526785 | SOIL/SEDIM | 88.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526786 | SOIL/SEDIM | 88.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526787 | SOIL/SEDIM | 90.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526788 | SOIL/SEDIM | 94.6 | 1.0 | 1.0 | | | 01/29/2002 | QC | 5 |
| | 527528 | SOIL/SEDIM | 94.6 | 1.0 | 1.0 | | 0.01 | 01/29/2002 | | |
| 9912010459 | 526789 | SOIL/SEDIM | 91.1 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526790 | SOIL/SEDIM | 84.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526791 | SOIL/SEDIM | 84.9 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526792 | SOIL/SEDIM | 87.2 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526793 | SOIL/SEDIM | 92.1 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526794 | SOIL/SEDIM | 95.7 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526795 | SOIL/SEDIM | 94.7 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526796 | SOIL/SEDIM | 80.7 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| | 527529 | SOIL/SEDIM | 80.4 | 1.0 | 1.0 | | 0.40 | 01/29/2002 | | |
| 9912010459 | 526797 | SOIL/SEDIM | 80.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526798 | SOIL/SEDIM | 89.3 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526799 | SOIL/SEDIM | 83.3 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526800 | SOIL/SEDIM | 91.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526801 | SOIL/SEDIM | 84.3 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526802 | SOIL/SEDIM | 90.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526804 | SOIL/SEDIM | 90.6 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526805 | SOIL/SEDIM | 88.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526807 | SOIL/SEDIM | 88.1 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| 9912010459 | 526809 | SOIL/SEDIM | 88.5 | 1.0 | 1.0 | | | 01/29/2002 | QC | 5 |
| | 527530 | SOIL/SEDIM | 88.5 | 1.0 | 1.0 | | 0.01 | 01/29/2002 | | |
| 9912010459 | 526811 | SOIL/SEDIM | 87.5 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |

ANALYTE:G:\STARLIMS\ASBAR.RP1

Review Date 2/1/02 Name S Baur
Entry Date ____ Name ____

| YPE | SUBMISSION | ORDER # | MATRIX | RESULT | DILUTION | POL | % RECOVERY | % RSD | ANALYZED | QC | PKG # |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SMP | 9912010459 | 526812 | SOIL/SEDIM | 82.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| SI | 912010459 | 526813 | SOIL/SEDIM | 82.8 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| SM | 912010459 | 526814 | SOIL/SEDIM | 82.9 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| SMP | 9912010459 | 526815 | SOIL/SEDIM | 81.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| SMP | 9912010459 | 526816 | SOIL/SEDIM | 82.4 | 1.0 | 1.0 | | | 01/29/2002 | | 5 |
| DUP | | 527524 | SOIL/SEDIM | 82.3 | 1.0 | 1.0 | | 0.08 | 01/29/2002 | | |
| SMP | 9912010467 | 527046 | SOIL/SEDIM | 89.7 | 1.0 | 1.0 | | | 01/29/2002 | | 1 |

Records printed: 58

ATE PRINTED: 01/30/02

## SOLIDS REPORT

RUN #: 73916 ANALYSIS DATE: 01/29/2002 ASSIGNED TO :
TEMPLATE: DWPS
TEST :

| DUP# | ORDER # | SUBMISSION | CONTROL TYPE | GROSS(g) TARE(g) DIFF(g) | | % SOLID | DISH ID | LS JOB# | LS LOC# |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 527525 | R22 0 | MBLK | (1.2600-1.2600)=0.0000 | DRY*100 = | 1.00 | 1 | | |
| | | | | (1.2600-1.2600)=0.0000 | WET | | | | |
| 2 | 526725 | R2210457 | ESMP | (9.4500-1.2500)=8.2000 | DRY*100 = | 77.30 | 2 | | |
| | | | | (11.8600-1.2500)=10.6100 | WET | | | | |
| 3 | 527526 | R22 0 | DUPE | (9.3500-1.2500)=8.1000 | DRY*100 = | 76.70 | 3 | | |
| | | | | (11.8100-1.2500)=10.5600 | WET | | | | |
| 4 | 526726 | R2210457 | ESMP | (9.6100-1.2600)=8.3500 | DRY*100 = | 82.80 | 4 | | |
| | | | | (11.3500-1.2600)=10.0900 | WET | | | | |
| 5 | 526729 | R2210457 | ESMP | (9.3700-1.2500)=8.1200 | DRY*100 = | 80.20 | 5 | | |
| | | | | (11.3700-1.2500)=10.1200 | WET | | | | |
| 6 | 526730 | R2210457 | ESMP | (9.5100-1.2600)=8.2500 | DRY*100 = | 78.70 | 6 | | |
| | | | | (11.7400-1.2600)=10.4800 | WET | | | | |
| 7 | 526757 | R2210459 | ESMP | (9.5700-1.2700)=8.3000 | DRY*100 = | 81.90 | 7 | | |
| | | | | (11.4000-1.2700)=10.1300 | WET | | | | |
| 8 | 526760 | R2210459 | ESMP | (10.7000-1.2600)=9.4400 | DRY*100 = | ~~91.30~~ 90.8 | 8 | | |
| | | | | (11.6600-1.2600)=10.3400 BB 2/11/02 | WET | | | | |
| 9 | 526763 | R2210459 | ESMP | (11.6500-1.2500)=10.4000 | DRY*100 = | 98.20 | 9 | | |
| | | | | (11.8400-1.2500)=10.5900 | WET | | | | |
| | 526765 | R2210459 | ESMP | (11.4600-1.2700)=10.1900 | DRY*100 = | 98.40 | 10 | | |
| | | | | (11.6300-1.2700)=10.3600 | WET | | | | |
| 11 | 526769 | R2210459 | ESMP | (10.0500-1.2500)=8.8000 | DRY*100 = | 84.40 | 11 | | |
| | | | | (11.6800-1.2500)=10.4300 | WET | | | | |
| 12 | 527527 | R22 0 | DUPE | (10.0500-1.2600)=8.7900 | DRY*100 = | 84.40 | 13 | | |
| | | | | (11.6700-1.2600)=10.4100 | WET | | | | |
| 13 | 526771 | R2210459 | ESMP | (10.0800-1.2500)=8.8300 | DRY*100 = | 87.20 | 14 | | |
| | | | | (11.3800-1.2500)=10.1300 | WET | | | | |
| 14 | 526773 | R2210459 | ESMP | (10.0100-1.2500)=8.7600 | DRY*100 = | 84.60 | 15 | | |
| | | | | (11.6000-1.2500)=10.3500 | WET | | | | |
| 15 | 526774 | R2210459 | ESMP | (10.1800-1.2400)=8.9400 | DRY*100 = | 85.80 | 16 | | |
| | | | | (11.6600-1.2400)=10.4200 | WET | | | | |
| 16 | 526775 | R2210459 | ESMP | (9.2500-1.2500)=8.0000 | DRY*100 = | 81.00 | 17 | | |
| | | | | (11.1200-1.2500)=9.8700 | WET | | | | |
| 17 | 526776 | R2210459 | ESMP | (10.5000-1.2600)=9.2400 | DRY*100 = | 89.80 | 18 | | |
| | | | | (11.5500-1.2600)=10.2900 | WET | | | | |
| 18 | 526777 | R2210459 | ESMP | (10.4200-1.2600)=9.1600 | DRY*100 = | 87.10 | 19 | | |
| | | | | (11.7800-1.2600)=10.5200 | WET | | | | |
| 19 | 526778 | R2210459 | ESMP | (9.7900-1.2400)=8.5500 | DRY*100 = | 84.30 | 20 | | |
| | | | | (11.3800-1.2400)=10.1400 | WET | | | | |
| 20 | 526779 | R2210459 | ESMP | (9.8300-1.2600)=8.5700 | DRY*100 = | 84.80 | 21 | | |
| | | | | (11.3700-1.2600)=10.1100 | WET | | | | |
| 21 | 526780 | R2210459 | ESMP | (10.2900-1.2600)=9.0300 | DRY*100 = | 89.60 | 22 | | |
| | | | | (11.3400-1.2600)=10.0800 | WET | | | | |
| 22 | 526781 | R2210459 | ESMP | (10.3300-1.2600)=9.0700 | DRY*100 = | 89.40 | 24 | | |
| | | | | (11.4100-1.2600)=10.1500 | WET | | | | |
| 23 | 526782 | R2210459 | ESMP | (10.8000-1.2600)=9.5400 | DRY*100 = | 89.60 | 25 | | |
| | | | | (11.9100-1.2600)=10.6500 | WET | 87.6 | | | |
| 24 | 526783 | R2210459 | ESMP | (10.4200-1.2600)=9.1600 | DRY*100 = | ~~88.00~~ | 26 | | |
| | | | | (11.~~3~~100-1.2600)=10.6500 BB 2/11/02 | WET | | | | |
| 25 | 526784 | R2210459 | ESMP | (9.8600-1.2600)=8.6000 | DRY*100 = | 85.40 | 27 | | |
| | | | | (11.3300-1.2600)=10.0700 | WET | | | | |

E PRINTED: 01/30/02

## SOLIDS REPORT

N #: 73916 ANALYSIS DATE: 01/29/2002 ASSIGNED TO :
MPLATE: DWPS
ST :

| P# | ORDER # | SUBMISSION | CONTROL TYPE | GROSS(g) TARE(g) DIFF(g) | | % SOLID | DISH ID | LS JOB# | LS LOC# |
|---|---|---|---|---|---|---|---|---|---|
| 26 | 526785 | R2210459 | ESMP | (10.2700-1.2500)=9.0200 | DRY*100 = | 88.50 | 28 | | |
| | | | | (11.4400-1.2500)=10.1900 | WET | | | | |
| 27 | 526786 | R2210459 | ESMP | (10.4800-1.2700)=9.2100 | DRY*100 = | 88.60 | 29 | | |
| | | | | (11.6600-1.2700)=10.3900 | WET | | | | |
| 28 | 526787 | R2210459 | ESMP | (10.6300-1.2500)=9.3800 | DRY*100 = | 90.50 | 30 | | |
| | | | | (11.6100-1.2500)=10.3600 | WET | | | | |
| 29 | 526788 | R2210459 | ESMP | (11.0300-1.2300)=9.8000 | DRY*100 = | 94.60 | 31 | | |
| | | | | (11.5900-1.2300)=10.3600 | WET | | | | |
| 30 | 527528 | R22 0 | DUPE | (11.0400-1.2400)=9.8000 | DRY*100 = | 94.60 | 32 | | |
| | | | | (11.6000-1.2400)=10.3600 | WET | | | | |
| 31 | 526789 | R2210459 | ESMP | (10.6800-1.2600)=9.4200 | DRY*100 = | 91.10 | 33 | | |
| | | | | (11.6000-1.2600)=10.3400 | WET | | | | |
| 32 | 526790 | R2210459 | ESMP | (9.7600-1.2500)=8.5100 | DRY*100 = | 84.50 | 35 | | |
| | | | | (11.3200-1.2500)=10.0700 | WET | | | | |
| 33 | 526791 | R2210459 | ESMP | (9.9100-1.2600)=8.6500 | DRY*100 = | 84.90 | 36 | | |
| | | | | (11.4500-1.2600)=10.1900 | WET | | | | |
| 34 | 526792 | R2210459 | ESMP | (10.3400-1.2400)=9.1000 | DRY*100 = | 87.20 | 37 | | |
| | | | | (11.6800-1.2400)=10.4400 | WET | | | | |
| | 526793 | R2210459 | ESMP | (10.9500-1.2500)=9.7000 | DRY*100 = | 92.10 | 38 | | |
| | | | | (11.7800-1.2500)=10.5300 | WET | | | | |
| 36 | 526794 | R2210459 | ESMP | (11.1200-1.2400)=9.8800 | DRY*100 = | 95.70 | 39 | | |
| | | | | (11.5600-1.2400)=10.3200 | WET | | | | |
| 37 | 526795 | R2210459 | ESMP | (10.9600-1.2400)=9.7200 | DRY*100 = | 94.70 | 40 | | |
| | | | | (11.5000-1.2400)=10.2600 | WET | | | | |
| 38 | 526796 | R2210459 | ESMP | (9.3000-1.2400)=8.0600 | DRY*100 = | 80.70 | 41 | | |
| | | | | (11.2300-1.2400)=9.9900 | WET | | | | |
| 39 | 527529 | R22 0 | DUPE | (9.3200-1.2500)=8.0700 | DRY*100 = | 80.40 | 42 | | |
| | | | | (11.2900-1.2500)=10.0400 | WET | | | | |
| 40 | 526797 | R2210459 | ESMP | (9.8400-1.2400)=8.6000 | DRY*100 = | 80.60 | 43 | | |
| | | | | (11.9100-1.2400)=10.6700 | WET | | | | |
| 41 | 526798 | R2210459 | ESMP | (10.1900-1.2400)=8.9500 | DRY*100 = | 89.30 | 44 | | |
| | | | | (11.2600-1.2400)=10.0200 | WET | | | | |
| 42 | 526799 | R2210459 | ESMP | (10.0000-1.2400)=8.7600 | DRY*100 = | 83.30 | 46 | | |
| | | | | (11.7500-1.2400)=10.5100 | WET | | | | |
| 43 | 526800 | R2210459 | ESMP | (10.7700-1.2400)=9.5300 | DRY*100 = | 91.50 | 47 | | |
| | | | | (11.6500-1.2400)=10.4100 | WET | | | | |
| 44 | 526801 | R2210459 | ESMP | (9.7900-1.2500)=8.5400 | DRY*100 = | 84.30 | 48 | | |
| | | | | (11.3800-1.2500)=10.1300 | WET | | | | |
| 45 | 526802 | R2210459 | ESMP | (10.6800-1.2400)=9.4400 | DRY*100 = | 90.50 | 49 | | |
| | | | | (11.6780-1.2400)=10.4300 | WET | | | | |
| 46 | 526804 | R2210459 | ESMP | (10.7200-1.2600)=9.4600 | DRY*100 = | 90.60 | 50 | | |
| | | | | (11.7000-1.2600)=10.4400 | WET | | | | |
| 47 | 526805 | R2210459 | ESMP | (10.2400-1.2600)=8.9800 | DRY*100 = | 88.50 | 51 | | |
| | | | | (11.4100-1.2600)=10.1500 | WET | | | | |
| 48 | 526807 | R2210459 | ESMP | (10.1000-1.2700)=8.8300 | DRY*100 = | 88.10 | 52 | | |
| | | | | (11.2900-1.2700)=10.0200 | WET | | | | |
| 49 | 526809 | R2210459 | ESMP | (10.0800-1.2600)=8.8200 | DRY*100 = | 88.50 | 53 | | |
| | | | | (11.2300-1.2600)=9.9700 | WET | | | | |
| 50 | 527530 | R22 0 | DUPE | (10.1200-1.2600)=8.8600 | DRY*100 = | 88.50 | 54 | | |
| | | | | (11.2700-1.2600)=10.0100 | WET | | | | |

PRINTED: 01/30/02

## SOLIDS REPORT

#: 73916 ANALYSIS DATE: 01/29/2002 ASSIGNED TO :
PLATE: DWPS
T :

| # | ORDER # | SUBMISSION | CONTROL TYPE | GROSS(g) TARE(g) DIFF(g) | | % SOLID | DISH ID | LS JOB# | LS LOC# |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 526811 | R2210459 | ESNP | (10.2100-1.3000)=8.9100 | DRY*100 = | 87.50 | 55 | | |
| | | | | (11.4800-1.3000)=10.1800 | WET | | | | |
| 52 | 526812 | R2210459 | ESNP | (9.6800-1.2600)=8.4200 | DRY*100 = | 82.80 | 57 | | |
| | | | | (11.4300-1.2600)=10.1700 | WET | | | | |
| 53 | 526813 | R2210459 | ESNP | (9.8600-1.2600)=8.6000 | DRY*100 = | 82.80 | 58 | | |
| | | | | (11.6500-1.2600)=10.3900 | WET | | | | |
| 54 | 526814 | R2210459 | ESNP | (10.0400-1.2600)=8.7800 | DRY*100 = | 82.90 | 59 | | |
| | | | | (11.8500-1.2600)=10.5900 | WET | | | | |
| 55 | 526815 | R2210459 | ESNP | (9.5500-1.2400)=8.3100 | DRY*100 = | 81.40 | 60 | | |
| | | | | (11.4500-1.2400)=10.2100 | WET | | | | |
| 56 | 526816 | R2210459 | ESNP | (9.5500-1.2700)=8.2800 | DRY*100 = | 82.40 | 61 | | |
| | | | | (11.3200-1.2700)=10.0500 | WET | | | | |
| 57 | 527524 | R22 0 | DUPE | (9.5100-1.2600)=8.2500 | DRY*100 = | 82.30 | 62 | | |
| | | | | (11.2800-1.2600)=10.0200 | WET | | | | |
| 58 | 527046 | R2210467 | ESNP | (10.8700-1.2700)=9.6000 | DRY*100 = | 89.70 | 63 | | |
| | | | | (11.9700-1.2700)=10.7000 | WET | | | | |

Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: T. Drobek

Date: 1/29/02 Time: 1050 "S" weight initial: 10.00 final: 10.00

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | | Gross | 1.26 | |
| ICB | | 1 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.86 | Gross | 9.45 | |
| 526725 | R2-10457 | 2 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.81 | Gross | 9.35 | |
| -Dup | | 3 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.35 | Gross | 9.61 | |
| 526726 | | 4 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.37 | Gross | 9.37 | |
| 526729 | | 5 | 1.25 TD 1/29 | Tare | | |
| | | | | diff. | | |
| | | | 11.74 | Gross | 9.51 | |
| 526730 | | 6 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.40 | Gross | 11.65 9.57 | GV 1/30/02 |
| 526757 | R2-10459 | 7 | 1.27 | Tare | | |
| | | | | Diff. | | |
| | | | 11.66 | Gross | 10.70 | |
| 526760 | | 8 | 1.25 TD 1/29 | Tare | | |
| | | | | Diff. | | |

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Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: T. Drobek

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| 526763 | R2-10159 | 9 | 11.84 | Gross | 11.65 | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |
| 526765 | | 10 | 11.63 | Gross | 11.46 | |
| | | | 1.27 | Tare | | |
| | | | | Diff. | | |
| 526769 | | 11 | 11.68 | Gross | 10.05 | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |
| CCB | | 12 | | Gross | 1.26 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526769 | | 13 | 11.67 | Gross | 10.05 | |
| -Dup | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526771 | | 14 | 11.38 | Gross | 10.08 | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |
| 526773 | | 15 | 11.60 | Gross | 10.01 | |
| | | | 1.25 (TO 1/29) | Tare | | |
| | | | | Diff. | | |
| 526774 | | 16 | 11.66 | Gross | 10.18 | |
| | | | 1.24 | Tare | | |
| | | | | Diff. | | |

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Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: T. Drobek

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| 526775 | R2-10459 | 17 | 11.12 | Gross | 9.25 | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |
| 526776 | | 18 | 11.55 | Gross | 10.50 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526777 | | 19 | 11.78 | Gross | 10.42 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526778 | | 20 | 11.38 | Gross | 9.79 | |
| | | | 1.24 | Tare | | |
| | | | | Diff. | | |
| 526779 | | 21 | 11.37 | Gross | 9.83. | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526780 | | 22 | 11.34 | Gross | 10.29 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| CCB | | 23 | | Gross | 1.26. | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |
| 526781 | | 24 | 11.41 | Gross | 10.33 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |

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TD 1/27

γ Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: T. Drobek

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | 11.91 | Gross | 10.80 | |
| 526782 | R2-10459 | 25 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.71 | Gross | 10.42 | |
| 526783 | | 26 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.343 | Gross | 986 | |
| 526784 | | 27 | 1.26 TD 1/28 | Tare | | |
| | | | | Diff. | | |
| | | | 11.44 | Gross | 10.27 | |
| 526785 | | 28 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.66 | Gross | 10.48 | |
| 526786 | | 29 | 1.27 | Tare | | |
| | | | | Diff. | | |
| | | | 11.61 | Gross | 10.63 | |
| 526787 | | 30 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.59 | Gross | 11.03 | |
| 526788 | | 31 | 1.23 | Tare | | |
| | | | | Diff. | | |
| | | | 11.60 | Gross | 11.04 | |
| -Dup | | 32 | 1.24 | Tare | | |
| | | | | Diff. | | |

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y Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: T. Drobek

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | 11.60 | Gross | 10.68 | |
| 526789 | R2-10459 | 33 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | | Gross | 1.26 | |
| CCB | | 34 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.32 | Gross | 9.76 | |
| 526790 | | 35 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.45 | Gross | 9.91 | |
| 526791 | | 36 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.68 | Gross | 10.34 | |
| 526792 | | 37 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.78 | Gross | 10.95 | |
| 526793 | | 38 | 1.265 TD 1/29 | Tare | | |
| | | | | Diff. | | |
| | | | 11.56 | Gross | 11.12 | |
| 526794 | | 39 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.50 | Gross | 10.946 GW 1/30/02 | |
| 526795 | | 40 | 1.24 | Tare | | |
| | | | | Diff. | | |

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Dry Weight Percent Solids

Analyst: T. Drobek

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | 11.23 | Gross | 9.30 | |
| 526796 | R2-10459 | 41 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.29 | Gross | 9.32 | |
| -Dup | | 42 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.91 | Gross | 9.84 | |
| 526797 | | 43 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.26 | Gross | 10.19 | |
| 526798 | | 44 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | | Gross | 1.25 | |
| CCB | | 45 | 1.25 | Tare | | |
| | | | | Diff. | | |
| | | | 11.75 | Gross | 10.00 | |
| 526799 | | 46 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.65 | Gross | 10.71 | |
| 526800 | | 47 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.38 | Gross | 9.79 | |
| 526801 | | 48 | 1.25 | Tare | | |
| | | | | Diff. | | |

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Dry Weight Percent Solids

Analyst: T. Drobek

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| 526802 | R2-10459 | 49 | 11.67 | Gross | 10.68 | |
| | | | 1.24 | Tare | | |
| | | | | Diff. | | |
| 526804 | | 50 | 11.70 | Gross | 10.72 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526805 | | 51 | 11.41 | Gross | 10.24 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526807 | | 52 | 11.29 | Gross | 10.10 | |
| | | | 1.27 | Tare | | |
| | | | | Diff. | | |
| 526809 | | 53 | 11.23 | Gross | 10.08 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| -Dup | | 54 | 11.27 | Gross | 10.12 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526811 | | 55 | 11.48 | Gross | 10.21 | |
| | | | 1.30 | Tare | | |
| | | | | Diff. | | |
| CCB | | 56 | | Gross | 1.25 | |
| | | | 1.25 | Tare | | |
| | | | | Diff. | | |

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Dry Weight Percent Solids

Analyst: T. Drobek

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Date: 1/29/02 Time: _____ "S" weight initial: _____ final: _____

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| 526812 | R2-10459 | 57 | 11.43 | Gross | 9.68 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526813 | | 58 | 11.65 | Gross | 9.86 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526814 | | 59 | 11.85 | Gross | 10.04 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 526815 | | 60 | 11.45 | Gross | 9.55 | |
| | | | 1.24 | Tare | | |
| | | | | Diff. | | |
| 526816 | | 61 | 11.32 | Gross | 9.55 | |
| | | | 1.27 | Tare | | |
| | | | | Diff. | | |
| -Dup | | 62 | 11.28 | Gross | 9.51 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |
| 527046 | R2-10467 | 63 | 11.97 | Gross | 10.87 | |
| | | | 1.26 | Tare | | |
| | | | TD 1/29 | Diff. | | |
| CCB | | 64 | | Gross | 1.25 | |
| | | | 1.26 | Tare | | |
| | | | | Diff. | | |

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**Columbia Analytical Services**
**1 Mustard St., Rochester, NY 14608-0859**

**General Chemistry Analytical Run Cover Sheet**

Analyst: T. Drobek  Date: 1/~~31~~ 29/02 TP 1/31

Analysis: DWPS  Instrument: American Scientific Tuploader

**Quality Control:**

| | Log Book # | Log Book Date | Stock Sol (mLs) | Stock Sol (mg/L) | Final Vol (mLs) | True Value (mg/L) |
|---|---|---|---|---|---|---|
| | | | | | | |
| *a) Standards Prep.:* | | | | | | |
| | | | | | | |
| *b) ICCV Preparation:* | | | | | | |
| | | | | | | |
| *c) LCS Preparation:* | | | | | | |
| | | | | | | |
| *d) Matrix Spike Prep.:* | | | | | | |

***Instrument log filled in? (Y) (N)***

***Comments:***

**Packages:**

**a) Chains Signed? (Y) (N)**

**b) Copy and attach Standards Preparation.**

**Production:**

| | Start Time | End Time | Total (minutes) |
|---|---|---|---|
| Preparation Time : | | | |
| Analytical Time: | | | |
| Finish Time: | | | |

**# of Samples (including Mtx QC): _____**
**Repeats due to Sample: _____**
**Repeats due to Error: _____**

***Comments:***

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Limits for DI Water  If pH < 5.5, or > 7.5  Notify QA!
Limits for Spec. Cond.  >= 1 - Notify QA!  (Limit is 2 umohs/cm)

Date: 1-29-02

| Sub. # | Order # | pH 150.1 9040B | Corrsivity 9045C | CONDUCTVITY 120.1 raw data | units | umhos/c | TEMP °C | Analyst | Time |
|---|---|---|---|---|---|---|---|---|---|
| DI Water | | 6.089 | | 0.585 | µs | 0.585 | | ME | 7:25 |
| RB-10457 | 526743 | 9.145 | | | | | | ME | 7:40 |

**pH Meter Calibration**

STANDARDS  4.00 ✓  10.00 ✓  ICV check 7.00 7.021  TEMP. 20.0

LOT # :  BDB2639D  BDB2639F  BDB2639E

**Conductivity Meter Calibration**  (calibrate to 1412 and test 2767 & 141.3 standard)

N KCL: 1412  Calibrated (Yes / NO)  LOT # : BDB2639C
Cell Constant: 1.082

N KCL: 2767  LOT # : BDB2641D  Reading 2690
10% Limits: 2490.3 to 3043.7

N KCL: 141.3  LOT # : BDB2641C  Reading 143.3
10% Limits: 127.17 to 155.43

uS = 1 umhos/cm  mS = 1,000 umhos/cm  S = 1,000,000 umhos/cm

Analyst: ME  DATE: 1-29-02  TIME: 7:10

Removed mm 1/4/02

Columbia Analytical Services, Inc.

A FULL SERVICE ENVIRONMENTAL LABORATORY

February 25, 2002

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

PROJECT:AGROMAC-LOCKWOOD OU #2
Submission #:R2210552

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:(585)288-5380 • Fax:(585)288-8475

Columbia Analytical Services, Inc.

1 Mustard ST.
Suite 250
Rochester, NY 14609
(585) 288-5380

**THIS IS AN ANALYTICAL TEST REPORT FOR:**

Client : Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Lab Submission # : R2210552
Project Manager : Mark Wilson
Reported : 02/25/02

Report Contains a total of 173 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. Penny

# SDG NARRATIVE

## CASE NARRATIVE

COMPANY: Tetra Tech EM Inc.
Agromac-Lockwood
SUBMISSION #: R2210552

Tetra Tech soil samples were collected on 01/19-21/02 and received at CAS on 01/24/02 in good condition.

## INORGANICS

Soil samples were analyzed for a site list of Metals by EPA Methods 6010B and 7471A and TPH by EPA 418.1.

All matrix spike recoveries were within QC limits except for Arsenic and Silver in sample MTS-GB-SLU-3. All associated data has been flagged "N". All RPD were within limits except for Barium.

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.



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

CAS ASP/CLP BATCHIN' 'ORM / LOGIN SHEET

| | | |
|---|---|---|
| SDG #: SMWB | BATCH COMPLETE: __yes_____ | DATE REVISED: |
| SUBMISSION R2210552 | DISKETTE REQUESTED: Y___ N__x__ | DATE DUE: 02/28/02 |
| CLIENT: Tetra Tech EM Inc. | DATE: 02/04/02 | 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 |
|---|---|---|---|---|---|---|---|---|
| 528677 | SMWB-SLU | SOIL | Metals /TPH | 1/19/02 | 1/24/02 | | | |
| 528678 | HWSC-SLU | SOIL | Metals | 1/20/02 | 1/24/02 | | | |
| 528679 | MTS-GB-SLU-1 | SOIL | Metals | 1/21/02 | 1/24/02 | | | |
| 528680 | MTS-GB-SLU-2-FD | SOIL | Metals | 1/21/02 | 1/24/02 | | | |
| 528681 | MTS-GB-SLU-2 | SOIL | Metals | 1/21/02 | 1/24/02 | | | |
| 528682 | MTS-GB-SLU-4 | SOIL | Metals | 1/21/02 | 1/24/02 | | | |
| 528683 | ST-SLU | SOIL | Metals | 1/20/02 | 1/24/02 | | | |
| 528684 | BAC-SLU | SOIL | Metals | 1/20/02 | 1/24/02 | | | |
| 528685 | MTS-GB-SLU-3 | SOIL | QC Metals | 1/21/02 | 1/24/02 | | | |

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

# CHAINS OF CUSTODY
# INTERNAL CHAINS

Columbia Analytical Services, Inc.
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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (716) 288-5380 • 800-695-7222 x11 • FAX (716) 288-8475 PAGE 1 OF 4

SR #

CAS Contact

| | |
|---|---|
| Project Name: Agromac-Lakewood OU #2 | Project Number: G9011.E.01.00008.10 |
| 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: 0 0 See below 2 0 0

| 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 | PESTICIDES/ PCB's 8081 608 CLP 8082 | STARS LIST 8021 VOA's TOTAL TCLP | STARS LIST 8270 SVOA's TOTAL TCLP | TCLP VOA's METALS 1311 SVOA's | WASTE CHARACTERIZATION React Corros. Ignit. HVP | METALS, TOTAL (List in comments below) | METALS, DISSOLVED (List in comments below) | pH and % Solids | TPH 418.1 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SMWB-WW | 526701 | 1/19/02 | 1545 | Water | 2 | | | | | | | | ✓ | ✓ | | | | |
| * SMWB-SLU | 04 | 1/19/02 | 1545 | Soil | 2 | | | | | | ✓ | | ✓ | | (X) | | | |
| * HWSC-SLU | 05 | 1/20/02 | 1600 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * MTS-GB-SLU-1 | 06 | 1/21/02 | 1030 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * MTS-GB-SLU-2-FD | 07 | 1/21/02 | 0800 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * MTS-GB-SLU-2 | 08 | 1/21/02 | 0800 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * MTS-GB-SLU-4 | 09 | 1/21/02 | 1330 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * ST-SLU | 10 | 1/20/02 | 1430 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * BAC-SLU | 11 | 1/20/02 | 1700 | Soil | 2 | | | | | | ✓ | | ✓ | | X | | | |
| * MTS-GB-SLU-3 | 412 / 413 | 1/21/02 | 0900 | Soil | 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 ____

REMARKS/ ALTERNATE DESCRIPTION

Please Note: The Soil jars marked for Total metals are ONLY for pH and % Solids. Disregard the metals analysis. That will come later.

SPECIAL INSTRUCTIONS/COMMENTS

**Metals**

Total Metals by 6010B
Dissolved Metals by 6020
TCLP Metals by 1311
See QAPP * Total Not to be Added by CR

See Remark page. Side column.

* Total Metals in Water preserved with $HNO_3$.
Total Metals in Soil "preserved" with Ice, no other preservative.
(**) Soil samples analyzed for Total Metals, also for pH & % Solids

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

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: | Signature | Signature | Signature | Signature |
| Printed Name: Trisha R. Dealy | Printed Name: Brian Colton | Printed Name | Printed Name | Printed Name | Printed Name |
| Firm: TTEMI | Firm: CAS | Firm | Firm | Firm | Firm |
| Date/Time: 1/23/02 1400 | Date/Time: 1/24/02 950 | 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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# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (716) 288-5380 • 800-695-7222 x11 • FAX (716) 288-8475 PAGE 2 OF 4

SR #

CAS Contact

| | |
|---|---|
| Project Name: Agromac-Lockwood OU #2 | Project Number: G9011.E.01.00008.14 |
| Project Manager: Curt Enos | Report CC: |
| Company/Address: Tetra Tech E.M 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: 0 * * 0 0

| 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 ☐ TOTAL ☐ TCLP VOA's | STAR'S LIST 8270 ☐ TOTAL ☐ TCLP SVOA's | TCLP METALS ☐ VOA's ☐ SVOA's 1311 | WASTE CHARACTERIZATION ☐ React ☐ Corros. ☐ Ignit. ☐ H/P | METALS: TOTAL (List in comments below) | METALS: DISSOLVED (List in comments below) | pH, % Solids | % Solids for 5035 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTS-GB-SLU-3-MS | 4[illegible] | 1/21/02 | 0900 | Soil | 2 | | | | | | ✓ | | | | ✓ | | | | |
| MTS-GB-SLU-3-MSD | 4[illegible] | 1/21/02 | 0900 | Soil | 2 | | | | | | ✓ | | | | ✓ | | | | |
| SR-S-3-6/10 | | 1/19/02 | 0950 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SR-S-3-6/10 MS | | 1/19/02 | 0950 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SR-S-3-6/10 MSD | | 1/19/02 | 0950 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SR-S-3-2/6 | | 1/19/02 | 0900 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SR-S-3-2/6 FD | | 1/19/02 | 0900 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SI-S-4-10/14 | | 1/20/02 | 1215 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SI-S-4-6/10 | | 1/20/02 | 1215 | Soil | 1 | | | | | | | | | | | ✓ | | | |
| SI-S-1-10/14 | | 1/20/02 | 1035 | Soil | 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 _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

**Metals**

*Please note: 1. The 8-oz. jars labeled for total metals analysis are for pH and % solids. Please disregard the metals analysis.
2. The 4-oz. jars labeled for VOC analysis are for % solids for 5035.

TCLP by 1311 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 |
|---|---|---|---|---|---|
| Signature: Trisha R. Dealy | Signature: [illegible] | Signature | Signature | Signature | Signature |
| Printed Name: Trisha R. Dealy | Printed Name: [illegible] | Printed Name | Printed Name | Printed Name | Printed Name |
| Firm: TTEMI | Firm: GBS | Firm | Firm | Firm | Firm |
| Date/Time: 1/23/02 1600 | Date/Time: 1/24/02 950 | Date/Time | Date/Time | Date/Time | Date/Time |

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

SCOC-0101-08

INTERNAL CHAINS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210552 DATE REC'D: 01/24/02 0950

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|
| METALS | 528677 | 1 | HE | JM | 24-02 15:40 | A1 | 02/23/02 |
| METALS | 528678 | 1 | | | | | 02/23/02 |
| METALS | 528679 | 1 | | | | | 02/23/02 |
| METALS | 528680 | 1 | | | | | 02/23/02 |
| METALS | 528681 | 1 | | | | | 02/23/02 |
| METALS | 528682 | 1 | | | | | 02/23/02 |
| METALS | 528683 | 1 | | | | | 02/23/02 |
| METALS | 528684 | 1 | | | | | 02/23/02 |
| METALS | 528685 QC | 1 | | | | | 02/23/02 |

60

INTERNAL CHAINS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210552 DATE REC'D: 01/24/02 0950

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|
| HG | 528677 | 1 | [illegible] | [illegible] | 24-02 15:40 | C3 | 02/23/02 |
| HG | 528678 | 1 | | | | | 02/23/02 |
| HG | 528679 | 1 | | | | | 02/23/02 |
| HG | 528680 | 1 | | | | | 02/23/02 |
| HG | 528681 | 1 | | | | | 02/23/02 |
| HG | 528682 | 1 | | | | | 02/23/02 |
| HG | 528683 | 1 | | | | | 02/23/02 |
| HG | 528684 | 1 | | | | | 02/23/02 |
| HG | 528685 QC | 1 | | | | | 02/23/02 |

10

INTERNAL \INS

CLIENT NAME: Tetra Tech EM Inc.

SDG#: SUBMISSION: R2210552 DATE REC'D: 01/24/02 0950

| | ORDER # | # OF CONTAINERS | RELINQUISHED BY | RECEIVED BY | DATE TIME | STORAGE LOCATION | SCHEDULED LTS DATE |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 528677 | 1 | [illegible] | TD | 2-402 | C-2 | 02/23/02 |
| PERCENT SOLIDS | 528678 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528679 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528680 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528681 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528682 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528683 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528684 | 1 | | | | | 02/23/02 |
| PERCENT SOLIDS | 528685 QC | 1 | | | | | 02/23/02 |

# METALS DATA

# METALS
## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Project: R2210552 SDG No.: SMWB

Lab Code: Case No.: SAS No.:

SOW No.: SW846 CLP-M Client: Tetra Tech EM Inc.

| Sample No. | Lab Sample ID. |
|---|---|
| SMWB-SLU | 528677 |
| HWSC-SLU | 528678 |
| MTS-GB-SLU-1 | 528679 |
| MTS-GB-SLU-2-FD | 528680 |
| MTS-GB-SLU-2 | 528681 |
| MTS-GB-SLU-4 | 528682 |
| ST-SLU | 528683 |
| BAC-SLU | 528684 |
| MTS-GB-SLU-3 | 528685 |
| MTS-GB-SLU-3D | 528685D |
| MTS-GB-SLU-3S | 528685S |

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: 2/25/02 Title: Laboratory Manager

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

BAC-SLU

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

atrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528684

evel (low/med): LOW Date Received: 01/24/02

Solids: 72.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 4.0 | U | N | P |
| 7440-39-3 | Barium | 6.6 | U | * | P |
| 7440-43-9 | Cadmium | 49.3 | | | P |
| 7440-47-3 | Chromium | 650 | | | P |
| 7439-92-1 | Lead | 10.2 | | | P |
| 7439-96-5 | Manganese | 2210 | | | P |
| 7439-97-6 | Mercury | 0.003 | U | | CV |
| 7782-49-2 | Selenium | 4.9 | U | | P |
| 7440-22-4 | Silver | 1.2 | U | N | P |
| 7440-66-6 | Zinc | 147000 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS
-1-
## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
HWSC-SLU

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528678

Level (low/med): LOW Date Received: 01/24/02

% Solids: 45.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 4.6 | B | N | P |
| 7440-39-3 | Barium | 454 | | * | P |
| 7440-43-9 | Cadmium | 9.4 | | | P |
| 7440-47-3 | Chromium | 47.9 | | | P |
| 7439-92-1 | Lead | 423 | | | P |
| 7439-96-5 | Manganese | 204 | | | P |
| 7439-97-6 | Mercury | 0.02 | B | | CV |
| 7782-49-2 | Selenium | 3.8 | U | | P |
| 7440-22-4 | Silver | 0.91 | U | N | P |
| 7440-66-6 | Zinc | 13700 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MTS-GB-SLU-1

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528679

Level (low/med): LOW Date Received: 01/24/02

% Solids: 59.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 8.6 | B | N | P |
| 7440-39-3 | Barium | 34.8 | | * | P |
| 7440-43-9 | Cadmium | 18.4 | | | P |
| 7440-47-3 | Chromium | 495 | | | P |
| 7439-92-1 | Lead | 797 | | | P |
| 7439-96-5 | Manganese | 679 | | | P |
| 7439-97-6 | Mercury | 0.02 | B | | CV |
| 7782-49-2 | Selenium | 5.9 | U | | P |
| 7440-22-4 | Silver | 1.4 | U | N | P |
| 7440-66-6 | Zinc | 78900 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MTS-GB-SLU-2

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528681

Level (low/med): LOW Date Received: 01/24/02

% Solids: 79.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 5.9 | B | N | P |
| 7440-39-3 | Barium | 96.8 | | * | P |
| 7440-43-9 | Cadmium | 15.7 | | | P |
| 7440-47-3 | Chromium | 432 | | | P |
| 7439-92-1 | Lead | 201 | | | P |
| 7439-96-5 | Manganese | 916 | | | P |
| 7439-97-6 | Mercury | 0.02 | B | | CV |
| 7782-49-2 | Selenium | 4.3 | U | | P |
| 7440-22-4 | Silver | 1.0 | U | N | P |
| 7440-66-6 | Zinc | 88300 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS
-1-
## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MTS-GB-SLU-2-FD

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528680

Level (low/med): LOW Date Received: 01/24/02

% Solids: 78.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 5.6 | B | N | P |
| 7440-39-3 | Barium | 63.2 | | * | P |
| 7440-43-9 | Cadmium | 17.4 | | | P |
| 7440-47-3 | Chromium | 535 | | | P |
| 7439-92-1 | Lead | 213 | | | P |
| 7439-96-5 | Manganese | 958 | | | P |
| 7439-97-6 | Mercury | 0.02 | B | | CV |
| 7782-49-2 | Selenium | 4.6 | U | | P |
| 7440-22-4 | Silver | 1.1 | U | N | P |
| 7440-66-6 | Zinc | 118000 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

MTS-GB-SLU-3

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528685

Level (low/med): LOW Date Received: 01/24/02

% Solids: 82.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 3.5 | U | N | P |
| 7440-39-3 | Barium | 37.9 | | * | P |
| 7440-43-9 | Cadmium | 5.4 | B | | P |
| 7440-47-3 | Chromium | 184 | | | P |
| 7439-92-1 | Lead | 234 | | | P |
| 7439-96-5 | Manganese | 669 | | | P |
| 7439-97-6 | Mercury | 0.02 | B | | CV |
| 7782-49-2 | Selenium | 4.4 | U | | P |
| 7440-22-4 | Silver | 1.1 | U | N | P |
| 7440-66-6 | Zinc | 75300 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS
-1-
## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
MTS-GB-SLU-4

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528682

Level (low/med): LOW Date Received: 01/24/02

Solids: 96.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 1.5 | U | N | P |
| 7440-39-3 | Barium | 126 | | * | P |
| 7440-43-9 | Cadmium | 0.67 | B | | P |
| 7440-47-3 | Chromium | 8.7 | | | P |
| 7439-92-1 | Lead | 18.0 | | | P |
| 7439-96-5 | Manganese | 165 | | | P |
| 7439-97-6 | Mercury | 0.01 | B | | CV |
| 7782-49-2 | Selenium | 1.8 | U | | P |
| 7440-22-4 | Silver | 0.44 | U | N | P |
| 7440-66-6 | Zinc | 508 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

SMWB-SLU

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528677

Level (low/med): LOW Date Received: 01/24/02

% Solids: 27.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 3.3 | B | N | P |
| 7440-39-3 | Barium | 354 | | * | P |
| 7440-43-9 | Cadmium | 7.7 | | | P |
| 7440-47-3 | Chromium | 59.7 | | | P |
| 7439-92-1 | Lead | 409 | | | P |
| 7439-96-5 | Manganese | 481 | | | P |
| 7439-97-6 | Mercury | 0.05 | B | | CV |
| 7782-49-2 | Selenium | 2.6 | U | | P |
| 7440-22-4 | Silver | 0.63 | U | N | P |
| 7440-66-6 | Zinc | 1060 | | | P |

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

ST-SLU

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SEDIMENT Lab Sample ID: 528683

Level (low/med): LOW Date Received: 01/24/02

% Solids: 13.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7440-38-2 | Arsenic | 44.1 | | N | P |
| 7440-39-3 | Barium | 238 | | * | P |
| 7440-43-9 | Cadmium | 6.7 | B | | P |
| 7440-47-3 | Chromium | 13.5 | B | | P |
| 7439-92-1 | Lead | 50.1 | | | P |
| 7439-96-5 | Manganese | 105 | | | P |
| 7439-97-6 | Mercury | 0.48 | | | CV |
| 7782-49-2 | Selenium | 15.7 | | | P |
| 7440-22-4 | Silver | 1.8 | B | N | P |
| 7440-66-6 | Zinc | 2120 | | | P |

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | 1017.70 | 101.8 | 1000.0 | 1020.53 | 102.1 | 1029.03 | 102.9 | P |
| Barium | 10000.0 | 10441.55 | 104.4 | 10000.0 | 10483.55 | 104.8 | 10507.71 | 105.1 | P |
| Cadmium | 500.0 | 516.91 | 103.4 | 500.0 | 516.08 | 103.2 | 512.10 | 102.4 | P |
| Chromium | 500.0 | 507.16 | 101.4 | 500.0 | 508.75 | 101.8 | 506.43 | 101.3 | P |
| Lead | 500.0 | 510.28 | 102.1 | 500.0 | 512.06 | 102.4 | 512.77 | 102.6 | P |
| Manganese | 750.0 | 762.76 | 101.7 | 750.0 | 761.21 | 101.5 | 769.23 | 102.6 | P |
| Mercury | 3.0 | 3.06 | 102.0 | 3.0 | 3.00 | 100.0 | 3.11 | 103.7 | CV |
| Selenium | 500.0 | 508.65 | 101.7 | 500.0 | 507.38 | 101.5 | 507.28 | 101.5 | P |
| Silver | 500.0 | 503.35 | 100.7 | 500.0 | 502.28 | 100.5 | 502.77 | 100.6 | P |
| Zinc | 1000.0 | 986.60 | 98.7 | 1000.0 | 995.94 | 99.6 | 994.34 | 99.4 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

itial Calibration Source:

ontinuing 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 | 1042.86 | 104.3 | 1047.64 | 104.8 | P |
| Barium | | | | 10000.0 | 10513.60 | 105.1 | 10511.75 | 105.1 | P |
| Cadmium | | | | 500.0 | 514.65 | 102.9 | 518.27 | 103.7 | P |
| Chromium | | | | 500.0 | 510.90 | 102.2 | 514.74 | 102.9 | P |
| Lead | | | | 500.0 | 510.37 | 102.1 | 512.98 | 102.6 | P |
| Manganese | | | | 750.0 | 775.91 | 103.5 | 780.22 | 104.0 | P |
| Mercury | | | | 3.0 | 3.13 | 104.3 | | | CV |
| Selenium | | | | 500.0 | 507.18 | 101.4 | 510.40 | 102.1 | P |
| Silver | | | | 500.0 | 506.24 | 101.2 | 508.79 | 101.8 | P |
| Zinc | | | | 1000.0 | 997.59 | 99.8 | | | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

itial Calibration Source:

ontinuing 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 | 1052.57 | 105.3 | 1033.79 | 103.4 | P |
| Barium | | | | 10000.0 | 10505.79 | 105.1 | 10379.63 | 103.8 | P |
| Cadmium | | | | 500.0 | 520.01 | 104.0 | 510.13 | 102.0 | P |
| Chromium | | | | 500.0 | 517.51 | 103.5 | 508.44 | 101.7 | P |
| Lead | | | | 500.0 | 510.39 | 102.1 | 501.27 | 100.3 | P |
| Manganese | | | | 750.0 | 782.06 | 104.3 | 774.83 | 103.3 | P |
| Selenium | | | | 500.0 | 508.22 | 101.6 | 498.27 | 99.7 | P |
| Silver | | | | 500.0 | 512.41 | 102.5 | 504.57 | 100.9 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

itial Calibration Source:

ontinuing 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 | 1036.40 | 103.6 | 1033.06 | 103.3 | P |
| Barium | | | | 10000.0 | 10383.09 | 103.8 | 10399.50 | 104.0 | P |
| Cadmium | | | | 500.0 | 513.88 | 102.8 | 515.64 | 103.1 | P |
| Chromium | | | | 500.0 | 509.90 | 102.0 | 511.53 | 102.3 | P |
| Lead | | | | 500.0 | 508.39 | 101.7 | 507.32 | 101.5 | P |
| Manganese | | | | 750.0 | 768.18 | 102.4 | 770.70 | 102.8 | P |
| Selenium | | | | 500.0 | 506.05 | 101.2 | 503.27 | 100.7 | P |
| Silver | | | | 500.0 | 506.83 | 101.4 | 506.95 | 101.4 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS

## -2A-

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | 1014.51 | 101.5 | 1025.65 | 102.6 | P |
| Barium | | | | 10000.0 | 10386.27 | 103.9 | 10369.67 | 103.7 | P |
| Cadmium | | | | 500.0 | 505.20 | 101.0 | 513.82 | 102.8 | P |
| Chromium | | | | 500.0 | 501.88 | 100.4 | 510.67 | 102.1 | P |
| Lead | | | | 500.0 | 498.90 | 99.8 | 502.41 | 100.5 | P |
| Manganese | | | | 750.0 | 765.19 | 102.0 | 772.08 | 102.9 | P |
| Selenium | | | | 500.0 | 495.10 | 99.0 | 495.50 | 99.1 | P |
| Silver | | | | 500.0 | 498.81 | 99.8 | 506.21 | 101.2 | P |

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

# METALS
## -2B-
## CRDL STANDARD FOR AA AND ICP

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG No.: SMWB

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 | 20.77 | 103.8 | 20.82 | 104.1 |
| Barium | | | | | | | | |
| Cadmium | | | | 10.0 | 10.24 | 102.4 | 10.15 | 101.5 |
| Chromium | | | | 20.0 | 20.11 | 100.6 | 20.56 | 102.8 |
| Lead | | | | 6.0 | 5.96 | 99.3 | 6.06 | 101.0 |
| Manganese | | | | 30.0 | 30.35 | 101.2 | 30.94 | 103.1 |
| Mercury | 0.2 | 0.23 | 115.0 | | | | | |
| Selenium | | | | 10.0 | 9.11 | 91.1 | 8.05 | 80.5 |
| Silver | | | | 20.0 | 18.78 | 93.9 | 18.90 | 94.5 |
| Zinc | | | | 40.0 | 42.39 | 106.0 | 47.29 | 118.2 |

# METALS

-3-

## BLANKS

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

| Analyte | Initial Calib. Blank (ug/L) | C | Continuing Calibration Blank (ug/L) 1 | C | 2 | C | 3 | C | Preparation Blank | C | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 2.9 | U | 2.9 | U | 2.9 | U | 2.9 | U | -0.428 | B | P |
| Barium | 4.8 | U | 4.8 | U | 4.8 | U | 4.8 | U | 0.483 | U | P |
| Cadmium | 0.2 | U | 0.2 | U | 0.2 | U | 0.2 | U | 0.017 | U | P |
| Chromium | 1.3 | U | 1.3 | U | 1.3 | U | 1.3 | U | 0.131 | U | P |
| Lead | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 0.203 | U | P |
| Manganese | 1.2 | U | 1.2 | U | 1.2 | U | 1.2 | U | 0.124 | U | P |
| Mercury | 0.02 | U | 0.02 | U | 0.02 | U | 0.02 | U | 0.003 | U | CV |
| Selenium | 3.6 | U | 3.6 | U | -4.1 | B | -5.0 | B | 0.362 | U | P |
| Silver | 0.9 | U | 0.9 | U | 0.9 | U | 0.9 | U | 0.087 | U | P |
| Zinc | 3.5 | U | 3.7 | B | 4.6 | B | 6.1 | B | 1.331 | B | P |

# METALS

-3-

## BLANKS

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | | | 2.9 | U | 2.9 | U | 2.9 | U | | | P |
| Barium | | | 4.8 | U | 4.8 | U | 4.8 | U | | | P |
| Cadmium | | | 0.2 | U | 0.2 | U | 0.2 | U | | | P |
| Chromium | | | 1.3 | U | 1.3 | U | 1.3 | U | | | P |
| Lead | | | 2.0 | U | 2.0 | U | 2.0 | U | | | P |
| Manganese | | | 1.2 | U | 1.2 | U | 1.2 | U | | | P |
| Selenium | | | 3.6 | U | -4.6 | B | 3.6 | U | | | P |
| Silver | | | 0.9 | U | 0.9 | U | 0.9 | U | | | P |

# METALS

-3-

## BLANKS

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | | | 2.9 | U | 2.9 | U | 2.9 | U | | | P |
| Barium | | | 4.8 | U | 4.8 | U | 4.8 | U | | | P |
| Cadmium | | | 0.2 | U | 0.2 | U | 0.2 | B | | | P |
| Chromium | | | 1.3 | U | 1.3 | U | 1.3 | U | | | P |
| Lead | | | 2.0 | U | 2.0 | U | 2.0 | U | | | P |
| Manganese | | | 1.2 | U | 1.2 | U | 1.2 | U | | | P |
| Selenium | | | 3.6 | U | 3.6 | U | 3.6 | U | | | P |
| Silver | | | 0.9 | U | 0.9 | U | 0.9 | U | | | P |

# METALS

-3-

## BLANKS

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | | | 2.9 | U | | | | | | | P |
| Barium | | | 8.1 | B | | | | | | | P |
| Cadmium | | | 0.4 | B | | | | | | | P |
| Chromium | | | 1.3 | U | | | | | | | P |
| Lead | | | 2.0 | U | | | | | | | P |
| Manganese | | | 1.2 | U | | | | | | | P |
| Selenium | | | 3.6 | U | | | | | | | P |
| Silver | | | 0.9 | U | | | | | | | P |

-4-

# ICP INTERFERENCE CHECK SAMPLE

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 | | | 6 | 2.8 | | 6 | 4.4 | |
| Barium | | 500 | -4 | 559.7 | 111.9 | -6 | 545.9 | 109.2 |
| Cadmium | | 1000 | 5 | 1010.0 | 101.0 | 6 | 985.3 | 98.5 |
| Chromium | | 500 | 8 | 524.1 | 104.8 | 8 | 517.9 | 103.6 |
| Lead | | 1000 | 3 | 1026.1 | 102.6 | 3 | 998.6 | 99.9 |
| Manganese | | 500 | -12 | 509.1 | 101.8 | -12 | 510.1 | 102.0 |
| Selenium | | | -4 | -6.0 | | -5 | -5.6 | |
| Silver | | 1000 | -7 | 1148.1 | 114.8 | -6 | 1138.9 | 113.9 |

-4-

## ICP INTERFERENCE CHECK SAMPLE

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

ICP ID Number: Optima ICP 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 |
| Zinc | | 1000 | 3 | 913.8 | 91.4 | 7 | 922.0 | 92.2 |

# METALS
## -5A-
## SPIKE SAMPLE RECOVERY

SAMPLE NO.

MTS-GB-SLU-3S

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

Matrix (soil/water): SOIL/SED Level (low/med): LOW

% Solids for Sample: 82.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| Analyte | Control Limit %R | Spiked Sample Result (SSR) | C | Sample Result (SR) | C | Spike Added (SA) | %R | Q | M |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 75 - 125 | 11.6217 | B | 3.5412 | U | 4.82 | 241.2 | N | P |
| Barium | 75 - 125 | 228.9957 | | 37.9244 | | 240.90 | 79.3 | | P |
| Cadmium | 75 - 125 | 11.2522 | | 5.4103 | B | 6.02 | 97.0 | | P |
| Chromium | | 205.9982 | | 184.4519 | | 24.09 | 89.4 | | P |
| Lead | 75 - 125 | 293.6286 | | 234.2644 | | 60.23 | 98.6 | | P |
| Manganese | | 756.2577 | | 668.6969 | | 60.23 | 145.4 | | P |
| Mercury | 75 - 125 | 0.2190 | | 0.0174 | B | 0.19 | 106.1 | | CV |
| Selenium | 75 - 125 | 117.6300 | | 4.3603 | U | 121.65 | 96.7 | | P |
| Silver | 75 - 125 | 1.0845 | B | 1.0515 | U | 6.02 | 18.0 | N | P |
| Zinc | | 78484.5930 | | 75325.6988 | | 60.23 | 5244.7 | | P |

Comments:

# METALS
## -5B-
## POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

MTS-GB-SLU-3A

ontract: R2210552

lab Code: Case No.: SAS No.: SDG NO.: SMWB

atrix (soil/water): SOIL/SED 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 | | 39.19 | | 2.94 | U | 40.0 | 98.0 | | P |
| Barium | | 2096.29 | | 31.49 | | 2000.0 | 103.2 | | P |
| Cadmium | | 55.20 | | 4.49 | B | 50.0 | 101.4 | | P |
| Chromium | | 351.79 | | 153.14 | | 200.0 | 99.3 | | P |
| Lead | | 700.81 | | 194.49 | | 500.0 | 101.3 | | P |
| Manganese | | 1061.40 | | 555.17 | | 500.0 | 101.2 | | P |
| Selenium | | 1063.79 | | 3.62 | U | 1010.0 | 105.3 | | P |
| Silver | | 46.03 | | 0.87 | U | 50.0 | 92.1 | | P |
| inc | | 1784.09 | | 1250.74 | | 500.0 | 106.7 | | P |

Comments:

# METALS

-6-

## DUPLICATES

SAMPLE NO.

MTS-GB-SLU-3D

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

atrix (soil/water): SOIL/SEDI Level (low/med): LOW

Solids for Sample: 82.2 % Solids for Duplicate: 82.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| Analyte | Control Limit | Sample (S) | C | Duplicate (D) | C | RPD | Q | M |
|---|---|---|---|---|---|---|---|---|
| Arsenic | | 3.5412 | U | 3.5412 | U | | | P |
| Barium | 24.1 | 37.9244 | | 69.6832 | | 59.0 | * | P |
| Cadmium | 6.0 | 5.4103 | B | 6.0243 | | 10.7 | | P |
| Chromium | | 184.4519 | | 218.6751 | | 17.0 | | P |
| Lead | | 234.2644 | | 281.2089 | | 18.2 | | P |
| Manganese | | 668.6969 | | 728.6077 | | 8.6 | | P |
| Mercury | | 0.0174 | B | 0.0210 | B | 18.7 | | CV |
| Selenium | | 4.3603 | U | 4.3603 | U | | | P |
| Silver | | 1.0515 | U | 1.0515 | U | | | P |
| Zinc | | 75325.6988 | | 80522.0317 | | 6.7 | | P |

# METALS

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## LABORATORY CONTROL SAMPLE

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

olid LCS Source: ERA

queous LCS Source:

| Analyte | Aqueous (ug/L) True | Found | %R | Solid (mg/kg) True | Found | C | Limits | | %R |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | | | 185.0 | 176.9 | | 138.0 | 233.0 | 95.6 |
| Barium | | | | 177.0 | 159.6 | | 137.0 | 218.0 | 90.2 |
| Cadmium | | | | 64.0 | 60.6 | | 49.2 | 78.7 | 94.6 |
| Chromium | | | | 143.0 | 130.3 | | 114.0 | 171.0 | 91.1 |
| Lead | | | | 119.0 | 111.8 | | 90.9 | 148.0 | 94.0 |
| Manganese | | | | 388.0 | 345.2 | | 311.0 | 465.0 | 89.0 |
| Mercury | | | | 1.5 | 1.5 | | 0.9 | 2.1 | 97.0 |
| Selenium | | | | 150.0 | 137.4 | | 111.0 | 188.0 | 91.6 |
| Silver | | | | 90.0 | 82.2 | | 67.0 | 113.0 | 91.4 |
| Zinc | | | | 273.0 | 236.3 | | 51.1 | 88.1 | 86.5 |

# METALS

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## ICP SERIAL DILUTIONS

SAMPLE NO.

MTS-GB-SLU-3L

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

atrix (soil/water): SOIL/SEDI Level (low/med): LOW

Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Arsenic | 2.94 | U | 14.70 | U | | | P |
| Barium | 31.49 | | 38.05 | B | 20.8 | | P |
| Cadmium | 4.49 | B | 10.39 | B | 131.6 | | P |
| Chromium | 153.14 | | 153.36 | | 0.1 | | P |
| Lead | 194.49 | | 196.84 | | 1.2 | | P |
| Manganese | 555.17 | | 558.79 | | 0.7 | | P |
| Selenium | 3.62 | U | 18.10 | U | | | P |
| Silver | 0.87 | U | 4.37 | U | | | P |
| Zinc | 1250.74 | | 1228.39 | | 1.8 | | P |

# METALS

## -10-

## INSTRUMENT DETECTION LIMITS (QUARTERLY)

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

ICP ID Number: Optima ICP Date: 01/14/02

Flame AA ID Number:

Furnace AA ID Number:

| Analyte | Wave-length | Back-ground | CRDL (ug/L) | IDL (ug/L) | M |
|---|---|---|---|---|---|
| Zinc | 206.191 | | 20.0 | 3.5 | P |

Comments

# METALS

-10-

## INSTRUMENT DETECTION LIMITS (QUARTERLY)

)ntract: R2210552

ıb Code: Case No.: SAS No.: SDG NO.: SMWB

:P ID Number: Optima ICP 2 Date: 02/14/02

.ame AA ID Number:

ırnace AA ID Number:

| Analyte | Wave-length | Back-ground | CRDL (ug/L) | IDL (ug/L) | M |
|---|---|---|---|---|---|
| Arsenic | 188.979 | | 10.0 | 2.9 | P |
| Barium | 233.53 | | 20.0 | 4.8 | P |
| Cadmium | 226.50 | | 5.0 | 0.2 | P |
| Chromium | 267.72 | | 10.0 | 1.3 | P |
| Lead | 220.35 | | 5.0 | 2.0 | P |
| Manganese | 257.61 | | 10.0 | 1.2 | P |
| Selenium | 196.03 | | 5.0 | 3.6 | P |
| Silver | 328.07 | | 10.0 | 0.9 | P |

ıents

# METALS

## -10-

## INSTRUMENT DETECTION LIMITS (QUARTERLY)

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

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)

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

CP ID Number: Optima ICP Date: 1/29/02

| 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 | 0.0482483 | 0.0000000 | -0.0655713 | 0.0000000 |
| Arsenic | 188.979 | 0.0525109 | -2.2611799 | 0.0000000 | -0.094808 |
| Barium | 233.527 | 0.0618643 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.2130980 | 0.0000000 |
| Boron | 249.773 | 0.0000000 | 0.0000000 | 1.4060000 | 0.0000000 |
| Cadmium | 226.502 | 0.0000000 | 0.0000000 | 0.1258280 | 0.0000000 |
| Calcium | 430.253 | 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 | -0.4089540 | 0.0000000 |
| Iron | 238.863 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.353 | -0.0888734 | -0.0588837 | 0.0000000 | -0.031878 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 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 | 9.2295399 | -67.586601 | 0.0000000 |
| Selenium | 196.026 | 0.0868916 | -0.0389969 | 0.1423080 | 0.0000000 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | -0.1651480 | 0.0000000 |
| Sodium | 330.237 | 0.0000000 | 0.0000000 | -2.9396801 | 0.0000000 |
| Thallium | 190.800 | 0.0000000 | -0.0584077 | 0.0000000 | -0.055089 |
| Tin | 189.933 | 0.0000000 | 2.1097300 | 0.0000000 | 0.0000000 |
| 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 | 0.0384380 |

Comments: _____

# METALS

## -11A-

## ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

ICP ID Number: Optima ICP 2 Date: 2/21/02

| 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 | -0.1768660 | 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 | 0.0630405 | 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 | -0.0638789 | 0.0000000 |
| Iron | 238.863 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.353 | -0.0871538 | 0.0000000 | 0.0220873 | 0.0000000 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 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 | -126.60199 | 0.0000000 |
| Selenium | 196.026 | 0.0380139 | 0.0000000 | 0.0000000 | 0.0663967 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | -0.0521973 | 0.0000000 |
| Sodium | 330.237 | 0.0000000 | 0.0000000 | -2.7079301 | 0.0000000 |
| Thallium | 190.800 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Tin | 189.933 | 0.0000000 | 0.0000000 | 0.0000000 | 3.5068800 |
| Titanium | 334.941 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.402 | 0.0000000 | 0.0000000 | 0.0251358 | 0.0000000 |
| Zinc | 206.191 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0278356 |

Comments:

# METALS

-12-

## ICP LINEAR RANGES (QUARTERLY)

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

CP ID Number: Optima ICP Date: 01/22/02

| Analyte | Integ. Time (Sec.) | Concentration (ug/L) | M |
|---|---|---|---|
| Zinc | 0.20 | 4000.0 | P |

Comments:

# METALS

-12-

## ICP LINEAR RANGES (QUARTERLY)

Contract: R2210552

Lab Code: Case No.: SAS No.: SDG NO.: SMWB

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 |

Comments:

# METALS
## -13-
## PREPARATION LOG

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

ethod: P

| Sample No. | Preparation Date | Weight (grams) | Volume (mL) |
|---|---|---|---|
| BAC-SLU | 02/20/02 | 1.01 | 100 |
| HWSC-SLU | 02/20/02 | 1.05 | 100 |
| LCSS | 02/20/02 | 1.05 | 100 |
| MTS-GB-SLU-1 | 02/20/02 | 1.03 | 100 |
| MTS-GB-SLU-2 | 02/20/02 | 1.05 | 100 |
| MTS-GB-SLU-2-F | 02/20/02 | 1.00 | 100 |
| MTS-GB-SLU-3 | 02/20/02 | 1.01 | 100 |
| MTS-GB-SLU-3D | 02/20/02 | 1.01 | 100 |
| MTS-GB-SLU-3S | 02/20/02 | 1.01 | 100 |
| MTS-GB-SLU-4 | 02/20/02 | 1.03 | 100 |
| PBS | 02/20/02 | 1.00 | 100 |
| SMWB-SLU | 02/20/02 | 1.00 | 100 |
| ST-SLU | 02/20/02 | 1.02 | 100 |

# METALS
## -13-
## PREPARATION LOG

ontract: R2210552

ab Code: Case No.: SAS No.: SDG NO.: SMWB

ethod: CV

| Sample No. | Preparation Date | Weight (grams) | Volume (mL) |
|---|---|---|---|
| BAC-SLU | 02/07/02 | 0.67 | 100 |
| HWSC-SLU | 02/07/02 | 0.61 | 100 |
| LCSS | 02/07/02 | 0.61 | 100 |
| MTS-GB-SLU-1 | 02/07/02 | 0.62 | 100 |
| MTS-GB-SLU-2 | 02/07/02 | 0.61 | 100 |
| MTS-GB-SLU-2-F | 02/07/02 | 0.61 | 100 |
| MTS-GB-SLU-3 | 02/07/02 | 0.67 | 100 |
| MTS-GB-SLU-3D | 02/07/02 | 0.60 | 100 |
| MTS-GB-SLU-3S | 02/07/02 | 0.65 | 100 |
| MTS-GB-SLU-4 | 02/07/02 | 0.64 | 100 |
| PBS | 02/07/02 | 0.60 | 100 |
| SMWB-SLU | 02/07/02 | 0.64 | 100 |
| ST-SLU | 02/07/02 | 0.65 | 100 |

# METALS

## -14-

## ANALYSIS RUN LOG

Contract: R2210552

Lab Code  Case No.:  SAS No.:  SDG No.: SMWB

Instrument ID Number: Optima ICP  Method: P

Start Date: 2/21/02  End Date: 2/21/02

| 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 | 10:18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calib Blank 1 | 1.00 | 10:21 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| Calib Std 1 | 1.00 | 10:25 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| HIGH CHECK | 1.00 | 10:30 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| ICV1 | 1.00 | 10:35 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| ICB1 | 1.00 | 10:39 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| CRDL1 | 1.00 | 10:43 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| ICS-A1 | 1.00 | 10:48 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| ICS-AB1 | 1.00 | 10:53 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| [illegible]1 | 1.00 | 10:58 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| [illegible]1 | 1.00 | 11:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| PBS | 1.00 | 11:06 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| LCSS | 1.00 | 11:11 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| SMWB-SLU | 10.00 | 11:15 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| HWSC-SLU | 100.00 | 11:19 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-1 | 500.00 | 11:23 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-2-FD | 500.00 | 11:28 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-2 | 500.00 | 11:32 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-4 | 100.00 | 11:36 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| ST-SLU | 10.00 | 11:41 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| BAC-SLU | 500.00 | 11:45 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| CCV2 | 1.00 | 11:49 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| CCB2 | 1.00 | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-3 | 500.00 | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-3D | 500.00 | 12:02 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-3S | 500.00 | 12:07 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-3A | 500.00 | 12:11 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| MTS-GB-SLU-3L | 2500.0 | 12:16 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| CRDL2 | 1.00 | 12:20 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| [illegible]6-A2 | 1.00 | 12:25 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| [illegible]S-AB2 | 1.00 | 12:30 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| CCV3 | 1.00 | 12:34 | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

# METALS

-14-

## ANALYSIS RUN LOG

Contract: R2210552

Lab Code | Case No.: | SAS No.: | SDG No.: SMWB

Instrument ID Number: Optima ICP | Method: P

Start Date: 2/21/02 | End Date: 2/21/02

| 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 |
| CCB3 | 1.00 | 12:38 | | | | | | | | | | | | | | | | | | | | | | | X | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

# METALS

-14-

## ANALYSIS RUN LOG

Contract: R2210552

Lab Code | Case No.: | SAS No.: | SDG No.: SMWB

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 2/21/02 | End Date: 2/22/02

| 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 | 16:13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calib Blank 1 | 1.00 | 16:15 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| Calib Std 1 | 1.00 | 16:20 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| HIGH CHECK | 1.00 | 16:25 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ICV1 | 1.00 | 16:30 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ICB1 | 1.00 | 16:35 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CRDL1 | 1.00 | 16:40 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ICS-A1 | 1.00 | 16:46 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ICS-AB1 | 1.00 | 16:52 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CCV1 | 1.00 | 16:57 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| | 1.00 | 17:01 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ZZZZZZ | 1.00 | 17:06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:21 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:27 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:37 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:42 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 17:47 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 17:53 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV2 | 1.00 | 17:58 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CCB2 | 1.00 | 18:03 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ZZZZZZ | 1.00 | 18:08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:18 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:23 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:33 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZ | 1.00 | 18:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 18:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

# METALS

-14-

## ANALYSIS RUN LOG

Contract: R2210552

Lab Code  Case No.:  SAS No.:  SDG No.: SMWB

Instrument ID Number: Optima ICP 2  Method: P

Start Date: 2/21/02  End Date: 2/22/02

| 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 | 18:53 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV3 | 1.00 | 18:58 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CCB3 | 1.00 | 19:03 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ZZZZZZ | 1.00 | 19:08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:27 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:37 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 19:49 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV4 | 1.00 | 19:54 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CCB4 | 1.00 | 19:59 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ZZZZZZ | 1.00 | 20:04 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:09 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:24 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:29 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 20:33 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 20:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV5 | 1.00 | 20:53 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| CCB5 | 1.00 | 20:58 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | |
| ZZZZZZ | 1.00 | 21:03 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 21:17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:23 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:28 | | | | | | | | | | | | | | | | | | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

# METALS

-14-

## ANALYSIS RUN LOG

Contract: R2210552

Lab Code | Case No.: | SAS No.: | SDG No.: SMWB

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 2/21/02 | End Date: 2/22/02

| 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 | 21:32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 21:47 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV6 | 1.00 | 21:52 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| CCB6 | 1.00 | 21:57 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| ZZZZZZ | 1.00 | 22:02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 22:07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 22:12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [illegible]ZZZ | 1.00 | 22:17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [illegible]ZZZ | 1.00 | 22:22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 22:27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 22:32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 22:37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 5.00 | 22:42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 22:46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV7 | 1.00 | 22:52 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| CCB7 | 1.00 | 22:56 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| ZZZZZZ | 1.00 | 23:01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 23:07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 23:11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 23:17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 23:23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV8 | 1.00 | 23:28 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| CCB8 | 1.00 | 23:33 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| PBS | 1.00 | 23:38 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| LCSS | 1.00 | 23:43 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| SMWB-SLU | 2.00 | 23:48 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| HWSC-SLU | 5.00 | 23:53 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| [illegible]-GB-SLU-1 | 10.00 | 23:58 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| [illegible]S-GB-SLU-2-FD | 10.00 | 00:03 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | | | | |
| MTS-GB-SLU-2 | 10.00 | 00:08 | | | | 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: R2210552

Lab Code | Case No.: | SAS No.: | SDG No.: SMWB

Instrument ID Number: Optima ICP 2 | Method: P

Start Date: 2/21/02 | End Date: 2/22/02

| 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 |
| MTS-GB-SLU-4 | 5.00 | 00:13 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| ST-SLU | 2.00 | 00:18 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| BAC-SLU | 10.00 | 00:23 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| CCV9 | 1.00 | 00:28 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| CCB9 | 1.00 | 00:33 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| MTS-GB-SLU-3 | 10.00 | 00:38 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| MTS-GB-SLU-3D | 10.00 | 00:43 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| MTS-GB-SLU-3S | 10.00 | 00:48 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| MTS-GB-SLU-3A | 10.00 | 00:53 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| [illegible]-GB-SLU-3L | 50.00 | 00:58 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| [illegible]ZZZ | 1.00 | 01:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | 1.00 | 01:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CRDL4 | 1.00 | 01:13 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| ICS-A4 | 1.00 | 01:18 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| ICS-AB4 | 1.00 | 01:24 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| CCV10 | 1.00 | 01:29 | | | | X | X | | X | | X | | | | X | | X | | | | X | X | | | | | |
| CCB10 | 1.00 | 01:34 | | | | 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: R2210552

Lab Code  Case No.:  SAS No.:  SDG No.: SMWB

Instrument ID Number: PE FAA/CVAA  Method: CV

Start Date: 2/8/02  End Date: 2/8/02

| Sample No. | D/F | Time | % R | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AL | SB | AS | BA | BE | CD | CA | CR | CO | CU | FE | PB | MG | MN | HG | NI | | SE | AG | NA | TL | V | ZN | CN |
| Calib Blank | 1.00 | 12:55 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 0.2ppb std | 1.00 | 12:57 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 0.5ppb std | 1.00 | 12:59 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1ppb std | 1.00 | 13:00 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 2ppb std | 1.00 | 13:02 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 5ppb std | 1.00 | 13:04 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 10ppb std | 1.00 | 13:06 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICV1 | 1.00 | 13:08 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ICB1 | 1.00 | 13:10 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CRDL1 | 1.00 | 13:11 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| 1 | 1.00 | 13:13 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB1 | 1.00 | 13:15 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| PBS | 1.00 | 13:17 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| LCSS | 1.00 | 13:19 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| SMWB-SLU | 1.00 | 13:21 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| HWSC-SLU | 1.00 | 13:22 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-1 | 1.00 | 13:24 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-2-FD | 1.00 | 13:26 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-2 | 1.00 | 13:28 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-4 | 1.00 | 13:30 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| ST-SLU | 1.00 | 13:32 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| BAC-SLU | 1.00 | 13:33 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV2 | 1.00 | 13:35 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB2 | 1.00 | 13:37 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-3 | 1.00 | 13:39 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-3D | 1.00 | 13:41 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| MTS-GB-SLU-3S | 1.00 | 13:42 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCV3 | 1.00 | 13:44 | | | | | | | | | | | | | | | | X | | | | | | | | | |
| CCB3 | 1.00 | 13:46 | | | | | | | | | | | | | | | | X | | | | | | | | | |

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

## Metals Cover Page

Instrument: Optima 1

Analyst: SD

Date: 2/21/02

Data File: feb21

Reviewed By: CK 2/22/02

Entered By: CK 2/22/02

Manager Approval: SD 2/22/02

| Starlims Run # | Analytes Used | Batch ID | Method Requested | Failed Analytes | Comments / Problems |
|---|---|---|---|---|---|
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CK 2/22/02

## Package Data:

| Client Sub. # | Type Of Package | Analytes Used | Failed Metals | Batch ID | Standards Attached | How Was Data Transferred To LIMS | Raw Data Copied |
|---|---|---|---|---|---|---|---|
| 12-10552 | Pkg 5 / ASP | Zn | | M253081 | 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 |
| | Pkg 5 / ASP | | | | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |

tion Summary
t New 6010B Date: 2/21/02 10:17:00 AM

| lement | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|

thod: New 6010B IEC: 012902.iec MSF:
sults: feb21 Spectra Stored: Yes Method Stored: Yes
ample Info: 6010b User: User1 Date: 2/21/02 10:17:00 AM
thod Description: OPTIMA 3000XL #1

ean Data
D: IS Init Seq. No.: 1 A/S Pos: 1
Data: Original Date: 2/21/02 10:18:25 AM

| lement | Mean Corr. Intensity | Std.Dev. | RSD |
|---|---|---|---|
| 371.030 | 4195247.3 | 28210.55 | 0.67% |

ean Data
D: Calib Blank 1 Seq. No.: 2 A/S Pos: 1
Data: Original Date: 2/21/02 10:20:01 AM

| lement | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| 371.030 | 4194875.4 | 22772.06 | 0.54% | 1.000 | mg/L |
| g 328.068 | -693.0 | 40.08 | 5.78% | 0 | mg/L |
| l 308.215 | 12943.7 | 255.92 | 1.98% | 0 | mg/L |
| s 188.979 | 1.2 | 4.01 | 332.96% | 0 | mg/L |
| 249.773 | 100.1 | 2.32 | 2.32% | 0 | mg/L |
| a 233.527 | -19.3 | 1.72 | 8.87% | 0 | mg/L |
| e .861 | -239.9 | 5.67 | 2.36% | 0 | mg/L |
| a .253 | 10865.7 | 207.86 | 1.91% | 0 | mg/L |
| d 226.502 | -9.0 | 1.08 | 12.04% | 0 | mg/L |
| o 228.616 | -1.6 | 2.06 | 132.03% | 0 | mg/L |
| r 267.716 | 352.3 | 8.91 | 2.53% | 0 | mg/L |
| u 324.754 | 11280.9 | 130.94 | 1.16% | 0 | mg/L |
| Fe 238.863 | 39.2 | 5.75 | 14.65% | 0 | mg/L |
| K 404.721 | -846.9 | 19.98 | 2.36% | 0 | mg/L |
| Mg 279.079 | 755.2 | 10.49 | 1.39% | 0 | mg/L |
| Mn 257.610 | 947.3 | 67.70 | 7.15% | 0 | mg/L |
| Mo 202.030 | -0.6 | 0.96 | 150.36% | 0 | mg/L |
| Na 330.237 | 3927.4 | 3.95 | 0.10% | 0 | mg/L |
| Ni 231.604 | -21.2 | 0.01 | 0.04% | 0 | mg/L |
| Pb 220.353 | 10.7 | 0.34 | 3.21% | 0 | mg/L |
| Sb 206.833 | 9.9 | 1.87 | 18.96% | 0 | mg/L |
| Se 196.026 | 8.3 | 0.58 | 6.91% | 0 | mg/L |
| Sn 189.933 | -23.0 | 2.51 | 10.91% | 0 | mg/L |
| Ti 334.941 | -3930.3 | 30.21 | 0.77% | 0 | mg/L |
| Tl 190.800 | -6.4 | 1.09 | 17.16% | 0 | mg/L |
| V 292.402 | 703.7 | 21.32 | 3.03% | 0 | mg/L |
| Zn 206.191 | -4.0 | 1.19 | 29.49% | 0 | mg/L |

SDeV/b
2/21/02

Mean Data
ID: Calib Std 1 Seq. No.: 3 A/S Pos: 2
Data: Original Date: 2/21/02 10:24:37 AM

| Element | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| Y 371.030 | 4234315.3 | 4748.26 | 0.11% | 1.009 | mg/L |
| Ag 328.068 | 250116.6 | 995.74 | 0.40% | 1.0000 | mg/L |
| Al 308.215 | 797601.1 | 2584.30 | 0.32% | 20.0000 | mg/L |
| As 188.979 | 654.4 | 1.58 | 0.24% | 2.0000 | mg/L |
| B 249.773 | 110866.7 | 2878.20 | 2.60% | 5.0000 | mg/L |
| Ba 233.527 | 363170.5 | 665.84 | 0.18% | 20.0000 | mg/L |
| Be 234.861 | 59009.0 | 431.42 | 0.73% | 0.50000 | mg/L |
| Ca 430.253 | 544422.1 | 2043.98 | 0.38% | 50.0000 | mg/L |
| Cd 226.502 | 5912.0 | 24.83 | 0.42% | 1.0000 | mg/L |
| Co 228.616 | 19988.6 | 121.24 | 0.61% | 5.0000 | mg/L |
| Cr 267.716 | 77084.2 | 465.67 | 0.60% | 1.0000 | mg/L |

| | | | | | |
|---|---|---|---|---|---|
| u 324.754 | 764517.0 | 4040.65 | 0.53% | 2.5000 | mg/L |
| e [illegible].863 | 20684.5 | 136.89 | 0.66% | 10.0000 | mg/L |
| '21 | 79.4 | 1.63 | 2.05% | 50.0000 | mg/L |
| g [illegible].079 | 480950.4 | 351.34 | 0.07% | 50.0000 | mg/L |
| n 257.610 | 400904.8 | 428.12 | 0.11% | 1.5000 | mg/L |
| o 202.030 | 7303.9 | 42.67 | 0.58% | 5.0000 | mg/L |
| a 330.237 | 50816.6 | 216.38 | 0.43% | 50.0000 | mg/L |
| i 231.604 | 16089.0 | 76.76 | 0.48% | 4.0000 | mg/L |
| b 220.353 | 563.9 | 2.19 | 0.39% | 1.0000 | mg/L |
| b 206.833 | 3752.9 | 16.34 | 0.44% | 10.0000 | mg/L |
| e 196.026 | 267.3 | 2.08 | 0.78% | 1.0000 | mg/L |
| n 189.933 | 7759.4 | 49.61 | 0.64% | 10.0000 | mg/L |
| 'i 334.941 | 6536772.1 | 3194.45 | 0.05% | 5.0000 | mg/L |
| 'l 190.800 | 598.5 | 7.06 | 1.18% | 2.0000 | mg/L |
| ' 292.402 | 728421.9 | 2411.99 | 0.33% | 5.0000 | mg/L |
| :n 206.191 | 10173.0 | 67.23 | 0.66% | 2.0000 | mg/L |

:alibration Summary
Iethod: New 6010B Date: 2/21/02 10:26:02 AM

| Element | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|
| \g 328.068 | 1 | Linear | -693.0 | 250809.6 | 0.00000 | 1.000000 |
| \l 308.215 | 1 | Linear | 12943.7 | 39232.9 | 0.00000 | 1.000000 |
| \s 188.979 | 1 | Linear | 1.2 | 326.6 | 0.00000 | 1.000000 |
| 3 249.773 | 1 | Linear | 100.1 | 22153.3 | 0.00000 | 1.000000 |
| 3a 233.527 | 1 | Linear | -19.3 | 18159.5 | 0.00000 | 1.000000 |
| 3e 234.861 | 1 | Linear | -239.9 | 118497.9 | 0.00000 | 1.000000 |
| :a 430.253 | 1 | Linear | 10865.7 | 10671.1 | 0.00000 | 1.000000 |
| :d 226.502 | 1 | Linear | -9.0 | 5921.0 | 0.00000 | 1.000000 |
| :o 228.616 | 1 | Linear | -1.6 | 3998.0 | 0.00000 | 1.000000 |
| :r 267.716 | 1 | Linear | 352.3 | 76731.9 | 0.00000 | 1.000000 |
| :u 324.754 | 1 | Linear | 11280.9 | 301294.5 | 0.00000 | 1.000000 |
| Fe [illegible].863 | 1 | Linear | 39.2 | 2064.5 | 0.00000 | 1.000000 |
| K [illegible]721 | 1 | Linear | -846.9 | 18.5 | 0.00000 | 1.000000 |
| Mg [illegible]79.079 | 1 | Linear | 755.2 | 9603.9 | 0.00000 | 1.000000 |
| Mn 257.610 | 1 | Linear | 947.3 | 266638.3 | 0.00000 | 1.000000 |
| Mo 202.030 | 1 | Linear | -0.6 | 1460.9 | 0.00000 | 1.000000 |
| Na 330.237 | 1 | Linear | 3927.4 | 937.8 | 0.00000 | 1.000000 |
| Ni 231.604 | 1 | Linear | -21.2 | 4027.6 | 0.00000 | 1.000000 |
| Pb 220.353 | 1 | Linear | 10.7 | 553.2 | 0.00000 | 1.000000 |
| Sb 206.833 | 1 | Linear | 9.9 | 374.3 | 0.00000 | 1.000000 |
| Se 196.026 | 1 | Linear | 8.3 | 259.0 | 0.00000 | 1.000000 |
| Sn 189.933 | 1 | Linear | -23.0 | 778.2 | 0.00000 | 1.000000 |
| Ti 334.941 | 1 | Linear | -3930.3 | 1308140.5 | 0.00000 | 1.000000 |
| Tl 190.800 | 1 | Linear | -6.4 | 302.4 | 0.00000 | 1.000000 |
| V 292.402 | 1 | Linear | 703.7 | 145543.6 | 0.00000 | 1.000000 |
| Zn 206.191 | 1 | Linear | -4.0 | 5088.5 | 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: 2/21/02 10:29:24 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4253603.9 | 1.014 | 0.0019 | mg/L | | | | 0.18% |
| Ag 328.068 | 248062.0 | 0.9918 | 0.00293 | mg/L | | | | 0.30% |
| Al 308.215 | 790040.5 | 19.81 | 0.070 | mg/L | | | | 0.35% |
| As 188.979 | 652.4 | 2.106 | 0.0042 | mg/L | | | | 0.20% |
| *QC exceeds upper limit for As 188.979 | | Recovery = 105.29% | | Action = Continue | | | | |
| B 249.773 | 112126.9 | 5.057 | 0.0551 | mg/L | | | | 1.09% |
| Ba 233.527 | 360354.0 | 19.84 | 0.066 | mg/L | | | | 0.33% |
| Be 234.861 | 58578.0 | 0.4964 | 0.00123 | mg/L | | | | 0.25% |
| Ca 430.253 | 539374.9 | 49.53 | 0.186 | mg/L | | | | 0.38% |
| Cd 226.502 | 5865.1 | 0.9921 | 0.00397 | mg/L | | | | 0.40% |
| C[illegible]8.616 | 19824.4 | 4.959 | 0.0260 | mg/L | | | | 0.52% |
| C[illegible]7.716 | 76512.5 | 0.9925 | 0.00354 | mg/L | | | | 0.36% |
| Cu 324.754 | 758294.4 | 2.479 | 0.0059 | mg/L | | | | 0.24% |
| Fe 238.863 | 20501.8 | 9.912 | 0.0842 | mg/L | | | | 0.85% |
| K 404.721 | 56.5 | 48.77 | 0.601 | mg/L | | | | 1.23% |
| Mg 279.079 | 476837.7 | 49.57 | 0.160 | mg/L | | | | 0.32% |

| | | | | | |
|---|---|---|---|---|---|
| n 257.610 | 397254.2 | 1.486 | 0.0051 | mg/L | 0.34% |
| o 202.030 | 7234.1 | 4.952 | 0.0134 | mg/L | 0.27% |
| a .237 | 50349.3 | 49.50 | 0.167 | mg/L | 0.34% |
| i ..604 | 15953.8 | 3.966 | 0.0096 | mg/L | 0.24% |
| b 220.353 | 557.0 | 0.9874 | 0.00687 | mg/L | 0.70% |
| b 206.833 | 3724.1 | 9.923 | 0.0315 | mg/L | 0.32% |
| e 196.026 | 266.9 | 0.9984 | 0.00811 | mg/L | 0.81% |
| n 189.933 | 7685.4 | 9.905 | 0.0022 | mg/L | 0.02% |
| i 334.941 | 6531728.9 | 4.996 | 0.0015 | mg/L | 0.03% |
| l 190.800 | 591.7 | 1.977 | 0.0020 | mg/L | 0.10% |
| 292.402 | 722896.3 | 4.962 | 0.0139 | mg/L | 0.28% |
| n 206.191 | 10123.5 | 1.990 | 0.0055 | mg/L | 0.28% |

lean 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: 2/21/02 10:34:02 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4320342.2 | 1.030 | 0.0003 | mg/L | | | | 0.03% |
| Ag 328.068 | 120391.6 | 0.4828 | 0.00119 | mg/L | | | | 0.25% |
| Al 308.215 | 405447.6 | 10.00 | 0.004 | mg/L | | | | 0.04% |
| As 188.979 | 335.1 | 1.077 | 0.0127 | mg/L | | | | 1.18% |
| B 249.773 | 57093.7 | 2.573 | 0.0244 | mg/L | | | | 0.95% |
| Ba 233.527 | 182107.1 | 10.03 | 0.042 | mg/L | | | | 0.42% |
| Be 234.861 | 28984.8 | 0.2466 | 0.00099 | mg/L | | | | 0.40% |
| Ca 430.253 | 270906.9 | 24.37 | 0.025 | mg/L | | | | 0.10% |
| Cd 226.502 | 3028.5 | 0.5130 | 0.00296 | mg/L | | | | 0.58% |
| Co 228.616 | 10043.1 | 2.512 | 0.0146 | mg/L | | | | 0.58% |
| Cr 267.716 | 38665.9 | 0.4993 | 0.00219 | mg/L | | | | 0.44% |
| Cu 324.754 | 397290.6 | 1.281 | 0.0008 | mg/L | | | | 0.06% |
| Fe 238.863 | 10413.3 | 5.025 | 0.0189 | mg/L | | | | 0.38% |
| K 404.721 | -429.0 | 22.56 | 1.670 | mg/L | | | | 7.40% |
| Mg 279.079 | 246659.1 | 25.60 | 0.037 | mg/L | | | | 0.14% |
| Mn 257.610 | 204115.3 | 0.7620 | 0.00092 | mg/L | | | | 0.12% |
| Mo 202.030 | 3604.6 | 2.468 | 0.0103 | mg/L | | | | 0.42% |
| Na 330.237 | 26057.4 | 23.60 | 0.056 | mg/L | | | | 0.24% |
| Ni 231.604 | 8178.9 | 2.036 | 0.0132 | mg/L | | | | 0.65% |
| Pb 220.353 | 290.1 | 0.5050 | 0.00281 | mg/L | | | | 0.56% |
| Sb 206.833 | 1886.4 | 5.013 | 0.0116 | mg/L | | | | 0.23% |
| Se 196.026 | 136.5 | 0.4947 | 0.00338 | mg/L | | | | 0.68% |
| Sn 189.933 | 4063.1 | 5.250 | 0.0364 | mg/L | | | | 0.69% |
| Ti 334.941 | 3218297.3 | 2.463 | 0.0009 | mg/L | | | | 0.04% |
| Tl 190.800 | 305.2 | 1.030 | 0.0022 | mg/L | | | | 0.22% |
| V 292.402 | 368780.6 | 2.529 | 0.0013 | mg/L | | | | 0.05% |
| Zn 206.191 | 5016.3 | 0.9866 | 0.00308 | mg/L | | | | 0.31% |

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: 2/21/02 10:38:21 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4258825.2 | 1.015 | 0.0061 | mg/L | | | | 0.60% |
| Ag 328.068 | -649.9 | 0.0002 | 0.00006 | mg/L | | | | 36.30% |
| Al 308.215 | 12582.7 | -0.0092 | 0.00064 | mg/L | | | | 6.92% |
| As 188.979 | 1.4 | 0.0007 | 0.00330 | mg/L | | | | 449.34% |
| B 249.773 | 2891.7 | 0.1260 | 0.03486 | mg/L | | | | 27.67% |
| Ba 233.527 | 9.4 | 0.0016 | 0.00021 | mg/L | | | | 13.47% |
| Be 234.861 | -225.6 | 0.0001 | 0.00000 | mg/L | | | | 2.35% |
| Ca 430.253 | 11376.5 | 0.0479 | 0.00198 | mg/L | | | | 4.13% |
| Cd 226.502 | -6.5 | 0.0004 | 0.00008 | mg/L | | | | 18.63% |
| Co 228.616 | 1.4 | 0.0008 | 0.00008 | mg/L | | | | 10.43% |
| Cr 267.716 | 418.3 | 0.0009 | 0.00044 | mg/L | | | | 51.43% |
| Cu 324.754 | 12462.8 | 0.0039 | 0.00107 | mg/L | | | | 27.18% |
| Fe 238.863 | 40.1 | 0.0004 | 0.00083 | mg/L | | | | 211.50% |
| K 404.721 | -888.3 | -2.231 | 0.9491 | mg/L | | | | 42.55% |
| *QC exceeds lower limit for K 404.721 | | Action = Continue | | | | | | |
| Mg 279.079 | 835.7 | 0.0084 | 0.00048 | mg/L | | | | 5.74% |
| Mn 257.610 | 850.7 | -0.0004 | 0.00008 | mg/L | | | | 20.87% |
| Mo 202.030 | 3.3 | 0.0027 | 0.00015 | mg/L | | | | 5.44% |

| | | | | | |
|---|---|---|---|---|---|
| a 330.237 | 3832.9 | -0.1008 | 0.04163 mg/L | | 41.29% |
| i 231.604 | -16.5 | 0.0012 | 0.00013 mg/L | | 10.84% |
| b .353 | 11.0 | 0.0005 | 0.00340 mg/L | | 640.34% |
| b .833 | 12.5 | 0.0071 | 0.00441 mg/L | | 62.34% |
| e .026 | 12.8 | 0.0171 | 0.00259 mg/L | | 15.18% |
| n 189.933 | -8.8 | 0.0182 | 0.00603 mg/L | | 33.09% |
| i 334.941 | -3463.6 | 0.0004 | 0.00016 mg/L | | 44.50% |
| l 190.800 | -4.6 | 0.0057 | 0.00268 mg/L | | 46.94% |
| 292.402 | 708.0 | 0.0000 | 0.00025 mg/L | | 823.59% |
| n 206.191 | 10.4 | 0.0028 | 0.00016 mg/L | | 5.53% |

ean Data

D: CRI 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: 2/21/02 10:42:39 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4417064.7 | 1.053 | 0.0059 | mg/L | | | | 0.56% |
| g 328.068 | 3933.5 | 0.0184 | 0.00018 | mg/L | | | | 0.97% |
| l 308.215 | 12157.9 | -0.0200 | 0.00229 | mg/L | | | | 11.44% |
| s 188.979 | 7.0 | 0.0176 | 0.00131 | mg/L | | | | 7.42% |
| 249.773 | 1023.0 | 0.0417 | 0.00506 | mg/L | | | | 12.16% |
| a 233.527 | -1.9 | 0.0010 | 0.00004 | mg/L | | | | 4.61% |
| e 234.861 | 883.1 | 0.0095 | 0.00002 | mg/L | | | | 0.22% |
| a 430.253 | 11223.6 | 0.0335 | 0.00027 | mg/L | | | | 0.80% |
| d 226.502 | 54.2 | 0.0107 | 0.00004 | mg/L | | | | 0.34% |
| o 228.616 | 409.5 | 0.1028 | 0.00020 | mg/L | | | | 0.20% |
| r 267.716 | 1904.5 | 0.0202 | 0.00065 | mg/L | | | | 3.20% |
| u 324.754 | 25597.6 | 0.0475 | 0.00058 | mg/L | | | | 1.21% |
| e 238.863 | 44.9 | 0.0027 | 0.00100 | mg/L | | | | 36.64% |
| 404.721 | -855.9 | -0.4824 | 0.95196 | mg/L | | | | 197.35% |
| g 279.079 | 746.0 | -0.0010 | 0.00256 | mg/L | | | | 265.60% |
| n 257.610 | 8895.7 | 0.0298 | 0.00031 | mg/L | | | | 1.03% |
| o 202.030 | 0.9 | 0.0010 | 0.00032 | mg/L | | | | 30.55% |
| .237 | 3690.0 | -0.2532 | 0.00858 | mg/L | | | | 3.39% |
| .604 | 310.0 | 0.0822 | 0.00034 | mg/L | | | | 0.41% |
| b 220.353 | 13.2 | 0.0045 | 0.00314 | mg/L | | | | 69.55% |
| b 206.833 | 54.2 | 0.1184 | 0.00126 | mg/L | | | | 1.06% |
| e 196.026 | 13.3 | 0.0190 | 0.00136 | mg/L | | | | 7.12% |
| n 189.933 | -15.5 | 0.0096 | 0.00138 | mg/L | | | | 14.38% |
| i 334.941 | -3622.9 | 0.0002 | 0.00001 | mg/L | | | | 4.12% |
| l 190.800 | -0.3 | 0.0200 | 0.00026 | mg/L | | | | 1.27% |
| 292.402 | 15141.0 | 0.0992 | 0.00032 | mg/L | | | | 0.32% |
| n 206.191 | 211.7 | 0.0424 | 0.00022 | mg/L | | | | 0.53% |

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: 2/21/02 10:47:18 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3926887.2 | 0.936 | 0.0011 | mg/L | | | | 0.11% |
| Ag 328.068 | -7872.2 | 0.0010 | 0.00007 | mg/L | | | | 7.11% |
| Al 308.215 | 19360583.8 | 493.1 | 2.62 | mg/L | | | | 0.53% |
| As 188.979 | -397.7 | 0.0111 | 0.01402 | mg/L | | | | 126.36% |
| B 249.773 | 5817.3 | 0.0059 | 0.00623 | mg/L | | | | 106.43% |
| Ba 233.527 | 602.5 | 0.0037 | 0.00060 | mg/L | | | | 16.13% |
| Be 234.861 | 4266.0 | -0.0002 | 0.00032 | mg/L | | | | 160.20% |
| Ca 430.253 | 5732009.2 | 536.1 | 2.76 | mg/L | | | | 0.51% |
| Cd 226.502 | 114.6 | -0.0017 | 0.00085 | mg/L | | | | 49.79% |
| Co 228.616 | 1.6 | 0.0008 | 0.00082 | mg/L | | | | 103.94% |
| Cr 267.716 | -181.7 | -0.0070 | 0.00011 | mg/L | | | | 1.60% |
| Cu 324.754 | -4813.2 | 0.0199 | 0.00037 | mg/L | | | | 1.84% |
| Fe 238.863 | 370392.2 | 179.4 | 0.06 | mg/L | | | | 0.03% |
| K 404.721 | -1236.2 | -13.83 | 3.150 | mg/L | | | | 22.77% |
| M 79.079 | 4679478.6 | 487.2 | 1.28 | mg/L | | | | 0.26% |
| N 7.610 | 3812.9 | 0.0107 | 0.00039 | mg/L | | | | 3.67% |
| Mo 02.030 | -50.8 | -0.0343 | 0.00052 | mg/L | | | | 1.52% |
| Na 330.237 | 3834.8 | 0.4285 | 0.01111 | mg/L | | | | 2.59% |
| Ni 231.604 | -28.9 | -0.0019 | 0.00026 | mg/L | | | | 13.90% |
| Pb 220.353 | -45.3 | -0.0103 | 0.00103 | mg/L | | | | 9.93% |

| | | | | | |
|---|---|---|---|---|---|
| b 206.833 | 2.6 | -0.0315 | 0.00156 | mg/L | 4.94% |
| e 196.026 | 7.9 | -0.0492 | 0.00327 | mg/L | 6.65% |
| n .933 | 1318.4 | 0.5926 | 0.00338 | mg/L | 0.57% |
| i .941 | -11698.7 | -0.0059 | 0.00003 | mg/L | 0.44% |
| l 190.800 | -18.8 | 0.0172 | 0.00403 | mg/L | 23.45% |
| 292.402 | 587.1 | -0.0008 | 0.00000 | mg/L | 0.42% |
| n 206.191 | 106.4 | 0.0030 | 0.00074 | mg/L | 24.70% |

lean Data ----------
D: ICSAB Seq. No.: 9 Sample No.: 7 A/S Pos: 8
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 10:52:11 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| ' 371.030 | 3873018.8 | 0.923 | 0.0070 | mg/L | | | | 0.76% |
| \g 328.068 | 264616.0 | 1.088 | 0.0005 | mg/L | | | | 0.04% |
| \l 308.215 | 19632735.2 | 500.1 | 4.51 | mg/L | | | | 0.90% |
| \s 188.979 | -402.4 | 0.0147 | 0.00757 | mg/L | | | | 51.58% |
| 3 249.773 | 5669.0 | -0.0045 | 0.00175 | mg/L | | | | 38.96% |
| 3a 233.527 | 9924.1 | 0.5166 | 0.00267 | mg/L | | | | 0.52% |
| 3e 234.861 | 65352.5 | 0.5148 | 0.00096 | mg/L | | | | 0.19% |
| :a 430.253 | 5816320.3 | 544.0 | 4.34 | mg/L | | | | 0.80% |
| :d 226.502 | 5813.6 | 0.9605 | 0.00351 | mg/L | | | | 0.37% |
| :o 228.616 | 1866.5 | 0.4672 | 0.00244 | mg/L | | | | 0.52% |
| :r 267.716 | 37617.3 | 0.4857 | 0.00125 | mg/L | | | | 0.26% |
| :u 324.754 | 153249.1 | 0.5456 | 0.00136 | mg/L | | | | 0.25% |
| Fe 238.863 | 375756.7 | 182.0 | 0.07 | mg/L | | | | 0.04% |
| K 404.721 | -1222.0 | -12.97 | 1.442 | mg/L | | | | 11.12% |
| 4g 279.079 | 4736154.3 | 493.1 | 2.92 | mg/L | | | | 0.59% |
| 4n 257.610 | 133439.0 | 0.4969 | 0.00056 | mg/L | | | | 0.11% |
| 4o 202.030 | -53.3 | -0.0360 | 0.00182 | mg/L | | | | 5.04% |
| Na 330.237 | 2827.1 | -0.6383 | 0.02913 | mg/L | | | | 4.56% |
| Ni 231.604 | 3682.9 | 0.9197 | 0.00238 | mg/L | | | | 0.26% |
| Pb 220.353 | 505.0 | 0.9857 | 0.00100 | mg/L | | | | 0.10% |
| Sb .833 | 0.8 | -0.0363 | 0.01120 | mg/L | | | | 30.88% |
| Se .026 | 6.3 | -0.0559 | 0.00971 | mg/L | | | | 17.38% |
| Sn 189.933 | 1319.7 | 0.5776 | 0.01263 | mg/L | | | | 2.19% |
| Ti 334.941 | -11552.0 | -0.0058 | 0.00002 | mg/L | | | | 0.28% |
| Tl 190.800 | -20.3 | 0.0127 | 0.00928 | mg/L | | | | 72.98% |
| V 292.402 | 73837.6 | 0.5025 | 0.00071 | mg/L | | | | 0.14% |
| Zn 206.191 | 4742.4 | 0.9138 | 0.00019 | mg/L | | | | 0.02% |

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: 2/21/02 10:56:54 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4310967.1 | 1.028 | 0.0007 | mg/L | | | | 0.07% |
| Ag 328.068 | 122581.4 | 0.4915 | 0.00121 | mg/L | | | | 0.25% |
| Al 308.215 | 404746.1 | 9.987 | 0.0102 | mg/L | | | | 0.10% |
| As 188.979 | 332.4 | 1.070 | 0.0001 | mg/L | | | | 0.01% |
| B 249.773 | 53803.1 | 2.424 | 0.0660 | mg/L | | | | 2.72% |
| Ba 233.527 | 184013.5 | 10.13 | 0.001 | mg/L | | | | 0.01% |
| Be 234.861 | 29446.8 | 0.2505 | 0.00061 | mg/L | | | | 0.24% |
| Ca 430.253 | 272514.6 | 24.52 | 0.020 | mg/L | | | | 0.08% |
| Cd 226.502 | 3049.1 | 0.5165 | 0.00156 | mg/L | | | | 0.30% |
| Co 228.616 | 10058.1 | 2.516 | 0.0043 | mg/L | | | | 0.17% |
| Cr 267.716 | 39044.7 | 0.5043 | 0.00058 | mg/L | | | | 0.11% |
| Cu 324.754 | 399757.6 | 1.289 | 0.0028 | mg/L | | | | 0.22% |
| Fe 238.863 | 10474.5 | 5.055 | 0.0010 | mg/L | | | | 0.02% |
| K 404.721 | -464.3 | 20.65 | 1.577 | mg/L | | | | 7.64% |
| *QC exceeds lower limit for K 404.721 | | Recovery = 82.62% | | Action = Continue | | | | |
| Mg 279.079 | 246021.9 | 25.54 | 0.082 | mg/L | | | | 0.32% |
| Mn 257.610 | 201192.5 | 0.7510 | 0.00126 | mg/L | | | | 0.17% |
| M 2.030 | 3571.4 | 2.445 | 0.0056 | mg/L | | | | 0.23% |
| N 0.237 | 26016.7 | 23.55 | 0.070 | mg/L | | | | 0.30% |
| Na 31.604 | 8003.3 | 1.992 | 0.0063 | mg/L | | | | 0.32% |
| Pb 220.353 | 290.1 | 0.5051 | 0.00268 | mg/L | | | | 0.53% |
| Sb 206.833 | 1876.4 | 4.987 | 0.0173 | mg/L | | | | 0.35% |
| Se 196.026 | 138.6 | 0.5029 | 0.01904 | mg/L | | | | 3.79% |

| | | | | | |
|---|---|---|---|---|---|
| 189.933 | 4057.3 | 5.243 | 0.0331 | mg/L | 0.63% |
| 3[illegible]941 | 3188066.8 | 2.440 | 0.0015 | mg/L | 0.06% |
| 100 | 307.1 | 1.037 | 0.0042 | mg/L | 0.41% |
| 2[illegible].02 | 369923.3 | 2.537 | 0.0000 | mg/L | 0.00% |
| 206.191 | 5063.8 | 0.9959 | 0.00008 | mg/L | 0.01% |

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: 2/21/02 11:01:14 AM

| ement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4253518.7 | 1.014 | 0.0020 | mg/L | | | | 0.20% |
| [illegible] 328.068 | -641.6 | 0.0002 | 0.00018 | mg/L | | | | 90.07% |
| [illegible] 308.215 | 13537.4 | 0.0151 | 0.00339 | mg/L | | | | 22.42% |
| [illegible] 188.979 | 3.6 | 0.0073 | 0.00543 | mg/L | | | | 74.63% |
| 249.773 | 2013.6 | 0.0864 | 0.02622 | mg/L | | | | 30.36% |
| [illegible] 233.527 | 32.0 | 0.0028 | 0.00046 | mg/L | | | | 16.35% |
| [illegible] 234.861 | -223.0 | 0.0001 | 0.00002 | mg/L | | | | 16.56% |
| [illegible] 430.253 | 11780.5 | 0.0857 | 0.00578 | mg/L | | | | 6.75% |
| [illegible] 226.502 | -6.9 | 0.0003 | 0.00019 | mg/L | | | | 57.38% |
| [illegible] 228.616 | 3.4 | 0.0012 | 0.00053 | mg/L | | | | 43.36% |
| [illegible] 267.716 | 418.8 | 0.0009 | 0.00033 | mg/L | | | | 38.11% |
| [illegible] 324.754 | 12398.6 | 0.0037 | 0.00094 | mg/L | | | | 25.46% |
| [illegible] 238.863 | 78.5 | 0.0190 | 0.00028 | mg/L | | | | 1.46% |
| 404.721 | -891.5 | -2.406 | 1.4840 | mg/L | | | | 61.67% |
| QC exceeds lower limit for K 404.721 | | Action = Continue | | | | | | |
| g 279.079 | 1913.6 | 0.1206 | 0.01857 | mg/L | | | | 15.39% |
| n 257.610 | 829.5 | -0.0004 | 0.00010 | mg/L | | | | 22.40% |
| o 202.030 | 0.8 | 0.0010 | 0.00025 | mg/L | | | | 25.33% |
| a 330.237 | 3795.5 | -0.1407 | 0.00469 | mg/L | | | | 3.33% |
| i 231.604 | -16.6 | 0.0012 | 0.00038 | mg/L | | | | 32.65% |
| b 220.353 | 9.9 | -0.0014 | 0.00151 | mg/L | | | | 105.44% |
| b [illegible].833 | 12.4 | 0.0068 | 0.00396 | mg/L | | | | 58.11% |
| e [illegible].026 | 12.8 | 0.0173 | 0.00471 | mg/L | | | | 27.22% |
| n [illegible].933 | -4.8 | 0.0234 | 0.00250 | mg/L | | | | 10.69% |
| i 334.941 | -3350.2 | 0.0004 | 0.00021 | mg/L | | | | 46.31% |
| l 190.800 | -6.1 | 0.0010 | 0.00033 | mg/L | | | | 34.63% |
| [illegible] 292.402 | 723.8 | 0.0001 | 0.00008 | mg/L | | | | 60.38% |
| n 206.191 | 15.0 | 0.0037 | 0.00096 | mg/L | | | | 25.75% |

lean Data ----------

D: PBS-M2530081 Seq. No.: 12 Sample No.: 1 A/S Pos: 9
ample Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 11:05:29 AM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4248290.6 | 1.013 | 0.0079 | mg/L | | | | 0.78% |
| Ag 328.068 | -681.9 | 0.0000 | 0.00006 | mg/L | | | | 129.47% |
| Al 308.215 | 12693.1 | -0.0064 | 0.00313 | mg/L | | | | 48.95% |
| As 188.979 | 1.4 | 0.0005 | 0.00464 | mg/L | | | | 882.18% |
| B 249.773 | 875.3 | 0.0350 | 0.00372 | mg/L | | | | 10.63% |
| Ba 233.527 | 7.4 | 0.0015 | 0.00013 | mg/L | | | | 8.85% |
| Be 234.861 | -244.3 | 0.0000 | 0.00003 | mg/L | | | | 89.44% |
| Ca 430.253 | 11981.6 | 0.1046 | 0.00848 | mg/L | | | | 8.11% |
| Cd 226.502 | -7.8 | 0.0002 | 0.00020 | mg/L | | | | 98.96% |
| Co 228.616 | -0.1 | 0.0004 | 0.00036 | mg/L | | | | 102.39% |
| Cr 267.716 | 459.1 | 0.0014 | 0.00009 | mg/L | | | | 6.47% |
| Cu 324.754 | 11975.4 | 0.0023 | 0.00027 | mg/L | | | | 11.61% |
| Fe 238.863 | 88.1 | 0.0237 | 0.00176 | mg/L | | | | 7.44% |
| K 404.721 | -935.0 | -4.755 | 2.4003 | mg/L | | | | 50.48% |
| Mg 279.079 | 1353.5 | 0.0623 | 0.00002 | mg/L | | | | 0.03% |
| Mn 257.610 | 1147.3 | 0.0008 | 0.00003 | mg/L | | | | 3.34% |
| Mo 202.030 | -0.8 | -0.0001 | 0.00136 | mg/L | | | | >999.9% |
| Na [illegible]330.237 | 4407.2 | 0.5116 | 0.03031 | mg/L | | | | 5.92% |
| [illegible] [illegible]1.604 | -19.3 | 0.0005 | 0.00058 | mg/L | | | | 119.23% |
| [illegible] [illegible].0.353 | 10.5 | -0.0004 | 0.00429 | mg/L | | | | >999.9% |
| Sb 206.833 | 12.1 | 0.0060 | 0.00248 | mg/L | | | | 41.11% |
| Se 196.026 | 11.7 | 0.0131 | 0.01239 | mg/L | | | | 94.72% |
| Sn 189.933 | -2.4 | 0.0264 | 0.00174 | mg/L | | | | 6.59% |
| Ti 334.941 | -3747.1 | 0.0001 | 0.00000 | mg/L | | | | 2.17% |

| | | | | | |
|---|---|---|---|---|---|
| 190.800 | -8.4 | -0.0066 | 0.00669 mg/L | | 101.61% |
| 292 402 | 699.8 | 0.0000 | 0.00011 mg/L | | 408.97% |
| 7 91 | 63.7 | 0.0133 | 0.00025 mg/L | | 1.90% |

an Data

: LCSS-M2530081 Seq. No.: 13 Sample No.: 2 A/S Pos: 10
mple Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 11:09:56 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4533370.6 | 1.081 | 0.0052 | mg/L | | | | 0.48% |
| 328.068 | 213040.6 | 0.8673 | 0.00004 | mg/L | | | | 0.00% |
| 308.215 | 1982023.3 | 50.19 | 0.017 | mg/L | | | | 0.03% |
| 188.979 | 425.2 | 1.523 | 0.0212 | mg/L | | | | 1.39% |
| 249.773 | 11194.3 | 0.5008 | 0.01057 | mg/L | | | | 2.11% |
| 233.527 | 30319.4 | 1.671 | 0.0139 | mg/L | | | | 0.83% |
| 234.861 | 53465.3 | 0.4337 | 0.00325 | mg/L | | | | 0.75% |
| 430.253 | 1070519.9 | 99.30 | 0.143 | mg/L | | | | 0.14% |
| 226.502 | 3803.3 | 0.6323 | 0.00228 | mg/L | | | | 0.36% |
| 228.616 | 8376.1 | 2.095 | 0.0014 | mg/L | | | | 0.07% |
| 267.716 | 102928.6 | 1.337 | 0.0087 | mg/L | | | | 0.65% |
| 324.754 | 270592.4 | 0.8980 | 0.00028 | mg/L | | | | 0.03% |
| 238.863 | 188794.7 | 91.43 | 0.457 | mg/L | | | | 0.50% |
| 404.721 | -366.0 | 32.14 | 4.804 | mg/L | | | | 14.95% |
| 279.079 | 223048.2 | 23.15 | 0.063 | mg/L | | | | 0.27% |
| 257.610 | 939924.9 | 3.522 | 0.0051 | mg/L | | | | 0.15% |
| 202.030 | 600.7 | 0.4116 | 0.00151 | mg/L | | | | 0.37% |
| 330.237 | 9257.0 | 5.683 | 0.0067 | mg/L | | | | 0.12% |
| 231.604 | 2874.2 | 0.7189 | 0.00216 | mg/L | | | | 0.30% |
| 220.353 | 651.9 | 1.169 | 0.0123 | mg/L | | | | 1.05% |
| 206.833 | 83.2 | 0.1960 | 0.00228 | mg/L | | | | 1.16% |
| 196.026 | 379.6 | 1.421 | 0.0202 | mg/L | | | | 1.43% |
| 189.933 | 1160.3 | 1.520 | 0.0017 | mg/L | | | | 0.11% |
| .941 | 1786610.7 | 1.369 | 0.0034 | mg/L | | | | 0.24% |
| 800 | 224.7 | 0.7640 | 0.01285 | mg/L | | | | 1.68% |
| .402 | 223741.8 | 1.532 | 0.0118 | mg/L | | | | 0.77% |
| 206.191 | 12619.1 | 2.481 | 0.0286 | mg/L | | | | 1.15% |

ean Data

D: 528677 1/10 Seq. No.: 14 Sample No.: 3 A/S Pos: 11
ample Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 10.0
Data: Original Date: 2/21/02 11:14:17 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4525289.2 | 1.079 | 0.0013 | mg/L | | | | 0.12% |
| g 328.068 | -1110.0 | -0.0017 | 0.00011 | mg/L | | | | 6.35% |
| l 308.215 | 47653.9 | 0.8847 | 0.00572 | mg/L | | | | 0.65% |
| s 188.979 | -0.3 | -0.0046 | 0.00547 | mg/L | | | | 119.24% |
| 249.773 | 13686.2 | 0.6133 | 0.01600 | mg/L | | | | 2.61% |
| a 233.527 | 1642.4 | 0.0915 | 0.00003 | mg/L | | | | 0.03% |
| e 234.861 | 90.5 | 0.0028 | 0.00016 | mg/L | | | | 5.68% |
| a 430.253 | 46146.2 | 3.306 | 0.0050 | mg/L | | | | 0.15% |
| d 226.502 | 9.3 | 0.0031 | 0.00020 | mg/L | | | | 6.35% |
| o 228.616 | 22.7 | 0.0061 | 0.00094 | mg/L | | | | 15.54% |
| r 267.716 | 1557.3 | 0.0157 | 0.00015 | mg/L | | | | 0.93% |
| Cu 324.754 | 53485.4 | 0.1401 | 0.00010 | mg/L | | | | 0.07% |
| Fe 238.863 | 23573.2 | 11.40 | 0.042 | mg/L | | | | 0.37% |
| K 404.721 | -826.4 | 1.107 | 1.0301 | mg/L | | | | 93.04% |
| Mg 279.079 | 7258.3 | 0.6771 | 0.00293 | mg/L | | | | 0.43% |
| Mn 257.610 | 33795.1 | 0.1232 | 0.00006 | mg/L | | | | 0.05% |
| Mo 202.030 | 10.6 | 0.0077 | 0.00011 | mg/L | | | | 1.49% |
| Na 330.237 | 3686.6 | -0.2568 | 0.05315 | mg/L | | | | 20.69% |
| Ni 231.604 | 149.8 | 0.0425 | 0.00012 | mg/L | | | | 0.28% |
| Pb 220.353 | 67.4 | 0.1024 | 0.00479 | mg/L | | | | 4.68% |
| Sb 206.833 | 9.6 | -0.0007 | 0.00036 | mg/L | | | | 54.19% |
| S 6.026 | 11.2 | 0.0112 | 0.00438 | mg/L | | | | 39.23% |
| S. 9.933 | 21.5 | 0.0571 | 0.00250 | mg/L | | | | 4.38% |
| Ti 334.941 | 64777.9 | 0.0525 | 0.00005 | mg/L | | | | 0.10% |
| Tl 190.800 | -4.7 | 0.0053 | 0.00342 | mg/L | | | | 64.09% |
| V 292.402 | 1236.9 | 0.0037 | 0.00019 | mg/L | | | | 5.21% |
| Zn 206.191 | 1499.3 | 0.2954 | 0.00123 | mg/L | | | | 0.42% |

an Data
: 578 1/100 Seq. No.: 15 Sample No.: 4 A/S Pos: 12
mp. Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 100.0
Data: Original Date: 2/21/02 11:18:34 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4322286.1 | 1.030 | 0.0007 | mg/L | | | | 0.07% |
| 328.068 | -696.8 | 0.0000 | 0.00026 | mg/L | | | | >999.9% |
| 308.215 | 24220.4 | 0.2874 | 0.00184 | mg/L | | | | 0.64% |
| 188.979 | 3.2 | 0.0060 | 0.00491 | mg/L | | | | 82.18% |
| 249.773 | 635.0 | 0.0241 | 0.00471 | mg/L | | | | 19.50% |
| 233.527 | 390.3 | 0.0226 | 0.00013 | mg/L | | | | 0.56% |
| 234.861 | -196.7 | 0.0004 | 0.00001 | mg/L | | | | 2.43% |
| 430.253 | 17692.7 | 0.6398 | 0.00466 | mg/L | | | | 0.73% |
| 226.502 | -5.9 | 0.0005 | 0.00063 | mg/L | | | | 124.15% |
| 228.616 | 3.2 | 0.0012 | 0.00076 | mg/L | | | | 62.89% |
| 267.716 | 606.4 | 0.0033 | 0.00067 | mg/L | | | | 20.18% |
| 324.754 | 11795.5 | 0.0017 | 0.00006 | mg/L | | | | 3.42% |
| 238.863 | 1897.6 | 0.9001 | 0.00133 | mg/L | | | | 0.15% |
| 404.721 | -904.0 | -3.078 | 1.0454 | mg/L | | | | 33.96% |
| 279.079 | 2465.9 | 0.1781 | 0.00235 | mg/L | | | | 1.32% |
| 257.610 | 3389.8 | 0.0092 | 0.00009 | mg/L | | | | 1.03% |
| 202.030 | 0.0 | 0.0004 | 0.00056 | mg/L | | | | 126.23% |
| 330.237 | 2810.4 | -1.191 | 0.0039 | mg/L | | | | 0.33% |
| 231.604 | -16.4 | 0.0012 | 0.00022 | mg/L | | | | 18.41% |
| 220.353 | 22.4 | 0.0211 | 0.00006 | mg/L | | | | 0.29% |
| 206.833 | 9.3 | -0.0015 | 0.00027 | mg/L | | | | 18.54% |
| 196.026 | 11.6 | 0.0126 | 0.01352 | mg/L | | | | 106.87% |
| 189.933 | -11.0 | 0.0154 | 0.00875 | mg/L | | | | 56.80% |
| 334.941 | 11236.1 | 0.0116 | 0.00007 | mg/L | | | | 0.63% |
| 190.800 | -7.2 | -0.0027 | 0.00850 | mg/L | | | | 320.56% |
| 292.402 | 821.8 | 0.0008 | 0.00038 | mg/L | | | | 46.24% |
| .191 | 3330.1 | 0.6552 | 0.00052 | mg/L | | | | 0.08% |

ean Data
D: 528679 1/500 Seq. No.: 16 Sample No.: 5 A/S Pos: 13
ample Qty: 1.0300 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 11:22:51 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4410748.9 | 1.051 | 0.0069 | mg/L | | | | 0.66% |
| g 328.068 | -765.6 | -0.0003 | 0.00007 | mg/L | | | | 25.27% |
| l 308.215 | 12854.9 | -0.0023 | 0.00453 | mg/L | | | | 200.37% |
| s 188.979 | 3.4 | 0.0066 | 0.00698 | mg/L | | | | 105.84% |
| 249.773 | 323.6 | 0.0101 | 0.00130 | mg/L | | | | 12.86% |
| a 233.527 | -6.3 | 0.0007 | 0.00010 | mg/L | | | | 14.64% |
| e 234.861 | -186.5 | 0.0005 | 0.00001 | mg/L | | | | 1.47% |
| a 430.253 | 16040.4 | 0.4849 | 0.00191 | mg/L | | | | 0.39% |
| d 226.502 | -4.1 | 0.0008 | 0.00009 | mg/L | | | | 10.67% |
| o 228.616 | -0.6 | 0.0002 | 0.00006 | mg/L | | | | 26.22% |
| r 267.716 | 882.4 | 0.0069 | 0.00054 | mg/L | | | | 7.83% |
| u 324.754 | 11375.7 | 0.0003 | 0.00033 | mg/L | | | | 103.72% |
| e 238.863 | 2639.9 | 1.260 | 0.0079 | mg/L | | | | 0.63% |
| 404.721 | -889.9 | -2.317 | 0.5754 | mg/L | | | | 24.84% |
| g 279.079 | 2344.0 | 0.1654 | 0.00060 | mg/L | | | | 0.36% |
| n 257.610 | 2912.5 | 0.0074 | 0.00006 | mg/L | | | | 0.79% |
| o 202.030 | -1.1 | -0.0003 | 0.00081 | mg/L | | | | 254.20% |
| Na 330.237 | 3145.9 | -0.8334 | 0.01016 | mg/L | | | | 1.22% |
| Ni 231.604 | -14.5 | 0.0017 | 0.00027 | mg/L | | | | 16.02% |
| Pb 220.353 | 15.7 | 0.0089 | 0.00010 | mg/L | | | | 1.09% |
| Sb 206.833 | 10.4 | 0.0014 | 0.00140 | mg/L | | | | 97.93% |
| Se 196.026 | 11.6 | 0.0126 | 0.00424 | mg/L | | | | 33.65% |
| Sn 189.933 | -12.1 | 0.0140 | 0.00243 | mg/L | | | | 17.39% |
| Ti 334.941 | -2543.4 | 0.0011 | 0.00004 | mg/L | | | | 3.96% |
| T .800 | -6.7 | -0.0012 | 0.00205 | mg/L | | | | 173.84% |
| V .402 | 688.3 | -0.0001 | 0.00018 | mg/L | | | | 167.51% |
| Zn 206.191 | 4941.6 | 0.9719 | 0.00166 | mg/L | | | | 0.17% |

Mean Data
ID: 528680 1/500 Seq. No.: 17 Sample No.: 6 A/S Pos: 14

mple Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 11:27:08 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4264742.2 | 1.017 | 0.0026 | mg/L | | | | 0.26% |
| g 328.068 | -809.7 | -0.0005 | 0.00021 | mg/L | | | | 44.37% |
| l 308.215 | 13592.5 | 0.0165 | 0.00023 | mg/L | | | | 1.40% |
| s 188.979 | 4.2 | 0.0091 | 0.00094 | mg/L | | | | 10.33% |
| 249.773 | 298.7 | 0.0090 | 0.00033 | mg/L | | | | 3.64% |
| a 233.527 | 1.2 | 0.0011 | 0.00001 | mg/L | | | | 0.79% |
| e 234.861 | -176.2 | 0.0005 | 0.00000 | mg/L | | | | 0.71% |
| a 430.253 | 15730.7 | 0.4559 | 0.01045 | mg/L | | | | 2.29% |
| d 226.502 | -4.8 | 0.0007 | 0.00003 | mg/L | | | | 4.97% |
| o 228.616 | 1.7 | 0.0008 | 0.00081 | mg/L | | | | 99.50% |
| r 267.716 | 994.2 | 0.0084 | 0.00029 | mg/L | | | | 3.42% |
| u 324.754 | 11384.4 | 0.0003 | 0.00002 | mg/L | | | | 5.70% |
| e 238.863 | 4811.1 | 2.311 | 0.0032 | mg/L | | | | 0.14% |
| 404.721 | -928.2 | -4.385 | 0.9246 | mg/L | | | | 21.09% |
| g 279.079 | 3217.4 | 0.2564 | 0.00152 | mg/L | | | | 0.59% |
| n 257.610 | 4671.5 | 0.0140 | 0.00005 | mg/L | | | | 0.35% |
| o 202.030 | 1.5 | 0.0015 | 0.00036 | mg/L | | | | 24.18% |
| a 330.237 | 2783.1 | -1.220 | 0.0132 | mg/L | | | | 1.08% |
| i 231.604 | -13.1 | 0.0020 | 0.00020 | mg/L | | | | 9.93% |
| b 220.353 | 12.1 | 0.0025 | 0.00086 | mg/L | | | | 33.96% |
| b 206.833 | 10.6 | 0.0020 | 0.00535 | mg/L | | | | 272.95% |
| e 196.026 | 12.2 | 0.0147 | 0.00819 | mg/L | | | | 55.54% |
| n 189.933 | -16.2 | 0.0087 | 0.00614 | mg/L | | | | 70.19% |
| i 334.941 | -2495.5 | 0.0011 | 0.00011 | mg/L | | | | 10.46% |
| l 190.800 | -6.6 | -0.0009 | 0.00187 | mg/L | | | | 199.50% |
| / 292.402 | 719.4 | 0.0001 | 0.00008 | mg/L | | | | 78.16% |
| n 206.191 | 9422.9 | 1.853 | 0.0101 | mg/L | | | | 0.54% |

lean Data
ID: 528681 1/500 Seq. No.: 18 Sample No.: 7 A/S Pos: 15
S: Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 11:31:26 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4258319.4 | 1.015 | 0.0061 | mg/L | | | | 0.60% |
| Ag 328.068 | -751.9 | -0.0002 | 0.00008 | mg/L | | | | 32.73% |
| Al 308.215 | 13532.1 | 0.0150 | 0.00102 | mg/L | | | | 6.82% |
| As 188.979 | -0.2 | -0.0043 | 0.00400 | mg/L | | | | 92.75% |
| B 249.773 | 233.2 | 0.0060 | 0.00046 | mg/L | | | | 7.57% |
| Ba 233.527 | 7.5 | 0.0015 | 0.00004 | mg/L | | | | 2.52% |
| Be 234.861 | -202.6 | 0.0003 | 0.00010 | mg/L | | | | 30.52% |
| Ca 430.253 | 14850.4 | 0.3734 | 0.00626 | mg/L | | | | 1.68% |
| Cd 226.502 | -7.1 | 0.0003 | 0.00029 | mg/L | | | | 92.97% |
| Co 228.616 | 0.8 | 0.0006 | 0.00015 | mg/L | | | | 24.47% |
| Cr 267.716 | 847.8 | 0.0065 | 0.00029 | mg/L | | | | 4.48% |
| Cu 324.754 | 11410.1 | 0.0004 | 0.00037 | mg/L | | | | 85.59% |
| Fe 238.863 | 3545.7 | 1.698 | 0.0219 | mg/L | | | | 1.29% |
| K 404.721 | -909.9 | -3.397 | 1.8902 | mg/L | | | | 55.65% |
| Mg 279.079 | 2727.1 | 0.2053 | 0.00118 | mg/L | | | | 0.57% |
| Mn 257.610 | 4016.5 | 0.0115 | 0.00016 | mg/L | | | | 1.35% |
| Mo 202.030 | -0.4 | 0.0002 | 0.00123 | mg/L | | | | 713.30% |
| Na 330.237 | 3197.4 | -0.7785 | 0.02884 | mg/L | | | | 3.70% |
| Ni 231.604 | -13.6 | 0.0019 | 0.00056 | mg/L | | | | 29.56% |
| Pb 220.353 | 8.1 | -0.0048 | 0.00292 | mg/L | | | | 60.84% |
| Sb 206.833 | 9.3 | -0.0015 | 0.00509 | mg/L | | | | 333.13% |
| Se 196.026 | 12.5 | 0.0162 | 0.00389 | mg/L | | | | 24.07% |
| Sn 189.933 | -16.5 | 0.0083 | 0.00833 | mg/L | | | | 100.67% |
| Ti 334.941 | -2816.7 | 0.0009 | 0.00009 | mg/L | | | | 11.12% |
| Tl 190.800 | -7.1 | -0.0024 | 0.00081 | mg/L | | | | 33.57% |
| V 292.402 | 685.8 | -0.0001 | 0.00011 | mg/L | | | | 93.15% |
| Zn 206.191 | 7483.9 | 1.472 | 0.0065 | mg/L | | | | 0.44% |

Data
ID. 528682 1/100 Seq. No.: 19 Sample No.: 8 A/S Pos: 16
Sample Qty: 1.0300 g Prep. Vol.: 100.0 mL Dilution: 1.0: 100.0
Data: Original Date: 2/21/02 11:35:45 AM

| em-- | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 3' 0 | 4278755.6 | 1.020 | 0.0022 | mg/L | | | | 0.22% |
| 3. 068 | -673.1 | 0.0001 | 0.00016 | mg/L | | | | 203.07% |
| 308.215 | 35448.0 | 0.5736 | 0.00199 | mg/L | | | | 0.35% |
| 188.979 | -2.0 | 0.0029 | 0.00760 | mg/L | | | | 257.97% |
| 249.773 | 208.9 | 0.0049 | 0.00028 | mg/L | | | | 5.67% |
| 233.527 | 205.8 | 0.0124 | 0.00020 | mg/L | | | | 1.65% |
| 234.861 | -210.3 | 0.0002 | 0.00001 | mg/L | | | | 5.31% |
| : 430.253 | 70472.6 | 5.586 | 0.0093 | mg/L | | | | 0.17% |
| . 226.502 | -10.6 | -0.0003 | 0.00035 | mg/L | | | | 128.46% |
| 228.616 | 3.2 | 0.0012 | 0.00015 | mg/L | | | | 12.56% |
| : 267.716 | 455.3 | 0.0013 | 0.00037 | mg/L | | | | 27.35% |
| 324.754 | 11084.4 | -0.0007 | 0.00028 | mg/L | | | | 42.21% |
| : 238.863 | 1254.0 | 0.5884 | 0.00226 | mg/L | | | | 0.38% |
| 404.721 | -922.1 | -4.057 | 1.1025 | mg/L | | | | 27.17% |
| 279.079 | 3290.7 | 0.2640 | 0.00139 | mg/L | | | | 0.53% |
| 257.610 | 4973.1 | 0.0151 | 0.00008 | mg/L | | | | 0.56% |
| 202.030 | -2.7 | -0.0014 | 0.00021 | mg/L | | | | 14.93% |
| 330.237 | 3604.9 | -0.3439 | 0.06753 | mg/L | | | | 19.63% |
| 231.604 | -16.7 | 0.0011 | 0.00098 | mg/L | | | | 87.77% |
| 220.353 | 9.0 | -0.0032 | 0.00242 | mg/L | | | | 75.47% |
| 206.833 | 8.2 | -0.0044 | 0.00238 | mg/L | | | | 53.65% |
| 196.026 | 12.5 | 0.0161 | 0.00646 | mg/L | | | | 40.23% |
| 189.933 | 27.4 | 0.0647 | 0.00099 | mg/L | | | | 1.53% |
| 334.941 | 24799.2 | 0.0220 | 0.00021 | mg/L | | | | 0.95% |
| 190.800 | -6.9 | -0.0017 | 0.00672 | mg/L | | | | 402.01% |
| 292.402 | 1076.0 | 0.0026 | 0.00011 | mg/L | | | | 4.32% |
| 206.191 | 253.5 | 0.0506 | 0.00052 | mg/L | | | | 1.02% |

ean Data ----------

D: 528683 1/10 Seq. No.: 20 Sample No.: 9 A/S Pos: 17

ample Qty: 1.0200 g Prep. Vol.: 100.0 mL Dilution: 1.0: 10.0

Data: Original Date: 2/21/02 11:40:04 AM

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| le...t | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4419491.6 | 1.053 | 0.0024 | mg/L | | | | 0.22% |
| g 328.068 | -660.5 | 0.0001 | 0.00004 | mg/L | | | | 27.19% |
| l 308.215 | 30672.8 | 0.4519 | 0.00240 | mg/L | | | | 0.53% |
| s 188.979 | 2.2 | 0.0032 | 0.00254 | mg/L | | | | 80.30% |
| 249.773 | 203.9 | 0.0047 | 0.00035 | mg/L | | | | 7.38% |
| a 233.527 | 515.0 | 0.0294 | 0.00008 | mg/L | | | | 0.27% |
| e 234.861 | -204.9 | 0.0003 | 0.00001 | mg/L | | | | 3.99% |
| a 430.253 | 28389.1 | 1.642 | 0.0036 | mg/L | | | | 0.22% |
| d 226.502 | -2.7 | 0.0011 | 0.00012 | mg/L | | | | 11.04% |
| o 228.616 | 1.4 | 0.0007 | 0.00050 | mg/L | | | | 66.99% |
| r 267.716 | 467.4 | 0.0015 | 0.00019 | mg/L | | | | 12.68% |
| u 324.754 | 143383.8 | 0.4385 | 0.00169 | mg/L | | | | 0.39% |
| e 238.863 | 1256.1 | 0.5894 | 0.00048 | mg/L | | | | 0.08% |
| 404.721 | -905.5 | -3.160 | 0.2056 | mg/L | | | | 6.51% |
| g 279.079 | 2857.3 | 0.2189 | 0.00066 | mg/L | | | | 0.30% |
| n 257.610 | 4108.0 | 0.0119 | 0.00002 | mg/L | | | | 0.17% |
| o 202.030 | 5.3 | 0.0041 | 0.00085 | mg/L | | | | 20.87% |
| Na 330.237 | 3324.3 | -0.6431 | 0.09135 | mg/L | | | | 14.20% |
| Ni 231.604 | -5.8 | 0.0038 | 0.00020 | mg/L | | | | 5.20% |
| Pb 220.353 | 13.5 | 0.0050 | 0.00160 | mg/L | | | | 31.81% |
| Sb 206.833 | 9.6 | -0.0008 | 0.00442 | mg/L | | | | 570.47% |
| Se 196.026 | 11.3 | 0.0114 | 0.00906 | mg/L | | | | 79.57% |
| Sn 189.933 | 3.3 | 0.0337 | 0.00017 | mg/L | | | | 0.49% |
| Ti 334.941 | 29621.5 | 0.0256 | 0.00227 | mg/L | | | | 8.86% |
| Tl 190.800 | -5.5 | 0.0030 | 0.00419 | mg/L | | | | 140.00% |
| V 292.402 | 1669.3 | 0.0066 | 0.00004 | mg/L | | | | 0.65% |
| Zn 206.191 | 1427.3 | 0.2813 | 0.00035 | mg/L | | | | 0.12% |

Mean Data ----------

ID: 528684 1/500 Seq. No.: 21 Sample No.: 10 A/S Pos: 18

S : Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0

Data: Original Date: 2/21/02 11:44:23 AM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4282482.9 | 1.021 | 0.0060 | mg/L | | | | 0.58% |

| | | | | | |
|---|---|---|---|---|---|
| y 328.068 | -792.8 | -0.0004 | 0.00000 | mg/L | 0.12% |
| l 308.215 | 13600.8 | 0.0167 | 0.00098 | mg/L | 5.85% |
| s 979 | 4.3 | 0.0095 | 0.00246 | mg/L | 25.84% |
| 2 ,73 | 203.5 | 0.0047 | 0.00023 | mg/L | 4.91% |
| a 233.527 | -18.9 | 0.0000 | 0.00020 | mg/L | 788.96% |
| e 234.861 | -183.2 | 0.0005 | 0.00003 | mg/L | 6.10% |
| a 430.253 | 11256.1 | 0.0366 | 0.00564 | mg/L | 15.42% |
| d 226.502 | -1.9 | 0.0012 | 0.00013 | mg/L | 11.26% |
| o 228.616 | 0.4 | 0.0005 | 0.00035 | mg/L | 70.36% |
| r 267.716 | 1081.0 | 0.0095 | 0.00010 | mg/L | 1.02% |
| u 324.754 | 10996.0 | -0.0009 | 0.00012 | mg/L | 12.92% |
| e 238.863 | 3961.0 | 1.900 | 0.0140 | mg/L | 0.73% |
| 404.721 | -899.9 | -2.860 | 0.6168 | mg/L | 21.57% |
| g 279.079 | 983.2 | 0.0237 | 0.00189 | mg/L | 7.98% |
| n 257.610 | 9239.1 | 0.0311 | 0.00018 | mg/L | 0.58% |
| o 202.030 | -0.1 | 0.0004 | 0.00135 | mg/L | 365.05% |
| a 330.237 | 1311.3 | -2.790 | 0.0500 | mg/L | 1.79% |
| i 231.604 | -13.0 | 0.0020 | 0.00026 | mg/L | 12.92% |
| b 220.353 | 9.4 | -0.0024 | 0.00044 | mg/L | 17.92% |
| b 206.833 | 9.3 | -0.0016 | 0.00178 | mg/L | 111.51% |
| e 196.026 | 11.3 | 0.0113 | 0.00474 | mg/L | 41.91% |
| n 189.933 | -28.0 | -0.0065 | 0.00737 | mg/L | 114.17% |
| i 334.941 | -2991.3 | 0.0007 | 0.00004 | mg/L | 4.95% |
| l 190.800 | -7.7 | -0.0044 | 0.00209 | mg/L | 47.52% |
| 292.402 | 682.0 | -0.0001 | 0.00012 | mg/L | 78.10% |
| n 206.191 | 11015.5 | 2.166 | 0.0070 | mg/L | 0.32% |

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: 2/21/02 11:48:51 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 030 | 4312787.6 | 1.028 | 0.0044 | mg/L | | | | 0.42% |
| Ag .068 | 122206.3 | 0.4900 | 0.00154 | mg/L | | | | 0.32% |
| Al 308.215 | 403115.5 | 9.945 | 0.0057 | mg/L | | | | 0.06% |
| As 188.979 | 331.1 | 1.065 | 0.0110 | mg/L | | | | 1.03% |
| B 249.773 | 54019.6 | 2.434 | 0.0618 | mg/L | | | | 2.54% |
| Ba 233.527 | 184626.1 | 10.17 | 0.028 | mg/L | | | | 0.28% |
| Be 234.861 | 29428.5 | 0.2504 | 0.00062 | mg/L | | | | 0.25% |
| Ca 430.253 | 271166.5 | 24.39 | 0.011 | mg/L | | | | 0.04% |
| Cd 226.502 | 3046.6 | 0.5160 | 0.00293 | mg/L | | | | 0.57% |
| Co 228.616 | 10163.3 | 2.542 | 0.0030 | mg/L | | | | 0.12% |
| Cr 267.716 | 39005.7 | 0.5037 | 0.00135 | mg/L | | | | 0.27% |
| Cu 324.754 | 397631.8 | 1.282 | 0.0015 | mg/L | | | | 0.12% |
| Fe 238.863 | 10513.8 | 5.074 | 0.0116 | mg/L | | | | 0.23% |
| K 404.721 | -438.4 | 22.05 | 0.331 | mg/L | | | | 1.50% |
| *QC exceeds lower limit for K 404.721 | | Recovery = 88.20% | | Action = Continue | | | | |
| Mg 279.079 | 245626.0 | 25.50 | 0.037 | mg/L | | | | 0.14% |
| Mn 257.610 | 202246.4 | 0.7550 | 0.00141 | mg/L | | | | 0.19% |
| Mo 202.030 | 3577.1 | 2.449 | 0.0174 | mg/L | | | | 0.71% |
| Na 330.237 | 26048.1 | 23.59 | 0.032 | mg/L | | | | 0.14% |
| Ni 231.604 | 8305.0 | 2.067 | 0.0000 | mg/L | | | | 0.00% |
| Pb 220.353 | 289.7 | 0.5044 | 0.00182 | mg/L | | | | 0.36% |
| Sb 206.833 | 1875.5 | 4.984 | 0.0357 | mg/L | | | | 0.72% |
| Se 196.026 | 136.8 | 0.4960 | 0.00284 | mg/L | | | | 0.57% |
| Sn 189.933 | 4065.0 | 5.253 | 0.0462 | mg/L | | | | 0.88% |
| Ti 334.941 | 3197628.0 | 2.447 | 0.0010 | mg/L | | | | 0.04% |
| Tl 190.800 | 303.6 | 1.025 | 0.0090 | mg/L | | | | 0.88% |
| V 292.402 | 369181.3 | 2.532 | 0.0013 | mg/L | | | | 0.05% |
| Zn 206.191 | 5055.7 | 0.9943 | 0.00796 | mg/L | | | | 0.80% |

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: 2/21/02 11:53:12 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4269874.3 | 1.018 | 0.0009 | mg/L | | | | 0.09% |
| Ag 328.068 | -688.7 | 0.0000 | 0.00004 | mg/L | | | | 219.05% |
| Al 308.215 | 12660.9 | -0.0072 | 0.00140 | mg/L | | | | 19.40% |

| | | | | | |
|---|---|---|---|---|---|
| ; 188.979 | 4.0 | 0.0085 | 0.00309 mg/L | | 36.24% |
| 249.773 | 1824.9 | 0.0779 | 0.02422 mg/L | | 31.10% |
| a 527 | 14.5 | 0.0019 | 0.00069 mg/L | | 36.97% |
| e .861 | -224.9 | 0.0001 | 0.00004 mg/L | | 30.94% |
| a 430.253 | 11545.9 | 0.0637 | 0.00171 mg/L | | 2.68% |
| d 226.502 | -9.3 | -0.0001 | 0.00027 mg/L | | 465.09% |
| o 228.616 | 1.8 | 0.0008 | 0.00111 mg/L | | 132.31% |
| r 267.716 | 402.5 | 0.0007 | 0.00032 mg/L | | 48.86% |
| u 324.754 | 12081.6 | 0.0027 | 0.00052 mg/L | | 19.72% |
| e 238.863 | 43.4 | 0.0020 | 0.00245 mg/L | | 120.26% |
| 404.721 | -902.8 | -3.017 | 0.9173 mg/L | | 30.41% |
| QC exceeds lower limit for K 404.721 | | | Action = Continue | | |
| g 279.079 | 890.3 | 0.0141 | 0.00215 mg/L | | 15.29% |
| n 257.610 | 814.9 | -0.0005 | 0.00008 mg/L | | 17.03% |
| o 202.030 | 1.4 | 0.0014 | 0.00122 mg/L | | 85.26% |
| a 330.237 | 3787.2 | -0.1495 | 0.05293 mg/L | | 35.40% |
| i 231.604 | -15.0 | 0.0015 | 0.00003 mg/L | | 2.04% |
| b 220.353 | 12.4 | 0.0029 | 0.00283 mg/L | | 96.31% |
| b 206.833 | 13.2 | 0.0090 | 0.00116 mg/L | | 12.95% |
| e 196.026 | 12.2 | 0.0151 | 0.00756 mg/L | | 50.11% |
| n 189.933 | -9.0 | 0.0179 | 0.00980 mg/L | | 54.67% |
| i 334.941 | -3394.0 | 0.0004 | 0.00020 mg/L | | 47.60% |
| l 190.800 | -6.9 | -0.0017 | 0.00108 mg/L | | 65.30% |
| 292.402 | 688.9 | -0.0001 | 0.00038 mg/L | | 371.65% |
| n 206.191 | 19.4 | 0.0046 | 0.00109 mg/L | | 23.74% |

lean Data ----------

:D: 528685 1/500 Seq. No.: 24 Sample No.: 11 A/S Pos: 19

ample Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0

Data: Original Date: 2/21/02 11:57:29 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4278050.8 | 1.020 | 0.0012 | mg/L | | | | 0.12% |
| g 9.068 | -724.1 | -0.0001 | 0.00020 | mg/L | | | | 160.19% |
| .215 | 13654.8 | 0.0181 | 0.00205 | mg/L | | | | 11.33% |
| s d.979 | 1.1 | -0.0003 | 0.00095 | mg/L | | | | 285.68% |
| B 249.773 | 562.0 | 0.0209 | 0.00270 | mg/L | | | | 12.93% |
| Ba 233.527 | -3.3 | 0.0009 | 0.00007 | mg/L | | | | 8.20% |
| Be 234.861 | -191.7 | 0.0004 | 0.00003 | mg/L | | | | 7.65% |
| Ca 430.253 | 12384.3 | 0.1423 | 0.00049 | mg/L | | | | 0.35% |
| Cd 226.502 | -7.6 | 0.0002 | 0.00014 | mg/L | | | | 59.13% |
| Co 228.616 | 2.6 | 0.0010 | 0.00005 | mg/L | | | | 4.34% |
| Cr 267.716 | 627.6 | 0.0036 | 0.00040 | mg/L | | | | 11.04% |
| Cu 324.754 | 11200.1 | -0.0003 | 0.00017 | mg/L | | | | 64.22% |
| Fe 238.863 | 3645.2 | 1.747 | 0.0015 | mg/L | | | | 0.08% |
| K 404.721 | -903.4 | -3.050 | 1.7842 | mg/L | | | | 58.49% |
| Mg 279.079 | 1459.6 | 0.0733 | 0.00596 | mg/L | | | | 8.13% |
| Mn 257.610 | 3580.6 | 0.0099 | 0.00005 | mg/L | | | | 0.54% |
| Mo 202.030 | -0.8 | -0.0001 | 0.00054 | mg/L | | | | 565.50% |
| Na 330.237 | 2434.3 | -1.592 | 0.0891 | mg/L | | | | 5.60% |
| Ni 231.604 | -15.0 | 0.0015 | 0.00015 | mg/L | | | | 9.62% |
| Pb 220.353 | 13.4 | 0.0048 | 0.00066 | mg/L | | | | 13.87% |
| Sb 206.833 | 9.9 | 0.0001 | 0.00161 | mg/L | | | | >999.9% |
| Se 196.026 | 12.4 | 0.0158 | 0.01544 | mg/L | | | | 97.51% |
| Sn 189.933 | -24.1 | -0.0014 | 0.00163 | mg/L | | | | 116.19% |
| Ti 334.941 | -3278.6 | 0.0005 | 0.00002 | mg/L | | | | 4.72% |
| Tl 190.800 | -6.2 | 0.0007 | 0.00296 | mg/L | | | | 454.65% |
| V 292.402 | 697.4 | 0.0000 | 0.00004 | mg/L | | | | 96.63% |
| Zn 206.191 | 6360.4 | 1.251 | 0.0085 | mg/L | | | | 0.68% |

Mean Data ----------

ID: 528685D 1/500 Seq. No.: 25 Sample No.: 12 A/S Pos: 20

Sample Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0

Data: Original Date: 2/21/02 12:01:50 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| nt | | | | | | | | |
| .030 | 4338589.9 | 1.034 | 0.0105 | mg/L | | | | 1.01% |
| Ag 328.068 | -801.7 | -0.0004 | 0.00025 | mg/L | | | | 56.61% |
| Al 308.215 | 13350.0 | 0.0104 | 0.00347 | mg/L | | | | 33.53% |
| As 188.979 | 2.0 | 0.0025 | 0.00158 | mg/L | | | | 62.14% |
| B 249.773 | 378.9 | 0.0126 | 0.00092 | mg/L | | | | 7.27% |

| | | | | | |
|---|---|---|---|---|---|
| 233.527 | 7.4 | 0.0015 | 0.00018 | mg/L | 12.30% |
| [illegible]861 | -182.5 | 0.0005 | 0.00007 | mg/L | 14.20% |
| [illegible]253 | 12411.3 | 0.1448 | 0.02060 | mg/L | 14.22% |
| [illegible].502 | -4.8 | 0.0007 | 0.00011 | mg/L | 15.78% |
| [illegible] 228.616 | 2.2 | 0.0010 | 0.00014 | mg/L | 15.18% |
| [illegible] 267.716 | 640.6 | 0.0038 | 0.00036 | mg/L | 9.64% |
| [illegible] 324.754 | 11008.3 | -0.0009 | 0.00027 | mg/L | 30.28% |
| [illegible] 238.863 | 3983.2 | 1.910 | 0.0444 | mg/L | 2.32% |
| 404.721 | -884.8 | -2.043 | 0.4383 | mg/L | 21.45% |
| [illegible] 279.079 | 1455.8 | 0.0729 | 0.00046 | mg/L | 0.63% |
| [illegible] 257.610 | 3868.7 | 0.0110 | 0.00018 | mg/L | 1.65% |
| [illegible] 202.030 | 0.5 | 0.0008 | 0.00044 | mg/L | 58.11% |
| [illegible] 330.237 | 2271.2 | -1.766 | 0.0585 | mg/L | 3.31% |
| [illegible] 231.604 | -13.4 | 0.0019 | 0.00114 | mg/L | 58.42% |
| [illegible] 220.353 | 11.8 | 0.0020 | 0.00211 | mg/L | 105.64% |
| [illegible] 206.833 | 9.2 | -0.0019 | 0.00261 | mg/L | 140.05% |
| [illegible] 196.026 | 10.8 | 0.0097 | 0.00368 | mg/L | 38.18% |
| [illegible] 189.933 | -20.8 | 0.0028 | 0.00158 | mg/L | 55.59% |
| [illegible] 334.941 | -1991.3 | 0.0015 | 0.00026 | mg/L | 17.80% |
| [illegible] 190.800 | -6.7 | -0.0011 | 0.00387 | mg/L | 343.82% |
| 292.402 | 658.6 | -0.0003 | 0.00009 | mg/L | 30.00% |
| [illegible] 206.191 | 6799.4 | 1.337 | 0.0296 | mg/L | 2.22% |

ean Data ----------

D: 528685S 1/500 Seq. No.: 26 Sample No.: 13 A/S Pos: 21
ample Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 12:06:12 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4317324.4 | 1.029 | 0.0113 | mg/L | | | | 1.10% |
| [illegible]g 328.068 | -692.2 | 0.0000 | 0.00011 | mg/L | | | | >999.9% |
| [illegible]l 308.215 | 13511.6 | 0.0145 | 0.00333 | mg/L | | | | 23.03% |
| [illegible]s 188.979 | 3.0 | 0.0054 | 0.00138 | mg/L | | | | 25.61% |
| [illegible] 773 | 333.5 | 0.0105 | 0.00052 | mg/L | | | | 4.89% |
| [illegible]a .527 | 52.9 | 0.0040 | 0.00003 | mg/L | | | | 0.87% |
| [illegible]e [illegible]34.861 | -168.8 | 0.0006 | 0.00002 | mg/L | | | | 3.36% |
| [illegible]a 430.253 | 12375.4 | 0.1415 | 0.01021 | mg/L | | | | 7.21% |
| [illegible]d 226.502 | -6.3 | 0.0005 | 0.00018 | mg/L | | | | 39.80% |
| [illegible]o 228.616 | 3.1 | 0.0012 | 0.00042 | mg/L | | | | 36.31% |
| [illegible]r 267.716 | 634.1 | 0.0037 | 0.00009 | mg/L | | | | 2.49% |
| [illegible]u 324.754 | 11197.6 | -0.0003 | 0.00048 | mg/L | | | | 173.88% |
| [illegible]e 238.863 | 3869.5 | 1.855 | 0.0142 | mg/L | | | | 0.76% |
| [illegible] 404.721 | -901.7 | -2.955 | 0.3877 | mg/L | | | | 13.12% |
| [illegible]g 279.079 | 1480.0 | 0.0755 | 0.00021 | mg/L | | | | 0.27% |
| [illegible]n 257.610 | 3983.0 | 0.0114 | 0.00023 | mg/L | | | | 2.01% |
| [illegible]o 202.030 | 2.3 | 0.0020 | 0.00045 | mg/L | | | | 22.24% |
| Na 330.237 | 2392.3 | -1.637 | 0.0901 | mg/L | | | | 5.50% |
| Ni 231.604 | -8.9 | 0.0030 | 0.00012 | mg/L | | | | 3.89% |
| Pb 220.353 | 11.0 | 0.0005 | 0.00077 | mg/L | | | | 144.81% |
| Sb 206.833 | 10.3 | 0.0012 | 0.00206 | mg/L | | | | 170.35% |
| Se 196.026 | 12.4 | 0.0157 | 0.00778 | mg/L | | | | 49.66% |
| Sn 189.933 | -21.3 | 0.0021 | 0.00368 | mg/L | | | | 172.50% |
| Ti 334.941 | -2053.7 | 0.0014 | 0.00008 | mg/L | | | | 5.63% |
| Tl 190.800 | -4.0 | 0.0078 | 0.00084 | mg/L | | | | 10.79% |
| V 292.402 | 796.1 | 0.0006 | 0.00001 | mg/L | | | | 1.58% |
| Zn 206.191 | 6627.3 | 1.303 | 0.0085 | mg/L | | | | 0.65% |

Mean Data ----------

ID: 528685A 1/500 Seq. No.: 27 Sample No.: 14 A/S Pos: 22
Sample Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 12:10:35 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4244710.2 | 1.012 | 0.0003 | mg/L | | | | 0.03% |
| A[illegible] [illegible]28.068 | 10968.5 | 0.0465 | 0.00052 | mg/L | | | | 1.12% |
| [illegible] 8.215 | 88042.0 | 1.914 | 0.0064 | mg/L | | | | 0.34% |
| A[illegible] [illegible]8.979 | 27.3 | 0.0798 | 0.00999 | mg/L | | | | 12.52% |
| B 249.773 | 21964.3 | 0.9869 | 0.02873 | mg/L | | | | 2.91% |
| Ba 233.527 | 37070.9 | 2.042 | 0.0004 | mg/L | | | | 0.02% |
| Be 234.861 | 5636.1 | 0.0496 | 0.00010 | mg/L | | | | 0.20% |
| Ca 430.253 | 32204.0 | 2.000 | 0.0035 | mg/L | | | | 0.18% |

| | | | | | |
|---|---|---|---|---|---|
| 226.502 | 301.1 | 0.0524 | 0.00001 | mg/L | 0.03% |
| [illegible].616 | 1965.2 | 0.4919 | 0.00220 | mg/L | 0.45% |
| 716 | 15509.7 | 0.1975 | 0.00019 | mg/L | 0.10% |
| .754 | 85284.5 | 0.2456 | 0.00162 | mg/L | 0.66% |
| 238.863 | 5664.2 | 2.725 | 0.0142 | mg/L | 0.52% |
| 404.721 | -601.6 | 13.24 | 0.793 | mg/L | 5.99% |
| 279.079 | 20787.7 | 2.086 | 0.0065 | mg/L | 0.31% |
| 257.610 | 133112.4 | 0.4957 | 0.00070 | mg/L | 0.14% |
| 202.030 | 696.9 | 0.4775 | 0.00011 | mg/L | 0.02% |
| 330.237 | 19800.5 | 16.93 | 0.038 | mg/L | 0.23% |
| 231.604 | 1955.9 | 0.4909 | 0.00191 | mg/L | 0.39% |
| 220.353 | 293.8 | 0.5116 | 0.00310 | mg/L | 0.61% |
| 206.833 | 194.2 | 0.4925 | 0.00126 | mg/L | 0.26% |
| 196.026 | 290.0 | 1.087 | 0.0063 | mg/L | 0.58% |
| 189.933 | 7.6 | 0.0393 | 0.00045 | mg/L | 1.14% |
| 334.941 | 637555.2 | 0.4904 | 0.00073 | mg/L | 0.15% |
| 190.800 | 575.0 | 1.922 | 0.0128 | mg/L | 0.67% |
| 292.402 | 70826.4 | 0.4818 | 0.00084 | mg/L | 0.17% |
| 206.191 | 9074.3 | 1.784 | 0.0058 | mg/L | 0.32% |

ean Data

D: 528685L 1/500 Seq. No.: 28 Sample No.: 15 A/S Pos: 23
ample Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 500.0
Data: Original Date: 2/21/02 12:14:58 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4292691.1 | 1.023 | 0.0093 | mg/L | | | | 0.91% |
| g 328.068 | -696.7 | 0.0000 | 0.00006 | mg/L | | | | 399.65% |
| l 308.215 | 12805.3 | -0.0035 | 0.00375 | mg/L | | | | 106.44% |
| s 188.979 | 0.9 | -0.0010 | 0.00508 | mg/L | | | | 502.44% |
| 249.773 | 719.5 | 0.0280 | 0.00771 | mg/L | | | | 27.59% |
| a 233.527 | -12.5 | 0.0004 | 0.00010 | mg/L | | | | 25.58% |
| e 234.861 | -219.0 | 0.0002 | 0.00001 | mg/L | | | | 5.61% |
| e .253 | 11369.6 | 0.0472 | 0.00161 | mg/L | | | | 3.40% |
| .502 | -8.2 | 0.0001 | 0.00010 | mg/L | | | | 82.32% |
| o .8.616 | 0.1 | 0.0004 | 0.00059 | mg/L | | | | 144.08% |
| r 267.716 | 466.7 | 0.0015 | 0.00096 | mg/L | | | | 64.16% |
| u 324.754 | 11483.9 | 0.0007 | 0.00066 | mg/L | | | | 98.00% |
| e 238.863 | 740.3 | 0.3396 | 0.00157 | mg/L | | | | 0.46% |
| 404.721 | -897.5 | -2.727 | 0.7439 | mg/L | | | | 27.27% |
| g 279.079 | 924.3 | 0.0176 | 0.00057 | mg/L | | | | 3.24% |
| n 257.610 | 1245.7 | 0.0011 | 0.00019 | mg/L | | | | 17.33% |
| o 202.030 | 1.8 | 0.0016 | 0.00106 | mg/L | | | | 64.44% |
| Na 330.237 | 3399.0 | -0.5635 | 0.02962 | mg/L | | | | 5.26% |
| Ni 231.604 | -18.2 | 0.0008 | 0.00016 | mg/L | | | | 21.55% |
| Pb 220.353 | 9.8 | -0.0016 | 0.00289 | mg/L | | | | 176.60% |
| Sb 206.833 | 10.4 | 0.0015 | 0.00227 | mg/L | | | | 152.37% |
| Se 196.026 | 11.3 | 0.0115 | 0.00276 | mg/L | | | | 24.06% |
| Sn 189.933 | -22.8 | 0.0002 | 0.00606 | mg/L | | | | >999.9% |
| Ti 334.941 | -3509.5 | 0.0003 | 0.00006 | mg/L | | | | 18.72% |
| Tl 190.800 | -6.4 | -0.0001 | 0.00416 | mg/L | | | | >999.9% |
| V 292.402 | 665.6 | -0.0003 | 0.00004 | mg/L | | | | 15.65% |
| Zn 206.191 | 1246.1 | 0.2457 | 0.00118 | mg/L | | | | 0.48% |

Mean Data

ID: CRI Seq. No.: 29 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: 2/21/02 12:19:19 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4384068.7 | 1.045 | 0.0068 | mg/L | | | | 0.65% |
| Ag 328.068 | 3861.7 | 0.0182 | 0.00019 | mg/L | | | | 1.07% |
| Al 308.215 | 12306.8 | -0.0162 | 0.00294 | mg/L | | | | 18.09% |
| As 188.979 | 8.9 | 0.0237 | 0.00420 | mg/L | | | | 17.71% |
| B 249.773 | 361.2 | 0.0118 | 0.00204 | mg/L | | | | 17.31% |
| 13.527 | -1.1 | 0.0010 | 0.00028 | mg/L | | | | 27.50% |
| 34.861 | 889.4 | 0.0095 | 0.00004 | mg/L | | | | 0.43% |
| Ca 430.253 | 11514.8 | 0.0608 | 0.00710 | mg/L | | | | 11.66% |
| Cd 226.502 | 56.1 | 0.0110 | 0.00023 | mg/L | | | | 2.07% |
| Co 228.616 | 415.5 | 0.1043 | 0.00049 | mg/L | | | | 0.47% |
| Cr 267.716 | 1927.0 | 0.0205 | 0.00087 | mg/L | | | | 4.25% |

| | | | | | |
|---|---|---|---|---|---|
| i 324.754 | 24911.1 | 0.0452 | 0.00072 | mg/L | 1.58% |
| : 2[illegible].863 | 49.8 | 0.0051 | 0.00073 | mg/L | 14.27% |
| [illegible] 21 | -948.5 | -5.482 | 0.3318 | mg/L | 6.05% |
| [illegible] .079 | 782.4 | 0.0028 | 0.00153 | mg/L | 54.03% |
| i 257.610 | 8936.0 | 0.0300 | 0.00062 | mg/L | 2.05% |
| ) 202.030 | 0.3 | 0.0006 | 0.00130 | mg/L | 203.79% |
| i 330.237 | 3633.8 | -0.3131 | 0.00619 | mg/L | 1.98% |
| i 231.604 | 311.1 | 0.0825 | 0.00113 | mg/L | 1.37% |
| ) 220.353 | 14.6 | 0.0070 | 0.00447 | mg/L | 64.12% |
| ) 206.833 | 56.0 | 0.1232 | 0.00111 | mg/L | 0.90% |
| e 196.026 | 15.6 | 0.0281 | 0.00112 | mg/L | 4.00% |
| i 189.933 | -23.4 | -0.0005 | 0.00298 | mg/L | 555.41% |
| i 334.941 | -3633.7 | 0.0002 | 0.00004 | mg/L | 17.56% |
| l 190.800 | -1.2 | 0.0171 | 0.00236 | mg/L | 13.85% |
| 292.402 | 15104.0 | 0.0989 | 0.00110 | mg/L | 1.11% |
| n 206.191 | 236.6 | 0.0473 | 0.00125 | mg/L | 2.65% |

ean Data ----------

D: ICSA Seq. No.: 30 Sample No.: 6 A/S Pos: 7
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 12:23:58 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3936777.1 | 0.938 | 0.0021 | mg/L | | | | 0.22% |
| g 328.068 | -7811.8 | 0.0015 | 0.00038 | mg/L | | | | 25.70% |
| l 308.215 | 19252053.8 | 490.4 | 2.60 | mg/L | | | | 0.53% |
| s 188.979 | -394.2 | 0.0121 | 0.00760 | mg/L | | | | 62.68% |
| 249.773 | 5421.9 | -0.0142 | 0.00052 | mg/L | | | | 3.69% |
| a 233.527 | 543.6 | 0.0007 | 0.00007 | mg/L | | | | 10.58% |
| e 234.861 | 4257.3 | -0.0006 | 0.00024 | mg/L | | | | 39.98% |
| a 430.253 | 5684648.8 | 531.7 | 3.57 | mg/L | | | | 0.67% |
| d 226.502 | 107.0 | -0.0032 | 0.00088 | mg/L | | | | 27.56% |
| o 228.616 | 4.8 | 0.0016 | 0.00064 | mg/L | | | | 40.01% |
| r [illegible].716 | -183.9 | -0.0070 | 0.00019 | mg/L | | | | 2.66% |
| [illegible] .754 | -5181.2 | 0.0194 | 0.00042 | mg/L | | | | 2.18% |
| e [illegible].863 | 373575.4 | 180.9 | 0.02 | mg/L | | | | 0.01% |
| [illegible] 404.721 | -1248.9 | -14.38 | 2.219 | mg/L | | | | 15.43% |
| g 279.079 | 4679629.7 | 487.2 | 2.60 | mg/L | | | | 0.53% |
| n 257.610 | 3723.4 | 0.0104 | 0.00027 | mg/L | | | | 2.57% |
| o 202.030 | -52.8 | -0.0357 | 0.00009 | mg/L | | | | 0.24% |
| a 330.237 | 3820.9 | 0.4183 | 0.05888 | mg/L | | | | 14.08% |
| i 231.604 | -31.8 | -0.0026 | 0.00044 | mg/L | | | | 16.79% |
| b 220.353 | -45.7 | -0.0116 | 0.00376 | mg/L | | | | 32.47% |
| b 206.833 | 4.9 | -0.0250 | 0.01352 | mg/L | | | | 54.09% |
| e 196.026 | 9.8 | -0.0421 | 0.00941 | mg/L | | | | 22.33% |
| n 189.933 | 1300.2 | 0.5784 | 0.00619 | mg/L | | | | 1.07% |
| i 334.941 | -11617.4 | -0.0059 | 0.00003 | mg/L | | | | 0.49% |
| l 190.800 | -22.3 | 0.0051 | 0.01144 | mg/L | | | | 224.88% |
| V 292.402 | 532.2 | -0.0012 | 0.00051 | mg/L | | | | 42.95% |
| n 206.191 | 125.3 | 0.0067 | 0.00143 | mg/L | | | | 21.33% |

Mean Data ----------

ID: ICSAB Seq. No.: 31 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: 2/21/02 12:28:52 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3836805.3 | 0.915 | 0.0079 | mg/L | | | | 0.87% |
| Ag 328.068 | 264058.1 | 1.086 | 0.0007 | mg/L | | | | 0.06% |
| Al 308.215 | 19740056.5 | 502.8 | 2.79 | mg/L | | | | 0.55% |
| As 188.979 | -402.5 | 0.0202 | 0.00316 | mg/L | | | | 15.61% |
| B 249.773 | 5401.1 | -0.0189 | 0.00060 | mg/L | | | | 3.17% |
| Ba 233.527 | 9993.2 | 0.5203 | 0.00289 | mg/L | | | | 0.56% |
| Be 234.861 | 65500.1 | 0.5157 | 0.00059 | mg/L | | | | 0.11% |
| Ca 430.253 | 5841517.6 | 546.4 | 2.78 | mg/L | | | | 0.51% |
| [illegible] 6.502 | 5872.5 | 0.9702 | 0.00314 | mg/L | | | | 0.32% |
| [illegible] .8.616 | 1899.3 | 0.4754 | 0.00489 | mg/L | | | | 1.03% |
| Cr 267.716 | 37589.7 | 0.4853 | 0.00021 | mg/L | | | | 0.04% |
| Cu 324.754 | 152754.9 | 0.5446 | 0.00089 | mg/L | | | | 0.16% |
| Fe 238.863 | 379106.6 | 183.6 | 0.16 | mg/L | | | | 0.09% |
| K 404.721 | -1254.1 | -14.61 | 2.635 | mg/L | | | | 18.04% |

| | | | | | |
|---|---|---|---|---|---|
| 279.079 | 4779970.2 | 497.6 | 1.79 | mg/L | 0.36% |
| 257.610 | 134185.5 | 0.4997 | 0.00015 | mg/L | 0.03% |
| 030 | -49.2 | -0.0332 | 0.00161 | mg/L | 4.86% |
| 237 | 2780.3 | -0.6835 | 0.07298 | mg/L | 10.68% |
| 231.604 | 3738.8 | 0.9336 | 0.00501 | mg/L | 0.54% |
| 220.353 | 511.0 | 0.9970 | 0.00318 | mg/L | 0.32% |
| 206.833 | 6.0 | -0.0225 | 0.00525 | mg/L | 23.30% |
| 196.026 | 6.8 | -0.0544 | 0.00295 | mg/L | 5.43% |
| 189.933 | 1329.9 | 0.5856 | 0.00794 | mg/L | 1.36% |
| 334.941 | -11560.0 | -0.0058 | 0.00005 | mg/L | 0.89% |
| 190.800 | -16.7 | 0.0252 | 0.01117 | mg/L | 44.42% |
| 292.402 | 73711.7 | 0.5016 | 0.00014 | mg/L | 0.03% |
| 206.191 | 4784.7 | 0.9220 | 0.00123 | mg/L | 0.13% |

ean Data ----------

D: CCV
ample Qty: 1.0000 g

Seq. No.: 32 Sample No.: 2 A/S Pos: 3
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 12:33:34 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 4278249.4 | 1.020 | 0.0019 | mg/L | | | | 0.19% |
| g 328.068 | 122586.7 | 0.4915 | 0.00248 | mg/L | | | | 0.51% |
| l 308.215 | 404785.8 | 9.988 | 0.0658 | mg/L | | | | 0.66% |
| s 188.979 | 333.1 | 1.072 | 0.0011 | mg/L | | | | 0.10% |
| 249.773 | 53579.3 | 2.414 | 0.0598 | mg/L | | | | 2.48% |
| a 233.527 | 185578.8 | 10.22 | 0.028 | mg/L | | | | 0.28% |
| e 234.861 | 29567.3 | 0.2515 | 0.00062 | mg/L | | | | 0.25% |
| a 430.253 | 271774.3 | 24.45 | 0.063 | mg/L | | | | 0.26% |
| d 226.502 | 3072.0 | 0.5203 | 0.00128 | mg/L | | | | 0.25% |
| o 228.616 | 10230.9 | 2.559 | 0.0012 | mg/L | | | | 0.05% |
| r 267.716 | 39154.0 | 0.5057 | 0.00191 | mg/L | | | | 0.38% |
| u 324.754 | 398318.7 | 1.285 | 0.0009 | mg/L | | | | 0.07% |
| e 238.863 | 10673.7 | 5.151 | 0.0414 | mg/L | | | | 0.80% |
| 721 | -461.0 | 20.83 | 0.082 | mg/L | | | | 0.39% |
| Q eeds lower limit for K 404.721 | | Recovery = 83.32% | | Action = Continue | | | | |
| g .079 | 247658.2 | 25.71 | 0.075 | mg/L | | | | 0.29% |
| n 257.610 | 202155.6 | 0.7546 | 0.00048 | mg/L | | | | 0.06% |
| o 202.030 | 3598.7 | 2.464 | 0.0100 | mg/L | | | | 0.41% |
| a 330.237 | 26107.2 | 23.65 | 0.027 | mg/L | | | | 0.11% |
| i 231.604 | 8356.5 | 2.080 | 0.0007 | mg/L | | | | 0.03% |
| b 220.353 | 293.1 | 0.5105 | 0.00156 | mg/L | | | | 0.31% |
| b 206.833 | 1892.0 | 5.028 | 0.0024 | mg/L | | | | 0.05% |
| e 196.026 | 140.6 | 0.5107 | 0.00010 | mg/L | | | | 0.02% |
| n 189.933 | 4063.8 | 5.251 | 0.0314 | mg/L | | | | 0.60% |
| i 334.941 | 3197579.9 | 2.447 | 0.0006 | mg/L | | | | 0.02% |
| l 190.800 | 304.0 | 1.026 | 0.0051 | mg/L | | | | 0.49% |
| 292.402 | 369151.3 | 2.532 | 0.0014 | mg/L | | | | 0.06% |
| n 206.191 | 5072.2 | 0.9976 | 0.00285 | mg/L | | | | 0.29% |

lean Data ----------

ID: CCB
Sample Qty: 1.0000 g

Seq. No.: 33 Sample No.: 4 A/S Pos: 1
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 2/21/02 12:37:55 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 4243991.7 | 1.012 | 0.0058 | mg/L | | | | 0.57% |
| Ag 328.068 | -678.7 | 0.0001 | 0.00002 | mg/L | | | | 28.50% |
| Al 308.215 | 12959.0 | 0.0004 | 0.00270 | mg/L | | | | 690.63% |
| As 188.979 | 1.4 | 0.0005 | 0.00319 | mg/L | | | | 625.00% |
| B 249.773 | 1978.6 | 0.0848 | 0.02749 | mg/L | | | | 32.41% |
| Ba 233.527 | 10.8 | 0.0017 | 0.00037 | mg/L | | | | 22.30% |
| Be 234.861 | -228.7 | 0.0001 | 0.00002 | mg/L | | | | 21.97% |
| Ca 430.253 | 11554.7 | 0.0646 | 0.01160 | mg/L | | | | 17.97% |
| Cd 226.502 | -7.4 | 0.0003 | 0.00034 | mg/L | | | | 131.28% |
| Co 228.616 | 3.0 | 0.0011 | 0.00029 | mg/L | | | | 25.26% |
| C .716 | 371.8 | 0.0003 | 0.00041 | mg/L | | | | 159.71% |
| C .754 | 12020.9 | 0.0025 | 0.00037 | mg/L | | | | 15.13% |
| Fe 238.863 | 70.2 | 0.0150 | 0.00224 | mg/L | | | | 14.95% |
| K 404.721 | -878.0 | -1.675 | 1.0222 | mg/L | | | | 61.03% |
| Mg 279.079 | 1714.9 | 0.0999 | 0.01766 | mg/L | | | | 17.67% |
| Mn 257.610 | 762.8 | -0.0007 | 0.00010 | mg/L | | | | 15.09% |

| | | | | |
|---|---|---|---|---|
| 202.030 | 0.8 | 0.0010 | 0.00034 mg/L | 33.82% |
| ? 237 | 3718.0 | -0.2233 | 0.06764 mg/L | 30.30% |
| 504 | -16.4 | 0.0012 | 0.00053 mg/L | 44.24% |
| 2..353 | 7.9 | -0.0051 | 0.00147 mg/L | 28.69% |
| C exceeds lower limit for Pb 220.353 | | | Action = Continue | |
| 206.833 | 11.2 | 0.0037 | 0.00491 mg/L | 133.98% |
| 196.026 | 11.6 | 0.0128 | 0.00001 mg/L | 0.05% |
| 189.933 | -9.0 | 0.0180 | 0.01199 mg/L | 66.61% |
| 334.941 | -3368.9 | 0.0004 | 0.00017 mg/L | 40.13% |
| 190.800 | -5.6 | 0.0025 | 0.00688 mg/L | 274.53% |
| 292.402 | 695.7 | -0.0001 | 0.00009 mg/L | 159.72% |
| 206.191 | 27.1 | 0.0061 | 0.00001 mg/L | 0.09% |

## Metals Cover Page

Instrument: Optima 2

Analyst: AP

Date: 2/21/02

Data File: 2feb21a2

Reviewed By: CK 2/22/02

Entered By: CK 2/22/02

Manager Approval: SD 2/22/02

| Starlims Run # | Analytes Used | Batch ID | Method Requested | Failed Analytes | Comments / Problems |
|---|---|---|---|---|---|
| 74775 | As Se Pb(L) Ag Ba Cd | M2680031 | 200.7 | | |
| | Cr Cu Fe Ni Pb Zn Al | | | | |
| | As Mo Mn | | | | |

## Package Data:

| Client Sub. # | Type Of Package | Analytes Used | Failed Metals | Batch ID | Standards Attached | How Was Data Transferred To LIMS | Raw Data Copied |
|---|---|---|---|---|---|---|---|
| ✓ K10552 | Pkg 5 / ASP | Ag Al Ba Cd Cr Pb Se Mn | | M2530081C | 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 |
| K10415 | Pkg 5 / ASP | As Se Tl Pb Sb Al Ca Cd Ni Zn B | | M2680012 14 | 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 |
| R10611 | Pkg 5 / ASP | Pb | | M2680031 | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |

al[illegible]ation Summary
el Method 200.7 Date: 02/21/02 4:11:21 PM

| lement | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|

ethod: Method 200.7 IEC: 022102.iec MSF:
esults: 2feb21a Spectra Stored: Yes Method Stored: Yes
ample Info: 2007 User: User1 Date: 02/21/02 4:11:21 PM
ethod Description: Optima 3000XL #2

ean Data
D: IS Init Seq. No.: 1 A/S Pos: 1
Data: Original Date: 02/21/02 4:12:51 PM

| lement | Mean Corr. Intensity | Std.Dev. | RSD |
|---|---|---|---|
| 371.030 | 3584783.5 | 33710.93 | 0.94% |

lean Data
D: Calib Blank 1 Seq. No.: 2 A/S Pos: 1
Data: Original Date: 02/21/02 4:14:22 PM

| lement | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| 371.030 | 3550518.6 | 8947.60 | 0.25% | 0.990 | mg/L |
| g 328.068 | -1408.0 | 9.83 | 0.70% | 0 | mg/L |
| l 308.215 | 8372.6 | 62.20 | 0.74% | 0 | mg/L |
| s 188.979 | -28.6 | 1.50 | 5.27% | 0 | mg/L |
| 249.773 | 402.7 | 4.38 | 1.09% | 0 | mg/L |
| Ba [illegible]3.527 | 43.3 | 0.18 | 0.42% | 0 | mg/L |
| Be [illegible].107 | -6042.0 | 20.66 | 0.34% | 0 | mg/L |
| Ca [illegible].887 | -1573.1 | 76.16 | 4.84% | 0 | mg/L |
| Cd 226.502 | -10.4 | 7.71 | 73.99% | 0 | mg/L |
| Co 228.616 | -185.8 | 0.67 | 0.36% | 0 | mg/L |
| Cr 267.716 | 160.4 | 28.70 | 17.89% | 0 | mg/L |
| Cu 324.754 | 2530.6 | 45.31 | 1.79% | 0 | mg/L |
| Fe 238.863 | -117.6 | 1.33 | 1.13% | 0 | mg/L |
| K 404.721 | -922.5 | 108.01 | 11.71% | 0 | mg/L |
| Mg 279.079 | -58.7 | 0.55 | 0.93% | 0 | mg/L |
| Mn 257.610 | 29.3 | 1.28 | 4.36% | 0 | mg/L |
| Mo 202.030 | -21.8 | 2.64 | 12.13% | 0 | mg/L |
| Na 330.237 | 646.8 | 10.37 | 1.60% | 0 | mg/L |
| Ni 231.604 | -197.0 | 2.32 | 1.18% | 0 | mg/L |
| Pb 220.353 | 16.3 | 0.04 | 0.27% | 0 | mg/L |
| Sb 206.833 | 35.6 | 0.85 | 2.38% | 0 | mg/L |
| Se 196.026 | 13.7 | 2.90 | 21.23% | 0 | mg/L |
| Sn 189.933 | 36.1 | 2.53 | 6.99% | 0 | mg/L |
| Ti 334.941 | -637.0 | 14.19 | 2.23% | 0 | mg/L |
| Tl 190.800 | -16.3 | 3.56 | 21.87% | 0 | mg/L |
| V 292.402 | 627.6 | 5.82 | 0.93% | 0 | mg/L |
| Zn 206.191 | 20.0 | 0.99 | 4.97% | 0 | mg/L |

S DeVito
2/21/02

Mean Data
ID: Calib Std 1 Seq. No.: 3 A/S Pos: 2
Data: Original Date: 02/21/02 4:19:24 PM

| Element | Mean Corr. Intensity | Std.Dev. | RSD | Conc. | Calib Units |
|---|---|---|---|---|---|
| Y 371.030 | 3526791.4 | 4196.75 | 0.12% | 0.984 | mg/L |
| Ag 328.068 | 136557.2 | 251.47 | 0.18% | 1.0000 | mg/L |
| Al 308.215 | 290011.1 | 995.07 | 0.34% | 20.0000 | mg/L |
| As 188.979 | 2247.5 | 1.34 | 0.06% | 2.0000 | mg/L |
| [illegible] 9.773 | 271779.9 | 1300.24 | 0.48% | 5.0000 | mg/L |
| [illegible] 3.527 | 1403212.3 | 1060.61 | 0.08% | 20.0000 | mg/L |
| Be 313.107 | 2583917.8 | 167.37 | 0.01% | 0.5000 | mg/L |
| Ca 315.887 | 5299220.2 | 5460.53 | 0.10% | 50.0000 | mg/L |
| Cd 226.502 | 80443.3 | 302.38 | 0.38% | 1.0000 | mg/L |
| Co 228.616 | 87624.8 | 99.39 | 0.11% | 5.0000 | mg/L |
| Cr 267.716 | 91389.8 | 202.86 | 0.22% | 1.0000 | mg/L |

| | | | | |
|---|---|---|---|---|
| ı 324.754 | 520830.8 | 3102.76 | 0.60% | 2.5000 mg/L |
| e 238.863 | 193222.2 | 571.79 | 0.30% | 10.0000 mg/L |
| 721 | 1680.8 | 104.67 | 6.23% | 50.0000 mg/L |
| g .079 | 743379.3 | 909.89 | 0.12% | 50.0000 mg/L |
| n 257.610 | 503869.0 | 253.93 | 0.05% | 1.5000 mg/L |
| o 202.030 | 58069.1 | 212.28 | 0.37% | 5.0000 mg/L |
| a 330.237 | 29269.6 | 117.47 | 0.40% | 50.0000 mg/L |
| i 231.604 | 107396.4 | 360.92 | 0.34% | 4.0000 mg/L |
| b 220.353 | 4026.7 | 2.50 | 0.06% | 1.0000 mg/L |
| b 206.833 | 15497.6 | 29.44 | 0.19% | 10.0000 mg/L |
| e 196.026 | 1987.1 | 5.89 | 0.30% | 1.0000 mg/L |
| n 189.933 | 65390.0 | 264.05 | 0.40% | 10.0000 mg/L |
| i 334.941 | 1677773.0 | 3821.14 | 0.23% | 5.0000 mg/L |
| l 190.800 | 2789.9 | 5.96 | 0.21% | 2.0000 mg/L |
| 292.402 | 858737.0 | 718.05 | 0.08% | 5.0000 mg/L |
| n 206.191 | 93608.0 | 436.90 | 0.47% | 2.0000 mg/L |

alibration Summary
ethod: Method 200.7 Date: 02/21/02 4:20:43 PM

| lement | Stds | Equation | Intercept | Slope | Curvature | Corr. Coeff. |
|---|---|---|---|---|---|---|
| g 328.068 | 1 | Linear | -1408.0 | 137965.2 | 0.00000 | 1.000000 |
| l 308.215 | 1 | Linear | 8372.6 | 14081.9 | 0.00000 | 1.000000 |
| s 188.979 | 1 | Linear | -28.6 | 1138.0 | 0.00000 | 1.000000 |
| 249.773 | 1 | Linear | 402.7 | 54275.4 | 0.00000 | 1.000000 |
| a 233.527 | 1 | Linear | 43.3 | 70158.5 | 0.00000 | 1.000000 |
| e 313.107 | 1 | Linear | -6042.0 | 5179919.8 | 0.00000 | 1.000000 |
| a 315.887 | 1 | Linear | -1573.1 | 106015.9 | 0.00000 | 1.000000 |
| d 226.502 | 1 | Linear | -10.4 | 80453.8 | 0.00000 | 1.000000 |
| o 228.616 | 1 | Linear | -185.8 | 17562.1 | 0.00000 | 1.000000 |
| r 267.716 | 1 | Linear | 160.4 | 91229.4 | 0.00000 | 1.000000 |
| u 324.754 | 1 | Linear | 2530.6 | 207320.1 | 0.00000 | 1.000000 |
| e .863 | 1 | Linear | -117.6 | 19334.0 | 0.00000 | 1.000000 |
| 721 | 1 | Linear | -922.5 | 52.1 | 0.00000 | 1.000000 |
| g .9.079 | 1 | Linear | -58.7 | 14868.8 | 0.00000 | 1.000000 |
| n 257.610 | 1 | Linear | 29.3 | 335893.1 | 0.00000 | 1.000000 |
| o 202.030 | 1 | Linear | -21.8 | 11618.2 | 0.00000 | 1.000000 |
| a 330.237 | 1 | Linear | 646.8 | 572.5 | 0.00000 | 1.000000 |
| i 231.604 | 1 | Linear | -197.0 | 26898.3 | 0.00000 | 1.000000 |
| b 220.353 | 1 | Linear | 16.3 | 4010.4 | 0.00000 | 1.000000 |
| b 206.833 | 1 | Linear | 35.6 | 1546.2 | 0.00000 | 1.000000 |
| e 196.026 | 1 | Linear | 13.7 | 1973.5 | 0.00000 | 1.000000 |
| n 189.933 | 1 | Linear | 36.1 | 6535.4 | 0.00000 | 1.000000 |
| i 334.941 | 1 | Linear | -637.0 | 335682.0 | 0.00000 | 1.000000 |
| l 190.800 | 1 | Linear | -16.3 | 1403.1 | 0.00000 | 1.000000 |
| 292.402 | 1 | Linear | 627.6 | 171621.9 | 0.00000 | 1.000000 |
| n 206.191 | 1 | Linear | 20.0 | 46794.0 | 0.00000 | 1.000000 |

lean 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: 02/21/02 4:24:33 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3536986.2 | 0.987 | 0.0045 | mg/L | | | | 0.46% |
| Ag 328.068 | 136376.5 | 0.9987 | 0.00139 | mg/L | | | | 0.14% |
| Al 308.215 | 290069.9 | 20.00 | 0.037 | mg/L | | | | 0.19% |
| As 188.979 | 2237.9 | 1.992 | 0.0164 | mg/L | | | | 0.82% |
| B 249.773 | 272629.5 | 5.016 | 0.0249 | mg/L | | | | 0.50% |
| Ba 233.527 | 1404253.9 | 20.01 | 0.008 | mg/L | | | | 0.04% |
| Be 313.107 | 2584190.1 | 0.5001 | 0.00017 | mg/L | | | | 0.03% |
| Ca 315.887 | 5303702.0 | 50.04 | 0.032 | mg/L | | | | 0.06% |
| Cd 226.502 | 80559.0 | 1.001 | 0.0002 | mg/L | | | | 0.02% |
| Co 228.616 | 87943.5 | 5.018 | 0.0090 | mg/L | | | | 0.18% |
| C 7.716 | 91345.2 | 0.9995 | 0.00321 | mg/L | | | | 0.32% |
| Cr 4.754 | 521564.1 | 2.504 | 0.0027 | mg/L | | | | 0.11% |
| Fe 238.863 | 193109.2 | 9.994 | 0.0266 | mg/L | | | | 0.27% |
| K 404.721 | 1666.2 | 49.72 | 0.583 | mg/L | | | | 1.17% |
| Mg 279.079 | 744232.1 | 50.06 | 0.032 | mg/L | | | | 0.06% |
| Mn 257.610 | 502967.0 | 1.497 | 0.0050 | mg/L | | | | 0.33% |

| | | | | | |
|---|---|---|---|---|---|
| 202.030 | 58085.2 | 5.001 | 0.0024 | mg/L | 0.05% |
| 3 37 | 29227.6 | 49.93 | 0.136 | mg/L | 0.27% |
| 2 04 | 107516.9 | 4.004 | 0.0066 | mg/L | 0.16% |
| 220.353 | 4010.6 | 0.9960 | 0.00372 | mg/L | 0.37% |
| 206.833 | 15434.4 | 9.959 | 0.0377 | mg/L | 0.38% |
| 196.026 | 1984.7 | 0.9988 | 0.00419 | mg/L | 0.42% |
| 189.933 | 65293.3 | 9.985 | 0.0117 | mg/L | 0.12% |
| 334.941 | 1675953.7 | 4.995 | 0.0006 | mg/L | 0.01% |
| 190.800 | 2774.4 | 1.989 | 0.0093 | mg/L | 0.47% |
| 292.402 | 857459.6 | 4.993 | 0.0031 | mg/L | 0.06% |
| 206.191 | 94390.7 | 2.017 | 0.0055 | mg/L | 0.27% |

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: 02/21/02 4:29:36 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3522665.4 | 0.983 | 0.0041 | mg/L | | | | 0.42% |
| 328.068 | 68037.2 | 0.5034 | 0.00266 | mg/L | | | | 0.53% |
| 308.215 | 148571.4 | 9.956 | 0.0519 | mg/L | | | | 0.52% |
| 188.979 | 1129.6 | 1.018 | 0.0097 | mg/L | | | | 0.95% |
| 249.773 | 136384.8 | 2.505 | 0.0112 | mg/L | | | | 0.45% |
| 233.527 | 732606.4 | 10.44 | 0.000 | mg/L | | | | 0.00% |
| 313.107 | 1300368.7 | 0.2522 | 0.00014 | mg/L | | | | 0.06% |
| 315.887 | 2714950.1 | 25.62 | 0.009 | mg/L | | | | 0.03% |
| 226.502 | 41577.1 | 0.5169 | 0.00226 | mg/L | | | | 0.44% |
| 228.616 | 44852.4 | 2.565 | 0.0151 | mg/L | | | | 0.59% |
| 267.716 | 46428.6 | 0.5072 | 0.00291 | mg/L | | | | 0.57% |
| 324.754 | 265250.8 | 1.267 | 0.0036 | mg/L | | | | 0.29% |
| 238.863 | 99161.4 | 5.135 | 0.0257 | mg/L | | | | 0.50% |
| 404.721 | 246.3 | 22.45 | 0.713 | mg/L | | | | 3.18% |
| QC ceeds lower limit for K 404.721 | | Recovery = 89.80% | | Action = Continue | | | | |
| g 079 | 374711.5 | 25.21 | 0.015 | mg/L | | | | 0.06% |
| n ..610 | 256234.9 | 0.7628 | 0.00432 | mg/L | | | | 0.57% |
| o 202.030 | 28978.5 | 2.496 | 0.0126 | mg/L | | | | 0.51% |
| a 330.237 | 14266.5 | 23.79 | 0.392 | mg/L | | | | 1.65% |
| i 231.604 | 55856.9 | 2.084 | 0.0103 | mg/L | | | | 0.50% |
| b 220.353 | 2062.7 | 0.5103 | 0.00163 | mg/L | | | | 0.32% |
| b 206.833 | 7805.8 | 5.025 | 0.0125 | mg/L | | | | 0.25% |
| e 196.026 | 1017.5 | 0.5086 | 0.00186 | mg/L | | | | 0.37% |
| n 189.933 | 34811.8 | 5.321 | 0.0029 | mg/L | | | | 0.05% |
| QC exceeds upper limit for Sn 189.933 | | Recovery = 106.42% | | Action = Continue | | | | |
| i 334.941 | 828265.8 | 2.469 | 0.0024 | mg/L | | | | 0.10% |
| l 190.800 | 1437.6 | 1.036 | 0.0079 | mg/L | | | | 0.76% |
| 292.402 | 434781.3 | 2.530 | 0.0012 | mg/L | | | | 0.05% |
| n 206.191 | 48893.5 | 1.044 | 0.0025 | mg/L | | | | 0.24% |

lean 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: 02/21/02 4:34:29 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3528396.2 | 0.984 | 0.0049 | mg/L | | | | 0.50% |
| Ag 328.068 | -1392.9 | 0.0001 | 0.00015 | mg/L | | | | 140.24% |
| Al 308.215 | 8352.8 | -0.0014 | 0.00304 | mg/L | | | | 216.60% |
| As 188.979 | -31.0 | -0.0021 | 0.00151 | mg/L | | | | 70.91% |
| B 249.773 | 1171.0 | 0.0142 | 0.00148 | mg/L | | | | 10.43% |
| Ba 233.527 | 126.5 | 0.0012 | 0.00007 | mg/L | | | | 5.74% |
| Be 313.107 | -6001.7 | 0.0000 | 0.00001 | mg/L | | | | 118.16% |
| Ca 315.887 | -1347.3 | 0.0021 | 0.00083 | mg/L | | | | 39.10% |
| Cd 226.502 | -6.4 | 0.0001 | 0.00001 | mg/L | | | | 16.10% |
| Co 228.616 | -137.7 | 0.0027 | 0.00000 | mg/L | | | | 0.10% |
| C 7.716 | 191.0 | 0.0003 | 0.00025 | mg/L | | | | 75.08% |
| Cu 4.754 | 3643.4 | 0.0054 | 0.00086 | mg/L | | | | 16.10% |
| Fe 238.863 | -120.6 | -0.0002 | 0.00060 | mg/L | | | | 380.19% |
| K 404.721 | -929.4 | -0.1326 | 0.17456 | mg/L | | | | 131.67% |
| Mg 279.079 | -13.2 | 0.0031 | 0.00044 | mg/L | | | | 14.32% |
| Mn 257.610 | 35.3 | 0.0000 | 0.00001 | mg/L | | | | 78.37% |
| Mo 202.030 | -16.8 | 0.0004 | 0.00001 | mg/L | | | | 3.39% |

| | | | | | |
|---|---|---|---|---|---|
| 330.237 | 769.1 | 0.2137 | 0.10554 | mg/L | 49.39% |
| .604 | -142.6 | 0.0020 | 0.00068 | mg/L | 33.67% |
| 353 | 16.9 | 0.0001 | 0.00090 | mg/L | 646.24% |
| .833 | 68.2 | 0.0211 | 0.00725 | mg/L | 34.37% |

IC exceeds upper limit for Sb 206.833 Action = Continue

| | | | | | |
|---|---|---|---|---|---|
| 196.026 | 10.3 | -0.0017 | 0.00057 | mg/L | 33.71% |
| 189.933 | 110.2 | 0.0113 | 0.00076 | mg/L | 6.72% |
| 334.941 | -359.5 | 0.0008 | 0.00031 | mg/L | 37.20% |
| 190.800 | -14.3 | 0.0014 | 0.00033 | mg/L | 23.49% |
| 292.402 | 692.7 | 0.0004 | 0.00006 | mg/L | 15.69% |
| 206.191 | 762.0 | 0.0159 | 0.00082 | mg/L | 5.16% |

ean Data ----------

D: CRI 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: 02/21/02 4:39:21 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3598609.3 | 1.004 | 0.0113 | mg/L | | | | 1.13% |
| g 328.068 | 1182.9 | 0.0188 | 0.00020 | mg/L | | | | 1.08% |
| l 308.215 | 8273.8 | -0.0070 | 0.00732 | mg/L | | | | 104.20% |
| s 188.979 | -4.9 | 0.0208 | 0.00215 | mg/L | | | | 10.35% |
| 249.773 | 808.6 | 0.0075 | 0.00051 | mg/L | | | | 6.76% |
| a 233.527 | 101.6 | 0.0008 | 0.00003 | mg/L | | | | 3.64% |
| e 313.107 | 44913.6 | 0.0098 | 0.00015 | mg/L | | | | 1.57% |
| a 315.887 | -338.3 | 0.0116 | 0.00027 | mg/L | | | | 2.30% |
| d 226.502 | 813.8 | 0.0102 | 0.00008 | mg/L | | | | 0.77% |
| o 228.616 | 1665.0 | 0.1054 | 0.00086 | mg/L | | | | 0.81% |
| r 267.716 | 1995.1 | 0.0201 | 0.00026 | mg/L | | | | 1.30% |
| u 324.754 | 12585.3 | 0.0485 | 0.00097 | mg/L | | | | 2.00% |
| e 238.863 | -39.8 | 0.0040 | 0.00078 | mg/L | | | | 19.48% |
| 404.721 | -967.2 | -0.8574 | 2.52493 | mg/L | | | | 294.48% |
| g 279.079 | -37.6 | 0.0014 | 0.00092 | mg/L | | | | 64.81% |
| n .610 | 10223.7 | 0.0304 | 0.00073 | mg/L | | | | 2.40% |
| o .030 | -19.4 | 0.0002 | 0.00009 | mg/L | | | | 46.69% |
| a 330.237 | 674.3 | 0.0480 | 0.00774 | mg/L | | | | 16.11% |
| i 231.604 | 2081.8 | 0.0847 | 0.00116 | mg/L | | | | 1.37% |
| b 220.353 | 40.2 | 0.0060 | 0.00140 | mg/L | | | | 23.55% |
| b 206.833 | 237.4 | 0.1305 | 0.00286 | mg/L | | | | 2.19% |
| e 196.026 | 31.6 | 0.0091 | 0.00027 | mg/L | | | | 2.96% |
| n 189.933 | 74.6 | 0.0059 | 0.00024 | mg/L | | | | 4.12% |
| i 334.941 | -507.9 | 0.0004 | 0.00006 | mg/L | | | | 16.47% |
| l 190.800 | 12.0 | 0.0201 | 0.00102 | mg/L | | | | 5.06% |
| / 292.402 | 17749.5 | 0.0998 | 0.00201 | mg/L | | | | 2.01% |
| n 206.191 | 2391.9 | 0.0507 | 0.00096 | mg/L | | | | 1.90% |

lean 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: 02/21/02 4:44:41 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3071087.2 | 0.857 | 0.0037 | mg/L | | | | 0.43% |
| Ag 328.068 | -3763.9 | -0.0068 | 0.00017 | mg/L | | | | 2.54% |
| Al 308.215 | 7517399.1 | 533.2 | 3.23 | mg/L | | | | 0.61% |
| As 188.979 | -61.9 | 0.0055 | 0.00048 | mg/L | | | | 8.68% |
| B 249.773 | 6832.6 | 0.1185 | 0.00037 | mg/L | | | | 0.31% |
| Ba 233.527 | -266.9 | -0.0044 | 0.00035 | mg/L | | | | 8.00% |
| Be 313.107 | -7245.5 | -0.0002 | 0.00000 | mg/L | | | | 0.77% |
| Ca 315.887 | 53471727.7 | 504.4 | 3.08 | mg/L | | | | 0.61% |
| Cd 226.502 | 1411.3 | 0.0053 | 0.00000 | mg/L | | | | 0.04% |
| Co 228.616 | -155.8 | 0.0017 | 0.00002 | mg/L | | | | 1.29% |
| Cr 267.716 | 924.1 | 0.0084 | 0.00007 | mg/L | | | | 0.88% |
| Cu 324.754 | 825.2 | 0.0043 | 0.00058 | mg/L | | | | 13.32% |
| F 38.863 | 3802115.3 | 196.7 | 0.25 | mg/L | | | | 0.13% |
| K .721 | -2718.6 | -9.599 | 0.1915 | mg/L | | | | 1.99% |
| Mg 79.079 | 8279996.9 | 556.9 | 3.45 | mg/L | | | | 0.62% |
| Mn 257.610 | -4151.7 | -0.0124 | 0.00021 | mg/L | | | | 1.65% |
| Mo 202.030 | -1.3 | 0.0018 | 0.00039 | mg/L | | | | 22.38% |
| Na 330.237 | 591.6 | 0.4361 | 0.07023 | mg/L | | | | 16.10% |
| Ni 231.604 | -163.3 | 0.0013 | 0.00042 | mg/L | | | | 33.87% |

| | | | | |
|---|---|---|---|---|
| 220.353 | -139.9 | 0.0032 | 0.00052 mg/L | 16.21% |
| ? 933 | 37.4 | 0.0011 | 0.00110 mg/L | 96.24% |
| )26 | 119.1 | -0.0038 | 0.00136 mg/L | 35.85% |
| 1b>.933 | 13166.1 | 0.0562 | 0.00198 mg/L | 3.52% |
| 334.941 | -2801.7 | -0.0064 | 0.00004 mg/L | 0.56% |
| 190.800 | -32.7 | -0.0117 | 0.00081 mg/L | 6.88% |
| 292.402 | 9580.2 | 0.0522 | 0.00010 mg/L | 0.18% |
| 206.191 | 1301.0 | 0.0119 | 0.00190 mg/L | 16.04% |

an Data ----------

: ICSAB Seq. No.: 9 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: 02/21/02 4:50:30 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3096299.2 | 0.864 | 0.0046 | mg/L | | | | 0.53% |
| [ 328.068 | 155575.8 | 1.148 | 0.0099 | mg/L | | | | 0.86% |
| . 308.215 | 7492368.4 | 531.5 | 4.45 | mg/L | | | | 0.84% |
| ; 188.979 | -64.8 | 0.0027 | 0.00695 | mg/L | | | | 253.08% |
| 249.773 | 6777.7 | 0.1175 | 0.00116 | mg/L | | | | 0.99% |
| ı 233.527 | 39311.3 | 0.5597 | 0.00340 | mg/L | | | | 0.61% |
| ; 313.107 | 2708978.6 | 0.5241 | 0.00003 | mg/L | | | | 0.01% |
| ı 315.887 | 53326833.1 | 503.0 | 3.64 | mg/L | | | | 0.72% |
| i 226.502 | 82239.3 | 1.010 | 0.0076 | mg/L | | | | 0.75% |
| ɔ 228.616 | 8638.7 | 0.5025 | 0.00266 | mg/L | | | | 0.53% |
| r 267.716 | 47976.5 | 0.5241 | 0.00496 | mg/L | | | | 0.95% |
| ı 324.754 | 119692.3 | 0.5776 | 0.00169 | mg/L | | | | 0.29% |
| ı 238.863 | 3780724.7 | 195.6 | 0.08 | mg/L | | | | 0.04% |
| 404.721 | -2798.0 | -11.26 | 1.356 | mg/L | | | | 12.03% |
| g 279.079 | 8257431.5 | 555.4 | 4.05 | mg/L | | | | 0.73% |
| n 257.610 | 171035.7 | 0.5091 | 0.00380 | mg/L | | | | 0.75% |
| o 202.030 | -6.2 | 0.0013 | 0.00016 | mg/L | | | | 12.07% |
| a [illegible].237 | 800.5 | 0.7980 | 0.08128 | mg/L | | | | 10.19% |
| i .604 | 25852.2 | 0.9684 | 0.00560 | mg/L | | | | 0.58% |
| b .353 | 3962.8 | 1.026 | 0.0037 | mg/L | | | | 0.36% |
| b 206.833 | 33.5 | -0.0014 | 0.00153 | mg/L | | | | 112.80% |
| e 196.026 | 114.5 | -0.0060 | 0.00566 | mg/L | | | | 94.82% |
| n 189.933 | 13060.9 | 0.0454 | 0.00672 | mg/L | | | | 14.81% |
| 'i 334.941 | -2708.8 | -0.0062 | 0.00036 | mg/L | | | | 5.84% |
| 'l 190.800 | -35.8 | -0.0139 | 0.00121 | mg/L | | | | 8.65% |
| ' 292.402 | 99684.2 | 0.5772 | 0.00424 | mg/L | | | | 0.74% |
| :n 206.191 | 48062.7 | 1.011 | 0.0036 | mg/L | | | | 0.36% |

lean Data ----------

:D: 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: 02/21/02 4:56:00 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3552563.1 | 0.991 | 0.0097 | mg/L | | | | 0.98% |
| Ag 328.068 | 67889.1 | 0.5023 | 0.00773 | mg/L | | | | 1.54% |
| Al 308.215 | 148815.7 | 9.973 | 0.1714 | mg/L | | | | 1.72% |
| As 188.979 | 1132.8 | 1.021 | 0.0097 | mg/L | | | | 0.96% |
| B 249.773 | 135418.4 | 2.488 | 0.0488 | mg/L | | | | 1.96% |
| Ba 233.527 | 735553.0 | 10.48 | 0.021 | mg/L | | | | 0.20% |
| Be 313.107 | 1303330.1 | 0.2528 | 0.00041 | mg/L | | | | 0.16% |
| Ca 315.887 | 2731260.5 | 25.78 | 0.030 | mg/L | | | | 0.12% |
| Cd 226.502 | 41510.3 | 0.5161 | 0.00834 | mg/L | | | | 1.62% |
| Co 228.616 | 45084.3 | 2.578 | 0.0390 | mg/L | | | | 1.51% |
| Cr 267.716 | 46573.4 | 0.5087 | 0.00717 | mg/L | | | | 1.41% |
| Cu 324.754 | 264758.6 | 1.265 | 0.0242 | mg/L | | | | 1.92% |
| Fe 238.863 | 99585.2 | 5.157 | 0.0752 | mg/L | | | | 1.46% |
| K 404.721 | 255.6 | 22.63 | 0.617 | mg/L | | | | 2.73% |
| Mg 279.079 | 378922.2 | 25.49 | 0.012 | mg/L | | | | 0.05% |
| M 7.610 | 255714.0 | 0.7612 | 0.00222 | mg/L | | | | 0.29% |
| M 2.030 | 28906.3 | 2.490 | 0.0413 | mg/L | | | | 1.66% |
| Na 330.237 | 14125.0 | 23.54 | 0.356 | mg/L | | | | 1.51% |
| Ni 231.604 | 55955.3 | 2.088 | 0.0315 | mg/L | | | | 1.51% |
| Pb 220.353 | 2069.9 | 0.5121 | 0.00044 | mg/L | | | | 0.08% |
| Sb 206.833 | 7785.8 | 5.012 | 0.0488 | mg/L | | | | 0.97% |
| Se 196.026 | 1015.0 | 0.5074 | 0.00207 | mg/L | | | | 0.41% |

| | | | | | |
|---|---|---|---|---|---|
| 1 189.933 | 34690.4 | 5.303 | 0.0956 | mg/L | 1.80% |
| . 334.941 | 829015.4 | 2.472 | 0.0074 | mg/L | 0.30% |
| . 800 | 1442.1 | 1.039 | 0.0039 | mg/L | 0.37% |
| 2 02 | 435018.2 | 2.531 | 0.0073 | mg/L | 0.29% |
| 1 206.191 | 48989.5 | 1.046 | 0.0149 | mg/L | 1.43% |

an Data ----------

D: 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: 02/21/02 5:00:52 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3601607.3 | 1.005 | 0.0048 | mg/L | | | | 0.48% |
| g 328.068 | -1359.2 | 0.0004 | 0.00010 | mg/L | | | | 27.67% |
| l 308.215 | 8383.4 | 0.0008 | 0.00095 | mg/L | | | | 124.12% |
| s 188.979 | -27.7 | 0.0007 | 0.00058 | mg/L | | | | 79.88% |
| 249.773 | 929.6 | 0.0097 | 0.00123 | mg/L | | | | 12.65% |
| a 233.527 | 89.2 | 0.0007 | 0.00010 | mg/L | | | | 15.52% |
| e 313.107 | -5868.1 | 0.0000 | 0.00000 | mg/L | | | | 10.14% |
| a 315.887 | 247.0 | 0.0172 | 0.00051 | mg/L | | | | 2.99% |
| d 226.502 | -6.8 | 0.0000 | 0.00000 | mg/L | | | | 2.54% |
| o 228.616 | -140.6 | 0.0026 | 0.00036 | mg/L | | | | 14.12% |
| r 267.716 | 188.6 | 0.0003 | 0.00035 | mg/L | | | | 113.60% |
| u 324.754 | 3232.5 | 0.0034 | 0.00104 | mg/L | | | | 30.87% |
| e 238.863 | 157.0 | 0.0142 | 0.00063 | mg/L | | | | 4.43% |
| 404.721 | -938.1 | -0.2980 | 2.46059 | mg/L | | | | 825.77% |
| g 279.079 | 1095.4 | 0.0776 | 0.00339 | mg/L | | | | 4.37% |
| n 257.610 | 36.6 | 0.0000 | 0.00002 | mg/L | | | | 104.25% |
| o 202.030 | -18.0 | 0.0003 | 0.00002 | mg/L | | | | 6.88% |
| a 330.237 | 624.4 | -0.0392 | 0.04374 | mg/L | | | | 111.54% |
| i 231.604 | -117.4 | 0.0030 | 0.00005 | mg/L | | | | 1.70% |
| b 220.353 | 16.0 | -0.0001 | 0.00012 | mg/L | | | | 154.57% |
| b 206.833 | 64.3 | 0.0185 | 0.00410 | mg/L | | | | 22.12% |
| QC xceeds upper limit for Sb 206.833 Action = Continue | | | | | | | | |
| e .026 | 12.0 | -0.0008 | 0.00201 | mg/L | | | | 244.28% |
| n .933 | 102.6 | 0.0102 | 0.00097 | mg/L | | | | 9.52% |
| i 334.941 | -456.5 | 0.0005 | 0.00021 | mg/L | | | | 38.97% |
| l 190.800 | -13.5 | 0.0020 | 0.00071 | mg/L | | | | 35.69% |
| / 292.402 | 682.0 | 0.0003 | 0.00008 | mg/L | | | | 26.38% |
| n 206.191 | 430.2 | 0.0088 | 0.00073 | mg/L | | | | 8.33% |

lean Data ----------

ID: PBW-M2680012 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: 02/21/02 5:05:42 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3623934.9 | 1.011 | 0.0033 | mg/L | | | | 0.33% |
| Ag 328.068 | -1375.6 | 0.0002 | 0.00003 | mg/L | | | | 11.65% |
| Al 308.215 | 8257.4 | -0.0082 | 0.00132 | mg/L | | | | 16.07% |
| As 188.979 | -26.8 | 0.0015 | 0.00188 | mg/L | | | | 122.59% |
| B 249.773 | 819.3 | 0.0077 | 0.00010 | mg/L | | | | 1.24% |
| Ba 233.527 | 60.9 | 0.0003 | 0.00000 | mg/L | | | | 0.96% |
| Be 313.107 | -5969.6 | 0.0000 | 0.00002 | mg/L | | | | 109.38% |
| Ca 315.887 | -1919.5 | -0.0033 | 0.00007 | mg/L | | | | 2.24% |
| Cd 226.502 | -3.7 | 0.0001 | 0.00006 | mg/L | | | | 69.28% |
| Co 228.616 | -155.8 | 0.0017 | 0.00020 | mg/L | | | | 11.82% |
| Cr 267.716 | 176.4 | 0.0002 | 0.00062 | mg/L | | | | 355.20% |
| Cu 324.754 | 2855.8 | 0.0016 | 0.00001 | mg/L | | | | 0.53% |
| Fe 238.863 | -2.2 | 0.0060 | 0.00022 | mg/L | | | | 3.70% |
| K 404.721 | -932.1 | -0.1835 | 0.72002 | mg/L | | | | 392.37% |
| Mg 279.079 | 601.1 | 0.0444 | 0.00293 | mg/L | | | | 6.60% |
| Mn 257.610 | 38.3 | 0.0000 | 0.00000 | mg/L | | | | 15.58% |
| Mo 202.030 | -21.2 | 0.0000 | 0.00001 | mg/L | | | | 28.04% |
| Na 330.237 | 833.9 | 0.3268 | 0.08408 | mg/L | | | | 25.73% |
| 1.604 | -154.4 | 0.0016 | 0.00007 | mg/L | | | | 4.66% |
| .0.353 | 14.7 | -0.0004 | 0.00078 | mg/L | | | | 189.47% |
| Sb 206.833 | 46.8 | 0.0072 | 0.00002 | mg/L | | | | 0.25% |
| Se 196.026 | 17.3 | 0.0018 | 0.00212 | mg/L | | | | 115.69% |
| Sn 189.933 | 66.9 | 0.0047 | 0.00047 | mg/L | | | | 9.99% |
| Ti 334.941 | -559.5 | 0.0002 | 0.00004 | mg/L | | | | 16.94% |

| | | | | | |
|---|---|---|---|---|---|
| 190.800 | -16.2 | 0.0001 | 0.00104 | mg/L | >999.9% |
| 29[illegible]02 | 654.6 | 0.0002 | 0.00007 | mg/L | 43.88% |
| [illegible]91 | 245.2 | 0.0048 | 0.00014 | mg/L | 2.93% |

an Data ----------

: LCSW-M2680012 Seq. No.: 13 Sample No.: 2 A/S Pos: 10
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 5:10:34 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3655474.4 | 1.020 | 0.0108 | mg/L | | | | 1.06% |
| 328.068 | 5373.7 | 0.0492 | 0.00046 | mg/L | | | | 0.93% |
| 308.215 | 35595.0 | 1.933 | 0.0247 | mg/L | | | | 1.28% |
| 188.979 | 12.1 | 0.0357 | 0.00006 | mg/L | | | | 0.16% |
| 249.773 | 52906.1 | 0.9673 | 0.00689 | mg/L | | | | 0.71% |
| 233.527 | 147164.8 | 2.097 | 0.0221 | mg/L | | | | 1.05% |
| 313.107 | 250972.6 | 0.0496 | 0.00002 | mg/L | | | | 0.04% |
| 315.887 | 211966.9 | 2.014 | 0.0000 | mg/L | | | | 0.00% |
| 226.502 | 4156.3 | 0.0518 | 0.00063 | mg/L | | | | 1.21% |
| 228.616 | 9023.8 | 0.5244 | 0.00435 | mg/L | | | | 0.83% |
| 267.716 | 18469.3 | 0.2007 | 0.00171 | mg/L | | | | 0.85% |
| 324.754 | 55689.0 | 0.2564 | 0.00251 | mg/L | | | | 0.98% |
| 238.863 | 19797.1 | 1.030 | 0.0073 | mg/L | | | | 0.70% |
| 404.721 | 10.0 | 17.91 | 0.545 | mg/L | | | | 3.04% |
| 279.079 | 29561.9 | 1.992 | 0.0222 | mg/L | | | | 1.11% |
| 257.610 | 170375.4 | 0.5071 | 0.00002 | mg/L | | | | 0.00% |
| 202.030 | 5688.2 | 0.4915 | 0.00593 | mg/L | | | | 1.21% |
| 330.237 | 10898.9 | 17.91 | 0.110 | mg/L | | | | 0.61% |
| 231.604 | 13841.1 | 0.5219 | 0.00401 | mg/L | | | | 0.77% |
| 220.353 | 2085.8 | 0.5160 | 0.00639 | mg/L | | | | 1.24% |
| 206.833 | 807.9 | 0.4995 | 0.00627 | mg/L | | | | 1.26% |
| 196.026 | 1891.6 | 0.9516 | 0.01445 | mg/L | | | | 1.52% |
| 189.933 | 566.4 | 0.0811 | 0.00036 | mg/L | | | | 0.44% |
| [illegible].941 | 166815.1 | 0.4988 | 0.00024 | mg/L | | | | 0.05% |
| [illegible].800 | 2808.8 | 2.014 | 0.0215 | mg/L | | | | 1.07% |
| 292.402 | 86513.8 | 0.5004 | 0.00520 | mg/L | | | | 1.04% |
| 206.191 | 24678.9 | 0.5270 | 0.00344 | mg/L | | | | 0.65% |

lean Data ----------

D: 526141 Seq. No.: 14 Sample No.: 3 A/S Pos: 11
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 5:15:29 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| [illegible] 371.030 | 3693129.9 | 1.030 | 0.0122 | mg/L | | | | 1.19% |
| Ag 328.068 | -1669.4 | -0.0019 | 0.00028 | mg/L | | | | 14.95% |
| Al 308.215 | 289454.6 | 19.96 | 0.430 | mg/L | | | | 2.15% |
| As 188.979 | -38.2 | -0.0084 | 0.00502 | mg/L | | | | 59.42% |
| B 249.773 | 2436.3 | 0.0375 | 0.00221 | mg/L | | | | 5.89% |
| Ba 233.527 | 11590.2 | 0.1646 | 0.00216 | mg/L | | | | 1.31% |
| Be 313.107 | -11726.6 | -0.0011 | 0.00003 | mg/L | | | | 3.14% |
| Ca 315.887 | 2536094.2 | 23.94 | 0.010 | mg/L | | | | 0.04% |
| Cd 226.502 | 168.9 | 0.0022 | 0.00002 | mg/L | | | | 1.03% |
| Co 228.616 | 77.7 | 0.0150 | 0.00050 | mg/L | | | | 3.30% |
| Cr 267.716 | 2695.4 | 0.0278 | 0.00036 | mg/L | | | | 1.29% |
| Cu 324.754 | 5736.3 | 0.0155 | 0.00059 | mg/L | | | | 3.79% |
| Fe 238.863 | 505226.3 | 26.14 | 0.004 | mg/L | | | | 0.01% |
| K 404.721 | -830.4 | 5.079 | 0.6565 | mg/L | | | | 12.92% |
| Mg 279.079 | 160253.8 | 10.78 | 0.219 | mg/L | | | | 2.04% |
| Mn 257.610 | 210800.1 | 0.6275 | 0.01231 | mg/L | | | | 1.96% |
| Mo 202.030 | -8.0 | 0.0012 | 0.00004 | mg/L | | | | 3.75% |
| Na 330.237 | 2532.8 | 3.295 | 0.2022 | mg/L | | | | 6.14% |
| Ni 231.604 | 344.9 | 0.0201 | 0.00016 | mg/L | | | | 0.80% |
| Pb 220.353 | 43.8 | 0.0069 | 0.00045 | mg/L | | | | 6.52% |
| S[illegible]6.833 | 38.6 | 0.0019 | 0.00182 | mg/L | | | | 96.40% |
| S 6.026 | 15.3 | 0.0008 | 0.00059 | mg/L | | | | 71.86% |
| Sn [illegible]89.933 | 2415.3 | 0.3640 | 0.00463 | mg/L | | | | 1.27% |
| Ti 334.941 | 393210.2 | 1.173 | 0.0008 | mg/L | | | | 0.07% |
| Tl 190.800 | -22.3 | -0.0043 | 0.00076 | mg/L | | | | 17.61% |
| V 292.402 | 8682.9 | 0.0469 | 0.00090 | mg/L | | | | 1.92% |
| Zn 206.191 | 2629.7 | 0.0558 | 0.00077 | mg/L | | | | 1.37% |

ar :a
: .42 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: 02/21/02 5:20:37 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3576703.2 | 0.998 | 0.0019 | mg/L | | | | 0.19% |
| 328.068 | -2445.4 | -0.0075 | 0.00012 | mg/L | | | | 1.53% |
| 308.215 | 10626.9 | 0.1601 | 0.00263 | mg/L | | | | 1.64% |
| 188.979 | -0.7 | 0.0443 | 0.00098 | mg/L | | | | 2.21% |
| 249.773 | 45524.3 | 0.8313 | 0.00624 | mg/L | | | | 0.75% |
| 233.527 | 14207.4 | 0.2019 | 0.00136 | mg/L | | | | 0.67% |
| 313.107 | -6095.0 | 0.0000 | 0.00001 | mg/L | | | | 59.25% |
| 315.887 | 17628092.8 | 166.3 | 0.59 | mg/L | | | | 0.36% |
| 226.502 | 636.0 | 0.0010 | 0.00015 | mg/L | | | | 14.82% |
| 228.616 | 995.6 | 0.0673 | 0.00020 | mg/L | | | | 0.30% |
| 267.716 | 283.2 | 0.0013 | 0.00004 | mg/L | | | | 2.91% |
| 324.754 | 1430.3 | -0.0053 | 0.00001 | mg/L | | | | 0.10% |
| 238.863 | 2163349.0 | 111.9 | 0.11 | mg/L | | | | 0.10% |
| 404.721 | 927.1 | 49.69 | 1.397 | mg/L | | | | 2.81% |
| 279.079 | 732683.6 | 49.28 | 0.024 | mg/L | | | | 0.05% |
| 257.610 | 646883.7 | 1.926 | 0.0027 | mg/L | | | | 0.14% |
| 202.030 | 145.8 | 0.0144 | 0.00009 | mg/L | | | | 0.65% |
| 330.237 | 18260.6 | 30.77 | 0.240 | mg/L | | | | 0.78% |
| 231.604 | 1014.4 | 0.0450 | 0.00004 | mg/L | | | | 0.09% |
| 220.353 | 27.7 | 0.0028 | 0.00041 | mg/L | | | | 14.48% |
| 206.833 | 32.2 | -0.0022 | 0.00017 | mg/L | | | | 7.66% |
| 196.026 | 21.1 | 0.0038 | 0.00457 | mg/L | | | | 121.58% |
| 189.933 | 6567.6 | 0.9994 | 0.00347 | mg/L | | | | 0.35% |
| 334.941 | 2677.7 | 0.0099 | 0.00005 | mg/L | | | | 0.50% |
| 190.800 | -39.7 | -0.0167 | 0.00101 | mg/L | | | | 6.04% |
| 402 | 5760.5 | 0.0299 | 0.00035 | mg/L | | | | 1.17% |
| .191 | 700.2 | 0.0145 | 0.00014 | mg/L | | | | 0.95% |

lean Data
:D: 526144 Seq. No.: 16 Sample No.: 5 A/S Pos: 13
:ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 5:25:51 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3502894.5 | 0.977 | 0.0112 | mg/L | | | | 1.15% |
| Ag 328.068 | -1864.7 | -0.0033 | 0.00041 | mg/L | | | | 12.41% |
| Al 308.215 | 13220.6 | 0.3443 | 0.00793 | mg/L | | | | 2.30% |
| As 188.979 | -16.2 | 0.0109 | 0.00113 | mg/L | | | | 10.41% |
| B 249.773 | 105426.8 | 1.935 | 0.0079 | mg/L | | | | 0.41% |
| Ba 233.527 | 54451.3 | 0.7755 | 0.00253 | mg/L | | | | 0.33% |
| Be 313.107 | -6193.3 | 0.0000 | 0.00001 | mg/L | | | | 23.00% |
| Ca 315.887 | 18015745.4 | 169.9 | 2.85 | mg/L | | | | 1.68% |
| Cd 226.502 | 134.0 | 0.0018 | 0.00003 | mg/L | | | | 1.46% |
| Co 228.616 | 76.9 | 0.0150 | 0.00026 | mg/L | | | | 1.74% |
| Cr 267.716 | 646.8 | 0.0053 | 0.00013 | mg/L | | | | 2.38% |
| Cu 324.754 | 3252.2 | 0.0035 | 0.00001 | mg/L | | | | 0.35% |
| Fe 238.863 | 514453.1 | 26.61 | 0.030 | mg/L | | | | 0.11% |
| K 404.721 | 4956.9 | 116.3 | 0.12 | mg/L | | | | 0.10% |
| Mg 279.079 | 1066077.6 | 71.70 | 0.018 | mg/L | | | | 0.02% |
| Mn 257.610 | 40509.5 | 0.1205 | 0.00028 | mg/L | | | | 0.24% |
| Mo 202.030 | 12.4 | 0.0029 | 0.00029 | mg/L | | | | 10.02% |
| Na 330.237 | 111299.3 | 193.3 | 0.15 | mg/L | | | | 0.08% |
| Ni 231.604 | 4092.9 | 0.1595 | 0.00127 | mg/L | | | | 0.79% |
| Pb 220.353 | 20.9 | 0.0012 | 0.00026 | mg/L | | | | 22.53% |
| Sb 206.833 | 39.1 | 0.0022 | 0.00058 | mg/L | | | | 26.31% |
| Se 196.026 | 20.6 | 0.0035 | 0.00370 | mg/L | | | | 105.21% |
| Sn 189.933 | 7776.7 | 1.184 | 0.0128 | mg/L | | | | 1.08% |
| T 4.941 | 1934.9 | 0.0077 | 0.00010 | mg/L | | | | 1.29% |
| T 0.800 | -20.2 | -0.0028 | 0.00029 | mg/L | | | | 10.53% |
| V 292.402 | 2185.4 | 0.0091 | 0.00050 | mg/L | | | | 5.47% |
| Zn 206.191 | 691.0 | 0.0143 | 0.00013 | mg/L | | | | 0.88% |

Mean Data
ID: 526144D Seq. No.: 17 Sample No.: 6 A/S Pos: 14

ple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 5:31:05 PM

| ment | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 3597136.7 | 1.003 | 0.0001 | mg/L | | | | 0.01% |
| 328.068 | -1882.7 | -0.0034 | 0.00002 | mg/L | | | | 0.72% |
| 308.215 | 13356.3 | 0.3539 | 0.00391 | mg/L | | | | 1.10% |
| ~~100.~~979 | -16.6 | 0.0105 | 0.00267 | mg/L | | | | 25.32% |
| 49.773 | 103585.5 | 1.901 | 0.0139 | mg/L | | | | 0.73% |
| 233.527 | 53590.0 | 0.7632 | 0.00368 | mg/L | | | | 0.48% |
| 313.107 | -6061.7 | 0.0000 | 0.00001 | mg/L | | | | 269.28% |
| 315.887 | 17425350.8 | 164.4 | 0.58 | mg/L | | | | 0.35% |
| 226.502 | 130.6 | 0.0018 | 0.00003 | mg/L | | | | 1.54% |
| 228.616 | 75.0 | 0.0149 | 0.00035 | mg/L | | | | 2.34% |
| 267.716 | 626.5 | 0.0051 | 0.00008 | mg/L | | | | 1.59% |
| 324.754 | 3025.2 | 0.0024 | 0.00008 | mg/L | | | | 3.48% |
| 238.863 | 499305.8 | 25.83 | 0.005 | mg/L | | | | 0.02% |
| 404.721 | 4930.7 | 115.7 | 1.70 | mg/L | | | | 1.47% |
| 279.079 | 1034015.7 | 69.55 | 0.018 | mg/L | | | | 0.03% |
| 257.610 | 39890.1 | 0.1187 | 0.00094 | mg/L | | | | 0.79% |
| 202.030 | 14.0 | 0.0031 | 0.00023 | mg/L | | | | 7.52% |
| 330.237 | 109610.8 | 190.3 | 1.40 | mg/L | | | | 0.74% |
| 231.604 | 3987.2 | 0.1556 | 0.00011 | mg/L | | | | 0.07% |
| 220.353 | 19.9 | 0.0009 | 0.00083 | mg/L | | | | 93.38% |
| 206.833 | 36.8 | 0.0008 | 0.00101 | mg/L | | | | 132.02% |
| 196.026 | 19.4 | 0.0029 | 0.00167 | mg/L | | | | 57.57% |
| 189.933 | 7576.1 | 1.154 | 0.0003 | mg/L | | | | 0.02% |
| 334.941 | 2339.5 | 0.0089 | 0.00007 | mg/L | | | | 0.82% |
| 190.800 | -20.0 | -0.0027 | 0.00164 | mg/L | | | | 61.49% |
| 292.402 | 2118.7 | 0.0087 | 0.00032 | mg/L | | | | 3.68% |
| 206.191 | 539.5 | 0.0111 | 0.00014 | mg/L | | | | 1.28% |

ata
144S Seq. No.: 18 Sample No.: 7 A/S Pos: 15
Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 5:36:23 PM

| lement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3512194.2 | 0.980 | 0.0046 | mg/L | | | | 0.47% |
| g 328.068 | 5392.2 | 0.0493 | 0.00060 | mg/L | | | | 1.22% |
| l 308.215 | 43394.3 | 2.487 | 0.0346 | mg/L | | | | 1.39% |
| ~~100.~~979 | 28.6 | 0.0502 | 0.00399 | mg/L | | | | 7.95% |
| 249.773 | 162225.8 | 2.982 | 0.0406 | mg/L | | | | 1.36% |
| a 233.527 | 201687.3 | 2.874 | 0.0274 | mg/L | | | | 0.95% |
| e 313.107 | 259293.2 | 0.0512 | 0.00002 | mg/L | | | | 0.05% |
| a 315.887 | 17981173.0 | 169.6 | 2.05 | mg/L | | | | 1.21% |
| d 226.502 | 4134.5 | 0.0515 | 0.00031 | mg/L | | | | 0.61% |
| o 228.616 | 9148.8 | 0.5315 | 0.00328 | mg/L | | | | 0.62% |
| r 267.716 | 19361.5 | 0.2105 | 0.00232 | mg/L | | | | 1.10% |
| u 324.754 | 59863.5 | 0.2765 | 0.00343 | mg/L | | | | 1.24% |
| e 238.863 | 528307.0 | 27.33 | 0.025 | mg/L | | | | 0.09% |
| 404.721 | 6517.5 | 146.4 | 1.75 | mg/L | | | | 1.20% |
| g 279.079 | 1085764.3 | 73.03 | 0.101 | mg/L | | | | 0.14% |
| n 257.610 | 214208.2 | 0.6376 | 0.00653 | mg/L | | | | 1.02% |
| o 202.030 | 5721.7 | 0.4944 | 0.00230 | mg/L | | | | 0.47% |
| Na 330.237 | 126981.6 | 220.7 | 2.44 | mg/L | | | | 1.11% |
| Ni 231.604 | 17883.6 | 0.6722 | 0.00609 | mg/L | | | | 0.91% |
| Pb 220.353 | 2044.5 | 0.5057 | 0.00019 | mg/L | | | | 0.04% |
| Sb 206.833 | 844.1 | 0.5228 | 0.00405 | mg/L | | | | 0.77% |
| Se 196.026 | 1992.4 | 1.003 | 0.0050 | mg/L | | | | 0.50% |
| Sn 189.933 | 7818.8 | 1.191 | 0.0060 | mg/L | | | | 0.50% |
| Ti 334.941 | 175575.5 | 0.5249 | 0.00586 | mg/L | | | | 1.12% |
| Tl 190.800 | 2749.2 | 1.971 | 0.0119 | mg/L | | | | 0.60% |
| V 292.402 | 91178.5 | 0.5276 | 0.00583 | mg/L | | | | 1.10% |
| Z 206.191 | 23843.6 | 0.5091 | 0.00514 | mg/L | | | | 1.01% |

Mean Data
ID: 526144A 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: 02/21/02 5:41:43 PM

| | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 17 0 | 3499748.1 | 0.976 | 0.0061 | mg/L | | | | 0.62% |
| 328.068 | 4935.9 | 0.0460 | 0.00000 | mg/L | | | | 0.00% |
| 308.215 | 42461.8 | 2.421 | 0.0100 | mg/L | | | | 0.41% |
| 188.979 | 26.8 | 0.0486 | 0.00459 | mg/L | | | | 9.45% |
| 249.773 | 161363.3 | 2.966 | 0.0112 | mg/L | | | | 0.38% |
| 233.527 | 193908.7 | 2.763 | 0.0180 | mg/L | | | | 0.65% |
| 313.107 | 246090.6 | 0.0487 | 0.00003 | mg/L | | | | 0.06% |
| 315.887 | 17780082.7 | 167.7 | 0.56 | mg/L | | | | 0.33% |
| 226.502 | 3944.8 | 0.0492 | 0.00034 | mg/L | | | | 0.69% |
| 228.616 | 8745.8 | 0.5086 | 0.00363 | mg/L | | | | 0.71% |
| 267.716 | 18432.7 | 0.2003 | 0.00101 | mg/L | | | | 0.50% |
| 324.754 | 57220.4 | 0.2638 | 0.00047 | mg/L | | | | 0.18% |
| 238.863 | 522273.5 | 27.02 | 0.005 | mg/L | | | | 0.02% |
| 404.721 | 6438.8 | 144.8 | 0.94 | mg/L | | | | 0.65% |
| 279.079 | 1073280.8 | 72.19 | 0.001 | mg/L | | | | 0.00% |
| 257.610 | 204795.2 | 0.6096 | 0.00306 | mg/L | | | | 0.50% |
| 202.030 | 5428.5 | 0.4691 | 0.00332 | mg/L | | | | 0.71% |
| 330.237 | 124973.1 | 217.2 | 0.74 | mg/L | | | | 0.34% |
| 231.604 | 17193.5 | 0.6465 | 0.00303 | mg/L | | | | 0.47% |
| 220.353 | 1958.3 | 0.4842 | 0.00410 | mg/L | | | | 0.85% |
| 206.833 | 802.4 | 0.4959 | 0.00382 | mg/L | | | | 0.77% |
| 196.026 | 1943.1 | 0.9777 | 0.01196 | mg/L | | | | 1.22% |
| 189.933 | 7806.1 | 1.189 | 0.0082 | mg/L | | | | 0.69% |
| 334.941 | 166802.7 | 0.4988 | 0.00226 | mg/L | | | | 0.45% |
| 190.800 | 2626.7 | 1.884 | 0.0127 | mg/L | | | | 0.67% |
| 292.402 | 86780.8 | 0.5020 | 0.00278 | mg/L | | | | 0.55% |
| 206.191 | 22915.3 | 0.4893 | 0.00206 | mg/L | | | | 0.42% |

ean Data ----------

D: 526144L 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: 02/21/02 5:46:49 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3664320.0 | 1.022 | 0.0006 | mg/L | | | | 0.06% |
| g 328.068 | -1441.4 | -0.0002 | 0.00034 | mg/L | | | | 142.34% |
| l 308.215 | 9336.4 | 0.0684 | 0.00367 | mg/L | | | | 5.36% |
| s 188.979 | -22.9 | 0.0050 | 0.00173 | mg/L | | | | 34.61% |
| 249.773 | 21733.3 | 0.3930 | 0.00601 | mg/L | | | | 1.53% |
| a 233.527 | 11016.0 | 0.1564 | 0.00188 | mg/L | | | | 1.20% |
| e 313.107 | -5994.5 | 0.0000 | 0.00000 | mg/L | | | | 7.52% |
| a 315.887 | 3596964.4 | 33.94 | 0.002 | mg/L | | | | 0.01% |
| d 226.502 | 19.6 | 0.0004 | 0.00000 | mg/L | | | | 1.30% |
| o 228.616 | -115.1 | 0.0040 | 0.00032 | mg/L | | | | 8.05% |
| r 267.716 | 257.9 | 0.0011 | 0.00012 | mg/L | | | | 11.53% |
| u 324.754 | 2822.2 | 0.0014 | 0.00012 | mg/L | | | | 8.49% |
| e 238.863 | 102711.0 | 5.319 | 0.0715 | mg/L | | | | 1.34% |
| 404.721 | -25.1 | 17.24 | 0.607 | mg/L | | | | 3.52% |
| g 279.079 | 208088.1 | 14.00 | 0.004 | mg/L | | | | 0.03% |
| n 257.610 | 8153.0 | 0.0242 | 0.00040 | mg/L | | | | 1.66% |
| o 202.030 | -9.3 | 0.0011 | 0.00008 | mg/L | | | | 7.15% |
| a 330.237 | 18354.2 | 30.93 | 0.391 | mg/L | | | | 1.26% |
| i 231.604 | 688.7 | 0.0329 | 0.00036 | mg/L | | | | 1.10% |
| b 220.353 | 17.3 | 0.0003 | 0.00046 | mg/L | | | | 184.23% |
| b 206.833 | 38.9 | 0.0021 | 0.00154 | mg/L | | | | 74.08% |
| e 196.026 | 14.6 | 0.0005 | 0.00095 | mg/L | | | | 202.66% |
| n 189.933 | 2869.5 | 0.4335 | 0.00129 | mg/L | | | | 0.30% |
| i 334.941 | -55.6 | 0.0017 | 0.00006 | mg/L | | | | 3.36% |
| l 190.800 | -15.1 | 0.0008 | 0.00152 | mg/L | | | | 188.92% |
| 292.402 | 948.7 | 0.0019 | 0.00022 | mg/L | | | | 11.98% |
| n 206.191 | 231.6 | 0.0045 | 0.00009 | mg/L | | | | 1.99% |

Me-- Data ----------

I 26145 Seq. No.: 21 Sample No.: 10 A/S Pos: 18

Sa e Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 5:51:56 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3511824.1 | 0.980 | 0.0147 | mg/L | | | | 1.50% |

| | | | | |
|---|---|---|---|---|
| 328.068 | -1668.2 | -0.0019 | 0.00007 mg/L | 3.90% |
| 308.215 | 14005.0 | 0.4000 | 0.00876 mg/L | 2.19% |
| 179 | -10.0 | 0.0163 | 0.00228 mg/L | 13.99% |
| 13 | 312164.8 | 5.744 | 0.0135 mg/L | 0.24% |
| 233.527 | 46089.6 | 0.6563 | 0.00341 mg/L | 0.52% |
| 313.107 | -6820.1 | -0.0002 | 0.00000 mg/L | 3.08% |
| 315.887 | 13540726.0 | 127.7 | 1.87 mg/L | 1.46% |
| 226.502 | 79.6 | 0.0011 | 0.00001 mg/L | 1.11% |
| 228.616 | 126.5 | 0.0178 | 0.00033 mg/L | 1.84% |
| 267.716 | 1643.0 | 0.0163 | 0.00016 mg/L | 0.96% |
| 324.754 | 3251.9 | 0.0035 | 0.00008 mg/L | 2.33% |
| 238.863 | 330024.3 | 17.08 | 0.077 mg/L | 0.45% |
| 404.721 | 29604.3 | 588.5 | 0.90 mg/L | 0.15% |
| 279.079 | 3651582.8 | 245.6 | 3.49 mg/L | 1.42% |
| 257.610 | 177055.1 | 0.5270 | 0.00273 mg/L | 0.52% |
| 202.030 | 27.8 | 0.0043 | 0.00004 mg/L | 0.83% |
| 330.237 | 655927.1 | 1145 | 2.0 mg/L | 0.17% |
| 231.604 | 3629.1 | 0.1422 | 0.00232 mg/L | 1.63% |
| 220.353 | 19.9 | 0.0009 | 0.00054 mg/L | 60.47% |
| 206.833 | 39.8 | 0.0027 | 0.00187 mg/L | 68.91% |
| 196.026 | 43.9 | -0.0010 | 0.00126 mg/L | 126.33% |
| 189.933 | 10431.2 | 0.7293 | 0.01225 mg/L | 1.68% |
| 334.941 | 14724.7 | 0.0458 | 0.00019 mg/L | 0.42% |
| 190.800 | -27.7 | -0.0081 | 0.00324 mg/L | 39.90% |
| 292.402 | 3980.3 | 0.0195 | 0.00029 mg/L | 1.48% |
| 206.191 | 640.1 | 0.0133 | 0.00007 mg/L | 0.56% |

ean Data ----------

D: CCV Seq. No.: 22 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: 02/21/02 5:57:07 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 030 | 3580080.1 | 0.999 | 0.0007 | mg/L | | | | 0.07% |
| .068 | 67956.2 | 0.5028 | 0.00471 | mg/L | | | | 0.94% |
| .215 | 148291.3 | 9.936 | 0.1241 | mg/L | | | | 1.25% |
| 188.979 | 1142.5 | 1.029 | 0.0034 | mg/L | | | | 0.33% |
| 249.773 | 136287.5 | 2.504 | 0.0276 | mg/L | | | | 1.10% |
| 233.527 | 737247.7 | 10.51 | 0.002 | mg/L | | | | 0.02% |
| 313.107 | 1306527.5 | 0.2534 | 0.00005 | mg/L | | | | 0.02% |
| 315.887 | 2735126.9 | 25.81 | 0.012 | mg/L | | | | 0.05% |
| 226.502 | 41190.1 | 0.5121 | 0.00439 | mg/L | | | | 0.86% |
| 228.616 | 44965.2 | 2.571 | 0.0313 | mg/L | | | | 1.22% |
| 267.716 | 46361.3 | 0.5064 | 0.00465 | mg/L | | | | 0.92% |
| 324.754 | 264176.7 | 1.262 | 0.0160 | mg/L | | | | 1.27% |
| 238.863 | 98686.1 | 5.110 | 0.0495 | mg/L | | | | 0.97% |
| 404.721 | 288.0 | 23.25 | 0.649 | mg/L | | | | 2.79% |
| 279.079 | 378476.3 | 25.46 | 0.004 | mg/L | | | | 0.02% |
| 257.610 | 258408.6 | 0.7692 | 0.00032 | mg/L | | | | 0.04% |
| 202.030 | 28663.0 | 2.469 | 0.0214 | mg/L | | | | 0.87% |
| 330.237 | 14131.2 | 23.56 | 0.210 | mg/L | | | | 0.89% |
| 231.604 | 55671.3 | 2.077 | 0.0162 | mg/L | | | | 0.78% |
| 220.353 | 2072.7 | 0.5128 | 0.00006 | mg/L | | | | 0.01% |
| 206.833 | 7836.0 | 5.045 | 0.0199 | mg/L | | | | 0.39% |
| 196.026 | 1014.8 | 0.5073 | 0.00331 | mg/L | | | | 0.65% |
| 189.933 | 35304.9 | 5.397 | 0.0542 | mg/L | | | | 1.00% |
| 334.941 | 839435.5 | 2.503 | 0.0004 | mg/L | | | | 0.01% |
| 190.800 | 1442.3 | 1.040 | 0.0013 | mg/L | | | | 0.12% |
| 292.402 | 438698.2 | 2.553 | 0.0004 | mg/L | | | | 0.02% |
| 206.191 | 48083.4 | 1.027 | 0.0116 | mg/L | | | | 1.13% |

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: 02/21/02 6:01:59 PM

| E. ent | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3630110.6 | 1.013 | 0.0049 | mg/L | | | | 0.48% |
| Ag 328.068 | -1384.9 | 0.0002 | 0.00018 | mg/L | | | | 104.73% |
| Al 308.215 | 8116.7 | -0.0182 | 0.00050 | mg/L | | | | 2.77% |
| As 188.979 | -28.8 | -0.0002 | 0.00222 | mg/L | | | | 951.29% |

| | | | | | |
|---|---|---|---|---|---|
| 249.773 | 1287.0 | 0.0163 | 0.00183 | mg/L | 11.21% |
| 2[illegible]527 | 89.6 | 0.0007 | 0.00009 | mg/L | 13.16% |
| [illegible].07 | -5834.4 | 0.0000 | 0.00001 | mg/L | 27.14% |
| 3[illegible].887 | -321.5 | 0.0118 | 0.00070 | mg/L | 5.92% |
| 226.502 | -8.6 | 0.0000 | 0.00002 | mg/L | 75.63% |
| 228.616 | -156.8 | 0.0017 | 0.00013 | mg/L | 7.66% |
| 267.716 | 152.9 | -0.0001 | 0.00008 | mg/L | 102.31% |
| 324.754 | 2931.3 | 0.0019 | 0.00072 | mg/L | 37.05% |
| 238.863 | -24.0 | 0.0048 | 0.00037 | mg/L | 7.63% |
| 404.721 | -890.7 | 0.6121 | 1.28314 | mg/L | 209.61% |
| 279.079 | 154.2 | 0.0143 | 0.00016 | mg/L | 1.13% |
| 257.610 | 45.4 | 0.0000 | 0.00003 | mg/L | 57.96% |
| 202.030 | -18.2 | 0.0003 | 0.00014 | mg/L | 45.37% |
| 330.237 | 583.9 | -0.1099 | 0.00779 | mg/L | 7.09% |
| 231.604 | -148.4 | 0.0018 | 0.00006 | mg/L | 3.14% |
| 220.353 | 13.5 | -0.0007 | 0.00035 | mg/L | 50.11% |
| 206.833 | 61.5 | 0.0167 | 0.00484 | mg/L | 29.00% |
| QC exceeds upper limit for Sb 206.833 | | Action = Continue | | | |
| 196.026 | 5.6 | -0.0041 | 0.00061 | mg/L | 14.77% |
| 189.933 | 87.2 | 0.0078 | 0.00171 | mg/L | 21.87% |
| 334.941 | -396.1 | 0.0007 | 0.00018 | mg/L | 24.77% |
| 190.800 | -15.1 | 0.0009 | 0.00144 | mg/L | 166.60% |
| 292.402 | 632.2 | 0.0000 | 0.00033 | mg/L | >999.9% |
| 206.191 | 368.8 | 0.0075 | 0.00044 | mg/L | 5.90% |

ean Data ----------

D: 526146 Seq. No.: 24 Sample No.: 11 A/S Pos: 19
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 6:07:02 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3575524.3 | 0.997 | 0.0030 | mg/L | | | | 0.30% |
| g [illegible].068 | -1766.7 | -0.0026 | 0.00009 | mg/L | | | | 3.49% |
| l .215 | 114546.7 | 7.540 | 0.1410 | mg/L | | | | 1.87% |
| s .979 | -22.7 | 0.0052 | 0.00343 | mg/L | | | | 66.63% |
| 249.773 | 139388.3 | 2.561 | 0.0396 | mg/L | | | | 1.54% |
| a 233.527 | 73913.6 | 1.053 | 0.0174 | mg/L | | | | 1.65% |
| e 313.107 | -8539.8 | -0.0005 | 0.00002 | mg/L | | | | 3.17% |
| a 315.887 | 11277132.3 | 106.4 | 0.41 | mg/L | | | | 0.38% |
| d 226.502 | 184.2 | 0.0024 | 0.00004 | mg/L | | | | 1.65% |
| o 228.616 | -17.0 | 0.0096 | 0.00004 | mg/L | | | | 0.38% |
| r 267.716 | 1640.7 | 0.0162 | 0.00004 | mg/L | | | | 0.26% |
| u 324.754 | 4814.1 | 0.0110 | 0.00016 | mg/L | | | | 1.50% |
| e 238.863 | 592170.3 | 30.63 | 0.008 | mg/L | | | | 0.03% |
| 404.721 | 9103.4 | 196.4 | 3.79 | mg/L | | | | 1.93% |
| g 279.079 | 1187824.2 | 79.89 | 0.016 | mg/L | | | | 0.02% |
| n 257.610 | 206159.2 | 0.6137 | 0.00889 | mg/L | | | | 1.45% |
| o 202.030 | -5.2 | 0.0014 | 0.00009 | mg/L | | | | 6.50% |
| a 330.237 | 179347.2 | 312.2 | 5.72 | mg/L | | | | 1.83% |
| i 231.604 | 1227.1 | 0.0529 | 0.00017 | mg/L | | | | 0.32% |
| b 220.353 | 25.9 | 0.0024 | 0.00115 | mg/L | | | | 48.49% |
| b 206.833 | 44.6 | 0.0058 | 0.00034 | mg/L | | | | 5.84% |
| e 196.026 | 21.5 | -0.0013 | 0.00311 | mg/L | | | | 235.13% |
| n 189.933 | 8058.5 | 1.228 | 0.0030 | mg/L | | | | 0.25% |
| i 334.941 | 152050.3 | 0.4549 | 0.00662 | mg/L | | | | 1.45% |
| l 190.800 | -25.5 | -0.0066 | 0.00039 | mg/L | | | | 5.98% |
| V 292.402 | 5015.4 | 0.0256 | 0.00036 | mg/L | | | | 1.40% |
| n 206.191 | 1234.7 | 0.0260 | 0.00037 | mg/L | | | | 1.44% |

Mean Data ----------

ID: 526147 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: 02/21/02 6:12:14 PM

| E nt | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y .030 | 3309358.8 | 0.923 | 0.0057 | mg/L | | | | 0.61% |
| Ag 328.068 | -4673.9 | -0.0135 | 0.00034 | mg/L | | | | 2.51% |
| Al 308.215 | 11947.8 | 0.2539 | 0.00333 | mg/L | | | | 1.31% |
| As 188.979 | -41.5 | 0.0232 | 0.00039 | mg/L | | | | 1.69% |
| B 249.773 | 320787.4 | 5.903 | 0.0019 | mg/L | | | | 0.03% |
| Ba 233.527 | 175410.4 | 2.500 | 0.0046 | mg/L | | | | 0.18% |

| | | | | | |
|---|---|---|---|---|---|
| 313.107 | -6431.6 | -0.0001 | 0.00001 | mg/L | 14.83% |
| 3[illegible] 887 | Saturated | | | | |
| [illegible]02 | 1234.0 | 0.0032 | 0.00001 | mg/L | 0.46% |
| [illegible]616 | 1774.7 | 0.1116 | 0.00087 | mg/L | 0.78% |
| 267.716 | 910.6 | 0.0082 | 0.00024 | mg/L | 2.96% |
| 324.754 | 1452.1 | 0.0073 | 0.00010 | mg/L | 1.42% |
| 238.863 | 3773693.1 | 195.2 | 0.20 | mg/L | 0.10% |
| 404.721 | 4128.2 | 121.7 | 1.00 | mg/L | 0.82% |
| 279.079 | 6300589.0 | 423.8 | 0.25 | mg/L | 0.06% |
| 257.610 | 2408183.1 | 7.169 | 0.0105 | mg/L | 0.15% |
| 202.030 | -28.1 | -0.0005 | 0.00039 | mg/L | 72.57% |
| 330.237 | 727668.2 | 1271 | 1.5 | mg/L | 0.12% |
| 231.604 | 19820.1 | 0.7442 | 0.00205 | mg/L | 0.28% |
| 220.353 | 35.8 | 0.0006 | 0.00108 | mg/L | 196.85% |
| 206.833 | 30.2 | -0.0035 | 0.00055 | mg/L | 15.86% |
| 196.026 | 93.5 | 0.0123 | 0.00189 | mg/L | 15.38% |
| 189.933 | 11359.2 | 0.2465 | 0.00904 | mg/L | 3.67% |
| 334.941 | -5239.6 | -0.0137 | 0.00003 | mg/L | 0.20% |
| 190.800 | -102.5 | -0.0615 | 0.00103 | mg/L | 1.68% |
| 292.402 | 10354.5 | 0.0567 | 0.00036 | mg/L | 0.64% |
| 206.191 | 1266.1 | 0.0148 | 0.00031 | mg/L | 2.10% |

Ca saturation affects IEC for none of the metals CR 2/22/02

ean Data ----------

D: 526149 Seq. No.: 26 Sample No.: 13 A/S Pos: 21
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 6:17:30 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3462355.7 | 0.966 | 0.0108 | mg/L | | | | 1.12% |
| g 328.068 | -2070.3 | -0.0048 | 0.00033 | mg/L | | | | 6.79% |
| l 308.215 | 9984.2 | 0.1144 | 0.00924 | mg/L | | | | 8.07% |
| s 188.979 | -26.9 | 0.0015 | 0.00301 | mg/L | | | | 201.49% |
| ~~249.773~~ | 286039.7 | 5.263 LR | 0.0043 | mg/L | | | | 0.08% |
| a .527 | 35593.9 | 0.5067 | 0.00187 | mg/L | | | | 0.37% |
| e .107 | -6522.2 | -0.0001 | 0.00001 | mg/L | | | | 13.22% |
| a 315.887 | 22606198.1 | 213.2 | 2.17 | mg/L | | | | 1.02% |
| d 226.502 | 255.5 | 0.0033 | 0.00003 | mg/L | | | | 1.00% |
| o 228.616 | -88.4 | 0.0055 | 0.00052 | mg/L | | | | 9.32% |
| r 267.716 | 1232.5 | 0.0118 | 0.00010 | mg/L | | | | 0.88% |
| u 324.754 | 2921.1 | 0.0019 | 0.00008 | mg/L | | | | 4.45% |
| e 238.863 | 916980.5 | 47.43 | 0.069 | mg/L | | | | 0.14% |
| 404.721 | 23352.7 | 472.2 | 2.02 | mg/L | | | | 0.43% |
| g 279.079 | 2661335.2 | 179.0 | 0.10 | mg/L | | | | 0.05% |
| n 257.610 | 472126.8 | 1.405 | 0.0014 | mg/L | | | | 0.10% |
| o 202.030 | 6.9 | 0.0025 | 0.00006 | mg/L | | | | 2.32% |
| a 330.237 | 433962.7 | 756.9 | 0.72 | mg/L | | | | 0.10% |
| i 231.604 | 3230.1 | 0.1274 | 0.00127 | mg/L | | | | 1.00% |
| b 220.353 | 19.8 | 0.0009 | 0.00013 | mg/L | | | | 15.01% |
| b 206.833 | 41.7 | 0.0039 | 0.00055 | mg/L | | | | 14.09% |
| e 196.026 | 37.0 | -0.0001 | 0.00290 | mg/L | | | | >999.9% |
| n 189.933 | 9955.3 | 0.8901 | 0.01718 | mg/L | | | | 1.93% |
| i 334.941 | 2722.4 | 0.0100 | 0.00003 | mg/L | | | | 0.30% |
| l 190.800 | -37.3 | -0.0150 | 0.00150 | mg/L | | | | 10.01% |
| 292.402 | 6502.5 | 0.0342 | 0.00020 | mg/L | | | | 0.58% |
| n 206.191 | 559.3 | 0.0115 | 0.00012 | mg/L | | | | 1.06% |

Mean Data ----------

ID: 526151 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: 02/21/02 6:22:42 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3654059.3 | 1.019 | 0.0037 | mg/L | | | | 0.36% |
| Ag 328.068 | -1984.4 | -0.0042 | 0.00032 | mg/L | | | | 7.74% |
| A[illegible] 8.215 | 9397.5 | 0.0728 | 0.00192 | mg/L | | | | 2.64% |
| A 8.979 | -29.3 | 0.0142 | 0.00165 | mg/L | | | | 11.57% |
| B [illegible].773 | 27508.2 | 0.4994 | 0.00177 | mg/L | | | | 0.35% |
| Ba 233.527 | 18286.0 | 0.2600 | 0.00238 | mg/L | | | | 0.92% |
| Be 313.107 | -5976.7 | 0.0000 | 0.00000 | mg/L | | | | 22.09% |
| Ca 315.887 | 5052186.3 | 47.67 | 0.004 | mg/L | | | | 0.01% |
| Cd 226.502 | 480.5 | 0.0008 | 0.00004 | mg/L | | | | 4.98% |

| | | | | | |
|---|---|---|---|---|---|
| 228.616 | 341.7 | 0.0300 | 0.00014 | mg/L | 0.47% |
| 2[illegible]16 | 101.3 | -0.0006 | 0.00009 | mg/L | 14.16% |
| 3 [illegible]4 | 1662.0 | -0.0042 | 0.00031 | mg/L | 7.42% |
| 23[illegible].863 | 1629344.5 | 84.28 | 0.075 | mg/L | 0.09% |
| 404.721 | -691.5 | 15.11 | 0.204 | mg/L | 1.35% |
| 279.079 | 188936.8 | 12.71 | 0.093 | mg/L | 0.73% |
| 257.610 | 1315962.5 | 3.918 | 0.0043 | mg/L | 0.11% |
| 202.030 | -22.9 | -0.0001 | 0.00008 | mg/L | 86.03% |
| 330.237 | 29213.1 | 49.90 | 0.424 | mg/L | 0.85% |
| 231.604 | 162.1 | 0.0134 | 0.00024 | mg/L | 1.82% |
| 220.353 | 19.8 | 0.0009 | 0.00011 | mg/L | 12.68% |
| 206.833 | 32.7 | -0.0019 | 0.00020 | mg/L | 10.82% |
| 196.026 | 19.6 | 0.0030 | 0.00183 | mg/L | 61.27% |
| 189.933 | 2713.2 | 0.4096 | 0.00115 | mg/L | 0.28% |
| 334.941 | 346.7 | 0.0029 | 0.00003 | mg/L | 0.93% |
| 190.800 | -62.4 | -0.0329 | 0.00226 | mg/L | 6.87% |
| 292.402 | 4086.5 | 0.0202 | 0.00011 | mg/L | 0.54% |
| 206.191 | 667.5 | 0.0138 | 0.00006 | mg/L | 0.45% |

an Data ----------

: 526153 Seq. No.: 28 Sample No.: 15 A/S Pos: 23

mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 6:27:46 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3560389.8 | 0.993 | 0.0068 | mg/L | | | | 0.69% |
| [illegible] 328.068 | -1642.3 | -0.0017 | 0.00007 | mg/L | | | | 4.37% |
| [illegible]. 308.215 | 11299.0 | 0.2078 | 0.00322 | mg/L | | | | 1.55% |
| [illegible] 188.979 | 15.7 | 0.0389 | 0.00243 | mg/L | | | | 6.24% |
| 249.773 | 72869.7 | 1.335 | 0.0042 | mg/L | | | | 0.32% |
| [illegible] 233.527 | 39731.3 | 0.5657 | 0.00210 | mg/L | | | | 0.37% |
| [illegible] 313.107 | -6159.9 | 0.0000 | 0.00002 | mg/L | | | | 67.75% |
| [illegible].887 | 8478443.6 | 79.99 | 0.019 | mg/L | | | | 0.02% |
| [illegible] 502 | 82.3 | 0.0012 | 0.00001 | mg/L | | | | 0.68% |
| [illegible] .616 | 2152.7 | 0.1332 | 0.00095 | mg/L | | | | 0.72% |
| [illegible] 267.716 | 441.5 | 0.0031 | 0.00009 | mg/L | | | | 2.77% |
| [illegible] 324.754 | 2674.7 | 0.0007 | 0.00010 | mg/L | | | | 14.23% |
| [illegible] 238.863 | 310912.9 | 16.09 | 0.060 | mg/L | | | | 0.38% |
| 404.721 | 343.5 | 26.35 | 0.826 | mg/L | | | | 3.13% |
| [illegible] 279.079 | 714115.4 | 48.03 | 0.009 | mg/L | | | | 0.02% |
| [illegible] 257.610 | 301679.0 | 0.8981 | 0.00023 | mg/L | | | | 0.03% |
| [illegible] 202.030 | 692.2 | 0.0615 | 0.00055 | mg/L | | | | 0.89% |
| [illegible] 330.237 | 105912.8 | 183.9 | 0.19 | mg/L | | | | 0.10% |
| [illegible] 231.604 | 4735.3 | 0.1834 | 0.00074 | mg/L | | | | 0.41% |
| [illegible] 220.353 | 18.2 | 0.0005 | 0.00042 | mg/L | | | | 89.46% |
| [illegible] 206.833 | 39.5 | 0.0025 | 0.00053 | mg/L | | | | 21.28% |
| [illegible] 196.026 | 9.2 | -0.0023 | 0.00366 | mg/L | | | | 161.68% |
| [illegible] 189.933 | 6601.5 | 1.005 | 0.0079 | mg/L | | | | 0.78% |
| [illegible] 334.941 | 1672.8 | 0.0069 | 0.00003 | mg/L | | | | 0.43% |
| [illegible] 190.800 | -28.8 | -0.0089 | 0.00054 | mg/L | | | | 6.02% |
| [illegible] 292.402 | 1519.8 | 0.0052 | 0.00006 | mg/L | | | | 1.11% |
| [illegible] 206.191 | 362.6 | 0.0073 | 0.00019 | mg/L | | | | 2.61% |

lean Data ----------

[D: 526156 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: 02/21/02 6:32:41 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3630595.6 | 1.013 | 0.0053 | mg/L | | | | 0.53% |
| Ag 328.068 | -1441.9 | -0.0002 | 0.00038 | mg/L | | | | 154.69% |
| Al 308.215 | 88127.1 | 5.664 | 0.0148 | mg/L | | | | 0.26% |
| As 188.979 | -31.9 | -0.0029 | 0.00125 | mg/L | | | | 42.84% |
| B 249.773 | 2053.2 | 0.0304 | 0.00171 | mg/L | | | | 5.63% |
| B[illegible] 1.527 | 3833.1 | 0.0540 | 0.00022 | mg/L | | | | 0.40% |
| B[illegible] 3.107 | -7390.4 | -0.0003 | 0.00000 | mg/L | | | | 0.80% |
| Ca 315.887 | 1603195.6 | 15.14 | 0.007 | mg/L | | | | 0.05% |
| Cd 226.502 | 38.8 | 0.0006 | 0.00000 | mg/L | | | | 0.69% |
| Co 228.616 | -128.4 | 0.0033 | 0.00016 | mg/L | | | | 4.95% |
| Cr 267.716 | 1094.6 | 0.0102 | 0.00008 | mg/L | | | | 0.77% |
| Cu 324.754 | 3450.9 | 0.0044 | 0.00018 | mg/L | | | | 4.15% |

| | | | | | |
|---|---|---|---|---|---|
| 238.863 | 121052.7 | 6.267 | 0.0004 | mg/L | 0.01% |
| .0 `1 | -870.2 | 1.004 | 1.1897 | mg/L | 118.46% |
| 2 79 | 96638.3 | 6.503 | 0.0017 | mg/L | 0.03% |
| 25/.610 | 31471.3 | 0.0936 | 0.00015 | mg/L | 0.16% |
| 202.030 | -14.2 | 0.0007 | 0.00002 | mg/L | 2.39% |
| 330.237 | 2726.9 | 3.634 | 0.0302 | mg/L | 0.83% |
| 231.604 | 13.2 | 0.0078 | 0.00008 | mg/L | 1.00% |
| 220.353 | 22.0 | 0.0014 | 0.00003 | mg/L | 2.09% |
| 206.833 | 37.6 | 0.0013 | 0.00010 | mg/L | 7.41% |
| 196.026 | 13.6 | 0.0000 | 0.00251 | mg/L | >999.9% |
| 189.933 | 1543.9 | 0.2307 | 0.00039 | mg/L | 0.17% |
| 334.941 | 106172.5 | 0.3182 | 0.00011 | mg/L | 0.03% |
| 190.800 | -17.4 | -0.0008 | 0.00186 | mg/L | 231.35% |
| 292.402 | 2611.4 | 0.0116 | 0.00005 | mg/L | 0.39% |
| 206.191 | 1477.3 | 0.0311 | 0.00005 | mg/L | 0.18% |

an Data ----------

: 526161 Seq. No.: 30 Sample No.: 17 A/S Pos: 25
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 6:37:37 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3638904.0 | 1.015 | 0.0020 | mg/L | | | | 0.20% |
| 328.068 | -1666.4 | -0.0019 | 0.00053 | mg/L | | | | 28.13% |
| 308.215 | 8685.8 | 0.0222 | 0.00271 | mg/L | | | | 12.18% |
| 188.979 | -26.9 | 0.0015 | 0.00189 | mg/L | | | | 126.47% |
| 249.773 | 9003.4 | 0.1585 | 0.00279 | mg/L | | | | 1.76% |
| 233.527 | 4918.4 | 0.0695 | 0.00030 | mg/L | | | | 0.43% |
| 313.107 | -5998.8 | 0.0000 | 0.00001 | mg/L | | | | 110.99% |
| 315.887 | 7067599.5 | 66.68 | 0.043 | mg/L | | | | 0.06% |
| 226.502 | 138.1 | 0.0018 | 0.00006 | mg/L | | | | 3.27% |
| 228.616 | -33.6 | 0.0087 | 0.00022 | mg/L | | | | 2.54% |
| .716 | 419.3 | 0.0028 | 0.00002 | mg/L | | | | 0.72% |
| 754 | 2336.9 | -0.0009 | 0.00012 | mg/L | | | | 12.39% |
| .863 | 552836.0 | 28.60 | 0.029 | mg/L | | | | 0.10% |
| 404.721 | -933.3 | 3.414 | 0.4293 | mg/L | | | | 12.57% |
| 279.079 | 833251.3 | 56.04 | 0.017 | mg/L | | | | 0.03% |
| 257.610 | 834318.5 | 2.484 | 0.0047 | mg/L | | | | 0.19% |
| 202.030 | 19.0 | 0.0035 | 0.00010 | mg/L | | | | 2.81% |
| 330.237 | 24919.6 | 42.40 | 0.565 | mg/L | | | | 1.33% |
| 231.604 | 156.5 | 0.0131 | 0.00003 | mg/L | | | | 0.21% |
| 220.353 | 16.7 | 0.0001 | 0.00061 | mg/L | | | | 699.12% |
| 206.833 | 37.0 | 0.0009 | 0.00027 | mg/L | | | | 29.73% |
| 196.026 | 16.1 | 0.0012 | 0.00394 | mg/L | | | | 316.39% |
| 189.933 | 6964.7 | 1.060 | 0.0015 | mg/L | | | | 0.14% |
| 334.941 | -475.1 | 0.0005 | 0.00011 | mg/L | | | | 22.15% |
| 190.800 | -45.8 | -0.0211 | 0.00148 | mg/L | | | | 7.02% |
| 292.402 | 1762.7 | 0.0066 | 0.00059 | mg/L | | | | 8.93% |
| 206.191 | 334.6 | 0.0067 | 0.00009 | mg/L | | | | 1.36% |

lean Data ----------

:D: 526162 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: 02/21/02 6:42:33 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3653835.9 | 1.019 | 0.0067 | mg/L | | | | 0.65% |
| Ag 328.068 | -1661.4 | -0.0018 | 0.00057 | mg/L | | | | 30.85% |
| Al 308.215 | 8313.7 | -0.0042 | 0.00753 | mg/L | | | | 179.87% |
| As 188.979 | -33.6 | -0.0045 | 0.00275 | mg/L | | | | 61.80% |
| B 249.773 | 35600.7 | 0.6485 | 0.00997 | mg/L | | | | 1.54% |
| Ba 233.527 | 14310.2 | 0.2034 | 0.00302 | mg/L | | | | 1.48% |
| Be 313.107 | -5990.3 | 0.0000 | 0.00001 | mg/L | | | | 137.97% |
| Ca 315.887 | 4288088.2 | 40.46 | 0.003 | mg/L | | | | 0.01% |
| C 6.502 | 187.6 | 0.0025 | 0.00001 | mg/L | | | | 0.48% |
| Co .8.616 | 45.2 | 0.0132 | 0.00035 | mg/L | | | | 2.66% |
| Cr 267.716 | 106.1 | -0.0006 | 0.00024 | mg/L | | | | 40.44% |
| Cu 324.754 | 2213.8 | -0.0015 | 0.00019 | mg/L | | | | 12.75% |
| Fe 238.863 | 712143.9 | 36.84 | 0.012 | mg/L | | | | 0.03% |
| K 404.721 | -818.8 | 6.657 | 1.7930 | mg/L | | | | 26.93% |
| Mg 279.079 | 176557.2 | 11.88 | 0.173 | mg/L | | | | 1.46% |

| | | | | | |
|---|---|---|---|---|---|
| 257.610 | 1688007.2 | 5.025 | 0.0057 | mg/L | 0.11% |
| 2[illegible] 030 | -23.5 | -0.0002 | 0.00018 | mg/L | 117.33% |
| [illegible] 37 | 47604.0 | 82.03 | 1.256 | mg/L | 1.53% |
| 2[illegible] 604 | 65.1 | 0.0097 | 0.00032 | mg/L | 3.24% |
| 220.353 | 18.4 | 0.0005 | 0.00024 | mg/L | 47.07% |
| 206.833 | 35.1 | -0.0003 | 0.00165 | mg/L | 482.08% |
| 196.026 | 15.1 | 0.0007 | 0.00321 | mg/L | 448.81% |
| 189.933 | 2564.9 | 0.3869 | 0.00212 | mg/L | 0.55% |
| 334.941 | -721.7 | -0.0003 | 0.00002 | mg/L | 6.74% |
| 190.800 | -71.6 | -0.0394 | 0.00064 | mg/L | 1.63% |
| 292.402 | 2077.0 | 0.0084 | 0.00001 | mg/L | 0.09% |
| 206.191 | 324.3 | 0.0065 | 0.00009 | mg/L | 1.43% |

an Data ----------

: 526163 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: 02/21/02 6:47:26 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3717792.0 | 1.037 | 0.0009 | mg/L | | | | 0.09% |
| g 328.068 | -1440.5 | -0.0002 | 0.00022 | mg/L | | | | 94.91% |
| l 308.215 | 76046.5 | 4.806 | 0.0183 | mg/L | | | | 0.38% |
| s 188.979 | -28.0 | 0.0005 | 0.00309 | mg/L | | | | 644.62% |
| 249.773 | 4056.8 | 0.0673 | 0.00019 | mg/L | | | | 0.29% |
| a 233.527 | 3257.2 | 0.0458 | 0.00015 | mg/L | | | | 0.33% |
| e 313.107 | -6298.3 | 0.0000 | 0.00000 | mg/L | | | | 8.37% |
| a 315.887 | 1122536.5 | 10.60 | 0.011 | mg/L | | | | 0.10% |
| d 226.502 | 68.7 | 0.0010 | 0.00007 | mg/L | | | | 6.63% |
| o 228.616 | -139.0 | 0.0027 | 0.00002 | mg/L | | | | 0.79% |
| r 267.716 | 759.4 | 0.0066 | 0.00011 | mg/L | | | | 1.67% |
| u 324.754 | 3717.9 | 0.0057 | 0.00025 | mg/L | | | | 4.37% |
| e 238.863 | 88145.7 | 4.565 | 0.0117 | mg/L | | | | 0.26% |
| 404.721 | -780.8 | 2.723 | 0.7658 | mg/L | | | | 28.12% |
| g .079 | 54789.3 | 3.689 | 0.0006 | mg/L | | | | 0.02% |
| n .610 | 23663.2 | 0.0704 | 0.00016 | mg/L | | | | 0.23% |
| o 202.030 | -10.9 | 0.0009 | 0.00012 | mg/L | | | | 13.20% |
| a 330.237 | 4819.7 | 7.289 | 0.0961 | mg/L | | | | 1.32% |
| i 231.604 | -40.3 | 0.0058 | 0.00022 | mg/L | | | | 3.74% |
| b 220.353 | 23.3 | 0.0017 | 0.00040 | mg/L | | | | 23.04% |
| b 206.833 | 35.0 | -0.0004 | 0.00141 | mg/L | | | | 331.67% |
| e 196.026 | 10.8 | -0.0014 | 0.00015 | mg/L | | | | 10.50% |
| n 189.933 | 918.7 | 0.1351 | 0.00031 | mg/L | | | | 0.23% |
| i 334.941 | 59924.3 | 0.1804 | 0.00017 | mg/L | | | | 0.09% |
| l 190.800 | -15.1 | 0.0009 | 0.00032 | mg/L | | | | 37.50% |
| r 292.402 | 2243.3 | 0.0094 | 0.00012 | mg/L | | | | 1.25% |
| n 206.191 | 699.5 | 0.0145 | 0.00006 | mg/L | | | | 0.44% |

lean Data ----------

ID: 526164 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: 02/21/02 6:52:17 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3724271.1 | 1.039 | 0.0174 | mg/L | | | | 1.68% |
| Ag 328.068 | -1397.4 | 0.0001 | 0.00003 | mg/L | | | | 32.55% |
| Al 308.215 | 32318.7 | 1.700 | 0.0162 | mg/L | | | | 0.95% |
| As 188.979 | -30.9 | -0.0021 | 0.00145 | mg/L | | | | 69.56% |
| B 249.773 | 2430.4 | 0.0374 | 0.00024 | mg/L | | | | 0.63% |
| Ba 233.527 | 1436.6 | 0.0199 | 0.00037 | mg/L | | | | 1.86% |
| Be 313.107 | -5820.7 | 0.0000 | 0.00001 | mg/L | | | | 24.40% |
| Ca 315.887 | 503701.8 | 4.766 | 0.0005 | mg/L | | | | 0.01% |
| Cd 226.502 | 12.8 | 0.0003 | 0.00002 | mg/L | | | | 6.61% |
| Co 228.616 | -159.9 | 0.0015 | 0.00005 | mg/L | | | | 3.10% |
| Cr 267.716 | 346.3 | 0.0020 | 0.00008 | mg/L | | | | 4.14% |
| C[illegible] 4.754 | 2822.1 | 0.0014 | 0.00021 | mg/L | | | | 14.91% |
| F 8.863 | 30407.6 | 1.579 | 0.0044 | mg/L | | | | 0.28% |
| K [illegible]4.721 | -774.4 | 2.845 | 0.2062 | mg/L | | | | 7.25% |
| Mg 279.079 | 27363.0 | 1.844 | 0.0054 | mg/L | | | | 0.29% |
| Mn 257.610 | 116746.0 | 0.3475 | 0.00034 | mg/L | | | | 0.10% |
| Mo 202.030 | -20.0 | 0.0002 | 0.00006 | mg/L | | | | 39.77% |
| Na 330.237 | 3460.8 | 4.916 | 0.0445 | mg/L | | | | 0.91% |

| | | | | | |
|---|---|---|---|---|---|
| 231.604 | -133.7 | 0.0024 | 0.00020 | mg/L | 8.37% |
| 2[illegible]53 | 17.3 | 0.0002 | 0.00003 | mg/L | 11.81% |
| 2 33 | 35.2 | -0.0003 | 0.00045 | mg/L | 169.14% |
| 19[illegible]026 | 8.8 | -0.0024 | 0.00035 | mg/L | 14.40% |
| 189.933 | 491.9 | 0.0697 | 0.00144 | mg/L | 2.06% |
| 334.941 | 21030.9 | 0.0645 | 0.00033 | mg/L | 0.51% |
| 190.800 | -19.5 | -0.0023 | 0.00198 | mg/L | 87.45% |
| 292.402 | 1154.3 | 0.0031 | 0.00006 | mg/L | 2.08% |
| 206.191 | 486.0 | 0.0100 | 0.00012 | mg/L | 1.19% |

an Data ----------

: CCV Seq. No.: 34 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: 02/21/02 6:57:17 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3587268.1 | 1.001 | 0.0040 | mg/L | | | | 0.40% |
| 328.068 | 68435.6 | 0.5062 | 0.00494 | mg/L | | | | 0.98% |
| 308.215 | 148832.1 | 9.974 | 0.1267 | mg/L | | | | 1.27% |
| 188.979 | 1158.2 | 1.043 | 0.0073 | mg/L | | | | 0.70% |
| 249.773 | 136684.5 | 2.511 | 0.0222 | mg/L | | | | 0.88% |
| 233.527 | 737661.4 | 10.51 | 0.001 | mg/L | | | | 0.01% |
| 313.107 | 1307635.0 | 0.2536 | 0.00004 | mg/L | | | | 0.02% |
| 315.887 | 2739659.5 | 25.86 | 0.014 | mg/L | | | | 0.06% |
| 226.502 | 41395.0 | 0.5146 | 0.00502 | mg/L | | | | 0.98% |
| 228.616 | 45635.6 | 2.609 | 0.0261 | mg/L | | | | 1.00% |
| 267.716 | 46769.4 | 0.5109 | 0.00493 | mg/L | | | | 0.97% |
| 324.754 | 265164.9 | 1.267 | 0.0109 | mg/L | | | | 0.86% |
| 238.863 | 99054.9 | 5.129 | 0.0497 | mg/L | | | | 0.97% |
| 404.721 | 430.6 | 25.99 | 2.348 | mg/L | | | | 9.03% |
| 279.079 | 379579.0 | 25.53 | 0.018 | mg/L | | | | 0.07% |
| 257.610 | 260653.4 | 0.7759 | 0.00863 | mg/L | | | | 1.11% |
| [illegible].030 | 28650.3 | 2.468 | 0.0228 | mg/L | | | | 0.92% |
| 237 | 14176.2 | 23.63 | 0.266 | mg/L | | | | 1.13% |
| .604 | 55862.7 | 2.084 | 0.0198 | mg/L | | | | 0.95% |
| 220.353 | 2063.1 | 0.5104 | 0.00457 | mg/L | | | | 0.90% |
| 206.833 | 7914.6 | 5.096 | 0.0224 | mg/L | | | | 0.44% |
| 196.026 | 1014.6 | 0.5072 | 0.00148 | mg/L | | | | 0.29% |
| 189.933 | 35674.3 | 5.453 | 0.0485 | mg/L | | | | 0.89% |
| 334.941 | 848639.8 | 2.530 | 0.0035 | mg/L | | | | 0.14% |
| 190.800 | 1442.3 | 1.040 | 0.0053 | mg/L | | | | 0.51% |
| 292.402 | 441729.3 | 2.570 | 0.0009 | mg/L | | | | 0.04% |
| 206.191 | 48266.7 | 1.031 | 0.0068 | mg/L | | | | 0.66% |

ean Data ----------

D: CCB Seq. No.: 35 Sample No.: 4 A/S Pos: 1
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:02:09 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3617307.0 | 1.009 | 0.0065 | mg/L | | | | 0.65% |
| g 328.068 | -1336.9 | 0.0005 | 0.00017 | mg/L | | | | 32.05% |
| l 308.215 | 8125.4 | -0.0176 | 0.00542 | mg/L | | | | 30.84% |
| s 188.979 | -27.2 | 0.0012 | 0.00010 | mg/L | | | | 8.74% |
| 249.773 | 1155.6 | 0.0139 | 0.00149 | mg/L | | | | 10.77% |
| a 233.527 | 73.5 | 0.0004 | 0.00005 | mg/L | | | | 10.59% |
| e 313.107 | -5930.8 | 0.0000 | 0.00000 | mg/L | | | | 8.33% |
| a 315.887 | 17.3 | 0.0150 | 0.00040 | mg/L | | | | 2.68% |
| d 226.502 | -6.8 | 0.0000 | 0.00003 | mg/L | | | | 66.81% |
| o 228.616 | -158.5 | 0.0016 | 0.00005 | mg/L | | | | 3.00% |
| Cr 267.716 | 142.8 | -0.0002 | 0.00022 | mg/L | | | | 115.82% |
| Cu 324.754 | 2982.1 | 0.0022 | 0.00083 | mg/L | | | | 38.32% |
| Fe 238.863 | -28.2 | 0.0046 | 0.00010 | mg/L | | | | 2.23% |
| K 404.721 | -939.5 | -0.3253 | 1.09547 | mg/L | | | | 336.76% |
| M 9.079 | 111.4 | 0.0114 | 0.00027 | mg/L | | | | 2.36% |
| M 7.610 | 76.4 | 0.0001 | 0.00001 | mg/L | | | | 5.78% |
| Mo 202.030 | -18.6 | 0.0003 | 0.00026 | mg/L | | | | 94.79% |
| Na 330.237 | 727.1 | 0.1402 | 0.02488 | mg/L | | | | 17.74% |
| Ni 231.604 | -163.9 | 0.0012 | 0.00011 | mg/L | | | | 8.75% |
| Pb 220.353 | 14.7 | -0.0004 | 0.00007 | mg/L | | | | 16.20% |
| Sb 206.833 | 62.2 | 0.0172 | 0.00567 | mg/L | | | | 33.08% |

: exceeds upper limit for Sb 206.833 Action = Continue

| | | | | | |
|---|---|---|---|---|---|
| 1 26 | 3.8 | -0.0050 | 0.00248 | mg/L | 49.72% |
| 1 33 | 86.0 | 0.0076 | 0.00131 | mg/L | 17.12% |
| 33 .941 | -393.2 | 0.0007 | 0.00019 | mg/L | 26.20% |
| 190.800 | -16.9 | -0.0005 | 0.00014 | mg/L | 29.03% |
| 292.402 | 648.6 | 0.0001 | 0.00012 | mg/L | 98.12% |
| 206.191 | 278.9 | 0.0055 | 0.00058 | mg/L | 10.44% |

an Data

: 526165 Seq. No.: 36 Sample No.: 21 A/S Pos: 29
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:07:02 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3662747.6 | 1.022 | 0.0070 | mg/L | | | | 0.68% |
| 328.068 | -1376.1 | 0.0002 | 0.00017 | mg/L | | | | 74.04% |
| 308.215 | 12450.6 | 0.2896 | 0.00982 | mg/L | | | | 3.39% |
| 188.979 | -29.8 | -0.0011 | 0.00027 | mg/L | | | | 25.43% |
| 249.773 | 9100.5 | 0.1603 | 0.00109 | mg/L | | | | 0.68% |
| 233.527 | 2420.0 | 0.0339 | 0.00022 | mg/L | | | | 0.64% |
| 313.107 | -5997.0 | 0.0000 | 0.00000 | mg/L | | | | 14.44% |
| 315.887 | 2134707.5 | 20.15 | 0.001 | mg/L | | | | 0.01% |
| 226.502 | 16.2 | 0.0003 | 0.00002 | mg/L | | | | 5.44% |
| 228.616 | -138.8 | 0.0027 | 0.00015 | mg/L | | | | 5.51% |
| 267.716 | 156.6 | 0.0000 | 0.00003 | mg/L | | | | 81.81% |
| 324.754 | 3165.5 | 0.0031 | 0.00007 | mg/L | | | | 2.40% |
| 238.863 | 8090.6 | 0.4245 | 0.00330 | mg/L | | | | 0.78% |
| 404.721 | -520.6 | 7.720 | 1.4735 | mg/L | | | | 19.09% |
| 279.079 | 83998.3 | 5.653 | 0.0509 | mg/L | | | | 0.90% |
| 257.610 | 1718430.5 | 5.116 | 0.0025 | mg/L | | | | 0.05% |
| 202.030 | -21.9 | 0.0000 | 0.00003 | mg/L | | | | 394.80% |
| 330.237 | 9322.6 | 15.16 | 0.085 | mg/L | | | | 0.56% |
| .604 | -51.7 | 0.0054 | 0.00012 | mg/L | | | | 2.16% |
| 353 | 19.4 | 0.0008 | 0.00039 | mg/L | | | | 51.17% |
| .833 | 43.6 | 0.0051 | 0.00132 | mg/L | | | | 25.74% |
| 196.026 | 17.1 | 0.0017 | 0.00260 | mg/L | | | | 151.40% |
| 189.933 | 1338.0 | 0.1992 | 0.00101 | mg/L | | | | 0.50% |
| 334.941 | 7997.3 | 0.0257 | 0.00001 | mg/L | | | | 0.03% |
| 190.800 | -73.1 | -0.0405 | 0.00129 | mg/L | | | | 3.18% |
| 292.402 | 697.3 | 0.0004 | 0.00017 | mg/L | | | | 40.94% |
| 206.191 | 607.2 | 0.0125 | 0.00003 | mg/L | | | | 0.27% |

ean Data

D: 526166 Seq. No.: 37 Sample No.: 22 A/S Pos: 30
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:11:56 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3708427.6 | 1.034 | 0.0006 | mg/L | | | | 0.06% |
| g 328.068 | -1350.6 | 0.0004 | 0.00014 | mg/L | | | | 34.85% |
| l 308.215 | 11772.6 | 0.2414 | 0.00534 | mg/L | | | | 2.21% |
| s 188.979 | -28.1 | 0.0004 | 0.00097 | mg/L | | | | 221.61% |
| 249.773 | 8730.6 | 0.1534 | 0.00178 | mg/L | | | | 1.16% |
| a 233.527 | 2355.3 | 0.0330 | 0.00003 | mg/L | | | | 0.10% |
| e 313.107 | -5917.1 | 0.0000 | 0.00000 | mg/L | | | | 16.37% |
| a 315.887 | 2082732.7 | 19.66 | 0.014 | mg/L | | | | 0.07% |
| d 226.502 | 12.8 | 0.0003 | 0.00001 | mg/L | | | | 1.86% |
| o 228.616 | -136.7 | 0.0028 | 0.00029 | mg/L | | | | 10.43% |
| r 267.716 | 184.1 | 0.0003 | 0.00037 | mg/L | | | | 142.65% |
| Cu 324.754 | 3096.3 | 0.0027 | 0.00019 | mg/L | | | | 7.11% |
| Fe 238.863 | 7111.6 | 0.3739 | 0.00466 | mg/L | | | | 1.25% |
| K 404.721 | -441.8 | 9.234 | 1.5248 | mg/L | | | | 16.51% |
| Mg 279.079 | 81603.5 | 5.492 | 0.0333 | mg/L | | | | 0.61% |
| Mn 257.610 | 1711363.9 | 5.095 | 0.0002 | mg/L | | | | 0.00% |
| M .030 | -21.3 | 0.0000 | 0.00026 | mg/L | | | | 630.44% |
| N. .237 | 9018.4 | 14.62 | 0.051 | mg/L | | | | 0.35% |
| Ni 231.604 | -59.5 | 0.0051 | 0.00011 | mg/L | | | | 2.14% |
| Pb 220.353 | 17.2 | 0.0002 | 0.00024 | mg/L | | | | 106.39% |
| Sb 206.833 | 38.2 | 0.0017 | 0.00263 | mg/L | | | | 156.66% |
| Se 196.026 | 17.6 | 0.0020 | 0.00194 | mg/L | | | | 98.20% |
| Sn 189.933 | 1307.4 | 0.1945 | 0.00023 | mg/L | | | | 0.12% |

| | | | | | |
|---|---|---|---|---|---|
| 334.941 | 7196.2 | 0.0233 | 0.00020 | mg/L | 0.85% |
| 1[illegible]900 | -70.7 | -0.0388 | 0.00056 | mg/L | 1.45% |
| 2[illegible]2 | 657.6 | 0.0002 | 0.00003 | mg/L | 15.17% |
| 2[illegible].191 | 639.4 | 0.0132 | 0.00015 | mg/L | 1.15% |

an Data ----------

: 526168 Seq. No.: 38 Sample No.: 23 A/S Pos: 31
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:16:49 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3721232.7 | 1.038 | 0.0026 | mg/L | | | | 0.25% |
| 328.068 | -1473.4 | -0.0005 | 0.00014 | mg/L | | | | 29.09% |
| 308.215 | 7947.1 | -0.0302 | 0.00205 | mg/L | | | | 6.79% |
| 188.979 | -26.5 | 0.0018 | 0.00160 | mg/L | | | | 89.28% |
| 249.773 | 1100.7 | 0.0129 | 0.00027 | mg/L | | | | 2.08% |
| 233.527 | 1091.8 | 0.0149 | 0.00011 | mg/L | | | | 0.76% |
| 313.107 | -5756.6 | 0.0001 | 0.00001 | mg/L | | | | 25.28% |
| 315.887 | 1842114.0 | 17.39 | 0.001 | mg/L | | | | 0.01% |
| 226.502 | 8.7 | 0.0002 | 0.00005 | mg/L | | | | 22.37% |
| 228.616 | -98.1 | 0.0050 | 0.00010 | mg/L | | | | 2.03% |
| 267.716 | 216.1 | 0.0006 | 0.00023 | mg/L | | | | 37.59% |
| 324.754 | 2644.0 | 0.0005 | 0.00008 | mg/L | | | | 14.02% |
| 238.863 | 22425.2 | 1.166 | 0.0100 | mg/L | | | | 0.85% |
| 404.721 | -796.7 | 2.418 | 2.4818 | mg/L | | | | 102.65% |
| 279.079 | 74097.3 | 4.987 | 0.0461 | mg/L | | | | 0.92% |
| 257.610 | 116555.3 | 0.3469 | 0.00024 | mg/L | | | | 0.07% |
| 202.030 | -15.6 | 0.0005 | 0.00016 | mg/L | | | | 29.94% |
| 330.237 | 1493.6 | 1.479 | 0.0040 | mg/L | | | | 0.27% |
| 231.604 | -97.0 | 0.0037 | 0.00011 | mg/L | | | | 2.88% |
| 220.353 | 16.3 | 0.0000 | 0.00036 | mg/L | | | | >999.9% |
| 206.833 | 36.9 | 0.0008 | 0.00126 | mg/L | | | | 155.86% |
| [illegible]96.026 | 8.2 | -0.0028 | 0.00241 | mg/L | | | | 87.01% |
| 933 | 1178.7 | 0.1748 | 0.00032 | mg/L | | | | 0.19% |
| .941 | -626.4 | 0.0000 | 0.00004 | mg/L | | | | 115.56% |
| 190.800 | -19.3 | -0.0022 | 0.00061 | mg/L | | | | 27.82% |
| 292.402 | 716.0 | 0.0005 | 0.00001 | mg/L | | | | 2.85% |
| 206.191 | 365.5 | 0.0074 | 0.00003 | mg/L | | | | 0.42% |

ean Data ----------

D: 526169 Seq. No.: 39 Sample No.: 24 A/S Pos: 32
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:21:45 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3632517.3 | 1.013 | 0.0094 | mg/L | | | | 0.93% |
| g 328.068 | -1591.2 | -0.0013 | 0.00031 | mg/L | | | | 23.08% |
| l 308.215 | 8243.7 | -0.0092 | 0.00372 | mg/L | | | | 40.63% |
| s 188.979 | -20.5 | 0.0071 | 0.00333 | mg/L | | | | 46.88% |
| 249.773 | 140403.7 | 2.579 | 0.0479 | mg/L | | | | 1.86% |
| a 233.527 | 67072.1 | 0.9554 | 0.01544 | mg/L | | | | 1.62% |
| e 313.107 | -6030.3 | 0.0000 | 0.00001 | mg/L | | | | 439.97% |
| a 315.887 | 8186621.3 | 77.24 | 0.020 | mg/L | | | | 0.03% |
| d 226.502 | 43.7 | 0.0007 | 0.00002 | mg/L | | | | 2.85% |
| o 228.616 | -135.7 | 0.0029 | 0.00010 | mg/L | | | | 3.36% |
| r 267.716 | 623.3 | 0.0051 | 0.00005 | mg/L | | | | 1.06% |
| u 324.754 | 2573.7 | 0.0002 | 0.00021 | mg/L | | | | 101.44% |
| Fe 238.863 | 178473.3 | 9.237 | 0.1619 | mg/L | | | | 1.75% |
| K 404.721 | 9415.6 | 198.6 | 4.62 | mg/L | | | | 2.33% |
| Mg 279.079 | 1113947.2 | 74.92 | 0.007 | mg/L | | | | 0.01% |
| Mn 257.610 | 49156.9 | 0.1463 | 0.00276 | mg/L | | | | 1.89% |
| Mo 202.030 | -10.9 | 0.0009 | 0.00008 | mg/L | | | | 8.08% |
| Na 330.237 | 179488.8 | 312.4 | 4.92 | mg/L | | | | 1.57% |
| Ni 231.604 | 992.4 | 0.0442 | 0.00028 | mg/L | | | | 0.63% |
| Pb [illegible].353 | 15.0 | -0.0003 | 0.00058 | mg/L | | | | 179.75% |
| Si [illegible].833 | 39.3 | 0.0024 | 0.00019 | mg/L | | | | 7.92% |
| ~~Se 196.026~~ | 24.2 | 0.0053 | 0.00194 | mg/L | | | | 36.36% |
| Sn 189.933 | 7852.3 | 1.196 | 0.0126 | mg/L | | | | 1.05% |
| Ti 334.941 | -584.7 | 0.0002 | 0.00005 | mg/L | | | | 29.81% |
| Tl 190.800 | -21.2 | -0.0035 | 0.00007 | mg/L | | | | 2.07% |
| V 292.402 | 1358.1 | 0.0043 | 0.00006 | mg/L | | | | 1.52% |

206.191 248.1 0.0049 0.00003 mg/L 0.70%

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526170 Seq. No.: 40 Sample No.: 25 A/S Pos: 33
ple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:26:48 PM

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| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3405067.3 | 0.950 | 0.0018 | mg/L | | | | 0.19% |
| 328.068 | -3622.4 | -0.0161 | 0.00058 | mg/L | | | | 3.62% |
| 308.215 | 10378.4 | 0.1424 | 0.00442 | mg/L | | | | 3.10% |
| 188.979 | -32.9 | 0.0068 | 0.00847 | mg/L | | | | 124.64% |
| ~~249.773~~ | 308651.8 | 5.679 42 | 0.0011 | mg/L | | | | 0.02% |
| 233.527 | 171926.2 | 2.450 | 0.0034 | mg/L | | | | 0.14% |
| 313.107 | -6287.8 | 0.0000 | 0.00001 | mg/L | | | | 15.25% |
| 315.887 | Saturated | | | | | | | |
| 226.502 | 339.0 | 0.0043 | 0.00001 | mg/L | | | | 0.19% |
| 228.616 | -135.9 | 0.0028 | 0.00019 | mg/L | | | | 6.58% |
| 267.716 | 1101.8 | 0.0103 | 0.00101 | mg/L | | | | 9.79% |
| 324.754 | 2036.9 | -0.0024 | 0.00029 | mg/L | | | | 12.21% |
| 238.863 | 1156696.7 | 59.83 | 0.018 | mg/L | | | | 0.03% |
| 404.721 | 5078.2 | 122.8 | 0.61 | mg/L | | | | 0.49% |
| 279.079 | 6114540.4 | 411.2 | 0.33 | mg/L | | | | 0.08% |
| 257.610 | 2450781.2 | 7.296 | 0.0011 | mg/L | | | | 0.02% |
| 202.030 | -23.4 | -0.0001 | 0.00013 | mg/L | | | | 94.79% |
| 330.237 | 699549.0 | 1221 | 0.0 | mg/L | | | | 0.00% |
| 231.604 | 13629.4 | 0.5140 | 0.00151 | mg/L | | | | 0.29% |
| 220.353 | 28.2 | 0.0030 | 0.00032 | mg/L | | | | 10.76% |
| 206.833 | 28.6 | -0.0045 | 0.00292 | mg/L | | | | 64.43% |
| ~~196.026~~ | 80.8 | 0.0067 | 0.00182 | mg/L | | | | 27.06% |
| 189.933 | 10946.3 | 0.2272 | 0.00100 | mg/L | | | | 0.44% |
| 334.941 | -6431.7 | -0.0173 | 0.00013 | mg/L | | | | 0.73% |
| [illegible].800 | -98.6 | -0.0586 | 0.00179 | mg/L | | | | 3.05% |
| 02 | 3944.3 | 0.0193 | 0.00011 | mg/L | | | | 0.56% |
| .191 | 194.2 | -0.0077 | 0.00016 | mg/L | | | | 2.03% |

ean Data ---

D: 526171 Seq. No.: 41 Sample No.: 26 A/S Pos: 34
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:31:45 PM

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| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3722014.0 | 1.038 | 0.0094 | mg/L | | | | 0.91% |
| g 328.068 | -1380.7 | 0.0002 | 0.00021 | mg/L | | | | 108.15% |
| l 308.215 | 8773.0 | 0.0284 | 0.00310 | mg/L | | | | 10.91% |
| s 188.979 | -28.5 | 0.0000 | 0.00020 | mg/L | | | | 398.27% |
| 249.773 | 2220.9 | 0.0335 | 0.00417 | mg/L | | | | 12.46% |
| a 233.527 | 778.3 | 0.0105 | 0.00011 | mg/L | | | | 1.02% |
| e 313.107 | -5761.0 | 0.0001 | 0.00002 | mg/L | | | | 30.25% |
| a 315.887 | 2429420.1 | 22.93 | 0.003 | mg/L | | | | 0.01% |
| d 226.502 | 9.1 | 0.0002 | 0.00001 | mg/L | | | | 3.11% |
| o 228.616 | -167.9 | 0.0010 | 0.00001 | mg/L | | | | 1.31% |
| r 267.716 | 243.0 | 0.0009 | 0.00006 | mg/L | | | | 6.87% |
| u 324.754 | 2818.3 | 0.0014 | 0.00002 | mg/L | | | | 1.79% |
| Fe 238.863 | 520.3 | 0.0330 | 0.00080 | mg/L | | | | 2.43% |
| K 404.721 | -880.7 | 0.8034 | 0.04975 | mg/L | | | | 6.19% |
| Mg 279.079 | 146190.7 | 9.836 | 0.0052 | mg/L | | | | 0.05% |
| Mn 257.610 | 3431.2 | 0.0101 | 0.00017 | mg/L | | | | 1.64% |
| Mo 202.030 | -18.6 | 0.0003 | 0.00026 | mg/L | | | | 93.57% |
| Na 330.237 | 2894.9 | 3.927 | 0.0892 | mg/L | | | | 2.27% |
| Ni 231.604 | -147.6 | 0.0018 | 0.00003 | mg/L | | | | 1.50% |
| Pb 220.353 | 12.7 | -0.0009 | 0.00049 | mg/L | | | | 54.58% |
| Sb 206.833 | 34.0 | -0.0011 | 0.00195 | mg/L | | | | 181.20% |
| Se 196.026 | 12.1 | -0.0008 | 0.00319 | mg/L | | | | 389.98% |
| S 9.933 | 2167.4 | 0.3261 | 0.00329 | mg/L | | | | 1.01% |
| T 1.941 | -667.3 | -0.0001 | 0.00011 | mg/L | | | | 119.37% |
| Tl 190.800 | -17.6 | -0.0010 | 0.00123 | mg/L | | | | 127.66% |
| V 292.402 | 646.2 | 0.0001 | 0.00008 | mg/L | | | | 74.22% |
| Zn 206.191 | 2482.8 | 0.0526 | 0.00067 | mg/L | | | | 1.27% |

Mean Data ---

CRI
pl ty: 1.0000 g
Seq. No.: 42 Sample No.: 5 A/S Pos: 6
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:36:40 PM

| ment | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 71.030 | 3718049.3 | 1.037 | 0.0016 | mg/L | | | | 0.16% |
| 328.068 | 1236.0 | 0.0192 | 0.00005 | mg/L | | | | 0.24% |
| 308.215 | 8489.2 | 0.0083 | 0.00304 | mg/L | | | | 36.78% |
| 188.979 | -3.8 | 0.0217 | 0.00049 | mg/L | | | | 2.28% |
| 49.773 | 970.0 | 0.0105 | 0.00061 | mg/L | | | | 5.88% |
| 233.527 | 97.7 | 0.0008 | 0.00014 | mg/L | | | | 18.11% |
| 313.107 | 45950.6 | 0.0100 | 0.00000 | mg/L | | | | 0.02% |
| 315.887 | 4472.6 | 0.0570 | 0.00248 | mg/L | | | | 4.35% |
| 226.502 | 806.4 | 0.0102 | 0.00003 | mg/L | | | | 0.33% |
| 228.616 | 1685.3 | 0.1065 | 0.00039 | mg/L | | | | 0.37% |
| 267.716 | 1981.7 | 0.0200 | 0.00013 | mg/L | | | | 0.63% |
| 324.754 | 12507.2 | 0.0481 | 0.00024 | mg/L | | | | 0.49% |
| 238.863 | -20.6 | 0.0050 | 0.00103 | mg/L | | | | 20.56% |
| 404.721 | -896.8 | 0.4937 | 0.40129 | mg/L | | | | 81.28% |
| 279.079 | 417.9 | 0.0321 | 0.00128 | mg/L | | | | 3.99% |
| 257.610 | 10785.8 | 0.0320 | 0.00014 | mg/L | | | | 0.42% |
| 202.030 | -22.3 | 0.0000 | 0.00012 | mg/L | | | | 286.19% |
| 330.237 | 673.1 | 0.0460 | 0.07121 | mg/L | | | | 154.87% |
| 231.604 | 2057.4 | 0.0838 | 0.00035 | mg/L | | | | 0.42% |
| 220.353 | 38.6 | 0.0056 | 0.00073 | mg/L | | | | 13.19% |
| 206.833 | 225.0 | 0.1225 | 0.00167 | mg/L | | | | 1.36% |
| 196.026 | 24.2 | 0.0054 | 0.00279 | mg/L | | | | 52.14% |
| 189.933 | 40.8 | 0.0007 | 0.00008 | mg/L | | | | 11.18% |
| 334.941 | -613.2 | 0.0001 | 0.00017 | mg/L | | | | 238.32% |
| 190.800 | 13.4 | 0.0212 | 0.00042 | mg/L | | | | 1.99% |
| 292.402 | 18131.7 | 0.1020 | 0.00060 | mg/L | | | | 0.58% |
| 206.191 | 1956.1 | 0.0414 | 0.00018 | mg/L | | | | 0.44% |

:e ta
): A
mple Qty: 1.0000 g
Seq. No.: 43 Sample No.: 6 A/S Pos: 7
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:42:07 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3152972.8 | 0.880 | 0.0055 | mg/L | | | | 0.62% |
| g 328.068 | -3703.6 | -0.0064 | 0.00048 | mg/L | | | | 7.55% |
| l 308.215 | 7485432.6 | 531.0 | 1.23 | mg/L | | | | 0.23% |
| s 188.979 | -60.1 | 0.0070 | 0.00207 | mg/L | | | | 29.57% |
| 249.773 | 7160.6 | 0.1245 | 0.00195 | mg/L | | | | 1.57% |
| a 233.527 | -381.2 | -0.0061 | 0.00002 | mg/L | | | | 0.30% |
| e 313.107 | -7104.7 | -0.0002 | 0.00001 | mg/L | | | | 5.04% |
| a 315.887 | 52874448.0 | 498.8 | 1.36 | mg/L | | | | 0.27% |
| d 226.502 | 1428.7 | 0.0055 | 0.00016 | mg/L | | | | 2.89% |
| o 228.616 | -178.4 | 0.0004 | 0.00024 | mg/L | | | | 56.83% |
| r 267.716 | 898.6 | 0.0081 | 0.00022 | mg/L | | | | 2.71% |
| u 324.754 | 375.6 | 0.0021 | 0.00020 | mg/L | | | | 9.51% |
| e 238.863 | 3794710.9 | 196.3 | 0.24 | mg/L | | | | 0.12% |
| 404.721 | -2557.9 | -6.561 | 1.8092 | mg/L | | | | 27.58% |
| lg 279.079 | 8229565.2 | 553.5 | 1.26 | mg/L | | | | 0.23% |
| ln 257.610 | -3704.2 | -0.0111 | 0.00009 | mg/L | | | | 0.83% |
| lo 202.030 | -7.2 | 0.0013 | 0.00004 | mg/L | | | | 3.51% |
| la 330.237 | 646.9 | 0.5317 | 0.05698 | mg/L | | | | 10.72% |
| li 231.604 | -187.2 | 0.0004 | 0.00019 | mg/L | | | | 51.99% |
| Pb 220.353 | -137.1 | 0.0037 | 0.00008 | mg/L | | | | 2.16% |
| Sb 206.833 | 29.8 | -0.0038 | 0.00231 | mg/L | | | | 61.10% |
| Se 196.026 | 113.6 | -0.0063 | 0.00166 | mg/L | | | | 26.45% |
| Sn 189.933 | 12886.7 | 0.0253 | 0.00733 | mg/L | | | | 28.96% |
| Ti 334.941 | -2847.9 | -0.0066 | 0.00015 | mg/L | | | | 2.26% |
| Tl 190.800 | -32.5 | -0.0116 | 0.00055 | mg/L | | | | 4.75% |
| V 402 | 9297.1 | 0.0505 | 0.00037 | mg/L | | | | 0.73% |
| Zn 206.191 | 991.5 | 0.0054 | 0.00009 | mg/L | | | | 1.74% |

Mean Data
ID: ICSAB
Sample Qty: 1.0000 g
Seq. No.: 44 Sample No.: 7 A/S Pos: 8
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:48:03 PM

| | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| :n 71.030 | 3181982.3 | 0.888 | 0.0065 | mg/L | | | | 0.73% |
| 328.068 | 155923.5 | 1.151 | 0.0024 | mg/L | | | | 0.21% |
| 308.215 | 7486969.8 | 531.1 | 1.90 | mg/L | | | | 0.36% |
| 188.979 | -66.9 | 0.0009 | 0.00210 | mg/L | | | | 229.97% |
| 249.773 | 7074.8 | 0.1229 | 0.00020 | mg/L | | | | 0.16% |
| 233.527 | 38792.6 | 0.5523 | 0.00176 | mg/L | | | | 0.32% |
| 313.107 | 2704288.1 | 0.5232 | 0.00069 | mg/L | | | | 0.13% |
| 315.887 | 52786583.0 | 497.9 | 1.61 | mg/L | | | | 0.32% |
| 226.502 | 81285.1 | 0.9981 | 0.00374 | mg/L | | | | 0.37% |
| 228.616 | 8673.6 | 0.5045 | 0.00421 | mg/L | | | | 0.83% |
| 267.716 | 48116.5 | 0.5257 | 0.00175 | mg/L | | | | 0.33% |
| 324.754 | 120152.4 | 0.5799 | 0.00283 | mg/L | | | | 0.49% |
| 238.863 | 3785628.1 | 195.8 | 0.48 | mg/L | | | | 0.25% |
| 404.721 | -2534.7 | -6.173 | 1.2885 | mg/L | | | | 20.87% |
| 279.079 | 8221417.1 | 552.9 | 1.88 | mg/L | | | | 0.34% |
| 257.610 | 173479.6 | 0.5164 | 0.00122 | mg/L | | | | 0.24% |
| 202.030 | -9.5 | 0.0011 | 0.00040 | mg/L | | | | 37.51% |
| 330.237 | 817.6 | 0.8285 | 0.01507 | mg/L | | | | 1.82% |
| 231.604 | 25517.2 | 0.9560 | 0.00884 | mg/L | | | | 0.93% |
| 220.353 | 3862.1 | 1.001 | 0.0102 | mg/L | | | | 1.02% |
| 206.833 | 33.3 | -0.0015 | 0.00119 | mg/L | | | | 80.00% |
| 196.026 | 119.4 | -0.0033 | 0.00325 | mg/L | | | | 97.26% |
| 189.933 | 12778.2 | 0.0106 | 0.00852 | mg/L | | | | 80.24% |
| 334.941 | -2771.0 | -0.0064 | 0.00001 | mg/L | | | | 0.17% |
| 190.800 | -32.6 | -0.0116 | 0.00242 | mg/L | | | | 20.82% |
| 292.402 | 99989.9 | 0.5790 | 0.00189 | mg/L | | | | 0.33% |
| 206.191 | 47570.7 | 1.001 | 0.0074 | mg/L | | | | 0.74% |

an Data
): CCV
Qty: 1.0000 g
Seq. No.: 45 Sample No.: 2 A/S Pos: 3
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:53:33 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3570673.7 | 0.996 | 0.0013 | mg/L | | | | 0.13% |
| g 328.068 | 68787.3 | 0.5088 | 0.00536 | mg/L | | | | 1.05% |
| l 308.215 | 150208.2 | 10.07 | 0.121 | mg/L | | | | 1.20% |
| s 188.979 | 1163.7 | 1.048 | 0.0040 | mg/L | | | | 0.38% |
| 249.773 | 137629.6 | 2.528 | 0.0248 | mg/L | | | | 0.98% |
| a 233.527 | 737531.7 | 10.51 | 0.008 | mg/L | | | | 0.08% |
| e 313.107 | 1308392.2 | 0.2538 | 0.00020 | mg/L | | | | 0.08% |
| a 315.887 | 2744623.8 | 25.90 | 0.023 | mg/L | | | | 0.09% |
| d 226.502 | 41686.3 | 0.5183 | 0.00442 | mg/L | | | | 0.85% |
| o 228.616 | 46107.9 | 2.636 | 0.0331 | mg/L | | | | 1.26% |
| r 267.716 | 47119.4 | 0.5147 | 0.00620 | mg/L | | | | 1.20% |
| u 324.754 | 267180.4 | 1.277 | 0.0122 | mg/L | | | | 0.95% |
| e 238.863 | 100295.1 | 5.194 | 0.0584 | mg/L | | | | 1.12% |
| 404.721 | 331.4 | 24.08 | 1.820 | mg/L | | | | 7.56% |
| g 279.079 | 382500.2 | 25.73 | 0.052 | mg/L | | | | 0.20% |
| n 257.610 | 262100.2 | 0.7802 | 0.00155 | mg/L | | | | 0.20% |
| o 202.030 | 28783.9 | 2.479 | 0.0240 | mg/L | | | | 0.97% |
| a 330.237 | 14374.0 | 23.98 | 0.346 | mg/L | | | | 1.44% |
| i 231.604 | 56315.2 | 2.101 | 0.0244 | mg/L | | | | 1.16% |
| b 220.353 | 2073.6 | 0.5130 | 0.00213 | mg/L | | | | 0.41% |
| b 206.833 | 7968.6 | 5.131 | 0.0301 | mg/L | | | | 0.59% |
| e 196.026 | 1020.9 | 0.5104 | 0.00034 | mg/L | | | | 0.07% |
| n 189.933 | 35237.1 | 5.386 | 0.0459 | mg/L | | | | 0.85% |
| i 334.941 | 851405.1 | 2.538 | 0.0066 | mg/L | | | | 0.26% |
| l 190.800 | 1449.8 | 1.045 | 0.0037 | mg/L | | | | 0.36% |
| 292.402 | 442562.0 | 2.575 | 0.0025 | mg/L | | | | 0.10% |
| Zn 206.191 | 49309.7 | 1.053 | 0.0096 | mg/L | | | | 0.91% |

M ata
I B
Sample Qty: 1.0000 g
Seq. No.: 46 Sample No.: 4 A/S Pos: 1
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 7:58:26 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| 371.030 | 3650104.1 | 1.018 | 0.0034 | mg/L | 0.34% |
| 3?? 068 | -1321.3 | 0.0006 | 0.00020 | mg/L | 31.97% |
| !15 | 8373.8 | 0.0001 | 0.00261 | mg/L | >999.9% |
| .979 | -26.2 | 0.0021 | 0.00094 | mg/L | 45.54% |
| 249.773 | 1150.4 | 0.0138 | 0.00149 | mg/L | 10.80% |
| 233.527 | 92.3 | 0.0007 | 0.00005 | mg/L | 7.42% |
| 313.107 | -5875.9 | 0.0000 | 0.00000 | mg/L | 4.57% |
| 315.887 | 1475.0 | 0.0288 | 0.00022 | mg/L | 0.75% |
| 226.502 | -10.2 | 0.0000 | 0.00000 | mg/L | 53.75% |
| 228.616 | -150.5 | 0.0020 | 0.00017 | mg/L | 8.37% |
| 267.716 | 149.7 | -0.0001 | 0.00020 | mg/L | 170.87% |
| 324.754 | 2935.7 | 0.0020 | 0.00071 | mg/L | 36.58% |
| 238.863 | 199.1 | 0.0164 | 0.00011 | mg/L | 0.68% |
| 404.721 | -838.8 | 1.608 | 1.0414 | mg/L | 64.77% |
| 279.079 | 1100.0 | 0.0779 | 0.00714 | mg/L | 9.16% |
| 257.610 | 96.7 | 0.0002 | 0.00002 | mg/L | 8.05% |
| 202.030 | -17.2 | 0.0004 | 0.00013 | mg/L | 32.14% |
| 330.237 | 684.3 | 0.0656 | 0.00360 | mg/L | 5.49% |
| 231.604 | -128.1 | 0.0026 | 0.00032 | mg/L | 12.61% |
| 220.353 | 14.0 | -0.0006 | 0.00029 | mg/L | 51.89% |
| 206.833 | 59.2 | 0.0152 | 0.00253 | mg/L | 16.65% |
| QC exceeds upper limit for Sb 206.833 | | Action = Continue | | | |
| 196.026 | 13.4 | -0.0001 | 0.00140 | mg/L | >999.9% |
| 189.933 | 104.0 | 0.0104 | 0.00184 | mg/L | 17.76% |
| 334.941 | -410.6 | 0.0007 | 0.00015 | mg/L | 22.93% |
| 190.800 | -13.3 | 0.0021 | 0.00122 | mg/L | 58.24% |
| 292.402 | 647.1 | 0.0001 | 0.00016 | mg/L | 143.06% |
| 206.191 | 276.2 | 0.0055 | 0.00081 | mg/L | 14.88% |

ean Data

D: PBW-M2680014 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: 02/21/02 8:03:18 PM

| | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3538331.3 | 0.987 | 0.0037 | mg/L | | | | 0.38% |
| g 328.068 | -1395.6 | 0.0001 | 0.00011 | mg/L | | | | 120.09% |
| l 308.215 | 8529.1 | 0.0111 | 0.00005 | mg/L | | | | 0.42% |
| s 188.979 | -30.4 | -0.0016 | 0.00179 | mg/L | | | | 109.79% |
| 249.773 | 1056.8 | 0.0121 | 0.00046 | mg/L | | | | 3.78% |
| a 233.527 | 65.6 | 0.0003 | 0.00003 | mg/L | | | | 8.36% |
| e 313.107 | -6137.0 | 0.0000 | 0.00000 | mg/L | | | | 17.81% |
| a 315.887 | -949.4 | 0.0059 | 0.00024 | mg/L | | | | 4.16% |
| d 226.502 | -3.4 | 0.0001 | 0.00004 | mg/L | | | | 43.37% |
| o 228.616 | -171.9 | 0.0008 | 0.00009 | mg/L | | | | 10.93% |
| r 267.716 | 158.0 | 0.0000 | 0.00020 | mg/L | | | | 736.94% |
| u 324.754 | 2894.5 | 0.0018 | 0.00015 | mg/L | | | | 8.41% |
| e 238.863 | 21.1 | 0.0072 | 0.00020 | mg/L | | | | 2.83% |
| 404.721 | -929.1 | -0.1255 | 1.29917 | mg/L | | | | >999.9% |
| g 279.079 | 613.3 | 0.0452 | 0.00154 | mg/L | | | | 3.40% |
| n 257.610 | 95.9 | 0.0002 | 0.00002 | mg/L | | | | 8.66% |
| o 202.030 | -22.3 | 0.0000 | 0.00008 | mg/L | | | | 175.39% |
| Na 330.237 | 917.3 | 0.4726 | 0.00310 | mg/L | | | | 0.66% |
| Ni 231.604 | -164.9 | 0.0012 | 0.00002 | mg/L | | | | 1.32% |
| Pb 220.353 | 15.7 | -0.0001 | 0.00037 | mg/L | | | | 255.60% |
| Sb 206.833 | 43.9 | 0.0053 | 0.00263 | mg/L | | | | 49.20% |
| Se 196.026 | 9.0 | -0.0024 | 0.00136 | mg/L | | | | 57.51% |
| Sn 189.933 | 68.6 | 0.0050 | 0.00033 | mg/L | | | | 6.58% |
| Ti 334.941 | -602.5 | 0.0001 | 0.00012 | mg/L | | | | 114.96% |
| Tl 190.800 | -15.9 | 0.0003 | 0.00000 | mg/L | | | | 0.51% |
| V 292.402 | 661.0 | 0.0002 | 0.00009 | mg/L | | | | 46.30% |
| Zn 206.191 | 176.2 | 0.0033 | 0.00017 | mg/L | | | | 5.19% |

Mean Data

ID: LCSW-M2680014 Seq. No.: 48 Sample No.: 28 A/S Pos: 36
S? e Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:08:14 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3657162.0 | 1.020 | 0.0037 | mg/L | | | | 0.37% |
| Ag 328.068 | 5552.0 | 0.0504 | 0.00067 | mg/L | | | | 1.32% |

| | | | | | |
|---|---|---|---|---|---|
| 308.215 | 36066.0 | 1.967 | 0.0288 | mg/L | 1.46% |
| 1[illegible] 979 | 11.7 | 0.0354 | 0.00291 | mg/L | 8.22% |
| 2[illegible] 3 | 54233.9 | 0.9918 | 0.00940 | mg/L | 0.95% |
| 2[illegible].527 | 149613.7 | 2.132 | 0.0001 | mg/L | 0.00% |
| 313.107 | 253206.0 | 0.0500 | 0.00002 | mg/L | 0.04% |
| 315.887 | 214844.6 | 2.041 | 0.0012 | mg/L | 0.06% |
| 226.502 | 4199.3 | 0.0523 | 0.00039 | mg/L | 0.74% |
| 228.616 | 9226.0 | 0.5359 | 0.00577 | mg/L | 1.08% |
| 267.716 | 18849.7 | 0.2049 | 0.00213 | mg/L | 1.04% |
| 324.754 | 56718.7 | 0.2614 | 0.00307 | mg/L | 1.18% |
| 238.863 | 20261.9 | 1.054 | 0.0138 | mg/L | 1.31% |
| 404.721 | 167.9 | 20.94 | 1.585 | mg/L | 7.57% |
| 279.079 | 30045.0 | 2.025 | 0.0219 | mg/L | 1.08% |
| 257.610 | 175223.7 | 0.5216 | 0.00016 | mg/L | 0.03% |
| 202.030 | 5705.4 | 0.4930 | 0.00305 | mg/L | 0.62% |
| 330.237 | 11021.2 | 18.12 | 0.423 | mg/L | 2.33% |
| 231.604 | 14030.7 | 0.5289 | 0.00379 | mg/L | 0.72% |
| 220.353 | 2081.3 | 0.5149 | 0.00334 | mg/L | 0.65% |
| 206.833 | 817.8 | 0.5059 | 0.00358 | mg/L | 0.71% |
| 196.026 | 1854.7 | 0.9329 | 0.00574 | mg/L | 0.62% |
| 189.933 | 564.9 | 0.0809 | 0.00049 | mg/L | 0.60% |
| 334.941 | 171469.6 | 0.5127 | 0.00011 | mg/L | 0.02% |
| 190.800 | 2808.7 | 2.013 | 0.0118 | mg/L | 0.59% |
| 292.402 | 88508.7 | 0.5121 | 0.00506 | mg/L | 0.99% |
| 206.191 | 24894.0 | 0.5316 | 0.00250 | mg/L | 0.47% |

an Data ----------

): 526172 Seq. No.: 49 Sample No.: 29 A/S Pos: 37

mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 8:13:12 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 37[illegible].030 | 3691981.0 | 1.030 | 0.0003 | mg/L | | | | 0.03% |
| g 068 | -1378.2 | 0.0002 | 0.00018 | mg/L | | | | 82.92% |
| l .215 | 8050.1 | -0.0229 | 0.00098 | mg/L | | | | 4.29% |
| s 188.979 | -29.0 | -0.0004 | 0.00098 | mg/L | | | | 259.50% |
| 249.773 | 3759.8 | 0.0619 | 0.00247 | mg/L | | | | 4.00% |
| a 233.527 | 477.0 | 0.0062 | 0.00006 | mg/L | | | | 1.05% |
| e 313.107 | -5878.4 | 0.0000 | 0.00000 | mg/L | | | | 12.06% |
| a 315.887 | 1039105.4 | 9.816 | 0.0007 | mg/L | | | | 0.01% |
| d 226.502 | 14.9 | 0.0003 | 0.00008 | mg/L | | | | 26.30% |
| o 228.616 | -166.7 | 0.0011 | 0.00003 | mg/L | | | | 3.17% |
| r 267.716 | 175.0 | 0.0002 | 0.00041 | mg/L | | | | 255.39% |
| u 324.754 | 2730.2 | 0.0010 | 0.00005 | mg/L | | | | 5.69% |
| e 238.863 | 85.3 | 0.0105 | 0.00028 | mg/L | | | | 2.66% |
| 404.721 | -728.2 | 3.732 | 1.6532 | mg/L | | | | 44.30% |
| g 279.079 | 39062.7 | 2.631 | 0.0358 | mg/L | | | | 1.36% |
| n 257.610 | 4938.8 | 0.0146 | 0.00018 | mg/L | | | | 1.23% |
| o 202.030 | -13.0 | 0.0008 | 0.00006 | mg/L | | | | 8.13% |
| a 330.237 | 4623.6 | 6.947 | 0.1941 | mg/L | | | | 2.79% |
| i 231.604 | -149.3 | 0.0018 | 0.00017 | mg/L | | | | 9.60% |
| b 220.353 | 14.7 | -0.0004 | 0.00072 | mg/L | | | | 180.14% |
| b 206.833 | 40.4 | 0.0031 | 0.00037 | mg/L | | | | 12.00% |
| e 196.026 | 7.3 | -0.0032 | 0.00024 | mg/L | | | | 7.57% |
| n 189.933 | 669.6 | 0.0969 | 0.00127 | mg/L | | | | 1.32% |
| i 334.941 | -571.7 | 0.0002 | 0.00005 | mg/L | | | | 23.62% |
| l 190.800 | -14.8 | 0.0010 | 0.00203 | mg/L | | | | 197.61% |
| 292.402 | 671.5 | 0.0003 | 0.00004 | mg/L | | | | 15.23% |
| n 206.191 | 248.7 | 0.0049 | 0.00010 | mg/L | | | | 1.98% |

Mean Data ----------

ID: 526172D 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: 02/21/02 8:18:09 PM

| E. t | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y [illegible].030 | 3737576.0 | 1.043 | 0.0034 | mg/L | | | | 0.33% |
| Ag 328.068 | -1384.4 | 0.0002 | 0.00017 | mg/L | | | | 99.79% |
| Al 308.215 | 7972.3 | -0.0284 | 0.00468 | mg/L | | | | 16.48% |
| As 188.979 | -29.0 | -0.0004 | 0.00011 | mg/L | | | | 32.38% |
| B 249.773 | 3611.1 | 0.0591 | 0.00028 | mg/L | | | | 0.48% |

| | | | | | |
|---|---|---|---|---|---|
| 233.527 | 468.7 | 0.0061 | 0.00005 | mg/L | 0.81% |
| 3[illegible]07 | -5783.4 | 0.0000 | 0.00000 | mg/L | 0.19% |
| 3[illegible]37 | 1026771.9 | 9.700 | 0.0044 | mg/L | 0.05% |
| 22[illegible].502 | 17.4 | 0.0003 | 0.00004 | mg/L | 10.89% |
| 228.616 | -165.8 | 0.0011 | 0.00008 | mg/L | 7.21% |
| 267.716 | 195.2 | 0.0004 | 0.00002 | mg/L | 4.65% |
| 324.754 | 2650.0 | 0.0006 | 0.00022 | mg/L | 38.12% |
| 238.863 | 57.0 | 0.0090 | 0.00046 | mg/L | 5.14% |
| 404.721 | -757.9 | 3.163 | 0.7076 | mg/L | 22.37% |
| 279.079 | 38624.1 | 2.602 | 0.0043 | mg/L | 0.16% |
| 257.610 | 4891.9 | 0.0145 | 0.00002 | mg/L | 0.14% |
| 202.030 | -13.1 | 0.0007 | 0.00018 | mg/L | 23.62% |
| 330.237 | 4528.0 | 6.780 | 0.0291 | mg/L | 0.43% |
| 231.604 | -148.5 | 0.0018 | 0.00022 | mg/L | 12.13% |
| 220.353 | 14.6 | -0.0004 | 0.00013 | mg/L | 30.52% |
| 206.833 | 37.2 | 0.0010 | 0.00070 | mg/L | 67.08% |
| 196.026 | 8.7 | -0.0025 | 0.00099 | mg/L | 39.21% |
| 189.933 | 655.2 | 0.0947 | 0.00093 | mg/L | 0.99% |
| 334.941 | -616.0 | 0.0001 | 0.00004 | mg/L | 61.72% |
| 190.800 | -14.7 | 0.0011 | 0.00067 | mg/L | 61.44% |
| 292.402 | 643.2 | 0.0001 | 0.00024 | mg/L | 261.94% |
| 206.191 | 224.1 | 0.0044 | 0.00010 | mg/L | 2.36% |

an Data ----------

: 526172S Seq. No.: 51 Sample No.: 31 A/S Pos: 39
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:23:07 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3702607.7 | 1.033 | 0.0013 | mg/L | | | | 0.13% |
| [illegible] 328.068 | 5526.8 | 0.0503 | 0.00007 | mg/L | | | | 0.14% |
| [illegible] 308.215 | 35710.4 | 1.941 | 0.0010 | mg/L | | | | 0.05% |
| [illegible] [illegible].979 | 14.9 | 0.0382 | 0.00031 | mg/L | | | | 0.81% |
| [illegible] 73 | 57930.2 | 1.060 | 0.0029 | mg/L | | | | 0.27% |
| [illegible] [illegible].527 | 148623.3 | 2.118 | 0.0002 | mg/L | | | | 0.01% |
| [illegible] 313.107 | 253173.1 | 0.0500 | 0.00004 | mg/L | | | | 0.08% |
| [illegible] 315.887 | 1242575.8 | 11.74 | 0.012 | mg/L | | | | 0.11% |
| [illegible] 226.502 | 4087.1 | 0.0509 | 0.00003 | mg/L | | | | 0.05% |
| [illegible] 228.616 | 9175.5 | 0.5330 | 0.00001 | mg/L | | | | 0.00% |
| [illegible] 267.716 | 18918.5 | 0.2056 | 0.00060 | mg/L | | | | 0.29% |
| [illegible] 324.754 | 56342.1 | 0.2596 | 0.00061 | mg/L | | | | 0.24% |
| [illegible] 238.863 | 20134.8 | 1.048 | 0.0008 | mg/L | | | | 0.08% |
| 404.721 | 300.3 | 23.49 | 1.280 | mg/L | | | | 5.45% |
| [illegible] 279.079 | 68594.2 | 4.617 | 0.0053 | mg/L | | | | 0.11% |
| [illegible] 257.610 | 179453.9 | 0.5342 | 0.00127 | mg/L | | | | 0.24% |
| [illegible] 202.030 | 5615.3 | 0.4852 | 0.00023 | mg/L | | | | 0.05% |
| [illegible] 330.237 | 15367.2 | 25.71 | 0.181 | mg/L | | | | 0.70% |
| [illegible] 231.604 | 13699.1 | 0.5166 | 0.00005 | mg/L | | | | 0.01% |
| [illegible] 220.353 | 2069.9 | 0.5121 | 0.00023 | mg/L | | | | 0.04% |
| [illegible] 206.833 | 819.7 | 0.5071 | 0.00260 | mg/L | | | | 0.51% |
| [illegible] 196.026 | 1847.6 | 0.9293 | 0.00032 | mg/L | | | | 0.03% |
| [illegible] 189.933 | 1133.1 | 0.1679 | 0.00016 | mg/L | | | | 0.10% |
| [illegible] 334.941 | 171147.9 | 0.5117 | 0.00130 | mg/L | | | | 0.25% |
| [illegible] 190.800 | 2809.7 | 2.014 | 0.0019 | mg/L | | | | 0.09% |
| [illegible] 292.402 | 88849.6 | 0.5140 | 0.00083 | mg/L | | | | 0.16% |
| [illegible] 206.191 | 24381.9 | 0.5206 | 0.00137 | mg/L | | | | 0.26% |

lean Data ----------

ID: 526172A Seq. No.: 52 Sample No.: 32 A/S Pos: 40
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:28:02 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3719740.7 | 1.038 | 0.0036 | mg/L | | | | 0.35% |
| Al [illegible].068 | 5196.4 | 0.0479 | 0.00032 | mg/L | | | | 0.66% |
| As [illegible].215 | 34804.9 | 1.877 | 0.0160 | mg/L | | | | 0.85% |
| As 188.979 | 12.8 | 0.0363 | 0.00238 | mg/L | | | | 6.55% |
| B 249.773 | 58615.8 | 1.073 | 0.0101 | mg/L | | | | 0.94% |
| Ba 233.527 | 142063.5 | 2.024 | 0.0155 | mg/L | | | | 0.77% |
| Be 313.107 | 245750.2 | 0.0486 | 0.00003 | mg/L | | | | 0.06% |
| Ca 315.887 | 1227668.9 | 11.59 | 0.003 | mg/L | | | | 0.02% |

| | | | | | |
|---|---|---|---|---|---|
| 226.502 | 3936.3 | 0.0491 | 0.00010 | mg/L | 0.21% |
| 2[illegible]16 | 8792.3 | 0.5112 | 0.00174 | mg/L | 0.34% |
| 2 16 | 18067.7 | 0.1963 | 0.00182 | mg/L | 0.93% |
| 3[illegible]54 | 54045.7 | 0.2485 | 0.00226 | mg/L | 0.91% |
| 238.863 | 19206.2 | 0.9995 | 0.00806 | mg/L | 0.81% |
| 04.721 | 232.9 | 22.19 | 0.265 | mg/L | 1.19% |
| 279.079 | 66273.2 | 4.461 | 0.0338 | mg/L | 0.76% |
| 257.610 | 171622.3 | 0.5109 | 0.00317 | mg/L | 0.62% |
| 202.030 | 5405.4 | 0.4671 | 0.00119 | mg/L | 0.26% |
| 330.237 | 14738.2 | 24.62 | 0.222 | mg/L | 0.90% |
| 231.604 | 13189.1 | 0.4977 | 0.00094 | mg/L | 0.19% |
| 220.353 | 2001.1 | 0.4949 | 0.00034 | mg/L | 0.07% |
| 206.833 | 789.6 | 0.4876 | 0.00051 | mg/L | 0.10% |
| 196.026 | 1678.7 | 0.8437 | 0.00370 | mg/L | 0.44% |
| 189.933 | 1105.2 | 0.1636 | 0.00071 | mg/L | 0.43% |
| 334.941 | 163476.4 | 0.4889 | 0.00295 | mg/L | 0.60% |
| 190.800 | 2716.7 | 1.948 | 0.0013 | mg/L | 0.06% |
| 292.402 | 84849.8 | 0.4907 | 0.00363 | mg/L | 0.74% |
| 206.191 | 23448.3 | 0.5007 | 0.00409 | mg/L | 0.82% |

an Data ----------

: 526172L Seq. No.: 53 Sample No.: 33 A/S Pos: 41
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:32:52 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3678275.5 | 1.026 | 0.0055 | mg/L | | | | 0.53% |
| [illegible] 328.068 | -1364.6 | 0.0003 | 0.00030 | mg/L | | | | 96.29% |
| . 308.215 | 8228.3 | -0.0102 | 0.00202 | mg/L | | | | 19.71% |
| [illegible] 188.979 | -28.4 | 0.0001 | 0.00196 | mg/L | | | | >999.9% |
| 249.773 | 1397.1 | 0.0183 | 0.00043 | mg/L | | | | 2.37% |
| [illegible] 233.527 | 117.0 | 0.0011 | 0.00006 | mg/L | | | | 5.86% |
| [illegible] 313.107 | -5993.6 | 0.0000 | 0.00001 | mg/L | | | | 75.47% |
| [illegible] 887 | 206981.8 | 1.967 | 0.0004 | mg/L | | | | 0.02% |
| [illegible] .502 | -0.6 | 0.0001 | 0.00001 | mg/L | | | | 8.11% |
| [illegible] 228.616 | -167.4 | 0.0010 | 0.00004 | mg/L | | | | 4.21% |
| [illegible] 267.716 | 166.8 | 0.0001 | 0.00005 | mg/L | | | | 65.34% |
| [illegible] 324.754 | 2636.2 | 0.0005 | 0.00005 | mg/L | | | | 9.38% |
| [illegible] 238.863 | -91.6 | 0.0013 | 0.00012 | mg/L | | | | 8.69% |
| 404.721 | -853.2 | 1.332 | 1.0604 | mg/L | | | | 79.59% |
| [illegible] 279.079 | 8133.2 | 0.5509 | 0.00211 | mg/L | | | | 0.38% |
| [illegible] 257.610 | 1052.8 | 0.0030 | 0.00003 | mg/L | | | | 0.95% |
| [illegible] 202.030 | -17.1 | 0.0004 | 0.00004 | mg/L | | | | 11.15% |
| [illegible] 330.237 | 1367.9 | 1.260 | 0.0054 | mg/L | | | | 0.43% |
| [illegible] 231.604 | -184.3 | 0.0005 | 0.00009 | mg/L | | | | 18.22% |
| [illegible] 220.353 | 12.5 | -0.0010 | 0.00046 | mg/L | | | | 48.49% |
| [illegible] 206.833 | 37.8 | 0.0014 | 0.00061 | mg/L | | | | 42.83% |
| [illegible] 196.026 | 13.0 | -0.0003 | 0.00123 | mg/L | | | | 359.83% |
| [illegible] 189.933 | 165.7 | 0.0198 | 0.00032 | mg/L | | | | 1.59% |
| [illegible] 334.941 | -589.4 | 0.0001 | 0.00004 | mg/L | | | | 27.08% |
| [illegible] 190.800 | -14.6 | 0.0012 | 0.00126 | mg/L | | | | 106.15% |
| [illegible] 292.402 | 674.7 | 0.0003 | 0.00015 | mg/L | | | | 54.49% |
| [illegible] 206.191 | 109.4 | 0.0019 | 0.00002 | mg/L | | | | 1.16% |

[illegible]ean Data ----------

[illegible]D: PBW-M2680031 Seq. No.: 54 Sample No.: 34 A/S Pos: 42
[illegible]ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:37:42 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3577965.8 | 0.998 | 0.0032 | mg/L | | | | 0.32% |
| Ag 328.068 | -1337.6 | 0.0005 | 0.00017 | mg/L | | | | 34.22% |
| Al 308.215 | 8250.9 | -0.0086 | 0.00084 | mg/L | | | | 9.68% |
| As 188.979 | -30.3 | -0.0016 | 0.00052 | mg/L | | | | 32.93% |
| B [illegible].773 | 760.5 | 0.0066 | 0.00027 | mg/L | | | | 4.09% |
| B [illegible]3.527 | 53.0 | 0.0001 | 0.00005 | mg/L | | | | 33.42% |
| Be [illegible]13.107 | -6079.3 | 0.0000 | 0.00001 | mg/L | | | | 88.65% |
| Ca 315.887 | -1427.1 | 0.0014 | 0.00030 | mg/L | | | | 21.89% |
| Cd 226.502 | -1.4 | 0.0001 | 0.00003 | mg/L | | | | 30.82% |
| Co 228.616 | -173.8 | 0.0007 | 0.00008 | mg/L | | | | 11.69% |
| Cr 267.716 | 145.4 | -0.0002 | 0.00012 | mg/L | | | | 70.61% |

| | | | | | |
|---|---|---|---|---|---|
| 324.754 | 2757.2 | 0.0011 | 0.00008 | mg/L | 7.08% |
| 23[illegible]63 | 13.3 | 0.0068 | 0.00002 | mg/L | 0.26% |
| 0[illegible] | -826.2 | 1.851 | 0.3796 | mg/L | 20.51% |
| 27[illegible]79 | 127.2 | 0.0125 | 0.00060 | mg/L | 4.79% |
| 257.610 | 96.9 | 0.0002 | 0.00002 | mg/L | 8.28% |
| 202.030 | -23.4 | -0.0001 | 0.00025 | mg/L | 177.89% |
| 330.237 | 838.6 | 0.3351 | 0.07687 | mg/L | 22.94% |
| 231.604 | -176.4 | 0.0008 | 0.00003 | mg/L | 4.57% |
| 220.353 | 13.6 | -0.0007 | 0.00053 | mg/L | 78.57% |
| 206.833 | 37.7 | 0.0013 | 0.00070 | mg/L | 52.59% |
| 196.026 | 9.5 | -0.0021 | 0.00121 | mg/L | 57.48% |
| 189.933 | 38.0 | 0.0003 | 0.00028 | mg/L | 96.40% |
| 334.941 | -580.7 | 0.0002 | 0.00007 | mg/L | 42.37% |
| 190.800 | -15.0 | 0.0009 | 0.00015 | mg/L | 16.73% |
| 292.402 | 669.6 | 0.0002 | 0.00020 | mg/L | 80.53% |
| 206.191 | 178.8 | 0.0034 | 0.00002 | mg/L | 0.49% |

In Data ----------

: LCSW-M2680031 Seq. No.: 55 Sample No.: 35 A/S Pos: 43
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:42:34 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3751507.5 | 1.047 | 0.0013 | mg/L | | | | 0.12% |
| 328.068 | 5454.5 | 0.0497 | 0.00003 | mg/L | | | | 0.07% |
| 308.215 | 35524.6 | 1.928 | 0.0196 | mg/L | | | | 1.01% |
| 188.979 | 15.6 | 0.0388 | 0.00297 | mg/L | | | | 7.64% |
| 249.773 | 53460.2 | 0.9776 | 0.01236 | mg/L | | | | 1.26% |
| 233.527 | 147373.6 | 2.100 | 0.0149 | mg/L | | | | 0.71% |
| 313.107 | 249706.3 | 0.0494 | 0.00001 | mg/L | | | | 0.02% |
| 315.887 | 211003.9 | 2.005 | 0.0009 | mg/L | | | | 0.04% |
| 226.502 | 4153.0 | 0.0517 | 0.00065 | mg/L | | | | 1.25% |
| 228.616 | 9133.0 | 0.5306 | 0.00240 | mg/L | | | | 0.45% |
| 716 | 18642.9 | 0.2026 | 0.00130 | mg/L | | | | 0.64% |
| 754 | 56008.1 | 0.2579 | 0.00221 | mg/L | | | | 0.86% |
| 238.863 | 19793.7 | 1.030 | 0.0071 | mg/L | | | | 0.69% |
| 404.721 | 228.2 | 22.10 | 0.448 | mg/L | | | | 2.03% |
| 279.079 | 29450.8 | 1.985 | 0.0167 | mg/L | | | | 0.84% |
| 257.610 | 172645.0 | 0.5139 | 0.00042 | mg/L | | | | 0.08% |
| 202.030 | 5636.7 | 0.4870 | 0.00236 | mg/L | | | | 0.48% |
| 330.237 | 11022.7 | 18.13 | 0.204 | mg/L | | | | 1.12% |
| 231.604 | 13845.7 | 0.5221 | 0.00407 | mg/L | | | | 0.78% |
| 220.353 | 2050.7 | 0.5073 | 0.00019 | mg/L | | | | 0.04% |
| 206.833 | 806.9 | 0.4988 | 0.00037 | mg/L | | | | 0.07% |
| 196.026 | 1840.4 | 0.9256 | 0.00413 | mg/L | | | | 0.45% |
| 189.933 | 538.7 | 0.0769 | 0.00016 | mg/L | | | | 0.20% |
| 334.941 | 169295.1 | 0.5062 | 0.00002 | mg/L | | | | 0.00% |
| 190.800 | 2774.8 | 1.989 | 0.0026 | mg/L | | | | 0.13% |
| 292.402 | 87698.3 | 0.5073 | 0.00365 | mg/L | | | | 0.72% |
| 206.191 | 24533.5 | 0.5239 | 0.00341 | mg/L | | | | 0.65% |

ean Data ----------

D: 525478 Seq. No.: 56 Sample No.: 36 A/S Pos: 44
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:47:25 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3659148.5 | 1.021 | 0.0062 | mg/L | | | | 0.61% |
| g 328.068 | -1493.9 | -0.0006 | 0.00006 | mg/L | | | | 9.55% |
| l 308.215 | 8171.5 | -0.0143 | 0.00796 | mg/L | | | | 55.77% |
| s 188.979 | -32.3 | -0.0033 | 0.00128 | mg/L | | | | 39.22% |
| 249.773 | 1211.0 | 0.0149 | 0.00089 | mg/L | | | | 6.00% |
| a 233.527 | 137.4 | 0.0013 | 0.00009 | mg/L | | | | 6.63% |
| e 313.107 | -6376.2 | -0.0001 | 0.00000 | mg/L | | | | 0.65% |
| [illegible].887 | 155765.4 | 1.484 | 0.0007 | mg/L | | | | 0.05% |
| [illegible].502 | 2.4 | 0.0002 | 0.00003 | mg/L | | | | 17.06% |
| o [illegible]8.616 | -169.0 | 0.0010 | 0.00037 | mg/L | | | | 38.33% |
| r 267.716 | 1294.4 | 0.0124 | 0.00005 | mg/L | | | | 0.43% |
| u 324.754 | 4805.6 | 0.0110 | 0.00012 | mg/L | | | | 1.08% |
| e 238.863 | 4497.1 | 0.2387 | 0.00483 | mg/L | | | | 2.02% |
| 404.721 | -1407.9 | -9.322 | 0.0978 | mg/L | | | | 1.05% |

| | | | | | |
|---|---|---|---|---|---|
| 279.079 | 3884.1 | 0.2652 | 0.00385 | mg/L | 1.45% |
| 257 610 | 365.3 | 0.0010 | 0.00001 | mg/L | 0.63% |
| 2 30 | -15.1 | 0.0006 | 0.00005 | mg/L | 7.79% |
| 3. .37 | 45944.0 | 79.13 | 1.464 | mg/L | 1.85% |
| 231.604 | -172.6 | 0.0009 | 0.00001 | mg/L | 0.87% |
| 220.353 | 12.7 | -0.0009 | 0.00081 | mg/L | 89.76% |
| 206.833 | 38.4 | 0.0018 | 0.00068 | mg/L | 38.46% |
| 196.026 | 10.2 | -0.0018 | 0.00288 | mg/L | 162.49% |
| 189.933 | 100.6 | 0.0099 | 0.00028 | mg/L | 2.87% |
| 334.941 | -528.3 | 0.0003 | 0.00008 | mg/L | 25.35% |
| 190.800 | -14.8 | 0.0011 | 0.00026 | mg/L | 23.61% |
| 292.402 | 657.0 | 0.0002 | 0.00017 | mg/L | 99.80% |
| 206.191 | 506.7 | 0.0104 | 0.00018 | mg/L | 1.73% |

an Data ----------

: CCV Seq. No.: 57 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: 02/21/02 8:52:24 PM

| ement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3565737.2 | 0.995 | 0.0026 | mg/L | | | | 0.26% |
| f 328.068 | 69286.6 | 0.5124 | 0.00203 | mg/L | | | | 0.40% |
| . 308.215 | 150535.4 | 10.10 | 0.021 | mg/L | | | | 0.21% |
| i 188.979 | 1169.3 | 1.053 | 0.0093 | mg/L | | | | 0.89% |
| 249.773 | 138360.7 | 2.542 | 0.0046 | mg/L | | | | 0.18% |
| a 233.527 | 737113.2 | 10.51 | 0.004 | mg/L | | | | 0.04% |
| e 313.107 | 1307652.6 | 0.2536 | 0.00021 | mg/L | | | | 0.08% |
| a 315.887 | 2738680.4 | 25.85 | 0.017 | mg/L | | | | 0.06% |
| d 226.502 | 41826.7 | 0.5200 | 0.00136 | mg/L | | | | 0.26% |
| o 228.616 | 46243.8 | 2.644 | 0.0026 | mg/L | | | | 0.10% |
| r 267.716 | 47372.5 | 0.5175 | 0.00060 | mg/L | | | | 0.12% |
| a 324.754 | 268264.3 | 1.282 | 0.0002 | mg/L | | | | 0.02% |
| e 238.863 | 100079.7 | 5.182 | 0.0058 | mg/L | | | | 0.11% |
| 4 `21 | 369.3 | 24.81 | 1.817 | mg/L | | | | 7.32% |
| g 079 | 380189.6 | 25.57 | 0.011 | mg/L | | | | 0.04% |
| n 25/.610 | 262717.5 | 0.7821 | 0.00191 | mg/L | | | | 0.24% |
| o 202.030 | 28827.2 | 2.483 | 0.0079 | mg/L | | | | 0.32% |
| a 330.237 | 14348.6 | 23.94 | 0.071 | mg/L | | | | 0.30% |
| i 231.604 | 56396.9 | 2.104 | 0.0051 | mg/L | | | | 0.24% |
| b 220.353 | 2063.2 | 0.5104 | 0.00441 | mg/L | | | | 0.86% |
| b 206.833 | 7965.0 | 5.128 | 0.0255 | mg/L | | | | 0.50% |
| e 196.026 | 1016.6 | 0.5082 | 0.00301 | mg/L | | | | 0.59% |
| n 189.933 | 35906.1 | 5.489 | 0.0137 | mg/L | | | | 0.25% |
| i 334.941 | 854460.6 | 2.547 | 0.0052 | mg/L | | | | 0.20% |
| l 190.800 | 1445.9 | 1.042 | 0.0037 | mg/L | | | | 0.35% |
| 292.402 | 443391.4 | 2.580 | 0.0035 | mg/L | | | | 0.13% |
| n 206.191 | 48706.6 | 1.040 | 0.0008 | mg/L | | | | 0.08% |

lean Data ----------

:D: CCB Seq. No.: 58 Sample No.: 4 A/S Pos: 1
iample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 8:57:17 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| ( 371.030 | 3630231.2 | 1.013 | 0.0031 | mg/L | | | | 0.30% |
| Ag 328.068 | -1381.1 | 0.0002 | 0.00024 | mg/L | | | | 120.97% |
| Al 308.215 | 8142.1 | -0.0164 | 0.00066 | mg/L | | | | 4.06% |
| As 188.979 | -28.7 | -0.0001 | 0.00149 | mg/L | | | | >999.9% |
| B 249.773 | 1045.7 | 0.0118 | 0.00140 | mg/L | | | | 11.81% |
| Ba 233.527 | 79.0 | 0.0005 | 0.00007 | mg/L | | | | 13.37% |
| Be 313.107 | -5919.4 | 0.0000 | 0.00001 | mg/L | | | | 31.01% |
| Ca 315.887 | 406.6 | 0.0187 | 0.00202 | mg/L | | | | 10.83% |
| Cd 226.502 | -0.1 | 0.0001 | 0.00002 | mg/L | | | | 12.97% |
| Co 228.616 | -159.9 | 0.0015 | 0.00026 | mg/L | | | | 17.61% |
| Cr `7.716 | 127.9 | -0.0004 | 0.00012 | mg/L | | | | 34.20% |
| Cu .754 | 3019.8 | 0.0024 | 0.00088 | mg/L | | | | 37.35% |
| Fe _8.863 | -38.1 | 0.0041 | 0.00077 | mg/L | | | | 18.65% |
| K 404.721 | -766.7 | 2.992 | 0.4228 | mg/L | | | | 14.13% |
| *QC exceeds upper limit for K 404.721 | | Action = Continue | | | | | | |
| Mg 279.079 | 191.9 | 0.0169 | 0.00410 | mg/L | | | | 24.34% |
| Mn 257.610 | 58.1 | 0.0001 | 0.00000 | mg/L | | | | 1.55% |

| | | | | |
|---|---|---|---|---|
| 202.030 | -18.3 | 0.0003 | 0.00000 mg/L | 1.34% |
| 330.237 | 690.6 | 0.0765 | 0.03280 mg/L | 42.90% |
| 604 | -161.0 | 0.0013 | 0.00036 mg/L | 26.71% |
| 353 | 12.1 | -0.0011 | 0.00079 mg/L | 74.16% |
| 206.833 | 61.8 | 0.0169 | 0.00490 mg/L | 28.99% |

QC exceeds upper limit for Sb 206.833 Action = Continue

| | | | | |
|---|---|---|---|---|
| 196.026 | 4.6 | -0.0046 | 0.00028 mg/L | 6.07% |
| 189.933 | 83.7 | 0.0073 | 0.00142 mg/L | 19.52% |
| 334.941 | -413.9 | 0.0007 | 0.00015 mg/L | 22.80% |
| 190.800 | -13.7 | 0.0019 | 0.00294 mg/L | 158.39% |
| 292.402 | 702.6 | 0.0004 | 0.00007 mg/L | 15.15% |
| 206.191 | 303.7 | 0.0061 | 0.00069 mg/L | 11.30% |

Mean Data

ID: 525478D Seq. No.: 59 Sample No.: 37 A/S Pos: 45
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:02:08 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3616980.1 | 1.009 | 0.0080 | mg/L | | | | 0.80% |
| 328.068 | -1450.2 | -0.0003 | 0.00009 | mg/L | | | | 30.06% |
| 308.215 | 8201.1 | -0.0122 | 0.00856 | mg/L | | | | 70.26% |
| 188.979 | -29.7 | -0.0010 | 0.00076 | mg/L | | | | 73.47% |
| 249.773 | 1197.6 | 0.0146 | 0.00085 | mg/L | | | | 5.78% |
| 233.527 | 140.2 | 0.0014 | 0.00004 | mg/L | | | | 3.24% |
| 313.107 | -6448.0 | -0.0001 | 0.00001 | mg/L | | | | 7.31% |
| 315.887 | 158042.5 | 1.506 | 0.0004 | mg/L | | | | 0.02% |
| 226.502 | -0.4 | 0.0001 | 0.00001 | mg/L | | | | 6.20% |
| 228.616 | -165.5 | 0.0012 | 0.00009 | mg/L | | | | 7.56% |
| 267.716 | 1322.5 | 0.0127 | 0.00034 | mg/L | | | | 2.68% |
| 324.754 | 4797.4 | 0.0109 | 0.00026 | mg/L | | | | 2.33% |
| 238.863 | 4467.7 | 0.2372 | 0.00234 | mg/L | | | | 0.99% |
| 404.721 | -1380.0 | -8.786 | 1.4011 | mg/L | | | | 15.95% |
| .079 | 3877.4 | 0.2647 | 0.00369 | mg/L | | | | 1.39% |
| .610 | 358.8 | 0.0010 | 0.00001 | mg/L | | | | 1.35% |
| .030 | -15.5 | 0.0005 | 0.00010 | mg/L | | | | 18.70% |
| 330.237 | 46050.3 | 79.31 | 1.015 | mg/L | | | | 1.28% |
| 231.604 | -172.3 | 0.0009 | 0.00013 | mg/L | | | | 14.35% |
| 220.353 | 13.2 | -0.0008 | 0.00016 | mg/L | | | | 19.80% |
| 206.833 | 41.7 | 0.0039 | 0.00057 | mg/L | | | | 14.64% |
| 196.026 | 13.3 | -0.0002 | 0.00223 | mg/L | | | | >999.9% |
| 189.933 | 121.2 | 0.0130 | 0.00021 | mg/L | | | | 1.62% |
| 334.941 | -552.4 | 0.0003 | 0.00005 | mg/L | | | | 21.56% |
| 190.800 | -16.3 | 0.0000 | 0.00030 | mg/L | | | | >999.9% |
| 292.402 | 753.0 | 0.0007 | 0.00037 | mg/L | | | | 50.33% |
| 206.191 | 419.3 | 0.0085 | 0.00028 | mg/L | | | | 3.30% |

Mean Data

ID: 525478S 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: 02/21/02 9:07:01 PM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3672513.7 | 1.024 | 0.0053 | mg/L | | | | 0.52% |
| Ag 328.068 | 5494.0 | 0.0500 | 0.00053 | mg/L | | | | 1.06% |
| Al 308.215 | 36531.5 | 2.000 | 0.0454 | mg/L | | | | 2.27% |
| As 188.979 | 13.2 | 0.0367 | 0.00060 | mg/L | | | | 1.62% |
| B 249.773 | 54855.5 | 1.003 | 0.0144 | mg/L | | | | 1.43% |
| Ba 233.527 | 147602.1 | 2.103 | 0.0361 | mg/L | | | | 1.72% |
| Be 313.107 | 253456.4 | 0.0501 | 0.00001 | mg/L | | | | 0.02% |
| Ca 315.887 | 375018.0 | 3.552 | 0.0617 | mg/L | | | | 1.74% |
| Cd 226.502 | 4075.1 | 0.0508 | 0.00034 | mg/L | | | | 0.66% |
| Co 228.616 | 9165.4 | 0.5325 | 0.00769 | mg/L | | | | 1.45% |
| Cr 267.716 | 19834.6 | 0.2157 | 0.00360 | mg/L | | | | 1.67% |
| Cu 324.754 | 59088.6 | 0.2728 | 0.00491 | mg/L | | | | 1.80% |
| Fe .863 | 24364.0 | 1.266 | 0.0202 | mg/L | | | | 1.59% |
| K .721 | -147.4 | 14.89 | 1.304 | mg/L | | | | 8.76% |
| Mg 279.079 | 33591.5 | 2.263 | 0.0400 | mg/L | | | | 1.77% |
| Mn 257.610 | 173853.5 | 0.5175 | 0.00913 | mg/L | | | | 1.76% |
| Mo 202.030 | 5596.9 | 0.4836 | 0.00247 | mg/L | | | | 0.51% |
| Na 330.237 | 59735.8 | 103.2 | 1.80 | mg/L | | | | 1.74% |

| | | | | | |
|---|---|---|---|---|---|
| 231.604 | 13759.6 | 0.5189 | 0.00249 | mg/L | 0.48% |
| 2[illegible] 353 | 2061.4 | 0.5099 | 0.00298 | mg/L | 0.58% |
| [illegible]33 | 825.8 | 0.5110 | 0.00338 | mg/L | 0.66% |
| 1[illegible].026 | 1823.7 | 0.9172 | 0.00615 | mg/L | 0.67% |
| 189.933 | 622.8 | 0.0898 | 0.00065 | mg/L | 0.72% |
| 334.941 | 170935.9 | 0.5111 | 0.00924 | mg/L | 1.81% |
| 190.800 | 2793.7 | 2.003 | 0.0067 | mg/L | 0.34% |
| 292.402 | 88331.1 | 0.5110 | 0.00853 | mg/L | 1.67% |
| 206.191 | 25105.8 | 0.5361 | 0.00808 | mg/L | 1.51% |

an Data ----------

: 525478A Seq. No.: 61 Sample No.: 39 A/S Pos: 47
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:11:55 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3535285.4 | 0.986 | 0.0051 | mg/L | | | | 0.52% |
| [illegible] 328.068 | 5283.6 | 0.0485 | 0.00010 | mg/L | | | | 0.20% |
| [illegible] 308.215 | 36743.7 | 2.015 | 0.0011 | mg/L | | | | 0.05% |
| [illegible] 188.979 | 9.4 | 0.0334 | 0.00259 | mg/L | | | | 7.77% |
| 249.773 | 56554.2 | 1.035 | 0.0015 | mg/L | | | | 0.14% |
| [illegible] 233.527 | 144821.6 | 2.064 | 0.0020 | mg/L | | | | 0.09% |
| [illegible] 313.107 | 245627.0 | 0.0486 | 0.00000 | mg/L | | | | 0.01% |
| [illegible] 315.887 | 367300.4 | 3.479 | 0.0007 | mg/L | | | | 0.02% |
| [illegible] 226.502 | 4073.5 | 0.0508 | 0.00000 | mg/L | | | | 0.00% |
| [illegible] 228.616 | 8996.9 | 0.5229 | 0.00016 | mg/L | | | | 0.03% |
| [illegible] 267.716 | 19409.2 | 0.2110 | 0.00007 | mg/L | | | | 0.03% |
| [illegible] 324.754 | 58245.8 | 0.2687 | 0.00034 | mg/L | | | | 0.13% |
| [illegible] 238.863 | 23998.6 | 1.247 | 0.0019 | mg/L | | | | 0.16% |
| 404.721 | -260.3 | 12.72 | 1.671 | mg/L | | | | 13.14% |
| [illegible] 279.079 | 32914.6 | 2.218 | 0.0014 | mg/L | | | | 0.06% |
| [illegible] 257.610 | 169950.2 | 0.5059 | 0.00037 | mg/L | | | | 0.07% |
| [illegible] 202.030 | 5549.1 | 0.4795 | 0.00080 | mg/L | | | | 0.17% |
| [illegible] .237 | 60034.8 | 103.7 | 0.05 | mg/L | | | | 0.05% |
| [illegible] .604 | 13599.1 | 0.5129 | 0.00087 | mg/L | | | | 0.17% |
| [illegible] 220.353 | 2003.1 | 0.4954 | 0.00176 | mg/L | | | | 0.35% |
| [illegible] 206.833 | 795.2 | 0.4912 | 0.00357 | mg/L | | | | 0.73% |
| [illegible] 196.026 | 1772.8 | 0.8914 | 0.00408 | mg/L | | | | 0.46% |
| [illegible] 189.933 | 604.6 | 0.0870 | 0.00030 | mg/L | | | | 0.35% |
| [illegible] 334.941 | 166676.7 | 0.4984 | 0.00010 | mg/L | | | | 0.02% |
| [illegible] 190.800 | 2723.5 | 1.953 | 0.0052 | mg/L | | | | 0.27% |
| 292.402 | 86359.7 | 0.4995 | 0.00031 | mg/L | | | | 0.06% |
| [illegible] 206.191 | 24694.3 | 0.5273 | 0.00025 | mg/L | | | | 0.05% |

ean Data ----------

D: 525478L Seq. No.: 62 Sample No.: 40 A/S Pos: 48
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:16:48 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| [illegible] 371.030 | 3715099.0 | 1.036 | 0.0055 | mg/L | | | | 0.53% |
| [illegible]g 328.068 | -1344.1 | 0.0005 | 0.00029 | mg/L | | | | 62.27% |
| [illegible]l 308.215 | 8058.8 | -0.0223 | 0.00264 | mg/L | | | | 11.86% |
| [illegible]s 188.979 | -28.7 | -0.0002 | 0.00348 | mg/L | | | | >999.9% |
| [illegible] 249.773 | 862.8 | 0.0085 | 0.00048 | mg/L | | | | 5.68% |
| [illegible]a 233.527 | 47.7 | 0.0001 | 0.00008 | mg/L | | | | 124.46% |
| [illegible]e 313.107 | -5975.7 | 0.0000 | 0.00001 | mg/L | | | | 39.55% |
| [illegible]a 315.887 | 29067.3 | 0.2890 | 0.00309 | mg/L | | | | 1.07% |
| [illegible]d 226.502 | -1.7 | 0.0001 | 0.00002 | mg/L | | | | 14.69% |
| [illegible]o 228.616 | -168.8 | 0.0010 | 0.00006 | mg/L | | | | 6.41% |
| [illegible]r 267.716 | 351.5 | 0.0021 | 0.00059 | mg/L | | | | 27.94% |
| [illegible]u 324.754 | 3083.5 | 0.0027 | 0.00016 | mg/L | | | | 5.91% |
| Fe 238.863 | 736.7 | 0.0442 | 0.00021 | mg/L | | | | 0.49% |
| K 404.721 | -981.6 | -1.135 | 1.0511 | mg/L | | | | 92.65% |
| M[illegible] [illegible]9.079 | 835.3 | 0.0601 | 0.00015 | mg/L | | | | 0.26% |
| M[illegible] [illegible]1.610 | 99.7 | 0.0002 | 0.00000 | mg/L | | | | 0.19% |
| Mo [illegible]02.030 | -17.3 | 0.0004 | 0.00013 | mg/L | | | | 32.47% |
| Na 330.237 | 8532.8 | 13.78 | 0.356 | mg/L | | | | 2.58% |
| Ni 231.604 | -176.3 | 0.0008 | 0.00008 | mg/L | | | | 9.77% |
| Pb 220.353 | 16.0 | -0.0001 | 0.00087 | mg/L | | | | >999.9% |
| Sb 206.833 | 35.3 | -0.0002 | 0.00073 | mg/L | | | | 298.80% |

| | | | | | |
|---|---|---|---|---|---|
| 196.026 | 13.9 | 0.0001 | 0.00360 | mg/L | >999.9% |
| 189.933 | 47.0 | 0.0017 | 0.00029 | mg/L | 17.64% |
| 3 41 | -539.7 | 0.0003 | 0.00004 | mg/L | 14.26% |
| 1 00 | -13.0 | 0.0023 | 0.00044 | mg/L | 18.74% |
| 92.402 | 698.2 | 0.0004 | 0.00001 | mg/L | 2.27% |
| 206.191 | 149.2 | 0.0028 | 0.00006 | mg/L | 2.00% |

an Data ----------

: 529217 Seq. No.: 63 Sample No.: 41 A/S Pos: 49
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:21:51 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3394993.6 | 0.947 | 0.0052 | mg/L | | | | 0.55% |
| 328.068 | -1638.4 | -0.0017 | 0.00013 | mg/L | | | | 7.84% |
| 308.215 | 9308.1 | 0.0664 | 0.00440 | mg/L | | | | 6.62% |
| 188.979 | -22.6 | 0.0052 | 0.00218 | mg/L | | | | 41.86% |
| 249.773 | 57503.0 | 1.052 | 0.0132 | mg/L | | | | 1.25% |
| 233.527 | 15180.4 | 0.2158 | 0.00315 | mg/L | | | | 1.46% |
| 313.107 | -6506.4 | -0.0001 | 0.00001 | mg/L | | | | 9.18% |
| 315.887 | 12837488.6 | 121.1 | 0.40 | mg/L | | | | 0.33% |
| 226.502 | -14.3 | 0.0000 | 0.00007 | mg/L | | | | 133.95% |
| 228.616 | -136.2 | 0.0028 | 0.00005 | mg/L | | | | 1.70% |
| 267.716 | 1001.3 | 0.0092 | 0.00010 | mg/L | | | | 1.13% |
| 324.754 | 3337.2 | 0.0039 | 0.00001 | mg/L | | | | 0.19% |
| 238.863 | 366.0 | 0.0250 | 0.00048 | mg/L | | | | 1.94% |
| 404.721 | 5012.8 | 114.0 | 1.71 | mg/L | | | | 1.50% |
| 279.079 | 3298349.1 | 221.8 | 0.10 | mg/L | | | | 0.04% |
| 257.610 | 53030.5 | 0.1578 | 0.00228 | mg/L | | | | 1.45% |
| 202.030 | 19.1 | 0.0035 | 0.00003 | mg/L | | | | 0.91% |
| 330.237 | 1737169.9 | 3033 | 0.5 | mg/L | | | | 0.02% |
| 231.604 | 151.1 | 0.0129 | 0.00002 | mg/L | | | | 0.14% |
| 220.353 | 14.6 | -0.0004 | 0.00006 | mg/L | | | | 15.21% |
| 833 | 40.7 | 0.0033 | 0.00100 | mg/L | | | | 30.78% |
| 026 | 40.9 | -0.0009 | 0.00208 | mg/L | | | | 228.51% |
| .933 | 10674.6 | 0.8499 | 0.00885 | mg/L | | | | 1.04% |
| 334.941 | -1129.1 | -0.0015 | 0.00015 | mg/L | | | | 10.39% |
| 190.800 | -23.0 | -0.0048 | 0.00105 | mg/L | | | | 22.08% |
| 292.402 | 941.5 | 0.0018 | 0.00012 | mg/L | | | | 6.72% |
| 206.191 | 714.0 | 0.0148 | 0.00018 | mg/L | | | | 1.20% |

ean Data ----------

0: 529600 Seq. No.: 64 Sample No.: 42 A/S Pos: 50
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:26:58 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3677795.9 | 1.026 | 0.0129 | mg/L | | | | 1.25% |
| g 328.068 | -1502.3 | -0.0007 | 0.00012 | mg/L | | | | 18.09% |
| l 308.215 | 251841.2 | 17.29 | 0.074 | mg/L | | | | 0.43% |
| s 188.979 | -28.4 | 0.0001 | 0.00092 | mg/L | | | | 670.58% |
| 249.773 | 8191.4 | 0.1435 | 0.00099 | mg/L | | | | 0.69% |
| a 233.527 | 23393.6 | 0.3328 | 0.00197 | mg/L | | | | 0.59% |
| e 313.107 | -6401.1 | -0.0001 | 0.00001 | mg/L | | | | 16.77% |
| a 315.887 | 984691.9 | 9.303 | 0.0103 | mg/L | | | | 0.11% |
| d 226.502 | 180.3 | 0.0024 | 0.00002 | mg/L | | | | 0.83% |
| o 228.616 | -43.7 | 0.0081 | 0.00025 | mg/L | | | | 3.15% |
| r 267.716 | 2154.3 | 0.0219 | 0.00044 | mg/L | | | | 2.02% |
| u 324.754 | 3402.7 | 0.0042 | 0.00013 | mg/L | | | | 3.16% |
| e 238.863 | 425203.9 | 22.00 | 0.018 | mg/L | | | | 0.08% |
| 404.721 | -673.8 | 7.562 | 0.3299 | mg/L | | | | 4.36% |
| g 279.079 | 256471.9 | 17.25 | 0.084 | mg/L | | | | 0.49% |
| n 257.610 | 2904421.1 | 8.647 | 0.0007 | mg/L | | | | 0.01% |
| o 202.030 | 22.3 | 0.0038 | 0.00001 | mg/L | | | | 0.39% |
| a 330.237 | 11964.7 | 19.77 | 0.062 | mg/L | | | | 0.31% |
| .604 | 299.1 | 0.0184 | 0.00028 | mg/L | | | | 1.50% |
| b .353 | 51.2 | 0.0087 | 0.00027 | mg/L | | | | 3.13% |
| b 206.833 | 33.8 | -0.0012 | 0.00099 | mg/L | | | | 85.38% |
| e 196.026 | 25.1 | 0.0058 | 0.00331 | mg/L | | | | 57.00% |
| n 189.933 | 3584.9 | 0.5430 | 0.00588 | mg/L | | | | 1.08% |
| i 334.941 | 131536.4 | 0.3937 | 0.00065 | mg/L | | | | 0.16% |

| | | | | | |
|---|---|---|---|---|---|
| 190.800 | -112.1 | -0.0683 | 0.00172 | mg/L | 2.52% |
| 292 402 | 6634.8 | 0.0350 | 0.00053 | mg/L | 1.52% |
| 191 | 2371.8 | 0.0503 | 0.00059 | mg/L | 1.17% |

an Data ----------

: 529601 Seq. No.: 65 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: 02/21/02 9:31:54 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3689975.7 | 1.029 | 0.0018 | mg/L | | | | 0.17% |
| g 328.068 | -1452.5 | -0.0003 | 0.00027 | mg/L | | | | 84.54% |
| . 308.215 | 97211.5 | 6.309 | 0.0533 | mg/L | | | | 0.84% |
| s 188.979 | -26.5 | 0.0018 | 0.00039 | mg/L | | | | 22.01% |
| 249.773 | 4042.8 | 0.0671 | 0.00099 | mg/L | | | | 1.48% |
| a 233.527 | 10240.7 | 0.1453 | 0.00087 | mg/L | | | | 0.60% |
| e 313.107 | -5424.5 | 0.0001 | 0.00000 | mg/L | | | | 2.33% |
| a 315.887 | 1952264.7 | 18.43 | 0.018 | mg/L | | | | 0.10% |
| d 226.502 | 34.9 | 0.0006 | 0.00005 | mg/L | | | | 9.37% |
| o 228.616 | -111.5 | 0.0042 | 0.00007 | mg/L | | | | 1.73% |
| r 267.716 | 1925.4 | 0.0193 | 0.00002 | mg/L | | | | 0.12% |
| u 324.754 | 2898.5 | 0.0018 | 0.00020 | mg/L | | | | 11.18% |
| e 238.863 | 112447.7 | 5.822 | 0.0398 | mg/L | | | | 0.68% |
| 404.721 | -701.0 | 4.255 | 1.3237 | mg/L | | | | 31.11% |
| g 279.079 | 258541.2 | 17.39 | 0.016 | mg/L | | | | 0.09% |
| n 257.610 | 37259.1 | 0.1108 | 0.00073 | mg/L | | | | 0.66% |
| o 202.030 | -0.4 | 0.0018 | 0.00015 | mg/L | | | | 7.90% |
| a 330.237 | 7786.6 | 12.47 | 0.182 | mg/L | | | | 1.46% |
| i 231.604 | 170.4 | 0.0137 | 0.00008 | mg/L | | | | 0.60% |
| b 220.353 | 24.8 | 0.0021 | 0.00035 | mg/L | | | | 16.41% |
| b 206.833 | 36.8 | 0.0007 | 0.00190 | mg/L | | | | 263.21% |
| e 196.026 | 9.9 | -0.0019 | 0.00189 | mg/L | | | | 99.28% |
| n 189.933 | 3479.2 | 0.5268 | 0.00104 | mg/L | | | | 0.20% |
| i .941 | 38378.6 | 0.1162 | 0.00065 | mg/L | | | | 0.56% |
| l .800 | -16.8 | -0.0004 | 0.00045 | mg/L | | | | 124.99% |
| 2..402 | 2786.1 | 0.0126 | 0.00023 | mg/L | | | | 1.82% |
| n 206.191 | 921.6 | 0.0193 | 0.00002 | mg/L | | | | 0.12% |

ean Data ----------

D: 529602 Seq. No.: 66 Sample No.: 44 A/S Pos: 52
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:36:50 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3676987.2 | 1.026 | 0.0132 | mg/L | | | | 1.29% |
| g 328.068 | -1426.8 | -0.0001 | 0.00011 | mg/L | | | | 78.24% |
| l 308.215 | 15849.1 | 0.5309 | 0.02249 | mg/L | | | | 4.24% |
| s 188.979 | -22.6 | 0.0052 | 0.00057 | mg/L | | | | 10.96% |
| 249.773 | 3936.9 | 0.0651 | 0.00128 | mg/L | | | | 1.96% |
| a 233.527 | 11091.1 | 0.1575 | 0.00367 | mg/L | | | | 2.33% |
| e 313.107 | -5850.5 | 0.0000 | 0.00003 | mg/L | | | | 69.40% |
| a 315.887 | 2662662.1 | 25.13 | 0.044 | mg/L | | | | 0.18% |
| d 226.502 | 12.0 | 0.0003 | 0.00002 | mg/L | | | | 6.28% |
| o 228.616 | -164.7 | 0.0012 | 0.00020 | mg/L | | | | 16.26% |
| r 267.716 | 951.5 | 0.0087 | 0.00005 | mg/L | | | | 0.56% |
| u 324.754 | 3770.6 | 0.0060 | 0.00026 | mg/L | | | | 4.33% |
| Fe 238.863 | 10673.9 | 0.5582 | 0.01094 | mg/L | | | | 1.96% |
| K 404.721 | -734.8 | 3.606 | 0.1006 | mg/L | | | | 2.79% |
| Mg 279.079 | 263969.1 | 17.76 | 0.034 | mg/L | | | | 0.19% |
| Mn 257.610 | 14566.6 | 0.0433 | 0.00112 | mg/L | | | | 2.59% |
| Mo 202.030 | -3.6 | 0.0016 | 0.00000 | mg/L | | | | 0.09% |
| Na 330.237 | 8307.4 | 13.38 | 0.224 | mg/L | | | | 1.68% |
| Ni 231.604 | -16.8 | 0.0067 | 0.00005 | mg/L | | | | 0.78% |
| Pb 220.353 | 25.2 | 0.0022 | 0.00007 | mg/L | | | | 3.18% |
| Sb 6.833 | 35.2 | -0.0003 | 0.00160 | mg/L | | | | 573.76% |
| S .026 | 16.5 | 0.0014 | 0.00103 | mg/L | | | | 71.13% |
| Sn .933 | 3521.5 | 0.5333 | 0.00679 | mg/L | | | | 1.27% |
| Ti 334.941 | 2627.9 | 0.0097 | 0.00026 | mg/L | | | | 2.66% |
| Tl 190.800 | -16.6 | -0.0003 | 0.00253 | mg/L | | | | >999.9% |
| V 292.402 | 1111.4 | 0.0028 | 0.00014 | mg/L | | | | 5.10% |
| Zn 206.191 | 834.8 | 0.0174 | 0.00028 | mg/L | | | | 1.60% |

an Data
: 503 Seq. No.: 67 Sample No.: 45 A/S Pos: 53
mp. Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:41:48 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3684287.9 | 1.028 | 0.0013 | mg/L | | | | 0.13% |
| 328.068 | -1435.7 | -0.0002 | 0.00004 | mg/L | | | | 18.00% |
| 308.215 | 82559.1 | 5.268 | 0.0365 | mg/L | | | | 0.69% |
| 188.979 | -25.3 | 0.0028 | 0.00035 | mg/L | | | | 12.39% |
| 249.773 | 14433.8 | 0.2585 | 0.00137 | mg/L | | | | 0.53% |
| 233.527 | 14565.2 | 0.2070 | 0.00076 | mg/L | | | | 0.37% |
| 313.107 | -5141.3 | 0.0002 | 0.00000 | mg/L | | | | 0.08% |
| 315.887 | 2161441.2 | 20.40 | 0.003 | mg/L | | | | 0.01% |
| 226.502 | 31.6 | 0.0005 | 0.00004 | mg/L | | | | 7.28% |
| 228.616 | -136.0 | 0.0028 | 0.00014 | mg/L | | | | 4.95% |
| 267.716 | 1516.2 | 0.0149 | 0.00025 | mg/L | | | | 1.67% |
| 324.754 | 3689.6 | 0.0056 | 0.00010 | mg/L | | | | 1.81% |
| 238.863 | 85101.6 | 4.408 | 0.0194 | mg/L | | | | 0.44% |
| 404.721 | -678.8 | 4.682 | 0.4926 | mg/L | | | | 10.52% |
| 279.079 | 253029.3 | 17.02 | 0.011 | mg/L | | | | 0.06% |
| 257.610 | 141691.5 | 0.4217 | 0.00029 | mg/L | | | | 0.07% |
| 202.030 | -4.7 | 0.0015 | 0.00008 | mg/L | | | | 5.20% |
| 330.237 | 7922.6 | 12.71 | 0.082 | mg/L | | | | 0.65% |
| 231.604 | 86.2 | 0.0105 | 0.00030 | mg/L | | | | 2.84% |
| 220.353 | 30.0 | 0.0034 | 0.00005 | mg/L | | | | 1.39% |
| 206.833 | 37.0 | 0.0009 | 0.00251 | mg/L | | | | 282.88% |
| 196.026 | 10.6 | -0.0015 | 0.00064 | mg/L | | | | 41.71% |
| 189.933 | 3436.8 | 0.5203 | 0.00067 | mg/L | | | | 0.13% |
| 334.941 | 26668.9 | 0.0813 | 0.00033 | mg/L | | | | 0.41% |
| 190.800 | -22.4 | -0.0044 | 0.00104 | mg/L | | | | 23.82% |
| 292.402 | 2599.5 | 0.0115 | 0.00009 | mg/L | | | | 0.83% |
| 191 | 1205.6 | 0.0253 | 0.00001 | mg/L | | | | 0.04% |

ean Data
D: 529604 Seq. No.: 68 Sample No.: 46 A/S Pos: 54
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:46:45 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3740107.9 | 1.043 | 0.0004 | mg/L | | | | 0.04% |
| g 328.068 | -1450.2 | -0.0003 | 0.00001 | mg/L | | | | 3.85% |
| l 308.215 | 107539.8 | 7.042 | 0.0208 | mg/L | | | | 0.30% |
| s 188.979 | -30.6 | -0.0018 | 0.00149 | mg/L | | | | 83.21% |
| 249.773 | 6639.6 | 0.1149 | 0.00076 | mg/L | | | | 0.66% |
| a 233.527 | 17425.3 | 0.2478 | 0.00155 | mg/L | | | | 0.63% |
| e 313.107 | -5501.7 | 0.0001 | 0.00000 | mg/L | | | | 3.26% |
| a 315.887 | 2285665.5 | 21.57 | 0.006 | mg/L | | | | 0.03% |
| d 226.502 | 43.3 | 0.0007 | 0.00001 | mg/L | | | | 1.17% |
| o 228.616 | -117.0 | 0.0039 | 0.00019 | mg/L | | | | 4.97% |
| r 267.716 | 1258.6 | 0.0120 | 0.00008 | mg/L | | | | 0.66% |
| u 324.754 | 3434.3 | 0.0044 | 0.00018 | mg/L | | | | 4.18% |
| e 238.863 | 124412.8 | 6.441 | 0.0132 | mg/L | | | | 0.21% |
| 404.721 | -591.7 | 6.354 | 0.5026 | mg/L | | | | 7.91% |
| g 279.079 | 275738.2 | 18.55 | 0.060 | mg/L | | | | 0.32% |
| n 257.610 | 109558.7 | 0.3261 | 0.00125 | mg/L | | | | 0.38% |
| o 202.030 | -9.9 | 0.0010 | 0.00012 | mg/L | | | | 11.75% |
| a 330.237 | 8590.4 | 13.88 | 0.065 | mg/L | | | | 0.47% |
| d 231.604 | 168.2 | 0.0136 | 0.00008 | mg/L | | | | 0.60% |
| b 220.353 | 28.4 | 0.0030 | 0.00014 | mg/L | | | | 4.56% |
| b 206.833 | 33.7 | -0.0012 | 0.00100 | mg/L | | | | 80.10% |
| e 196.026 | 15.3 | 0.0008 | 0.00143 | mg/L | | | | 179.09% |
| n 189.933 | 3674.0 | 0.5566 | 0.00110 | mg/L | | | | 0.20% |
| i 334.941 | 46808.6 | 0.1413 | 0.00059 | mg/L | | | | 0.41% |
| .800 | -18.4 | -0.0015 | 0.00078 | mg/L | | | | 50.64% |
| .402 | 2885.5 | 0.0132 | 0.00023 | mg/L | | | | 1.75% |
| n 206.191 | 1144.1 | 0.0240 | 0.00011 | mg/L | | | | 0.48% |

Mean Data
ID: CCV Seq. No.: 69 Sample No.: 8 A/S Pos: 4

ple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:51:45 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 171.030 | 3654549.3 | 1.019 | 0.0031 | mg/L | | | | 0.30% |
| 328.068 | 68204.5 | 0.5046 | 0.00297 | mg/L | | | | 0.59% |
| 308.215 | 148045.6 | 9.919 | 0.0735 | mg/L | | | | 0.74% |
| 188.979 | 1147.9 | 1.034 | 0.0022 | mg/L | | | | 0.21% |
| 249.773 | 136083.5 | 2.500 | 0.0104 | mg/L | | | | 0.41% |
| 233.527 | 728262.0 | 10.38 | 0.005 | mg/L | | | | 0.05% |
| 313.107 | 1292024.9 | 0.2506 | 0.00001 | mg/L | | | | 0.00% |
| 315.887 | 2706827.4 | 25.55 | 0.016 | mg/L | | | | 0.06% |
| 226.502 | 41031.5 | 0.5101 | 0.00308 | mg/L | | | | 0.60% |
| 228.616 | 45474.3 | 2.600 | 0.0138 | mg/L | | | | 0.53% |
| 267.716 | 46545.5 | 0.5084 | 0.00245 | mg/L | | | | 0.48% |
| 324.754 | 263828.7 | 1.260 | 0.0075 | mg/L | | | | 0.60% |
| 238.863 | 98238.3 | 5.087 | 0.0323 | mg/L | | | | 0.63% |
| 404.721 | 430.9 | 25.99 | 0.069 | mg/L | | | | 0.26% |
| 279.079 | 375870.8 | 25.28 | 0.003 | mg/L | | | | 0.01% |
| 257.610 | 260289.8 | 0.7748 | 0.00472 | mg/L | | | | 0.61% |
| 202.030 | 28290.8 | 2.437 | 0.0151 | mg/L | | | | 0.62% |
| 330.237 | 14091.4 | 23.49 | 0.279 | mg/L | | | | 1.19% |
| 231.604 | 55355.7 | 2.065 | 0.0151 | mg/L | | | | 0.73% |
| 220.353 | 2026.6 | 0.5013 | 0.00186 | mg/L | | | | 0.37% |
| 206.833 | 7824.9 | 5.038 | 0.0084 | mg/L | | | | 0.17% |
| 196.026 | 997.0 | 0.4983 | 0.00303 | mg/L | | | | 0.61% |
| 189.933 | 35396.3 | 5.411 | 0.0426 | mg/L | | | | 0.79% |
| 334.941 | 843785.2 | 2.516 | 0.0005 | mg/L | | | | 0.02% |
| 190.800 | 1419.3 | 1.023 | 0.0056 | mg/L | | | | 0.55% |
| 292.402 | 437853.5 | 2.548 | 0.0012 | mg/L | | | | 0.05% |
| 206.191 | 47693.0 | 1.019 | 0.0062 | mg/L | | | | 0.60% |

an Data
):
m Qty: 1.0000 g Seq. No.: 70 Sample No.: 9 A/S Pos: 5
Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 9:56:40 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3727851.8 | 1.040 | 0.0045 | mg/L | | | | 0.43% |
| g 328.068 | -1366.4 | 0.0003 | 0.00015 | mg/L | | | | 50.71% |
| l 308.215 | 7918.3 | -0.0323 | 0.00047 | mg/L | | | | 1.46% |
| s 188.979 | -29.2 | -0.0006 | 0.00039 | mg/L | | | | 66.59% |
| 249.773 | 974.6 | 0.0105 | 0.00139 | mg/L | | | | 13.19% |
| a 233.527 | 102.2 | 0.0008 | 0.00001 | mg/L | | | | 1.43% |
| e 313.107 | -5721.6 | 0.0001 | 0.00000 | mg/L | | | | 0.09% |
| a 315.887 | -2174.3 | -0.0057 | 0.00040 | mg/L | | | | 7.11% |
| d 226.502 | -3.3 | 0.0001 | 0.00001 | mg/L | | | | 15.58% |
| o 228.616 | -154.4 | 0.0018 | 0.00006 | mg/L | | | | 3.11% |
| r 267.716 | 144.4 | -0.0002 | 0.00022 | mg/L | | | | 128.00% |
| u 324.754 | 3022.6 | 0.0024 | 0.00097 | mg/L | | | | 40.77% |
| e 238.863 | -99.1 | 0.0010 | 0.00032 | mg/L | | | | 33.96% |
| 404.721 | -800.7 | 2.340 | 0.8751 | mg/L | | | | 37.40% |
| QC exceeds upper limit for K 404.721 Action = Continue | | | | | | | | |
| lg 279.079 | 50.9 | 0.0074 | 0.00119 | mg/L | | | | 16.09% |
| In 257.610 | 79.3 | 0.0001 | 0.00001 | mg/L | | | | 6.64% |
| lo 202.030 | -17.6 | 0.0004 | 0.00002 | mg/L | | | | 5.05% |
| la 330.237 | 696.4 | 0.0867 | 0.08189 | mg/L | | | | 94.45% |
| li 231.604 | -162.0 | 0.0013 | 0.00000 | mg/L | | | | 0.15% |
| Sb 220.353 | 15.8 | -0.0001 | 0.00004 | mg/L | | | | 29.88% |
| Sb 206.833 | 58.8 | 0.0150 | 0.00632 | mg/L | | | | 42.14% |
| QC exceeds upper limit for Sb 206.833 Action = Continue | | | | | | | | |
| Se 196.026 | 9.5 | -0.0021 | 0.00040 | mg/L | | | | 18.80% |
| Sn 189.933 | 79.3 | 0.0066 | 0.00118 | mg/L | | | | 17.79% |
| Ti 334.941 | -422.3 | 0.0006 | 0.00025 | mg/L | | | | 39.40% |
| Tl 190.800 | -14.6 | 0.0012 | 0.00170 | mg/L | | | | 143.65% |
| V 292.402 | 669.7 | 0.0002 | 0.00016 | mg/L | | | | 64.70% |
| Zn 206.191 | 271.0 | 0.0054 | 0.00043 | mg/L | | | | 8.07% |

Mean Data
ID: 529605 Seq. No.: 71 Sample No.: 47 A/S Pos: 55
Sample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 10:01:32 PM

| en. | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3586137.7 | 1.000 | 0.0096 | mg/L | | | | 0.96% |
| 328.068 | -1445.5 | -0.0003 | 0.00039 | mg/L | | | | 143.38% |
| 308.215 | 10820.7 | 0.1738 | 0.01075 | mg/L | | | | 6.18% |
| 188.979 | -28.1 | 0.0004 | 0.00387 | mg/L | | | | >999.9% |
| 249.773 | 2969.9 | 0.0473 | 0.00138 | mg/L | | | | 2.92% |
| 233.527 | 44921.0 | 0.6397 | 0.00674 | mg/L | | | | 1.05% |
| 313.107 | -6003.2 | 0.0000 | 0.00000 | mg/L | | | | 66.57% |
| 315.887 | 1621324.7 | 15.31 | 0.003 | mg/L | | | | 0.02% |
| 226.502 | 11.0 | 0.0003 | 0.00001 | mg/L | | | | 3.77% |
| 228.616 | -160.9 | 0.0014 | 0.00033 | mg/L | | | | 23.41% |
| 267.716 | 920.6 | 0.0083 | 0.00027 | mg/L | | | | 3.21% |
| 324.754 | 4295.3 | 0.0085 | 0.00028 | mg/L | | | | 3.28% |
| 238.863 | 6400.5 | 0.3371 | 0.00345 | mg/L | | | | 1.02% |
| 404.721 | -741.0 | 3.487 | 0.8868 | mg/L | | | | 25.43% |
| 279.079 | 161395.6 | 10.86 | 0.002 | mg/L | | | | 0.02% |
| 257.610 | 5719.1 | 0.0169 | 0.00027 | mg/L | | | | 1.59% |
| 202.030 | -1.6 | 0.0017 | 0.00020 | mg/L | | | | 11.73% |
| 330.237 | 6343.3 | 9.951 | 0.2136 | mg/L | | | | 2.15% |
| 231.604 | 21.0 | 0.0081 | 0.00013 | mg/L | | | | 1.58% |
| 220.353 | 46.3 | 0.0075 | 0.00072 | mg/L | | | | 9.69% |
| 206.833 | 42.9 | 0.0047 | 0.00329 | mg/L | | | | 70.25% |
| 196.026 | 14.6 | 0.0005 | 0.00176 | mg/L | | | | 359.61% |
| 189.933 | 2433.0 | 0.3668 | 0.00332 | mg/L | | | | 0.90% |
| 334.941 | 653.4 | 0.0038 | 0.00004 | mg/L | | | | 0.93% |
| 190.800 | -15.8 | 0.0003 | 0.00069 | mg/L | | | | 205.94% |
| 292.402 | 945.5 | 0.0019 | 0.00042 | mg/L | | | | 22.73% |
| 206.191 | 1262.4 | 0.0266 | 0.00034 | mg/L | | | | 1.28% |

ean Data

D: 529605L Seq. No.: 72 Sample No.: 48 A/S Pos: 56

ar Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 10:06:21 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3708291.6 | 1.034 | 0.0017 | mg/L | | | | 0.16% |
| g 328.068 | -1378.8 | 0.0002 | 0.00007 | mg/L | | | | 31.17% |
| l 308.215 | 8579.4 | 0.0147 | 0.00079 | mg/L | | | | 5.39% |
| s 188.979 | -24.0 | 0.0040 | 0.00015 | mg/L | | | | 3.67% |
| 249.773 | 1080.8 | 0.0125 | 0.00015 | mg/L | | | | 1.20% |
| a 233.527 | 8712.7 | 0.1236 | 0.00033 | mg/L | | | | 0.27% |
| e 313.107 | -5943.8 | 0.0000 | 0.00000 | mg/L | | | | 2.17% |
| a 315.887 | 316563.7 | 3.001 | 0.0007 | mg/L | | | | 0.02% |
| d 226.502 | -4.2 | 0.0001 | 0.00004 | mg/L | | | | 54.37% |
| o 228.616 | -161.6 | 0.0014 | 0.00019 | mg/L | | | | 13.95% |
| r 267.716 | 282.6 | 0.0013 | 0.00027 | mg/L | | | | 20.36% |
| u 324.754 | 2955.5 | 0.0020 | 0.00003 | mg/L | | | | 1.48% |
| e 238.863 | 1071.5 | 0.0615 | 0.00035 | mg/L | | | | 0.56% |
| 404.721 | -798.2 | 2.388 | 0.6932 | mg/L | | | | 29.03% |
| lg 279.079 | 31260.6 | 2.106 | 0.0069 | mg/L | | | | 0.33% |
| ln 257.610 | 1150.4 | 0.0033 | 0.00001 | mg/L | | | | 0.41% |
| lo 202.030 | -17.1 | 0.0004 | 0.00012 | mg/L | | | | 30.12% |
| la 330.237 | 1547.6 | 1.574 | 0.0128 | mg/L | | | | 0.81% |
| li 231.604 | -145.9 | 0.0019 | 0.00006 | mg/L | | | | 3.27% |
| b 220.353 | 20.7 | 0.0011 | 0.00011 | mg/L | | | | 9.63% |
| ib 206.833 | 37.1 | 0.0009 | 0.00149 | mg/L | | | | 160.73% |
| ie 196.026 | 7.9 | -0.0029 | 0.00049 | mg/L | | | | 17.05% |
| in 189.933 | 563.7 | 0.0807 | 0.00078 | mg/L | | | | 0.97% |
| li 334.941 | -344.7 | 0.0009 | 0.00005 | mg/L | | | | 5.95% |
| l 190.800 | -15.2 | 0.0008 | 0.00256 | mg/L | | | | 336.25% |
| 292.402 | 691.8 | 0.0004 | 0.00019 | mg/L | | | | 50.45% |
| n 206.191 | 276.6 | 0.0055 | 0.00013 | mg/L | | | | 2.37% |

ata

ID. 28765 Seq. No.: 73 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: 02/21/02 10:11:20 PM

| | Mean Corr. | Mean | Calib | Mean | Sample |
|---|---|---|---|---|---|

| :ment | Intensity | Conc. | Std.Dev. | Units | Conc. | Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3647821.4 | 1.018 | 0.0054 | mg/L | | | | 0.53% |
| ? `68 | -1491.8 | -0.0006 | 0.00003 | mg/L | | | | 5.23% |
| : .15 | 9563.8 | 0.0846 | 0.00187 | mg/L | | | | 2.21% |
| 188.979 | -27.0 | 0.0013 | 0.00131 | mg/L | | | | 98.88% |
| 249.773 | 4253.2 | 0.0709 | 0.00046 | mg/L | | | | 0.64% |
| 233.527 | *6659.0* | *0.0943* | *0.00082* | *mg/L* | | | | *0.87%* |
| 313.107 | -6058.5 | 0.0000 | 0.00000 | mg/L | | | | 32.31% |
| 315.887 | 10026543.5 | 94.59 | 0.613 | mg/L | | | | 0.65% |
| 226.502 | 4.5 | 0.0002 | 0.00000 | mg/L | | | | 2.15% |
| 228.616 | -160.1 | 0.0015 | 0.00023 | mg/L | | | | 15.72% |
| 267.716 | 403.0 | 0.0027 | 0.00005 | mg/L | | | | 1.77% |
| 324.754 | 15860.4 | 0.0643 | 0.00019 | mg/L | | | | 0.29% |
| 238.863 | 13940.2 | 0.7271 | 0.00166 | mg/L | | | | 0.23% |
| 404.721 | -102.6 | 15.75 | 0.338 | mg/L | | | | 2.15% |
| 279.079 | 346971.3 | 23.34 | 0.020 | mg/L | | | | 0.09% |
| 257.610 | 32646.5 | 0.0971 | 0.00045 | mg/L | | | | 0.47% |
| 202.030 | 71.6 | 0.0080 | 0.00000 | mg/L | | | | 0.02% |
| 330.237 | 143773.9 | 250.0 | 0.01 | mg/L | | | | 0.00% |
| 231.604 | -118.5 | 0.0029 | 0.00018 | mg/L | | | | 6.26% |
| 220.353 | 23.6 | 0.0018 | 0.00028 | mg/L | | | | 15.58% |
| 206.833 | 39.4 | 0.0024 | 0.00174 | mg/L | | | | 71.83% |
| 196.026 | 11.3 | -0.0012 | 0.00043 | mg/L | | | | 34.91% |
| 189.933 | 4246.4 | 0.6442 | 0.00449 | mg/L | | | | 0.70% |
| 334.941 | -338.0 | 0.0009 | 0.00023 | mg/L | | | | 26.22% |
| 190.800 | -17.3 | -0.0007 | 0.00176 | mg/L | | | | 242.21% |
| 292.402 | 3375.9 | 0.0160 | 0.00012 | mg/L | | | | 0.74% |
| 206.191 | 3783.7 | 0.0804 | 0.00071 | mg/L | | | | 0.88% |

:an Data ----------

): 528769 Seq. No.: 74 Sample No.: 50 A/S Pos: 58

mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 10:16:19 PM

| le | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 3. .030 | 3531073.1 | 0.985 | 0.0011 | mg/L | | | | 0.11% |
| g 328.068 | -1404.2 | 0.0000 | 0.00012 | mg/L | | | | 448.55% |
| l 308.215 | 10040.5 | 0.1184 | 0.00643 | mg/L | | | | 5.43% |
| s 188.979 | -27.3 | 0.0011 | 0.00174 | mg/L | | | | 157.54% |
| 249.773 | 15054.2 | 0.2699 | 0.00027 | mg/L | | | | 0.10% |
| a 233.527 | 4897.1 | 0.0692 | 0.00015 | mg/L | | | | 0.22% |
| e 313.107 | -6250.3 | 0.0000 | 0.00000 | mg/L | | | | 7.18% |
| a 315.887 | 7092255.4 | 66.91 | 0.023 | mg/L | | | | 0.03% |
| d 226.502 | 6.1 | 0.0002 | 0.00000 | mg/L | | | | 0.23% |
| o 228.616 | -175.6 | 0.0006 | 0.00001 | mg/L | | | | 2.20% |
| r 267.716 | 341.1 | 0.0020 | 0.00006 | mg/L | | | | 3.26% |
| u 324.754 | 13570.3 | 0.0532 | 0.00047 | mg/L | | | | 0.87% |
| e 238.863 | 12267.8 | 0.6406 | 0.00015 | mg/L | | | | 0.02% |
| 404.721 | -475.2 | 8.591 | 4.2076 | mg/L | | | | 48.98% |
| g 279.079 | 266970.6 | 17.96 | 0.046 | mg/L | | | | 0.26% |
| n 257.610 | 17258.0 | 0.0513 | 0.00003 | mg/L | | | | 0.05% |
| o 202.030 | 9.8 | 0.0027 | 0.00012 | mg/L | | | | 4.38% |
| a 330.237 | 100267.1 | 174.0 | 0.84 | mg/L | | | | 0.48% |
| i 231.604 | -140.3 | 0.0021 | 0.00008 | mg/L | | | | 3.89% |
| b 220.353 | 22.4 | 0.0015 | 0.00068 | mg/L | | | | 44.99% |
| b 206.833 | 39.8 | 0.0027 | 0.00029 | mg/L | | | | 10.92% |
| e 196.026 | 8.7 | -0.0025 | 0.00186 | mg/L | | | | 74.31% |
| n 189.933 | 3573.6 | 0.5413 | 0.00001 | mg/L | | | | 0.00% |
| i 334.941 | -318.8 | 0.0009 | 0.00022 | mg/L | | | | 23.66% |
| l 190.800 | -18.7 | -0.0018 | 0.00050 | mg/L | | | | 28.24% |
| 292.402 | 1213.6 | 0.0034 | 0.00024 | mg/L | | | | 6.99% |
| n 206.191 | 2138.7 | 0.0453 | 0.00009 | mg/L | | | | 0.20% |

lean Data ----------

[D: 528770 Seq. No.: 75 Sample No.: 51 A/S Pos: 59

Sam le Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 10:21:19 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3642136.2 | 1.016 | 0.0077 | mg/L | | | | 0.76% |
| Ag 328.068 | -1489.4 | -0.0006 | 0.00023 | mg/L | | | | 38.96% |

| | | | | | |
|---|---|---|---|---|---|
| 308.215 | 14349.5 | 0.4244 | 0.00647 | mg/L | 1.53% |
| 188.979 | -29.1 | -0.0005 | 0.00244 | mg/L | 483.64% |
| 24 73 | 8794.9 | 0.1546 | 0.00103 | mg/L | 0.67% |
| 2 27 | 9265.2 | 0.1314 | 0.00060 | mg/L | 0.45% |
| 31.107 | -6076.8 | 0.0000 | 0.00001 | mg/L | 184.02% |
| 315.887 | 8373770.0 | 79.00 | 0.414 | mg/L | 0.52% |
| 226.502 | 15.0 | 0.0003 | 0.00000 | mg/L | 1.30% |
| 228.616 | -165.2 | 0.0012 | 0.00015 | mg/L | 12.97% |
| 267.716 | 434.0 | 0.0030 | 0.00003 | mg/L | 0.92% |
| 324.754 | 31085.4 | 0.1377 | 0.00034 | mg/L | 0.24% |
| 238.863 | 13796.9 | 0.7197 | 0.00396 | mg/L | 0.55% |
| 404.721 | -53.3 | 16.70 | 0.038 | mg/L | 0.23% |
| 279.079 | 377953.9 | 25.42 | 0.011 | mg/L | 0.04% |
| 257.610 | 12829.4 | 0.0381 | 0.00028 | mg/L | 0.73% |
| 202.030 | 0.5 | 0.0019 | 0.00019 | mg/L | 10.08% |
| 330.237 | 76871.0 | 133.2 | 0.30 | mg/L | 0.23% |
| 231.604 | -117.7 | 0.0029 | 0.00015 | mg/L | 4.94% |
| 220.353 | 31.4 | 0.0038 | 0.00087 | mg/L | 22.92% |
| 206.833 | 37.9 | 0.0015 | 0.00078 | mg/L | 52.62% |
| 196.026 | 14.7 | 0.0005 | 0.00230 | mg/L | 449.37% |
| 189.933 | 4533.6 | 0.6882 | 0.00467 | mg/L | 0.68% |
| 334.941 | 78.6 | 0.0021 | 0.00006 | mg/L | 2.85% |
| 190.800 | -17.2 | -0.0007 | 0.00078 | mg/L | 113.91% |
| 292.402 | 717.8 | 0.0005 | 0.00021 | mg/L | 40.31% |
| 206.191 | 4848.9 | 0.1032 | 0.00053 | mg/L | 0.51% |

an Data ----------

: 528767 Seq. No.: 76 Sample No.: 52 A/S Pos: 60

mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/21/02 10:26:19 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3481979.1 | 0.971 | 0.0028 | mg/L | | | | 0.29% |
| 328.068 | -1408.4 | 0.0000 | 0.00009 | mg/L | | | | >999.9% |
| 215 | 9975.3 | 0.1138 | 0.00204 | mg/L | | | | 1.79% |
| 979 | -28.4 | 0.0001 | 0.00132 | mg/L | | | | >999.9% |
| 249.773 | 15153.9 | 0.2718 | 0.00105 | mg/L | | | | 0.39% |
| 233.527 | 4885.4 | 0.0690 | 0.00032 | mg/L | | | | 0.47% |
| 313.107 | -6283.9 | 0.0000 | 0.00000 | mg/L | | | | 1.57% |
| 315.887 | 7185524.0 | 67.79 | 0.023 | mg/L | | | | 0.03% |
| 226.502 | 9.5 | 0.0002 | 0.00003 | mg/L | | | | 12.41% |
| 228.616 | -173.8 | 0.0007 | 0.00000 | mg/L | | | | 0.40% |
| 267.716 | 396.0 | 0.0026 | 0.00038 | mg/L | | | | 14.73% |
| 324.754 | 13409.3 | 0.0525 | 0.00025 | mg/L | | | | 0.47% |
| 238.863 | 11780.6 | 0.6154 | 0.00541 | mg/L | | | | 0.88% |
| 404.721 | -418.8 | 9.674 | 0.9840 | mg/L | | | | 10.17% |
| 279.079 | 269766.1 | 18.15 | 0.112 | mg/L | | | | 0.62% |
| 257.610 | 17386.8 | 0.0517 | 0.00027 | mg/L | | | | 0.52% |
| 202.030 | 9.1 | 0.0027 | 0.00011 | mg/L | | | | 4.31% |
| 330.237 | 101283.2 | 175.8 | 0.91 | mg/L | | | | 0.52% |
| 231.604 | -140.2 | 0.0021 | 0.00002 | mg/L | | | | 0.87% |
| 220.353 | 22.2 | 0.0015 | 0.00050 | mg/L | | | | 33.75% |
| 206.833 | 37.3 | 0.0011 | 0.00126 | mg/L | | | | 119.12% |
| 196.026 | 10.9 | -0.0014 | 0.00223 | mg/L | | | | 157.78% |
| 189.933 | 3563.4 | 0.5397 | 0.00104 | mg/L | | | | 0.19% |
| 334.941 | -491.3 | 0.0004 | 0.00020 | mg/L | | | | 46.13% |
| 190.800 | -17.3 | -0.0008 | 0.00041 | mg/L | | | | 54.07% |
| 292.402 | 1250.2 | 0.0036 | 0.00002 | mg/L | | | | 0.43% |
| 206.191 | 2129.8 | 0.0451 | 0.00008 | mg/L | | | | 0.18% |

ean Data ----------

D: 528767D Seq. No.: 77 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: 02/21/02 10:31:11 PM

| | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 030 | 3609213.7 | 1.007 | 0.0057 | mg/L | | | | 0.57% |
| g 328.068 | -1406.4 | 0.0000 | 0.00045 | mg/L | | | | >999.9% |
| l 308.215 | 9616.2 | 0.0883 | 0.00262 | mg/L | | | | 2.97% |
| s 188.979 | -26.0 | 0.0023 | 0.00010 | mg/L | | | | 4.29% |
| 249.773 | 14810.0 | 0.2654 | 0.00058 | mg/L | | | | 0.22% |

| | | | | | |
|---|---|---|---|---|---|
| 233.527 | 4779.2 | 0.0675 | 0.00029 | mg/L | 0.43% |
| 3[illegible]107 | -6143.2 | 0.0000 | 0.00000 | mg/L | 20.78% |
| [illegible]87 | 7113974.2 | 67.12 | 0.032 | mg/L | 0.05% |
| 2[illegible]02 | 4.4 | 0.0002 | 0.00000 | mg/L | 0.27% |
| 228.616 | -176.1 | 0.0006 | 0.00008 | mg/L | 15.27% |
| 267.716 | 336.0 | 0.0019 | 0.00006 | mg/L | 2.97% |
| 324.754 | 12903.0 | 0.0500 | 0.00037 | mg/L | 0.73% |
| 238.863 | 11314.9 | 0.5913 | 0.00373 | mg/L | 0.63% |
| 404.721 | -438.1 | 9.305 | 0.9685 | mg/L | 10.41% |
| 279.079 | 264162.1 | 17.77 | 0.052 | mg/L | 0.30% |
| 257.610 | 16973.4 | 0.0504 | 0.00007 | mg/L | 0.13% |
| 202.030 | 10.7 | 0.0028 | 0.00030 | mg/L | 10.84% |
| 330.237 | 99592.7 | 172.8 | 0.34 | mg/L | 0.20% |
| 231.604 | -138.2 | 0.0022 | 0.00009 | mg/L | 4.14% |
| 220.353 | 19.3 | 0.0008 | 0.00033 | mg/L | 43.57% |
| 206.833 | 37.1 | 0.0009 | 0.00145 | mg/L | 153.85% |
| 196.026 | 12.3 | -0.0007 | 0.00003 | mg/L | 3.63% |
| 189.933 | 3517.9 | 0.5328 | 0.00241 | mg/L | 0.45% |
| 334.941 | -531.4 | 0.0003 | 0.00019 | mg/L | 59.63% |
| 190.800 | -16.6 | -0.0003 | 0.00089 | mg/L | 351.21% |
| 292.402 | 1210.5 | 0.0034 | 0.00016 | mg/L | 4.81% |
| 206.191 | 2105.9 | 0.0446 | 0.00013 | mg/L | 0.28% |

an Data ----------

: 528767S Seq. No.: 78 Sample No.: 54 A/S Pos: 62
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 10:36:06 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3614136.9 | 1.008 | 0.0049 | mg/L | | | | 0.49% |
| [illegible] 328.068 | 5603.7 | 0.0508 | 0.00022 | mg/L | | | | 0.44% |
| [illegible]. 308.215 | 38891.2 | 2.167 | 0.0053 | mg/L | | | | 0.24% |
| [illegible] 188.979 | 13.7 | 0.0372 | 0.00341 | mg/L | | | | 9.19% |
| 2[illegible]73 | 69012.5 | 1.264 | 0.0046 | mg/L | | | | 0.36% |
| [illegible]527 | 150113.1 | 2.139 | 0.0041 | mg/L | | | | 0.19% |
| [illegible] 313.107 | 256489.1 | 0.0507 | 0.00001 | mg/L | | | | 0.02% |
| [illegible] 315.887 | 7166451.6 | 67.61 | 0.028 | mg/L | | | | 0.04% |
| [illegible] 226.502 | 4014.3 | 0.0500 | 0.00012 | mg/L | | | | 0.25% |
| [illegible] 228.616 | 8985.7 | 0.5222 | 0.00018 | mg/L | | | | 0.03% |
| [illegible] 267.716 | 18725.5 | 0.2035 | 0.00020 | mg/L | | | | 0.10% |
| [illegible] 324.754 | 67962.8 | 0.3156 | 0.00039 | mg/L | | | | 0.12% |
| [illegible] 238.863 | 29395.7 | 1.526 | 0.0001 | mg/L | | | | 0.01% |
| 404.721 | 937.5 | 35.72 | 0.916 | mg/L | | | | 2.56% |
| [illegible] 279.079 | 288131.2 | 19.38 | 0.013 | mg/L | | | | 0.07% |
| [illegible] 257.610 | 187769.4 | 0.5589 | 0.00110 | mg/L | | | | 0.20% |
| [illegible] 202.030 | 5633.3 | 0.4867 | 0.00113 | mg/L | | | | 0.23% |
| [illegible] 330.237 | 112485.8 | 195.4 | 0.19 | mg/L | | | | 0.10% |
| [illegible] 231.604 | 13384.4 | 0.5049 | 0.00059 | mg/L | | | | 0.12% |
| [illegible] 220.353 | 2050.5 | 0.5072 | 0.00165 | mg/L | | | | 0.33% |
| [illegible] 206.833 | 830.1 | 0.5138 | 0.00448 | mg/L | | | | 0.87% |
| [illegible] 196.026 | 1930.8 | 0.9715 | 0.00141 | mg/L | | | | 0.14% |
| [illegible] 189.933 | 3768.9 | 0.5712 | 0.00043 | mg/L | | | | 0.08% |
| [illegible] 334.941 | 170412.9 | 0.5096 | 0.00101 | mg/L | | | | 0.20% |
| [illegible] 190.800 | 2766.1 | 1.983 | 0.0046 | mg/L | | | | 0.23% |
| [illegible] 292.402 | 88389.0 | 0.5114 | 0.00103 | mg/L | | | | 0.20% |
| [illegible] 206.191 | 25432.3 | 0.5431 | 0.00162 | mg/L | | | | 0.30% |

lean Data ----------

:D: 528767L Seq. No.: 79 Sample No.: 55 A/S Pos: 63
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 10:41:00 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3628734.5 | 1.012 | 0.0049 | mg/L | | | | 0.48% |
| Ag [illegible]9.068 | -1345.6 | 0.0005 | 0.00040 | mg/L | | | | 89.04% |
| Al [illegible].215 | 8650.6 | 0.0197 | 0.00737 | mg/L | | | | 37.32% |
| As [illegible]8.979 | -28.3 | 0.0002 | 0.00210 | mg/L | | | | >999.9% |
| B 249.773 | 3551.0 | 0.0580 | 0.00211 | mg/L | | | | 3.63% |
| Ba 233.527 | 986.6 | 0.0134 | 0.00000 | mg/L | | | | 0.01% |
| Be 313.107 | -6126.5 | 0.0000 | 0.00001 | mg/L | | | | 63.60% |
| Ca 315.887 | 1399866.4 | 13.22 | 0.008 | mg/L | | | | 0.06% |

| | | | | | |
|---|---|---|---|---|---|
| l 226.502 | -3.4 | 0.0001 | 0.00007 | mg/L | 76.87% |
| ) 2[illegible].616 | -173.0 | 0.0007 | 0.00014 | mg/L | 19.33% |
| : 716 | 165.5 | 0.0001 | 0.00054 | mg/L | 964.10% |
| ı _ .754 | 4624.9 | 0.0101 | 0.00022 | mg/L | 2.21% |
| ə 238.863 | 2100.9 | 0.1147 | 0.00085 | mg/L | 0.74% |
| 404.721 | -788.8 | 2.569 | 1.7923 | mg/L | 69.77% |
| g 279.079 | 52162.1 | 3.512 | 0.0644 | mg/L | 1.83% |
| n 257.610 | 3426.7 | 0.0101 | 0.00019 | mg/L | 1.92% |
| ɔ 202.030 | -15.2 | 0.0006 | 0.00012 | mg/L | 21.78% |
| a 330.237 | 17001.7 | 28.57 | 0.704 | mg/L | 2.46% |
| i 231.604 | -184.3 | 0.0005 | 0.00009 | mg/L | 18.65% |
| b 220.353 | 19.3 | 0.0007 | 0.00015 | mg/L | 20.43% |
| b 206.833 | 36.4 | 0.0005 | 0.00038 | mg/L | 75.34% |
| e 196.026 | 11.6 | -0.0010 | 0.00119 | mg/L | 113.98% |
| n 189.933 | 845.5 | 0.1238 | 0.00044 | mg/L | 0.36% |
| i 334.941 | -495.9 | 0.0004 | 0.00019 | mg/L | 44.64% |
| l 190.800 | -13.7 | 0.0018 | 0.00117 | mg/L | 64.72% |
| 292.402 | 764.8 | 0.0008 | 0.00025 | mg/L | 31.55% |
| n 206.191 | 489.8 | 0.0100 | 0.00017 | mg/L | 1.66% |

ean Data ----------

D: 528749 Seq. No.: 80 Sample No.: 56 A/S Pos: 64
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 10:45:54 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| : 371.030 | 3668542.7 | 1.023 | 0.0078 | mg/L | | | | 0.76% |
| ıg 328.068 | -1406.4 | 0.0000 | 0.00014 | mg/L | | | | >999.9% |
| ıl 308.215 | 10826.0 | 0.1742 | 0.00786 | mg/L | | | | 4.51% |
| ıs 188.979 | -27.9 | 0.0005 | 0.00168 | mg/L | | | | 316.89% |
| ) 249.773 | 16801.2 | 0.3021 | 0.00313 | mg/L | | | | 1.04% |
| ;a 233.527 | 5074.3 | 0.0717 | 0.00049 | mg/L | | | | 0.69% |
| ;e 313.107 | -6039.0 | 0.0000 | 0.00000 | mg/L | | | | 731.94% |
| :a .887 | 7297953.9 | 68.85 | 0.030 | mg/L | | | | 0.04% |
| :d .502 | 10.1 | 0.0003 | 0.00006 | mg/L | | | | 24.10% |
| :o 228.616 | -167.8 | 0.0010 | 0.00013 | mg/L | | | | 12.40% |
| :r 267.716 | 403.2 | 0.0027 | 0.00022 | mg/L | | | | 8.12% |
| :u 324.754 | 18263.7 | 0.0759 | 0.00089 | mg/L | | | | 1.18% |
| Fe 238.863 | 19615.2 | 1.021 | 0.0045 | mg/L | | | | 0.44% |
| K 404.721 | -386.5 | 10.29 | 0.791 | mg/L | | | | 7.69% |
| Mg 279.079 | 269251.2 | 18.11 | 0.137 | mg/L | | | | 0.75% |
| Mn 257.610 | 17593.3 | 0.0523 | 0.00043 | mg/L | | | | 0.81% |
| Mo 202.030 | 16.3 | 0.0033 | 0.00013 | mg/L | | | | 3.94% |
| Na 330.237 | 110317.0 | 191.6 | 2.06 | mg/L | | | | 1.08% |
| Ni 231.604 | -123.3 | 0.0027 | 0.00029 | mg/L | | | | 10.44% |
| Pb 220.353 | 26.9 | 0.0026 | 0.00033 | mg/L | | | | 12.39% |
| Sb 206.833 | 36.9 | 0.0008 | 0.00109 | mg/L | | | | 132.14% |
| Se 196.026 | 12.8 | -0.0004 | 0.00223 | mg/L | | | | 522.08% |
| Sn 189.933 | 3564.7 | 0.5399 | 0.00505 | mg/L | | | | 0.94% |
| Ti 334.941 | 56.5 | 0.0021 | 0.00034 | mg/L | | | | 16.57% |
| Tl 190.800 | -16.6 | -0.0002 | 0.00029 | mg/L | | | | 134.80% |
| V 292.402 | 1215.2 | 0.0034 | 0.00021 | mg/L | | | | 6.21% |
| Zn 206.191 | 2879.3 | 0.0611 | 0.00048 | mg/L | | | | 0.78% |

Mean Data ----------

ID: CCV Seq. No.: 81 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: 02/21/02 10:50:55 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3615760.8 | 1.009 | 0.0085 | mg/L | | | | 0.84% |
| Ag 328.068 | 68517.2 | 0.5068 | 0.00481 | mg/L | | | | 0.95% |
| Al 308.215 | 149082.8 | 9.992 | 0.0996 | mg/L | | | | 1.00% |
| As 188.979 | 1150.9 | 1.036 | 0.0007 | mg/L | | | | 0.06% |
| B [illegible].773 | 136561.6 | 2.509 | 0.0312 | mg/L | | | | 1.24% |
| B 3.527 | 728504.6 | 10.38 | 0.007 | mg/L | | | | 0.06% |
| Be [illegible]13.107 | 1292310.8 | 0.2507 | 0.00004 | mg/L | | | | 0.02% |
| Ca 315.887 | 2706350.6 | 25.54 | 0.008 | mg/L | | | | 0.03% |
| Cd 226.502 | 41333.5 | 0.5139 | 0.00359 | mg/L | | | | 0.70% |
| Co 228.616 | 45602.2 | 2.607 | 0.0199 | mg/L | | | | 0.76% |
| Cr 267.716 | 46678.3 | 0.5099 | 0.00479 | mg/L | | | | 0.94% |

| | | | | | |
|---|---|---|---|---|---|
| 324.754 | 265630.3 | 1.269 | 0.0149 | mg/L | 1.17% |
| 238.863 | 98617.3 | 5.107 | 0.0445 | mg/L | 0.87% |
| 1 | 423.5 | 25.85 | 2.024 | mg/L | 7.83% |
| 279 | 375465.1 | 25.26 | 0.007 | mg/L | 0.03% |
| 257.610 | 258057.0 | 0.7682 | 0.00006 | mg/L | 0.01% |
| 202.030 | 28588.9 | 2.463 | 0.0147 | mg/L | 0.60% |
| 330.237 | 14268.6 | 23.80 | 0.272 | mg/L | 1.14% |
| 231.604 | 55730.4 | 2.079 | 0.0146 | mg/L | 0.70% |
| 220.353 | 2055.2 | 0.5084 | 0.00556 | mg/L | 1.09% |
| 206.833 | 7859.1 | 5.060 | 0.0516 | mg/L | 1.02% |
| 196.026 | 1012.3 | 0.5061 | 0.00406 | mg/L | 0.80% |
| 189.933 | 35885.5 | 5.485 | 0.0196 | mg/L | 0.36% |
| 334.941 | 840047.7 | 2.504 | 0.0002 | mg/L | 0.01% |
| 190.800 | 1437.6 | 1.036 | 0.0049 | mg/L | 0.47% |
| 292.402 | 436461.1 | 2.539 | 0.0006 | mg/L | 0.02% |
| 206.191 | 48079.9 | 1.027 | 0.0081 | mg/L | 0.79% |

an Data ----------

: CCB Seq. No.: 82 Sample No.: 9 A/S Pos: 5
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 10:55:50 PM

| ement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3700886.0 | 1.032 | 0.0014 | mg/L | | | | 0.13% |
| 328.068 | -1352.0 | 0.0004 | 0.00055 | mg/L | | | | 134.98% |
| 308.215 | 7972.0 | -0.0285 | 0.00074 | mg/L | | | | 2.61% |
| 188.979 | -29.3 | -0.0007 | 0.00057 | mg/L | | | | 84.05% |
| 249.773 | 958.9 | 0.0102 | 0.00124 | mg/L | | | | 12.12% |
| 233.527 | 117.3 | 0.0011 | 0.00003 | mg/L | | | | 3.09% |
| 313.107 | -5744.4 | 0.0001 | 0.00001 | mg/L | | | | 19.71% |
| 315.887 | -2131.5 | -0.0053 | 0.00115 | mg/L | | | | 21.86% |
| 226.502 | -2.9 | 0.0001 | 0.00001 | mg/L | | | | 15.11% |
| 228.616 | -155.6 | 0.0017 | 0.00031 | mg/L | | | | 17.84% |
| 716 | 144.7 | -0.0002 | 0.00015 | mg/L | | | | 89.02% |
| 754 | 3151.8 | 0.0030 | 0.00122 | mg/L | | | | 40.58% |
| .863 | -135.6 | -0.0009 | 0.00041 | mg/L | | | | 44.23% |
| 404.721 | -809.3 | 2.174 | 0.2021 | mg/L | | | | 9.30% |
| QC exceeds upper limit for K 404.721 | | Action = Continue | | | | | | |
| 279.079 | 8.4 | 0.0045 | 0.00023 | mg/L | | | | 5.03% |
| 257.610 | 51.4 | 0.0001 | 0.00000 | mg/L | | | | 4.13% |
| 202.030 | -13.2 | 0.0007 | 0.00016 | mg/L | | | | 21.13% |
| 330.237 | 695.1 | 0.0843 | 0.04884 | mg/L | | | | 57.95% |
| 231.604 | -164.7 | 0.0012 | 0.00030 | mg/L | | | | 24.61% |
| 220.353 | 13.9 | -0.0006 | 0.00006 | mg/L | | | | 9.49% |
| 206.833 | 60.9 | 0.0163 | 0.00384 | mg/L | | | | 23.53% |
| QC exceeds upper limit for Sb 206.833 | | Action = Continue | | | | | | |
| 196.026 | 13.0 | -0.0004 | 0.00380 | mg/L | | | | >999.9% |
| 189.933 | 71.1 | 0.0054 | 0.00008 | mg/L | | | | 1.53% |
| 334.941 | -399.1 | 0.0007 | 0.00029 | mg/L | | | | 40.45% |
| 190.800 | -11.9 | 0.0031 | 0.00111 | mg/L | | | | 35.56% |
| 292.402 | 696.5 | 0.0004 | 0.00010 | mg/L | | | | 24.24% |
| 206.191 | 308.6 | 0.0062 | 0.00049 | mg/L | | | | 7.96% |

lean Data ----------

D: 528751 Seq. No.: 83 Sample No.: 57 A/S Pos: 65
ample Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:00:46 PM

| lement | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3672728.6 | 1.025 | 0.0070 | mg/L | | | | 0.68% |
| g 328.068 | -1459.1 | -0.0004 | 0.00074 | mg/L | | | | 199.25% |
| l 308.215 | 9775.6 | 0.0996 | 0.00671 | mg/L | | | | 6.74% |
| s 188.979 | -25.6 | 0.0026 | 0.00072 | mg/L | | | | 27.44% |
| 249.773 | 16765.0 | 0.3015 | 0.00160 | mg/L | | | | 0.53% |
| a 233.527 | 4675.6 | 0.0660 | 0.00039 | mg/L | | | | 0.60% |
| 313.107 | -6083.0 | 0.0000 | 0.00001 | mg/L | | | | 176.54% |
| a 315.887 | 7138270.3 | 67.35 | 0.102 | mg/L | | | | 0.15% |
| d 226.502 | 2.0 | 0.0002 | 0.00005 | mg/L | | | | 34.24% |
| o 228.616 | -164.9 | 0.0012 | 0.00007 | mg/L | | | | 5.90% |
| r 267.716 | 350.8 | 0.0021 | 0.00015 | mg/L | | | | 7.07% |
| u 324.754 | 13092.6 | 0.0509 | 0.00005 | mg/L | | | | 0.10% |

| | | | | | |
|---|---|---|---|---|---|
| 238.863 | 9711.1 | 0.5084 | 0.00333 | mg/L | 0.65% |
| 404.721 | -439.9 | 9.271 | 0.1867 | mg/L | 2.01% |
| 79 | 265821.9 | 17.88 | 0.104 | mg/L | 0.58% |
| 610 | 16300.4 | 0.0484 | 0.00029 | mg/L | 0.60% |
| 202.030 | 10.2 | 0.0028 | 0.00015 | mg/L | 5.43% |
| 330.237 | 108695.2 | 188.7 | 1.26 | mg/L | 0.67% |
| 231.604 | -120.2 | 0.0029 | 0.00003 | mg/L | 1.15% |
| 220.353 | 22.0 | 0.0014 | 0.00081 | mg/L | 57.05% |
| 206.833 | 44.6 | 0.0058 | 0.00083 | mg/L | 14.29% |
| 196.026 | 13.1 | -0.0003 | 0.00018 | mg/L | 59.92% |
| 189.933 | 3533.9 | 0.5352 | 0.00224 | mg/L | 0.42% |
| 334.941 | -360.6 | 0.0008 | 0.00018 | mg/L | 22.21% |
| 190.800 | -16.8 | -0.0004 | 0.00121 | mg/L | 307.59% |
| 292.402 | 1143.4 | 0.0030 | 0.00017 | mg/L | 5.54% |
| 206.191 | 2440.0 | 0.0517 | 0.00022 | mg/L | 0.43% |

an Data ----------

: 528752 Seq. No.: 84 Sample No.: 58 A/S Pos: 66
mple Qty: 1.0000 mL Prep. Vol.: 50.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:05:50 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3695617.1 | 1.031 | 0.0075 | mg/L | | | | 0.72% |
| 328.068 | -1528.1 | -0.0009 | 0.00020 | mg/L | | | | 23.23% |
| 308.215 | 19727.4 | 0.8063 | 0.00720 | mg/L | | | | 0.89% |
| 188.979 | -24.0 | 0.0040 | 0.00119 | mg/L | | | | 29.49% |
| 249.773 | 10001.1 | 0.1768 | 0.00019 | mg/L | | | | 0.11% |
| 233.527 | 8994.4 | 0.1276 | 0.00093 | mg/L | | | | 0.73% |
| 313.107 | -5989.2 | 0.0000 | 0.00000 | mg/L | | | | 12.46% |
| 315.887 | 8181446.1 | 77.19 | 0.474 | mg/L | | | | 0.61% |
| 226.502 | 18.4 | 0.0004 | 0.00001 | mg/L | | | | 3.47% |
| 228.616 | -159.4 | 0.0015 | 0.00012 | mg/L | | | | 8.00% |
| 267.716 | 463.9 | 0.0033 | 0.00003 | mg/L | | | | 0.90% |
| 754 | 36627.5 | 0.1645 | 0.00041 | mg/L | | | | 0.25% |
| 863 | 17656.8 | 0.9193 | 0.00368 | mg/L | | | | 0.40% |
| 404.721 | -261.0 | 12.71 | 0.574 | mg/L | | | | 4.52% |
| 279.079 | 369231.8 | 24.84 | 0.028 | mg/L | | | | 0.11% |
| 257.610 | 12377.6 | 0.0368 | 0.00008 | mg/L | | | | 0.22% |
| 202.030 | 2.6 | 0.0021 | 0.00006 | mg/L | | | | 2.66% |
| 330.237 | 66373.8 | 114.8 | 0.34 | mg/L | | | | 0.29% |
| 231.604 | -94.7 | 0.0038 | 0.00000 | mg/L | | | | 0.08% |
| 220.353 | 31.6 | 0.0038 | 0.00008 | mg/L | | | | 2.20% |
| 206.833 | 41.0 | 0.0035 | 0.00013 | mg/L | | | | 3.78% |
| 196.026 | 16.5 | 0.0014 | 0.00060 | mg/L | | | | 42.05% |
| 189.933 | 4426.0 | 0.6717 | 0.00520 | mg/L | | | | 0.77% |
| 334.941 | 551.7 | 0.0035 | 0.00051 | mg/L | | | | 14.43% |
| 190.800 | -15.7 | 0.0004 | 0.00168 | mg/L | | | | 423.77% |
| 292.402 | 746.5 | 0.0007 | 0.00005 | mg/L | | | | 6.64% |
| 206.191 | 5738.9 | 0.1222 | 0.00058 | mg/L | | | | 0.48% |

lean Data ----------

ID: CRI Seq. No.: 85 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: 02/21/02 11:10:52 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3687407.4 | 1.029 | 0.0031 | mg/L | | | | 0.30% |
| Ag 328.068 | 1192.7 | 0.0189 | 0.00048 | mg/L | | | | 2.54% |
| Al 308.215 | 7995.0 | -0.0268 | 0.00127 | mg/L | | | | 4.72% |
| As 188.979 | -5.5 | 0.0202 | 0.00442 | mg/L | | | | 21.81% |
| B 249.773 | 660.0 | 0.0047 | 0.00019 | mg/L | | | | 4.11% |
| Ba 233.527 | 62.2 | 0.0003 | 0.00003 | mg/L | | | | 12.80% |
| Be 313.107 | 45322.2 | 0.0099 | 0.00012 | mg/L | | | | 1.25% |
| Ca 315.887 | 993.2 | 0.0242 | 0.00378 | mg/L | | | | 15.63% |
| Cd 226.502 | 810.8 | 0.0102 | 0.00002 | mg/L | | | | 0.21% |
| Co 228.616 | 1679.0 | 0.1062 | 0.00018 | mg/L | | | | 0.17% |
| Cr 267.716 | 2009.9 | 0.0203 | 0.00050 | mg/L | | | | 2.48% |
| Cu 324.754 | 12436.0 | 0.0478 | 0.00034 | mg/L | | | | 0.70% |
| Fe 238.863 | -146.5 | -0.0015 | 0.00064 | mg/L | | | | 42.92% |
| K 404.721 | -761.0 | 3.102 | 1.3316 | mg/L | | | | 42.93% |
| Mg 279.079 | 15.0 | 0.0050 | 0.00017 | mg/L | | | | 3.36% |

| | | | | | |
|---|---|---|---|---|---|
| 257.610 | 10547.0 | 0.0313 | 0.00039 | mg/L | 1.25% |
| 20[illegible]030 | -22.0 | 0.0000 | 0.00003 | mg/L | 171.69% |
| 3 37 | 734.1 | 0.1525 | 0.04415 | mg/L | 28.96% |
| 2[illegible]004 | 2040.7 | 0.0832 | 0.00006 | mg/L | 0.07% |
| 220.353 | 36.8 | 0.0051 | 0.00069 | mg/L | 13.53% |
| 206.833 | 226.6 | 0.1235 | 0.00190 | mg/L | 1.54% |
| 196.026 | 31.2 | 0.0089 | 0.00084 | mg/L | 9.42% |
| 189.933 | 41.6 | 0.0008 | 0.00029 | mg/L | 34.77% |
| 334.941 | -600.7 | 0.0001 | 0.00002 | mg/L | 20.22% |
| 190.800 | 12.1 | 0.0202 | 0.00012 | mg/L | 0.58% |
| 292.402 | 18100.0 | 0.1018 | 0.00180 | mg/L | 1.76% |
| 206.191 | 2027.9 | 0.0429 | 0.00005 | mg/L | 0.12% |

an Data ----------
: ICSA Seq. No.: 86 Sample No.: 6 A/S Pos: 7
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:16:18 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3164541.0 | 0.883 | 0.0018 | mg/L | | | | 0.20% |
| 328.068 | -3619.9 | -0.0058 | 0.00001 | mg/L | | | | 0.25% |
| 308.215 | 7476380.6 | 530.3 | 2.67 | mg/L | | | | 0.50% |
| 188.979 | -65.9 | 0.0018 | 0.00077 | mg/L | | | | 42.14% |
| 249.773 | 6789.2 | 0.1177 | 0.00033 | mg/L | | | | 0.28% |
| 233.527 | -375.8 | -0.0060 | 0.00011 | mg/L | | | | 1.91% |
| 313.107 | -7109.2 | -0.0002 | 0.00001 | mg/L | | | | 4.68% |
| 315.887 | 52755911.8 | 497.6 | 1.84 | mg/L | | | | 0.37% |
| 226.502 | 1411.7 | 0.0053 | 0.00001 | mg/L | | | | 0.16% |
| 228.616 | -182.4 | 0.0002 | 0.00065 | mg/L | | | | 333.12% |
| 267.716 | 927.1 | 0.0084 | 0.00003 | mg/L | | | | 0.33% |
| 324.754 | 407.0 | 0.0023 | 0.00021 | mg/L | | | | 9.36% |
| 238.863 | 3783015.4 | 195.7 | 0.04 | mg/L | | | | 0.02% |
| 404 721 | -2430.9 | -4.197 | 1.4523 | mg/L | | | | 34.61% |
| 079 | 8224079.6 | 553.1 | 1.92 | mg/L | | | | 0.35% |
| 610 | -3897.1 | -0.0117 | 0.00004 | mg/L | | | | 0.33% |
| 202.030 | -10.6 | 0.0010 | 0.00021 | mg/L | | | | 21.27% |
| 330.237 | 619.7 | 0.4825 | 0.04546 | mg/L | | | | 9.42% |
| 231.604 | -196.1 | 0.0000 | 0.00043 | mg/L | | | | >999.9% |
| 220.353 | -140.2 | 0.0029 | 0.00211 | mg/L | | | | 73.17% |
| 206.833 | 31.3 | -0.0028 | 0.00051 | mg/L | | | | 18.26% |
| 196.026 | 114.5 | -0.0058 | 0.00454 | mg/L | | | | 78.17% |
| 189.933 | 12830.8 | 0.0180 | 0.00218 | mg/L | | | | 12.08% |
| 334.941 | -2871.4 | -0.0067 | 0.00002 | mg/L | | | | 0.26% |
| 190.800 | -32.5 | -0.0116 | 0.00265 | mg/L | | | | 22.97% |
| 292.402 | 9290.4 | 0.0505 | 0.00024 | mg/L | | | | 0.47% |
| 206.191 | 1051.1 | 0.0066 | 0.00055 | mg/L | | | | 8.31% |

ean Data ----------
D: ICSAB Seq. No.: 87 Sample No.: 7 A/S Pos: 8
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:22:13 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3166263.8 | 0.883 | 0.0073 | mg/L | | | | 0.83% |
| g 328.068 | 157751.8 | 1.164 | 0.0124 | mg/L | | | | 1.06% |
| l 308.215 | 7507193.0 | 532.5 | 2.88 | mg/L | | | | 0.54% |
| s 188.979 | -63.1 | 0.0042 | 0.00189 | mg/L | | | | 45.39% |
| 249.773 | 6867.2 | 0.1191 | 0.00169 | mg/L | | | | 1.42% |
| a 233.527 | 39252.5 | 0.5589 | 0.00632 | mg/L | | | | 1.13% |
| e 313.107 | 2706455.7 | 0.5237 | 0.00025 | mg/L | | | | 0.05% |
| a 315.887 | 52955381.6 | 499.5 | 3.45 | mg/L | | | | 0.69% |
| d 226.502 | 82138.8 | 1.009 | 0.0121 | mg/L | | | | 1.20% |
| o 228.616 | 8729.8 | 0.5077 | 0.00396 | mg/L | | | | 0.78% |
| r 267.716 | 48451.3 | 0.5293 | 0.00485 | mg/L | | | | 0.92% |
| u 1.754 | 121840.7 | 0.5880 | 0.00651 | mg/L | | | | 1.11% |
| Fe .863 | 3776454.3 | 195.3 | 0.13 | mg/L | | | | 0.07% |
| K 404.721 | -2488.1 | -5.339 | 2.3520 | mg/L | | | | 44.05% |
| Mg 279.079 | 8256297.1 | 555.3 | 3.68 | mg/L | | | | 0.66% |
| Mn 257.610 | 174665.5 | 0.5199 | 0.00531 | mg/L | | | | 1.02% |
| Mo 202.030 | -11.7 | 0.0009 | 0.00045 | mg/L | | | | 51.57% |
| Na 330.237 | 763.8 | 0.7333 | 0.05732 | mg/L | | | | 7.82% |

| | | | | | |
|---|---|---|---|---|---|
| i 231.604 | 25693.9 | 0.9625 | 0.00787 | mg/L | 0.82% |
| b 220.353 | 3894.6 | 1.009 | 0.0076 | mg/L | 0.76% |
| b [illegible].833 | 26.1 | -0.0062 | 0.00122 | mg/L | 19.71% |
| e 026 | 119.1 | -0.0037 | 0.00082 | mg/L | 22.23% |
| n .933 | 12858.6 | 0.0147 | 0.00600 | mg/L | 40.84% |
| i 334.941 | -2796.3 | -0.0064 | 0.00009 | mg/L | 1.45% |
| l 190.800 | -34.0 | -0.0126 | 0.00030 | mg/L | 2.37% |
| 292.402 | 100993.0 | 0.5848 | 0.00487 | mg/L | 0.83% |
| n 206.191 | 47944.5 | 1.009 | 0.0079 | mg/L | 0.78% |

ean Data ----------

D: CCV Seq. No.: 88 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: 02/21/02 11:27:42 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3624190.7 | 1.011 | 0.0019 | mg/L | | | | 0.19% |
| g 328.068 | 68533.9 | 0.5070 | 0.00341 | mg/L | | | | 0.67% |
| l 308.215 | 149792.9 | 10.04 | 0.061 | mg/L | | | | 0.60% |
| s 188.979 | 1147.1 | 1.033 | 0.0062 | mg/L | | | | 0.60% |
| 249.773 | 136764.5 | 2.512 | 0.0214 | mg/L | | | | 0.85% |
| a 233.527 | 729655.7 | 10.40 | 0.000 | mg/L | | | | 0.00% |
| e 313.107 | 1294414.3 | 0.2511 | 0.00008 | mg/L | | | | 0.03% |
| a 315.887 | 2718017.9 | 25.65 | 0.025 | mg/L | | | | 0.10% |
| d 226.502 | 41474.6 | 0.5156 | 0.00219 | mg/L | | | | 0.43% |
| o 228.616 | 45800.3 | 2.618 | 0.0187 | mg/L | | | | 0.71% |
| r 267.716 | 46826.9 | 0.5115 | 0.00347 | mg/L | | | | 0.68% |
| u 324.754 | 266848.9 | 1.275 | 0.0090 | mg/L | | | | 0.70% |
| e 238.863 | 99534.2 | 5.154 | 0.0219 | mg/L | | | | 0.43% |
| 404.721 | 446.4 | 26.29 | 0.359 | mg/L | | | | 1.37% |
| g 279.079 | 379970.1 | 25.56 | 0.052 | mg/L | | | | 0.20% |
| n 257.610 | 258902.7 | 0.7707 | 0.00043 | mg/L | | | | 0.06% |
| o 202.030 | 28535.6 | 2.458 | 0.0129 | mg/L | | | | 0.52% |
| a 330.237 | 14208.1 | 23.69 | 0.360 | mg/L | | | | 1.52% |
| i .604 | 55931.9 | 2.087 | 0.0108 | mg/L | | | | 0.52% |
| b .353 | 2050.9 | 0.5073 | 0.00180 | mg/L | | | | 0.35% |
| b 206.833 | 7840.8 | 5.048 | 0.0059 | mg/L | | | | 0.12% |
| e 196.026 | 1006.9 | 0.5033 | 0.00222 | mg/L | | | | 0.44% |
| n 189.933 | 35028.3 | 5.354 | 0.0365 | mg/L | | | | 0.68% |
| i 334.941 | 842687.9 | 2.512 | 0.0009 | mg/L | | | | 0.04% |
| l 190.800 | 1432.0 | 1.032 | 0.0008 | mg/L | | | | 0.08% |
| 292.402 | 437814.8 | 2.547 | 0.0020 | mg/L | | | | 0.08% |
| n 206.191 | 48906.1 | 1.045 | 0.0053 | mg/L | | | | 0.51% |

ean Data ----------

D: CCB Seq. No.: 89 Sample No.: 9 A/S Pos: 5
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:32:38 PM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3724140.7 | 1.039 | 0.0003 | mg/L | | | | 0.03% |
| Ag 328.068 | -1357.8 | 0.0004 | 0.00024 | mg/L | | | | 66.63% |
| Al 308.215 | 8067.7 | -0.0217 | 0.00288 | mg/L | | | | 13.29% |
| As 188.979 | -26.7 | 0.0016 | 0.00072 | mg/L | | | | 43.95% |
| B 249.773 | 964.1 | 0.0103 | 0.00129 | mg/L | | | | 12.49% |
| Ba 233.527 | 151.7 | 0.0015 | 0.00003 | mg/L | | | | 2.25% |
| Be 313.107 | -5654.8 | 0.0001 | 0.00000 | mg/L | | | | 4.44% |
| Ca 315.887 | -1110.6 | 0.0044 | 0.00097 | mg/L | | | | 22.31% |
| Cd 226.502 | 2.2 | 0.0002 | 0.00004 | mg/L | | | | 25.80% |
| Co 228.616 | -148.2 | 0.0021 | 0.00033 | mg/L | | | | 15.35% |
| Cr 267.716 | 149.8 | -0.0001 | 0.00009 | mg/L | | | | 79.93% |
| Cu 324.754 | 2925.1 | 0.0019 | 0.00039 | mg/L | | | | 20.31% |
| Fe 238.863 | 115.1 | 0.0120 | 0.00036 | mg/L | | | | 2.99% |
| K 404.721 | -784.3 | 2.656 | 0.1373 | mg/L | | | | 5.17% |
| *QC exceeds upper limit for K 404.721 | | Action = Continue | | | | | | |
| Mg 279.079 | 1096.4 | 0.0777 | 0.00681 | mg/L | | | | 8.77% |
| M .610 | 53.7 | 0.0001 | 0.00001 | mg/L | | | | 13.76% |
| Mo 202.030 | -12.4 | 0.0008 | 0.00022 | mg/L | | | | 27.52% |
| Na 330.237 | 715.1 | 0.1193 | 0.10383 | mg/L | | | | 87.03% |
| Ni 231.604 | -124.6 | 0.0027 | 0.00007 | mg/L | | | | 2.46% |
| Pb 220.353 | 14.5 | -0.0005 | 0.00024 | mg/L | | | | 51.78% |

| | | | | |
|---|---|---|---|---|
| 206.833 | 60.3 | 0.0160 | 0.00383 mg/L | 23.99% |
| : ~~eeds upper limit for Sb 206.833 | | Action = Continue | | |
| : 26 | 10.7 | -0.0015 | 0.00064 mg/L | 42.72% |
| 1. 933 | 101.3 | 0.0100 | 0.00111 mg/L | 11.12% |
| 334.941 | -391.9 | 0.0007 | 0.00019 mg/L | 26.28% |
| 190.800 | -13.0 | 0.0023 | 0.00047 mg/L | 20.30% |
| 292.402 | 709.4 | 0.0005 | 0.00021 mg/L | 44.35% |
| 206.191 | 304.6 | 0.0061 | 0.00048 mg/L | 7.83% |

an Data ----------

: PBS-M2530081 Seq. No.: 90 Sample No.: 59 A/S Pos: 67
mple Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:37:32 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3502748.1 | 0.977 | 0.0034 | mg/L | | | | 0.35% |
| 328.068 | -1409.0 | 0.0000 | 0.00024 | mg/L | | | | >999.9% |
| 308.215 | 8166.2 | -0.0147 | 0.00127 | mg/L | | | | 8.66% |
| : 188.979 | -33.4 | -0.0043 | 0.00011 | mg/L | | | | 2.64% |
| 249.773 | 829.5 | 0.0079 | 0.00028 | mg/L | | | | 3.57% |
| ı 233.527 | 57.2 | 0.0002 | 0.00004 | mg/L | | | | 21.29% |
| : 313.107 | -6057.5 | 0.0000 | 0.00000 | mg/L | | | | 139.00% |
| ı 315.887 | 37.3 | 0.0152 | 0.00086 | mg/L | | | | 5.66% |
| ı 226.502 | 0.2 | 0.0001 | 0.00007 | mg/L | | | | 54.33% |
| › 228.616 | -189.0 | -0.0002 | 0.00039 | mg/L | | | | 218.46% |
| : 267.716 | 239.0 | 0.0009 | 0.00038 | mg/L | | | | 44.42% |
| ı 324.754 | 2869.8 | 0.0016 | 0.00033 | mg/L | | | | 20.12% |
| : 238.863 | 230.4 | 0.0180 | 0.00036 | mg/L | | | | 2.01% |
| 404.721 | -911.7 | 0.2085 | 0.67072 | mg/L | | | | 321.70% |
| ı 279.079 | 417.4 | 0.0320 | 0.00183 | mg/L | | | | 5.72% |
| ı 257.610 | 104.9 | 0.0002 | 0.00000 | mg/L | | | | 0.82% |
| › 202.030 | -20.2 | 0.0001 | 0.00003 | mg/L | | | | 19.71% |
| ı 330.237 | 1279.3 | 1.105 | 0.0104 | mg/L | | | | 0.94% |
| i 604 | -193.9 | 0.0001 | 0.00004 | mg/L | | | | 38.39% |
| o .353 | 16.5 | 0.0001 | 0.00124 | mg/L | | | | >999.9% |
| b 206.833 | 46.9 | 0.0073 | 0.00093 | mg/L | | | | 12.78% |
| e 196.026 | 7.0 | -0.0034 | 0.00036 | mg/L | | | | 10.55% |
| n 189.933 | 132.2 | 0.0147 | 0.00101 | mg/L | | | | 6.86% |
| i 334.941 | -535.7 | 0.0003 | 0.00002 | mg/L | | | | 7.64% |
| l 190.800 | -16.8 | -0.0004 | 0.00082 | mg/L | | | | 214.11% |
| 292.402 | 663.2 | 0.0002 | 0.00010 | mg/L | | | | 49.89% |
| n 206.191 | 711.4 | 0.0148 | 0.00014 | mg/L | | | | 0.92% |

ean Data ----------

D: LCSS-M2530081 Seq. No.: 91 Sample No.: 60 A/S Pos: 68
ample Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:42:42 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| ' 371.030 | 3750704.0 | 1.046 | 0.0096 | mg/L | | | | 0.92% |
| ıg 328.068 | 117691.8 | 0.8633 | 0.00019 | mg/L | | | | 0.02% |
| ıl 308.215 | 733282.8 | 51.48 | 0.008 | mg/L | | | | 0.02% |
| ıs 188.979 | 2065.6 | 1.857 | 0.0204 | mg/L | | | | 1.10% |
| ı 249.773 | 23993.2 | 0.4346 | 0.00084 | mg/L | | | | 0.19% |
| Ba 233.527 | 117645.6 | 1.676 | 0.0019 | mg/L | | | | 0.11% |
| Be 313.107 | 2288558.7 | 0.4430 | 0.00538 | mg/L | | | | 1.21% |
| Ca 315.887 | 10762668.5 | 101.5 | 1.35 | mg/L | | | | 1.33% |
| Cd 226.502 | 51653.8 | 0.6360 | 0.00041 | mg/L | | | | 0.06% |
| Co 228.616 | 37901.4 | 2.169 | 0.0045 | mg/L | | | | 0.21% |
| Cr 267.716 | 125013.2 | 1.369 | 0.0003 | mg/L | | | | 0.03% |
| Cu 324.754 | 190488.1 | 0.9066 | 0.00420 | mg/L | | | | 0.46% |
| Fe 238.863 | 1875575.9 | 97.02 | 0.105 | mg/L | | | | 0.11% |
| K 404.721 | -296.5 | 24.31 | 0.831 | mg/L | | | | 3.42% |
| Mg 279.079 | 342906.9 | 23.07 | 0.023 | mg/L | | | | 0.10% |
| Mn 257.610 | 1217462.3 | 3.624 | 0.0027 | mg/L | | | | 0.07% |
| M 1.030 | 5011.6 | 0.4332 | 0.00536 | mg/L | | | | 1.24% |
| Na 330.237 | 6004.4 | 9.359 | 0.1222 | mg/L | | | | 1.31% |
| Ni 231.604 | 19647.6 | 0.7378 | 0.00855 | mg/L | | | | 1.16% |
| Pb 220.353 | 4707.9 | 1.174 | 0.0142 | mg/L | | | | 1.21% |
| Sb 206.833 | 370.6 | 0.2166 | 0.00317 | mg/L | | | | 1.46% |
| Se 196.026 | 2860.5 | 1.443 | 0.0165 | mg/L | | | | 1.14% |

| | | | | | |
|---|---|---|---|---|---|
| 189.933 | 9559.9 | 1.457 | 0.0183 | mg/L | 1.25% |
| 3?* 941 | 472666.3 | 1.410 | 0.0012 | mg/L | 0.09% |
| : 00 | 1066.2 | 0.7715 | 0.00819 | mg/L | 1.06% |
| 2?. .02 | 277238.9 | 1.612 | 0.0006 | mg/L | 0.04% |
| 206.191 | 118616.0 | 2.534 | 0.0009 | mg/L | 0.03% |

an Data ----------

: 528677 1/2 Seq. No.: 92 Sample No.: 61 A/S Pos: 69
mple Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:47:46 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3605120.7 | 1.006 | 0.0010 | mg/L | | | | 0.10% |
| 328.068 | -1723.1 | -0.0023 | 0.00036 | mg/L | | | | 15.84% |
| 308.215 | 79090.0 | 5.022 | 0.0274 | mg/L | | | | 0.55% |
| 188.979 | -35.9 | 0.0046 | 0.00029 | mg/L | | | | 6.39% |
| 249.773 | 180425.7 | 3.317 | 0.0075 | mg/L | | | | 0.23% |
| 233.527 | 34532.5 | 0.4916 | 0.00218 | mg/L | | | | 0.44% |
| : 313.107 | -6470.4 | -0.0001 | 0.00002 | mg/L | | | | 22.81% |
| 315.887 | 2078504.2 | 19.62 | 0.005 | mg/L | | | | 0.03% |
| 226.502 | 851.7 | 0.0107 | 0.00030 | mg/L | | | | 2.82% |
| 228.616 | 276.3 | 0.0263 | 0.00011 | mg/L | | | | 0.43% |
| : 267.716 | 7730.4 | 0.0830 | 0.00019 | mg/L | | | | 0.22% |
| 324.754 | 167076.4 | 0.7937 | 0.00101 | mg/L | | | | 0.13% |
| : 238.863 | 1202821.6 | 62.22 | 0.007 | mg/L | | | | 0.01% |
| 404.721 | -370.3 | 18.48 | 1.506 | mg/L | | | | 8.15% |
| 279.079 | 49409.1 | 3.327 | 0.0113 | mg/L | | | | 0.34% |
| 257.610 | 224732.2 | 0.6690 | 0.00004 | mg/L | | | | 0.01% |
| 202.030 | 510.0 | 0.0458 | 0.00017 | mg/L | | | | 0.36% |
| 330.237 | 2560.2 | 3.342 | 0.0307 | mg/L | | | | 0.92% |
| 231.604 | 5779.4 | 0.2222 | 0.00087 | mg/L | | | | 0.39% |
| 220.353 | 2299.1 | 0.5692 | 0.00209 | mg/L | | | | 0.37% |
| 206.833 | 40.4 | 0.0031 | 0.00173 | mg/L | | | | 56.72% |
| .026 | 7.6 | -0.0031 | 0.00187 | mg/L | | | | 60.50% |
| .933 | 1065.4 | 0.1575 | 0.00081 | mg/L | | | | 0.51% |
| 334.941 | 95799.4 | 0.2873 | 0.00023 | mg/L | | | | 0.08% |
| 190.800 | -23.9 | -0.0055 | 0.00038 | mg/L | | | | 6.90% |
| 292.402 | 7099.6 | 0.0377 | 0.00020 | mg/L | | | | 0.54% |
| 206.191 | 73652.0 | 1.574 | 0.0043 | mg/L | | | | 0.27% |

ean Data ----------

D: 528678 1/5 Seq. No.: 93 Sample No.: 62 A/S Pos: 70
ample Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:52:47 PM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3751305.0 | 1.046 | 0.0032 | mg/L | | | | 0.30% |
| g 328.068 | -1476.4 | -0.0005 | 0.00015 | mg/L | | | | 30.94% |
| l 308.215 | 88200.8 | 5.669 | 0.0293 | mg/L | | | | 0.52% |
| s 188.979 | -23.6 | 0.0044 | 0.00075 | mg/L | | | | 17.20% |
| 249.773 | 2163.5 | 0.0324 | 0.00304 | mg/L | | | | 9.38% |
| a 233.527 | 30510.7 | 0.4343 | 0.00293 | mg/L | | | | 0.67% |
| e 313.107 | -5919.8 | 0.0000 | 0.00000 | mg/L | | | | 5.86% |
| a 315.887 | 1411202.6 | 13.33 | 0.020 | mg/L | | | | 0.15% |
| d 226.502 | 715.7 | 0.0090 | 0.00002 | mg/L | | | | 0.24% |
| o 228.616 | -88.9 | 0.0055 | 0.00015 | mg/L | | | | 2.70% |
| r 267.716 | 4334.1 | 0.0457 | 0.00080 | mg/L | | | | 1.74% |
| u 324.754 | 8267.1 | 0.0277 | 0.00010 | mg/L | | | | 0.37% |
| Fe 238.863 | 358444.5 | 18.55 | 0.005 | mg/L | | | | 0.03% |
| K 404.721 | -863.2 | 3.488 | 1.2577 | mg/L | | | | 36.06% |
| g 279.079 | 42342.5 | 2.852 | 0.0158 | mg/L | | | | 0.55% |
| n 257.610 | 65436.6 | 0.1947 | 0.00144 | mg/L | | | | 0.74% |
| Mo 202.030 | -3.2 | 0.0016 | 0.00001 | mg/L | | | | 0.85% |
| Na 330.237 | 2331.1 | 2.942 | 0.0361 | mg/L | | | | 1.23% |
| N 1.604 | 116.0 | 0.0116 | 0.00012 | mg/L | | | | 1.00% |
| P .353 | 1638.2 | 0.4044 | 0.00047 | mg/L | | | | 0.12% |
| Sb .06.833 | 36.3 | 0.0004 | 0.00063 | mg/L | | | | 149.07% |
| Se 196.026 | 11.3 | -0.0012 | 0.00317 | mg/L | | | | 268.32% |
| Sn 189.933 | 738.3 | 0.1074 | 0.00042 | mg/L | | | | 0.39% |
| Ti 334.941 | 74454.4 | 0.2237 | 0.00151 | mg/L | | | | 0.67% |
| Tl 190.800 | -17.0 | -0.0005 | 0.00055 | mg/L | | | | 105.57% |

| | | | | | | |
|---|---|---|---|---|---|---|
| 92.402 | 4766.0 | 0.0241 | 0.00047 | mg/L | | 1.95% |
| 206.191 | 609327.1 | 13.02 | 0.003 | mg/L | | 0.02% |

n a

528679 1/10 Seq. No.: 94 Sample No.: 63 A/S Pos: 71
ple Qty: 1.0300 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/21/02 11:57:43 PM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3698069.5 | 1.032 | 0.0007 | mg/L | | | | 0.07% |
| 328.068 | -1816.0 | -0.0030 | 0.00009 | mg/L | | | | 2.93% |
| 308.215 | 17189.3 | 0.6261 | 0.00092 | mg/L | | | | 0.15% |
| 188.979 | -35.8 | 0.0053 | 0.00217 | mg/L | | | | 41.17% |
| 249.773 | 3404.1 | 0.0553 | 0.00059 | mg/L | | | | 1.06% |
| 233.527 | 1546.6 | 0.0214 | 0.00010 | mg/L | | | | 0.47% |
| 313.107 | -5555.1 | 0.0001 | 0.00000 | mg/L | | | | 0.63% |
| 315.887 | 2885613.3 | 27.23 | 0.006 | mg/L | | | | 0.02% |
| 226.502 | 901.3 | 0.0113 | 0.00002 | mg/L | | | | 0.21% |
| 228.616 | -120.7 | 0.0037 | 0.00005 | mg/L | | | | 1.43% |
| 267.716 | 27974.9 | 0.3049 | 0.00213 | mg/L | | | | 0.70% |
| 324.754 | 21188.5 | 0.0900 | 0.00005 | mg/L | | | | 0.05% |
| 238.863 | 1274973.1 | 65.95 | 0.016 | mg/L | | | | 0.02% |
| 404.721 | -1279.7 | 1.489 | 0.6278 | mg/L | | | | 42.16% |
| 279.079 | 102846.9 | 6.921 | 0.0249 | mg/L | | | | 0.36% |
| 257.610 | 140501.8 | 0.4182 | 0.00209 | mg/L | | | | 0.50% |
| 202.030 | 218.9 | 0.0207 | 0.00008 | mg/L | | | | 0.37% |
| 330.237 | 28056.1 | 47.88 | 0.196 | mg/L | | | | 0.41% |
| 231.604 | 1069.0 | 0.0471 | 0.00022 | mg/L | | | | 0.47% |
| 220.353 | 1984.7 | 0.4908 | 0.00129 | mg/L | | | | 0.26% |
| 206.833 | 41.1 | 0.0035 | 0.00200 | mg/L | | | | 56.60% |
| 196.026 | 8.6 | -0.0026 | 0.00133 | mg/L | | | | 51.22% |
| 189.933 | 2058.8 | 0.3095 | 0.00020 | mg/L | | | | 0.06% |
| 334.941 | 13474.3 | 0.0420 | 0.00008 | mg/L | | | | 0.18% |
| 800 | -19.7 | -0.0024 | 0.00082 | mg/L | | | | 33.82% |
| 02 | 5761.3 | 0.0299 | 0.00016 | mg/L | | | | 0.55% |
| 206.191 | 2111035.1 | 45.11 | 0.081 | mg/L | | | | 0.18% |

an Data

): 528680 1/10 Seq. No.: 95 Sample No.: 64 A/S Pos: 72
mple Qty: 1.0000 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:02:40 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3637174.8 | 1.015 | 0.0064 | mg/L | | | | 0.63% |
| g 328.068 | -2128.5 | -0.0052 | 0.00010 | mg/L | | | | 1.94% |
| l 308.215 | 22168.1 | 0.9797 | 0.00429 | mg/L | | | | 0.44% |
| s 188.979 | -47.2 | 0.0044 | 0.00128 | mg/L | | | | 29.23% |
| 249.773 | 5265.4 | 0.0896 | 0.00025 | mg/L | | | | 0.28% |
| a 233.527 | 3537.2 | 0.0498 | 0.00025 | mg/L | | | | 0.49% |
| e 313.107 | -6509.4 | -0.0001 | 0.00001 | mg/L | | | | 10.46% |
| a 315.887 | 2573481.3 | 24.29 | 0.001 | mg/L | | | | 0.00% |
| d 226.502 | 1690.2 | 0.0137 | 0.00025 | mg/L | | | | 1.80% |
| o 228.616 | -95.6 | 0.0051 | 0.00001 | mg/L | | | | 0.26% |
| r 267.716 | 38628.7 | 0.4217 | 0.00140 | mg/L | | | | 0.33% |
| u 324.754 | 12011.9 | 0.0457 | 0.00021 | mg/L | | | | 0.45% |
| e 238.863 | 2269370.0 | 117.4 | 0.01 | mg/L | | | | 0.01% |
| 404.721 | -1484.0 | 4.077 | 0.4634 | mg/L | | | | 11.37% |
| g 279.079 | 174447.4 | 11.74 | 0.058 | mg/L | | | | 0.49% |
| n 257.610 | 253634.8 | 0.7550 | 0.00036 | mg/L | | | | 0.05% |
| o 202.030 | 269.3 | 0.0251 | 0.00003 | mg/L | | | | 0.11% |
| a 330.237 | 54124.6 | 93.42 | 0.713 | mg/L | | | | 0.76% |
| i 231.604 | 1947.8 | 0.0797 | 0.00013 | mg/L | | | | 0.16% |
| b 220.353 | 690.6 | 0.1681 | 0.00056 | mg/L | | | | 0.33% |
| b 206.833 | 37.8 | 0.0014 | 0.00094 | mg/L | | | | 68.16% |
| e 196.026 | 15.5 | 0.0009 | 0.00397 | mg/L | | | | 436.10% |
| r .933 | 2729.8 | 0.4122 | 0.00231 | mg/L | | | | 0.56% |
| i 4.941 | 15321.8 | 0.0475 | 0.00039 | mg/L | | | | 0.83% |
| l 190.800 | -24.2 | -0.0056 | 0.00185 | mg/L | | | | 32.94% |
| / 292.402 | 8903.7 | 0.0482 | 0.00018 | mg/L | | | | 0.36% |
| n 206.191 | 3729594.8 | 79.70 | 0.299 | mg/L | | | | 0.38% |

an Data
): 528681 1/10 Seq. No.: 96 Sample No.: 65 A/S Pos: 73
Qty: 1.0500 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:07:39 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3655876.6 | 1.020 | 0.0023 | mg/L | | | | 0.23% |
| g 328.068 | -2104.9 | -0.0051 | 0.00013 | mg/L | | | | 2.50% |
| l 308.215 | 20225.9 | 0.8417 | 0.01297 | mg/L | | | | 1.54% |
| s 188.979 | -43.9 | 0.0049 | 0.00189 | mg/L | | | | 38.26% |
| 249.773 | 4809.1 | 0.0812 | 0.00090 | mg/L | | | | 1.10% |
| a 233.527 | 5705.9 | 0.0807 | 0.00043 | mg/L | | | | 0.53% |
| e 313.107 | -6486.6 | -0.0001 | 0.00000 | mg/L | | | | 0.33% |
| a 315.887 | 2432412.9 | 22.96 | 0.021 | mg/L | | | | 0.09% |
| d 226.502 | 1571.3 | 0.0131 | 0.00011 | mg/L | | | | 0.81% |
| o 228.616 | -98.4 | 0.0050 | 0.00007 | mg/L | | | | 1.34% |
| r 267.716 | 33048.3 | 0.3605 | 0.00345 | mg/L | | | | 0.96% |
| u 324.754 | 11989.0 | 0.0456 | 0.00055 | mg/L | | | | 1.20% |
| e 238.863 | 2014832.3 | 104.2 | 0.12 | mg/L | | | | 0.12% |
| 404.721 | -1465.4 | 2.767 | 1.3827 | mg/L | | | | 49.96% |
| g 279.079 | 164149.8 | 11.04 | 0.109 | mg/L | | | | 0.98% |
| n 257.610 | 256557.5 | 0.7637 | 0.00011 | mg/L | | | | 0.01% |
| o 202.030 | 255.9 | 0.0239 | 0.00004 | mg/L | | | | 0.15% |
| a 330.237 | 59285.1 | 102.4 | 1.21 | mg/L | | | | 1.18% |
| i 231.604 | 1779.7 | 0.0735 | 0.00002 | mg/L | | | | 0.02% |
| b 220.353 | 687.5 | 0.1674 | 0.00121 | mg/L | | | | 0.72% |
| b 206.833 | 37.9 | 0.0015 | 0.00082 | mg/L | | | | 56.09% |
| e 196.026 | 13.5 | -0.0001 | 0.00383 | mg/L | | | | >999.9% |
| n 189.933 | 2617.7 | 0.3950 | 0.00124 | mg/L | | | | 0.31% |
| i 334.941 | 15189.3 | 0.0471 | 0.00013 | mg/L | | | | 0.29% |
| l 190.800 | -24.5 | -0.0059 | 0.00019 | mg/L | | | | 3.24% |
| 292.402 | 7812.9 | 0.0419 | 0.00035 | mg/L | | | | 0.85% |
| n 206.191 | 3567271.0 | 76.23 | 0.042 | mg/L | | | | 0.05% |

ata
ID: 528682 1/5 Seq. No.: 97 Sample No.: 66 A/S Pos: 74
Sample Qty: 1.0300 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:12:40 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3630007.5 | 1.013 | 0.0033 | mg/L | | | | 0.33% |
| Ag 328.068 | -1675.3 | -0.0019 | 0.00044 | mg/L | | | | 22.51% |
| Al 308.215 | 174365.7 | 11.79 | 0.028 | mg/L | | | | 0.24% |
| As 188.979 | -26.0 | 0.0023 | 0.00038 | mg/L | | | | 16.91% |
| B 249.773 | 2194.1 | 0.0330 | 0.00003 | mg/L | | | | 0.08% |
| Ba 233.527 | 17722.3 | 0.2520 | 0.00149 | mg/L | | | | 0.59% |
| Be 313.107 | -7140.7 | -0.0002 | 0.00000 | mg/L | | | | 1.31% |
| Ca 315.887 | 13229659.9 | 124.8 | 0.42 | mg/L | | | | 0.34% |
| Cd 226.502 | 97.2 | 0.0013 | 0.00009 | mg/L | | | | 6.58% |
| Co 228.616 | -36.8 | 0.0085 | 0.00007 | mg/L | | | | 0.79% |
| Cr 267.716 | 1743.9 | 0.0174 | 0.00000 | mg/L | | | | 0.00% |
| Cu 324.754 | 5273.6 | 0.0132 | 0.00008 | mg/L | | | | 0.61% |
| Fe 238.863 | 241045.4 | 12.47 | 0.063 | mg/L | | | | 0.50% |
| K 404.721 | -904.9 | 0.3397 | 1.47512 | mg/L | | | | 434.18% |
| Mg 279.079 | 73325.8 | 4.935 | 0.0233 | mg/L | | | | 0.47% |
| Mn 257.610 | 110516.1 | 0.3289 | 0.00178 | mg/L | | | | 0.54% |
| Mo 202.030 | 12.0 | 0.0029 | 0.00008 | mg/L | | | | 2.71% |
| Na 330.237 | 1328.6 | 1.191 | 0.0371 | mg/L | | | | 3.11% |
| Ni 231.604 | 233.1 | 0.0160 | 0.00001 | mg/L | | | | 0.08% |
| Pb 220.353 | 160.1 | 0.0359 | 0.00091 | mg/L | | | | 2.55% |
| Sb 206.833 | 35.6 | 0.0000 | 0.00207 | mg/L | | | | >999.9% |
| Se 196.026 | 14.4 | 0.0004 | 0.00202 | mg/L | | | | 576.13% |
| Sn 189.933 | 1030.4 | 0.1521 | 0.00057 | mg/L | | | | 0.38% |
| Ti 334.941 | 154117.7 | 0.4610 | 0.00215 | mg/L | | | | 0.47% |
| T 190.800 | -17.8 | -0.0011 | 0.00110 | mg/L | | | | 102.77% |
| .402 | 11315.0 | 0.0623 | 0.00004 | mg/L | | | | 0.07% |
| Z 06.191 | 59681.8 | 1.275 | 0.0324 | mg/L | | | | 2.54% |

Mean Data
ID: 528683 1/2 Seq. No.: 98 Sample No.: 67 A/S Pos: 75
Sample Qty: 1.0200 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/22/02 12:17:39 AM

| em. | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3674778.8 | 1.025 | 0.0013 | mg/L | | | | 0.12% |
| 328.068 | -1243.4 | 0.0012 | 0.00016 | mg/L | | | | 13.16% |
| 308.215 | 43207.6 | 2.474 | 0.0320 | mg/L | | | | 1.29% |
| 188.979 | 4.7 | 0.0292 | 0.00186 | mg/L | | | | 6.37% |
| 249.773 | 1197.8 | 0.0146 | 0.00023 | mg/L | | | | 1.57% |
| 233.527 | 11091.7 | 0.1575 | 0.00136 | mg/L | | | | 0.86% |
| 313.107 | -6532.2 | -0.0001 | 0.00000 | mg/L | | | | 2.02% |
| 315.887 | 1042451.7 | 9.848 | 0.0280 | mg/L | | | | 0.28% |
| 226.502 | 348.9 | 0.0045 | 0.00004 | mg/L | | | | 0.90% |
| 228.616 | -110.8 | 0.0043 | 0.00004 | mg/L | | | | 1.01% |
| 267.716 | 975.3 | 0.0089 | 0.00001 | mg/L | | | | 0.06% |
| 324.754 | 487177.3 | 2.338 | 0.0028 | mg/L | | | | 0.12% |
| 238.863 | 63752.6 | 3.304 | 0.0253 | mg/L | | | | 0.77% |
| 404.721 | -794.3 | 2.463 | 2.2261 | mg/L | | | | 90.37% |
| 279.079 | 16087.7 | 1.086 | 0.0086 | mg/L | | | | 0.79% |
| 257.610 | 23352.8 | 0.0694 | 0.00061 | mg/L | | | | 0.88% |
| 202.030 | 237.1 | 0.0223 | 0.00028 | mg/L | | | | 1.26% |
| 330.237 | 954.4 | 0.5373 | 0.14576 | mg/L | | | | 27.13% |
| 231.604 | 267.5 | 0.0173 | 0.00005 | mg/L | | | | 0.27% |
| 220.353 | 149.5 | 0.0332 | 0.00027 | mg/L | | | | 0.82% |
| 206.833 | 35.0 | -0.0004 | 0.00193 | mg/L | | | | 438.90% |
| 196.026 | 34.3 | 0.0104 | 0.00102 | mg/L | | | | 9.81% |
| 189.933 | 548.9 | 0.0785 | 0.00036 | mg/L | | | | 0.45% |
| 334.941 | 36932.4 | 0.1119 | 0.00103 | mg/L | | | | 0.92% |
| 190.800 | -17.2 | -0.0007 | 0.00086 | mg/L | | | | 126.46% |
| 292.402 | 7343.7 | 0.0391 | 0.00077 | mg/L | | | | 1.98% |
| 206.191 | 80631.1 | 1.723 | 0.0015 | mg/L | | | | 0.09% |

an Data

): 528684 1/10 Seq. No.: 99 Sample No.: 68 A/S Pos: 76
Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:22:35 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3663701.9 | 1.022 | 0.0028 | mg/L | | | | 0.28% |
| g 328.068 | -1991.3 | -0.0042 | 0.00014 | mg/L | | | | 3.29% |
| l 308.215 | 14353.0 | 0.4247 | 0.00682 | mg/L | | | | 1.61% |
| s 188.979 | -52.4 | -0.0038 | 0.00196 | mg/L | | | | 51.85% |
| 249.773 | 4083.7 | 0.0678 | 0.00008 | mg/L | | | | 0.12% |
| a 233.527 | 126.1 | 0.0012 | 0.00015 | mg/L | | | | 13.02% |
| e 313.107 | -6461.3 | -0.0001 | 0.00001 | mg/L | | | | 11.11% |
| a 315.887 | 30067.9 | 0.2985 | 0.01446 | mg/L | | | | 4.84% |
| d 226.502 | 3398.9 | 0.0362 | 0.00020 | mg/L | | | | 0.56% |
| o 228.616 | -132.2 | 0.0030 | 0.00017 | mg/L | | | | 5.53% |
| r 267.716 | 43741.5 | 0.4777 | 0.00116 | mg/L | | | | 0.24% |
| u 324.754 | 2297.2 | -0.0011 | 0.00011 | mg/L | | | | 9.78% |
| e 238.863 | 1879438.1 | 97.22 | 0.005 | mg/L | | | | 0.00% |
| 404.721 | -1350.5 | 4.089 | 0.7662 | mg/L | | | | 18.74% |
| lg 279.079 | 6840.8 | 0.4640 | 0.01822 | mg/L | | | | 3.93% |
| ln 257.610 | 545193.2 | 1.623 | 0.0001 | mg/L | | | | 0.01% |
| lo 202.030 | 322.5 | 0.0296 | 0.00014 | mg/L | | | | 0.48% |
| la 330.237 | 18534.1 | 31.25 | 0.546 | mg/L | | | | 1.75% |
| Ni 231.604 | 1585.2 | 0.0663 | 0.00013 | mg/L | | | | 0.19% |
| Pb 220.353 | 46.3 | 0.0075 | 0.00055 | mg/L | | | | 7.30% |
| Sb 206.833 | 40.2 | 0.0029 | 0.00416 | mg/L | | | | 142.42% |
| Se 196.026 | 12.2 | -0.0007 | 0.00355 | mg/L | | | | 474.97% |
| Sn 189.933 | 415.8 | 0.0581 | 0.00060 | mg/L | | | | 1.03% |
| Ti 334.941 | 10314.9 | 0.0326 | 0.00028 | mg/L | | | | 0.85% |
| Tl 190.800 | -33.6 | -0.0123 | 0.00008 | mg/L | | | | 0.64% |
| V 292.402 | 7322.2 | 0.0390 | 0.00013 | mg/L | | | | 0.32% |
| Zn 206.191 | 4235805.7 | 90.52 | 0.004 | mg/L | | | | 0.00% |

M ata

ID. CV Seq. No.: 100 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: 02/22/02 12:27:38 AM

| | Mean Corr. | Mean | Calib | Mean | Sample |
|---|---|---|---|---|---|

| ment | Intensity | Conc. | Std.Dev. | Units | Conc. | Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 7) [illegible]0 | 3669991.4 | 1.024 | 0.0075 | mg/L | | | | 0.74% |
| 3 [illegible]8 | 67410.7 | 0.4988 | 0.00127 | mg/L | | | | 0.25% |
| 3[illegible]15 | 147169.9 | 9.856 | 0.0413 | mg/L | | | | 0.42% |
| 188.979 | 1126.0 | 1.015 | 0.0102 | mg/L | | | | 1.01% |
| 49.773 | 134532.2 | 2.471 | 0.0146 | mg/L | | | | 0.59% |
| 233.527 | 728728.2 | 10.39 | 0.007 | mg/L | | | | 0.07% |
| 313.107 | 1292210.6 | 0.2506 | 0.00019 | mg/L | | | | 0.08% |
| 315.887 | 2711289.0 | 25.59 | 0.003 | mg/L | | | | 0.01% |
| 226.502 | 40635.1 | 0.5052 | 0.00163 | mg/L | | | | 0.32% |
| 228.616 | 45017.8 | 2.574 | 0.0139 | mg/L | | | | 0.54% |
| 267.716 | 45946.2 | 0.5019 | 0.00120 | mg/L | | | | 0.24% |
| 324.754 | 261301.7 | 1.248 | 0.0096 | mg/L | | | | 0.77% |
| 238.863 | 97568.6 | 5.053 | 0.0179 | mg/L | | | | 0.35% |
| 404.721 | 385.7 | 25.13 | 0.568 | mg/L | | | | 2.26% |
| 279.079 | 376868.6 | 25.35 | 0.000 | mg/L | | | | 0.00% |
| 257.610 | 257050.1 | 0.7652 | 0.00358 | mg/L | | | | 0.47% |
| 202.030 | 27975.1 | 2.410 | 0.0068 | mg/L | | | | 0.28% |
| 330.237 | 14066.1 | 23.44 | 0.231 | mg/L | | | | 0.99% |
| 231.604 | 54771.9 | 2.044 | 0.0083 | mg/L | | | | 0.41% |
| 220.353 | 2017.1 | 0.4989 | 0.00271 | mg/L | | | | 0.54% |
| 206.833 | 7733.7 | 4.979 | 0.0495 | mg/L | | | | 0.99% |
| 196.026 | 990.7 | 0.4951 | 0.00142 | mg/L | | | | 0.29% |
| 189.933 | 34386.7 | 5.256 | 0.0317 | mg/L | | | | 0.60% |
| 334.941 | 841813.6 | 2.510 | 0.0010 | mg/L | | | | 0.04% |
| 190.800 | 1410.9 | 1.017 | 0.0081 | mg/L | | | | 0.79% |
| 292.402 | 436652.3 | 2.541 | 0.0016 | mg/L | | | | 0.06% |
| 206.191 | 62693.1 | 1.339 | 0.0045 | mg/L | | | | 0.34% |

C exceeds upper limit for Zn 206.191 Recovery = 133.93% Action = Continue

an Data ----------

: CCB Seq. No.: 101 Sample No.: 9 A/S Pos: 5
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:32:33 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3717579.5 | 1.037 | 0.0004 | mg/L | | | | 0.04% |
| g 328.068 | -1307.5 | 0.0007 | 0.00047 | mg/L | | | | 65.13% |
| l 308.215 | 7941.4 | -0.0306 | 0.00261 | mg/L | | | | 8.52% |
| s 188.979 | -27.6 | 0.0009 | 0.00058 | mg/L | | | | 66.07% |
| 249.773 | 1842.3 | 0.0265 | 0.00988 | mg/L | | | | 37.24% |
| a 233.527 | 376.2 | 0.0047 | 0.00019 | mg/L | | | | 4.10% |
| e 313.107 | -5056.2 | 0.0002 | 0.00002 | mg/L | | | | 8.75% |
| a 315.887 | -701.0 | 0.0082 | 0.00036 | mg/L | | | | 4.42% |
| d 226.502 | 8.4 | 0.0002 | 0.00006 | mg/L | | | | 25.24% |
| o 228.616 | -141.8 | 0.0025 | 0.00022 | mg/L | | | | 8.97% |
| r 267.716 | 177.3 | 0.0002 | 0.00009 | mg/L | | | | 49.63% |
| u 324.754 | 4091.1 | 0.0075 | 0.00302 | mg/L | | | | 40.11% |
| e 238.863 | 15.8 | 0.0069 | 0.00024 | mg/L | | | | 3.52% |
| 404.721 | -876.6 | 0.8814 | 0.32685 | mg/L | | | | 37.08% |
| g 279.079 | 262.1 | 0.0216 | 0.00020 | mg/L | | | | 0.92% |
| n 257.610 | 146.3 | 0.0003 | 0.00000 | mg/L | | | | 0.66% |
| o 202.030 | 4.6 | 0.0023 | 0.00076 | mg/L | | | | 33.29% |
| a 330.237 | 735.2 | 0.1544 | 0.09689 | mg/L | | | | 62.76% |
| i 231.604 | -146.6 | 0.0019 | 0.00014 | mg/L | | | | 7.37% |
| b 220.353 | 16.9 | 0.0001 | 0.00052 | mg/L | | | | 379.68% |
| b 206.833 | 89.9 | 0.0351 | 0.01454 | mg/L | | | | 41.42% |

QC exceeds upper limit for Sb 206.833 Action = Continue

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| e 196.026 | 7.5 | -0.0031 | 0.00069 | mg/L | | | | 22.17% |
| n 189.933 | 110.6 | 0.0114 | 0.00275 | mg/L | | | | 24.09% |
| i 334.941 | 391.7 | 0.0031 | 0.00098 | mg/L | | | | 31.97% |
| l 190.800 | -10.2 | 0.0044 | 0.00321 | mg/L | | | | 73.74% |
| / 292.402 | 907.0 | 0.0016 | 0.00029 | mg/L | | | | 18.03% |
| n 206.191 | 12017.5 | 0.2564 | 0.00788 | mg/L | | | | 3.07% |

*QC exceeds upper limit for Zn 206.191 Action = Continue

ata ----------

ID: [illegible]28685 1/10 Seq. No.: 102 Sample No.: 69 A/S Pos: 77
Sample Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:37:31 AM

| | Mean Corr. | Mean | | Calib | | Mean | | Sample |
|---|---|---|---|---|---|---|---|---|

| ement | Intensity | Conc. | Std.Dev. | Units | Conc. | Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 37' 030 | 3702374.7 | 1.033 | 0.0087 | mg/L | | | | 0.85% |
| )68 | -1891.7 | -0.0035 | 0.00026 | mg/L | | | | 7.33% |
| .215 | 11827.1 | 0.2453 | 0.00245 | mg/L | | | | 1.00% |
| 188.979 | -44.1 | 0.0022 | 0.00210 | mg/L | | | | 97.53% |
| 249.773 | 3946.7 | 0.0653 | 0.00284 | mg/L | | | | 4.35% |
| 233.527 | 2252.2 | 0.0315 | 0.00033 | mg/L | | | | 1.05% |
| 313.107 | -6247.2 | 0.0000 | 0.00001 | mg/L | | | | 33.74% |
| 315.887 | 688700.6 | 6.511 | 0.0121 | mg/L | | | | 0.19% |
| 226.502 | 805.6 | 0.0045 | 0.00001 | mg/L | | | | 0.14% |
| 228.616 | -98.5 | 0.0050 | 0.00022 | mg/L | | | | 4.39% |
| 267.716 | 14130.9 | 0.1531 | 0.00205 | mg/L | | | | 1.34% |
| 324.754 | 7016.7 | 0.0216 | 0.00038 | mg/L | | | | 1.77% |
| 238.863 | 1732827.4 | 89.63 | 0.247 | mg/L | | | | 0.28% |
| 404.721 | -1387.6 | 2.415 | 1.1879 | mg/L | | | | 49.20% |
| 279.079 | 43173.9 | 2.908 | 0.0424 | mg/L | | | | 1.46% |
| 257.610 | 186505.6 | 0.5552 | 0.00651 | mg/L | | | | 1.17% |
| 202.030 | 129.2 | 0.0130 | 0.00000 | mg/L | | | | 0.01% |
| 330.237 | 14501.0 | 24.20 | 0.345 | mg/L | | | | 1.42% |
| 231.604 | 1316.7 | 0.0563 | 0.00032 | mg/L | | | | 0.57% |
| 220.353 | 796.3 | 0.1945 | 0.00210 | mg/L | | | | 1.08% |
| 206.833 | 47.8 | 0.0079 | 0.00007 | mg/L | | | | 0.94% |
| 196.026 | 14.3 | 0.0003 | 0.00022 | mg/L | | | | 72.68% |
| 189.933 | 908.6 | 0.1335 | 0.00089 | mg/L | | | | 0.67% |
| 334.941 | 6381.8 | 0.0209 | 0.00059 | mg/L | | | | 2.83% |
| 190.800 | -22.3 | -0.0043 | 0.00018 | mg/L | | | | 4.24% |
| 292.402 | 5462.2 | 0.0282 | 0.00067 | mg/L | | | | 2.39% |
| 206.191 | 2827873.3 | 60.43 | 0.252 | mg/L | | | | 0.42% |

ean Data ----------

D: 528685D 1/10 Seq. No.: 103 Sample No.: 70 A/S Pos: 78

ample Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/22/02 12:42:27 AM

| | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3689445.9 | 1.029 | 0.0029 | mg/L | | | | 0.28% |
| g 328.068 | -1885.7 | -0.0035 | 0.00016 | mg/L | | | | 4.66% |
| l 308.215 | 12169.1 | 0.2696 | 0.01369 | mg/L | | | | 5.08% |
| a 188.979 | -46.7 | 0.0012 | 0.00494 | mg/L | | | | 396.06% |
| 249.773 | 4186.7 | 0.0697 | 0.00064 | mg/L | | | | 0.92% |
| a 233.527 | 4102.1 | 0.0579 | 0.00009 | mg/L | | | | 0.16% |
| e 313.107 | -6515.7 | -0.0001 | 0.00001 | mg/L | | | | 8.42% |
| a 315.887 | 783374.2 | 7.404 | 0.0074 | mg/L | | | | 0.10% |
| d 226.502 | 885.9 | 0.0050 | 0.00005 | mg/L | | | | 1.05% |
| o 228.616 | -93.7 | 0.0052 | 0.00041 | mg/L | | | | 7.75% |
| r 267.716 | 16723.0 | 0.1815 | 0.00237 | mg/L | | | | 1.31% |
| u 324.754 | 7723.7 | 0.0250 | 0.00032 | mg/L | | | | 1.26% |
| e 238.863 | 1882705.2 | 97.38 | 0.029 | mg/L | | | | 0.03% |
| 404.721 | -1532.5 | 0.6146 | 0.68584 | mg/L | | | | 111.59% |
| g 279.079 | 48027.4 | 3.234 | 0.0331 | mg/L | | | | 1.02% |
| n 257.610 | 203212.6 | 0.6049 | 0.00640 | mg/L | | | | 1.06% |
| o 202.030 | 185.9 | 0.0179 | 0.00006 | mg/L | | | | 0.35% |
| Na 330.237 | 15315.8 | 25.62 | 0.467 | mg/L | | | | 1.82% |
| Ni 231.604 | 1391.6 | 0.0591 | 0.00006 | mg/L | | | | 0.10% |
| Pb 220.353 | 952.6 | 0.2335 | 0.00074 | mg/L | | | | 0.32% |
| Sb 206.833 | 40.5 | 0.0031 | 0.00143 | mg/L | | | | 45.56% |
| Se 196.026 | 16.6 | 0.0015 | 0.00265 | mg/L | | | | 179.96% |
| Sn 189.933 | 1026.2 | 0.1515 | 0.00148 | mg/L | | | | 0.98% |
| Ti 334.941 | 14835.1 | 0.0461 | 0.00090 | mg/L | | | | 1.95% |
| Tl 190.800 | -21.1 | -0.0034 | 0.00108 | mg/L | | | | 31.33% |
| V 292.402 | 5993.7 | 0.0313 | 0.00005 | mg/L | | | | 0.17% |
| Zn 206.191 | 2992694.4 | 63.95 | 0.055 | mg/L | | | | 0.09% |

Mean Data ----------

ID: 528685S 1/10 Seq. No.: 104 Sample No.: 71 A/S Pos: 79

Sa e Qty: 1.0100 g Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0

Data: Original Date: 02/22/02 12:47:24 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3691723.0 | 1.030 | 0.0058 | mg/L | | | | 0.56% |
| Ag 328.068 | -1283.8 | 0.0009 | 0.00003 | mg/L | | | | 3.83% |

| | | | | | |
|---|---|---|---|---|---|
| 308.215 | 14393.0 | 0.4275 | 0.00961 | mg/L | 2.25% |
| 188.979 | -36.8 | 0.0096 | 0.00027 | mg/L | 2.82% |
| 2 73 | 9010.3 | 0.1586 | 0.00197 | mg/L | 1.24% |
| 527 | 13381.6 | 0.1901 | 0.00072 | mg/L | 0.38% |
| 313.107 | 17244.0 | 0.0045 | 0.00001 | mg/L | 0.33% |
| 315.887 | 721912.9 | 6.824 | 0.0137 | mg/L | 0.20% |
| 226.502 | 1225.1 | 0.0093 | 0.00003 | mg/L | 0.32% |
| 228.616 | 776.2 | 0.0548 | 0.00066 | mg/L | 1.21% |
| 267.716 | 15762.8 | 0.1710 | 0.00020 | mg/L | 0.12% |
| 324.754 | 11835.7 | 0.0449 | 0.00017 | mg/L | 0.37% |
| 238.863 | 1844791.9 | 95.42 | 0.094 | mg/L | 0.10% |
| 404.721 | -1340.1 | 4.061 | 0.6843 | mg/L | 16.85% |
| 279.079 | 46536.2 | 3.134 | 0.0057 | mg/L | 0.18% |
| 257.610 | 210923.3 | 0.6279 | 0.00151 | mg/L | 0.24% |
| 202.030 | 637.4 | 0.0567 | 0.00041 | mg/L | 0.72% |
| 330.237 | 15457.8 | 25.87 | 0.067 | mg/L | 0.26% |
| 231.604 | 2666.6 | 0.1065 | 0.00087 | mg/L | 0.82% |
| 220.353 | 994.0 | 0.2438 | 0.00038 | mg/L | 0.15% |
| 206.833 | 102.3 | 0.0431 | 0.00141 | mg/L | 3.27% |
| 196.026 | 206.4 | 0.0977 | 0.00022 | mg/L | 0.22% |
| 189.933 | 961.1 | 0.1415 | 0.00123 | mg/L | 0.87% |
| 334.941 | 22308.0 | 0.0684 | 0.00096 | mg/L | 1.41% |
| 190.800 | 238.5 | 0.1816 | 0.00017 | mg/L | 0.09% |
| 292.402 | 13709.1 | 0.0762 | 0.00025 | mg/L | 0.32% |
| 206.191 | 2947727.6 | 62.99 | 0.143 | mg/L | 0.23% |

ean Data

D: 528685A 1/10 Seq. No.: 105 Sample No.: 72 A/S Pos: 80
ample Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:52:23 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3597016.1 | 1.003 | 0.0054 | mg/L | | | | 0.54% |
| g .068 | 4942.7 | 0.0460 | 0.00046 | mg/L | | | | 0.99% |
| l .215 | 40286.1 | 2.266 | 0.0044 | mg/L | | | | 0.19% |
| s ..d.979 | -2.1 | 0.0392 | 0.00060 | mg/L | | | | 1.54% |
| 249.773 | 61128.1 | 1.119 | 0.0068 | mg/L | | | | 0.61% |
| a 233.527 | 147115.8 | 2.096 | 0.0151 | mg/L | | | | 0.72% |
| e 313.107 | 244510.0 | 0.0484 | 0.00005 | mg/L | | | | 0.10% |
| a 315.887 | 900788.8 | 8.512 | 0.0061 | mg/L | | | | 0.07% |
| d 226.502 | 4888.9 | 0.0552 | 0.00029 | mg/L | | | | 0.52% |
| o 228.616 | 9042.0 | 0.5254 | 0.00224 | mg/L | | | | 0.43% |
| r 267.716 | 32253.9 | 0.3518 | 0.00237 | mg/L | | | | 0.67% |
| u 324.754 | 57349.0 | 0.2644 | 0.00047 | mg/L | | | | 0.18% |
| e 238.863 | 1747927.1 | 90.41 | 0.050 | mg/L | | | | 0.05% |
| 404.721 | -324.2 | 22.94 | 1.478 | mg/L | | | | 6.44% |
| g 279.079 | 73095.3 | 4.920 | 0.0377 | mg/L | | | | 0.77% |
| n 257.610 | 356547.0 | 1.061 | 0.0016 | mg/L | | | | 0.15% |
| o 202.030 | 5479.8 | 0.4735 | 0.00266 | mg/L | | | | 0.56% |
| a 330.237 | 25540.8 | 43.49 | 0.312 | mg/L | | | | 0.72% |
| i 231.604 | 15039.7 | 0.5665 | 0.00275 | mg/L | | | | 0.49% |
| b 220.353 | 2826.9 | 0.7008 | 0.00529 | mg/L | | | | 0.75% |
| b 206.833 | 804.9 | 0.4975 | 0.00808 | mg/L | | | | 1.62% |
| e 196.026 | 2113.0 | 1.064 | 0.0129 | mg/L | | | | 1.21% |
| n 189.933 | 1381.0 | 0.2058 | 0.00128 | mg/L | | | | 0.62% |
| i 334.941 | 173977.5 | 0.5202 | 0.00373 | mg/L | | | | 0.72% |
| l 190.800 | 2775.1 | 1.989 | 0.0132 | mg/L | | | | 0.66% |
| V 292.402 | 91506.2 | 0.5295 | 0.00470 | mg/L | | | | 0.89% |
| n 206.191 | 2772379.7 | 59.25 | 0.023 | mg/L | | | | 0.04% |

Mean Data

ID: 528685L 1/10 Seq. No.: 106 Sample No.: 73 A/S Pos: 81
Sample Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 12:57:19 AM

| E nt | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y .030 | 3697600.2 | 1.031 | 0.0045 | mg/L | | | | 0.44% |
| Ag 328.068 | -1434.0 | -0.0002 | 0.00010 | mg/L | | | | 51.79% |
| Al 308.215 | 8885.0 | 0.0364 | 0.00025 | mg/L | | | | 0.68% |
| As 188.979 | -26.1 | 0.0022 | 0.00097 | mg/L | | | | 44.86% |
| B 249.773 | 2074.1 | 0.0308 | 0.00503 | mg/L | | | | 16.32% |

| | | | | | |
|---|---|---|---|---|---|
| 233.527 | 577.2 | 0.0076 | 0.00043 mg/L | | 5.70% |
| 313.107 | -5862.4 | 0.0000 | 0.00001 mg/L | | 34.56% |
| ? `87 | 136737.7 | 1.305 | 0.0190 mg/L | | 1.46% |
| 2 ,02 | 156.8 | 0.0021 | 0.00010 mg/L | | 4.67% |
| 228.616 | -145.6 | 0.0023 | 0.00035 mg/L | | 15.22% |
| 267.716 | 2958.7 | 0.0307 | 0.00046 mg/L | | 1.49% |
| 324.754 | 3709.4 | 0.0057 | 0.00041 mg/L | | 7.27% |
| 238.863 | 356502.7 | 18.45 | 0.003 mg/L | | 0.01% |
| 404.721 | -978.5 | 1.260 | 0.1168 mg/L | | 9.27% |
| 279.079 | 8621.2 | 0.5838 | 0.00462 mg/L | | 0.79% |
| 257.610 | 37568.2 | 0.1118 | 0.00165 mg/L | | 1.48% |
| 202.030 | 22.7 | 0.0038 | 0.00058 mg/L | | 15.27% |
| 330.237 | 3290.8 | 4.619 | 0.1556 mg/L | | 3.37% |
| 231.604 | 118.8 | 0.0117 | 0.00019 mg/L | | 1.63% |
| 220.353 | 174.2 | 0.0394 | 0.00061 mg/L | | 1.55% |
| 206.833 | 46.5 | 0.0070 | 0.00268 mg/L | | 38.14% |
| 196.026 | 12.2 | -0.0008 | 0.00089 mg/L | | 115.99% |
| 189.933 | 216.6 | 0.0276 | 0.00062 mg/L | | 2.26% |
| 334.941 | 1136.7 | 0.0053 | 0.00078 mg/L | | 14.73% |
| 190.800 | -13.0 | 0.0024 | 0.00057 mg/L | | 24.27% |
| 292.402 | 1670.3 | 0.0061 | 0.00006 mg/L | | 0.92% |
| 206.191 | 639364.5 | 13.66 | 0.052 mg/L | | 0.38% |

an Data ----------

: 999991 Seq. No.: 107 Sample No.: 74 A/S Pos: 82
mple Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 1:02:13 AM

| ement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3624100.5 | 1.011 | 0.0099 | mg/L | | | | 0.98% |
| g 328.068 | -1366.4 | 0.0003 | 0.00039 | mg/L | | | | 128.21% |
| l 308.215 | 8457.9 | 0.0061 | 0.01034 | mg/L | | | | 170.72% |
| s 188.979 | -26.1 | 0.0022 | 0.00003 | mg/L | | | | 1.30% |
| 2 773 | 1159.3 | 0.0139 | 0.00163 | mg/L | | | | 11.70% |
| a 527 | 24.9 | -0.0003 | 0.00002 | mg/L | | | | 8.47% |
| e .107 | -6153.5 | 0.0000 | 0.00001 | mg/L | | | | 51.01% |
| a 315.887 | -2492.0 | -0.0087 | 0.00459 | mg/L | | | | 52.90% |
| d 226.502 | -7.4 | 0.0000 | 0.00006 | mg/L | | | | 163.13% |
| o 228.616 | -166.9 | 0.0011 | 0.00003 | mg/L | | | | 2.34% |
| r 267.716 | 127.8 | -0.0004 | 0.00006 | mg/L | | | | 16.07% |
| u 324.754 | 2777.3 | 0.0012 | 0.00007 | mg/L | | | | 5.67% |
| e 238.863 | 215.3 | 0.0172 | 0.00605 | mg/L | | | | 35.13% |
| 404.721 | -969.2 | -0.8969 | 0.31651 | mg/L | | | | 35.29% |
| g 279.079 | 79.3 | 0.0093 | 0.00515 | mg/L | | | | 55.54% |
| n 257.610 | 60.3 | 0.0001 | 0.00007 | mg/L | | | | 75.10% |
| o 202.030 | -18.5 | 0.0003 | 0.00003 | mg/L | | | | 11.94% |
| a 330.237 | 595.1 | -0.0904 | 0.01611 | mg/L | | | | 17.81% |
| i 231.604 | -196.3 | 0.0000 | 0.00021 | mg/L | | | | 829.37% |
| b 220.353 | 15.2 | -0.0003 | 0.00087 | mg/L | | | | 315.96% |
| b 206.833 | 37.4 | 0.0011 | 0.00224 | mg/L | | | | 195.12% |
| e 196.026 | 7.3 | -0.0032 | 0.00248 | mg/L | | | | 76.81% |
| n 189.933 | 41.3 | 0.0008 | 0.00047 | mg/L | | | | 59.51% |
| i 334.941 | -564.4 | 0.0002 | 0.00007 | mg/L | | | | 32.88% |
| l 190.800 | -13.2 | 0.0022 | 0.00079 | mg/L | | | | 35.74% |
| 292.402 | 709.0 | 0.0005 | 0.00001 | mg/L | | | | 2.94% |
| n 206.191 | 8973.9 | 0.1913 | 0.00553 | mg/L | | | | 2.89% |

lean Data ----------

D: 999992 Seq. No.: 108 Sample No.: 75 A/S Pos: 83
ample Qty: 1.0000 mL Prep. Vol.: 100.0 mL Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 1:07:06 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| f 371.030 | 3582713.7 | 0.999 | 0.0210 | mg/L | | | | 2.10% |
| Ag 328.068 | -1357.4 | 0.0004 | 0.00013 | mg/L | | | | 35.02% |
| A .215 | 8506.2 | 0.0095 | 0.02488 | mg/L | | | | 262.40% |
| As .979 | -27.2 | 0.0012 | 0.00211 | mg/L | | | | 177.55% |
| B 249.773 | 1066.5 | 0.0122 | 0.00083 | mg/L | | | | 6.77% |
| Ba 233.527 | 18.2 | -0.0004 | 0.00004 | mg/L | | | | 10.96% |
| Be 313.107 | -6201.3 | 0.0000 | 0.00002 | mg/L | | | | 56.32% |
| Ca 315.887 | -2651.0 | -0.0102 | 0.00581 | mg/L | | | | 57.11% |

| | | | | |
|---|---|---|---|---|
| 226.502 | -5.4 | 0.0001 | 0.00000 mg/L | 3.68% |
| 22^ 616 | -173.9 | 0.0007 | 0.00010 mg/L | 14.68% |
| ; 16 | 142.5 | -0.0002 | 0.00050 mg/L | 254.06% |
| 3. /54 | 2769.3 | 0.0012 | 0.00034 mg/L | 29.28% |
| 238.863 | -83.3 | 0.0018 | 0.00085 mg/L | 48.11% |
| 404.721 | -886.1 | 0.6995 | 1.74811 mg/L | 249.91% |
| 279.079 | 39.8 | 0.0066 | 0.00099 mg/L | 14.90% |
| 257.610 | 33.7 | 0.0000 | 0.00003 mg/L | 223.16% |
| 202.030 | -21.7 | 0.0000 | 0.00011 mg/L | >999.9% |
| 330.237 | 712.9 | 0.1155 | 0.29027 mg/L | 251.25% |
| 231.604 | -199.8 | -0.0001 | 0.00015 mg/L | 140.37% |
| 220.353 | 13.6 | -0.0007 | 0.00060 mg/L | 87.53% |
| 206.833 | 38.4 | 0.0018 | 0.00102 mg/L | 58.25% |
| 196.026 | 11.1 | -0.0013 | 0.00186 mg/L | 142.31% |
| 189.933 | 40.0 | 0.0006 | 0.00034 mg/L | 57.35% |
| 334.941 | -580.3 | 0.0002 | 0.00013 mg/L | 76.79% |
| 190.800 | -14.7 | 0.0011 | 0.00201 mg/L | 180.92% |
| 292.402 | 714.5 | 0.0005 | 0.00038 mg/L | 74.95% |
| 206.191 | 6677.6 | 0.1423 | 0.00932 mg/L | 6.55% |

ean Data ----------
): CRI Seq. No.: 109 Sample No.: 5 A/S Pos: 6
mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 1:12:01 AM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3723072.9 | 1.039 | 0.0038 | mg/L | | | | 0.36% |
| g 328.068 | 1199.0 | 0.0189 | 0.00014 | mg/L | | | | 0.74% |
| l 308.215 | 7893.4 | -0.0340 | 0.00709 | mg/L | | | | 20.83% |
| s 188.979 | -4.9 | 0.0208 | 0.00326 | mg/L | | | | 15.68% |
| 249.773 | 956.4 | 0.0102 | 0.00155 | mg/L | | | | 15.22% |
| a 233.527 | 66.1 | 0.0003 | 0.00010 | mg/L | | | | 29.95% |
| e 313.107 | 44520.2 | 0.0098 | 0.00009 | mg/L | | | | 0.87% |
| a 887 | 643.7 | 0.0209 | 0.00030 | mg/L | | | | 1.45% |
| d 502 | 806.4 | 0.0102 | 0.00007 | mg/L | | | | 0.66% |
| o 228.616 | 1673.8 | 0.1059 | 0.00002 | mg/L | | | | 0.02% |
| r 267.716 | 2035.8 | 0.0206 | 0.00009 | mg/L | | | | 0.45% |
| u 324.754 | 12935.8 | 0.0502 | 0.00073 | mg/L | | | | 1.46% |
| e 238.863 | -9.4 | 0.0056 | 0.00052 | mg/L | | | | 9.23% |
| 404.721 | -806.4 | 2.231 | 0.9100 | mg/L | | | | 40.79% |
| g 279.079 | -34.1 | 0.0017 | 0.00131 | mg/L | | | | 79.52% |
| n 257.610 | 10421.7 | 0.0309 | 0.00028 | mg/L | | | | 0.90% |
| o 202.030 | -21.7 | 0.0000 | 0.00005 | mg/L | | | | 472.10% |
| a 330.237 | 752.2 | 0.1841 | 0.02333 | mg/L | | | | 12.67% |
| i 231.604 | 2033.5 | 0.0829 | 0.00028 | mg/L | | | | 0.34% |
| b 220.353 | 40.6 | 0.0061 | 0.00005 | mg/L | | | | 0.87% |
| b 206.833 | 224.2 | 0.1219 | 0.00139 | mg/L | | | | 1.14% |
| e 196.026 | 29.6 | 0.0080 | 0.00028 | mg/L | | | | 3.49% |
| n 189.933 | 50.8 | 0.0022 | 0.00082 | mg/L | | | | 36.63% |
| i 334.941 | -523.2 | 0.0003 | 0.00010 | mg/L | | | | 28.23% |
| l 190.800 | 14.1 | 0.0217 | 0.00172 | mg/L | | | | 7.94% |
| 292.402 | 17917.8 | 0.1007 | 0.00071 | mg/L | | | | 0.71% |
| n 206.191 | 24891.5 | 0.5315 | 0.01839 | mg/L | | | | 3.46% |

*QC exceeds upper limit for Zn 206.191 Recovery = 1328.78% Action = Continue

ean Data ----------
D: ICSA Seq. No.: 110 Sample No.: 6 A/S Pos: 7
ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0
Data: Original Date: 02/22/02 1:17:27 AM

| Element | Mean Corr. Intensity | Mean Conc. | Calib Std.Dev. | Units | Mean Conc. | Sample Std.Dev. | Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3172176.1 | 0.885 | 0.0049 | mg/L | | | | 0.56% |
| Ag 328.068 | -3654.4 | -0.0061 | 0.00025 | mg/L | | | | 4.07% |
| Al 308.215 | 7501040.6 | 532.1 | 3.70 | mg/L | | | | 0.70% |
| As 188.979 | -60.8 | 0.0061 | 0.00456 | mg/L | | | | 74.52% |
| B 773 | 7130.9 | 0.1240 | 0.00144 | mg/L | | | | 1.16% |
| Ba 233.527 | -405.4 | -0.0064 | 0.00019 | mg/L | | | | 2.97% |
| Be 313.107 | -7120.6 | -0.0002 | 0.00001 | mg/L | | | | 2.88% |
| Ca 315.887 | 52946912.3 | 499.4 | 2.67 | mg/L | | | | 0.53% |
| Cd 226.502 | 1426.3 | 0.0056 | 0.00009 | mg/L | | | | 1.53% |
| Co 228.616 | -176.9 | 0.0005 | 0.00026 | mg/L | | | | 51.52% |

| | | | | | |
|---|---|---|---|---|---|
| 267.716 | 927.0 | 0.0084 | 0.00006 | mg/L | 0.70% |
| 3?4.754 | 839.4 | 0.0043 | 0.00096 | mg/L | 22.30% |
| 363 | 3770340.2 | 195.0 | 0.38 | mg/L | 0.19% |
| 4( 21 | -2378.7 | -3.278 | 0.0698 | mg/L | 2.13% |
| ) 279.079 | 8272897.4 | 556.4 | 2.88 | mg/L | 0.52% |
| ı 257.610 | -3860.6 | -0.0116 | 0.00003 | mg/L | 0.26% |
| › 202.030 | -9.4 | 0.0011 | 0.00081 | mg/L | 75.66% |
| ı 330.237 | 717.9 | 0.6523 | 0.02605 | mg/L | 3.99% |
| . 231.604 | -188.9 | 0.0003 | 0.00018 | mg/L | 60.44% |
| › 220.353 | -141.1 | 0.0028 | 0.00050 | mg/L | 17.75% |
| › 206.833 | 27.9 | -0.0050 | 0.00328 | mg/L | 65.24% |
| ‹ 196.026 | 116.0 | -0.0053 | 0.00521 | mg/L | 98.31% |
| › 189.933 | 12866.6 | 0.0120 | 0.00326 | mg/L | 27.15% |
| ı 334.941 | -2830.6 | -0.0065 | 0.00000 | mg/L | 0.01% |
| ı 190.800 | -29.3 | -0.0093 | 0.00005 | mg/L | 0.50% |
| 292.402 | 9289.4 | 0.0505 | 0.00022 | mg/L | 0.43% |
| › 206.191 | 21233.6 | 0.4379 | 0.06601 | mg/L | 15.08% |

ean Data ----------

D: ICSAB Seq. No.: 111 Sample No.: 7 A/S Pos: 8

ample Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0

Data: Original Date: 02/22/02 1:23:23 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3198834.3 | 0.892 | 0.0032 | mg/L | | | | 0.36% |
| g 328.068 | 154317.5 | 1.139 | 0.0067 | mg/L | | | | 0.59% |
| l 308.215 | 7454274.9 | 528.8 | 4.45 | mg/L | | | | 0.84% |
| s 188.979 | -62.7 | 0.0044 | 0.00787 | mg/L | | | | 177.70% |
| 249.773 | 7050.3 | 0.1225 | 0.00119 | mg/L | | | | 0.97% |
| a 233.527 | 38344.0 | 0.5459 | 0.00372 | mg/L | | | | 0.68% |
| e 313.107 | 2696664.3 | 0.5218 | 0.00057 | mg/L | | | | 0.11% |
| a 315.887 | 52685774.3 | 497.0 | 4.45 | mg/L | | | | 0.90% |
| d 226.502 | 80250.1 | 0.9853 | 0.00735 | mg/L | | | | 0.75% |
| o .616 | 8695.2 | 0.5057 | 0.00390 | mg/L | | | | 0.77% |
| r .716 | 47403.7 | 0.5179 | 0.00231 | mg/L | | | | 0.45% |
| u 3?4.754 | 118394.9 | 0.5713 | 0.00070 | mg/L | | | | 0.12% |
| e 238.863 | 3762268.6 | 194.6 | 0.26 | mg/L | | | | 0.14% |
| 404.721 | -2463.5 | -4.959 | 0.9241 | mg/L | | | | 18.64% |
| lg 279.079 | 8229960.3 | 553.5 | 5.51 | mg/L | | | | 1.00% |
| ln 257.610 | 171375.1 | 0.5101 | 0.00303 | mg/L | | | | 0.59% |
| lo 202.030 | -11.7 | 0.0009 | 0.00013 | mg/L | | | | 14.65% |
| la 330.237 | 817.6 | 0.8253 | 0.05223 | mg/L | | | | 6.33% |
| li 231.604 | 25469.6 | 0.9542 | 0.00672 | mg/L | | | | 0.70% |
| b 220.353 | 3853.6 | 0.9986 | 0.00773 | mg/L | | | | 0.77% |
| ib 206.833 | 35.6 | 0.0000 | 0.00270 | mg/L | | | | >999.9% |
| le 196.026 | 114.9 | -0.0056 | 0.00211 | mg/L | | | | 38.00% |
| in 189.933 | 12775.5 | 0.0082 | 0.01172 | mg/L | | | | 142.98% |
| i 334.941 | -2706.0 | -0.0062 | 0.00002 | mg/L | | | | 0.29% |
| l 190.800 | -36.4 | -0.0143 | 0.00125 | mg/L | | | | 8.69% |
| 292.402 | 98789.7 | 0.5720 | 0.00383 | mg/L | | | | 0.67% |
| n 206.191 | 55344.6 | 1.167 | 0.0442 | mg/L | | | | 3.79% |

lean Data ----------

ID: CCV Seq. No.: 112 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: 02/22/02 1:28:52 AM

| Element | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| Y 371.030 | 3670284.8 | 1.024 | 0.0035 | mg/L | | | | 0.34% |
| Ag 328.068 | 68431.2 | 0.5062 | 0.00094 | mg/L | | | | 0.18% |
| Al 308.215 | 152771.7 | 10.25 | 0.170 | mg/L | | | | 1.66% |
| As 188.979 | 1138.7 | 1.026 | 0.0005 | mg/L | | | | 0.05% |
| B 249.773 | 136163.0 | 2.501 | 0.0109 | mg/L | | | | 0.44% |
| Ba 233.527 | 727563.2 | 10.37 | 0.008 | mg/L | | | | 0.08% |
| Be 3.107 | 1292664.4 | 0.2507 | 0.00032 | mg/L | | | | 0.13% |
| C 3.887 | 2746752.9 | 25.92 | 0.213 | mg/L | | | | 0.82% |
| Cd 6.502 | 41328.1 | 0.5138 | 0.00160 | mg/L | | | | 0.31% |
| Co 228.616 | 45773.0 | 2.617 | 0.0068 | mg/L | | | | 0.26% |
| Cr 267.716 | 46748.8 | 0.5107 | 0.00034 | mg/L | | | | 0.07% |
| Cu 324.754 | 266218.2 | 1.272 | 0.0008 | mg/L | | | | 0.06% |
| Fe 238.863 | 101650.9 | 5.264 | 0.0689 | mg/L | | | | 1.31% |

| | | | | | |
|---|---|---|---|---|---|
| 404.721 | 423.0 | 25.84 | 0.703 | mg/L | 2.72% |
| 279.079 | 385188.2 | 25.91 | 0.271 | mg/L | 1.05% |
| 610 | 259364.6 | 0.7721 | 0.00057 | mg/L | 0.07% |
| 030 | 28364.5 | 2.443 | 0.0060 | mg/L | 0.25% |
| 330.237 | 14219.9 | 23.71 | 0.123 | mg/L | 0.52% |
| 231.604 | 55627.6 | 2.075 | 0.0027 | mg/L | 0.13% |
| 220.353 | 2031.2 | 0.5024 | 0.00258 | mg/L | 0.51% |
| 206.833 | 7786.3 | 5.013 | 0.0439 | mg/L | 0.88% |
| 196.026 | 991.5 | 0.4955 | 0.00112 | mg/L | 0.23% |
| 189.933 | 34502.7 | 5.274 | 0.0081 | mg/L | 0.15% |
| 334.941 | 843781.7 | 2.516 | 0.0020 | mg/L | 0.08% |
| 190.800 | 1417.3 | 1.022 | 0.0019 | mg/L | 0.19% |
| 292.402 | 437323.5 | 2.545 | 0.0004 | mg/L | 0.02% |
| 206.191 | 55123.9 | 1.178 | 0.0078 | mg/L | 0.66% |

QC exceeds upper limit for Zn 206.191 Recovery = 117.76% Action = Continue

an Data ----------

): CCB Seq. No.: 113 Sample No.: 9 A/S Pos: 5

mple Qty: 1.0000 g Prep. Vol.: 1.0 L Dilution: 1.0: 1.0

Data: Original Date: 02/22/02 1:33:47 AM

| lement | Mean Corr. Intensity | Mean Conc. | Std.Dev. | Calib Units | Mean Conc. | Std.Dev. | Sample Units | RSD |
|---|---|---|---|---|---|---|---|---|
| 371.030 | 3740417.3 | 1.043 | 0.0128 | mg/L | | | | 1.23% |
| g 328.068 | -1301.0 | 0.0008 | 0.00027 | mg/L | | | | 34.71% |
| l 308.215 | 8102.6 | -0.0192 | 0.01296 | mg/L | | | | 67.58% |
| s 188.979 | -25.8 | 0.0024 | 0.00115 | mg/L | | | | 47.76% |
| 249.773 | 2249.3 | 0.0340 | 0.00864 | mg/L | | | | 25.39% |
| a 233.527 | 610.8 | 0.0081 | 0.00178 | mg/L | | | | 21.96% |
| e 313.107 | -4739.1 | 0.0003 | 0.00002 | mg/L | | | | 8.51% |
| a 315.887 | 1122.9 | 0.0254 | 0.00217 | mg/L | | | | 8.52% |
| d 226.502 | 23.1 | 0.0004 | 0.00013 | mg/L | | | | 31.93% |
| o 228.616 | -108.7 | 0.0044 | 0.00042 | mg/L | | | | 9.49% |
| r 267.716 | 214.5 | 0.0006 | 0.00036 | mg/L | | | | 60.97% |
| u .754 | 3816.8 | 0.0062 | 0.00230 | mg/L | | | | 37.02% |
| e .863 | 272.2 | 0.0202 | 0.00049 | mg/L | | | | 2.43% |
| 4[illegible].721 | -890.1 | 0.6227 | 0.25405 | mg/L | | | | 40.80% |
| g 279.079 | 1674.7 | 0.1166 | 0.00110 | mg/L | | | | 0.94% |
| n 257.610 | 220.4 | 0.0006 | 0.00013 | mg/L | | | | 22.15% |
| o 202.030 | 15.9 | 0.0032 | 0.00107 | mg/L | | | | 33.04% |
| a 330.237 | 791.5 | 0.2528 | 0.00877 | mg/L | | | | 3.47% |
| i 231.604 | -87.7 | 0.0041 | 0.00043 | mg/L | | | | 10.54% |
| b 220.353 | 18.2 | 0.0005 | 0.00051 | mg/L | | | | 107.48% |
| b 206.833 | 96.4 | 0.0393 | 0.01498 | mg/L | | | | 38.15% |

QC exceeds upper limit for Sb 206.833 Action = Continue

| | | | | | |
|---|---|---|---|---|---|
| e 196.026 | 8.8 | -0.0025 | 0.00026 | mg/L | 10.63% |
| n 189.933 | 148.7 | 0.0172 | 0.00354 | mg/L | 20.55% |
| i 334.941 | 546.6 | 0.0035 | 0.00119 | mg/L | 33.89% |
| l 190.800 | -9.9 | 0.0046 | 0.00131 | mg/L | 28.69% |
| 292.402 | 990.1 | 0.0021 | 0.00027 | mg/L | 12.76% |
| n 206.191 | 6390.3 | 0.1361 | 0.00743 | mg/L | 5.46% |

QC exceeds upper limit for Zn 206.191 Action = Continue

# Metals Cover Page

Instrument: FIMS

A  yst: DCB    Date: 2/8/02

Data File: Feb-0852    Reviewed By: DCB

Entered By: CK 2/14/02    Manager Approval: CK 2/14/02

| Starlims Run # | Analytes Used | Batch ID | Method Requested | Failed Analytes | Comments / Problems |
|---|---|---|---|---|---|
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## 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-10552 | (Pkg 5) / ASP | Hg | | M2H801320 | (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 |
| | Pkg 5 / ASP | | | | YES / NO | MARRS to LIMS / Run Created Above | YES / NO |

Method Name: Hg_CLP
Method Description: Method 245.1A FIMS
Element: Hg

2/8/02
DCS

Date: 02/08/2002
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Linear
Wavelength: 253.7 nm
Sample Info Name: ROUTINE.SIF Results Data Set Name: Feb-08S2

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/08/2002
Sample ID: Calib Blank

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0002 | 0.0010 | 0.0002 | 12:55:01 | No |
| 2 | | | 0.0002 | 0.0011 | 0.0002 | 12:55:30 | No |
| Mean: | | | 0.0002 | | | | |
| SD : | | | 0.0000 | | | | |
| %RSD: | | | 4.8057 | | | | |

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 8 Date: 02/08/2002
Sample ID: 0.2ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0017 | 0.0096 | 0.0020 | 12:56:50 | No |
| 2 | | | 0.0017 | 0.0090 | 0.0019 | 12:57:19 | No |
| Mean: | | | 0.0017 | | | | |
| SD : | | | 0.0000 | | | | |
| %RSD: | | | 1.9270 | | | | |

[Hg] Standard number 1 applied. [0.2000]
Correlation Coefficient: 1.00000 Slope: 0.00861

Element: Hg Seq. No.: 3 AS Loc.: 2 Date: 02/08/2002
Sample ID: 0.5ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0044 | 0.0213 | 0.0046 | 12:58:40 | No |
| 2 | | | 0.0043 | 0.0211 | 0.0046 | 12:59:09 | No |
| Mean: | | | 0.0043 | | | | |
| SD : | | | 0.0000 | | | | |
| %RSD: | | | 0.6542 | | | | |

[Hg] Standard number 2 applied. [0.5000]
Correlation Coefficient: 0.99996 Slope: 0.00869

Element: Hg Seq. No.: 4 AS Loc.: 3 Date: 02/08/2002
Sample ID: 1ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0088 | 0.0415 | 0.0090 | 01:00:28 | No |
| 2 | | | 0.0087 | 0.0416 | 0.0089 | 01:00:58 | No |
| Mean: | | | 0.0088 | | | | |
| SD : | | | 0.0001 | | | | |
| %RSD: | | | 0.8778 | | | | |

[Hg] Standard number 3 applied. [1.000]

Correlation Coefficient: 0.99998 Slope: 0.00874

Element: Hg Seq. No.: 5 AS Loc.: 4 Date: 02/08/2002
Sample ID: 2ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0174 | 0.0815 | 0.0177 | 01:02:17 | No |
| 2 | | | 0.0173 | 0.0811 | 0.0175 | 01:02:47 | No |
| Mean: | | | 0.0174 | | | | |
| SD : | | | 0.0001 | | | | |
| %RSD: | | | 0.7630 | | | | |

[Hg] Standard number 4 applied. [2.000]
Correlation Coefficient: 0.99998 Slope: 0.00869

Element: Hg Seq. No.: 6 AS Loc.: 5 Date: 02/08/2002
Sample ID: 5ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0439 | 0.2028 | 0.0442 | 01:04:07 | No |
| 2 | | | 0.0436 | 0.2021 | 0.0438 | 01:04:37 | No |
| Mean: | | | 0.0438 | | | | |
| SD : | | | 0.0002 | | | | |
| %RSD: | | | 0.5470 | | | | |

[Hg] Standard number 5 applied. [5.000]
Correlation Coefficient: 0.99999 Slope: 0.00874

Element: Hg Seq. No.: 7 AS Loc.: 6 Date: 02/08/2002
Sample ID: 10ppb std

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | | | 0.0856 | 0.3989 | 0.0858 | 01:05:58 | No |
| 2 | | | 0.0863 | 0.3951 | 0.0865 | 01:06:27 | No |
| Mean: | | | 0.0860 | | | | |
| SD : | | | 0.0005 | | | | |
| %RSD: | | | 0.5641 | | | | |

[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99995 Slope: 0.00863

Calibration data for Hg

| Standard ID | Mean Signal (Pk Height) | Entered Concentration (µg/L) | Calculated Concentration (µg/L) | Standard Deviation | %RSD |
|---|---|---|---|---|---|
| Calib Blank | 0.0002 | ---- | ---- | ---- | ---- |
| 0.2ppb std | 0.0017 | 0.2000 | 0.1996 | 0.00003 | 1.9 |
| 0.5ppb std | 0.0043 | 0.5000 | 0.5039 | 0.00003 | 0.7 |
| 1ppb std | 0.0088 | 1.0000 | 1.014 | 0.00008 | 0.9 |
| 2ppb std | 0.0173 | 2.0000 | 2.010 | 0.00013 | 0.8 |
| 5ppb std | 0.0438 | 5.0000 | 5.073 | 0.00024 | 0.5 |
| 10ppb std | 0.0860 | 10.0000 | 9.959 | 0.00048 | 0.6 |
| 2ppb std | 0.0173 | 2.0000 | 2.010 | 0.00013 | 0.8 |
| Correlation Coefficient: 0.99995 | | Slope: | 0.00863 | ---- | |

Element: Hg Seq. No.: 8 AS Loc.: 7 Date: 02/08/2002
Sample ID: ICV

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.061 | 3.061 | 0.0264 | 0.1223 | 0.0267 | 01:07:48 | No |
| 2 | 3.050 | 3.050 | 0.0263 | 0.1227 | 0.0266 | 01:08:17 | No |
| Mean: | 3.055 | 3.055 | 0.0264 | | | | |
| SD : | 0.00784 | 0.00784 | 0.0001 | | | | |
| %RSD: | 0.3 | 0.3 | 0.2566 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 9 AS Loc.: 1 Date: 02/08/2002
Sample ID: ICB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | -0.0026 | -0.0026 | 0.0000 | 0.0008 | 0.0002 | 01:09:36 | No |
| 2 | 0.0048 | 0.0048 | 0.0000 | 0.0015 | 0.0003 | 01:10:05 | No |
| Mean: | 0.0011 | 0.0011 | 0.0000 | | | | |
| SD : | 0.00524 | 0.00524 | 0.0000 | | | | |
| %RSD: | 460.5 | 460.5 | 460.4937 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 10 AS Loc.: 8 Date: 02/08/2002
Sample ID: CRII

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.2411 | 0.2411 | 0.0021 | 0.0105 | 0.0023 | 01:11:25 | No |
| 2 | 0.2203 | 0.2203 | 0.0019 | 0.0100 | 0.0021 | 01:11:54 | No |
| Mean: | 0.2307 | 0.2307 | 0.0020 | | | | |
| SD : | 0.01467 | 0.01467 | 0.0001 | | | | |
| %RSD: | 6.4 | 6.4 | 6.3568 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 11 AS Loc.: 7 Date: 02/08/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.010 | 3.010 | 0.0260 | 0.1244 | 0.0262 | 01:13:30 | No |
| 2 | 2.998 | 2.998 | 0.0259 | 0.1230 | 0.0261 | 01:13:59 | No |
| Mean: | 3.004 | 3.004 | 0.0259 | | | | |
| SD : | 0.00845 | 0.00845 | 0.0001 | | | | |
| %RSD: | 0.3 | 0.3 | 0.2813 | | | | |

QC value within specified limits.

---

Element: Hg Seq. No.: 12 AS Loc.: 1 Date: 02/08/2002
Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0072 | 0.0072 | 0.0001 | 0.0013 | 0.0003 | 01:15:19 | No |
| 2 | 0.0092 | 0.0092 | 0.0001 | 0.0017 | 0.0003 | 01:15:48 | No |
| Mean: | 0.0082 | 0.0082 | 0.0001 | | | | |
| SD : | 0.00139 | 0.00139 | 0.0000 | | | | |
| %RSD: | 17.0 | 17.0 | 16.9642 | | | | |

QC value within specified limits.

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Element: Hg Seq. No.: 13 AS Loc.: 9 Date: 02/08/2002
Sample ID: PBS-M2480132B

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0046 | 0.0046 | 0.0000 | 0.0015 | 0.0003 | 01:17:03 | No |
| 2 | 0.0020 | 0.0020 | 0.0000 | 0.0013 | 0.0003 | 01:17:32 | No |
| Mean: | 0.0033 | 0.0033 | 0.0000 | | | | |
| SD : | 0.00188 | 0.00188 | 0.0000 | | | | |
| %RSD: | 56.9 | 56.9 | 56.8821 | | | | |

Element: Hg Seq. No.: 14 AS Loc.: 10 Date: 02/08/2002
Sample ID: LCSS-M2480132B

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 8.786 | 8.786 | 0.0758 | 0.3689 | 0.0761 | 01:18:49 | No |
| 2 | 8.853 | 8.853 | 0.0764 | 0.3650 | 0.0766 | 01:19:18 | No |
| Mean: | 8.820 | 8.820 | 0.0761 | | | | |
| SD : | 0.04785 | 0.04785 | 0.0004 | | | | |
| %RSD: | 0.5 | 0.5 | 0.5425 | | | | |

Element: Hg Seq. No.: 15 AS Loc.: 11 Date: 02/08/2002
Sample ID: 528677

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0867 | 0.0867 | 0.0007 | 0.0047 | 0.0010 | 01:20:36 | No |
| 2 | 0.0842 | 0.0842 | 0.0007 | 0.0045 | 0.0010 | 01:21:05 | No |
| Mean: | 0.0855 | 0.0855 | 0.0007 | | | | |
| SD : | 0.00177 | 0.00177 | 0.0000 | | | | |
| %RSD: | 2.1 | 2.1 | 2.0664 | | | | |

Element: Hg Seq. No.: 16 AS Loc.: 12 Date: 02/08/2002
Sample ID: 528678

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0693 | 0.0693 | 0.0006 | 0.0042 | 0.0008 | 01:22:24 | No |
| 2 | 0.0695 | 0.0695 | 0.0006 | 0.0042 | 0.0008 | 01:22:54 | No |
| Mean: | 0.0694 | 0.0694 | 0.0006 | | | | |
| SD : | 0.00014 | 0.00014 | 0.0000 | | | | |
| %RSD: | 0.2 | 0.2 | 0.2022 | | | | |

Element: Hg Seq. No.: 17 AS Loc.: 13 Date: 02/08/2002
Sample ID: 528679

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0766 | 0.0766 | 0.0007 | 0.0046 | 0.0009 | 01:24:13 | No |
| 2 | 0.0750 | 0.0750 | 0.0006 | 0.0044 | 0.0009 | 01:24:42 | No |
| Mean: | 0.0758 | 0.0758 | 0.0007 | | | | |
| SD : | 0.00112 | 0.00112 | 0.0000 | | | | |
| %RSD: | 1.5 | 1.5 | 1.4717 | | | | |

Element: Hg Seq. No.: 18 AS Loc.: 14 Date: 02/08/2002
Sample ID: 528680

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0896 | 0.0896 | 0.0008 | 0.0051 | 0.0010 | 01:26:04 | No |
| 2 | 0.0860 | 0.0860 | 0.0007 | 0.0047 | 0.0010 | 01:26:33 | No |
| Mean: | 0.0878 | 0.0878 | 0.0008 | | | | |
| SD : | 0.00253 | 0.00253 | 0.0000 | | | | |

%RSD: 2.9 2.9 2.8787

Element: Hg Seq. No.: 19 AS Loc.: 15 Date: 02/08/2002
Sample ID: 528681

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0984 | 0.0984 | 0.0008 | 0.0055 | 0.0011 | 01:27:54 | No |
| 2 | 0.0937 | 0.0937 | 0.0008 | 0.0050 | 0.0010 | 01:28:23 | No |
| Mean: | 0.0961 | 0.0961 | 0.0008 | | | | |
| SD : | 0.00330 | 0.00330 | 0.0000 | | | | |
| %RSD: | 3.4 | 3.4 | 3.4311 | | | | |

Element: Hg Seq. No.: 20 AS Loc.: 16 Date: 02/08/2002
Sample ID: 528682

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0815 | 0.0815 | 0.0007 | 0.0042 | 0.0009 | 01:29:46 | No |
| 2 | 0.0928 | 0.0928 | 0.0008 | 0.0051 | 0.0010 | 01:30:15 | No |
| Mean: | 0.0871 | 0.0871 | 0.0008 | | | | |
| SD : | 0.00799 | 0.00799 | 0.0001 | | | | |
| %RSD: | 9.2 | 9.2 | 9.1748 | | | | |

Element: Hg Seq. No.: 21 AS Loc.: 17 Date: 02/08/2002
Sample ID: 528683

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.4048 | 0.4048 | 0.0035 | 0.0169 | 0.0037 | 01:31:39 | No |
| 2 | 0.4124 | 0.4124 | 0.0036 | 0.0180 | 0.0038 | 01:32:08 | No |
| Mean: | 0.4086 | 0.4086 | 0.0035 | | | | |
| SD : | 0.00536 | 0.00536 | 0.0000 | | | | |
| %RSD: | 1.3 | 1.3 | 1.3106 | | | | |

Element: Hg Seq. No.: 22 AS Loc.: 18 Date: 02/08/2002
Sample ID: 528684

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0124 | 0.0124 | 0.0001 | 0.0016 | 0.0003 | 01:33:24 | No |
| 2 | 0.0114 | 0.0114 | 0.0001 | 0.0018 | 0.0003 | 01:33:54 | No |
| Mean: | 0.0119 | 0.0119 | 0.0001 | | | | |
| SD : | 0.00072 | 0.00072 | 0.0000 | | | | |
| %RSD: | 6.1 | 6.1 | 6.0946 | | | | |

Element: Hg Seq. No.: 23 AS Loc.: 7 Date: 02/08/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.104 | 3.104 | 0.0268 | 0.1283 | 0.0270 | 01:35:13 | No |
| 2 | 3.114 | 3.114 | 0.0269 | 0.1270 | 0.0271 | 01:35:42 | No |
| Mean: | 3.109 | 3.109 | 0.0268 | | | | |
| SD : | 0.00759 | 0.00759 | 0.0001 | | | | |
| %RSD: | 0.2 | 0.2 | 0.2442 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 1 Date: 02/08/2002

Sample ID: CCB

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0013 | 0.0013 | 0.0000 | 0.0011 | 0.0003 | 01:37:02 | No |
| 2 | 0.0009 | 0.0009 | 0.0000 | 0.0012 | 0.0002 | 01:37:31 | No |
| Mean: | 0.0011 | 0.0011 | 0.0000 | | | | |
| SD : | 0.00033 | 0.00033 | 0.0000 | | | | |
| %RSD: | 29.6 | 29.6 | 29.6367 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 25 AS Loc.: 19 Date: 02/08/2002
Sample ID: 528685

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0970 | 0.0970 | 0.0008 | 0.0050 | 0.0011 | 01:38:47 | No |
| 2 | 0.0950 | 0.0950 | 0.0008 | 0.0049 | 0.0011 | 01:39:16 | No |
| Mean: | 0.0960 | 0.0960 | 0.0008 | | | | |
| SD : | 0.00146 | 0.00146 | 0.0000 | | | | |
| %RSD: | 1.5 | 1.5 | 1.5174 | | | | |

Element: Hg Seq. No.: 26 AS Loc.: 20 Date: 02/08/2002
Sample ID: 528685D

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.1046 | 0.1046 | 0.0009 | 0.0056 | 0.0011 | 01:40:33 | No |
| 2 | 0.1028 | 0.1028 | 0.0009 | 0.0053 | 0.0011 | 01:41:03 | No |
| Mean: | 0.1037 | 0.1037 | 0.0009 | | | | |
| SD : | 0.00127 | 0.00127 | 0.0000 | | | | |
| %RSD: | 1.2 | 1.2 | 1.2235 | | | | |

Element: Hg Seq. No.: 27 AS Loc.: 21 Date: 02/08/2002
Sample ID: 528685S

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 1.177 | 1.177 | 0.0102 | 0.0486 | 0.0104 | 01:42:20 | No |
| 2 | 1.164 | 1.164 | 0.0100 | 0.0484 | 0.0103 | 01:42:49 | No |
| Mean: | 1.170 | 1.170 | 0.0101 | | | | |
| SD : | 0.00917 | 0.00917 | 0.0001 | | | | |
| %RSD: | 0.8 | 0.8 | 0.7836 | | | | |

Element: Hg Seq. No.: 28 AS Loc.: 7 Date: 02/08/2002
Sample ID: CCV

| Repl # | SampleConc µg/L | StndConc µg/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|---|---|---|---|---|---|---|---|
| 1 | 3.148 | 3.148 | 0.0272 | 0.1308 | 0.0274 | 01:44:09 | No |
| 2 | 3.113 | 3.113 | 0.0269 | 0.1285 | 0.0271 | 01:44:38 | No |
| Mean: | 3.130 | 3.130 | 0.0270 | | | | |
| SD : | 0.02423 | 0.02423 | 0.0002 | | | | |
| %RSD: | 0.8 | 0.8 | 0.7740 | | | | |

QC value within specified limits.

Element: Hg Seq. No.: 29 AS Loc.: 1 Date: 02/08/2002
Sample ID: CCB

| Repl | SampleConc | StndConc | BlnkCorr | Peak | Peak | Time | Peak |
|---|---|---|---|---|---|---|---|

Perkin-Elmer AAWinLab: 02/08/2002, 01:45:02 PM

| # | µg/L | µg/L | Signal | Area | Height | | Stored |
|---|---|---|---|---|---|---|---|
| 1 | 0.0038 | 0.0038 | 0.0000 | 0.0012 | 0.0003 | 01:45:58 | No |
| 2 | 0.0011 | 0.0011 | 0.0000 | 0.0009 | 0.0002 | 01:46:27 | No |
| Mean: | 0.0024 | 0.0024 | 0.0000 | | | | |
| SD : | 0.00190 | 0.00190 | 0.0000 | | | | |
| %RSD: | 78.9 | 78.9 | 78.9343 | | | | |

QC value within specified limits.

**CAS-Rochester ICP Soil Digest Log**

Analyst: JM Date: 2/20/02 Spike Witness: DCA Approval: _____

Method: (SW846 3050) // CLP Digest: Initial Digestion // (Redigestion) of _____

Report: Routine // ASP // (Pkg.5) (6010B/846) // 200.7/136 // ASP/CLP

| | Client/ Order # | Initial wgt(g) | Final vol(ml) | Initial Color/Clarity | Final Color/Clarity | Metals | Spike vol(ml) |
|---|---|---|---|---|---|---|---|
| 1 | PBS | 1.00 | 100 | colorless/clear | colorless/clear | 2As,2Pb,2Se,Ag,Be, Cd,Cr,Mn,Zn | |
| 2 | LCSS | 1.05 | | brown/fine | yellow/clear | | #246 |
| 3 | R10552 528677 | 1.00 | | black/medium | | | |
| 4 | 678 | 1.05 | | brown/medium | | | |
| 5 | 679 | 1.03 | | | | | |
| 6 | 680 | 1.00 | | | | | |
| 7 | 681 | 1.05 | | | | | |
| 8 | 682 | 1.03 | | | | | |
| 9 | 683 | 1.02 | | | | | |
| 10 | 684 | 1.01 | | | | | |
| 11 | 685 | 1.01 | | | | | |
| | 685D | 1.01 | | | | | |
| 13 | 685S | 1.01 | | | | | 0.1ml Se 1.0ml Sex A,B |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | | | | | |
| 26 | | | | | | | |

JM 2/20/02

Spiking Standards Lot # or Prep Date:

Spike A,B M1780032E Spike #4 — Se M1780029Q Sn — Ba — TCLP —

Reagent Lot #:

LCSS M1780032M HNO3 M1780031I HCL M1780031J H2O2 M1780029R

Comments/Problems: Hot Plate

M2530081 (1) 81

## Columbia Analytical Services

Analysis For: Hg | EPA Method: 7470 / 7471 / 245.1 / 245.5 | Analyst: DCB

Bath Temp: In 95 / Out 95 | Report: Routine / ASP / Pkg.5 | Date Prepped: 2/7/02

Time In: 1440 | File Name: Feb-085 Feb-0852 | Date Analyzed: 2/8/02

Time Out: 1510

| | Client / Submission # | Sample Number | Initial Wgt/Volume (g/ml) | Final Volume (ml) | | Client / Submission # | Sample Number | Initial Wgt/Volume (g/ml) | Final Volume (ml) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | PBS A | 0.60 | 100 | 31 | R-10552 | 528681 | 0.61 | 100 |
| 2 | | LCSS A | 0.62 | | 32 | | 682 | 0.64 | |
| 3 | R-10459 | 526793 | 0.61 | | 33 | | 683 | 0.65 | |
| 4 | | 794 | 0.66 | | 34 | | 684 | 0.67 | |
| 5 | | 795 | 0.61 | | 35 | | 685 | 0.67 | |
| 6 | | 796 | 0.62 | | 36 | | 685Dup | 0.60 | |
| 7 | | 797 | 0.63 | | 37 | | 685SPK | 0.65 | |
| 8 | | 798 | 0.61 | | 38 | | | | |
| 9 | | 799 | 0.64 | | 39 | | | | |
| 10 | | 800 | 0.64 | | 40 | | | | |
| 11 | | 801 | 0.67 | | 41 | | | | |
| 12 | | 802 | 0.62 | | 42 | | | | |
| 13 | | 804 | 0.63 | | 43 | | | | |
| 14 | | 805 | 0.60 | | 44 | | | | |
| 15 | | 807 | 0.63 | | 45 | | | | |
| 16 | | 809 | 0.61 | | 46 | | | | |
| 17 | | 809Dup | 0.61 | | 47 | | | | |
| 18 | | 809SPK | 0.61 | | 48 | | | | |
| 19 | | 811 | 0.60 | | 49 | | | | |
| 20 | | 812 | 0.64 | | | | ICB | 100ml DI Water | 100 |
| 21 | | 813 | 0.62 | | | | Std 0 | 100ml DI Water | 100 |
| 22 | | 814 | 0.62 | | | | Std 0.2* | 0.20ml of 0.1ppm | 100 |
| 23 | | 815 | 0.67 | | | | Std 0.5* | 0.50ml of 0.1ppm | 100 |
| 24 | | 816 | 0.61 | | | | Std 1.0* | 1.00ml of 0.1ppm | 100 |
| 25 | | PBS B | 0.60 | | | | Std 2.0* | 2.00ml of 0.1ppm | 100 |
| 26 | | LCSS B | 0.61 | | | | Std 5.0* | 5.00ml of 0.1ppm | 100 |
| 27 | R-10552 | 528677 | 0.64 | | | | Std 10.0* | 10.0ml of 0.1ppm | 100 |
| 28 | | 678 | 0.61 | | | | ICV/CCV** | 3.00ml of 0.1ppm | 100 |
| 29 | | 679 | 0.62 | | | | LCSW/MS** | 1.00ml of 0.1ppm | 100 |
| 30 | | 680 | 0.61 | | | | CRDL* | 0.20ml of 0.1ppm | 100 |

2/7/02 DCB

**Lot # of Reagents Used:**

HNO3: M1780031I | H2SO4: — | HCL: M1780031J | K2S2O8: — | KMnO4: M178030P

SnCl2: M1780031Q | NaCl: M178030K | NH2OH-HCL: M178 0030E | LCSS CAS Lot#: M17800.29X

LCSS ERA Lot#: 246

*Source Standard: (Vendor/Lot #) M1780030N | **ICV Standard: (Vendor/Lot #) M1780026F

*(10ppm stock Lot#: M2650177A) | **(10ppm stock Lot#: M2650217A)

*(0.1ppm working std Lot#: M2650177D) | **(0.1ppm working std Lot#: M2650217D)

**Comments/Problems:** M2480132A = Feb-085 M2480132A = Feb-0852

**Batch Name:** M2480132A M2480132A

## ΓIMA 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *l Std 1* | CA | M1780032T | 5000 | 2.00 | 200 | 50.0 | 2%HNO3 | SD 2/20/02 | A | M17800311 | M1780031J | M18 |
| | MG | | 5000 | | | 50.0 | 5%HCl | SD 2/21/02 | B | / | / | M18 |
| | K | | 5000 | | | 50.0 | | | C | | | |
| | NA | | 5000 | | | 50.0 | | | D | | | |
| *il Std 2* | AG | M1780031M | 100 | 2.00 | | 1.00 | | | E | | | |
| | CR | | 100 | | | 1.00 | | | F | | | |
| | MN | | 150 | | | 1.50 | | | G | | | |
| | NI | | 400 | | | 4.00 | | | H | | | |
| | ZN | | 200 | | | 2.00 | | | I | | | |
| *:al Std 3* | AL | M1780032K | 2000 | 2.00 | | 20.0 | | | J | | | |
| | 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 | M1780032J | 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* | SB | M1780032P | 1000 | 2.00 | | 10.0 | | | V | | | |
| *Elements* | SN | 3DF | 1000 | 2.00 | | 10.0 | | | W | | | |
| | B | 28E | 1000 | 1.00 | | 5.00 | | | X | | | |
| | MO | 25N | 1000 | 1.00 | | 5.00 | | | Y | | | |
| | TI | 29H | 1000 | 1.00 | | 5.00 | | | Z | | | |

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## IMA 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 2/21/02 | A | M1780031 1 | M1780031J | M#/M10 |
| | MG | | 5000 | | | 25.0 | 5%HCl | | B | | | |
| | K | | 5000 | | | 25.0 | | | C | | | |
| | NA | | 5000 | | | 25.0 | | | D | | | |
| l Std 2 | AG | M1780031G | 100 | 1.00 | | 0.500 | | | E | | | |
| | CR | | 100 | | | 0.500 | | | F | | | |
| | MN | | 150 | | | 0.750 | | | G | | | |
| | NI | | 400 | | | 2.00 | | | H | | | |
| | ZN | | 200 | | | 1.00 | | | I | | | |
| il Std 3 | AL | M1780031 H | 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 | | | |
| Cal Std 4 | AS | M1780031C | 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 | M1780030H | 1000 | 1.00 | | 5.00 | | | V | | | |
| Elements | SN | M1780031V | 1000 | 1.00 | | 5.00 | | | W | | | |
| | B | M1780031P | 1000 | 0.500 | | 2.50 | | | X | | | |
| | MO | M1780027C | 1000 | 0.500 | | 2.50 | | | Y | | | |
| | TI | M1780027H | 1000 | 0.500 | | 2.50 | | | Z | | | |

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## OPTIMA CRI STANDARD

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RDL STD | M17800260 | Multi | 0.500 | 500 | Multi | 5% HCL 2%HNO3 | SD 11/26/01 | A | M1780028N | M1780030A | 5/26/02 | M10 |
| AG | | 20 | | | 0.0200 | | SD 12/4/01 | B | " | " | 6/4/02 | M10 |
| AS | | 20 | | | 0.0200 | | SD 12/12/01 | C | M1780029E | M1780030A | 6/12/02 | M10 |
| BE | | 10 | | | 0.0100 | | SD 12/19/01 | D | " | M1780031J | 6/19/02 | M10 |
| CD | | 10 | | | 0.0100 | | SD 1/2/02 | E | " | " | 7/2/02 | M10 |
| CR | | 20 | | | 0.0200 | | SD 1/9/02 | F | " | " | 7/9/02 | M10 |
| CO | | 100 | | | 0.100 | | SD 1/16/02 | G | M17800311 | " | 7/16/02 | M10 |
| CU | | 50 | | | 0.0500 | | SD 1/24/02 | H | " | " | 7/24/02 | M10 |
| MN | | 30 | | | 0.0300 | | SD 2/4/02 | I | " | " | 8/4/02 | M10 |
| NI | | 80 | | | 0.0800 | | SD 2/10/02 | J | " | " | 8/10/02 | M10 |
| PB | | 6 | | | 0.00600 | | SD 2/20/02 | K | " | " | 8/20/02 | M10 |
| 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 | | | | |

## ICSA

| lement | 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 | M1780019E | M1780031J | 7/11/02 | — |
| AL | | 5000 | | | 500 | 2%HNO3 | SA 1/28/02 | B | M1780031 I | " | 7/28/02 | — |
| CA | | 5000 | | | 500 | | SA 2/10/02 | C | " | " | 8/10/02 | — |
| FE | | 2000 | | | 200 | | | D | | | | |
| MG | | 5000 | | | 500 | | | E | | | | |

## ICSAB

| t. A Sol'n | M1780031E | Multi | 100 | 1000 | Multi | | SD 12/26/01 | AA | M1780019E | M1780031J | 6/26/02 | — |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AL | | 5000 | | | 500 | | SD 1/11/02 | BB | " | " | 7/11/02 | — |
| CA | | 5000 | | | 500 | | SA 1/28/02 | CC | M1780031 I | " | 7/28/02 | — |
| FE | | 2000 | | | 200 | | SD 2/19/02 | DD | " | " | 8/19/02 | — |
| MG | | 5000 | | | 500 | | | EE | | | | |
| it. 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 | | | | |

## OPTIMA INTERNAL STANDARD

| nent | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Y | M1780029N | 1000 | 50.0 | 500 | 100 | 2% HNO3 | SD 10/22/01 | A | M1780028N | M1780029V | 4/22/02 | — |
| Cs | M17800090 | 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 | — |
| | | | | | | | SD 2/4/02 | G | " | " | 8/4/02 | — |
| | | | | | | | | H | | | | |
| | | | | | | | | I | | | | |
| | | | | | | | | J | | | | |
| | | | | | | | | K | | | | |
| | | | | | | | | L | | | | |
| | | | | | | | | M | | | | |
| | | | | | | | | N | | | | |
| | | | | | | | | O | | | | |
| | | | | | | | | P | | | | |
| | | | | | | | | Q | | | | |
| | | | | | | | | R | | | | |
| | | | | | | | | S | | | | |

144

## 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 | M1780030N | 1000 | 1.00 | 100 | 10.0 | 0.5% HNO3 | DCB 2/4/02 | A | 2/10/02 | M1780031E | my |

(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 2/4/02 | B | M1780031E | my |
| | | | | | | | DCB 2/5/02 | C | 2/4/02 DCB M1780031E | my |
| | | | | | | | DCB 2/7/02 | D | M1780031E | my |
| | | | | | | | | E | | |
| | | | | | | | | 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 2/4/02 | I | M1780031E | — |
| 0.500 | | | 0.500 | | 0.500 | | DCB 2/5/02 | J | M1780031E | — |
| 1.00 | | | 1.00 | | 1.00 | | DCB 2/7/02 | K | M1780031E | — |
| 2.00 | | | 2.00 | | 2.00 | | | L | | |
| 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 | M178026F | 1000 | 1.00 | 100 | 10.0 | 0.5% HNO3 | DCB 2/4/02 | A | 2/10/02 | M1780315 | 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 2/4/02 | B | M1780031E | M4 |
| | | | | | | | DCB 2/5/02 | C | M1780031E | M4 |
| | | | | | | | DCB 2/7/02 | D | M1780031E | M4 |
| | | | | | | | | E | | |
| | | | | | | | | 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 2/4/02 | I | M1780031E | — |
| LCSW / MS | | | 1.00 | | 1.00 | | DCB 2/5/02 | J | M1780031E | — |
| | | | | | | | DCB 2/7/02 | K | M1780031E | — |
| | | | | | | | | L | | |
| | | | | | | | | M | | |
| | | | | | | | | N | | |
| | | | | | | | | O | | |

# WET CHEM DATA

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : SMWB-SLU

Date Sampled : 01/19/02 Order #: 528677 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 27.8 | % | 02/06/02 | 11:00 | 1.0 |
| TOTAL PETROLEUM HYDROCARBONS | 418.1 | 33.0 | 550000 | MG/KG | 02/19/02 | 09:30 | 20.0 |

COLUMBIA ANALYTICAL SERVICES

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : HWSC-SLU

Date Sampled : 01/20/02 Order #: 528678 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 45.5 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : MTS-GB-SLU-1

Date Sampled : 01/21/02 Order #: 528679 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 59.8 | % | 02/06/02 | 11:00 | 1.0 |

COLUMBIA ANALYTICAL SERVICES

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : MTS-GB-SLU-2-FD

Date Sampled : 01/21/02 Order #: 528680 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 78.8 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : MTS-GB-SLU-2

Date Sampled : 01/21/02 Order #: 528681 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 79.4 | % | 02/06/02 | 11:00 | 1.0 |

COLUMBIA ANALYTICAL SERVICES

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : MTS-GB-SLU-4

Date Sampled : 01/21/02 Order #: 528682 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 96.7 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : ST-SLU

Date Sampled : 01/20/02 Order #: 528683 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 13.0 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : BAC-SLU

Date Sampled : 01/20/02 Order #: 528684 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 72.8 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

Reported: 02/25/02

Tetra Tech EM Inc.
Project Reference: AGROMAC-LOCKWOOD OU #2
Client Sample ID : MTS-GB-SLU-3

Date Sampled : 01/21/02 Order #: 528685 Sample Matrix: SOIL/SEDIMENT
Date Received: 01/24/02 Submission #: R2210552

| ANALYTE | METHOD | PQL | RESULT | DRY WEIGHT UNITS | DATE ANALYZED | TIME ANALYZED | DILUTION |
|---|---|---|---|---|---|---|---|
| PERCENT SOLIDS | 160.0 | 1.0 | 82.2 | % | 02/06/02 | 11:00 | 1.0 |

**COLUMBIA ANALYTICAL SERVICES**

INORGANIC QUALITY CONTROL SUMMARY

Report Date : 02/25/02
CAS Order # : 528685 - MTS-GB-SLU-3
Client : Tetra Tech EM Inc.
AGROMAC-LOCKWOOD OU #2
Reported Units: %
Run # : 74165

**PRECISION**

| | ORIGINAL | DUPLICATE | RPD |
|---|---|---|---|
| PERCENT SOLIDS | 82.2 | 84.0 | 2 |

COLUMBIA ANALYTICAL SERVICES

INORGANIC BLANK SPIKE SUMMARY

CAS Submission #: R2210552
Client: Tetra Tech EM Inc.
AGROMAC-LOCKWOOD OU #2

BLANK SPIKES

| | BLANK | FOUND | ADDED | % REC | LIMITS | RUN | UNITS |
|---|---|---|---|---|---|---|---|
| TOTAL PETROLEUM HYDROCARBONS | 33.0 U | 4.32 | 4.43 | 98 | 79 - 130 | 74577 | MG/KG |

1 Copy 10552 A

In #: 74165
Analyte: PERCENT SOL. 160.0 PERCENT SOLIDS
Dir 02/08/02 15:38

| TYPE | SUBMISSION | ORDER # | MATRIX | REPORTED RESULT | DILUTION | POL | % RECOVERY | % RSD | DATE ANALYZED | QC | PKG # |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LK6 | | 529258 | SOIL/SEDIM | 1.00 | 1.0 | 1.0 | | | 02/06/2002 | | |
| SMP | 9912010523 | 528030 | SOIL/SEDIM | 96.4 | 1.0 | 1.0 | | | 02/06/2002 | RUN | 2+IC |
| SMP | 9912010552 | 528677 | SOIL/SEDIM | 27.8 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528678 | SOIL/SEDIM | 45.5 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528679 | SOIL/SEDIM | 59.8 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528680 | SOIL/SEDIM | 78.8 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528681 | SOIL/SEDIM | 79.4 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528682 | SOIL/SEDIM | 96.7 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528683 | SOIL/SEDIM | 13.0 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528684 | SOIL/SEDIM | 72.8 | 1.0 | 1.0 | | | 02/06/2002 | | 5 |
| SMP | 9912010552 | 528685 | SOIL/SEDIM | 82.2 | 1.0 | 1.0 | | | 02/06/2002 | QC | 5 |
| DUP | | 529998 | SOIL/SEDIM | 84.0 | 1.0 | 1.0 | | 2.21 | 02/06/2002 | | |

Records printed: 12

Review Date 2/12/02 Name BJBowe
Data Entry Date _____ Name _____
Final Review Date _____ Name _____
QC Date _____ Name _____
Comments:

ITE PRINTED: 02/08/02

## SOLIDS REPORT

JN #: 74165 ANALYSIS DATE: 02/06/2002 ASSIGNED TO :
EMPLATE: DWPS
EST :

| UP# | ORDER # | SUBMISSION | CONTROL TYPE | GROSS(g) TARE(g) DIFF(g) | | % SOLID | DISH ID | LS JOB# | LS LOC# |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 529258 | R22 0 | ICBW | (1.2600-1.2600)=0.0000 | DRY*100 = | 1.00 | 1.0 | | |
| | | | | (1.2600-1.2600)=0.0000 | WET | | | | |
| 2 | 528030 | R2210523 | ESMP | (11.5700-1.2600)=10.3100 | DRY*100 = | 96.40 | 11 | | |
| | | | | (11.9500-1.2600)=10.6900 | WET | | | | |
| 3 | 528677 | R2210552 | ESMP | (3.9700-1.2400)=2.7300 | DRY*100 = | 27.80 | 12 | | |
| | | | | (11.0600-1.2400)=9.8200 | WET | | | | |
| 4 | 528678 | R2210552 | ESMP | (6.0100-1.2700)=4.7400 | DRY*100 = | 45.50 | 21 | | |
| | | | | (11.6900-1.2700)=10.4200 | WET | | | | |
| 5 | 528679 | R2210552 | ESMP | (7.3600-1.2600)=6.1000 | DRY*100 = | 59.80 | 23 | | |
| | | | | (11.4600-1.2600)=10.2000 | WET | | | | |
| 6 | 528680 | R2210552 | ESMP | (8.6200-1.3400)=7.2800 | DRY*100 = | 78.80 | 24 | | |
| | | | | (10.5800-1.3400)=9.2400 | WET | | | | |
| 7 | 528681 | R2210552 | ESMP | (8.3500-1.2600)=7.0900 | DRY*100 = | 79.40 | 34 | | |
| | | | | (10.1900-1.2600)=8.9300 | WET | | | | |
| 8 | 528682 | R2210552 | ESMP | (12.4200-1.3200)=11.1000 | DRY*100 = | 96.70 | 37 | | |
| | | | | (12.8000-1.3200)=11.4800 | WET | | | | |
| 9 | 528683 | R2210552 | ESMP | (2.6600-1.2800)=1.3800 | DRY*100 = | 13.00 | 38 | | |
| | | | | (11.9000-1.2800)=10.6200 | WET | | | | |
| | 528684 | R2210552 | ESMP | (8.3500-1.3000)=7.0500 | DRY*100 = | 72.80 | 56 | | |
| | | | | (10.9900-1.3000)=9.6900 | WET | | | | |
| 11 | 528685 | R2210552 | ESMP | (10.2400-1.3000)=8.9400 | DRY*100 = | 82.20 | 57 | | |
| | | | | (12.1700-1.3000)=10.8700 | WET | | | | |
| 12 | 529998 | R22 0 | DUPE | (10.8200-1.2900)=9.5300 | DRY*100 = | 84.00 | 67 | | |
| | | | | (12.6300-1.2900)=11.3400 | WET | | | | |

Dry Weight Percent Solids

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Analyst: GN ITA

Date: 02/06/02 Time: 11:00 "S" weight initial: 10.01 final: 10.00

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | | Gross | 1.26. | |
| ICB | | 1 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.95 | Gross | 11.57 | |
| 528030 | R-10523 | 11 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 11.06 | Gross | 3.97 | |
| 528677 | R-10522 | 12 | 1.24 | Tare | | |
| | | | | Diff. | | |
| | | | 11.69 | Gross | 6.01 | |
| 678 | | 21 | 1.27 | Tare | | |
| | | | | Diff. | | |
| | | | 11.646 GN 2/6/02 | Gross | 7.36 | |
| 679 | | 23 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 10.58 | Gross | 8.62 | |
| 680 | | 24 | 1.34 | Tare | | |
| | | | | Diff. | | |
| | | | 10.19 | Gross | 8.35 | |
| 681 | | 34 | 1.276 GN 2/6/02 | Tare | | |
| | | | | Diff. | | |
| | | | 12.80 | Gross | 12.42 | |
| 682 | | 37 | 1.32 | Tare | | |
| | | | | Diff. | | |

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Dry Weight Percent Solids

Analyst: GNITA

Columbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Date: 02/06/02 Time: 11:00 "S" weight initial: 11.01 final: 11.00

| Order Number | Submission Client | Dish I.D. | Wet Weight (g) | | Dry Weight (g) | Percent Solid |
|---|---|---|---|---|---|---|
| | | | 11.90 | Gross | 2.66 | |
| 528683 | | 38 | 1.28 | Tare | | |
| | | | | Diff. | | |
| | | | 10.99 | Gross | 8.3J | |
| 684 | | 56 | 1.30 | Tare | | |
| | | | | Diff. | | |
| | | | 12.17 | Gross | 10.24 | |
| 685 | | 57 | 1.30 | Tare | | |
| | | | | Diff. | | |
| | | | | Gross | 1.21 | |
| CCB | | 62 | 1.26 | Tare | | |
| | | | | Diff. | | |
| | | | 12.63 | Gross | 10.82 | |
| 685 | | 67 | 1.29 | Tare | | |
| DUP | | | | Diff. | | |
| | | | | Gross | 1.28 | |
| CCB | | 98 | 1.28 | Tare | | |
| | | | | Diff. | | |
| | | | | Gross | | |
| | GN 2/6/02 | | | Tare | | |
| | | | | Diff. | | |
| | | | | Gross | | |
| | | | | Tare | | |
| | | | | Diff. | | |

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**Columbia Analytical Services**
**1 Mustard St., Rochester, NY 14608-0859**

**General Chemistry Analytical Run Cover Sheet**

**Analyst:** CN/TA **Date:** 02/06/02

**Analysis:** PERCENT SOLIDS **Instrument:** AMERICAN SCIENTIFIC PRODUCTS

**Quality Control:**

| | Log Book # | Log Book Date | Stock Sol (mLs) | Stock Sol (mg/L) | Final Vol (mLs) | True Value (mg/L) |
|---|---|---|---|---|---|---|
| | | | | | | |
| *a) Standards Prep.:* | | | | | | |
| | | | | | | |
| *b) ICCV Preparation:* | | | | | | |
| | | | | | | |
| *c) LCS Preparation:* | | | | | | |
| | | | | | | |
| *d) Matrix Spike Prep.:* | | | | | | |

*Instrument log filled in? (Y) (N)*

*Comments:*

**Packages:**

a) Chains Signed? (Y) (N)

b) Copy and attach Standards Preparation.

**Production:**

| | Start Time | End Time | Total (minutes) |
|---|---|---|---|
| Preparation Time : | | | |
| Analytical Time: | | | |
| Finish Time: | | | |

# of Samples (including Mtx QC): _____
Repeats due to Sample: _____
Repeats due to Error: _____

*Comments:*

c:\greg\forms\cover2.tmp

1 copy 10552

Docs ✓
A

#: 74577
lyt: TPH 418.1 TOTAL PETROLEUM HYDROCARBON BY IR
n: 2/20/02 16:53

| E | SUBMISSION | ORDER # | MATRIX | REPORTED RESULT | | DILUTION | PQL | % RECOVERY | % RSD | DATE ANALYZED | QC | PKG # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MP | 9912010552 | 528677 | SOIL/SEDIM | 153000 | | 20.0 | 33.0 | | | 02/19/2002 | | 5 |
| JP | | 531965 | SOIL/SEDIM | 117000 | | 20.0 | 33.0 | | 26.31 | 02/19/2002 | | |
| C1 | | 531966 | SOIL/SEDIM | 135000 | | 20.0 | 33.0 | 40.6 | dilutes | 02/19/2002 | | |
| K5 | | 531961 | SOIL/SEDIM | 136 | | 1.0 | 33.0 | 103.6 | but | 02/19/2002 | | |
| K4 | | 531962 | SOIL/SEDIM | 33.0 | U | 1.0 | 33.0 | | bl | 02/19/2002 | | |
| K2 | | 531963 | SOIL/SEDIM | 33.0 | U | 1.0 | 33.0 | | 2/20/02 | 02/19/2002 | | |
| KB | | 531964 | SOIL/SEDIM | 302 | | 1.0 | 33.0 | 102.4 | | 02/19/2002 | | |
| MP | 9912010584 | 529220 | WATER | 0.500 | U | 1.0 | 0.500 | | | 02/19/2002 | | 2 |
| MP | 9912010682 | 530735 | WATER | 0.500 | U | 1.0 | 0.500 | | | 02/19/2002 | | 2 |
| K2 | | 531967 | WATER | 0.500 | U | 1.0 | 0.500 | | | 02/19/2002 | | |
| KB | | 531968 | WATER | 4.32 | | 1.0 | 0.500 | 97.5 | | 02/19/2002 | | |
| K5 | | 531969 | WATER | 136 | | 1.0 | 0.500 | 103.4 | | 02/19/2002 | | |

ecords printed: 12

Review Date 2/20/02 Name B Brae
Data Entry Date _____ Name _____
Final Review Date _____ Name _____
QC Date _____ Name _____
Comments:

.umbia Analytical Services
1 Mustard Street
Rochester, NY 14609

Name: C. Carlson

Date: 2/19/02

Time: 09:30

Total Recoverable Petroleum Hydrocarbons
Method: 418.1, EPA 600 Series
TPH, mg/L = Conc.(mg/L)*Dil'n*100 mL extract/Sample amount
Corr. Coeff: 0.99998 Y-intercept: _____ Slope: _____
Curve Date: 12/28/01 Pipet: 1ml volumetric glass

| Job # | Client | Mtrx s/w | Sample Vol (mL) or Wgt (g) | Absorb Sample | Absorb Samp-Blk | Conc. (mg/L) | Dil'n | Result |
|---|---|---|---|---|---|---|---|---|
| | 0.000 | | | 0.000 | | | | |
| | 6.645 | | | 0.009 | | | | |
| | 22.150 | | | 0.030 | | | | |
| | 44.300 | | | 0.661 | | | | |
| | 88.600 | | | 0.122 | | | | |
| | 221.50 | | | 0.301 | | | | |
| 131.10 | ICV | — | — | 0.184 | — | 135.08 | — | 135.08 (103%) |
| | ICB | — | — | 0.000 | — | <5.0 | — | <0.50 |
| | CCV | — | — | 0.185 | — | 135.81 | — | 135.81 (103.6% |
| | CCB | — | — | 0.000 | — | <5.0 | — | <0.50 |
| | PB | Soil | 15.00g | 0.015 | 0.000 | -0.23816 | 1 | <0.50 |
| +1.0mls 4430ppm TV=295.3 | LCS | | 15.00g | 0.077 | 0.062 | 45.36 | 1 | 302.39 (102.4% |
| 12-10552 | 528677 | | 2.03 | 0.226 | 0.211 | 154.94 | 20 40 | 152650 ~~305,241.0~~ |
| | dup | | 2.00 | 0.175 | 0.160 | 117.43 | 20 ~~40~~ | 117,430.0 ~~234,858.0~~ |
| +1.0mls 4430ppm TV=2182 | spk | | 2.03 | 0.202 | 0.187 | 137.29 | 20 40 | 135,261.1 ~~270,513.e~~ |
| | PB | Water | 1000 | 0.009 | 0.000 | <5.0 | 1 | <0.50 |
| +1.0mls 4430ppm TV=4.93 | LCS | | 1000 | 0.068 | 0.059 | 43.15 | 1 | 4.32 (87.5% |
| 12-10584 | 529220 | | 1030 | 0.010 | 0.001 | <5.0 | 1 | <0.50 |
| | 530735 | | 1025 | 0.012 | 0.003 | <5.0 | 1 | <0.50 |
| | CCV | — | — | ~~0.180~~ 0.186 cc 2/19 | — | 136.55 | — | 136.55 (104.2% |
| | CCB | — | — | 0.000 | — | <5.0 | — | <0.50 |

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**Columbia Analytical Services**
**1 Mustard St., Rochester, NY**

**General Chemistry Analytical Run Cover Sheet**

Analyst: C. Carlson Date: 2/19/2002

Analysis: Total Petroleum Hydrocarbons Instrument: Buck IR

**Quality Control:**

| | Log Book # | Log Book Date | Log Book Page # | Stock Sol (m/Ls) | Stock Sol (mg/L) | Final Vol (mLs) | True Value (mg/L) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| *a) Standards Prep.:* | WC55 | 12/28/01 | 265A | | | | |
| | | | | | | | |
| *b) I/CCV Preparation:* | WC55 | 12/28/01 | 264F | 3 | 4370 | 100.00 | 131.10 |
| | | | | | | | |
| *c) LCS Preparation:(w)* | WC55 | 12/28/01 | 264G | 1 | 4430 | 1000.00 | 4.43 |
| *(s)* | WC55 | 12/28/01 | 264H | 1 | 4430 | 15.00 | 295.33 |
| *d) Matrix Spike Prep:(w)* | WC55 | 12/28/01 | 264G | 1 | 4430 | 1000.00 | 4.43 |
| *(s)* | WC55 | 12/28/01 | 264H | 1 | 4430 | 15.00 | 295.33 |

*Instrument log filled in? (Y) (N)*

*Comments:* All samples are checked with pH paper prior to analysis have pH of <2.
Unless otherwise noted:

**Packages:**

a) Chains Signed? (Y) (N)

b) Copy and attach Standards Preparation.

**Data Review:**

| | Yes | No | Comments |
|---|---|---|---|
| Date Checked | | | |
| Time Checked | | | |
| Hold Times Met | | | |
| QC Objectives Met | | | |
| Calculations Checked | | | |
| Transcriptions Chck'd | | | |
| Other: | | | |
| | | | |
| | | | |
| | | | |

**Comments:**

c:\greg\forms\cover.tph

TPH-IR (Con't)

2/28/01 CC

Ⓐ Standards (TPH-IR)

• made from 1st Source Standard Working Stock

| Conc (mg/l) | mls 1° working stock (4430 ppm / ~~5760 ppm~~ cc 12/28) (WC5526 4B) |
|---|---|
| 0.000 | 0.000 |
| ~~8.640~~ 6.645 | 3 mls of 221.50 / ~~288.000~~ cc 12/28 |
| ~~28.800~~ 22.150 | 0.500 |
| ~~57.600~~ 44.300 | 1.000 |
| ~~115.200~~ 88.600 | 2.000 |
| ~~288.000~~ 22.50 | 5.000 |

* All standards are diluted to final volumes of 100 ml in 100 ml volumetric flasks with pure freon (EM Lot# 41281, WC5524 5J)

2/28/01 DMG

Ⓑ 0.00564 N Sodium Thiosulfate (Chlorine Demand / ~~Residual~~) DMG 12/28/01

- SAME AS WC5525 1D. Exp. 2 weeks, 1/11/02.

Ⓒ Stock Chlorine Solution - Chlorine Demand

Add 6.0 mL commercial chlorine bleach to DI water and dilute to 500 mL in vol. flask. Prepare fresh each run + Standardize with use.

Ⓓ Standard Iodate Titrant 0.00564 N - Chlorine Demand

Same as WC5524 9E. Prepare fresh each RUN.

12/28/01 DMG

Ⓔ Standards Prep: Intermediate Stds. Stock Solution

Exp. 6 months, 6/28/01.

| Anion | Stock conc. | mls stock | volumetric Final vol. | Int. Stock concentration, ppm |
|---|---|---|---|---|
| F | 100 ppm WC5521 9D | 50.0 | 100 mls | 50.0 |
| Cl | 1000 ppm WC5510 6C | 10.0 | | 100.0 |
| Br | 1000 ppm WC5520 9A | 5.0 | | 50.0 |

4 :

# TPH - IR

8/01 (A) 1st Source Reference oil:

In a volumetric Flask, mix the following: 12/28/01 CC

- 15ml Hexadecane (Aldrich Lot# KU6262LS, WC45294G)
- 15ml 2,2,4-Trimethylpentane (Aldrich Lot# HU04946MS, WC45295H)
- 10ml Chlorobenzene (Aldrich Lot# DI07336DI, WC45295G)

Store @ 4°C in original vol. Flask. Exp 12/28/02

(B) 1st Source Standard Working Stock (1° stock):

- 0.50ml 1st Source Reference oil (WC55264A)

⇒ 100ml w/Pure Freon (EM Lot# 41281, WC55245J)

Actual wgt. = 0.4430 ~~0.4760g~~ CC 12/28/01 TV= ~~5760~~ CC 12/28 ~~4390~~ CC 12/28/01 4430 ppm

Store in 100ml vol Flask @ 4.0°C Exp 12/28/02

(C) 2nd Source Reference oil: 12/28/01 DMG

In a volumetric Flask, mix the following:

- 15ml Hexadecane (EM Lot# 36249, WC45296A)
- 15ml 2,2,4-Trimethylpentane (EM Lot# 40117, WC55024E)
- 10ml Chlorobenzene (Mallinckrodt Lot# 4419 KXHH, WC45296C)

Store @ 4.0°C in original vol Flask Exp 12/28/02

(D) 2nd Source Reference working Stock (2° Stock):

- 0.50ml 2nd Source Reference Oil (WC55264C)

⇒ 100ml w/Pure Freon (EM Lot# 41281, WC55245J)

Actual wgt. = 0.4370 ~~0.5230~~ CC 12/28 TV= 4370 ppm ~~5230 ppm~~ CC 12/28

Store in 100ml vol. Flask @ 4.0°C Exp 12/28/02 12/28/01 DMG

(F) ICV/CCV:

- 3 mls 2nd Source Reference working Stock (WC55264D)

⇒ 100ml w/Pure Freon (WC55245J) TV= 131.10 mg/l ~~156.9 mg/l~~ CC 12/28

Store in 100 ml vol Flask @ 4.0°C Exp 12/28/02

(G) LCS water / Matrix spike water (TPH-IR)

- 1.0ml of 1° Standard Working Stock (4430 ppm ~~5760 ppm~~ CC 12/28, WC55264B)

added to 1000 ml DI or sample TV= ~~5.76 mg/l~~ 4.43 mg/l

(H) LCS soil / Matrix spike soil (TPH-IR)

- 1.0 ml 1° Standard Working Stock (4430 ppm ~~5760 ppm~~, WC55264B)

added to 15.0g Blank soil or Sample TV= ~~384.0~~ 295.3 mg/l

9/13/00 DMG (A) Magnesium Chloride Solution: $CN^-$ Distillation
510 $MgCl_2 \cdot 6H_2O$ (EM Lot 38230942 ≈ 272.5g)
(EM Lot 39349018 ≈ 231.5g)
⇒ 1000 mL w/ DI. Store @ R.T. Exp. 9/13/01

9/18/00 DMG (A) Stock
In
40.
iN
Bri.
in

9/15/00 BB Received from VWR
(B) · (2) x 2.5L Phosphoric Acid, EM, Lot # 39350029, Cat. # PX0995-14, CAS # 7664-38-2. Store @ R.T. No Exp. date.

9/19/00 DK (B) Sulfi
⇒

(C) · (1) x 500g Sulfamic Acid, EM Lot # 39133025, Cat. # SX1140-3, CAS # 5329-14-6. Store @ R.T. No Exp date.

9/20/00 DK (C) TKN

(D) · (4) x 500g Sodium Phosphate Dibasic · $7H_2O$, EM Lot # 39103019, Cat. # SX0715-1, CAS # 7782-85-6. Store @ R.T. No. Exp. date.

9/20/00 DMG (D) Phenols

(E) · (1) x 1L 2,2,4-Trimethylpentane, EM Lot # 40117, Cat # TX1389-6., CAS # 540-84-1. Store in flammable Cabinet. No. Exp. date.

9/20/00 DMG (E) 10% Pt
100 mls
in dr

(F) · (4) x 4L Freon, EM Lot # 39353, Cat # TX1165-1, CAS # 76-13-1, Store @ RT. No Exp date.

9/20/0 DK (F) D.O.

9/18/00 BB (G) Hydrogen Peroxide Stock # 2 (~10,000 ppm)
33 ml of 30% $H_2O_2$ Soln (EM Lot # 39241945)
→ 1000 ml w/ ultra pure DI. Store @ 4°C in amber glass. Standardize monthly. Exp 9/18/2001.

9/21/00 CC (G) Sulfid
⇒ 1

9/18/00 IS (H) TSS / TS Reference
0.2157g Kaolin (WC45080A) → 1000g w/ DI Water
TV = 216 mg/L. Store in plastic @ 4°C. Exp: 9/18/01.

9/21/00 CC ~~(H) NH4C~~
To a

SO 9/18/00 (I) Grease ±0.1 413.1 spike sol'n
To a tared amber glass jar add (using glass pipets)
· 0.2672 g Crisco 0.1
· 0.2646 g Fuel oil #2
· 100 ml pure Freon (EM Lot 39353)
Conc. = 5318 mg/L use 5ml spk / 1000 ml DI or Sample for LCS or MS value of 26.59 mg/L
Store @ 4°C expires 3/18/01

Stir ul
Conc

9/25/00



9/25/01

6/6/00 CC/DMB

Ⓐ Sulfide Reference

0.4250 g $Na_2S \cdot 9H_2O$ (WC45150D) ⇒ 100 mls w/ DI

$\frac{(0.4250)(0.1333)(1000)}{100} = 0.5665$

Store @ 4°C in amber glass. Exp. 1 week.

6/6/00 DZ

Ⓑ TKN Buffer

To a tared 1-L amber, add:

- 941 g UPDI
- 35.0 g Sodium Phosphate, Dibasic (Lot# H6505-Em)
- 20.0 g $Na_2$-EDTA (WC4046H, Lot# K34607 Baker)
- 50.0 g NaOH Flakes (WC45294E)

Stir until dissolved. Store @ RT. Exp 1 month. 7/6/00.

6/6/00 KS

Ⓒ IS/ISS Reference

0.2191 g Kaolin (WC4580A) → 1000 g w/ DI

TV = 219 mg/L Store in plastic @ 4°C. Exp 6/6/01.

6/6/00 CC

Ⓓ 0.0250 N $Na_2S_2O_3$ - Sulfides

50 ml 0.1000 N $Na_2S_2O_3$ (WC45241D) ⇒ 200 ml w/ DI.

Store @ 4°C in Amber glass Expires in 2 weeks

6/7/00 CC

Ⓔ $Cr^{6+}$ soils digest Reagent

- 40 g NaOH pellets (WC45267F)
- 60 g $Na_2CO_3$ (WC45229E)

⇒ 2000 ml w/ DI

Store in plastic @ 4°C for up to 1 month

6/7/00 CC

Ⓕ 0.5 N Fas - TOC Walkley Black

same as WC45220B. Exp. 6/7/01.

6/7/00 KS

Ⓖ Received from Aldrich

Ⓖ (1) x 100mL Chlorobenzene, 99.8%, Aldrich, Lot. # DI 07336DI, Cat. # 28,451-3. Store in Flammable cabinet. No exp. date. Exp 6/7/00 GG 7/7

Ⓗ (1) x 100mL 2,2,4-Trimethylpentane, 99.8%, Aldrich Lot# HU04946MS, Cat. # 36,006-6. Store in Flammable

| | | | |
|---|---|---|---|
| 6/5/00 BB | Received from Fisher<br>(A) · (1) x 1 Kg. Chromatographic Silica Gel, Fisher, Lot # 995513, Cat. # S745-1. No exp. date. Store @ R.T. | 6/6/00 GC/DMG | (A) Sulfide 0.42 |
| 6/5/00 BB | Received from VWR<br>(B) · (1) x 4 L Acetone, B+J, Lot # BR436, Cat # 010-4. Store in flammable cabinet. No exp. date. | 6/6/00 DZ | Store<br>(B) TK T |
| | (C) · (1) x 3.78 L Sodium Hydroxide, 50% Soln., E.M., Lot # 125975/110912, Cat. # SX0597-1. Store @ R.T. No exp. date. | | |
| | (D) · (1) x 500 ml Glycerol, E.M., Lot # 39233009, Cat. # GX0185-6. Store @ R.T. No exp. date. | | |
| | (E) · (1) x 2.5 Kg Sodium Hydroxide, Flake, J.T. Baker, Lot # N48603, Cat. # 3734-05. Store @ R.T. No exp. date. | | S |
| | (F) · (12) x 1 L Methanol, omnisolve, E.M. Lot # 39039, Cat. # MX0482-6. Store in flammable cabinet. No. exp. date. (These ordered by organics). | 6/6/00 KS | (C) TS/T 0.21 TV = |
| 6/5/00 BB | Received from Aldrich<br>(G) · (1) x 100 ml Hexadecane, 99+%, Aldrich, Lot # KU 06262LS, Cat # 29,631-7. Store @ RT. No exp date. | 6/6/00 CC | (D) 0.02 50 ml Store |
| | IC curve | | |
| 6/5/00 [illegible] | (H) Standard stock sources - same as WC45252A. | 6/7/00 CC | (E) Cr 6= |
| | (I) Standard prep - same as WC45252B. | | -40 |
| | (J) Reference stock sources - same as WC45252C. | | -60 |
| | (K) ICV Prep - same as WC45252D. | | ⇒ |
| | (L) CCV Prep - same as WC45253B. | | Sto |
| | (M) LCS/MS - same as WC45253C. | | |
| 6/6/00 DZ | (N) TKN Color Reagent<br>To a tared 1 Liter amber, add:<br>· 75.0 g Sodium Salicylate (WC45234F)<br>· 0.5 g Sodium Nitroprusside (Baker Lot # L02630)<br>· 454 g D.I.<br>Stir until dissolved. Store @ RT. Exp. 1 month. | 6/7/00 [illegible] | (F) 0.5 Sar |
| | | 6/7/00 KS | (G) Rece<br>(G) (1) x DI 07. No exp |
| | | | (H) (1) x Lot # H cabinet |

6/7/00 Received from VWR

(A) (1) x 80ml, Hexadecane, OmniSolv, Lot # 36249, Cat. # HX0201-7. Store at R.T. No exp date. Exp 6/7/01 (6/15)

(B) (1) x 500g, Glycerol, Difco, Bacto, Lot # 0117200, Cat. # 228220 (0282-17). Store at R.T. Exp. 5/2/01

(C) (1) x 500ml, Chlorobenzene, Mallinckrodt, Lot # 4419KXHH, Cat. # 4419-04. Store in Flammable Cabinet. No exp. date. Exp. 6/7/01 (6/6/25)

(D) (1) x 4L, Water Hardness Titrant, VWR, Lot # 0003198, Cat. # VW3511-4, Store at R.T., Exp. 9/30/01. 0.0100 M, or 0.0200 N

6/13/00 JL

(A) Bu
To

At

(B) So

6/8/00 JL (E) FAS titrant - Cl Residual - same as WC45204C. Exp. 7/8/00.

IC curve

6/8/00 JL (F) Standard Stock sources - same as WC45252A.
(G) Standard Prep - same as WC45252B.
(H) Reference stock sources - same as WC45252C.
(I) ICV Prep - same as WC45252D.
(J) CCV Prep - same as WC45253B.
(K) LCS/MS - same as WC45253C.

6/14/00 JL

(C) TK
E

6/14/00 JL

(D) TK

6/12/00 (L) TKN ~~Buffer~~ Digest (x2)

To a tared 2-liter Volumetric Flask, add:
- 268g $K_2SO_4$ (WC45286J)
- 14.6g $CuSO_4$ (WC45187I)
- ~1200ml UPDI

While stirring, slowly add,
- 268ml Conc $H_2SO_4$ Instra Analyzed (WC45250C)

Stir until cool. Bring to volume w/UPDI

6/14/00 BB

Receive

(E) (3

6/15/00 DZ

(F) NH

6/12/00 JL/DG (M) Phenols color Reagent - same as WC45006G. Exp. 6/19/00.

(N) $Cr^{6+}$ soils ICV/ICB: 0.050 mls 1000 ppm Reference Stock (WC45289H) to 49.95 mls $Cr^{6+}$ Soil digest reagent Bring to volume (100 ml) with DI (TV = 0.50 mg/l)

(G) Cr+C

.0
.2

However, since it is not practical to use such a small volume, it would be better to prepare such a standard in steps.

$$Say: \frac{1\ ml\ of\ 1000\ ppm}{100\ mls} = 10\ ppm$$

$$Then: \frac{1\ ml\ of\ 10\ ppm}{100\ mls} = 100\ \mu g / L\ final\ working\ standard$$

9.6. Standards and reagents are stored separately, at temperatures specified in the methods.

## 10. QA/QC REQUIREMENTS

10.1. Periodic review of the lab notebooks and real-time review of the lab sample preparation benchsheets shall be performed by the department manager or designee.

10.2. Each batch of samples should have a laboratory control sample prepared with the samples. These may include a laboratory control sample for other matrices.

10.3. A matrix spike should be added to at least 1 sample per 20.

10.4. Spiking solutions should be made routinely and verified prior to use by analyzing them against previously used standard.

10.5. It is a CLP requirement that the statement of purity (certificate of analysis) for standards is initialed, dated and placed in the standards notebook. It should be verified that the standards are NIST traceable.

10.6. It is recommended that the following list of storage-time recommendations are followes:

| | |
|---|---|
| ≤ 100 µg/L | Daily |
| ≤ 1000 µg/L | Weekly |
| 1 - 100 mg/L | 6 months |
| 100 - 1000 mg/L | Yearly |

All standards and reagents shall be stored under proper conditions as outlined in the appropriate analytical SOP.

10.7. Typically the following discard dates can also be used:

| | |
|---|---|
| Purchased Reagents - | manufacturer's expiration date, or 3 years after receipt, whichever comes first |
| Purchased Standards - | manufacturer's expiration date, or 2 years after receipt, whichever comes first |

→ Confirms purchased stock solution for standard are valid between 1 & 3 years.